



Town of Newmarket Council Information Package

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Information Reports

The following Information Reports were distributed during this period:

- INFO-2022-15: Disconnecting From Work Policy & Procedure
Office of the CAO - Human Resources/Innovation & Strategic Initiatives
May 31, 2022
- INFO-2022-16: Casual Employee Resourcing Strategy
Office of the CAO - Human Resources/Community Services/Public Works Services
June 3, 2022

Email: Ontario Land Tribunal

Orangeville Council, at it's May 16, 2022 Council meeting passed the following resolution:

"2022-196

Moved: Councillor Peters

Seconded: Councillor Post

That the Town of Orangeville 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 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 that a copy of this Motion be sent to the Association of Municipalities of Ontario (AMO) and all Ontario municipalities for their consideration.

Result: Carried"

Regards,

Tracy Macdonald | Assistant Clerk | Corporate Services
Town of Orangeville | 87 Broadway | Orangeville ON L9W 1K1
519-941-0440 Ext. 2256 | Toll Free 1-866-941-0440 Ext. 2256
tmacdonald@orangeville.ca | www.orangeville.ca



May 24, 2022

Ministry of Municipal Affairs and Housing
College Park, 17th Floor
777 Bay Street
Toronto, Ontario
M7A 2J3

ATTENTION: Honorable Minister Steve Clark

Dear Minister Clark:

RE: Ontario Must Build it Right the First Time

Please be advised that the Council of the Corporation of the Township of Lanark Highlands passed the following resolution at their regular meeting held May 10th, 2022:

Moved by Councillor Jeannie Kelso

Seconded by Reeve Peter McLaren

THAT, the Council of the Township of Lanark Highlands support the City of Waterloo's resolution re: Ontario Must Build it Right the First Time;

AND THAT, this resolution be provided to the Minister of Municipal Affairs and Housing and to all Ontario Municipalities.

Carried

Sincerely,

Amanda Noël

Amanda Noël,
Clerk

Encl.

c. c. All Ontario Municipalities

March 23, 2022

Hon. Steve Clark
Minister of Municipal Affairs and Housing
College Park, 17th Floor
777 Bay St.
Toronto, ON M7A 2J3

RE: Resolution from the City of Waterloo passed March 21st, 2022 re: Ontario Must Build it Right the First Time

Dear Minister Clark,

Please be advised that the Council of the Corporation of the City of Waterloo at its Council meeting held on Monday, March 21st, 2022 resolved as follows:

WHEREAS the Province of Ontario adopted greenhouse gas reduction targets of 30% by 2030, and emissions from buildings represented 22% of the province's 2017 emissions,

WHEREAS all Waterloo Region municipalities, including the City of Waterloo, adopted greenhouse gas reduction targets of 80% below 2012 levels by 2050 and endorsed in principle a 50% reduction by 2030 interim target that requires the support of bold and immediate provincial and federal actions,

WHEREAS greenhouse gas emissions from buildings represent 45% of all emissions in Waterloo Region, and an important strategy in the TransformWR community climate action strategy, adopted by all Councils in Waterloo Region, targets new buildings to be net-zero carbon or able to transition to net-zero carbon using region-wide building standards and building capacity and expertise of building operators, property managers, and in the design and construction sector,

WHEREAS the City of Waterloo recently adopted a net-zero carbon policy for new local government buildings and endorsed a corporate greenhouse gas and energy roadmap to achieve a 50% emissions reduction by 2030 for existing local government buildings and net-zero emissions by 2050 (provided the provincial electricity grid is also net-zero emissions),

WHEREAS the draft National Model Building Code proposes energy performance tiers for new buildings and a pathway to requiring net zero ready construction in new buildings, allowing the building industry, skilled trades, and suppliers to adapt on a predictable and reasonable timeline while encouraging innovation;

WHEREAS the Ministry of Municipal Affairs and Housing is consulting on changes for the next edition of the Ontario Building Code (ERO #: 019-4974) that generally aligns with the draft National Model Building Code except it does not propose adopting energy performance tiers, it does not propose timelines for increasing minimum energy performance standards step-by-step to the highest energy performance tier, and, according to Efficiency Canada and The Atmospheric Fund, it proposes adopting minimum energy performance standards that do not materially improve on the requirements in the current Ontario Building code;

WHEREAS buildings with better energy performance provide owners and occupants with lower energy bills, improved building comfort, and resilience from power disruptions that are expected to be more common in a changing climate, tackling both inequality and energy poverty;

WHEREAS municipalities are already leading the way in adopting or developing energy performance tiers as part of Green Development Standards, including Toronto and Whitby with adopted standards and Ottawa, Pickering, and others with standards in development;

WHEREAS the City of Waterloo is finalizing Green Development Standards for its west side employment lands and actively pursuing Green Development Standards in partnership with the Region of Waterloo, the Cities of Kitchener and Cambridge, and all local electricity and gas utilities through WR Community Energy;

WHEREAS while expensive retrofits of the current building stock to achieve future net zero requirements could be aligned with end-of-life replacement cycles to be more cost-efficient, new buildings that are not constructed to be net zero ready will require substantial retrofits before end-of-life replacement cycles at significantly more cost, making it more cost-efficient to build it right the first time.

THEREFORE BE IT RESOLVED THAT Council request the Province of Ontario to include energy performance tiers and timelines for increasing minimum energy performance standards step-by-step to the highest energy performance tier in the next edition of the Ontario Building Code, consistent with the intent of the draft National Model Building Code and the necessity of bold and immediate provincial action on climate change;

THAT Council request the Province of Ontario to adopt a more ambitious energy performance tier of the draft National Model Building Code as the minimum requirement for the next edition of the Ontario Building Code than those currently proposed;

THAT Council request the Province of Ontario provide authority to municipalities to adopt a specific higher energy performance tier than the Ontario Building Code, which would provide more consistency for developers and homebuilders than the emerging patchwork of municipal Green Development Standards;

THAT Council request the Province of Ontario to facilitate capacity, education and training in the implementation of the National Model Building Code for municipal planning and building inspection staff, developers, and homebuilders to help build capacity; and

THAT this resolution be provided to the Minister of Municipal Affairs and Housing, to area MPPs, and to all Ontario Municipalities.

Please accept this letter for information purposes only.

If you have any questions or require additional information, please contact me.

Sincerely,

A handwritten signature in cursive script that reads 'Julie Scott'.

Julie Scott
City Clerk, City of Waterloo

CC (by email):

Catherine Fife, M.P.P (Waterloo)
Laura Mae Lindo, M.P.P (Kitchener Centre)
Belinda C. Karahalios, M.P.P (Cambridge)
Amy Fee, M.P.P (Kitchener-South Hespeler)
Mike Harris, M.P.P (Kitchener-Conestoga)



MUNICIPALITY OF
SHUNIAH

COUNCIL RESOLUTION

Resolution No.: 174-22

Date: May 24, 2022

Moved By: MEGHAN CHOMUT

Seconded By: DON SMITH

THAT Council hereby receives the Community Schools Alliance Action Plan and Social and Economic Impact for Small Communities in Ontario Study;

WHEREAS all students should have the opportunity to attend elementary and secondary school in their home community;

THEREFORE, BE IT RESOLVED THAT:

1. The province increase the Rural and Northern Education Fund (RNEF) to \$50 million;
2. Should the current moratorium on accommodation reviews and school closures be lifted, we ask that the moratorium remain in place for schools that qualify for the RNEF until a thorough review of the education funding formula is completed;
3. Before templates required by the 2018 Pupil Accommodation Review Guide (PARG) are developed, there be consultation with school boards and community groups including the Community Schools Alliance.

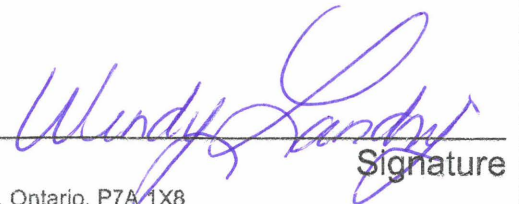
AND FURTHER THAT a copy of this resolution be forwarded to Ontario municipalities, Community Schools Alliance, local MP's and MPP's and the Premier of Ontario.

Carried

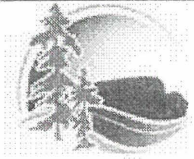
Defeated

Amended

Deferred


Signature

Municipality of Shuniah, 420 Leslie Avenue, Thunder Bay, Ontario, P7A 1X8



MUNICIPALITY OF SHUNIAH

COUNCIL RESOLUTION

Resolution No.: 173-22

Date: May 24, 2022

Moved By: RON GIARDETTI

Seconded By: MEGHAN CHOMUT

THAT Council hereby supports the resolution from the Town of East Hawkesbury for the Funding Support for Infrastructure Projects - Bridge and Culvert Replacements in Rural Municipalities; and

BE IT RESOLVED that a copy of this resolution be forwarded to Ontario municipalities, AMO, Premier of Ontario, Provincial Minister of Finance.

- Carried
- Defeated
- Amended
- Deferred

Wendy Landry

 Signature

Municipality of Shuniah, 420 Leslie Avenue, Thunder Bay, Ontario, P7A 1X8



The Town of The Blue Mountains
Council Meeting

Title: Mayor Soever Notice of Motion May 10, 2022

Date: Tuesday, May 24, 2022

Moved by: Mayor Soever

Seconded by: Councillor Hope

WHEREAS it is in the best interest of good government and the democratic process that all Ontarians have access to candidate information during the upcoming municipal elections; and,
WHEREAS the clerks of some municipalities do not supply the mailing addresses of voters on the voters list to candidates, thereby limiting the access of voters who have mailing addresses outside the municipality to candidate information, effectively disenfranchising them;
BE IT RESOLVED THAT the Council of the Town of The Blue Mountains expresses its support for the inclusion of the mailing addresses of voters on voter's lists provided to candidates;
AND THAT a copy of this resolution be sent to all municipalities in Ontario to ask for their support;
AND THAT a copy of this resolution be sent to the Premier of Ontario and the Minister of Municipal Affairs and Housing;
AND THAT a copy of this resolution be sent to the Canadian Civil Liberties Association

YES: 6

NO: 0

CONFLICT: 0

ABSENT: 1

The motion is Carried

YES: 6

Mayor Soever Deputy Mayor Bordignon Councillor Hope Councillor Matrosovs
Councillor Sampson Councillor Bill Abbotts

NO: 0

CONFLICT: 0

ABSENT: 1

Councillor Uram

Administration

Office of the Regional Clerk

1815 Sir Isaac Brock Way, PO Box 1042, Thorold, ON L2V 4T7

Telephone: 905-980-6000 Toll-free: 1-800-263-7215 Fax: 905-687-4977

www.niagararegion.ca

May 25, 2022

CL 10-2022, May 19, 2022

DISTRIBUTION LIST***SENT ELECTRONICALLY*****Re: Motion - Voluntary Russian Sanction Request**

Whereas Russia's unprovoked and brazen invasion of the sovereign nation of Ukraine has been unequivocally condemned by the majority of the free world, including by those living and working in Niagara;

Whereas the death and destruction caused by Russia's senseless invasion will have a lasting impact on the innocent and independent citizens of Ukraine;

Whereas Russia has placed sanctions on many Canadian premiers, mayors, journalists, military officials as well as senior staff in the federal government, "indefinitely" banning these individuals from entering Russia;

Whereas those Russian sanctions include Toronto Mayor John Tory and Ottawa Mayor Jim Watson;

Whereas the residents and businesses of Niagara stand in solidarity with the people of Ukraine and the proud Ukrainian-Canadian community who call our region home;

Whereas Niagara Region continues to be a willing host to those Ukrainian citizens fleeing their homeland during this challenging time, providing support through the Region's Community Services Department as well as number of other local agencies;

Whereas silence may be interpreted as complicity; and

Whereas any sanctions placed on Niagara's elected officials be considered wholly ineffective and be received as a demonstration of Niagara's steadfast commitment to support Ukraine during this time.

NOW THEREFORE BE IT RESOLVED:

1. That Niagara Regional Council unequivocally **DENOUNCES** Russia's unjustifiable invasion of the sovereign nation of Ukraine;

-
2. That Niagara Regional Council **SUPPORTS** all of the sanctions that the Federal Government of Canada has thus far imposed on Russia;
 3. That any Regional Councillor who wishes to be voluntarily sanctioned **INDICATE** their support by advising the Regional Chair's Office by phone or email by no later than Friday, May 20 at 4:30 p.m.;
 4. That the Regional Chair **BE DIRECTED** to send correspondence to the Consulate General of the Russian Federation with the names of the Regional Councillors who have indicated their support to be voluntarily sanctioned, resulting in their "indefinite" ban from entering Russia;
 5. That the Regional Clerk **BE DIRECTED** to circulate this motion to Niagara's 12 local councils, local area MPs, MPPs, AMO, and FCM; and
 6. That this motion **BE FORWARDED** to all other municipalities in Ontario, requesting they consider enacting similar measures in order to present a united front and support the citizens of Ukraine.

Yours truly,



Ann-Marie Norio

Regional Clerk

CLK-C 2022-079

Distribution List

Local Area Councils

Chris Bittle, Member of Parliament, St. Catharines

Vance Badawey, Member of Parliament, Niagara Centre

Tony Baldinelli, Member of Parliament, Niagara Falls

Dean Allison, Member of Parliament, Niagara West

Jennie Stevens, Member of Provincial Parliament, St. Catharines

Jeff Burch, Member of Provincial Parliament, Niagara Centre

Wayne Gates, Member of Provincial Parliament, Niagara Falls

Sam Oosterhoff, Member of Provincial Parliament, Niagara West

Association of Municipalities Ontario

Federation of Canadian Municipalities

All Ontario Municipalities

Regional Council Decision - 2019 to 2023 Strategic Plan Year 3 (2021) Progress Report and 2023 to 2027 Strategic Plan Development

On May 26, 2022 Regional Council made the following decision:

1. Council approve the approach for development of the draft 2023 to 2027 Strategic Plan, outlined in this report, in alignment with the four [Vision](#) areas of focus: Economic Vitality, Healthy Communities, Sustainable Environment and Good Government.
2. The Regional Clerk circulate this report to local municipalities.

The original staff report is attached for your information.

Please contact Krista South, Executive Manager, Office of the Chief Administrative Officer at 1-877-464-9675 ext. 71208 if you have any questions with respect to this matter.

Regards,

Christopher Raynor (he/him) | Regional Clerk, Regional Clerk's Office, Corporate Services Department

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
Finance and Administration
May 5, 2022

Report of the Chief Administrative Officer

2019 to 2023 Strategic Plan Year 3 (2021) Progress Report and 2023 to 2027 Strategic Plan Development

1. Recommendations

1. Council approve the approach for development of the draft 2023 to 2027 Strategic Plan, outlined in this report, in alignment with the four [Vision](#) areas of focus: Economic Vitality, Healthy Communities, Sustainable Environment and Good Government.
2. The Regional Clerk circulate this report to local municipalities.

2. Summary

This report provides a summary on the progress made in 2021, year three of the [2019 to 2023 Strategic Plan](#).

Key Points:

- In 2021, 23 of 31 (74%) of the *2019 to 2023 Strategic Plan* performance measures were trending in the desired direction (see Attachment 1). While most performance measures are trending in the right direction, the Region's Strategic Plan progress reporting is exception-based and provides explanations for performance measure variances
- The Strategic Plan was developed to withstand changing operating environments by anchoring into core services to ensure the Region continues to meet its legislative obligations while remaining flexible and responsive to residents' needs
- Building on the success of Council direction over this Council term, staff are beginning the process to develop the 2023 to 2027 Strategic Plan in alignment with the 2023-2026 Budget

3. Background

The Strategic Plan sets out critical steps needed for the Region to move towards meeting Council's Vision

To achieve Council's Vision of Strong, Caring, Safe Communities, the Region sets priorities over each four-year term of Council through the Strategic Plan. The Strategic Plan alignment with Vision ensures that decisions made today set a course for the desired future.

On [February 28, 2019](#), Council approved the *2019 to 2023 Strategic Plan* tabled with the *2019 to 2022 Regional Budget*. Strategic Plan progress reports are presented to Council annually. This report provides a summary on the progress made on performance measures in year three (2021) of the *2019 to 2023 Strategic Plan*.

Performance accountability considers York Region's specific contributions to the well-being of our communities

Performance accountability is measured through performance measures that capture how well a core regional service is working to contribute to our communities' well-being. Performance measures in the *2019 to 2023 Strategic Plan* are tracked to ensure that objectives are met, with variances reported to Council annually.

In March 2020, York Region declared a state of emergency in response to the COVID-19 pandemic

On March 23, 2020, York Region declared a state of emergency in response to the evolving COVID-19 pandemic. Throughout the pandemic, the province has put public health measures in place to limit the transmission of COVID-19. This resulted in the cancellation of organized events, closures of facilities and businesses and shutdown of non-essential services. York Region administrative facilities were closed to the public and included temporary disruption to some York Region programs and services. In 2021, York Region facilities remained closed to the public. During these times of uncertainty and rapid change, the number one priority is protecting the health and safety of residents and all our communities while providing core service delivery.

4. Analysis

IMPACTS OF COVID-19 ON YORK REGION'S *2019 TO 2023 STRATEGIC PLAN*

The *2019 to 2023 Strategic Plan* was developed to withstand changing operating environments

The *2019 to 2023 Strategic Plan* was developed to withstand changing operating environments by anchoring the plan in core services to ensure the Region continues to meet its legislative obligations while remaining flexible and responsive to residents' needs. This approach was critical in maintaining progress during the COVID-19 pandemic.

The *2019 to 2023 Strategic Plan's* priorities, objectives, performance measures and key activities set for the four-year Council term are still relevant. Programs and services the Region provides have not changed even though how the Region provides them in our changing operating environment may have been impacted.

The COVID-19 pandemic brought about major changes in the way people live, work and play. For example, all modes of travel were affected, even after restrictions were eased. Private vehicle travel fell sharply at the start of the lockdown but eventually rebounded. There was a noticeable shift in traffic patterns as volumes became more uniform through the day. Some of these shifts may last well beyond the pandemic with a positive outlook on the future for York Region residents. For example, key partnerships were developed between York Region and partner agencies to coordinate and leverage services and funding opportunities for those impacted by COVID-19. These partnerships and lessons learned will help inform York Region service and response even after the pandemic.

2019 TO 2023 STRATEGIC PLAN PERFORMANCE MEASURES

Performance measures help demonstrate York Region's specific contribution to the well-being of our communities. The baseline trend in the Year 3 (2021) Progress Report is based on comparing the 2021 data with 2017 data. As fluctuations can occur from year-to-year, it is more meaningful to report on the baseline trend as a five-year impact summary rather than annual variance.

74% of the Strategic Plan's performance measures were trending in the desired direction

In 2021, 23 of 31 (74%) performance measures' current baselines were trending in the desired direction (see Attachment 1). York Region accomplished a great deal in 2021 despite COVID-19's impacts. To highlight a few achievements in 2021:

- Launched a refreshed *Vision*, with Council renewing their commitment to strong, caring, safe communities
- Achieved top scores in the Ontario Chief Drinking Water Inspector's report, with 100% of samples meeting provincial standards to support safe communities
- Purchased six more electric buses, moving closer to Council's goal of zero greenhouse gas emissions by 2051 to deliver and promote environmentally sustainable services
- Planted 92,154 trees and shrubs through the Regional Greening Strategy Program to enhance and preserve green space. This is a 52% increase from 2020 when tree planting programs were heavily impacted by COVID-19
- Continued to implement the Regional Fiscal Strategy that helped build reserves and reduce the debt level. The reserve-to-debt ratio grew from 86% to 147% between 2017 and 2021

- Worked to finalize the Municipal Comprehensive Review, updating the Transportation Master Plan and Water and Wastewater Master Plan for final Council approval of the Regional Official Plan in 2022

Five performance measures were not trending in the desired direction

Five (5) out of 31 (16%) of the performance measures' current baseline trends were not trending in the desired direction (see Attachment 1):

- Number of transit ridership per capita (due to COVID-19)
- Percentage of regional roads with sidewalks and/or dedicated bike lanes in urban areas
- Percentage of individuals and families remaining stably housed after six months who were homeless or at risk of homelessness (due to COVID-19)
- Number of megalitres of treated water consumed per 100,000 population
- Percentage of regional assets with a condition assessment rating of fair or better condition

In 2021, three (3) performance measures had no data available for reporting:

- Percentage of 17-year-old students in compliance with *Immunization of Schools Pupils Act* (due to COVID-19)
- Percentage of food service premises with a certified food handler at all times (due to COVID-19)
- Percentage of York Region clients receiving help to improve their housing stability

Attachment 2 is an exception report summarizing these performance measures. The summary outlines contributing factors for performance relating to each measure and activities planned to support future progress.

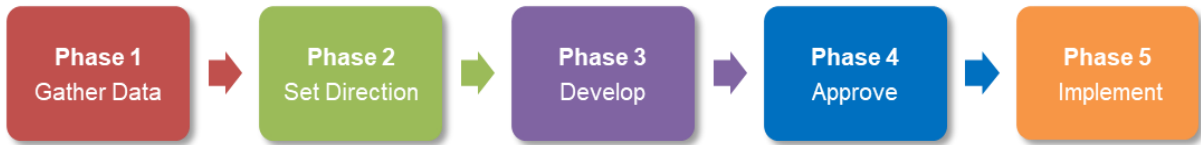
Building on the success of Council direction over this Council term, staff are beginning the process to develop the 2023 to 2027 Strategic Plan to align with the 2022 to 2026 Council term

York Regional Council's commitment to strong, caring, safe communities is the guiding star for the Region's activities.

Public consultation is completed through the visioning process. Comprehensive community consultation on the future vision for York Region was conducted between 2018 to 2021 and informed the renewal of York Region's *Vision*, approved by Council November 2021.

York Region establishes a new Strategic Plan and Multi-Year Budget every four years at the start of a four-year Council term to work towards Council's Vision. The strategic planning process involves five phases (see Figure 1).

Figure 1
Five Phases to Strategic Planning



The Region sets priorities over each four-year term of Council through the Strategic Plan, in alignment with Vision's four areas of focus – Economic Vitality, Healthy Communities, Sustainable Environment and Good Government and focuses on York Region's 15 core services (see Figure 2). Continuing to anchor the Strategic Plan in core services will help to ensure the Region continues to meet its legislative obligations while remaining flexible and responsive to the changing needs of our residents.

Figure 2
York Region's 15 Core Services



The 2023 to 2027 Strategic Plan will build off the success of Council's direction this term with the current *2019 to 2023 Strategic Plan*. Core components captured in the plan are priorities, objectives, and performance measures. Table 2 captures the emerging priorities informing the development of the 2023 to 2027 Strategic Plan. The draft 2023 to 2027 Strategic Plan

will be presented at the start of the next Council term for approval in alignment with the 2023-2026 Budget. Once Council has approved the plan, performance measures will be tracked and reported to Council annually.

Table 2

Emerging 2023 to 2027 Priorities in Alignment with *Vision* four Areas of Focus

Areas of Focus	Emerging Priorities
Economic Vitality	Encourage Economic Growth
Healthy Communities	Support Community Well-Being Deliver and Promote Affordable Housing
Sustainable Environment	Reduce Our Ecological Impact
Good Government	Deliver Trusted and Efficient Services Support Employee Well-Being

5. Financial

Costs associated with the delivery of the *2019 to 2023 Strategic Plan* are aligned with the multi-year budget. The 2022 Regional Budget, approved on December 16, 2021, supports fiscal responsibility within a complex environment and continues to focus on delivering the priorities of the *2019 to 2023 Strategic Plan*, while responding to fiscal challenges, including COVID-19 impacts and investments in infrastructure.

Impacts to the Region's budget directly affects the Region's ability to achieve the four areas of focus of Economic Vitality, Healthy Communities, Sustainable Environment and Good Government. York Region's Strategic Plan and Multi-Year Budget are developed in alignment. As a result, any reductions to planned contributions and budgetary allocations would requiring revisiting commitments identified in the Strategic Plan.

6. Local Impact

The Region's *2019 to 2023 Strategic Plan* shares similar priorities as local municipalities. The progress made in year three of the Region's four-year Strategic Plan continues to support the strong alignment of priorities profiled in many of the local municipalities' plans.

7. Conclusion

The Year 3 (2021) Progress Report provides Council with an update on how the Region is progressing towards meeting its priorities. York Region accomplished a great deal in 2021 despite COVID-19's impacts on much of the operating environment. In Year 3 (2021), 74% (23 of 31) of performance measures are trending in the desired direction. This demonstrates York Region's dedicated commitment made in Year 3 in taking specific, implementable strategies and actions, while responding to COVID-19, to address turning and maintaining the curves of performance measures toward achieving the priorities captured in the Strategic Plan. It is recommended that Council approve the approach for development of the draft 2023 to 2027 Strategic Plan and that this report be circulated to local municipalities for information.

For more information on this report, please contact Krista South, Executive Manager, Office of the Chief Administrative Officer at 1-877-464-9675 ext. 71208. Accessible formats or communication supports are available upon request.



Approved for Submission:

Bruce Macgregor
Chief Administrative Officer

April 8, 2022
Attachments (2)
#13724193

2019 TO 2023 STRATEGIC PLAN ¹⁹ YEAR 3 (2021) PROGRESS REPORT



SUMMARY: 23 of 31 = 74% of Performance Measures Trending in the Desired Direction

Result Area	Performance Measure	Historical Data					Baseline Trend
		2017	2018	YEAR 1 2019	YEAR 2 2020	YEAR 3 2021	
Economic Vitality	Increase % of business engagements resulting in business retention, expansion and attraction	45%	37%	53%	61%	52%	●
	Maintain # of transit ridership per capita	20.8	20	19.8	9.5	8.9	●**
	Increase # of kilometres of bus rapidways	12.30	12.30	27.30	33.70	33.70	●
	Increase # of people and employment within 500 metres of transit	Data not available for reporting	241,000	257,000	265,000	272,300	●
	Maintain % of on-time performance on all transit routes	94.14%	91.45%	91.48%	94.74%	95.64%	●
	Increase # of road lane kilometres	4,229.70	4,265.12	4,293.00	4,318.00	4,382.00	●
Healthy Communities	Maintain % of residents that rate York Region as a safe place to live	96%	94%	95%	96%	95%	●
	Maintain police emergency (Priority 1) response time in minutes	7:06	7:00	6:50	6:44	6:52	●
	Maintain % of municipal drinking water samples meeting Ontario Drinking Water Standards	99.93%	99.89%	100.00%	99.98%	100.00%	●
	Increase % of regional roads with sidewalks and/or dedicated bike lanes in urban areas	Data not available for reporting	88%	84%	85%	86%	●
	Increase % of 17-year-old students in compliance with Immunization of School Pupils Act	86.43%	91.83%	92.00%	Data not available for reporting		▲**
	Increase % of food service premises with a certified food handler at all times	52%	68%	77%	Data not available for reporting		▲**
	Increase % of York Region clients receiving help to improve their housing stability	Data not available for reporting					▲
	Maintain paramedic response time for emergency response services to meet Council approved targets	78%	76%	76%	76%	75%	●
	Increase # of advocacy activities related to long-term care beds	Data not available for reporting	3	13	10	21	●
	Decrease # of days to determine York Region residents' eligibility for social assistance	9	8	8	3	5	●
	Decrease # of children with an immediate need waiting for subsidized childcare	1,258	1,575	2,152	1,855	421	●
	Increase % of individuals and families remaining stably housed after six months who were homeless or at risk of homelessness	Data not available for reporting		83%	81%	74%	●**
Sustainable Environment	Maintain % of wastewater receiving treatment	99.97%	99.99%	100.00%	99.97%	99.99%	●
	Maintain % of residential solid waste diverted from landfill	93%	94%	94%	93%	92%	●
	Decrease # of megalitres of treated water consumed per 100,000 population	9,605	9,855	10,004	10,368	10,245	●
	Decrease # of per capita greenhouse gas emissions across Regional operations in tonnes	64.80	65.20	65.40	55.50	53.70	●
	Increase % of growth occurring within the built-up areas	46.9%	59.3%	75.0%	59.0%	58.0%	●
	Increase % of development applications meeting timeline commitments	Data not available for reporting		100%	100%	100%	●
	Maintain # of trees and shrubs planted annually through the Regional Greening Strategy Program	85,464	101,122	102,332	60,539	92,154	●
Good Government	Maintain / Improve comparative \$ of operating cost per unit of service*	0.91	1.00	1.01	0.95	1.04	●
	Increase % of public-facing transactions that can be completed online or with a mobile device	Data not available for reporting	60%	73%	75%	75%	●
	Increase % of reserve-to-debt ratio	86%	99%	111%	126%	147%	●
	Maintain % of regional assets with a condition assessment rating of fair or better condition	91%	90%	87%	86%	86%	●
	Maintain % of York Region residents that are satisfied with Regional government	78%	75%	81%	87%	80%	●
	Increase # of open data sets	177	214	228	228	228	●

*NOTE: 2018 as baseline year and considered trending in the right direction compared to inflation. 2021 data may be subject to change based on finalized FIR data.

LEGEND ● = Trending in the desired direction ● = Not trending in the desired direction ▲ = Data Not Available for Reporting
**Performance measures negatively impacted due to the COVID-19 pandemic.

Exception Report Summary

2019 to 2023 Strategic Plan Year 3 (2021) Progress Report – Performance Measures

Performance Measures Not Trending in the Desired Direction

Five (5) of 31 (16%) of the Strategic Plan's performance measures' current baseline trends were not trending in the desired direction (see Attachment 1):

- Number of transit ridership per capita (due to COVID-19)
- Percentage of regional roads with sidewalks and/or dedicated bike lanes in urban areas
- Percentage of individuals and families remaining stably housed after six months who were homeless or at risk of homelessness (due to COVID-19)
- Number of megalitres of treated water consumed per 100,000 population
- Percentage of regional assets with a condition assessment rating of fair or better condition

Contributing factors for the performance of each of these measures are detailed below.

Performance Measures With No Data Available for Reporting

In 2021, three (3) performance measures had no data available for reporting:

- Percentage of 17-year-old students in compliance with *Immunization of Schools Pupils Act* (due to COVID-19)
- Percentage of food service premises with a certified food handler at all times (due to COVID-19)
- Percentage of York Region clients receiving help to improve their housing stability

Explanations for each of these measures with no data available for reporting are detailed below.

Performance Measures Not Trending in the Desired Direction



ECONOMIC VITALITY

Maintain number of transit ridership per capita

The number of transit ridership per capita decreased significantly in 2020 and 2021 compared to previous years, reaching 8.9 million riders across the York Region Transit system in 2021. Ridership was primarily impacted due to the COVID-19 pandemic with work-from-home initiatives, changes in ridership behaviour as a result of distancing and risk of COVID-19 transmission, school closures and limitations on travel for leisure. In addition, the York Region service area population decreased slightly in 2020 and 2021, as select low performing services were discontinued due to ridership decline. However, Mobility On-Request service areas were expanded to assist with service coverage and address changes in travel patterns.

Prior to the pandemic, transit ridership was impacted by reduced service hours and construction across the region. Revenue service hour decreases have been a result of budgetary restraints to pay for capital expenditures. A clear trend was identified between construction areas and corresponding ridership. In areas where construction was occurring, ridership in those corridors and routes connecting to them decreased due to increased travel times and delays.

The regional road network continues to be under pressure due to significant growth across York Region. To manage this demand on regional roads, highways and transit system, the Region is continuing to focus on providing mobility for all modes of travel (walking, cycling, transit and auto uses) through improved transit services, development of complete and walkable communities, improved network infrastructure and connections as well as promoting active transportation through the implementation of cycling facilities.



HEALTHY COMMUNITIES

Increase percentage of regional roads with sidewalks and/or dedicated bike lanes in urban areas

In 2021, 86% of regional roads have an adjacent sidewalk and/or dedicated bike lane in urban areas.

2018 was the first year the percentage of regional roads with sidewalks and/or dedicated bike lanes in urban areas was measured. This performance measure illustrates the number of regional roads that have a sidewalk or bike lane adjacent to it. In 2019, the data collection methodology was refined to provide more accurate data. As the data sets are refined fluctuations may appear due to data reporting becoming more accurate. York Region continues to include pedestrian and cycling facilities as part of road improvement projects in partnership with local partners, and this trend is expected to be maintained or increase as the urbanization of the Region continues.

Increase percentage of individuals and families remaining stably housed after six months who were homeless or at risk of homelessness

In 2021, 74% of individuals and families remained stably housed after six months who were previously homeless or at risk of homelessness. Ongoing waves of the pandemic in 2021 made it challenging for York Region to conduct follow-ups with clients at the six-month post-service check-in.

The 2021 update excludes data from the three external emergency housing providers that employ housing support workers. However, in 2021, York Region met with the emergency housing partners to provide guidance and capacity building supports to strengthen tracking and reporting of performance and outcomes to ensure accurate and consistent data collection. 2022 will be the first full year of available data from emergency housing providers.

During the pandemic, affordable housing options across York Region has continued to be extremely limited and financial instability has increased, affecting the ability of residents to maintain their housing.

This measure excludes clients for whom 'housing status' was unknown or unavailable at six months, and may not reflect unique customers, as it is possible to access multiple programs in a calendar year.



SUSTAINABLE ENVIRONMENT

Decrease number of megalitres of treated water consumed per 100,000 population

The number of megalitres of treated water consumed per 100,000 population is used to track water consumption at York Region. In 2021, 10,245 megalitres of treated water was consumed per 100,000 population. Annual values are determined using treated water consumed (annual billed volume) and serviced population data.

Weather plays a significant factor in seasonal water use, particularly in the summer months. Seasonal residential demand increases are primarily related to lawn and garden watering and other outdoor uses. Typically, the hotter and drier the weather and the longer the duration of hot and/or dry events there is a greater amount of water consumed.

In addition to weather patterns, in December 2018, one of the main bulk water supply meters was replaced with new technology which increased the accuracy and confidence in total water demand volumes.



GOOD GOVERNMENT

Maintain percentage of regional assets with a condition assessment rating of fair or better condition

This performance measure includes only service areas deemed as "core assets" per O.Reg 588/17. (e.g. Water/Wastewater, Roads).

In 2021, the percentage of regional assets with a condition assessment rating of fair or better condition remained the same as 2020 at 86%. This is primarily due to aging road assets which did not have a sustainable funding source. In 2019, Regional Council approved drawing from the Asset Management Reserve to fund road assets.

The Region continues improving asset management practices to better understand risks and vulnerabilities to service delivery and better link asset management decision-making with broader provincial acts and regulations, corporate policies, plans and budgets. The goal of asset management is not to achieve 100% of assets in fair or better condition but rather to ensure critical assets are replaced at optimal intervals. Corporate Asset Management review cost, risk and performance drivers (level of service) to determine optimal asset invention requirements.

Corporate Asset Management updates Council regularly on asset management progress. The next Annual State of Infrastructure Report is scheduled for Fall 2022 and an update on the Corporate Asset Management Plan and policy planned for 2024.

Performance Measures With No Data Available for Reporting



HEALTHY COMMUNITIES

Increase percentage of 17-years-old students in compliance with the *Immunization of School Pupils Act (ISPA)*

In 2021, due to the ongoing staffing requirements for the COVID-19 operational response, this program was suspended as per Ministry of Health guidance, resulting in 2021 data for this performance measure not being available.

Increase percentage of food service premises with a certified food handler at all times

Due to the COVID-19 response, including redeployment of staff in 2020 and 2021, and requirements of the *Reopening Ontario Act* for the closure of premises, 2021 data for this performance measure is not available.

Increase percentage of York Region clients receiving help to improve their housing stability

The performance measure outlining the percentage of York Region clients receiving help to improve housing stability has been reported as data not available in the past three years due to data collection constraints. Staff have been working to develop a methodology to report on this measure but have concluded there is no broad denominator representing York Region clients that can be used to support its calculation. This performance measure will be reassessed and updated with a more meaningful, reliable, and reportable measure as part of developing the draft 2023 to 2027 Strategic Plan for Council's consideration next term.

Working with community partners, York Region delivers several housing stability programs providing a range of shorter- and longer- term supports, including rent-g geared-to-income subsidies, portable housing benefits, outreach, case management and counselling and emergency and transitional housing. In 2021, 9,802 households received housing assistance through short- and long-term programs delivered directly by the Region and through partners, an increase of approximately 6% from 2020 with 9,244 households.

Regional Council Decision - 2021 Regional Centres and Corridors Update

On May 26, 2022 Regional Council made the following decision:

1. Council continue to advocate for Federal and /or Provincial funding toward the Phase Three Rapid Transit network, and critical infrastructure for the advancement of the Yonge North Subway Extension project that will support and implement Provincial Growth Plan forecasts within the Regional Centres and Corridors.
2. The Regional Clerk forward this report to the local municipalities, Minister of Municipal Affairs and Housing and York Region Members of Federal and Provincial Parliament as an example of the Region' s continued commitment to transit-oriented development within Regional Centres and Corridors.

The original staff report is attached for your information.

Please contact Jessica Wu, Senior Planner at 1-877-464-9675 ext. 71507 if you have any questions with respect to this matter.

Regards,

Christopher Raynor (he/him) | Regional Clerk, Regional Clerk's Office, Corporate Services Department

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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
Planning and Economic Development
May 5, 2022

Report of the Commissioner of Corporate Services and Chief Planner

2021 Regional Centres and Corridors Update

1. Recommendation

1. Council continue to advocate for Federal and/or Provincial funding toward the Phase Three Rapid Transit network, and critical infrastructure for the advancement of the Yonge North Subway Extension project that will support and implement Provincial Growth Plan forecasts within the Regional Centres and Corridors.
2. The Regional Clerk forward this report to the local municipalities, Minister of Municipal Affairs and Housing and York Region Members of Federal and Provincial Parliament as an example of the Region's continued commitment to transit-oriented development within Regional Centres and Corridors.

2. Summary

This report provides an annual overview of development activities, trends and project updates in Regional Centres and Corridors. It highlights permit and construction activities, infrastructure investments and projects, secondary plan updates and socio-demographic trends.

Key Points:

- Regional Centres and Corridors are being transformed into compact, mixed-use communities through committed infrastructure investments, comprehensive and integrated planning policies, and strong development activity
- Multi-unit residential construction activities remained robust, with 87% of new apartment starts located in Regional Centres and Corridors
- Office vacancies and subleasing activities in Centres and Corridors remained stable in 2021. Future demand will be shaped by return-to-office models and shifts to leveraging office space for collaboration and innovation
- There is growing interest in developing purpose-built rental housing in Centres and Corridors, with two buildings being constructed and 11 buildings proposed

- York Region remains committed to the timely advancement of the Yonge North Subway Extension and working with the Province to develop livable, complete communities around subway stations
- Strong development interests along the Yonge North Subway Extension Corridor resulted in over 50,000 new residential units proposed in 2021

3. Background

Regional Centres and Corridors support and implement objectives and principles of city building and complete communities

Regional Centres and Corridors are priority intensification areas in York Region. They are integral to the Regional urban structure in the Regional Official Plan to accommodate residential intensification and commercial/office growth supported by rapid transit investment. Accommodating growth through intensification in strategic locations like Centres and Corridors helps maintain fiscal sustainability by aligning growth with existing and planned infrastructure and services.

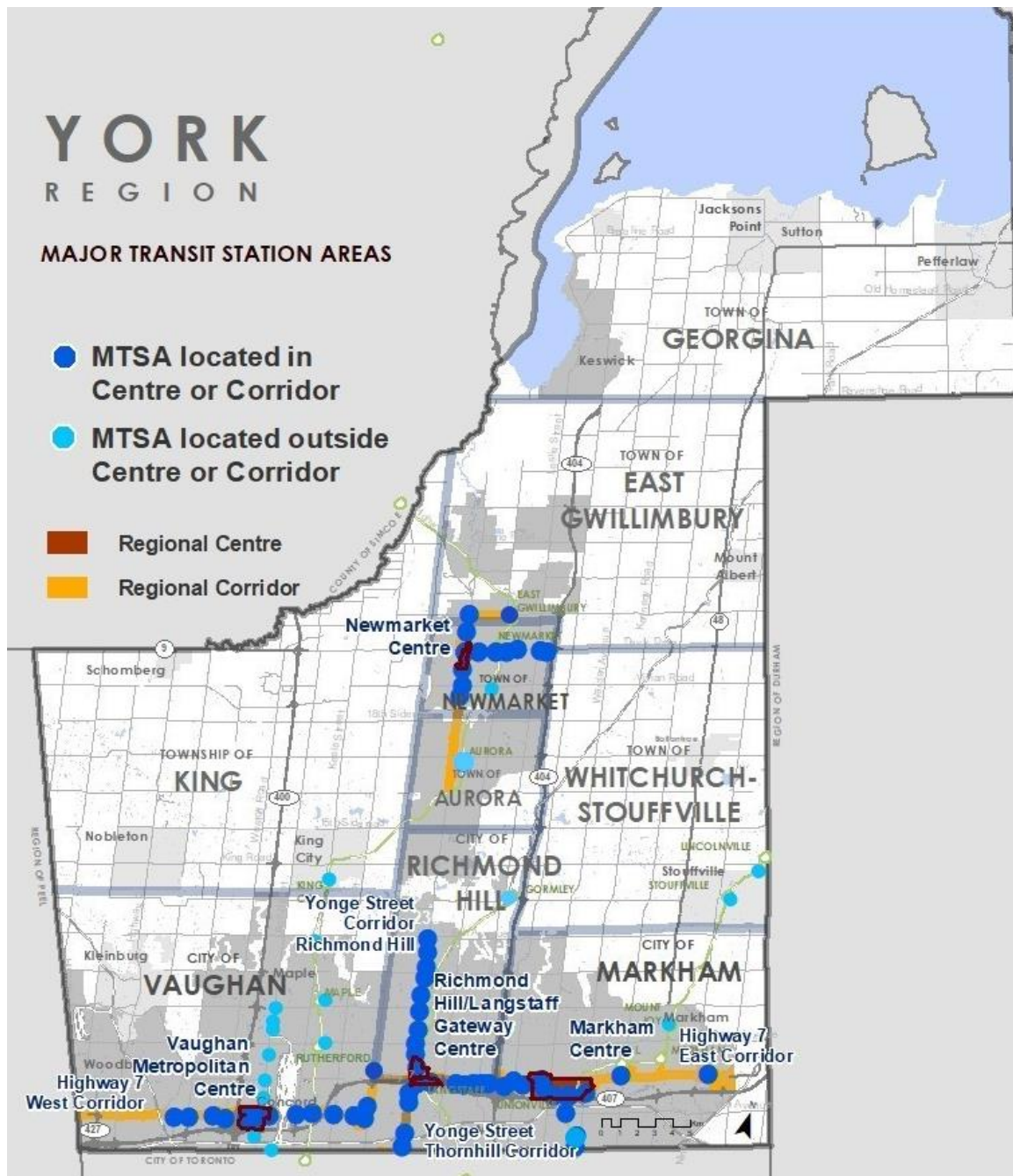
The Region's four Regional Centres (Markham Centre, Newmarket Centre, Richmond Hill/Langstaff Gateway and Vaughan Metropolitan Centre) and Regional Corridors (Highway 7, Yonge Street, Davis Drive and Green Lane) shown in Figure 1 are at different stages of growth and development. Subsequent report sections highlight development activities, trends, investments and initiatives along Regional Centres and Corridors in 2021.

Figure 1
Growing Regional Centres and Corridors



The Region's urban structure includes 78 major transit station areas (MTSA), with 58 located in Centres and Corridors (Figure 2). MTSA and Phase Three Rapid Transit projects will strengthen connections between Regional Centres and Corridors. Together with updated Regional Official Plan policies, intensification in Centres and Corridors will support the advancement of city building objectives to deliver complete, resilient communities with destinations to live, work, learn and play.

Figure 2
Major Transit Stations Areas in Centres and Corridors



4. Analysis

Strong development interest and robust building activities continue to drive high-density residential growth in Regional Centres and Corridors

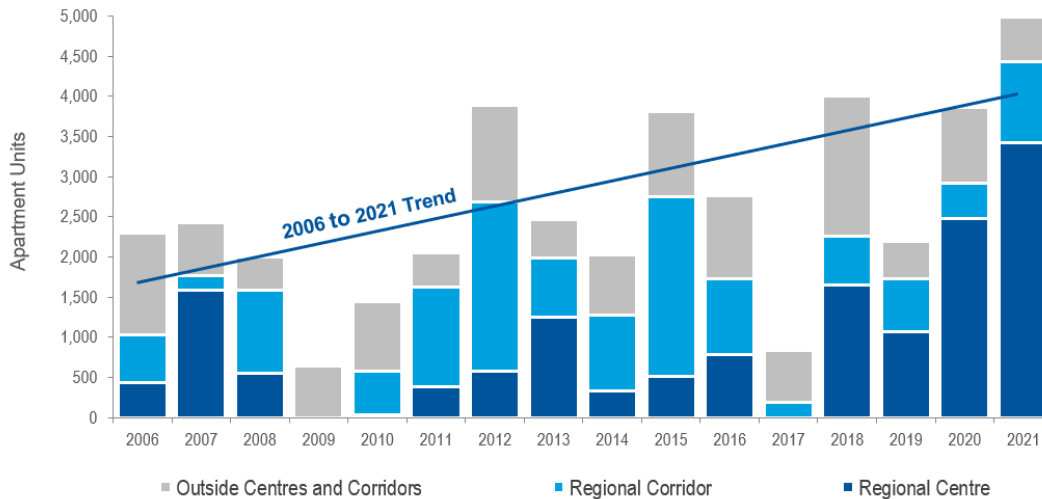
Across the Region, building permits were issued for 5,096 apartment units in 2021. This represents a 32% increase compared to 3,855 units in 2020 (Figure 3), the highest single-year apartment growth Region-wide since 2006. Since 2006, 68% of all new multi-storey apartment units in the Region are in Centres and Corridors.

2021 was a record year for apartment building activities in Regional Centres and Corridors. Almost 87% (4,435) of building permits issued for new apartments were in Regional Centres and Corridors (Figure 3), with a majority (72%) issued in the first half of the year. Apartment starts were mainly concentrated in Markham Centre (1,521 units) and Richmond Hill Centre (1,149 units). Development activities in Centres and Corridors continue to show strength and resilience during the pandemic.

The following are key highlights of 2021 building permit activity in Centres and Corridors:

- 43% of new building permit units and most new apartment units (87%) were in Centres and Corridors
- Within Regional Centres, Markham Centre had the strongest apartment permit unit activity (44%) followed by Richmond Hill/Langstaff Gateway (34%) and the Vaughan Metropolitan Centre (22%)
- 578 purpose-built rental apartments are under construction, with another 2,616 units proposed in Centres and Corridors
- Only 5% of housing starts in Centres and Corridors are medium density developments (10 storeys or less)
- About 68,200 new high-density units and 427,800 square metres of commercial space are proposed or under construction along the Yonge North Subway Extension (YNSE) corridor
- In November 2021, Smart Centres announced plans to acquire 21 hectares of land in the Vaughan Metropolitan Centre, making them the largest landowner in this Regional Centre

Figure 3
New Apartments in York Region and Centres and Corridors



Note: 2020 apartment units shown included an additional 1,400 units observed to be under construction

Construction activity is strong in Vaughan Metropolitan Centre and Markham Centre

After a strong year of building activity in 2020 with 29 multi-story residential buildings (8,900 units) being constructed, construction activity in the Centres remained robust in 2021. There were 27 multi-story residential buildings (8,140 units) under construction. The largest volume of construction activities was in the Vaughan Metropolitan Centre (Figure 4) with 7 buildings (2,540 units) followed by Markham Centre with 7 buildings (2,190 units) (Source: Altus Group Data Solutions Inc.). The York University Markham Centre Campus, which broke ground in 2020, is under construction and scheduled to open in fall 2023 (Figure 5).

Figure 4
Apartments Under Construction in Centres and Corridors, 2021

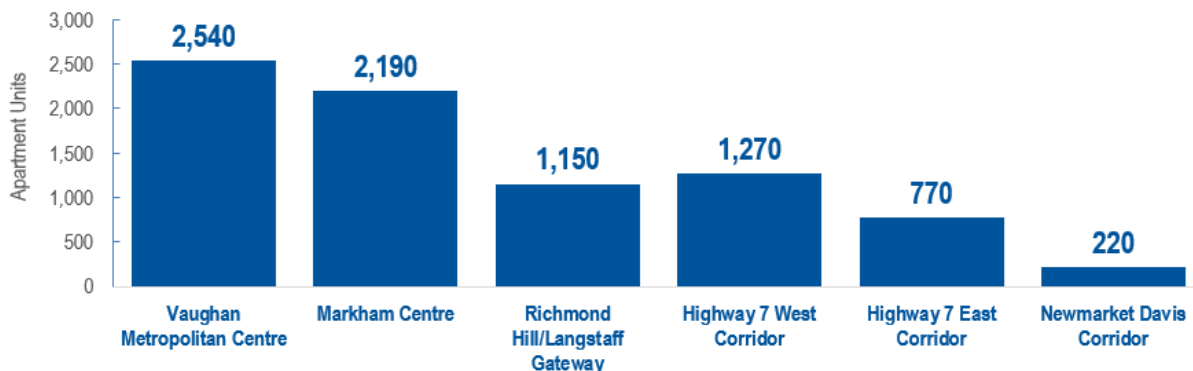


Figure 5 York University Markham Centre Campus Rendering



Source: York University and Diamond Schmitt Architects

GTA recorded strong new condominium sales activity in 2021, despite low inventory in Centres and Corridors

Despite the pandemic, the GTA experienced strong new condominium sales in 2021, 40% above the 10-year average with 32,900 units sold among low, medium, and high-rise buildings, stacked townhouses and loft units. York Region alone recorded a 44% (1,800 unit) increase in apartment sales from 2020 (Source: Altus Group Data Solutions Inc). In 2021, unsold new condominiums in Centres and Corridors remained consistent with previous two-year trend at 4% (443 units) of total apartment inventory.

Office activity in Centres and Corridors remained stable in 2021, but future demand will be shaped by return-to-office models post-pandemic

Office market conditions, in terms of vacancies and subleasing activities, is relatively stable in Centres and Corridors due to the type of businesses and variety of services and amenities offered at these locations. Companies with office spaces in Centres and Corridors are typically in the information and communication technologies (ICT), engineering, financial and professional services, and retail sectors. Modern office towers are in demand by high profile anchor tenants. Commercial real estate market indicators have recorded a strong trend for modern office space built since 2015, at a single-digit vacancy rate compared to GTA's 905-regions overall double-digit vacancy rates.

With the ease of COVID-19 restrictions, businesses will be testing return-to-office models. The demand for office space will be dependent on business decisions to continue with remote work, shift to hybrid models, or bringing employees back to in-office work full-time.

Offering flexibility may also help employers tap into an expanded talent pool by being more sensitive and adaptable to workers' needs and schedules. According to the Collier Office Market Report (2021), office space will increasingly be leveraged as a destination for collaboration and innovation to strengthen and enrich company culture. York Region continues to promote mixed-use communities through its development charge deferral program for large office building projects.

Purpose-built rental housing projects have increased in Centres and Corridors, with two buildings under construction and 11 buildings proposed

Complete communities include housing options for people at all income levels, which has positive outcomes for the broader economy, environment, and community. Centres and Corridors are great locations for purpose-built rental and affordable housing projects because of great access to rapid transit and a variety of community amenities and services.

Region-wide, 15 purpose-built rental apartments (2,885 units) are being proposed, of which 11 apartments (2,616 units) are in Centres and Corridors. Two rental housing buildings are under construction in the Vaughan Metropolitan Centre (362 units) and along Davis Drive (216 units) (Figure 6). Almost three-quarters (71% or 1,851 units) of proposed purpose-built rental housing units are concentrated along the Yonge Street Corridor in Richmond Hill, with another 19% (501 units) along Davis Drive Corridor in Newmarket.

Figure 6

Purpose-built Rental Housing along Davis Drive in Newmarket



The Region continues to promote purpose-built rental housing through the development charge deferral program. In 2020, two proposals with 261 units secured affordable rental development charge deferral, of which 216 units were in Centres and Corridors. There were no new rental housing development charge deferrals in 2021.

More renters and seniors are moving into Centres and Corridors

Demographics in Centres and Corridors evolve with housing and job options, access to services and amenities, changing lifestyle and personal needs. Based on 2021 EnviroNics Analytics, the proportion of tenants has grown in all four Regional Centres compared to

2019. These areas, well-served by higher order transit and diverse daily destinations are also attracting more seniors (65+). Markham Centre and Newmarket Centre had an increased share of single-person household. Richmond Hill Centre recorded growth in family households (with four or more persons). More households in Markham Centre and Vaughan Metropolitan Centre are earning more than \$100,000 compared to 2019.

Updates to Regional Centre Secondary Plans are underway to manage growth trends, infrastructure and service needs in these growing communities

Official plan amendment applications in Centres and Corridors proposing heights and/or density beyond local Official Plan permission grew over the past few years. In 2021, 70% of proposed developments exceeded planned height and/or density permissions. Over the years, there has been an increase in the number development proposals requiring amendments to Official Plans and zoning by-law to build much denser and taller buildings than the planned vision. This additional population places greater demand on infrastructure and community services.

Existing developments and active applications in Markham Centre, Vaughan Metropolitan Centre and Richmond Hill/Langstaff Gateway Centre (including Provincial Transit-Oriented Communities proposals) already exceed local secondary plan 2031 projected residential target by 62%, 94% and 95% respectively (Attachment 1). Secondary Plan updates at these Regional Centres are underway to balance growth trends with the delivery of infrastructure, parkland and community services, and meeting the needs of demographics within these communities (Attachment 1). Updated population and employment targets, and policies to support city building and complete community visions will be tabled for local Council adoption later in 2022.

York Region remains committed to the advancement of the Yonge North Subway Extension

The Federal government announced a \$2.24 billion funding commitment to the Yonge North Subway Extension in May 2021. Together with Provincial and Regional funding, the Yonge North Subway Extension project has advanced planning and design works, alignment options, and community engagement to deliver critical infrastructure and services required to support growth and intensification in Centres and Corridors.

In planning for the arrival of extended subway services and stations along Yonge Street, it is important to plan livable, complete communities with context appropriate residential densities, a mix and range of residential, employment, community and cultural amenities and destinations around future stations.

Unprecedented development interest along the Yonge North Subway Extension corridor with over 68,000 units under review and construction, 78% of which were newly proposed in 2021

The anticipated opening of extended subway services continued to attract and strengthen development interest in and around the Yonge North Subway Extension corridor in York

Region. There are about 68,200 units and 427,800 square metres of non-residential space in different stages of development review and approval (Table 1).

Table 1
Development Activities in the Yonge North Subway Extension Corridor, 2021

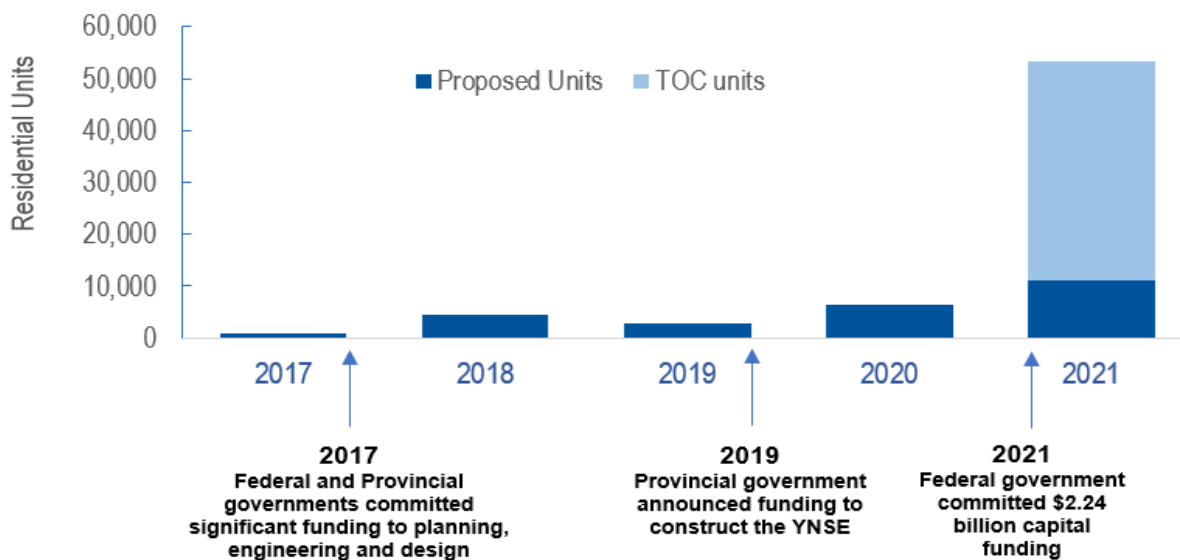
Status	Residential Units	Non-Residential Gross Floor Area (sq.m.)
Pre-consultation	9,000	38,400
Under Application	16,000	46,000
Provincial Transit-Oriented Communities proposals	42,000	343,000
Approved and Under Construction	1,200	400
Total	68,200	427,800

Through the Ontario Transit-Oriented Communities Program, the Province partnered with landowners to submit development proposals to offset capital cost of the transit program. Approximately 42,000 units and 343,000 square metres of commercial/retail/office space are proposed in the Bridge and High Tech station areas. Regional and local municipal staff continue to work with the Province to promote Transit-Oriented Communities along the Yonge North Subway Extension corridor that reflect good planning principles and the visions established in local municipal secondary plans.

Of the 68,200 units under review and construction in the Yonge North Subway Extension Corridor, 78% (53,200 units) were proposed in 2021 alone (Figure 7). About 45,700 units were part of active applications, with an additional 7,500 units considered through pre-consultation meetings.

Figure 7

New High-Rise Residential Units Proposed Along the Yonge North Subway Extension Corridor, 2017 to 2021



Additional funding needed to support expansion of rapid transit service

Approximately 34 km of opened rapidways connecting Regional Centres in Markham, Richmond Hill, Vaughan, and Newmarket were completed in 2020. An additional 135 km of rapid transit is planned to complete missing links along Highway 7, Yonge Street, Jane Street, Leslie Street, McCowan Road, Steeles Avenue, Green Lane and Major Mackenzie Drive as well as extension of the Toronto-York Spadina Subway Extension and the Yonge North Subway Extension to Major Mackenzie Drive (Figure 8).

Additional funding is needed for the planning and design of these Phase Three Rapid Transit Network, with the amount to be confirmed upon the completion of the Regional Transportation Master Plan and Development Charge Bylaw Update. It is anticipated that planned and opened bus rapid transit corridors will be home to approximately 766,000 residents and 512,000 jobs by 2051.

Figure 8

Opened and Planned Rapidways Connect Communities, Improve Quality of Life and Support Economic Vibrancy



York Region has requested the Province introduce legislative changes similar to Bill 171, the Building Transit Faster Act, to advance Environmental Assessment Approvals for critical Water and Wastewater Infrastructure

Bill 171, the *Building Transit Faster Act*, introduced by the Province in February 2020, includes several measures to help accelerate the delivering of the Provincial subway program. York Region has asked the Province to introduce similar legislation to Bill 171 to help expedite Environmental Assessment Approvals associated with approval of key infrastructure projects. Continued delay in approval of a sewage solution for York Region's northern municipalities significantly impacts the ability for municipalities dependent on this project to meet Provincial Growth Plan targets and realize economic development opportunities.

5. Financial

Development in Centres and Corridors optimizes investment in capital infrastructure. To date:

- The Region has invested in Bus Rapid Transit, preliminary planning and design for the Yonge North Subway Extension, and facilities and terminals to support Centres and Corridors
- This investment has provided over \$2.1 billion in assets, including rapidway, stations and lanes, boulevard work, underground infrastructure, streetscape features, facilities and terminals, and Toronto-York Spadina Subway Extension subway infrastructure
- Additional funding is required to build 135+ km of planned bus rapidways and subway extensions, critical to connecting the Regional Centres and complete the rapid transit network
- York Region has committed \$1.12 billion for capital construction of the total \$5.6 billion project cost of the Yonge North Subway Extension project to Highway 7. It is understood that the Region will not be required to contribute any additional funding beyond the \$1.12 billion, which represents the Region's pro rata contribution to the \$5.6 billion capital construction costs as per the preliminary agreement. This contribution will be funded through a combination of tax levy and development charges.
- An incremental Rapid Transit Infrastructure Levy (RTIL) equivalent to 1% tax levy increase was approved as part of the 2022 budget, to help fund the Region's portion of the Yonge North Subway Extension. As noted in the 2022 budget, additional RTIL amounts will be necessary to fully fund the project. Financial analysis continues and further levy requests will be made through future budgets.
- Region's 2022 Development Charge Bylaw, which is anticipated to come into effect in June 2022, includes the Region's share of the Yonge North Subway Extension for the first time.
- Implementation of these capital projects will have implications for the operating budget

Additional density and population proposed beyond the Regional and local municipal planning framework will place additional demands on funding for infrastructure and services. Staff are assessing and identifying infrastructure upgrades required to support additional growth in Centres and Corridors.

6. Local Impact

Regional staff continue to collaborate with local municipal partners in planning and implementing city building initiatives along Centres and Corridors. Ongoing municipal engagement and partnership activities include:

- Review of Secondary Plans and draft Regional Official Plan city building policies
- Coordinate review and commenting of development applications along Regional Centres and Corridors, including Transit-Oriented Communities proposals
- Establish data and 3D modelling visualization standards and processes to inform development review, community engagement and promote city building objectives
- Develop a 15-minute city mapping tool to assess walkability in York Region neighborhoods and measure achievement of complete community objectives outlined in the Regional Official Plan

7. Conclusion

Regional Centres and Corridors program is a long-term strategy to drive city building efforts in York Region. Accommodating growth through intensification in strategic locations like Centres and Corridors and MTSAs helps maintain fiscal sustainability by aligning growth with existing and planned infrastructure and services.

Ongoing funding commitments for subway and bus rapid transit projects and strengthened municipal policy framework have stimulated residential and job growth in Centres and Corridors. In 2021, 43% of York Region residential permit units and 87% of apartment permits units were in Centres and Corridors. Development proposals in Markham, Richmond Hill/Langstaff Gateway and Vaughan Metropolitan Centres have exceeded planned population growth targets with secondary plan updates underway. Growth along Centres and Corridors will need supporting infrastructure, servicing and community services to achieve planned vision and growth targets.

Federal and Provincial funding commitments for the Yonge North Subway Extension, and the opening of the Toronto-York Spadina Subway Extension are important catalysts to the transformation and growth of vibrant communities in Centres and Corridors. The planned 135 km Phase Three Rapid Transit Network requires additional funding to complete the missing links in the Region's rapid transit network, moving people and attracting jobs to York Region and GTA-wide destinations.

For more information on this report, please contact Jessica Wu, Senior Planner at 1-877-464-9675 ext. 71507. 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

April 21, 2022

Attachment (1)

13754861

2021 REGIONAL CENTRES and CORRIDORS REPORT

An overview of development activities and demographics in York Region's Centres and Corridors

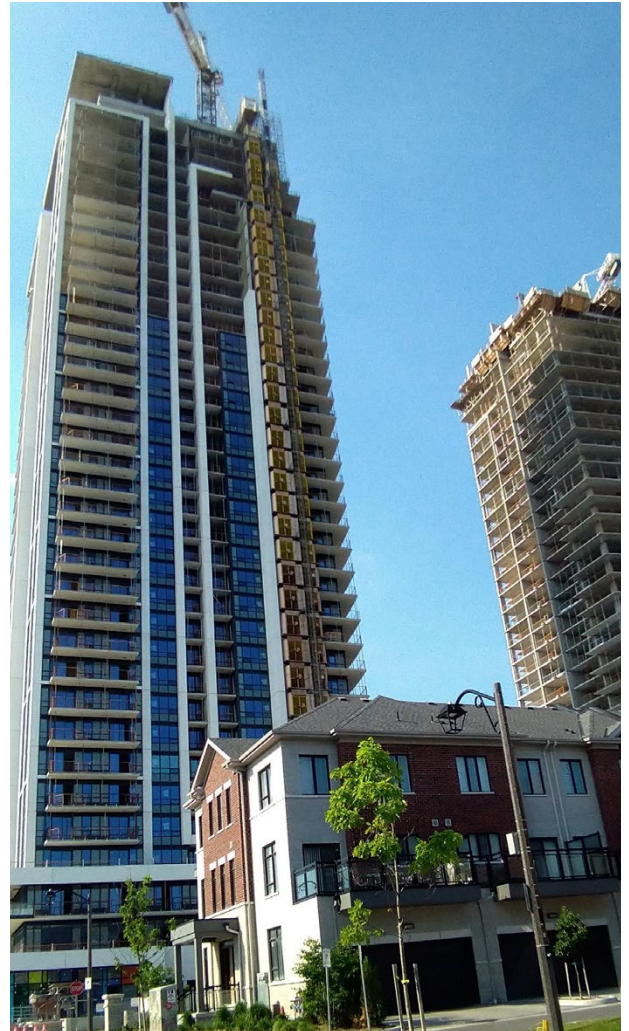
CITY BUILDING in YORK REGION

CENTRES and CORRIDORS 2021 PROGRAM RESULTS | MAY 2022

York Region's Centres and Corridors Program is a city-building initiative and the foundation of York Region's planned urban structure. It combines planning for urban pedestrian friendly/walkable communities with construction of new rapid transit corridors and stations that connect York Region and the Greater Toronto Area. Accommodating growth in Regional Centres and Corridors helps maintain fiscal sustainability by directing more residents and jobs to strategic intensification areas with existing and planned infrastructure and services.

Subway extensions and VivaNext rapidways are important catalysts to the transformation and growth of vibrant communities in Centres and Corridors. The introduction of 58 of the 78 Council endorsed Major Transit Station Area (MTSA) along Centres and Corridors will promote a clustering of diverse land uses to build and revitalize 15-minute, complete communities with destinations to live, work, learn and play.

2021 had been a record year for apartment building activities in Regional Centres and Corridors with 4,435 units or 87% of new apartment in York Region. Apartment starts were mainly concentrated in Markham Centre (1,521 units) and Richmond Hill Centre (1,149 units). There were 27 multi-storey residential buildings under construction (8,140 units) with the largest volume of activities in the Vaughan Metropolitan Centre (among 7 buildings; 2,540 units).



STRONG CONSTRUCTION ACTIVITY
27 BUILDINGS (8,140 UNITS) under CONSTRUCTION

SINCE 2006

68%

of **ALL NEW MULTI-STOREY RESIDENTIAL APARTMENT UNITS** in the Region have been located in **Centres and Corridors**

87%

of **ALL APARTMENT UNIT STARTS** were located in **Centres and Corridors**

Highest ONE-YEAR Percentage Recorded!

578

PURPOSE-BUILT RENTAL APARTMENT UNITS underconstruction in 2021, with another 2,600 units proposed in **Centres and Corridors**

CITY BUILDING in YORK REGION CENTRES and CORRIDORS 2021 PROGRAM RESULTS | MAY 2022

Companies with office spaces in Centres and Corridors are typically in the information and communication technologies (ICT), engineering, financial and professional services, and retail sectors. No new building permits were issued for office in 2021. Future demand for office space will be shaped by return-to-office models and shifts to use these spaces as destinations for collaboration and innovation to strengthen and enrich company culture.

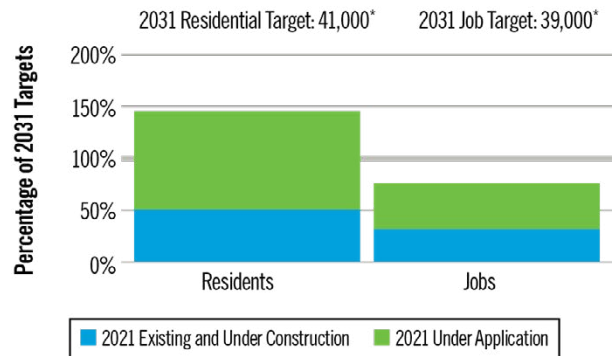
Built and projected growth in Markham Centre, Richmond Hill/Langstaff Gateway Centre and Vaughan Metropolitan Centre have already exceeded 2031 growth targets. Updates to secondary plans in these Regional Centres are underway to manage growth trends, infrastructure and service needs in these growing communities.

The anticipated opening of the Yonge North Subway Extension (YSNE) continued to attract strong development interest along Yonge Corridor between Steeles Ave. and High Tech Road. There are over 68,000 units proposed along this corridor through pre-consultation, Official Plan and Zoning amendment, site plan, Provincial Transit-Oriented Communities (TOC) applications and under construction. 78% (53,200 units) were proposed in 2021 alone.

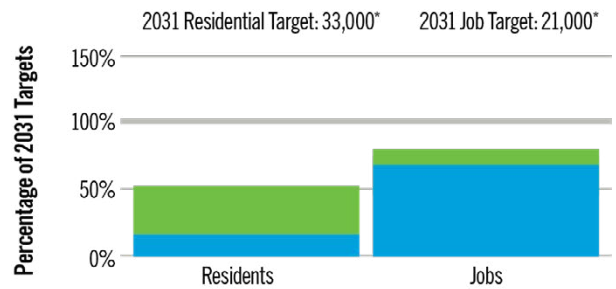


Progress Towards Growth in Regional Centres

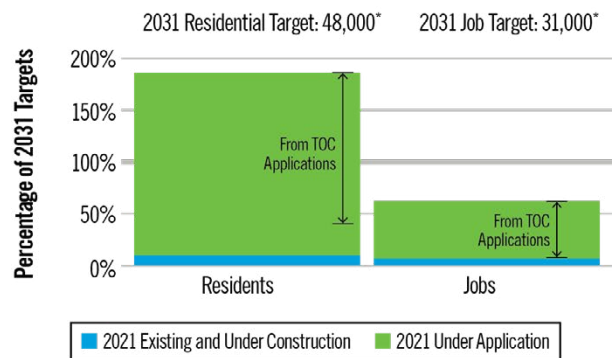
MARKHAM CENTRE



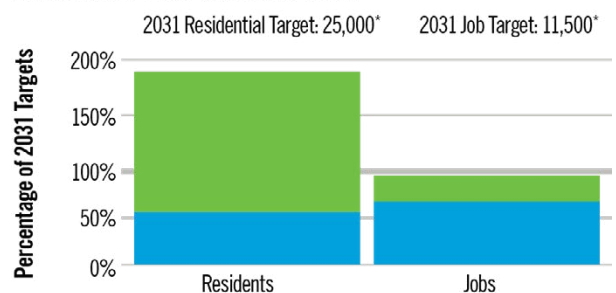
NEWMARKET URBAN CENTRES



RICHMOND HILL/LANGSTAFF GATEWAY CENTRE

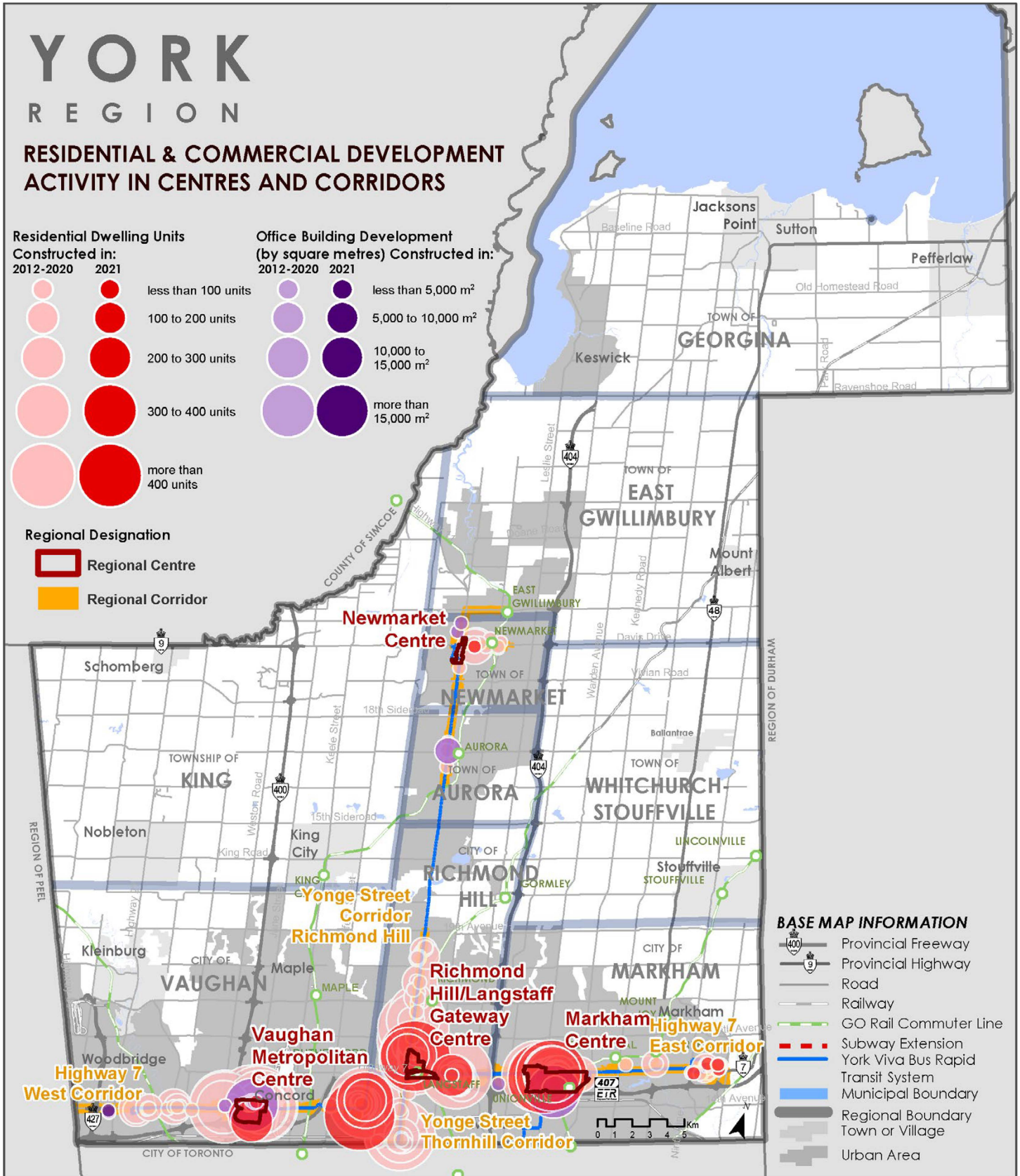


VAUGHAN METROPOLITAN CENTRE



*Population and job targets subject to Secondary Plan approvals in: Markham, Newmarket, Richmond Hill and Vaughan.

CITY BUILDING in YORK REGION CENTRES and CORRIDORS 2021 PROGRAM RESULTS | MAY 2022

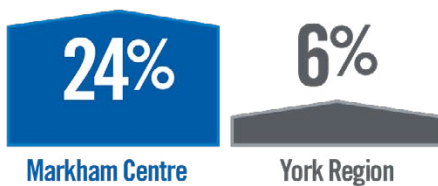


MARKHAM CENTRE

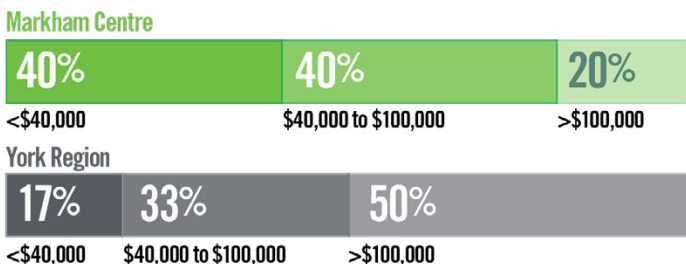
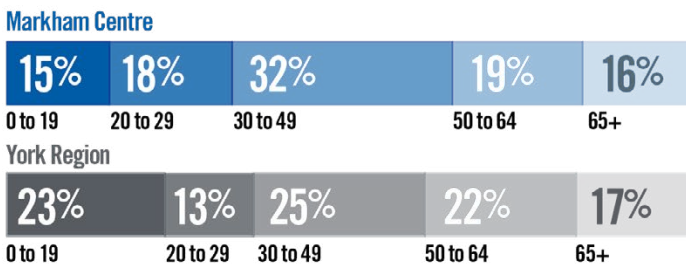
DEMOGRAPHICS 2021



POPULATION GROWTH
2016 to 2021



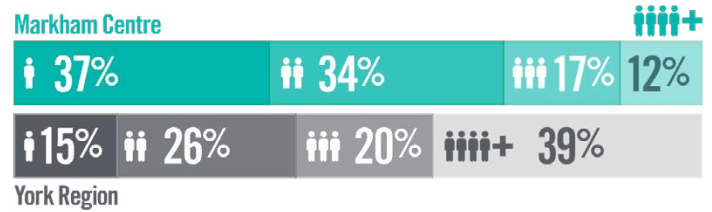
POPULATION AGE



Source: Environics Analytics - Demostats 2021, York Region 2019 Employment Survey

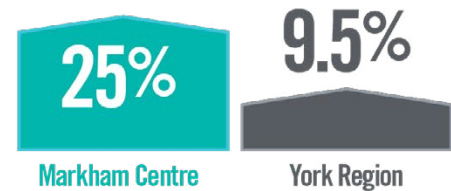


HOUSEHOLD COMPOSITION

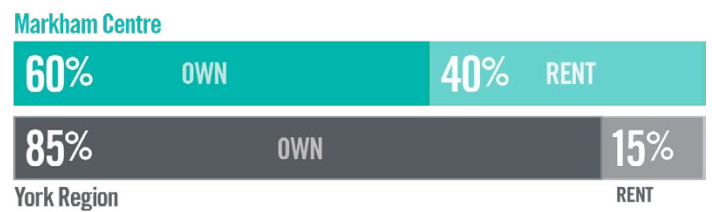


HOUSEHOLD GROWTH

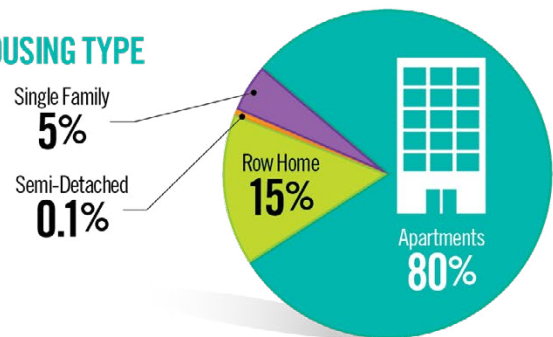
2016 to 2021



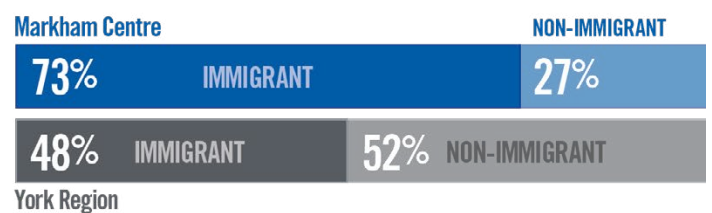
HOUSEHOLD TENURE OWNERSHIP vs. RENTAL



HOUSING TYPE



POPULATION DIVERSITY

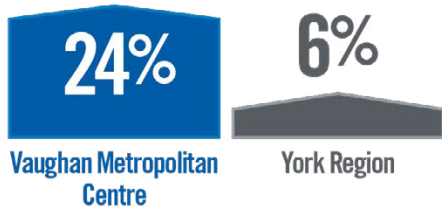


VAUGHAN METROPOLITAN CENTRE

DEMOGRAPHICS 2021

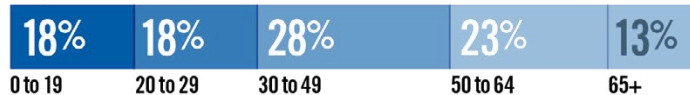


POPULATION GROWTH
2016 to 2021



POPULATION AGE

Vaughan Metropolitan Centre



York Region



Vaughan Metropolitan Centre



York Region



Source: City of Vaughan 2020 VMC Development Activity Report, Environics Analytics - Demostats 2021, York Region 2019 Employment Survey



HOUSEHOLD COMPOSITION

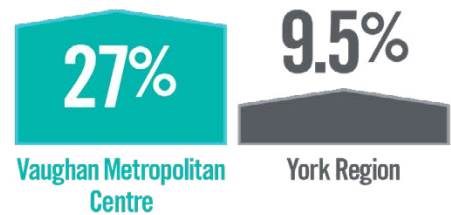
Vaughan Metropolitan Centre



York Region

HOUSEHOLD GROWTH

2016 to 2021



HOUSEHOLD TENURE OWNERSHIP vs. RENTAL

Vaughan Metropolitan Centre



York Region

HOUSING TYPE



POPULATION DIVERSITY

Vaughan Metropolitan Centre



York Region

RICHMOND HILL/LANGSTAFF GATEWAY CENTRE

DEMOGRAPHICS 2021



TOTAL POPULATION

3,800

TARGET POPULATION

48,000



TOTAL JOBS

2,800

TARGET JOBS

31,000

POPULATION GROWTH 2016 to 2021



Richmond Hill/Langstaff Gateway Centre



York Region

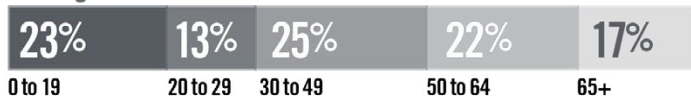
POPULATION AGE



Richmond Hill/Langstaff Gateway Centre



York Region



\$88,600 AVERAGE HOUSEHOLD INCOME

\$142,200 YORK REGION AVERAGE

Richmond Hill/Langstaff Gateway Centre



York Region



Source: Environics Analytics - Demostats 2021, York Region 2019 Employment Survey



2.2 AVERAGE RESIDENTS per HOUSEHOLD

3.1 YORK REGION AVERAGE RESIDENTS

HOUSEHOLD COMPOSITION

Richmond Hill/Langstaff Gateway Centre



York Region

HOUSEHOLD GROWTH 2016 to 2021



Richmond Hill/Langstaff Gateway Centre



York Region

HOUSEHOLD TENURE OWNERSHIP vs. RENTAL

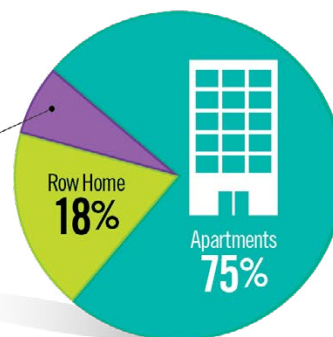
Richmond Hill/Langstaff Gateway Centre



York Region

HOUSING TYPE

Single Family 7%



Row Home 18%

Apartments 75%

POPULATION DIVERSITY

Richmond Hill/Langstaff Gateway Centre



York Region

NEWMARKET CENTRE

DEMOGRAPHICS 2021



TOTAL POPULATION

3,600

TARGET POPULATION*

33,000



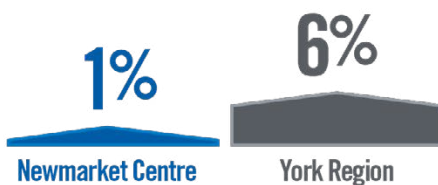
TOTAL JOBS

18,300

TARGET JOBS*

32,500

POPULATION GROWTH
2016 to 2021

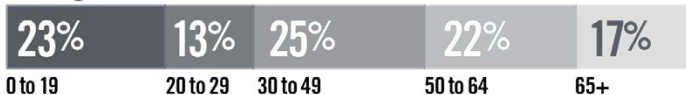


POPULATION AGE

Newmarket Centre



York Region



\$89,100 AVERAGE HOUSEHOLD INCOME

\$142,200 YORK REGION AVERAGE

Newmarket Centre



York Region



*Targets are for the Newmarket Urban Centres Secondary Plan area
Source: Environics Analytics - Demostats 2021, York Region 2019 Employment Survey



2.2 AVERAGE RESIDENTS per HOUSEHOLD

3.1 YORK REGION AVERAGE RESIDENTS

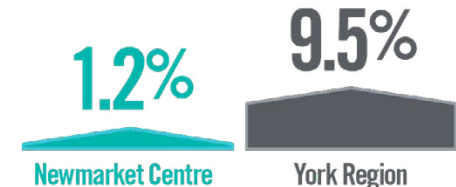
HOUSEHOLD COMPOSITION

Newmarket Centre



York Region

HOUSEHOLD GROWTH
2016 to 2021



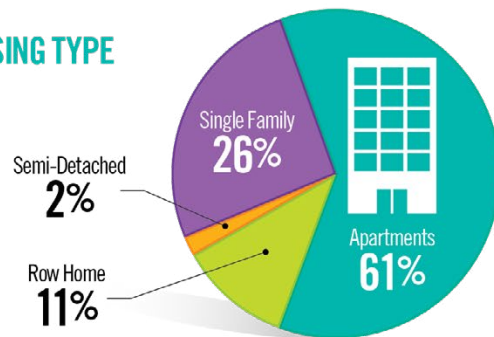
HOUSEHOLD TENURE OWNERSHIP vs. RENTAL

Newmarket Centre



York Region

HOUSING TYPE



POPULATION DIVERSITY

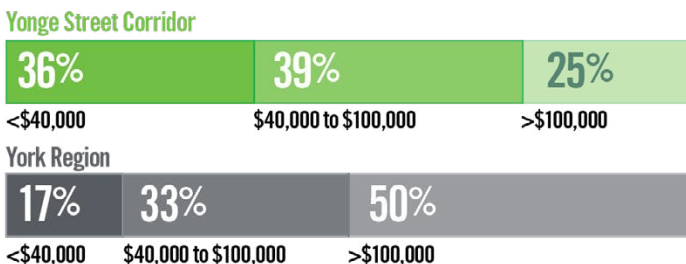
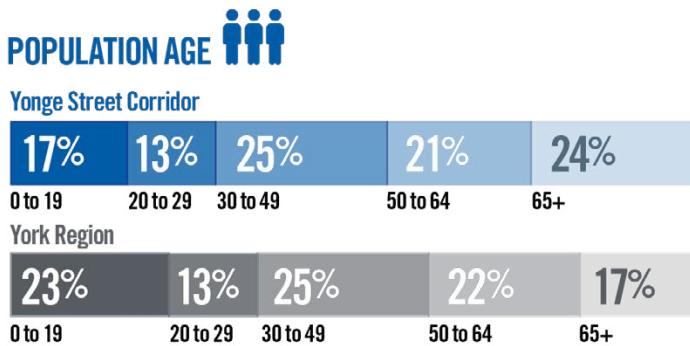
Newmarket Centre



York Region

YONGE STREET CORRIDOR

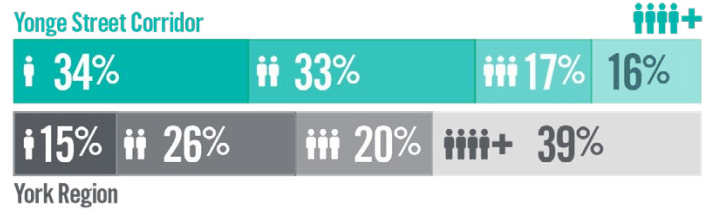
DEMOGRAPHICS 2021



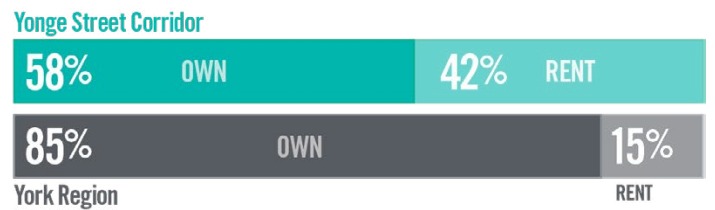
Source: Environics Analytics - Demostats 2021, York Region 2019 Employment Survey



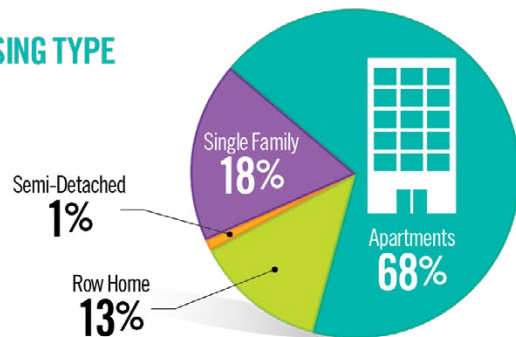
HOUSEHOLD COMPOSITION



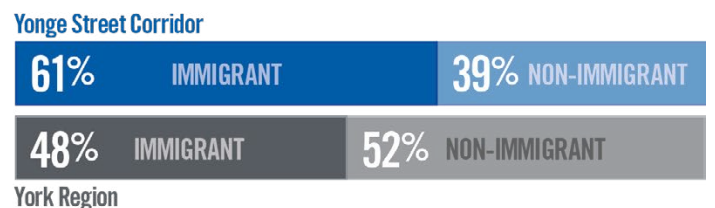
HOUSEHOLD TENURE OWNERSHIP vs. RENTAL



HOUSING TYPE



POPULATION DIVERSITY

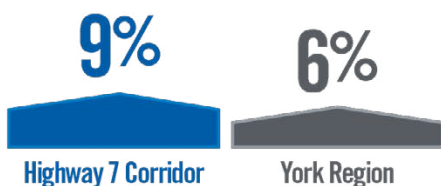


HIGHWAY 7 CORRIDOR

DEMOGRAPHICS 2021



POPULATION GROWTH
2016 to 2021

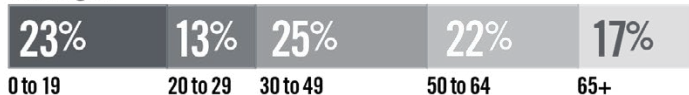


POPULATION AGE

Highway 7 Corridor



York Region



Highway 7 Corridor



York Region

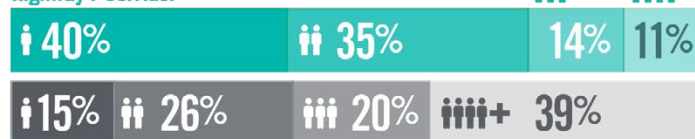


Source: Environics Analytics - Demostats 2021, York Region 2019 Employment Survey



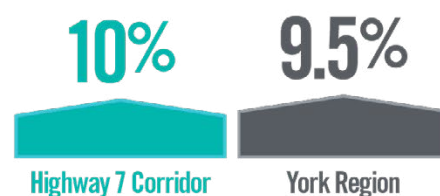
HOUSEHOLD COMPOSITION

Highway 7 Corridor



York Region

HOUSEHOLD GROWTH
2016 to 2021



HOUSEHOLD TENURE OWNERSHIP vs. RENTAL

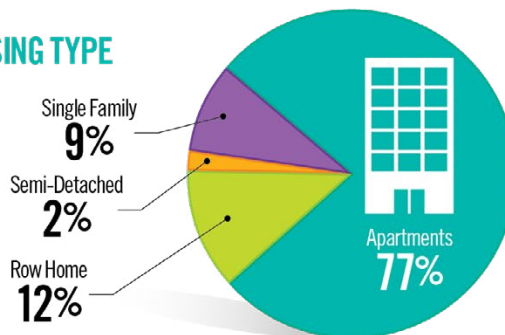
Yonge Street Corridor



York Region



HOUSING TYPE



POPULATION DIVERSITY

Highway 7 Corridor



York Region



2021 REGIONAL CENTRES and CORRIDORS REPORT

For more information on Centres and Corridors
in York Region please contact:

Planning and Economic Development

1 877 4654 9675 Extension 71507

yorklink.ca/citybuilding



Regional Council Decision - 2022 Development Charges Bylaw and Background Study – Final

On May 26, 2022 Regional Council made the following decision:

1. Council approve the 2022 Development Charges Bylaw, with an effective date of June 17, 2022, that incorporates the rates as set out in the 2022 Development Charges Background Study (Attachment 1).
2. Pursuant to the Development Charges Act, 1997:
 - a. Council determine that no further public meeting is required
 - b. Notice of the passage of the bylaw be given
3. Regional staff be authorized to attend the Ontario Land Tribunal or the courts, as appropriate, to defend the Region' s position if the 2022 Development Charges Bylaw is appealed.
4. The Regional Solicitor be authorized to execute Minutes of Settlement, to resolve any appeals to the 2022 Development Charges Bylaw.
5. The Regional Clerk circulate this report to local municipalities and the Building Industry and Land Development Association – York Chapter.

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 (he/him) | Regional Clerk, Regional Clerk's Office, Corporate Services Department

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
Finance and Administration
May 5, 2022

Report of the Commissioner of Finance

2022 Development Charges Bylaw and Background Study - Final

1. Recommendations

1. Council approve the 2022 Development Charges Bylaw, with an effective date of June 17, 2022, that incorporates the rates as set out in the 2022 Development Charges Background Study (Attachment 1).
2. Pursuant to the *Development Charges Act, 1997*:
 - a. Council determine that no further public meeting is required
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3. Regional staff be authorized to attend the Ontario Land Tribunal or the courts, as appropriate, to defend the Region's position if the 2022 Development Charges Bylaw is appealed.
4. The Regional Solicitor be authorized to execute Minutes of Settlement, to resolve any appeals to the 2022 Development Charges Bylaw.
5. The Regional Clerk circulate this report to local municipalities and the Building Industry and Land Development Association – York Chapter.

2. Summary

Development charges are fees levied on new residential and non-residential development and help pay for growth-related infrastructure. To levy and collect development charges, a municipality must have a development charges bylaw in place and updated at least every five years, in accordance with the *Development Charges Act, 1997 (Act)*. This report supports the 2022 Development Charges Bylaw (2022 Bylaw) and Background Study, being brought to Council for approval.

Key Points:

- Development charges are a cost recovery tool to help fund the cost of infrastructure needed for growth-related population and jobs. The Act sets out specific rules and methodologies for calculating development charge rates

- As the 2017 Development Charges Bylaw, No.2017-35 is approaching its expiry, the Region must approve a new development charges bylaw by June 17, 2022, to continue collecting development charges
- The draft 2022 Bylaw and Background Study was made publicly available on February 25, 2022, and tabled at the Committee of the Whole on March 3, 2022
- The Region held a public meeting on March 24, 2022. The final 2022 Bylaw and Background Study that is being brought to Council reflects consideration of the feedback received at the meeting (as outlined in Attachments 2 and 3)
- Staff have also made minor modifications to the Bylaw and several technical adjustments to the proposed rate calculation to reflect the most up-to-date information (changes summarized in Tables 3, 5 and 6)
- The process to pass the 2022 Bylaw has complied with all statutory requirements and timelines under the Act
- If passed, the 2022 Bylaw, including updated development charges rates, would come into effect on June 17, 2022

3. Background

Development charges are a cost recovery tool to help fund the infrastructure needed to service planned growth

Development charges are a necessary cost recovery tool to help fund growth-related infrastructure that enables housing supply and non-residential development and facilitates complete communities throughout the Region. Regional growth-related infrastructure needs to be built and financed years before the development takes place to ensure the adequate capacity is available to service population and employment growth. Without development charges, the cost for additional infrastructure would be at the expense of existing property owners, in the form of higher property taxes and user fees. Development charges enable municipalities to recover some, but not all, of the cost of growth infrastructure.

The Act sets out the rules and methodologies for calculating development charge rates. The proposed DC rates in the 2022 Bylaw are premised upon the population and employment growth anticipated in the Region's draft Official Plan and the infrastructure identified in the Master Plans to service that growth. The proposed 2022 Bylaw reflects the growth envisaged by the draft Regional Official Plan and is not intended to direct the geographic location of growth.

The Region's 2017 Development Charges Bylaw is expiring, and a new bylaw must be passed, prior to June 17, 2022

The 2017 Development Charges Bylaw (2017 Bylaw) came into force on June 17, 2017, and is approaching its statutory five-year expiration. The Act requires that a new bylaw be in

place prior to June 17, 2022, for the Region to continue collecting development charges. To pass a development charges bylaw, Council must prepare a background study describing the methodologies and assumptions that underpin the development charges rates (as well as supporting policies).

The proposed 2022 Bylaw reflects the direction of Council over the past year

The work to update a development charges bylaw is a complex process, involving extensive policy development, analysis, and consultation. Regional Council began this work in [June](#) of last year through the approval of the 2022 Bylaw's workplan and the scope of the areas of review.

In [November](#), Council provided policy directions including a number of policies to support a mix and range of housing options, and the choice of a 20-year planning horizon for the 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. In addition, neighbouring municipalities have not used a 30-year horizon for their development charges bylaw. Finally, where appropriate, some services have chosen to use a horizon to 2031, such as Ambulance Services (formerly Paramedic Services) and Public Health. In the case of Transit, the Act limits the service to a 10-year planning horizon.

In [February](#), Council endorsed, in principle, the use of a uniform, Region-wide rate to recover all growth-related costs in the 2022 Bylaw. Council received the draft 2022 Bylaw and Background Study in [March](#) and directed staff to return in May for Council's consideration of approval of the 2022 Bylaw.

Aspects of the 2022 Bylaw were also brought before the [October](#) 2021 meeting of the Housing Affordability Task Force, the December meeting of the York Region/Local Municipal Housing Working Group, and the January 2022 meeting of the York Region Rapid Transit Corporation Board of Directors.

Extensive consultation with stakeholders has been an integral part of the 2022 Bylaw development process

The consultation process informing the 2022 Bylaw and Background Study has been extensive both in breadth and depth. Beginning in early 2021 and continuing through April 2022, staff had frequent, often weekly meetings with the representatives from the local municipalities (finance and planning). Finance and other departmental staff also held meetings with the Building Industry and Land Development Association – York Chapter (BILD) and the BILD Working Group¹ on 16 occasions. Since the public meeting, staff engaged with deputants (including BILD) and other interested stakeholders through six weekly meetings as well as on a one-on-one basis.

¹ Note: The BILD Working Group consists of BILD staff, representatives from the development community, BILD consultants (e.g., engineering and legal) as well as Regional staff.

The meetings were supported through detailed written responses to stakeholder questions as well as prepared materials such as presentations and position papers. Topics discussed included:

- 2022 Bylaw review process
- Planning horizon and growth forecast, including the methodology for the persons per unit forecast
- Growth capital program
- Level of service and funding envelop calculations
- Methodology for determining statutory deductions
- Yonge North Subway Extension (YNSE) funding assumptions
- Consideration of area-specific development charges
- Development charges policies, including those that help facilitate a mix and range of housing options (e.g., treatment of stacked townhomes)
- Development charge treatment of hospices

The number of stakeholder engagement sessions for the 2022 Bylaw update far exceeds that for the 2017 Bylaw.

The Yonge North Subway Extension (YNSE) is in the Region's development charges bylaw for the first time

After many years of advocacy on the part of Council, the YNSE is on the cusp of breaking ground. Council has also been successful in advocating for changes to the Act and related regulations, to treat the YNSE as a discrete service, with a 20-year planning horizon with a forward-looking planned level of service. As a result of these efforts, the 2022 Bylaw includes \$1.12 billion for this project, which represents the Region's pro-rata contribution to the total \$5.6 billion capital construction cost as per the [Preliminary Agreement](#). Seventy five percent, or \$840 million is eligible to be recovered through development charges under the 2022 Bylaw.

The YNSE is a strategic asset that is integral to the Region's transportation network and provides benefits across the Region. In [February 2022](#), Council endorsed in principle, the use of a Region-wide rate structure for the YNSE, after having considered two alternative area-rating options. The 2022 Bylaw and Background Study reflects this Council direction.

The 2022 Bylaw does not consider the full extent of increased densities proposed at the Transit Oriented Community sites

The 2022 Bylaw and Background Study is underpinned by the best available information from the Region's Municipal Comprehensive Review and the Master Plans. The proposed densities for the Transit Oriented Community (TOC) sites are not fully included in these plans as it is likely that the full build-out of these areas will occur well beyond the bylaw horizon of 2041. The Municipal Comprehensive Review forecast assumes a portion of the growth of the TOC sites will be realized by 2041.

The proposed densities and TOC agreements, once finalized, may necessitate a review of the Region's spatial distribution of growth as well as the infrastructure solutions to support that growth. Any major change to the growth and infrastructure forecasts could be considered as part of the Region's next development charges bylaw update.

The proposed development charge rates represent less than 5% of the price of new single and semi-detached homes in the Region

Development charges are not a significant determinant of new home prices which are largely driven by the demand for housing, the market price of equivalent resale stock, cost of supplies, interest rates, economics, the availability and cost of land. Historically, the Regional development charge rate, as a percentage of the price of a new single and semi-detached home in York Region, has consistently been less than 5% and with the proposed 2022 Bylaw this rate will remain below 5%. Similar trends have been observed for apartments.

The 2022 Bylaw includes several policies to support a mix and range of housing options

Working within the parameters of the Act, the 2022 Bylaw was reviewed to align with Council's housing priorities on providing a mix and range of housing options in the Region. As a result, the 2022 Bylaw incorporates the following changes:

- Statutory development charges exemptions for additional dwellings in, or ancillary to, existing residential buildings, as well as second suites in, or ancillary to, new residential buildings
- All DC-eligible residential dwellings that are less than 700 square feet be charged/levied the small apartment rate (to be reflective of their anticipated draw on service)
- Alignment of the categorization of stacked townhomes with the Statistics Canada definition, and treatment of stacked towns as apartments for the purposes of levying development charges

In addition to the above bylaw changes, in November 2021, Council also approved the removal of the four-storey requirement from the Region's [Development Charges Deferral for Purpose-Built Rental Buildings](#). The removal of this requirement could help facilitate rental across the Region, regardless of height.

The 2022 Bylaw includes \$909 million of gross capital costs to support Housing Services

In early 2021, Council acknowledged a housing affordability crisis and established the Housing Affordability Task Force. In recognition of this work and underpinned by the Housing York Strategic Plan and the Region's Community Housing Development Master Plan currently under development, the 2022 Bylaw includes \$909 million of gross project costs to facilitate the construction of over 2,700 affordable rental apartments and transitional housing in the next 20 years. Of the \$909 million, approximately \$181 million is proposed to be funded through development charges.

4. Analysis

All prescribed timelines for passing the 2022 Bylaw have been met

The Act prescribes a specific process and sets timelines that must be complied with prior to the passage of a development charges bylaw. This is to ensure transparency and to provide all stakeholders with an opportunity to comment on a municipality's proposed development charges bylaw. Key statutory timelines include:

- Making the background study publicly available at least 60 days prior to passing the bylaw
- Holding at least one public meeting on the bylaw
 - Provide at least 20-day notice of the public meeting
 - Ensure the background study and proposed bylaw be available at least two weeks prior to the public meeting

Table 1 shows key dates in the 2022 Bylaw process. This timeline meets all legislative requirements.

Table 1
Key Dates in 2022 Bylaw Process

Deliverables	Dates	Elapsed Time
Notice of public meeting published in all local Metroland newspapers*	February 24, 2022	
2022 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 Bylaw and rates in effect	June 17, 2022	

*Note: Authority to publish notice provided in June 2021 Council report

**Note: Technically, the 2022 Bylaw and Background Study was publicly released on February 25, as part of the March 3, Committee of the Whole agenda. However, to guard against the possibility of technical/internet issues, staff begin the statutory timelines at tabling on March 3.

The Region received additional stakeholder feedback through deputations at the March 24, 2022 public meeting and subsequent communications

Council held a public meeting on March 24, 2022, to seek and consider feedback on the draft 2022 Bylaw and Background Study. The Region received five deputations and four communications from stakeholders. In total, nine issues were raised as summarized in Table 2 below:

Table 2
Issues Raised at the March 24 Public Meeting

Issue	Response Overview and Detail
Not impose/defer DCs on hospices	Amend - Section 3.5.1 of the 2022 Bylaw has been updated to include hospices If the local municipality provides a development charges exemption rather than a deferral, the cost would have to be funded through a non-development charge source of funds
More information on area-specific DCs, including an inter-jurisdictional scan	Hold - Maintain the Region-wide uniform rate structure as previously approved in principle by Council in February 2022 Review as part of next update as required per the Act
Extend planning horizon to 2051	Hold - Maintain 2041 planning horizon previously approved by Council in November 2021 Review as part of next update
Consider raising the delineation point for small and large apartments from 700 sq.ft. to 1,000 sq.ft. <u>or</u> create multiple delineation points	Hold – Maintain current delineation at 700 sq.ft Review as part of next update
Clarify the BRT costs/ DC rate impact in the 2022 Bylaw	Further details have been provided in Attachment 2 of this report and included in the 2022 DC Bylaw and Background Study
Revisit benefit to existing and post period benefit deduction assumptions	No change to overall methodology Some technical changes were made where warranted on a project-specific basis
Develop options to address housing affordability challenges	Continue to advocate for legislative changes to support affordable housing priorities Review as part of next update
Include additional stakeholders in DC Bylaw consultations	All interested stakeholders are engaged in the consultation process

Issue	Response Overview and Detail
Provide clarification that the 2022 Bylaw timelines, including public meeting and notice for public meeting were in accordance with requirements under the Act	Confirmed and responded to by the Office of the Regional Clerk

The details of these deputations and communications, as well as Region's responses and considerations, are summarized in Attachments 2 and 3 to this report.

Raising the delineation point between small and large apartments is not recommended since it would result in unintended consequences

The 2022 Bylaw uses a 700 square-foot threshold to delineate small and large apartments for the purposes of determining development charges rates. This delineation point roughly translates to the size threshold between apartment units with fewer than two bedrooms and those with two or more. This threshold, originally determined in consultation with BILD and Hemson Consulting, was reviewed and [confirmed](#) as part of the 2022 Bylaw. It is based on the 2016 Census occupancy data and the size data of close to 37,000 recently sold apartments in the Region.

The average occupancy, or persons per unit, is used by municipalities to determine the draw on servicing and is the driver for the residential DC rate calculation. Any substantial increase in the delineation point (i.e., to 1000 square foot threshold) would also increase the number of people anticipated to be housed in the units. This would have the unintended consequence of raising both the small and large apartment development charges rates.

In addition, by raising the delineation point to 1,000 square feet, the majority of the Region's apartments would be in the small apartment class (effectively combining the two apartment rate categories into one). The smaller apartments within this class would then be subsidizing the larger ones. This would make the 2022 Bylaw vulnerable to appeal as it would go against the 2016 divisional court precedent involving Halton Region².

Finally, increasing or creating multiple delineation points would require developing new persons per unit and housing mix forecasts which cannot be completed in time for the 2022 Bylaw. In addition, once created, it would be difficult to merge the subcategories in light of the Halton decision. The delineation point could be revisited as part of the next bylaw review.

² *Hamilton Halton Home Builders' Association v. The Regional Municipality of Halton*, 2016 ONSC 3807

The Region will continue to advocate for and support affordable housing priorities

While the primary purpose of development charges is cost recovery, they have a place in the suite of tools needed to address the housing affordability challenges in the Region. Continued engagement and dialogue with the Province, building industry and interested parties is needed to identify areas where the development charges regime can be better aligned with the policy objective of ensuring a mix and range of housing for people of all income levels and stage of life. This work will be closely aligned with the work on the first Regional Affordable Housing Implementation Plan. The Plan will be aimed at reviewing and updating housing affordability policies, including any financial incentive options for the private market (in parallel with the Community Housing Development Master Plan).

In addition, senior government cost-sharing for community housing investments is also needed. Cost-sharing arrangements help offset the municipal share of costs and reduce the amount that needs to be recovered through development charges.

The finalized 2022 Bylaw and development charges rate calculations reflect minor modifications informed by stakeholder engagement

Since tabling the 2022 Bylaw, staff have consulted with internal and external stakeholders. Based on these consultations, minor technical modifications to the 2022 Bylaw and development charges rate calculations were made. Table 3 summarizes these modifications, which resulted in overall reductions in the proposed DC rates. Tables 5 and 6 provide information on the associated DC rate impact.

Table 3
Summary of Key Revisions

Areas	Description
Key Bylaw-related adjustments	
Section 3.5.1	To add hospices to the list of development for which DCs may be exempted or deferred (subject to local municipal matching under section 3.5.2 of the Bylaw) This change reflects the need for this vital service and helps to simplify the Region's previous process
Adjustments not impacting rate calculation	
Project-specific modifications	To provide additional location details for some Housing Services' projects
Removal of local road from Roads service	Removal of Project 39 Jefferson Sideroad - Bathurst Street to Yonge Street as it is a local municipal road and should not have been included in the draft version of the Background Study*

Areas	Description
Existing Debt adjustment in Level of Service Calculation	Updated the existing debt adjustment for one police station in the Level of Service inventory to accurately reflect the location of the project for which the debt was issued**
Adjustments impacting rate calculation	
Year-end adjustments	To adjust the DC reserve balances upwards to reflect the 2021 year-end actuals Updated Sutton Wastewater Servicing outstanding prepaid credit balance
Historical level-of-service cap adjustment	Public Works projects: Updated building replacement values for salt storage facilities for level of service calculation
Project-specific modifications	Roads projects: <ul style="list-style-type: none"> - Revised benefit-to-existing deduction for Grade Separations from 0% to 10% (Projects 1 to 4) - Revised post-period benefit deduction to reflect the timing of four projects (Projects 21,37,48,99). - Updated project costs based on updated TMP estimates (Projects 96,97,109)

Notes:

* This project was subject to a 100% post period benefit deduction. Therefore, removing this project does not have a rate impact.

** After this revision, the proposed Police Services program continues to stay within the maximum allowed funding envelope. Therefore, there is no impact on DC rates.

The 2022 Bylaw will help recover approximately \$10 billion in development-charge-eligible costs

The 2022 Bylaw and Background Study, being brought to Council in final form, includes \$16.2 billion of growth-related infrastructure project costs. Approximately \$7.9 billion of this amount is eligible to be recovered under the 2022 Bylaw after statutory deductions of \$8.3 billion.

Close to \$6.4 billion of the deductions relate to benefit to existing development, grants, subsidies and other contributions. This amount will either be funded from non-DC Regional sources (e.g., tax levy or user rates) or grants and subsidies (see Table 3 below). The remaining \$1.9 billion was deducted for post-period-benefit and level of service caps, which are potentially recoverable under future bylaws.

In addition to the new project costs, the 2022 Bylaw will also help to repay \$2 billion in outstanding development charges debt. Approximately 80% of this debt pertains to Roads and Water and Wastewater infrastructure. Together with the infrastructure costs mentioned above, the 2022 Bylaw helps to recover approximately \$10 billion in development-charge-eligible costs, before the cost of financing. Table 4 below also provides a breakdown by service.

Table 4
2022 Bylaw - Costs and Deductions by Service (\$M)

Service	Gross Capital Costs	Statutory deductions		In-period Growth Costs (2022-2041)	Existing DC Debt to be Repaid	Total DC Costs to be Recovered Before Financing
		Benefit to Existing, Capital Grants, Subsidies and Other Contributions	Level of Service/ Post Period Benefit Deduction (Beyond 2041)			
Water	777	89	203	486	540	1,026
Wastewater	2,675	234	654	1,787	753	2,540
Roads	8,477	4,048	759	3,671	430	4,100
Transit	1,297	737	6	554	1	555
Toronto-York Spadina Subway Extension (TYSSE)	7	3	0	4	222	226
Yonge North Subway Extension (YNSE)	1,120	280	0	840	0	840
Police Services	370	207	57	106	62	168
Waste Diversion	131	81	8	42	0	42
Public Works	279	13	160	105	1	106
Housing Services	909	727	0	181	7	189
Growth Studies	32	0	0	32	0	32
Court Services	0	0	0	0	4	4
Ambulance Services	53	10	11	32	12	44
Public Health	31	0	0	31	0	31
Long-Term Care/Seniors Services	3	2	0	0	0	0
Total	16,162	6,432	1,858	7,871	2,031	9,903

Note: Figures may not sum due to rounding

Notice has been provided and the proposed rates will come into effect on June 17, 2022

As part of the process to update the Bylaw, staff have communicated the timing of the new DC Bylaw and rates taking effect. Notification has been provided through signage distributed at the local municipalities and electronically to address the changed needs of pandemic work environment, including by way of updating the Region's [Development Planning Review](#) and [Development Charges](#) webpage. In addition, the Region requested that the local municipalities provide notice, where possible, to the developments awaiting building permit issuance.

Once approved, the 2022 Bylaw, including the new rates, would come into effect on June 17, 2022. As required under the Act and the regulation, the Region will update its development charges pamphlet, setting out the list of services to which the development charges relate, the new rates and a summary of associated policies (e.g., deferrals).

The Region must now provide stakeholders with notice of passage of the 2022 Bylaw and of the appeal period

Once the 2022 Bylaw is passed, the appeal period begins, and the Region must provide written notice to the public within 20 days of passage. This notice, expected to be provided on June 2, 2022, will once again be given through publication in all local Metroland newspapers.

Under Section 14 of the Act, any person or organization can appeal the Region's 2022 Bylaw to the Ontario Land Tribunal. In accordance with Section 16 of the Act, the Ontario Land Tribunal cannot amend the Bylaw so as to increase the development charges rates.

The appeal period for the 2022 Bylaw will begin on May 27, 2022, one day after the bylaw is expected to be passed, and will end 40 days later, on July 5, 2022, at 4:30 pm. Anyone wishing to appeal the 2022 Bylaw must file the appeal with the Regional Clerk prior to that deadline. In the event the Region receives any appeals of the 2022 Bylaw, Council will be updated through a report from the Regional Solicitor.

5. Financial

Since tabling, technical adjustments were made to the proposed rate calculation to reflect the most up-to-date information

As noted in Table 3, since tabling the draft background study, staff updated the development charge rate calculations to reflect up-to-date information. These revisions resulted in a decrease in proposed rates for all rate categories, except for retail and hotel, compared to what was tabled in March 2022. These changes and their effect on all residential and non-residential rate categories are summarized in Tables 5 and 6 respectively.

Table 5
Summary of Incremental DC Rate Changes to
Residential Development Charges Rates (\$ per unit)

Reason for change	Single and Semi-Detached Dwellings	Multiple Unit Dwellings	Apartments ≥ 700 sq. ft.	Apartments <700 sq. ft.
Draft DC Rates (as Tabled March 3)	77,873	64,792	50,280	32,702
Year-end adjustments* (reserve balances and Prepaid DC credit balances)	(331)	(276)	(214)	(139)
Adjustments to Public Works historic level of service cap	(38)	(32)	(25)	(16)
Adjustments to Roads project	255	212	165	107
Total Change	(114)	(95)	(74)	(48)
Final 2022 DC Rates	77,758	64,697	50,206	32,654

Note: Rates do not include local, education or GO Transit DCs. Numbers may not add up due to rounding.

*Includes applicable exemptions

Table 6
Summary of Incremental DC Rate Changes to
Non-Residential Development Charges Rates (\$ per sq. ft.)

Reason for change	Retail	Industrial/Office/ Institutional	Hotel
Draft DC Rates (as Tabled March 3)	60.58	24.70	10.91
Year-end adjustments* (reserve balances and Prepaid DC credit balances)	(0.18)	(0.37)	(0.04)
Adjustments to Public Works historic level of service cap	(0.04)	(0.01)	(0.01)
Adjustments to Roads project	0.25	0.09	0.05
Total Change	0.03	(0.29)	0.00
Final 2022 DC Rates	60.61	24.41	10.91

Note: Rates do not include local, education or GO Transit DCs. Numbers may not add up due to rounding.

* Includes applicable non-residential development charge exemptions such as hospitals (i.e., Cortellucci Vaughan Hospital - Mackenzie Health), places of worship, etc.

The final proposed residential development charges rates represent increases of 16% to 31% depending on the structure type

Taking into consideration the changes noted in Table 5, and as Table 7 indicates, the final 2022 development charges rates for residential development would increase by 16% to 31%, depending on the structure type.

Table 7
Regional Residential Development Charges Rates: Current vs. 2022 Bylaw

Residential (\$ per unit)	Current Rates, \$ (as at May 1, 2022)	Final 2022 Bylaw Rates, \$	% Change
Single and Semi-Detached Dwellings	65,608	77,758	19%
Multiple Unit Dwellings	52,814	64,697	22%
Apartments >=700 sq. ft.	38,382	50,206	31%
Apartments < 700 sq ft.	28,042	32,654	16%

Note: Rates do not include local, education or GO Transit DCs

Proposed non-residential rates are approximately the same compared to current rates

After taking into consideration the changes noted in Table 6, as Table 8 indicates, the 2022 development charges rates represent a 4% increase for retail, a minimal increase for industrial/office/institutional developments, and a 5% decrease for hotels.

Table 8
Non-Residential Development Charges Rates: Current vs. 2022 Bylaw

Non-residential (\$ per sq. ft. of Gross Floor Area)	Current Rates, \$ (as at May 1, 2022)	Final 2022 Bylaw Rates, \$	% Change
Retail	58.50	60.61	4%
Industrial/Office/Institutional	24.31	24.41	0%
Hotel	11.44	10.91	-5%

Note: Rates do not include local, education DCs

6. Local Impact

Development charges are a major source for funding vital growth-related infrastructure, required by the Region's local municipalities to meet the provincially mandated growth targets and planning objectives. Key investments, partly funded by the 2022 Bylaw, including the Primary Trunk Sewer, Upper York Water Reclamation Centre, Yonge North Subway Extension and the portfolio of Housing Services' projects, will help facilitate complete communities in all nine local municipalities.

Feedback from local municipal staff has been integral to the review and development of the 2022 Bylaw. Region and local staff held weekly meetings to discuss development charge policy and administration issues.

7. Conclusion

Section 10 of the Act requires that, prior to passing a development charges bylaw, a municipality's Council must complete a development charges background study. Attachment 1 to this report satisfies this obligation.

Having satisfied all statutory requirements and timelines, it is recommended that Council approve the 2022 Bylaw and Background Study with an effective date of June 17, 2022, to continue to collect development charges.

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

April 22, 2022

Attachments (3)

13710742

THE REGIONAL MUNICIPALITY OF YORK 2022 DEVELOPMENT CHARGES BACKGROUND STUDY



For more information on this report, please contact
Edward Hankins, Director, Treasury Office, and
Deputy Treasurer, at 1-877-464-9675 ext.71644.

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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
FSW	Floor Space per Worker
GFA	Gross floor area
GTA	Greater Toronto Area
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>Subway Extensions</u> under <i>Development Charges Act, 1997</i>

PPB	Post-Period Benefit
PPU	Persons per unit
sq. ft.	square foot
sq. m.	square metre
TMP	Transportation Master Plan
TYSSE	Toronto-York Spadina Subway Extension
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/>	
\$9.9 billion	Total DC-recoverable costs under 2022 Bylaw (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. The service specific calculations are summarized in Table ES-4.

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.

More details on how the proposed rates compare to the current development charges rate by service could be found in tables ES-5 and ES-6 of this chapter.

TABLE ES-2
PROPOSED DEVELOPMENT CHARGES RATES*

	Current rate*	Proposed rate	% Increase/ (Decrease)
Residential Rate (per unit)			
Single and Semi-Detached Dwellings	\$65,608	77,758	19%
Multiple Unit Dwellings	\$52,814	64,697	22%
Large Apartments > = 700 sq. ft.	\$38,382	50,206	31%
Small Apartments < 700 sq. ft.	\$28,042	32,654	16%
Non-Residential Rate (per sq. ft.)			
Retail	\$58.50	60.61	4%
Industrial/Office/Institutional	\$24.31	24.41	0%
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

- 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), the BILD working group (on 16 occasions) and the local municipalities (weekly).

Since the public meeting on March 24, 2022, staff engaged with deputants and other interested stakeholders through six weekly meetings as well as through individual communications.

Topics discussed, as part of the consultation process, included: planning horizon and growth forecast, development charges methodologies and assumptions, levels of service, statutory deductions, consideration of area-specific rates, treatment of stacked townhouses, and development charges policies.

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 Charges 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

TABLE ES-4
DC-RECOVERABLE COSTS BY SERVICE (\$M)

Service	Gross Project Cost	Grants, Subsidies and Other Recoveries	Municipal Cost	Benefit to Existing	Outstanding DC Debt	Potential DC Recoverable Project Costs			Total DC-Recoverable Costs under 2022 Bylaw (before Financing)
						Total DC-Eligible Cost	In-period Growth Costs	Post Period Benefit/Level of Service Deduction	
Hard Services									
Water	777	48	729	40	540	688	486	203	1,026
Wastewater	2,675	234	2,441	0	753	2,441	1,787	654	2,540
Roads	8,477	1,767	6,710	2,281	430	4,429	3,671	759	4,100
Subtotal Hard Services	11,930	2,049	9,880	2,322	1,723	7,559	5,943	1,616	7,666
General Services									
Transit	1,297	595	702	141	1	560	554	6	555
Toronto-York Spadina Subway Extension (TYSSE)	7	2	5	1	222	4	4	0	226
Yonge North Subway Extension (YNSE)	1,120	0	1,120	280	0	840	840	0	840
Police Services	370	0	370	207	62	164	106	57	168
Waste Diversion	131	0	131	81	0	50	42	8	42
Public Works	279	0	279	13	1	265	105	160	106
Housing Services	909	261	647	466	7	181	181	0	189
Growth Studies	32	0	32	0	0	32	32	0	32
Court Services	0	0	0	0	4	0	0	0	4
Ambulance Services	53	0	53	10	12	43	32	11	44
Public Health	31	0	31	0	0	31	31	0	31
Long-Term Care/Seniors Services	3	2	1	1	0	0	0	0	0
Subtotal General Services	4,232	860	3,372	1,201	309	2,171	1,928	242	2,237
Total	16,162	2,910	13,252	3,523	2,031	9,729	7,871	1,858	9,903

TABLE ES-5
COMPARISON OF CURRENT AND PROPOSED RESIDENTIAL DEVELOPMENT CHARGES, PER UNIT

Service	Single and Semi-Detached			Multiples			Apartments = > 700 sqft			Apartments < 700 sqft		
	May 2022 Current charge	June 2022 Proposed Charge	Change (\$)	May 2022 Current charge	June 2022 Proposed Charge	Change (\$)	May 2022 Current charge	June 2022 Proposed Charge	Change (\$)	May 2022 Current charge	June 2022 Proposed Charge	Change (\$)
Hard Services												
Water	10,578	8,954	(1,625)	8,516	7,450	(1,067)	6,188	5,781	(407)	4,521	3,760	(761)
Wastewater	21,746	20,944	(802)	17,506	17,425	(81)	12,722	13,523	801	9,295	8,795	(500)
Roads	26,654	25,897	(757)	21,454	21,546	92	15,593	16,721	1,128	11,391	10,875	(516)
Subtotal Hard Services	58,978	55,794	(3,184)	47,476	46,421	(1,055)	34,503	36,024	1,521	25,207	23,430	(1,777)
General Services												
Transit	1,509	7,689	6,180	1,214	6,397	5,183	883	4,964	4,081	645	3,229	2,584
Toronto-York Spadina Subway Extension (TYSSE)	2,921	3,448	527	2,350	2,869	519	1,709	2,226	517	1,248	1,448	200
Yonge North Subway Extension (YNSE)	0	5,837	5,837	0	4,856	4,856	0	3,769	3,769	0	2,451	2,451
Police Services	1,042	1,078	36	839	897	58	608	696	88	445	453	8
Waste Diversion	47	362	315	39	301	262	29	234	205	20	152	132
Public Works	234	549	315	190	456	266	136	354	218	100	230	130
Housing Services	242	1,608	1,366	194	1,338	1,144	141	1,038	897	103	675	572
Growth Studies	0	175	175	0	146	146	0	113	113	0	74	74
Court Services	45	65	20	38	54	16	28	42	14	20	27	7
Ambulance Services	456	766	310	367	637	270	267	494	227	195	322	127
Public Health	134	389	255	107	323	216	78	251	173	59	163	104
Long-Term Care/Seniors Services	0	0	0	0	0	0	0	0	0	0	0	0
Subtotal General Services	6,630	21,965	15,335	5,338	18,275	12,937	3,879	14,182	10,303	2,835	9,224	6,389
Total	65,608	77,758	12,150	52,814	64,697	11,883	38,382	50,206	11,824	28,042	32,654	4,612
% Change			19%			22%			31%			16%

TABLE ES-6
COMPARISON OF CURRENT AND PROPOSED NON-RESIDENTIAL DEVELOPMENT CHARGES, PER SQ. FT. OF GFA

Service	Retail			Industrial/Office/Institutional			Hotel		
	May 2022 Current charge	June 2022 Proposed Charge	Change (\$)	May 2022 Current charge	June 2022 Proposed Charge	Change (\$)	May 2022 Current charge	June 2022 Proposed Charge	Change (\$)
Hard Services									
Water	6.39	4.22	(2.17)	3.96	2.79	(1.17)	1.12	0.91	(0.21)
Wastewater	12.30	9.90	(2.40)	8.10	6.58	(1.52)	2.29	2.13	(0.16)
Roads	33.15	27.39	(5.76)	9.74	8.57	(1.17)	6.60	4.53	(2.07)
Subtotal Hard Services	51.84	41.51	(10.33)	21.80	17.94	(3.86)	10.01	7.57	(2.44)
General Services									
Transit	2.10	7.90	5.80	0.62	2.54	1.92	0.48	1.36	0.88
Toronto-York Spadina Subway Extension (TYSSE)	3.59	3.61	0.02	1.05	1.14	0.09	0.70	0.62	(0.08)
Yonge North Subway Extension (YNSE)	0.00	5.92	5.92	0.00	1.96	1.96	0.00	1.04	1.04
Police Services	0.70	0.67	(0.03)	0.57	0.44	(0.13)	0.14	0.14	0.00
Waste Diversion	0.03	0.00	(0.03)	0.03	0.00	(0.03)	0.03	0.00	(0.03)
Public Works	0.12	0.65	0.53	0.13	0.16	0.03	0.05	0.10	0.05
Housing Services	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Studies	0.00	0.13	0.13	0.00	0.09	0.09	0.00	0.03	0.03
Court Services	0.03	0.04	0.01	0.02	0.03	0.01	0.01	0.01	0.00
Ambulance Services	0.08	0.16	0.08	0.08	0.10	0.02	0.02	0.03	0.01
Public Health	0.01	0.02	0.01	0.01	0.01	0.00	0.00	0.01	0.01
Long-Term Care/Seniors Services	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Subtotal General Services	6.66	19.10	12.44	2.51	6.47	3.96	1.43	3.34	1.91
Total	58.50	60.61	2.11	24.31	24.41	0.10	11.44	10.91	(0.53)
% Change			4%			0%			-5%

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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

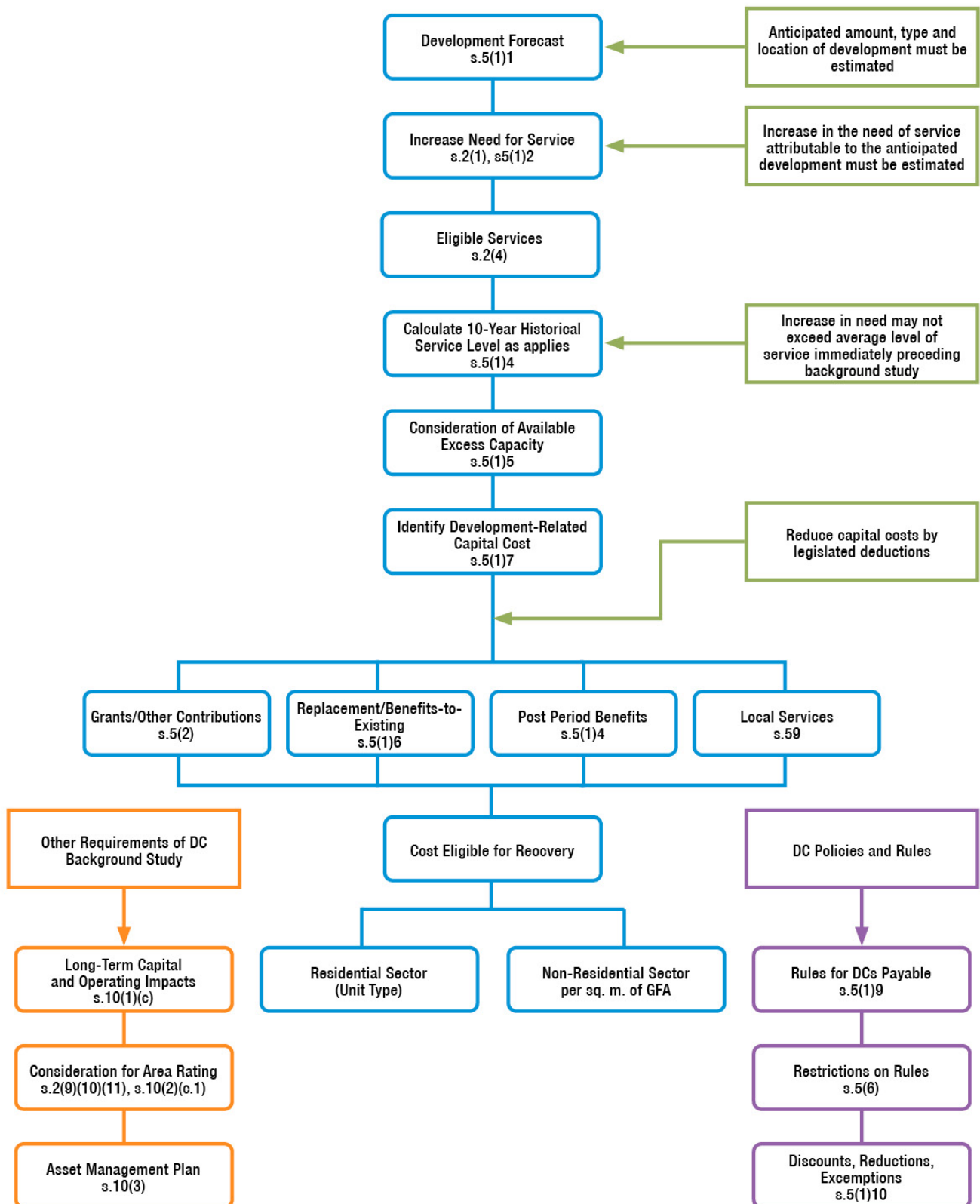
TABLE 1-1
SCHEDULE OF KEY DC BYLAW PROCESS DATES IN YORK REGION

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
Bill 108: <i>More Homes, More Choice Act, 2019</i>	<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
Bill 197: <i>COVID-19 Economic Recovery Act, 2020</i>	<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	DC 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	DC Eligibility
		✓
Waste Diversion Services	Collection, transfer vehicles and equipment (not for waste diversion purposes)	✗
	Landfills, incineration, and other disposal facilities	✗
	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)	✗
	Office furniture	✗
	Computer equipment	✗
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.

To determine the funding envelope, any positive reserve balances are added to the LOS while negative balances are removed. The reserves are indicative of whether the municipality have constructed the service capacity needed for development that has already occurred.

In addition, any outstanding development charge debt principal that is to be recovered under this bylaw have been removed to determine the total eligible funding envelope for new projects .

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.

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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

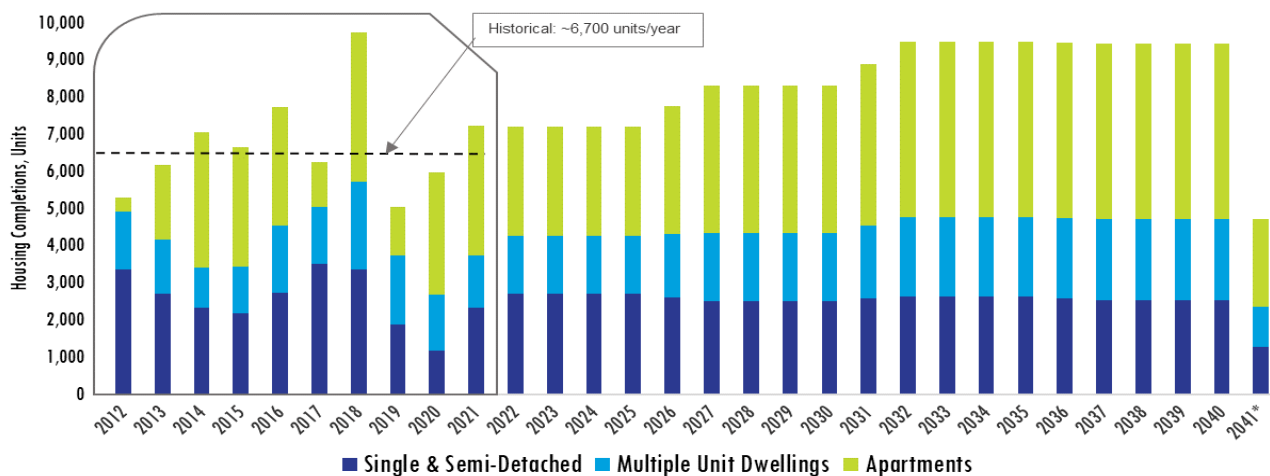
Year End	Net Population (excl. institutional population)	Housing Units			
		Single and Semi-Detached Dwellings	Multiple Unit Dwellings ¹	Apartments ²	Total Households
2021	1,227,700	264,357	68,163	63,420	395,940
2026	1,333,300	276,216	76,045	79,508	431,769
2031	1,449,700	289,880	85,127	98,042	473,049
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

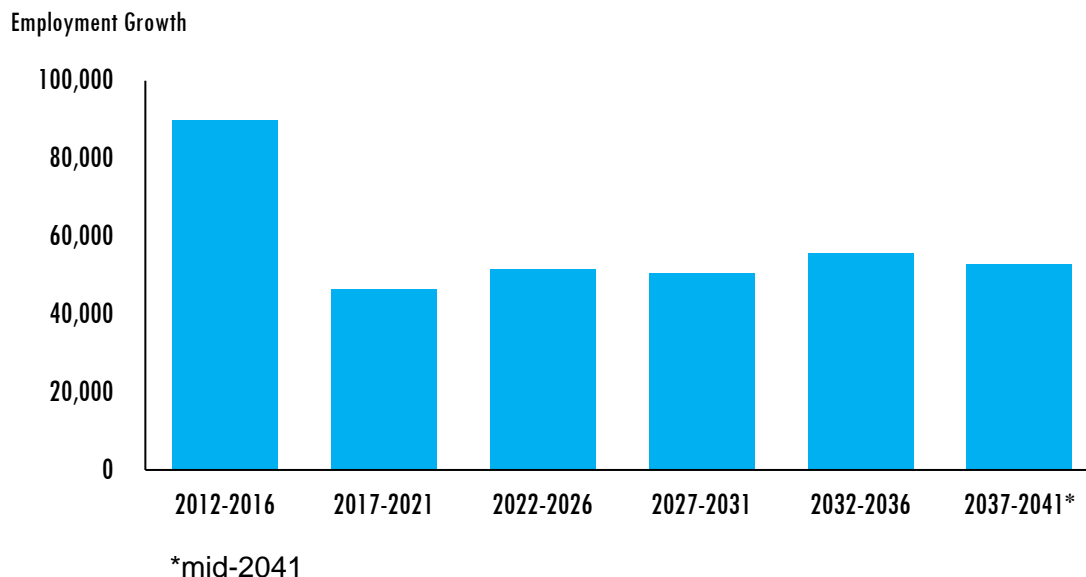
Consistent with the population forecast, the employment forecast is based on the recent York Region MCR work. The methodology for the employment forecast is outlined in Attachment 1 of the March 2021 York Region staff report on the Proposed 2051 Forecast and Land Needs Assessment. The impact of the COVID-19 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**

Floor Space per Worker	Retail 430	Industrial 850	Office 250	Institutional 900	Hotel 2,000	Total
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 79.38%, and the non-residential share is 20.62%.

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 79.38%	
Non-Residential share 20.62%	

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 Charges 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
										79.38%	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	5,991,354	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	2,485,285	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	23,813	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	1,916,154	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	436,522,674	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	7,836,862	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	77,614,002	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	11,057,969	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	33,499,544	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	17,438,316	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	594,385,973	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	1,682,786	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	7,938	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	11,113,056	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	4,082,401	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	3,826,614	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	3,669,581	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	24,382,376	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	284,332,214	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	9,737,895	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	50,700,363	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	108,298,650	6,032,266	21,968,582	136,813
23	Newmarket Diversion Sewer	2032-2041	29,797,687	0	29,797,687	0	29,797,687	20,196,997	9,600,690	16,031,711	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	27,091,271	1,508,991	5,495,514	34,224

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
							79.38%	4.42%	16.10%	0.10%			
25	Yonge Street Sewer Twinning	2022-2031	65,934,090	0	65,934,090	0	65,934,090	56,399,910	9,534,180	44,768,391	2,493,612	9,081,351	56,556
26	York Durham Sewage System Force-main Twinning	2022-2031	2,096,000	0	2,096,000	0	2,096,000	2,096,000	0	1,663,736	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	5,207,451	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	17,740,694	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	565,572,375	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	6,520,796	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	6,520,796	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	3,822,782	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	55,300,164	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	31,475,246	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	90,598,192	5,046,345	18,378,011	114,452
Other													
34	York Durham Sewage System (YDSS)	2022-2031	41,961,183	0	41,961,183	0	41,961,183	41,961,183	0	33,307,405	1,855,232	6,756,469	42,077
35	Sharon Trunk Sewer	2022-2031	14,378,667	0	14,378,667	0	14,378,667	14,378,667	0	11,413,312	635,725	2,315,212	14,418
36	Sutton Water Resource Recovery Facility Expansion	2022-2031	14,308,868	0	14,308,868	0	14,308,868	14,308,868	0	11,357,908	632,639	2,303,973	14,348
37	Northeast Vaughan Wastewater Servicing	2022-2031	101,500,000	0	101,500,000	0	101,500,000	101,500,000	0	80,567,357	4,487,625	16,343,238	101,780
Subtotal Other			172,148,717	0	172,148,717	0	172,148,717	172,148,717	0	136,645,983	7,611,220	27,718,891	172,624
Total			2,675,263,976	234,430,800	2,440,833,176	0	2,440,833,176	1,786,551,435	654,281,741	1,418,105,696	78,988,890	287,665,368	1,791,482

*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 79.38%, and the non-residential share is 20.62% (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
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		
											79.38%	Retail	Industrial/ Office/ Institutional
										4.42%	16.10%	0.10%	
Water Supply													
1	Ballantrae Wells EA	2022-2031	29,000	0	29,000	0	29,000	29,000	0	23,019	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	6,035,769	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	238,130	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	1,266,616	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	4,558,347	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	12,121,882	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	9,082,283	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	1,170,684	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	998,932	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	33,168,626	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	55,013,278	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	21,500,813	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	120,934,615	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	18,943,422	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	2,078,816	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	18,979,573	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	20,382,734	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	3,233,478	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	63,618,023	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	54,377,726	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	2,695,633	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	1,233,514	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	2,817,873	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	9,484,218	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	19,205,155	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	27,896,723	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	117,710,842	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
										79.38%	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	15,807,871	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	3,818,020	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	11,206,403	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	30,832,294	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	40,283,679	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	40,283,679	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	385,501,335	21,472,534	78,199,660	487,001

*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

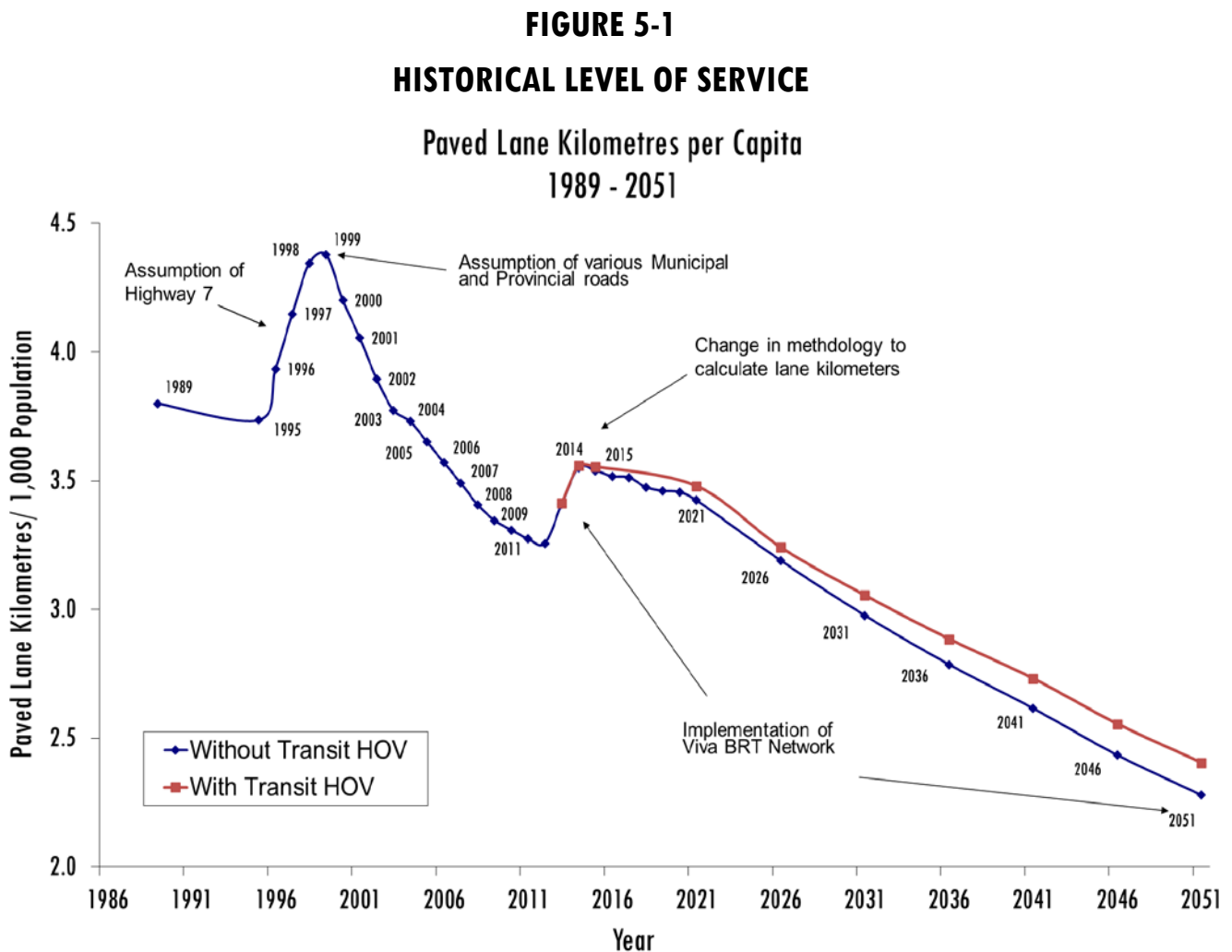
¹ Table 5-5 provides a list of projects contingent on certain trigger events to proceed

- 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.



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	10% to 73%	27% to 90%
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.		

Project Category	Benefit to Existing	Proportion Attributed to Development
Jog Elimination / Intersection Improvement 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.	10%	90%
CONTRIBUTION TO INFRASTRUCTURE		
Mid-Block Crossing To support the Regional share for new mid-block crossings of 400 series highways to support new growth areas.	0%	100%
400-Series Interchange - New 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.	0%	100%
400-Series Interchange Improvements 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.	10%	90%
Interchange Ramp Extensions To support the Regional share for new interchange ramp extensions from 400 series highways to new growth areas.	0%	100%
Road Improvements to Support Transit 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.	18%	82%
MISCELLANEOUS POLICIES AND PROGRAMS		
Reconstruction to Regional standard 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.	73%	27%
Active and Sustainable Transportation 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.	10%	90%
Programs and Studies 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.	10%	90%

Project Category	Benefit to Existing	Proportion Attributed to Development
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 Charges 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	676,200	6,085,800	6,085,800	0	4,556,859	544,271	974,576	10,095
2	Barrie GO - Elgin Mills East of Yonge Street	2022-2031	57,399,000	5,444,000	51,955,000	5,195,500	46,759,500	46,759,500	0	35,012,065	4,181,837	7,488,035	77,563
3	Barrie GO - Rutherford Road East of Keele Street	2022-2031	220,000	0	220,000	22,000	198,000	198,000	0	148,256	17,708	31,708	328
4	Stouffville GO - Steeles Avenue - Kennedy Road to Midland Ave (YR Share)	2022-2031	12,045,000	0	12,045,000	1,204,500	10,840,500	10,840,500	0	8,117,031	969,497	1,735,990	17,982
Subtotal Growth Structures (Grade Separations)			76,426,000	5,444,000	70,982,000	7,098,200	63,883,800	63,883,800	0	47,834,210	5,713,313	10,230,308	105,968
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 Road Ramp Extensions (Regional Share)	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 New Infrastructure (Missing Links)			189,645,000	0	189,645,000	1,000,000	188,645,000	188,645,000	0	141,251,532	16,871,067	30,209,482	312,918
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	Non-Residential Share		
											74.88%	Retail	Industrial/ Office/ Institutional
										8.94%	16.01%	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	16,836,952	0	12,606,988	1,505,777	2,696,258	27,929
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
X	Jefferson Sideroad - Bathurst Street to Yonge Street	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	25,405,084	0	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	32,305,042	0	24,189,015	2,889,133	5,173,308	53,587
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			1,097,134,197	42,490,430	1,054,643,766	105,464,377	949,179,390	673,371,874	275,807,515	504,200,000	60,221,591	107,833,315	1,116,968
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	26,893,657	37,310	26,856,347	2,685,635	24,170,713	24,170,713	0	18,098,281	2,161,657	3,870,682	40,094
97	Keele Street - Highway 7 to Langstaff Road	2032-2041	37,445,343	53,690	37,391,653	3,739,165	33,652,487	33,652,487	0	25,197,940	3,009,639	5,389,087	55,822
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	0	29,823,164	0	0	0	0
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	26,517,005	0	26,517,005	2,651,701	23,865,305	23,865,305	0	17,869,601	2,134,343	3,821,774	39,587
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			1,083,686,428	25,302,693	1,058,383,736	105,838,374	952,545,362	751,158,905	201,386,458	562,444,519	67,178,310	120,290,077	1,245,999
Road Improvements to Support Transit													
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	North East Vaughan (Dufferin Street, Keele Street and King Vaughan Road) Road 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			8,477,068,299	1,766,583,708	6,710,484,591	2,281,228,092	4,429,256,499	3,670,608,779	758,647,720	2,748,438,149	328,273,141	587,808,800	6,088,689

2022 Development Charges 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)	Residential	Non-Residential Share		
											Retail	Industrial/ Office/ Institutional	Hotel
										74.88%	8.94%	16.01%	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	1,013,861	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 Charges 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)	Residential 74.00%	Non-Residential Share		
											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 Charges 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
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	74.00%	9.27%	16.56%	0.17%
	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 signal 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 (BTE) development as of the date of the completion of the background study. For calculating the BTE share, several 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 Charges 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	628,965,979	75,123,625	134,517,030	1,393,365
	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 \$167,910,231 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, \$106,305,542 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:

Facilities	<p>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.</p> <p>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.</p>
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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.
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

Table 9-2

2022 Development Charges 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 Existing Debt Share	(1.65)	(1.65)	(1.65)	(1.65)	(1.65)	(1.65)	(1.65)	(1.65)	(1.65)	(1.65)	2,420,000
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
Eqypt 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
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

Table 9-2

Description	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022 Value (\$ per Acre)
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	32.75	32.75	32.75	36.14	58.14	58.14	66.14	66.14	67.04	45.69	1,323

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	0.0202	0.0197	0.0194	0.0211	0.0333	0.0326	0.0364	0.0357	0.0370	0.0243

10 Year Average	2012-2021
Quantity Standard (acre. per 1,000 capita)	0.0280
Quality Standard (\$ per acre)	\$1,323
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)	\$23,541,134

Table 9-3

2022 Development Charges Background Study
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	(24,775)	(24,775)	(24,775)	(24,775)	(24,775)	(24,775)	(24,775)	(24,775)	(24,775)	(24,775)	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

Table 9-3

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	457,565	457,565	587,774	590,653	605,153	605,153	658,670	658,670	667,570	671,516	\$455.43

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	0.2829	0.2755	0.3490	0.3447	0.3463	0.3395	0.3621	0.3556	0.3689	0.3576

10 Year Average	2012-2021
Quantity Standard (Sqft per Capita)	0.3382
Quality Standard (\$ per Sqft)	\$455
Service Standard (\$ per Capita)	\$154.04

DC Amount (before adjustments)	20-Year
Gross population and employment requiring new space growth	636,079
\$ per Capita	\$154.04
DC Amount (before adjustments)	\$97,982,446

Table 9-4

2022 Development Charges 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	\$6,648,572

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

Table 9-5

2022 Development Charges 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

Table 9-6

2022 Development Charges Background Study
Police Services
Growth related capital costs

10-Year Historic Level of Service Cap	
Land	23,541,134
Facilities	97,982,446
Vehicles	11,942,139
Equipment	23,857,422
Opening reserve adjustment	10,587,091
Funding Envelope	167,910,231
Less Existing debt principal	61,604,690
Total eligible amount for new projects	106,305,542

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	31,260,807	16,889,193	23,407,124	1,683,582	6,131,974	38,128
2	Consolidated Leased Premises	2022-2026	10,000,000	0	10,000,000	1,000,000	9,000,000	5,843,142	3,156,858	4,375,163	314,688	1,146,163	7,127
3	#1 District Multi-Function	2022-2026	3,600,000	0	3,600,000	360,000	3,240,000	2,103,531	1,136,469	1,575,059	113,288	412,619	2,566
4	240 Prospect Renovation	2022-2026	2,050,000	0	2,050,000	205,000	1,845,000	1,197,844	647,156	896,908	64,511	234,963	1,461
5	PS Leasehold Improvements	2022-2041	3,056,000	0	3,056,000	305,600	2,750,400	1,785,664	964,736	1,337,050	96,169	350,268	2,178
6	Renovations/Major Equipment to Existing Facilities	2022-2041	24,960,000	0	24,960,000	19,968,000	4,992,000	3,240,996	1,751,004	2,426,757	174,547	635,739	3,953
	Subtotal Facilities		97,166,000	0	97,166,000	27,188,600	69,977,400	45,431,983	24,545,417	34,018,062	2,446,784	8,911,726	55,412
Vehicles													
7	Vehicles	2022-2041	108,496,000	0	108,496,000	79,202,080	29,293,920	19,018,724	10,275,196	14,240,632	1,024,272	3,730,624	23,196
8	Air Operations	2022-2041	14,008,000	0	14,008,000	10,225,840	3,782,160	2,455,522	1,326,638	1,838,619	132,245	481,664	2,995
9	Marine Boats	2027-2041	3,334,000	0	3,334,000	2,433,820	900,180	584,431	315,749	437,604	31,475	114,639	713
10	Air Operations- Helicopter Replacement	2022-2026	7,050,000	0	7,050,000	5,146,500	1,903,500	1,235,824	667,676	925,347	66,557	242,414	1,507
	Subtotal Vehicles		132,888,000	0	132,888,000	97,008,240	35,879,760	23,294,502	12,585,258	17,442,201	1,254,548	4,569,341	28,411
Equipment													
11	Business Intelligence	2022-2041	3,480,000	0	3,480,000	2,547,907	932,093	605,150	326,943	453,118	32,591	118,703	738
12	Computer Aided Dispatch - Records Mgmt System	2022-2026	3,700,000	0	3,700,000	2,701,000	999,000	648,589	350,411	485,643	34,930	127,224	791
13	Connected Officer	2022-2041	20,034,000	0	20,034,000	14,624,820	5,409,180	3,511,845	1,897,335	2,629,561	189,134	688,867	4,283
14	Data Governance and Retention Management	2022-2041	2,000,000	0	2,000,000	1,460,000	540,000	350,588	189,412	262,510	18,881	68,770	428
15	Digital Evidence Management & In-Car Cam	2022-2041	21,695,000	0	21,695,000	15,837,350	5,857,650	3,803,009	2,054,641	2,847,575	204,815	745,980	4,638
16	Disaster Recovery Plan	2022-2041	1,232,000	0	1,232,000	899,360	332,640	215,963	116,677	161,706	11,631	42,362	263
17	Employee Scheduling	2022-2041	560,000	0	560,000	408,800	151,200	98,165	53,035	73,503	5,287	19,256	120
18	Portable and Mobile User Gear	2022-2041	8,208,000	0	8,208,000	5,991,840	2,216,160	1,438,815	777,345	1,077,340	77,489	282,231	1,755
19	Radio System	2022-2031	27,880,000	0	27,880,000	20,352,400	7,527,600	4,887,204	2,640,396	3,659,387	263,205	958,651	5,961
20	Specialized Equipment - Closed-Circuit / Witness Rooms	2022-2041	1,672,000	0	1,672,000	1,220,560	451,440	293,092	158,348	219,458	15,785	57,492	357
21	Specialized Equipment - Forensic Equipment	2022-2041	6,355,000	0	6,355,000	4,639,150	1,715,850	1,113,995	601,855	834,125	59,995	218,516	1,359
22	Specialized Equipment - Growth Staff	2022-2041	26,536,000	0	26,536,000	0	26,536,000	17,228,178	9,307,822	12,899,926	927,841	3,379,399	21,013

Table 9-6

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 - Road Safety	2022-2041	1,888,000	0	1,888,000	1,378,240	509,760	330,956	178,804	247,809	17,824	64,919	404
24	Specialized Equipment - Robotics / Support Services	2022-2041	1,676,000	0	1,676,000	1,223,480	452,520	293,793	158,727	219,983	15,823	57,629	358
25	Specialized Equipment - Technical Investigations	2022-2041	4,400,000	0	4,400,000	3,212,000	1,188,000	771,295	416,705	577,522	41,539	151,294	941
26	Specialized Equipment - Telephone	2027-2041	1,400,000	0	1,400,000	1,022,000	378,000	245,412	132,588	183,757	13,217	48,139	299
27	Talent Management	2022-2041	6,000,000	0	6,000,000	4,380,000	1,620,000	1,051,765	568,235	787,529	56,644	206,309	1,283
28	YRP Net Rewrite	2022-2041	610,000	0	610,000	445,300	164,700	106,929	57,771	80,065	5,759	20,975	130
	Subtotal Equipment		139,326,000	0	139,326,000	82,344,207	56,981,793	36,994,742	19,987,051	27,700,517	1,992,388	7,256,716	45,121
Land													
29	Land Bank Acquisition	2032-2036	1,000,000	0	1,000,000	100,000	900,000	584,314	315,686	437,516	31,469	114,616	713
	Subtotal Land		1,000,000	0	1,000,000	100,000	900,000	584,314	315,686	437,516	31,469	114,616	713
Total			370,380,000	0	370,380,000	206,641,047	163,738,953	106,305,542	57,433,412	79,598,296	5,725,190	20,852,399	129,657

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 \$70,978,684 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, \$70,978,684 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.

Table 9-7

2022 Development Charges Background Study
 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

Table 9-8

2022 Development Charges 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
DC Amount (before adjustments)	476,277
\$ per Capita	\$43.57
DC Amount (before adjustments)	\$20,751,590

Table 9-9

2022 Development Charges 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
DC Amount (before adjustments)	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
MRF - SCADA System w/ Controls	1	1	1	1	1	1	1	1	1	1	1,267,935

Table 9-9

Description	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022 Value (\$ per Equipment)
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 Charges 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	1,496,577
Funding Envelope	70,978,684
Less Existing debt principal	0
Total eligible amount for new projects	70,978,684

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%
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 \$105,653,242 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, \$104,873,013 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%

Table 9-13

2022 Development Charges 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

Table 9-14

2022 Development Charges 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 Office	7,650	7,650	7,650	7,650	7,650	7,650	7,650	7,650	7,650	7,650	615
SE Main Office 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 Main Yard Salt Storage	4,370	4,370	4,370	4,370	4,370	4,370	4,370	4,370	4,370	4,370	350
SE Satellite Yard Salt Storage Only	14,682	14,682	14,682	14,682	14,682	14,682	14,682	14,682	14,682	14,682	350
SW Main Yard Office	13,724	13,724	13,724	13,724	13,724	13,724	13,724	13,724	13,724	13,724	615
SW Main Yard Salt Storage	21,474	21,474	21,474	21,474	21,474	21,474	21,474	21,474	21,474	21,474	350
Central Main Yard Office	16,888	16,888	16,888	16,888	16,888	16,888	16,888	16,888	16,888	16,888	615
Central Main Yard Salt Storage	10,764	10,764	10,764	10,764	10,764	10,764	10,764	10,764	10,764	10,764	350
North Main Yard Office	8,622	8,622	8,622	8,622	8,622	8,622	8,622	8,622	8,622	8,622	445
North Main Yard Salt Storage	26,790	26,790	26,790	26,790	26,790	26,790	26,790	26,790	26,790	26,790	350
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	448

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)	\$448
Service Standard (\$ per Capita)	\$33.89

DC Amount (before adjustments)	20 Year
DC Amount (before adjustments)	636,079
\$ per Capita	\$33.89
DC Amount (before adjustments)	\$21,557,597

Table 9-15

2022 Development Charges 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	17	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	10	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

Table 9-16

2022 Development Charges 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

Table 9-17

2022 Development Charges Background Study
Public Works
Growth related capital costs

10-Year Historic Level of Service Cap	
Land	33,164,575
Facilities	21,557,597
Vehicles	18,989,846
Equipment	5,845,175
Opening reserve adjustment	26,096,048
Funding Envelope	105,653,242
Less Existing debt principal	780,229
Total eligible amount for new projects	104,873,013

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 Fleet Roads													
1	Electric Fleet Infrastructure	2022-2031	1,603,000	0	1,603,000	0	1,603,000	633,754	969,246	474,535	56,678	101,489	1,051
2	Central Snow Management Facility	2022-2026	300,000	0	300,000	0	300,000	118,606	181,394	88,809	10,607	18,994	197
3	Fleet New Additions	2022-2041	9,636,000	0	9,636,000	0	9,636,000	3,809,638	5,826,362	2,852,539	340,707	610,073	6,319
Subtotal Growth Fleet Roads			11,539,000	0	11,539,000	0	11,539,000	4,561,998	6,977,002	3,415,883	407,993	730,555	7,567
Growth Facilities Roads													
4	Various Maintenance Facility Upgrades	2022-2041	6,757,000	0	6,757,000	337,850	6,419,150	2,537,841	3,881,309	1,900,257	226,966	406,408	4,210
5	Central Main Yard	2022-2026	4,434,000	0	4,434,000	221,700	4,212,300	1,665,353	2,546,947	1,246,964	148,937	266,688	2,762
6	Central Satellite Yard	2027-2031	39,748,000	0	39,748,000	1,987,400	37,760,600	14,928,831	22,831,769	11,178,246	1,335,128	2,390,693	24,763
7	North Existing Yard	2022-2026	5,803,000	0	5,803,000	290,150	5,512,850	2,179,531	3,333,319	1,631,965	194,922	349,029	3,615
8	North Satellite Yard	2037-2041	33,945,000	0	33,945,000	1,697,250	32,247,750	12,749,299	19,498,451	9,546,280	1,140,207	2,041,664	21,148
9	Southeast Main Yard	2022-2026	60,220,000	0	60,220,000	3,011,000	57,209,000	22,617,847	34,591,153	16,935,543	2,022,779	3,622,007	37,518
10	Southeast Main Yard - Phase 2 (10988/10990 Warden Avenue)	2027-2036	17,718,000	0	17,718,000	885,900	16,832,100	6,654,650	10,177,450	4,982,796	595,145	1,065,671	11,039
11	Southeast Satellite Yard	2032-2036	60,226,000	0	60,226,000	3,011,300	57,214,700	22,620,100	34,594,600	16,937,231	2,022,981	3,622,368	37,522
12	Southwest Main Yard	2022-2026	2,781,000	0	2,781,000	139,050	2,641,950	1,044,507	1,597,443	782,095	93,413	167,267	1,733
13	Southwest Satellite Yard	2022-2031	35,446,000	0	35,446,000	1,772,300	33,673,700	13,313,055	20,360,645	9,968,404	1,190,625	2,131,944	22,083
Subtotal Growth Facilities Roads			267,078,000	0	267,078,000	13,353,900	253,724,100	100,311,015	153,413,085	75,109,781	8,971,104	16,063,738	166,393
Total			278,617,000	0	278,617,000	13,353,900	265,263,100	104,873,013	160,390,087	78,525,663	9,379,096	16,794,293	173,960

9.4 Housing Services

9.4.1 Program Description

Community housing is a significant and critical component of the housing system in York Region. The [2022 Community and Health Services 10-year capital plan](#) and the [Building Better Together: Housing York Inc.'s 2021 to 2024 Strategic Plan](#) include redevelopment projects (Table 9-19) in Unionville and Whitchurch-Stouffville, Nobleview Pines and Armitage Gardens buildings, transitional and emergency housing, pre-development costs, land acquisitions, and a regeneration expansion program.

The program included in the background study supports [the 10-year Housing and Homelessness Plan](#) approved by Council in 2019, the [Building Better Together: Housing York Inc.'s 2021-2024 Strategic Plan](#), and long-term development [projects](#) endorsed by Housing York Inc. Board of Directors in April 2022. The Region is in the process of establishing a Community Housing Development Master Plan, which will service as a strategic, long-term approach to the development of new community housing with the primary objective of increasing the supply of community housing in York Region.

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 \$985,203,701 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, \$977,749,209 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 DC-eligible costs have been allocated to residential development.

Table 9-18

2022 Development Charges 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

Table 9-18

Description	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022 Value (\$ per Unit)
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
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

Table 9-18

Description	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022 Value (\$ per Unit)
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 - Treffry	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
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

Table 9-19

2022 Development Charges 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	6,240,298
Funding Envelope	985,203,701
Less Existing debt principal	7,454,492
Total eligible amount for new projects	977,749,209

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 100%	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	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	0
3	Men's Emergency and Transitional Housing	2022-2026	10,000,000		10,000,000	7,200,000	2,800,000	2,800,000	0	2,800,000	0	0	0	0
4	62 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	0
5	Aurora (TBD)	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	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	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	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	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	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	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	0
12	East Gwillimbury (TBD)	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	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	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	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	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	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	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	0
19	Vaughan (TBD)	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	0
20	Richmond Hill (TBD)	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	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	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	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	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

Table 9-21

2022 Development Charges 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 74.88%	Retail 5.39%	Industrial/ Office/ Institutional 19.62%	Hotel 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 \$9,703,514 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, \$6,010,248 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

Table 9-23

2022 Development Charges 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

Table 9-24

2022 Development Charges 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 Charges 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	(5,566,497)
Funding Envelope	9,703,514
Less Existing debt principal	3,693,266
Total eligible amount for new projects	6,010,248

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%	19.61%	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 \$45,513,674 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, \$33,746,003 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

Table 9-27

2022 Development Charges 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 - Pefferlaw (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 2,007,245
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	4,683,571
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	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 space increase	300,113
\$ per Capita	\$43.09
DC Amount (before adjustments)	\$12,931,930

Table 9-28

**2022 Development Charges 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	1,261
Station #10 - Pefferlaw (Georgina) Existing Debt Share	(279)	(279)	(279)	(279)	(279)	(279)	(279)	(279)	(279)	(279)	1,261
Station #11 - Sutton (Georgina)	1,937	1,937	1,937	1,937	1,937	1,937	1,937	1,937	1,937	1,937	1,261
Station #12 - Keswick (Georgina)	2,278	2,278	2,278	2,278	2,278	2,278	2,278	2,278	2,278	2,278	1,261
Station #13 - Holland Landing							5,371	5,371	5,371	5,371	1,261
Station #13 - Holland Landing Existing Debt Share							(920)	(920)	(920)	(920)	1,261
Station #14 - Queensville (East Gwillimbury)	957	957	957								1,261
Station #14 - Queensville (East Gwillimbury) Existing Debt Share	(332)	(332)	(332)								1,261
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	1,261
Station #16 - Newmarket NW								7,266	7,266	7,266	1,261
Station #17 - Newmarket	9,179	9,179	9,179	9,179	9,179	9,179	9,179				1,261
Station #18 - Aurora	2,037	2,037	2,037	2,037	2,037	2,037	2,037	2,037	2,037	2,037	1,261
Station #19 - Newmarket SE							7,212	7,212	7,212	7,212	1,261
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	1,261
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	1,261
Station #22 - Gormley (Whitchurch-Stouffville)										3,886	1,261
Station #22 - Gormley (Whitchurch-Stouffville) Existing Debt Share										(2,773)	1,261
Station #23 - Markham	6,276	6,276	6,276	6,276	6,276	6,276	6,276	6,276	6,276	6,276	1,261
Station #24 - Unionville	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,261
Station #25 - Markham								5,275	5,275	5,275	1,261
Station #25 - Markham Existing Debt Share								(743)	(743)	(743)	1,261
Station #26 - Markham	4,445	4,445	4,445	4,445	4,445	4,445	4,445	4,445	4,445	4,445	1,261
Station #28 - Richmond Hill	6,634	6,634	6,634	6,634	6,634	6,634	6,634	6,634	6,634	6,634	1,261
Station #29 - Thornhill (Markham)										5,371	1,261
Station #29 - Thornhill (Markham) Existing Debt Share										(2,810)	1,261
Station #30 - Woodbridge (Vaughan)	6,857	6,857	6,857	6,857	6,857	6,857	6,857	6,857	6,857	6,857	1,261
Station #31 - Vaughan West						3,767	3,767	3,767	3,767	3,767	1,261
Station #31 - Vaughan West Existing Debt Share						(746)	(746)	(746)	(746)	(746)	1,261
Station #32 - Maple (Vaughan)	2,226	2,226	2,226	2,226	2,226	2,226	2,226	2,226	2,226	2,226	1,261
Station #34 - Thornhill (Vaughan)	6,857	6,857	6,857	6,857	6,857	6,857	6,857	6,857	6,857	6,857	1,261
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	1,261
Station #37 - Nobleton (King)	3,220	3,220	3,220	3,220	3,220	3,220	3,220	3,220	3,220	3,220	1,261
Station #38 - Schomberg	2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,200	1,261
Station #38 - Schomberg Existing Debt Share	(170)	(170)	(170)	(170)	(170)	(170)	(170)	(170)	(170)	(170)	1,261
Station #39 - King	3,724	3,724	3,724	3,724	3,724	3,724	3,724	3,724	3,724	3,724	1,261
Station #70 - Holland Landing				2,076	2,076	2,076					1,261
Station #85 - Richmond Hill									2,082	2,082	1,261
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	1,261
Total	130,673	130,673	130,673	133,747	133,747	136,768	146,355	148,975	149,818	153,492	1,261

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)	\$1,261
Service Standard (\$ per Capita)	\$100.10

DC Amount (before adjustments)	10 Year
Gross population and employment requiring new space increase	300,113
\$ per Capita	\$100.10
DC Amount (before adjustments)	\$30,042,323

Table 9-29

2022 Development Charges 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. Defibrillator)	0	2	2	2	2	2	2	4	2	3	135,000
Logistics Vehicles						2	2	2	2	2	154,395
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 new space increase	300,113
\$ per Capita	\$12.90
DC Amount (before adjustments)	\$3,871,337

Table 9-30

2022 Development Charges Background Study
Ambulance Services
Growth related capital costs

10-Year Historic Level of Service Cap	
Land	12,931,930
Facilities	30,042,323
Vehicles	3,871,337
Equipment	0
Opening reserve adjustment	(1,331,916)
Funding Envelope	45,513,674
Less Existing Debt Principal	11,767,671
Total eligible amount for new projects	33,746,003

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 to 4 bays)	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	Bailantrae 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 \$31,489,501 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, \$31,489,501 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.

Table 9-31

2022 Development Charges 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		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

Table 9-32

2022 Development Charges 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	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 Charges 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

Table 9-34

2022 Development Charges 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	12,130,184
Funding Envelope	31,489,501
Less Existing debt principal	0
Total eligible amount for new projects	31,489,501

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	
							97.18%	0.60%	2.20%	0.01%				
1	Provision for Public Health Facilities and Land	2022-2031	31,463,986	0	31,463,986	0	31,463,986	31,463,986	0	30,577,086	190,123	692,471	4,306	
2	Provision for Public Health Vehicles	2022-2031	25,515	0	25,515	0	25,515	25,515	0	24,796	154	562	3	
Total			31,489,501	0	31,489,501	0	31,489,501	31,489,501	0	30,601,881	190,278	693,033	4,309	

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 \$52,316,244 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, \$52,316,244 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/ Seniors Services programs are provided solely for the benefit of residential development. As such, 100% of the DC-eligible costs have been allocated to residential development.

Table 9-35

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

Table 9-36

2022 Development Charges 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	21,809,015
Total eligible amount for new projects	52,316,244

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	Retail	Industrial/ Office/ Institutional	Hotel
								100%	0%	0%	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

0

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	\$2,349.63
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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	(67,869,850)	(6,895,402)	(6,895,402)	(58,110,648)	6,895,402	(113,774)	20,326	2,349.63	47,758,544	(10,465,878)	(2,239,705)	(172,687)	(80,748,120)
2023	(80,748,120)	(15,163,415)	(15,573,933)	(58,098,574)	15,573,933	(771,883)	20,326	2,413.24	49,051,507	(9,818,950)	(2,745,436)	(166,922)	(93,479,428)
2024	(93,479,428)	(26,646,893)	(28,109,242)	(58,086,583)	28,109,242	(2,146,694)	20,326	2,478.57	50,379,475	(9,853,803)	(3,225,040)	(169,978)	(106,728,249)
2025	(106,728,249)	(17,784,070)	(19,267,927)	(58,074,427)	19,267,927	(4,096,310)	20,326	2,545.68	51,743,394	(10,427,343)	(3,788,853)	(185,085)	(121,129,530)
2026	(121,129,530)	(12,244,211)	(13,624,981)	(58,269,466)	13,624,981	(5,445,472)	21,883	2,614.59	57,215,162	(6,499,776)	(4,360,663)	(116,996)	(132,106,966)
2027	(132,106,966)	(8,661,963)	(9,899,716)	(59,128,221)	9,899,716	(6,409,935)	23,439	2,685.38	62,942,592	(2,595,564)	(4,887,958)	(48,018)	(139,638,506)
2028	(139,638,506)	(12,498,208)	(14,670,854)	(59,441,065)	14,670,854	(7,253,757)	23,439	2,758.08	64,646,632	(2,048,191)	(5,236,444)	(38,404)	(146,961,544)
2029	(146,961,544)	(20,415,067)	(24,612,727)	(59,084,224)	24,612,727	(8,571,195)	23,439	2,832.75	66,396,805	(1,258,614)	(5,658,019)	(24,228)	(153,902,405)
2030	(153,902,405)	(28,409,281)	(35,177,944)	(55,326,795)	35,177,944	(10,710,411)	23,439	2,909.44	68,194,360	2,157,154	(6,309,999)	29,122	(158,026,129)
2031	(158,026,129)	(23,860,073)	(30,344,729)	(42,888,326)	30,344,729	(13,407,401)	25,131	2,988.21	75,096,626	18,800,899	(6,874,137)	277,313	(145,822,053)
2032	(145,822,053)	(22,758,046)	(29,726,772)	(31,815,568)	29,726,772	(15,820,468)	26,823	3,069.11	82,322,638	34,686,602	(6,343,259)	511,627	(116,967,083)
2033	(116,967,083)	(30,116,073)	(40,402,886)	(22,239,803)	40,402,886	(18,429,766)	26,823	3,152.20	84,551,352	43,881,783	(5,088,068)	647,256	(77,526,111)
2034	(77,526,111)	(31,308,460)	(43,139,691)	(17,416,481)	43,139,691	(21,720,097)	26,823	3,237.54	86,840,404	47,703,826	(3,372,386)	703,631	(32,491,040)
2035	(32,491,040)	(36,776,520)	(52,045,985)	(10,722,044)	52,045,985	(25,363,463)	26,823	3,325.18	89,191,427	53,105,920	(1,413,360)	783,312	19,984,833
2036	19,984,833	(30,801,328)	(44,770,024)	(6,434,666)	44,770,024	(29,367,053)	26,761	3,415.21	91,394,356	55,592,637	589,553	819,991	76,987,014
2037	76,987,014	(14,682,812)	(21,919,386)	(2,202,337)	21,919,386	(32,450,074)	26,700	3,507.67	93,654,700	59,002,289	2,271,117	870,284	139,130,703
2038	139,130,703	(19,930,229)	(30,558,549)	(298,095)	30,558,549	(34,390,754)	26,700	3,602.63	96,190,206	61,501,357	4,104,356	907,145	205,643,561
2039	205,643,561	(11,051,276)	(17,403,401)	(298,095)	17,403,401	(36,548,235)	26,700	3,700.16	98,794,356	61,948,025	6,066,485	913,733	274,571,805
2040	274,571,805	(8,301,384)	(13,426,830)	(298,095)	13,426,830	(37,853,403)	26,700	3,800.34	101,469,007	63,317,509	8,099,868	933,933	346,923,116
2041	346,923,116	(7,196,624)	(11,955,096)	(251,971)	11,955,096	(401,410,600)	13,350	3,903.22	52,108,035	(349,554,537)	10,234,232	(7,602,811)	0
Total		(385,501,335)	(503,526,077)	(658,485,486)	503,526,077	(712,280,747)	476,277		1,469,941,579		(30,177,717)	(1,127,780)	

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	\$4.22
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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	(3,780,370)	(384,076)	(384,076)	(3,236,780)	384,076	(6,337)	736,966	4.22	3,107,416	(135,701)	(124,752)	(2,239)	(4,043,062)
2023	(4,043,062)	(844,607)	(867,473)	(3,236,107)	867,473	(42,994)	737,005	4.33	3,191,710	(87,391)	(137,464)	(1,486)	(4,269,403)
2024	(4,269,403)	(1,484,240)	(1,565,693)	(3,235,439)	1,565,693	(119,571)	736,966	4.45	3,277,947	(77,063)	(147,294)	(1,329)	(4,495,090)
2025	(4,495,090)	(990,578)	(1,073,229)	(3,234,762)	1,073,229	(228,166)	736,966	4.57	3,366,691	(96,237)	(159,576)	(1,708)	(4,752,610)
2026	(4,752,610)	(682,006)	(758,915)	(3,245,626)	758,915	(303,314)	725,783	4.69	3,405,364	(143,576)	(171,094)	(2,584)	(5,069,864)
2027	(5,069,864)	(482,474)	(551,417)	(3,293,459)	551,417	(357,035)	697,281	4.82	3,360,207	(290,287)	(187,585)	(5,370)	(5,553,107)
2028	(5,553,107)	(696,154)	(817,171)	(3,310,884)	817,171	(404,036)	697,242	4.95	3,450,987	(263,934)	(208,242)	(4,949)	(6,030,231)
2029	(6,030,231)	(1,137,125)	(1,370,936)	(3,291,008)	1,370,936	(477,418)	697,281	5.08	3,544,611	(223,815)	(232,164)	(4,308)	(6,490,518)
2030	(6,490,518)	(1,582,405)	(1,959,421)	(3,081,718)	1,959,421	(596,573)	697,242	5.22	3,640,373	(37,918)	(266,111)	(777)	(6,795,325)
2031	(6,795,325)	(1,329,013)	(1,690,210)	(2,388,892)	1,690,210	(746,796)	735,504	5.36	3,944,107	808,419	(295,597)	11,924	(6,270,579)
2032	(6,270,579)	(1,267,630)	(1,655,790)	(1,772,136)	1,655,790	(881,205)	775,604	5.51	4,271,737	1,618,396	(272,770)	23,871	(4,901,082)
2033	(4,901,082)	(1,677,474)	(2,250,452)	(1,238,763)	2,250,452	(1,026,543)	775,604	5.66	4,387,385	2,122,078	(213,197)	31,301	(2,960,900)
2034	(2,960,900)	(1,743,890)	(2,402,893)	(970,103)	2,402,893	(1,209,816)	775,604	5.81	4,506,164	2,326,246	(128,799)	34,312	(729,142)
2035	(729,142)	(2,048,463)	(2,898,976)	(597,221)	2,898,976	(1,412,752)	775,604	5.97	4,628,159	2,618,186	(31,718)	38,618	1,895,945
2036	1,895,945	(1,715,643)	(2,493,703)	(358,413)	2,493,703	(1,635,753)	800,261	6.13	4,904,576	2,910,410	55,930	42,929	4,905,215
2037	4,905,215	(817,837)	(1,220,916)	(122,671)	1,220,916	(1,807,478)	806,907	6.29	5,079,187	3,149,038	144,704	46,448	8,245,405
2038	8,245,405	(1,110,119)	(1,702,120)	(16,604)	1,702,120	(1,915,575)	806,945	6.47	5,216,945	3,284,766	243,239	48,450	11,821,861
2039	11,821,861	(615,559)	(969,374)	(16,604)	969,374	(2,035,747)	806,907	6.64	5,357,927	3,305,576	348,745	48,757	15,524,939
2040	15,524,939	(462,389)	(747,878)	(16,604)	747,878	(2,108,445)	806,945	6.82	5,503,244	3,378,195	457,986	49,828	19,410,948
2041	19,410,948	(400,854)	(665,902)	(14,035)	665,902	(22,358,078)	401,733	7.00	2,813,932	(19,558,181)	572,623	(425,390)	0
Total		(21,472,534)	(28,046,545)	(36,677,828)	28,046,545	(39,673,633)	14,730,349		80,958,670		(753,136)	(73,703)	

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	\$2.79
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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	(10,690,664)	(1,398,745)	(1,398,745)	(11,787,853)	1,398,745	(23,079)	4,021,383	2.79	11,215,710	(595,222)	(352,792)	(9,821)	(11,648,499)
2023	(11,648,499)	(3,075,927)	(3,159,201)	(11,785,403)	3,159,201	(156,578)	4,021,383	2.86	11,519,352	(422,629)	(396,049)	(7,185)	(12,474,361)
2024	(12,474,361)	(5,405,372)	(5,702,012)	(11,782,971)	5,702,012	(435,461)	4,021,383	2.94	11,831,215	(387,217)	(430,365)	(6,679)	(13,298,624)
2025	(13,298,624)	(3,607,532)	(3,908,535)	(11,780,505)	3,908,535	(830,944)	4,021,383	3.02	12,151,520	(459,929)	(472,101)	(8,164)	(14,238,817)
2026	(14,238,817)	(2,483,761)	(2,763,853)	(11,820,069)	2,763,853	(1,104,624)	3,963,103	3.10	12,299,621	(625,073)	(512,597)	(11,251)	(15,387,739)
2027	(15,387,739)	(1,757,095)	(2,008,176)	(11,994,269)	2,008,176	(1,300,267)	3,827,293	3.19	12,199,707	(1,094,830)	(569,346)	(20,254)	(17,072,169)
2028	(17,072,169)	(2,535,285)	(2,976,010)	(12,057,730)	2,976,010	(1,471,438)	3,827,293	3.27	12,529,988	(999,180)	(640,206)	(18,735)	(18,730,290)
2029	(18,730,290)	(4,141,234)	(4,992,737)	(11,985,344)	4,992,737	(1,738,683)	3,827,293	3.36	12,869,212	(854,815)	(721,116)	(16,455)	(20,322,677)
2030	(20,322,677)	(5,762,875)	(7,135,911)	(11,223,143)	7,135,911	(2,172,627)	3,827,293	3.45	13,217,619	(178,151)	(833,230)	(3,652)	(21,337,710)
2031	(21,337,710)	(4,840,060)	(6,155,485)	(8,699,976)	6,155,485	(2,719,716)	4,037,794	3.55	14,322,108	2,902,416	(928,190)	42,811	(19,320,673)
2032	(19,320,673)	(4,616,512)	(6,030,131)	(6,453,847)	6,030,131	(3,209,211)	4,161,884	3.64	15,161,916	5,498,858	(840,449)	81,108	(14,581,157)
2033	(14,581,157)	(6,109,101)	(8,195,800)	(4,511,385)	8,195,800	(3,738,512)	4,161,884	3.74	15,572,393	7,322,496	(634,280)	108,007	(7,784,934)
2034	(7,784,934)	(6,350,979)	(8,750,966)	(3,532,965)	8,750,966	(4,405,962)	4,161,884	3.84	15,993,984	8,055,056	(338,645)	118,812	50,289
2035	50,289	(7,460,185)	(10,557,624)	(2,174,987)	10,557,624	(5,145,025)	4,161,884	3.95	16,426,987	9,106,975	1,484	134,328	9,293,076
2036	9,293,076	(6,248,106)	(9,081,682)	(1,305,284)	9,081,682	(5,957,161)	4,293,709	4.05	17,406,112	10,143,667	274,146	149,619	19,860,508
2037	19,860,508	(2,978,436)	(4,446,388)	(446,748)	4,446,388	(6,582,558)	4,334,163	4.16	18,045,780	11,016,474	585,885	162,493	31,625,360
2038	31,625,360	(4,042,884)	(6,198,858)	(60,469)	6,198,858	(6,976,228)	4,334,163	4.28	18,534,332	11,497,635	932,948	169,590	44,225,533
2039	44,225,533	(2,241,772)	(3,530,312)	(60,469)	3,530,312	(7,413,877)	4,334,163	4.39	19,036,111	11,561,764	1,304,653	170,536	57,262,487
2040	57,262,487	(1,683,951)	(2,723,657)	(60,469)	2,723,657	(7,678,633)	4,334,163	4.51	19,551,474	11,812,372	1,689,243	174,232	70,938,334
2041	70,938,334	(1,459,848)	(2,425,113)	(51,113)	2,425,113	(81,422,961)	2,157,860	4.63	9,997,671	(71,476,404)	2,092,681	(1,554,612)	0
Total		(78,199,660)	(102,141,198)	(133,575,001)	102,141,198	(144,483,547)	79,831,360		289,882,812		(788,328)	(345,272)	

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	\$0.91
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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	(85,739)	(8,711)	(8,711)	(73,411)	8,711	(144)	72,000	0.91	65,411	(8,143)	(2,829)	(134)	(96,846)
2023	(96,846)	(19,156)	(19,674)	(73,395)	19,674	(975)	72,000	0.93	67,182	(7,188)	(3,293)	(122)	(107,449)
2024	(107,449)	(33,663)	(35,510)	(73,380)	35,510	(2,712)	72,000	0.96	69,001	(7,091)	(3,707)	(122)	(118,370)
2025	(118,370)	(22,466)	(24,341)	(73,365)	24,341	(5,175)	72,000	0.98	70,869	(7,671)	(4,202)	(136)	(130,379)
2026	(130,379)	(15,468)	(17,212)	(73,611)	17,212	(6,879)	74,000	1.01	74,810	(5,681)	(4,694)	(102)	(140,856)
2027	(140,856)	(10,943)	(12,506)	(74,696)	12,506	(8,098)	74,000	1.04	76,835	(5,959)	(5,212)	(110)	(152,136)
2028	(152,136)	(15,789)	(18,534)	(75,091)	18,534	(9,164)	74,000	1.07	78,915	(5,340)	(5,705)	(100)	(163,281)
2029	(163,281)	(25,790)	(31,093)	(74,641)	31,093	(10,828)	74,000	1.10	81,052	(4,417)	(6,286)	(85)	(174,070)
2030	(174,070)	(35,889)	(44,440)	(69,894)	44,440	(13,530)	74,000	1.12	83,246	(178)	(7,137)	(4)	(181,389)
2031	(181,389)	(30,142)	(38,334)	(54,180)	38,334	(16,937)	78,000	1.16	90,121	19,003	(7,890)	280	(169,995)
2032	(169,995)	(28,750)	(37,554)	(40,192)	37,554	(19,986)	84,000	1.19	99,681	39,503	(7,395)	583	(137,305)
2033	(137,305)	(38,045)	(51,041)	(28,095)	51,041	(23,282)	84,000	1.22	102,380	51,002	(5,973)	752	(91,523)
2034	(91,523)	(39,552)	(54,498)	(22,002)	54,498	(27,439)	84,000	1.25	105,152	55,711	(3,981)	822	(38,972)
2035	(38,972)	(46,459)	(65,749)	(13,545)	65,749	(32,041)	84,000	1.29	107,998	62,412	(1,695)	921	22,665
2036	22,665	(38,911)	(56,558)	(8,129)	56,558	(37,099)	86,000	1.32	113,563	68,335	669	1,008	92,677
2037	92,677	(18,549)	(27,691)	(2,782)	27,691	(40,994)	88,000	1.36	119,350	75,574	2,734	1,115	172,100
2038	172,100	(25,178)	(38,604)	(377)	38,604	(43,446)	88,000	1.39	122,581	78,759	5,077	1,162	257,098
2039	257,098	(13,961)	(21,986)	(377)	21,986	(46,171)	88,000	1.43	125,900	79,352	7,584	1,170	345,205
2040	345,205	(10,487)	(16,962)	(377)	16,962	(47,820)	88,000	1.47	129,308	81,112	10,184	1,196	437,697
2041	437,697	(9,091)	(15,103)	(318)	15,103	(507,103)	44,000	1.51	66,405	(441,016)	12,912	(9,592)	0
Total		(487,001)	(636,100)	(831,859)	636,100	(899,823)	1,554,000		1,849,761		(30,840)	(1,500)	

**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	\$927,689,739	
Discount Rate Applied to Post 2041 Debt Payments	2.95%	

Calculated Development Charge per Capita	\$5,497.50
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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	(82,205,801)	(56,999,866)	(56,999,866)	(82,190,111)	56,999,866	(940,498)	20,326	5,497.50	111,742,121	28,611,512	(2,712,791)	271,809	(56,035,271)
2023	(56,035,271)	(69,252,923)	(71,127,802)	(82,190,111)	71,127,802	(5,401,259)	20,326	5,646.33	114,767,307	27,175,936	(1,905,199)	271,759	(30,492,775)
2024	(30,492,775)	(97,885,677)	(103,257,523)	(82,190,111)	103,257,523	(11,246,842)	20,326	5,799.19	117,874,392	24,437,439	(1,052,001)	250,484	(6,856,853)
2025	(6,856,853)	(116,292,745)	(125,995,912)	(82,190,111)	125,995,912	(19,388,723)	20,326	5,956.19	121,065,596	19,486,762	(243,418)	209,483	12,595,974
2026	12,595,974	(166,940,628)	(185,766,394)	(82,633,523)	185,766,394	(29,951,170)	21,883	6,117.45	133,868,057	21,283,363	277,111	234,117	34,390,565
2027	34,390,565	(183,938,747)	(210,222,700)	(83,823,892)	210,222,700	(44,492,980)	23,439	6,283.06	147,268,701	18,951,829	790,983	217,946	54,351,324
2028	54,351,324	(145,508,813)	(170,803,577)	(84,321,508)	170,803,577	(59,772,945)	23,439	6,453.16	151,255,694	7,161,242	1,277,256	84,145	62,873,967
2029	62,873,967	(101,369,419)	(122,212,575)	(82,727,663)	122,212,575	(71,947,534)	23,439	6,627.87	155,350,627	675,430	1,540,412	8,274	65,098,083
2030	65,098,083	(93,393,616)	(115,645,145)	(69,156,449)	115,645,145	(81,359,568)	23,439	6,807.30	159,556,422	9,040,405	1,757,648	122,045	76,018,181
2031	76,018,181	(62,447,570)	(79,419,479)	(57,993,493)	79,419,479	(89,783,417)	25,131	6,991.60	175,705,864	27,928,955	2,242,536	411,952	106,601,625
2032	106,601,625	(45,833,921)	(59,868,694)	(50,417,570)	59,868,694	(95,708,944)	26,823	7,180.88	192,612,786	46,486,273	3,144,748	685,673	156,918,318
2033	156,918,318	(54,988,492)	(73,771,032)	(40,774,644)	73,771,032	(100,798,703)	26,823	7,375.29	197,827,376	56,254,030	4,629,090	829,747	218,631,184
2034	218,631,184	(28,740,254)	(39,600,979)	(32,665,661)	39,600,979	(105,954,584)	26,823	7,574.96	203,183,140	64,562,895	6,449,620	952,303	290,596,002
2035	290,596,002	(53,570,338)	(75,812,530)	(22,117,766)	75,812,530	(109,908,867)	26,823	7,780.04	208,683,900	76,657,268	8,572,582	1,130,695	376,956,547
2036	376,956,547	(48,324,770)	(70,240,513)	(17,783,006)	70,240,513	(115,850,003)	26,761	7,990.66	213,838,161	80,205,151	11,120,218	1,183,026	469,464,942
2037	469,464,942	(25,598,180)	(38,214,506)	(13,702,843)	38,214,506	(120,770,201)	26,700	8,206.99	219,126,757	84,653,713	13,849,216	1,248,642	569,216,514
2038	569,216,514	(15,914,279)	(24,400,988)	(10,457,767)	24,400,988	(123,525,569)	26,700	8,429.18	225,059,157	91,075,821	16,791,887	1,343,368	678,427,590
2039	678,427,590	(16,842,649)	(26,523,578)	(10,457,767)	26,523,578	(125,522,953)	26,700	8,657.38	231,152,165	95,171,445	20,013,614	1,403,779	795,016,428
2040	795,016,428	(17,725,724)	(28,669,953)	(10,457,767)	28,669,953	(127,690,588)	26,700	8,891.77	237,410,128	99,261,774	23,452,985	1,464,111	919,195,297
2041	919,195,297	(16,537,087)	(27,471,557)	(17,239,274)	27,471,557	(1,030,846,899)	13,350	9,132.49	121,918,756	(926,167,417)	27,116,261	(20,144,141)	0
Total		(1,418,105,696)	(1,706,025,303)	(1,015,491,038)	1,706,025,303	(2,470,862,245)	476,277		3,439,267,109		137,112,759	(7,820,784)	

**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	\$51,672,582	
Discount Rate Applied to Post 2041 Debt Payments	2.95%	

Calculated Development Charge per sqft	\$9.90
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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	(4,578,886)	(3,174,909)	(3,174,909)	(4,578,013)	3,174,909	(52,386)	736,966	9.90	7,298,763	2,668,365	(151,103)	25,349	(2,036,276)
2023	(2,036,276)	(3,857,407)	(3,961,839)	(4,578,013)	3,961,839	(300,852)	737,005	10.17	7,496,754	2,617,889	(69,233)	26,179	538,559
2024	538,559	(5,452,260)	(5,751,473)	(4,578,013)	5,751,473	(626,452)	736,966	10.45	7,699,310	2,494,845	11,040	25,572	3,070,017
2025	3,070,017	(6,477,539)	(7,018,008)	(4,578,013)	7,018,008	(1,079,957)	736,966	10.73	7,907,753	2,249,783	66,005	24,185	5,409,991
2026	5,409,991	(9,298,640)	(10,347,241)	(4,602,711)	10,347,241	(1,668,289)	725,783	11.02	7,998,590	1,727,590	119,020	19,003	7,275,604
2027	7,275,604	(10,245,440)	(11,709,464)	(4,669,015)	11,709,464	(2,478,272)	697,281	11.32	7,892,523	745,236	167,339	8,570	8,196,750
2028	8,196,750	(8,104,882)	(9,513,808)	(4,696,732)	9,513,808	(3,329,370)	697,242	11.63	8,105,749	79,647	192,624	936	8,469,956
2029	8,469,956	(5,646,305)	(6,807,275)	(4,607,954)	6,807,275	(4,007,498)	697,281	11.94	8,325,655	(289,798)	207,514	(5,579)	8,382,094
2030	8,382,094	(5,202,051)	(6,441,467)	(3,852,034)	6,441,467	(4,531,751)	697,242	12.26	8,550,582	166,797	226,317	2,252	8,777,459
2031	8,777,459	(3,478,347)	(4,423,688)	(3,230,254)	4,423,688	(5,000,962)	735,504	12.60	9,263,999	1,032,783	258,935	15,234	10,084,411
2032	10,084,411	(2,552,962)	(3,334,703)	(2,808,273)	3,334,703	(5,331,015)	775,604	12.94	10,033,542	1,894,254	297,490	27,940	12,304,095
2033	12,304,095	(3,062,875)	(4,109,067)	(2,271,159)	4,109,067	(5,614,516)	775,604	13.29	10,305,180	2,419,504	362,971	35,688	15,122,258
2034	15,122,258	(1,600,840)	(2,205,786)	(1,819,487)	2,205,786	(5,901,700)	775,604	13.65	10,584,171	2,862,984	446,107	42,229	18,473,577
2035	18,473,577	(2,983,883)	(4,222,779)	(1,231,966)	4,222,779	(6,121,955)	775,604	14.02	10,870,715	3,516,794	544,971	51,873	22,587,215
2036	22,587,215	(2,691,703)	(3,912,417)	(990,518)	3,912,417	(6,452,878)	800,261	14.40	11,519,970	4,076,573	666,323	60,129	27,390,240
2037	27,390,240	(1,425,826)	(2,128,559)	(763,252)	2,128,559	(6,726,934)	806,907	14.78	11,930,100	4,439,913	808,012	65,489	32,703,654
2038	32,703,654	(886,430)	(1,359,142)	(582,501)	1,359,142	(6,880,409)	806,945	15.19	12,253,667	4,790,757	964,758	70,664	38,529,833
2039	38,529,833	(938,140)	(1,477,371)	(582,501)	1,477,371	(6,991,664)	806,907	15.60	12,584,809	5,010,644	1,136,630	73,907	44,751,014
2040	44,751,014	(987,328)	(1,596,925)	(582,501)	1,596,925	(7,112,402)	806,945	16.02	12,926,133	5,231,231	1,320,155	77,161	51,379,560
2041	51,379,560	(921,120)	(1,530,174)	(960,232)	1,530,174	(57,418,465)	401,733	16.45	6,609,422	(51,769,276)	1,515,697	(1,125,982)	0
Total		(78,988,890)	(95,026,094)	(56,563,139)	95,026,094	(137,627,728)	14,730,349		190,157,385		9,091,570	(479,201)	

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	\$188,183,582	
Discount Rate Applied to Post 2041 Debt Payments	2.95%	

Calculated Development Charge per sqft	\$6.58
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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	(10,382,020)	(11,562,528)	(11,562,528)	(16,672,416)	11,562,528	(190,782)	4,021,383	6.58	26,441,979	9,578,781	(342,607)	90,998	(1,054,847)
2023	(1,054,847)	(14,048,084)	(14,428,406)	(16,672,416)	14,428,406	(1,095,655)	4,021,383	6.75	27,157,841	9,389,769	(35,865)	93,898	8,392,955
2024	8,392,955	(19,856,291)	(20,945,980)	(16,672,416)	20,945,980	(2,281,443)	4,021,383	6.94	27,893,083	8,939,224	172,056	91,627	17,595,861
2025	17,595,861	(23,590,199)	(25,558,504)	(16,672,416)	25,558,504	(3,933,038)	4,021,383	7.12	28,648,230	8,042,775	378,311	86,460	26,103,407
2026	26,103,407	(33,864,216)	(37,683,057)	(16,762,363)	37,683,057	(6,075,650)	3,963,103	7.32	28,997,389	6,159,375	574,275	67,753	32,904,811
2027	32,904,811	(37,312,316)	(42,644,064)	(17,003,832)	42,644,064	(9,025,483)	3,827,293	7.51	28,761,833	2,732,518	756,811	31,424	36,425,564
2028	36,425,564	(29,516,732)	(34,647,822)	(17,104,774)	34,647,822	(12,125,053)	3,827,293	7.72	29,540,500	310,673	856,001	3,650	37,595,888
2029	37,595,888	(20,562,974)	(24,791,047)	(16,781,460)	24,791,047	(14,594,691)	3,827,293	7.93	30,340,248	(1,035,903)	921,099	(19,941)	37,461,144
2030	37,461,144	(18,945,068)	(23,458,832)	(14,028,514)	23,458,832	(16,503,939)	3,827,293	8.14	31,161,647	629,194	1,011,451	8,494	39,110,282
2031	39,110,282	(12,667,605)	(16,110,388)	(11,764,087)	16,110,388	(18,212,732)	4,037,794	8.36	33,765,574	3,788,754	1,153,753	55,884	44,108,674
2032	44,108,674	(9,297,496)	(12,144,475)	(10,227,297)	12,144,475	(19,414,737)	4,161,884	8.59	35,745,491	6,103,457	1,301,206	90,026	51,603,363
2033	51,603,363	(11,154,517)	(14,964,591)	(8,271,212)	14,964,591	(20,447,204)	4,161,884	8.82	36,713,226	7,994,810	1,522,299	117,923	61,238,396
2034	61,238,396	(5,830,014)	(8,033,132)	(6,626,290)	8,033,132	(21,493,084)	4,161,884	9.06	37,707,160	9,587,786	1,806,533	141,420	72,774,135
2035	72,774,135	(10,866,842)	(15,378,712)	(4,486,630)	15,378,712	(22,295,217)	4,161,884	9.31	38,728,003	11,946,156	2,146,837	176,206	87,043,333
2036	87,043,333	(9,802,769)	(14,248,418)	(3,607,316)	14,248,418	(23,500,388)	4,293,709	9.56	41,036,371	13,928,668	2,567,778	205,448	103,745,227
2037	103,745,227	(5,192,638)	(7,751,883)	(2,779,647)	7,751,883	(24,498,459)	4,334,163	9.82	42,544,443	15,266,337	3,060,484	225,178	122,297,227
2038	122,297,227	(3,228,241)	(4,949,786)	(2,121,377)	4,949,786	(25,057,390)	4,334,163	10.08	43,696,245	16,517,477	3,607,768	243,633	142,666,105
2039	142,666,105	(3,416,563)	(5,380,357)	(2,121,377)	5,380,357	(25,462,564)	4,334,163	10.35	44,879,230	17,295,289	4,208,650	255,106	164,425,150
2040	164,425,150	(3,595,696)	(5,815,753)	(2,121,377)	5,815,753	(25,902,272)	4,334,163	10.64	46,094,242	18,070,592	4,850,542	266,541	187,612,825
2041	187,612,825	(3,354,579)	(5,572,656)	(3,497,019)	5,572,656	(209,109,203)	2,157,860	10.92	53,570,349	(189,035,873)	5,534,578	(4,111,530)	0
Total		(287,665,368)	(346,070,393)	(205,994,238)	346,070,393	(501,218,984)	79,831,360		683,423,083		36,051,961	(1,879,802)	

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	\$1,171,943	
Discount Rate Applied to Post 2041 Debt Payments	2.95%	

Calculated Development Charge per sqft	\$2.13
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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	(103,850)	(72,007)	(72,007)	(103,830)	72,007	(1,188)	72,000	2.13	153,283	48,265	(3,427)	459	(58,553)
2023	(58,553)	(87,487)	(89,855)	(103,830)	89,855	(6,823)	72,000	2.19	157,433	46,780	(1,991)	468	(13,297)
2024	(13,297)	(123,658)	(130,444)	(103,830)	130,444	(14,208)	72,000	2.25	161,695	43,657	(459)	447	30,349
2025	30,349	(146,912)	(159,170)	(103,830)	159,170	(24,494)	72,000	2.31	166,073	37,749	653	406	69,157
2026	69,157	(210,895)	(234,677)	(104,390)	234,677	(37,837)	74,000	2.37	175,307	33,080	1,521	364	104,122
2027	104,122	(232,368)	(265,573)	(105,894)	265,573	(56,208)	74,000	2.43	180,053	17,951	2,395	206	124,675
2028	124,675	(183,820)	(215,775)	(106,523)	215,775	(75,511)	74,000	2.50	184,928	2,894	2,930	34	130,533
2029	130,533	(128,059)	(154,390)	(104,509)	154,390	(90,891)	74,000	2.57	189,934	(5,466)	3,198	(105)	128,160
2030	128,160	(117,983)	(146,094)	(87,365)	146,094	(102,781)	74,000	2.64	195,076	4,931	3,460	67	136,617
2031	136,617	(78,890)	(100,330)	(73,263)	100,330	(113,423)	78,000	2.71	211,188	24,502	4,030	361	165,511
2032	165,511	(57,902)	(75,632)	(63,692)	75,632	(120,908)	84,000	2.78	233,590	48,990	4,883	723	220,106
2033	220,106	(69,467)	(93,194)	(51,510)	93,194	(127,338)	84,000	2.86	239,914	61,066	6,493	901	288,566
2034	288,566	(36,307)	(50,028)	(41,266)	50,028	(133,852)	84,000	2.93	246,409	71,291	8,513	1,052	369,421
2035	369,421	(67,675)	(95,773)	(27,941)	95,773	(138,847)	84,000	3.01	253,080	86,292	10,898	1,273	467,884
2036	467,884	(61,048)	(88,734)	(22,465)	88,734	(146,352)	86,000	3.09	266,121	97,303	13,803	1,435	580,425
2037	580,425	(32,338)	(48,276)	(17,311)	48,276	(152,568)	88,000	3.18	279,682	109,803	17,123	1,620	708,971
2038	708,971	(20,104)	(30,826)	(13,211)	30,826	(156,049)	88,000	3.26	287,254	117,994	20,915	1,740	849,619
2039	849,619	(21,277)	(33,507)	(13,211)	33,507	(158,572)	88,000	3.35	295,031	123,247	25,064	1,818	999,748
2040	999,748	(22,393)	(36,219)	(13,211)	36,219	(161,310)	88,000	3.44	303,018	128,496	29,493	1,895	1,159,632
2041	1,159,632	(20,891)	(34,705)	(21,778)	34,705	(1,302,261)	44,000	3.54	155,611	(1,168,428)	34,209	(25,413)	0
Total		(1,791,482)	(2,155,208)	(1,282,862)	2,155,208	(3,121,421)	1,554,000		4,334,680		183,702	(10,251)	

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	\$2,629,953,320	
Discount Rate Applied to Post 2041 Debt Payments	2.95%	

Calculated Development Charge per Capita	\$6,796.78
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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	419,312,544	(124,802,909)	(124,802,909)	(52,877,184)	124,802,909	(2,059,248)	20,326	6,796.78	138,151,396	83,214,964	7,966,938	790,542	511,284,989
2023	511,284,989	(136,184,483)	(139,871,394)	(52,877,184)	139,871,394	(11,556,513)	20,326	6,980.79	141,891,557	77,457,860	10,225,700	774,579	599,743,127
2024	599,743,127	(145,193,969)	(153,162,037)	(52,877,184)	153,162,037	(22,191,099)	20,326	7,169.78	145,732,975	70,664,692	12,294,734	724,313	683,426,867
2025	683,426,867	(144,701,617)	(156,775,146)	(52,877,184)	156,775,146	(33,733,426)	20,326	7,363.89	149,678,392	63,067,782	14,693,678	677,979	761,866,305
2026	761,866,305	(147,299,561)	(163,910,419)	(47,436,349)	163,910,419	(45,665,893)	21,883	7,563.25	165,506,603	72,404,361	16,761,059	796,448	851,828,172
2027	851,828,172	(134,751,245)	(154,006,543)	(38,902,839)	154,006,543	(57,914,383)	23,439	7,768.01	182,074,372	85,257,149	19,592,048	980,457	957,657,827
2028	957,657,827	(134,978,453)	(158,442,655)	(33,602,998)	158,442,655	(69,732,935)	23,439	7,978.31	187,003,656	83,667,723	22,504,959	983,096	1,064,813,604
2029	1,064,813,604	(105,605,121)	(127,319,205)	(32,548,634)	127,319,205	(81,295,016)	23,439	8,194.31	192,066,391	78,222,740	26,087,933	958,229	1,170,082,507
2030	1,170,082,507	(106,304,206)	(131,631,753)	(23,212,211)	131,631,753	(91,328,996)	23,439	8,416.15	197,266,188	82,724,982	31,592,228	1,116,787	1,285,516,503
2031	1,285,516,503	(210,047,185)	(267,133,504)	(12,354,800)	267,133,504	(104,761,335)	25,131	8,644.00	217,232,410	100,116,276	37,922,737	1,476,715	1,425,032,231
2032	1,425,032,231	(141,954,223)	(185,421,927)	(7,599,016)	185,421,927	(124,345,364)	26,823	8,878.02	238,135,135	106,190,755	42,038,451	1,566,314	1,574,827,750
2033	1,574,827,750	(130,550,204)	(175,142,525)	(6,813,919)	175,142,525	(138,949,000)	26,823	9,118.37	244,582,148	98,819,229	46,457,419	1,457,584	1,721,561,981
2034	1,721,561,981	(127,585,974)	(175,799,753)	(3,813,951)	175,799,753	(152,968,518)	26,823	9,365.24	251,203,700	94,421,231	50,786,078	1,392,713	1,868,162,004
2035	1,868,162,004	(115,972,167)	(164,123,352)	(1,914,613)	164,123,352	(166,772,334)	26,823	9,618.78	258,004,517	89,317,570	55,110,779	1,317,434	2,013,907,787
2036	2,013,907,787	(130,084,457)	(189,078,996)	(1,101,621)	189,078,996	(180,439,198)	26,761	9,879.19	264,376,942	82,836,123	59,410,280	1,221,833	2,157,376,022
2037	2,157,376,022	(148,568,768)	(221,792,410)	(793,321)	221,792,410	(196,270,364)	26,700	10,146.65	270,915,451	73,851,767	63,642,593	1,089,314	2,295,959,695
2038	2,295,959,695	(128,982,110)	(197,765,218)	(793,321)	197,765,218	(213,483,340)	26,700	10,421.35	278,249,923	63,973,261	67,730,811	943,606	2,428,607,373
2039	2,428,607,373	(168,128,122)	(264,765,915)	(793,321)	264,765,915	(230,754,846)	26,700	10,703.48	285,782,960	54,234,793	71,643,918	799,963	2,555,286,047
2040	2,555,286,047	(143,306,735)	(231,787,277)	(793,321)	231,787,277	(251,209,493)	26,700	10,993.26	293,519,938	41,517,124	75,380,938	612,378	2,672,796,486
2041	2,672,796,486	(123,436,639)	(205,054,052)	(670,572)	205,054,052	(2,843,132,334)	13,350	11,290.88	150,733,189	(2,693,069,716)	78,847,496	(58,574,266)	0
Total		(2,748,438,149)	(3,587,786,990)	(424,653,539)	3,587,786,990	(5,018,563,636)	476,277		4,252,107,840		810,690,776	(38,893,985)	

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	\$314,121,327	
Discount Rate Applied to Post 2041 Debt Payments	2.95%	

Calculated Development Charge per sqft	\$27.39
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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	33,190,854	(14,906,445)	(14,906,445)	(6,315,645)	14,906,445	(245,956)	736,966	27.39	20,187,881	13,626,280	630,626	129,450	47,577,210
2023	47,577,210	(16,265,859)	(16,706,224)	(6,315,645)	16,706,224	(1,380,309)	737,005	28.13	20,735,509	13,039,556	951,544	130,396	61,698,705
2024	61,698,705	(17,341,951)	(18,293,656)	(6,315,645)	18,293,656	(2,650,502)	736,966	28.90	21,295,767	12,329,620	1,264,823	126,379	75,419,527
2025	75,419,527	(17,283,145)	(18,725,206)	(6,315,645)	18,725,206	(4,029,117)	736,966	29.68	21,872,305	11,527,544	1,621,520	123,921	88,692,512
2026	88,692,512	(17,593,443)	(19,577,442)	(5,665,792)	19,577,442	(5,454,329)	725,783	30.48	22,123,553	11,003,432	1,951,235	121,038	101,768,217
2027	101,768,217	(16,094,673)	(18,394,524)	(4,646,551)	18,394,524	(6,917,287)	697,281	31.31	21,830,179	10,266,341	2,340,669	118,063	114,493,290
2028	114,493,290	(16,121,811)	(18,924,373)	(4,013,538)	18,924,373	(8,328,894)	697,242	32.16	22,419,947	10,077,515	2,690,592	118,411	127,379,808
2029	127,379,808	(12,613,464)	(15,206,991)	(3,887,605)	15,206,991	(9,709,868)	697,281	33.03	23,028,193	9,430,720	3,120,805	115,526	140,046,859
2030	140,046,859	(12,696,962)	(15,722,082)	(2,772,464)	15,722,082	(10,908,325)	697,242	33.92	23,650,327	9,969,538	3,781,265	134,589	153,932,251
2031	153,932,251	(25,088,012)	(31,906,395)	(1,475,656)	31,906,395	(12,512,682)	735,504	34.84	25,623,589	11,635,251	4,541,001	171,620	170,280,124
2032	170,280,124	(16,954,996)	(22,146,774)	(907,626)	22,146,774	(14,851,796)	775,604	35.78	27,752,094	11,992,672	5,023,264	176,892	187,472,951
2033	187,472,951	(15,592,902)	(20,919,003)	(813,854)	20,919,003	(16,596,053)	775,604	36.75	28,503,424	11,093,517	5,530,452	163,629	204,260,550
2034	204,260,550	(15,238,854)	(20,997,503)	(455,538)	20,997,503	(18,270,542)	775,604	37.74	29,275,095	10,549,014	6,025,686	155,598	220,990,848
2035	220,990,848	(13,851,703)	(19,602,875)	(228,681)	19,602,875	(19,919,269)	775,604	38.77	30,067,657	9,919,707	6,519,230	146,316	237,576,101
2036	237,576,101	(15,537,273)	(22,583,574)	(131,578)	22,583,574	(21,551,637)	800,261	39.82	31,863,450	10,180,235	7,008,495	150,158	254,914,990
2037	254,914,990	(17,745,037)	(26,490,860)	(94,754)	26,490,860	(23,442,510)	806,907	40.89	32,997,842	9,460,578	7,519,992	139,544	272,035,104
2038	272,035,104	(15,405,609)	(23,621,055)	(94,754)	23,621,055	(25,498,426)	806,945	42.00	33,892,807	8,299,627	8,025,036	122,419	288,482,186
2039	288,482,186	(20,081,204)	(31,623,611)	(94,754)	31,623,611	(27,561,333)	806,907	43.14	34,808,723	7,152,636	8,510,224	105,501	304,250,548
2040	304,250,548	(17,116,540)	(27,684,646)	(94,754)	27,684,646	(30,004,433)	806,945	44.31	35,752,803	5,653,615	8,975,391	83,391	318,962,945
2041	318,962,945	(14,743,258)	(24,491,633)	(80,093)	24,491,633	(339,583,404)	401,733	45.51	18,281,210	(321,382,288)	9,409,407	(6,990,065)	0
Total		(328,273,141)	(428,524,872)	(50,720,571)	428,524,872	(599,416,672)	14,730,349		525,962,354		95,441,259	(4,457,225)	

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	\$562,468,435	
Discount Rate Applied to Post 2041 Debt Payments	2.95%	

Calculated Development Charge per sqft	\$8.57
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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	98,054,954	(26,691,613)	(26,691,613)	(11,308,850)	26,691,613	(440,412)	4,021,383	8.57	34,479,048	22,729,787	1,863,044	215,933	122,863,718
2023	122,863,718	(29,125,792)	(29,914,312)	(11,308,850)	29,914,312	(2,471,593)	4,021,383	8.81	35,412,496	21,632,054	2,457,274	216,321	147,169,366
2024	147,169,366	(31,052,652)	(32,756,783)	(11,308,850)	32,756,783	(4,746,013)	4,021,383	9.04	36,371,216	20,316,353	3,016,972	208,243	170,710,934
2025	170,710,934	(30,947,352)	(33,529,520)	(11,308,850)	33,529,520	(7,214,572)	4,021,383	9.29	37,355,891	18,832,469	3,670,285	202,449	193,416,137
2026	193,416,137	(31,502,975)	(35,055,541)	(10,145,218)	35,055,541	(9,766,570)	3,963,103	9.54	37,811,177	17,899,389	4,255,155	196,893	215,767,574
2027	215,767,574	(28,819,265)	(32,937,398)	(8,320,155)	32,937,398	(12,386,156)	3,827,293	9.80	37,504,024	16,797,713	4,962,654	193,174	237,721,115
2028	237,721,115	(28,867,858)	(33,886,150)	(7,186,677)	33,886,150	(14,913,791)	3,827,293	10.06	38,519,367	16,418,899	5,586,446	192,922	259,919,382
2029	259,919,382	(22,585,780)	(27,229,774)	(6,961,180)	27,229,774	(17,386,575)	3,827,293	10.34	39,562,199	15,214,444	6,368,025	186,377	281,688,228
2030	281,688,228	(22,735,293)	(28,152,099)	(4,964,398)	28,152,099	(19,532,543)	3,827,293	10.62	40,633,263	16,136,321	7,605,582	217,840	305,647,972
2031	305,647,972	(44,922,817)	(57,131,875)	(2,642,323)	57,131,875	(22,405,319)	4,037,794	10.90	44,028,657	18,981,015	9,016,615	279,970	333,925,572
2032	333,925,572	(30,359,767)	(39,656,210)	(1,625,203)	39,656,210	(26,593,758)	4,161,884	11.20	46,610,372	18,391,412	9,850,804	271,273	362,439,061
2033	362,439,061	(27,920,788)	(37,457,753)	(1,457,294)	37,457,753	(29,717,039)	4,161,884	11.50	47,872,251	16,697,918	10,691,952	246,294	390,075,225
2034	390,075,225	(27,286,828)	(37,598,314)	(815,690)	37,598,314	(32,715,395)	4,161,884	11.81	49,168,292	15,637,207	11,507,219	230,649	417,450,300
2035	417,450,300	(24,802,981)	(35,101,081)	(409,478)	35,101,081	(35,667,619)	4,161,884	12.13	50,499,421	14,422,324	12,314,784	212,729	444,400,136
2036	444,400,136	(27,821,178)	(40,438,348)	(235,604)	40,438,348	(38,590,553)	4,293,709	12.46	53,509,421	14,683,264	13,109,804	216,578	472,409,783
2037	472,409,783	(31,774,420)	(47,434,770)	(169,668)	47,434,770	(41,976,366)	4,334,163	12.80	55,475,873	13,329,839	13,936,089	196,615	499,872,326
2038	499,872,326	(27,585,419)	(42,296,071)	(169,668)	42,296,071	(45,657,708)	4,334,163	13.15	56,977,767	11,150,391	14,746,234	164,468	525,933,419
2039	525,933,419	(35,957,582)	(56,625,518)	(169,668)	56,625,518	(49,351,567)	4,334,163	13.50	58,520,321	8,999,087	15,515,036	132,737	550,580,278
2040	550,580,278	(30,649,029)	(49,572,373)	(169,668)	49,572,373	(53,726,205)	4,334,163	13.87	60,104,637	6,208,765	16,242,118	91,579	573,122,740
2041	573,122,740	(26,399,409)	(43,854,935)	(143,415)	43,854,935	(608,061,057)	2,157,860	14.24	30,734,582	(577,469,890)	16,907,121	(12,559,970)	0
Total		(587,808,800)	(767,320,439)	(90,820,704)	767,320,439	(1,073,320,813)	79,831,360		891,150,275		183,623,214	(8,686,926)	

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	\$5,826,207	
Discount Rate Applied to Post 2041 Debt Payments	2.95%	

Calculated Development Charge per sqft	\$4.53
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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	1,067,133	(276,479)	(276,479)	(117,140)	276,479	(4,562)	72,000	4.53	326,077	204,375	20,276	1,942	1,293,725
2023	1,293,725	(301,693)	(309,861)	(117,140)	309,861	(25,601)	72,000	4.65	334,905	192,163	25,874	1,922	1,513,684
2024	1,513,684	(321,652)	(339,304)	(117,140)	339,304	(49,161)	72,000	4.78	343,972	177,671	31,031	1,821	1,724,207
2025	1,724,207	(320,561)	(347,308)	(117,140)	347,308	(74,731)	72,000	4.91	353,284	161,413	37,070	1,735	1,924,426
2026	1,924,426	(326,317)	(363,115)	(105,087)	363,115	(101,165)	74,000	5.04	372,928	166,676	42,337	1,833	2,135,272
2027	2,135,272	(298,518)	(341,175)	(86,183)	341,175	(128,299)	74,000	5.18	383,024	168,542	49,111	1,938	2,354,864
2028	2,354,864	(299,021)	(351,002)	(74,442)	351,002	(154,481)	74,000	5.32	393,393	164,471	55,339	1,933	2,576,606
2029	2,576,606	(233,950)	(282,054)	(72,106)	282,054	(180,095)	74,000	5.46	404,044	151,843	63,127	1,860	2,793,436
2030	2,793,436	(235,499)	(291,607)	(51,423)	291,607	(202,324)	74,000	5.61	414,982	161,236	75,423	2,177	3,032,272
2031	3,032,272	(465,323)	(591,788)	(27,370)	591,788	(232,081)	78,000	5.76	449,256	189,805	89,452	2,800	3,314,329
2032	3,314,329	(314,475)	(410,770)	(16,834)	410,770	(275,466)	84,000	5.92	496,912	204,612	97,773	3,018	3,619,732
2033	3,619,732	(289,211)	(387,998)	(15,095)	387,998	(307,817)	84,000	6.08	510,365	187,453	106,782	2,765	3,916,732
2034	3,916,732	(282,645)	(389,454)	(8,449)	389,454	(338,875)	84,000	6.24	524,182	176,858	115,544	2,609	4,211,742
2035	4,211,742	(256,916)	(363,587)	(4,241)	363,587	(369,455)	84,000	6.41	538,374	164,677	124,246	2,429	4,503,094
2036	4,503,094	(288,180)	(418,872)	(2,440)	418,872	(399,732)	86,000	6.58	566,114	163,942	132,841	2,418	4,802,296
2037	4,802,296	(329,128)	(491,343)	(1,757)	491,343	(434,803)	88,000	6.76	594,963	158,402	141,668	2,336	5,104,702
2038	5,104,702	(285,738)	(438,115)	(1,757)	438,115	(472,935)	88,000	6.94	611,070	136,377	150,589	2,012	5,393,679
2039	5,393,679	(372,459)	(586,543)	(1,757)	586,543	(511,197)	88,000	7.13	627,613	114,658	159,114	1,691	5,669,143
2040	5,669,143	(317,471)	(513,485)	(1,757)	513,485	(556,511)	88,000	7.33	644,605	86,336	167,240	1,273	5,923,992
2041	5,923,992	(273,453)	(454,262)	(1,486)	454,262	(6,298,468)	44,000	7.52	331,028	(5,968,925)	174,758	(129,824)	0
Total		(6,088,689)	(7,948,121)	(940,746)	7,948,121	(11,117,760)	1,554,000		9,221,092		1,859,594	(89,313)	

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	2.59%	

Calculated Development Charge per Capita	\$2,017.69
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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 Transactions	
2022	13,275,822	(15,655,055)	(15,655,055)	(198,012)	15,655,055	(215,257)	20,326	2,017.69	41,011,563	40,598,293	179,224	274,038	54,327,378
2023	54,327,378	(29,895,999)	(30,705,371)	(195,210)	30,705,371	(2,331,810)	20,326	2,072.31	42,121,865	39,594,846	814,911	296,961	95,034,095
2024	95,034,095	(16,806,561)	(17,728,884)	(86,548)	17,728,884	(5,888,255)	20,326	2,128.42	43,262,227	37,287,425	1,615,580	316,943	134,254,043
2025	134,254,043	(14,756,995)	(15,988,281)	(86,548)	15,988,281	(8,041,687)	20,326	2,186.04	44,433,462	36,305,227	2,416,573	326,747	173,302,590
2026	173,302,590	(11,467,969)	(12,761,203)	(86,548)	12,761,203	(9,961,688)	21,883	2,245.22	49,132,217	39,083,981	3,206,098	361,527	215,954,196
2027	215,954,196	(36,992,911)	(42,279,019)	(86,548)	42,279,019	(12,037,350)	23,439	2,306.01	54,050,518	41,926,621	4,211,107	408,785	262,500,708
2028	262,500,708	(46,327,257)	(54,380,631)	(86,548)	54,380,631	(17,496,019)	23,439	2,368.44	55,513,823	37,931,256	5,250,014	379,313	306,061,291
2029	306,061,291	(73,095,729)	(88,125,368)	(86,548)	88,125,368	(24,872,585)	23,439	2,432.56	57,016,744	32,057,611	6,427,287	336,605	344,882,794
2030	344,882,794	(75,285,196)	(93,222,298)	(86,548)	93,222,298	(36,082,958)	23,439	2,498.42	58,560,354	22,390,848	8,104,746	263,092	375,641,480
2031	375,641,480	(89,841,624)	(114,258,650)	(312,399)	114,258,650	(442,026,255)	25,131	2,566.05	64,487,518	(377,851,136)	9,766,678	(7,557,023)	(0)
Total		(410,125,295)	(485,104,758)	(1,311,455)	485,104,758	(558,953,864)	222,074		509,590,292		41,992,217	(4,593,011)	

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 Capita	\$7.90
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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 Transactions	
2022	1,082,970	(1,962,215)	(1,962,215)	(24,819)	1,962,215	(26,980)	736,966	7.90	5,818,763	5,766,964	14,620	38,927	6,903,481
2023	6,903,481	(3,747,185)	(3,848,632)	(24,468)	3,848,632	(292,271)	737,005	8.11	5,976,606	5,659,868	103,552	42,449	12,709,350
2024	12,709,350	(2,106,546)	(2,222,150)	(10,848)	2,222,150	(738,038)	736,966	8.33	6,138,090	5,389,204	216,059	45,808	18,360,421
2025	18,360,421	(1,849,652)	(2,003,982)	(10,848)	2,003,982	(1,007,951)	736,966	8.55	6,304,266	5,285,467	330,488	47,569	24,023,946
2026	24,023,946	(1,437,403)	(1,599,498)	(10,848)	1,599,498	(1,248,605)	725,783	8.79	6,376,683	5,117,230	444,443	47,334	29,632,953
2027	29,632,953	(4,636,717)	(5,299,281)	(10,848)	5,299,281	(1,508,770)	697,281	9.02	6,292,124	4,772,506	577,843	46,532	35,029,834
2028	35,029,834	(5,806,690)	(6,816,106)	(10,848)	6,816,106	(2,192,963)	697,242	9.27	6,462,113	4,258,302	700,597	42,583	40,031,316
2029	40,031,316	(9,161,869)	(11,045,694)	(10,848)	11,045,694	(3,117,547)	697,281	9.52	6,637,428	3,509,033	840,658	36,845	44,417,851
2030	44,417,851	(9,436,298)	(11,684,547)	(10,848)	11,684,547	(4,522,663)	697,242	9.78	6,816,746	2,283,235	1,043,820	26,828	47,771,734
2031	47,771,734	(11,260,811)	(14,321,257)	(39,155)	14,321,257	(55,399,089)	735,504	10.04	7,385,500	(48,052,744)	1,242,065	(961,055)	(0)
Total		(51,405,386)	(60,803,363)	(164,377)	60,803,363	(70,054,876)	7,198,237		64,208,319		5,514,143	(586,179)	

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 Capita	\$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 Transactions	
2022	3,273,771	(3,503,960)	(3,503,960)	(44,320)	3,503,960	(48,179)	4,021,383	2.54	10,227,064	10,134,565	44,196	68,408	13,520,940
2023	13,520,940	(6,691,410)	(6,872,565)	(43,692)	6,872,565	(521,912)	4,021,383	2.61	10,503,940	9,938,335	202,814	74,538	23,736,627
2024	23,736,627	(3,761,693)	(3,968,130)	(19,371)	3,968,130	(1,317,926)	4,021,383	2.68	10,788,312	9,451,015	403,523	80,334	33,671,498
2025	33,671,498	(3,302,954)	(3,578,543)	(19,371)	3,578,543	(1,799,914)	4,021,383	2.76	11,080,383	9,261,098	606,087	83,350	43,622,033
2026	43,622,033	(2,566,794)	(2,856,249)	(19,371)	2,856,249	(2,229,654)	3,963,103	2.83	11,215,429	8,966,404	807,008	82,939	53,478,383
2027	53,478,383	(8,279,861)	(9,463,013)	(19,371)	9,463,013	(2,694,235)	3,827,293	2.91	11,124,322	8,410,716	1,042,828	82,004	63,013,933
2028	63,013,933	(10,369,101)	(12,171,631)	(19,371)	12,171,631	(3,916,010)	3,827,293	2.99	11,425,490	7,490,109	1,260,279	74,901	71,839,221
2029	71,839,221	(16,360,499)	(19,724,476)	(19,371)	19,724,476	(5,567,054)	3,827,293	3.07	11,734,812	6,148,386	1,508,624	64,558	79,560,789
2030	79,560,789	(16,850,552)	(20,865,286)	(19,371)	20,865,286	(8,076,193)	3,827,293	3.15	12,052,507	3,956,943	1,869,679	46,494	85,433,904
2031	85,433,904	(20,108,614)	(25,573,703)	(69,920)	25,573,703	(98,926,175)	4,037,794	3.23	13,059,638	(85,936,456)	2,221,282	(1,718,729)	0
Total		(91,795,437)	(108,577,559)	(293,531)	108,577,559	(125,097,252)	39,395,602		113,211,898		9,966,318	(1,061,203)	

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 Capita	\$1.36
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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 Transactions	
2022	37,697	(35,307)	(35,307)	(447)	35,307	(485)	72,000	1.36	98,241	97,309	509	657	136,172
2023	136,172	(67,424)	(69,250)	(440)	69,250	(5,259)	72,000	1.40	100,900	95,201	2,043	714	234,129
2024	234,129	(37,904)	(39,984)	(195)	39,984	(13,280)	72,000	1.44	103,632	90,157	3,980	766	329,033
2025	329,033	(33,281)	(36,058)	(195)	36,058	(18,136)	72,000	1.48	106,438	88,106	5,923	793	423,855
2026	423,855	(25,864)	(28,780)	(195)	28,780	(22,467)	74,000	1.52	112,356	89,694	7,841	830	522,220
2027	522,220	(83,430)	(95,352)	(195)	95,352	(27,148)	74,000	1.56	115,398	88,055	10,183	859	621,317
2028	621,317	(104,482)	(122,645)	(195)	122,645	(39,459)	74,000	1.60	118,522	78,868	12,426	789	713,400
2029	713,400	(164,853)	(198,749)	(195)	198,749	(56,095)	74,000	1.65	121,731	65,440	14,981	687	794,508
2030	794,508	(169,791)	(210,244)	(195)	210,244	(81,378)	74,000	1.69	125,026	43,453	18,671	511	857,143
2031	857,143	(202,620)	(257,688)	(705)	257,688	(996,833)	78,000	1.74	135,352	(862,185)	22,286	(17,244)	(0)
Total		(924,956)	(1,094,057)	(2,958)	1,094,057	(1,260,540)	736,000		1,137,596		98,843	(10,639)	

**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	2.91%	

Calculated Development Charge per Capita	\$905.40
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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 Transactions	
2022	15,238,194	(2,690,224)	(2,690,224)	(17,445,308)	2,690,224	(44,389)	20,326	905.40	18,403,186	913,489	289,526	8,678	16,449,886
2023	16,449,886	0	0	(17,445,308)	0	(197,854)	20,326	929.91	18,901,414	1,258,251	328,998	12,583	18,049,717
2024	18,049,717	0	0	(17,445,308)	0	(197,854)	20,326	955.09	19,413,130	1,769,968	370,019	18,142	20,207,846
2025	20,207,846	0	0	(17,445,308)	0	(197,854)	20,326	980.95	19,938,700	2,295,538	434,469	24,677	22,962,530
2026	22,962,530	0	0	(17,667,689)	0	(197,854)	21,883	1,007.50	22,047,181	4,181,638	505,176	45,998	27,695,341
2027	27,695,341	0	0	(17,934,005)	0	(197,854)	23,439	1,034.78	24,254,178	6,122,318	636,993	70,407	34,525,058
2028	34,525,058	0	0	(18,761,350)	0	(197,854)	23,439	1,062.79	24,910,809	5,951,605	811,339	69,931	41,357,933
2029	41,357,933	0	0	(18,702,368)	0	(197,854)	23,439	1,091.57	25,585,217	6,684,995	1,013,269	81,891	49,138,089
2030	49,138,089	0	0	(18,320,784)	0	(197,854)	23,439	1,121.12	26,277,884	7,759,246	1,326,728	104,750	58,328,813
2031	58,328,813	0	0	(85,703,733)	0	(2,005,095)	25,131	1,151.47	28,937,590	(58,771,238)	1,720,700	(1,278,274)	0
Total		(2,690,224)	(2,690,224)	(246,871,164)	2,690,224	(3,632,316)	222,074		228,669,287		7,437,216	(841,218)	

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	2.92%	

Calculated Development Charge per Capita	\$3.61
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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 Transactions	
2022	1,112,574	(337,195)	(337,195)	(2,186,607)	337,195	(5,564)	736,966	3.61	2,663,448	471,277	21,139	4,477	1,609,467
2023	1,609,467	0	0	(2,186,607)	0	(24,799)	737,005	3.71	2,735,698	524,292	32,189	5,243	2,171,191
2024	2,171,191	0	0	(2,186,607)	0	(24,799)	736,966	3.81	2,809,615	598,208	44,509	6,132	2,820,041
2025	2,820,041	0	0	(2,186,607)	0	(24,799)	736,966	3.92	2,885,679	674,273	60,631	7,248	3,562,193
2026	3,562,193	0	0	(2,214,480)	0	(24,799)	725,783	4.02	2,918,827	679,547	78,368	7,475	4,327,584
2027	4,327,584	0	0	(2,247,861)	0	(24,799)	697,281	4.13	2,880,121	607,461	99,534	6,986	5,041,566
2028	5,041,566	0	0	(2,351,560)	0	(24,799)	697,242	4.24	2,957,931	581,571	118,477	6,833	5,748,447
2029	5,748,447	0	0	(2,344,168)	0	(24,799)	697,281	4.36	3,038,179	669,212	140,837	8,198	6,566,694
2030	6,566,694	0	0	(2,296,340)	0	(24,799)	697,242	4.48	3,120,259	799,120	177,301	10,788	7,553,903
2031	7,553,903	0	0	(10,740,553)	0	(251,243)	735,504	4.60	3,380,597	(7,611,199)	222,840	(165,544)	0
Total		(337,195)	(337,195)	(30,941,389)	337,195	(455,200)	7,198,237		29,390,353		995,826	(102,163)	

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	2.92%	

Calculated Development Charge per Capita	\$1.14
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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 Transactions	
2022	3,671,279	(602,134)	(602,134)	(3,904,660)	602,134	(9,935)	4,021,383	1.14	4,572,397	657,802	69,754	6,249	4,405,085
2023	4,405,085	0	0	(3,904,660)	0	(44,284)	4,021,383	1.17	4,696,185	747,241	88,102	7,472	5,247,900
2024	5,247,900	0	0	(3,904,660)	0	(44,284)	4,021,383	1.20	4,823,325	874,381	107,582	8,962	6,238,825
2025	6,238,825	0	0	(3,904,660)	0	(44,284)	4,021,383	1.23	4,953,906	1,004,962	134,135	10,803	7,388,725
2026	7,388,725	0	0	(3,954,434)	0	(44,284)	3,963,103	1.27	5,014,283	1,015,565	162,552	11,171	8,578,014
2027	8,578,014	0	0	(4,014,041)	0	(44,284)	3,827,293	1.30	4,973,551	915,225	197,294	10,525	9,701,058
2028	9,701,058	0	0	(4,199,220)	0	(44,284)	3,827,293	1.33	5,108,199	864,695	227,975	10,160	10,803,888
2029	10,803,888	0	0	(4,186,018)	0	(44,284)	3,827,293	1.37	5,246,493	1,016,190	264,695	12,448	12,097,222
2030	12,097,222	0	0	(4,100,611)	0	(44,284)	3,827,293	1.41	5,388,531	1,243,635	326,625	16,789	13,684,271
2031	13,684,271	0	0	(19,178,286)	0	(448,587)	4,037,794	1.45	5,838,807	(13,788,067)	403,686	(299,890)	0
Total		(602,134)	(602,134)	(55,251,250)	602,134	(812,797)	39,395,602		50,615,676		1,982,400	(205,309)	

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	2.92%	

Calculated Development Charge per Capita	\$0.62
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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 Transactions	
2022	32,524	(6,067)	(6,067)	(39,344)	6,067	(100)	72,000	0.62	44,566	5,122	618	49	38,313
2023	38,313	0	0	(39,344)	0	(446)	72,000	0.64	45,773	5,982	766	60	45,121
2024	45,121	0	0	(39,344)	0	(446)	72,000	0.65	47,012	7,222	925	74	53,342
2025	53,342	0	0	(39,344)	0	(446)	72,000	0.67	48,285	8,494	1,147	91	63,074
2026	63,074	0	0	(39,846)	0	(446)	74,000	0.69	50,970	10,678	1,388	117	75,257
2027	75,257	0	0	(40,447)	0	(446)	74,000	0.71	52,350	11,457	1,731	132	88,576
2028	88,576	0	0	(42,312)	0	(446)	74,000	0.73	53,767	11,008	2,082	129	101,795
2029	101,795	0	0	(42,179)	0	(446)	74,000	0.75	55,222	12,597	2,494	154	117,040
2030	117,040	0	0	(41,319)	0	(446)	74,000	0.77	56,718	14,952	3,160	202	135,355
2031	135,355	0	0	(193,262)	0	(4,521)	78,000	0.79	61,402	(136,381)	3,993	(2,966)	0
Total		(6,067)	(6,067)	(556,743)	6,067	(8,191)	736,000		516,065		18,303	(1,958)	

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	\$1,531.64
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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	1,531.64	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	1,573.10	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	1,615.69	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	1,659.43	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	1,704.36	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	1,750.50	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	1,797.89	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	1,846.56	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	1,896.56	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	1,947.90	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	2,000.64	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	2,054.80	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	2,110.43	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	2,167.57	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	2,226.25	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	2,286.52	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	2,348.42	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	2,412.00	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	2,477.30	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	2,544.37	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	\$44,642,917	
Discount Rate Applied to Post 2041 Debt Payments	2.60%	

Calculated Development Charge per Capita	\$283.41
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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	7,967,494	(5,864,032)	(5,864,032)	(5,645,128)	5,864,032	(80,630)	20,326	283.41	5,760,493	34,735	107,561	234	8,110,024
2023	8,110,024	(2,390,145)	(2,454,853)	(5,645,128)	2,454,853	(742,267)	20,326	291.08	5,916,447	(470,948)	121,650	(6,829)	7,753,898
2024	7,753,898	(2,863,202)	(3,020,331)	(5,645,128)	3,020,331	(1,051,445)	20,326	298.96	6,076,622	(619,951)	131,816	(9,609)	7,256,154
2025	7,256,154	(4,978,160)	(5,393,524)	(5,645,128)	5,393,524	(1,461,024)	20,326	307.05	6,241,134	(865,018)	130,611	(13,840)	6,507,906
2026	6,507,906	(2,512,060)	(2,795,343)	(5,711,567)	2,795,343	(2,084,192)	21,883	315.36	6,901,122	(894,636)	120,396	(14,538)	5,719,128
2027	5,719,128	(1,933,770)	(2,210,097)	(5,982,584)	2,210,097	(2,420,759)	23,439	323.90	7,591,948	(811,395)	111,523	(13,591)	5,005,665
2028	5,005,665	(1,914,758)	(2,247,613)	(6,051,803)	2,247,613	(2,695,990)	23,439	332.67	7,797,484	(950,308)	100,113	(16,155)	4,139,315
2029	4,139,315	(4,020,208)	(4,846,827)	(5,874,322)	4,846,827	(3,021,950)	23,439	341.68	8,008,585	(887,688)	86,926	(15,535)	3,323,018
2030	3,323,018	(3,981,294)	(4,929,858)	(4,376,742)	4,929,858	(3,634,813)	23,439	350.93	8,225,401	213,846	78,091	2,513	3,617,468
2031	3,617,468	(2,145,461)	(2,728,551)	(3,405,489)	2,728,551	(4,219,837)	25,131	360.43	9,057,931	1,432,606	94,054	18,624	5,162,751
2032	5,162,751	(7,608,601)	(9,938,425)	(2,098,867)	9,938,425	(4,632,207)	26,823	370.19	9,929,512	3,198,437	134,232	41,580	8,537,000
2033	8,537,000	(7,736,822)	(10,379,506)	(1,995,605)	10,379,506	(5,249,870)	26,823	380.21	10,198,332	2,952,857	221,962	38,387	11,750,206
2034	11,750,206	(3,468,957)	(4,779,850)	(1,720,684)	4,779,850	(6,155,561)	26,823	390.50	10,474,431	2,598,186	305,505	33,776	14,687,674
2035	14,687,674	(1,903,349)	(2,693,612)	(1,629,816)	2,693,612	(6,315,289)	26,823	401.07	10,758,004	2,812,899	381,880	36,568	17,919,020
2036	17,919,020	(1,977,479)	(2,874,284)	(1,157,338)	2,874,284	(6,040,072)	26,761	411.93	11,023,715	3,826,305	465,895	49,742	22,260,962
2037	22,260,962	(2,329,261)	(3,477,262)	(378,772)	3,477,262	(6,082,998)	26,700	423.08	11,296,351	4,834,582	578,785	62,850	27,737,178
2038	27,737,178	(2,427,216)	(3,721,593)	0	3,721,593	(6,257,169)	26,700	434.54	11,602,176	5,345,007	721,167	69,485	33,872,837
2039	33,872,837	(7,660,772)	(12,064,081)	0	12,064,081	(6,573,808)	26,700	446.30	11,916,281	5,342,473	880,694	69,452	40,165,456
2040	40,165,456	(9,537,265)	(15,425,770)	0	15,425,770	(7,570,389)	26,700	458.39	12,238,890	4,668,500	1,044,302	60,691	45,938,949
2041	45,938,949	(2,345,483)	(3,896,338)	0	3,896,338	(52,494,294)	13,350	470.80	6,285,116	(46,209,178)	1,194,413	(924,184)	0
Total		(79,598,296)	(105,741,751)	(62,964,102)	105,741,751	(128,784,564)	476,277		177,299,976		7,011,575	(530,379)	

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	\$3,210,988	
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	389,490	(421,777)	(421,777)	(406,032)	421,777	(5,799)	736,966	0.67	495,184	83,353	5,258	563	478,664
2023	478,664	(171,914)	(176,568)	(406,032)	176,568	(53,388)	737,005	0.69	508,617	49,197	7,180	369	535,410
2024	535,410	(205,939)	(217,240)	(406,032)	217,240	(75,626)	736,966	0.71	522,360	40,702	9,102	346	585,560
2025	585,560	(358,059)	(387,935)	(406,032)	387,935	(105,086)	736,966	0.73	536,501	25,384	10,540	228	621,712
2026	621,712	(180,683)	(201,058)	(410,810)	201,058	(149,908)	725,783	0.75	542,664	(18,054)	11,502	(293)	614,867
2027	614,867	(139,088)	(158,963)	(430,304)	158,963	(174,116)	697,281	0.77	535,468	(68,951)	11,990	(1,155)	556,751
2028	556,751	(137,721)	(161,662)	(435,282)	161,662	(193,912)	697,242	0.79	549,934	(79,260)	11,135	(1,347)	487,279
2029	487,279	(289,158)	(348,613)	(422,517)	348,613	(217,357)	697,281	0.81	564,854	(75,020)	10,233	(1,313)	421,179
2030	421,179	(286,359)	(354,585)	(314,802)	354,585	(261,438)	697,242	0.83	580,114	3,875	9,898	46	434,997
2031	434,997	(154,314)	(196,254)	(244,943)	196,254	(303,516)	735,504	0.85	628,516	80,056	11,310	1,041	527,404
2032	527,404	(547,256)	(714,831)	(150,963)	714,831	(333,176)	775,604	0.88	680,726	196,586	13,713	2,556	740,258
2033	740,258	(556,479)	(746,557)	(143,536)	746,557	(377,602)	775,604	0.90	699,155	178,016	19,247	2,314	939,836
2034	939,836	(249,508)	(343,796)	(123,762)	343,796	(442,745)	775,604	0.93	718,083	151,576	24,436	1,970	1,117,818
2035	1,117,818	(136,900)	(193,741)	(117,226)	193,741	(454,234)	775,604	0.95	737,523	166,064	29,063	2,159	1,315,103
2036	1,315,103	(142,232)	(206,736)	(83,243)	206,736	(434,438)	800,261	0.98	781,572	263,891	34,193	3,431	1,616,618
2037	1,616,618	(167,535)	(250,106)	(27,244)	250,106	(437,526)	806,907	1.00	809,397	344,628	42,032	4,480	2,007,758
2038	2,007,758	(174,580)	(267,679)	0	267,679	(450,053)	806,945	1.03	831,350	381,296	52,202	4,957	2,446,213
2039	2,446,213	(551,009)	(867,722)	0	867,722	(472,828)	806,907	1.06	853,816	380,988	63,602	4,953	2,895,755
2040	2,895,755	(685,978)	(1,109,514)	0	1,109,514	(544,508)	806,945	1.09	876,973	332,465	75,290	4,322	3,307,832
2041	3,307,832	(168,701)	(280,248)	0	280,248	(3,775,706)	401,733	1.12	448,416	(3,327,290)	86,004	(66,546)	0
Total		(5,725,190)	(7,605,585)	(4,528,758)	7,605,585	(9,262,963)	14,730,349		12,901,224		537,927	(36,920)	

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	\$11,695,124	
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	2,662,699	(1,536,203)	(1,536,203)	(1,478,857)	1,536,203	(21,123)	4,021,383	0.44	1,756,772	256,792	35,946	1,733	2,957,171
2023	2,957,171	(626,147)	(643,099)	(1,478,857)	643,099	(194,452)	4,021,383	0.45	1,804,333	131,024	44,358	983	3,133,535
2024	3,133,535	(750,074)	(791,237)	(1,478,857)	791,237	(275,447)	4,021,383	0.46	1,853,181	98,877	53,270	840	3,286,523
2025	3,286,523	(1,304,131)	(1,412,944)	(1,478,857)	1,412,944	(382,745)	4,021,383	0.47	1,903,352	41,750	59,157	376	3,387,807
2026	3,387,807	(658,085)	(732,297)	(1,496,262)	732,297	(545,997)	3,963,103	0.49	1,926,550	(115,708)	62,674	(1,880)	3,332,892
2027	3,332,892	(506,591)	(578,980)	(1,567,260)	578,980	(634,167)	3,827,293	0.50	1,910,900	(290,528)	64,991	(4,866)	3,102,490
2028	3,102,490	(501,610)	(588,808)	(1,585,393)	588,808	(706,270)	3,827,293	0.51	1,962,633	(329,029)	62,050	(5,593)	2,829,917
2029	2,829,917	(1,053,176)	(1,269,725)	(1,538,899)	1,269,725	(791,662)	3,827,293	0.53	2,015,768	(314,793)	59,428	(5,509)	2,569,043
2030	2,569,043	(1,042,981)	(1,291,477)	(1,146,577)	1,291,477	(952,213)	3,827,293	0.54	2,070,340	(28,450)	60,373	(533)	2,600,433
2031	2,600,433	(562,047)	(714,800)	(892,137)	714,800	(1,105,472)	4,037,794	0.56	2,243,342	245,732	67,611	3,195	2,916,971
2032	2,916,971	(1,993,228)	(2,603,573)	(549,841)	2,603,573	(1,213,501)	4,161,884	0.57	2,374,885	611,543	75,841	7,950	3,612,305
2033	3,612,305	(2,026,819)	(2,719,123)	(522,790)	2,719,123	(1,375,311)	4,161,884	0.59	2,439,180	541,080	93,920	7,034	4,254,339
2034	4,254,339	(908,764)	(1,252,179)	(450,768)	1,252,179	(1,612,575)	4,161,884	0.60	2,505,216	441,873	110,613	5,744	4,812,569
2035	4,812,569	(498,621)	(705,647)	(426,964)	705,647	(1,654,419)	4,161,884	0.62	2,573,039	491,657	125,127	6,392	5,435,744
2036	5,435,744	(518,041)	(752,977)	(303,188)	752,977	(1,582,320)	4,293,709	0.63	2,726,405	840,896	141,329	10,932	6,428,901
2037	6,428,901	(610,198)	(910,940)	(99,227)	910,940	(1,593,565)	4,334,163	0.65	2,826,599	1,133,806	167,151	14,739	7,744,598
2038	7,744,598	(635,859)	(974,947)	0	974,947	(1,639,193)	4,334,163	0.67	2,903,123	1,263,930	201,360	16,431	9,226,319
2039	9,226,319	(2,006,896)	(3,160,432)	0	3,160,432	(1,722,143)	4,334,163	0.69	2,981,719	1,259,576	239,884	16,374	10,742,154
2040	10,742,154	(2,498,481)	(4,041,095)	0	4,041,095	(1,983,218)	4,334,163	0.71	3,062,443	1,079,225	279,296	14,030	12,114,705
2041	12,114,705	(614,447)	(1,020,725)	0	1,020,725	(13,751,952)	2,157,860	0.73	1,565,984	(12,185,968)	314,982	(243,719)	0
Total		(20,852,399)	(27,701,210)	(16,494,732)	27,701,210	(33,737,746)	79,831,360		45,405,764		2,319,363	(155,348)	

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	\$72,718	
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	10,290	(9,552)	(9,552)	(9,195)	9,552	(131)	72,000	0.14	10,312	985	139	7	11,421
2023	11,421	(3,893)	(3,999)	(9,195)	3,999	(1,209)	72,000	0.15	10,591	187	171	1	11,780
2024	11,780	(4,664)	(4,920)	(9,195)	4,920	(1,713)	72,000	0.15	10,878	(30)	200	(0)	11,949
2025	11,949	(8,109)	(8,785)	(9,195)	8,785	(2,380)	72,000	0.16	11,172	(403)	215	(6)	11,755
2026	11,755	(4,092)	(4,553)	(9,304)	4,553	(3,395)	74,000	0.16	11,793	(905)	217	(15)	11,053
2027	11,053	(3,150)	(3,600)	(9,745)	3,600	(3,943)	74,000	0.16	12,113	(1,576)	216	(26)	9,666
2028	9,666	(3,119)	(3,661)	(9,858)	3,661	(4,391)	74,000	0.17	12,440	(1,809)	193	(31)	8,020
2029	8,020	(6,548)	(7,895)	(9,569)	7,895	(4,922)	74,000	0.17	12,777	(1,714)	168	(30)	6,445
2030	6,445	(6,485)	(8,030)	(7,129)	8,030	(5,921)	74,000	0.18	13,123	73	151	1	6,670
2031	6,670	(3,495)	(4,445)	(5,547)	4,445	(6,874)	78,000	0.18	14,207	1,786	173	23	8,653
2032	8,653	(12,394)	(16,189)	(3,419)	16,189	(7,545)	84,000	0.19	15,714	4,750	225	62	13,690
2033	13,690	(12,602)	(16,907)	(3,251)	16,907	(8,551)	84,000	0.19	16,140	4,337	356	56	18,440
2034	18,440	(5,651)	(7,786)	(2,803)	7,786	(10,027)	84,000	0.20	16,577	3,747	479	49	22,715
2035	22,715	(3,100)	(4,388)	(2,655)	4,388	(10,287)	84,000	0.20	17,025	4,084	591	53	27,442
2036	27,442	(3,221)	(4,682)	(1,885)	4,682	(9,839)	86,000	0.21	17,903	6,179	713	80	34,415
2037	34,415	(3,794)	(5,664)	(617)	5,664	(9,909)	88,000	0.21	18,815	8,289	895	108	43,707
2038	43,707	(3,954)	(6,062)	0	6,062	(10,192)	88,000	0.22	19,324	9,132	1,136	119	54,094
2039	54,094	(12,479)	(19,651)	0	19,651	(10,708)	88,000	0.23	19,847	9,139	1,406	119	64,758
2040	64,758	(15,535)	(25,127)	0	25,127	(12,331)	88,000	0.23	20,385	8,053	1,684	105	74,600
2041	74,600	(3,821)	(6,347)	0	6,347	(85,507)	44,000	0.24	10,468	(75,039)	1,940	(1,501)	0
Total		(129,657)	(172,241)	(102,561)	172,241	(209,776)	1,554,000		291,604		11,271	(827)	

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	\$95.43
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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	1,070,899	(102,000)	(102,000)	0	102,000	(1,403)	20,326	95.43	1,939,767	1,938,365	14,457	13,084	3,036,805
2023	3,036,805	(102,000)	(104,761)	0	104,761	(13,811)	20,326	98.02	1,992,283	1,978,472	45,552	14,839	5,075,667
2024	5,075,667	(102,000)	(107,598)	0	107,598	(26,675)	20,326	100.67	2,046,220	2,019,544	86,286	17,166	7,198,664
2025	7,198,664	(1,535,600)	(1,663,727)	0	1,663,727	(64,812)	20,326	103.40	2,101,617	2,036,805	129,576	18,331	9,383,376
2026	9,383,376	(1,535,600)	(1,708,768)	0	1,708,768	(270,794)	21,883	106.19	2,323,859	2,053,065	173,592	18,991	11,629,024
2027	11,629,024	(12,835,280)	(14,669,379)	0	14,669,379	(699,617)	23,439	109.07	2,556,485	1,856,867	226,766	18,104	13,730,762
2028	13,730,762	(12,163,000)	(14,277,375)	0	14,277,375	(2,515,545)	23,439	112.02	2,625,696	110,151	274,615	1,102	14,116,630
2029	14,116,630	(102,000)	(122,973)	0	122,973	(4,049,484)	23,439	115.06	2,696,782	(1,352,702)	296,449	(23,672)	13,036,704
2030	13,036,704	(102,000)	(126,302)	0	126,302	(4,065,056)	23,439	118.17	2,769,791	(1,295,265)	306,363	(24,286)	12,023,516
2031	12,023,516	(102,000)	(129,721)	0	129,721	(4,081,241)	25,131	121.37	3,050,135	(1,031,106)	312,611	(20,622)	11,284,399
2032	11,284,399	(102,000)	(133,233)	0	133,233	(4,096,491)	26,823	124.66	3,343,627	(752,864)	293,394	(15,057)	10,809,872
2033	10,809,872	(102,000)	(136,840)	0	136,840	(4,101,187)	26,823	128.03	3,434,149	(667,038)	281,057	(13,341)	10,410,550
2034	10,410,550	(102,000)	(140,545)	0	140,545	(4,105,890)	26,823	131.50	3,527,122	(578,768)	270,674	(11,575)	10,090,881
2035	10,090,881	(13,097,716)	(18,535,836)	0	18,535,836	(4,453,626)	26,823	135.06	3,622,611	(831,015)	262,363	(16,620)	9,505,609
2036	9,505,609	0	0	0	0	(6,246,453)	26,761	138.71	3,712,086	(2,534,367)	247,146	(50,687)	7,167,700
2037	7,167,700	0	0	0	0	(5,817,629)	26,700	142.47	3,803,892	(2,013,737)	186,360	(40,275)	5,300,049
2038	5,300,049	0	0	0	0	(4,001,701)	26,700	146.32	3,906,874	(94,827)	137,801	(1,897)	5,341,126
2039	5,341,126	0	0	0	0	(2,467,763)	26,700	150.29	4,012,645	1,544,882	138,869	20,083	7,044,961
2040	7,044,961	0	0	0	0	(2,452,190)	26,700	154.36	4,121,279	1,669,088	183,169	21,698	8,918,917
2041	8,918,917	0	0	0	0	(11,087,808)	13,350	158.53	2,116,427	(8,971,381)	231,892	(179,428)	0
Total		(42,085,196)	(51,959,060)	0	51,959,060	(64,619,176)	476,277		59,703,345		4,098,994	(254,062)	

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	\$26,860,327	
Discount Rate Applied to Post 2041 Debt Payments	2.60%	

Calculated Development Charge per Capita	\$144.02
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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	19,444,951	(3,416,075)	(3,416,075)	(78,446)	3,416,075	(46,971)	20,326	144.02	2,927,312	2,801,895	262,507	18,913	22,528,266
2023	22,528,266	(10,340,246)	(10,620,187)	(78,446)	10,620,187	(565,662)	20,326	147.92	3,006,562	2,362,455	337,924	17,718	25,246,363
2024	25,246,363	(9,796,055)	(10,333,651)	(78,446)	10,333,651	(1,860,870)	20,326	151.92	3,087,959	1,148,643	429,188	9,763	26,833,958
2025	26,833,958	(1,570,140)	(1,701,148)	(78,446)	1,701,148	(2,994,155)	20,326	156.03	3,171,559	98,958	483,011	891	27,416,818
2026	27,416,818	(3,999,386)	(4,450,394)	(78,446)	4,450,394	(3,248,698)	21,883	160.26	3,506,945	179,802	507,211	1,663	28,105,494
2027	28,105,494	(6,151,268)	(7,030,254)	(78,446)	7,030,254	(3,843,358)	23,439	164.60	3,858,002	(63,801)	548,057	(1,069)	28,588,681
2028	28,588,681	(673,837)	(790,974)	(78,446)	790,974	(4,610,762)	23,439	169.05	3,962,450	(726,758)	571,774	(12,355)	28,421,342
2029	28,421,342	(3,294,318)	(3,971,682)	(75,231)	3,971,682	(4,765,128)	23,439	173.63	4,069,725	(770,634)	596,848	(13,486)	28,234,070
2030	28,234,070	(4,630,713)	(5,734,005)	(49,350)	5,734,005	(5,299,100)	23,439	178.33	4,179,904	(1,168,545)	663,501	(21,910)	27,707,115
2031	27,707,115	(4,918,128)	(6,254,770)	(44,818)	6,254,770	(6,041,174)	25,131	183.16	4,602,972	(1,483,021)	720,385	(29,660)	26,914,819
2032	26,914,819	(867,322)	(1,132,904)	0	1,132,904	(6,691,343)	26,823	188.12	5,045,883	(1,645,460)	699,785	(32,909)	25,936,235
2033	25,936,235	(9,437,179)	(12,660,657)	0	12,660,657	(6,548,032)	26,823	193.21	5,182,489	(1,365,542)	674,342	(27,311)	25,217,724
2034	25,217,724	(691,554)	(952,887)	0	952,887	(6,637,142)	26,823	198.44	5,322,795	(1,314,347)	655,661	(26,287)	24,532,751
2035	24,532,751	(4,233,057)	(5,990,605)	0	5,990,605	(5,726,423)	26,823	203.81	5,466,898	(259,525)	637,852	(5,190)	24,905,887
2036	24,905,887	(3,923,706)	(5,703,144)	0	5,703,144	(6,231,939)	26,761	209.33	5,601,924	(630,015)	647,553	(12,600)	24,910,825
2037	24,910,825	(197,437)	(294,746)	0	294,746	(6,258,172)	26,700	215.00	5,740,470	(517,702)	647,681	(10,354)	25,030,451
2038	25,030,451	(166,502)	(255,293)	0	255,293	(5,527,658)	26,700	220.82	5,895,881	368,223	650,792	4,787	26,054,253
2039	26,054,253	(166,502)	(262,205)	0	262,205	(5,406,065)	26,700	226.80	6,055,500	649,435	677,411	8,443	27,389,541
2040	27,389,541	(9,583,699)	(15,500,872)	0	15,500,872	(5,210,386)	26,700	232.94	6,219,440	1,009,054	712,128	13,118	29,123,841
2041	29,123,841	(468,540)	(778,344)	0	778,344	(32,489,066)	13,350	239.24	3,193,909	(29,295,157)	757,220	(585,903)	0
Total		(78,525,663)	(97,834,797)	(718,519)	97,834,797	(120,002,102)	476,277		90,098,579		11,880,830	(703,740)	

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	\$3,208,194	
Discount Rate Applied to Post 2041 Debt Payments	2.60%	

Calculated Development Charge per sqft	\$0.65
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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	822,992	(408,016)	(408,016)	(9,370)	408,016	(5,610)	736,966	0.65	481,577	466,597	11,110	3,150	1,303,849
2023	1,303,849	(1,235,038)	(1,268,474)	(9,370)	1,268,474	(67,563)	737,005	0.67	494,640	417,708	19,558	3,133	1,744,248
2024	1,744,248	(1,170,040)	(1,234,250)	(9,370)	1,234,250	(222,262)	736,966	0.69	508,005	276,374	29,652	2,349	2,052,623
2025	2,052,623	(187,537)	(203,185)	(9,370)	203,185	(357,622)	736,966	0.71	521,758	154,767	36,947	1,393	2,245,730
2026	2,245,730	(477,686)	(531,555)	(9,370)	531,555	(388,024)	725,783	0.73	527,752	130,358	41,546	1,206	2,418,840
2027	2,418,840	(734,707)	(839,693)	(9,370)	839,693	(459,050)	697,281	0.75	520,753	52,334	47,167	510	2,518,851
2028	2,518,851	(80,483)	(94,474)	(9,370)	94,474	(550,709)	697,242	0.77	534,822	(25,256)	50,377	(429)	2,543,543
2029	2,543,543	(393,473)	(474,377)	(8,986)	474,377	(569,146)	697,281	0.79	549,332	(28,800)	53,414	(504)	2,567,653
2030	2,567,653	(553,092)	(684,869)	(5,894)	684,869	(632,924)	697,242	0.81	564,173	(74,646)	60,340	(1,400)	2,551,948
2031	2,551,948	(587,421)	(747,069)	(5,353)	747,069	(721,557)	735,504	0.83	611,244	(115,666)	66,351	(2,313)	2,500,319
2032	2,500,319	(103,593)	(135,314)	0	135,314	(799,213)	775,604	0.85	662,019	(137,194)	65,008	(2,744)	2,425,389
2033	2,425,389	(1,127,176)	(1,512,187)	0	1,512,187	(782,096)	775,604	0.88	679,942	(102,154)	63,060	(2,043)	2,384,252
2034	2,384,252	(82,599)	(113,813)	0	113,813	(792,739)	775,604	0.90	698,350	(94,389)	61,991	(1,888)	2,349,966
2035	2,349,966	(505,596)	(715,517)	0	715,517	(683,963)	775,604	0.92	717,256	33,293	61,099	433	2,444,791
2036	2,444,791	(468,647)	(681,183)	0	681,183	(744,342)	800,261	0.95	760,095	15,752	63,565	205	2,524,313
2037	2,524,313	(23,582)	(35,204)	0	35,204	(747,475)	806,907	0.98	787,155	39,680	65,632	516	2,630,140
2038	2,630,140	(19,887)	(30,492)	0	30,492	(660,223)	806,945	1.00	808,504	148,282	68,384	1,928	2,848,733
2039	2,848,733	(19,887)	(31,318)	0	31,318	(645,700)	806,907	1.03	830,353	184,654	74,067	2,400	3,109,854
2040	3,109,854	(1,144,676)	(1,851,422)	0	1,851,422	(622,328)	806,945	1.06	852,874	230,546	80,856	2,997	3,424,254
2041	3,424,254	(55,962)	(92,965)	0	92,965	(3,880,490)	401,733	1.09	436,094	(3,444,397)	89,031	(68,888)	0
Total		(9,379,096)	(11,685,377)	(85,820)	11,685,377	(14,333,038)	14,730,349		12,546,700		1,109,155	(59,990)	

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	\$5,744,621	
Discount Rate Applied to Post 2041 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	5,891,254	(730,596)	(730,596)	(16,777)	730,596	(10,046)	4,021,383	0.16	657,957	631,134	79,532	4,260	6,606,180
2023	6,606,180	(2,211,470)	(2,271,341)	(16,777)	2,271,341	(120,978)	4,021,383	0.17	675,770	538,015	99,093	4,035	7,247,323
2024	7,247,323	(2,095,084)	(2,210,059)	(16,777)	2,210,059	(397,984)	4,021,383	0.17	694,065	279,303	123,204	2,374	7,652,205
2025	7,652,205	(335,806)	(363,825)	(16,777)	363,825	(640,360)	4,021,383	0.18	712,855	55,718	137,740	501	7,846,164
2026	7,846,164	(855,349)	(951,806)	(16,777)	951,806	(694,799)	3,963,103	0.18	721,543	9,967	145,154	92	8,001,377
2027	8,001,377	(1,315,572)	(1,503,561)	(16,777)	1,503,561	(821,979)	3,827,293	0.19	715,682	(123,074)	156,027	(2,061)	8,032,268
2028	8,032,268	(144,114)	(169,166)	(16,777)	169,166	(986,104)	3,827,293	0.19	735,058	(267,824)	160,645	(4,553)	7,920,536
2029	7,920,536	(704,556)	(849,424)	(16,090)	849,424	(1,019,118)	3,827,293	0.20	754,958	(280,250)	166,331	(4,904)	7,801,713
2030	7,801,713	(990,371)	(1,226,332)	(10,554)	1,226,332	(1,133,319)	3,827,293	0.20	775,397	(368,477)	183,340	(6,909)	7,609,668
2031	7,609,668	(1,051,841)	(1,337,708)	(9,585)	1,337,708	(1,292,027)	4,037,794	0.21	840,190	(461,421)	197,851	(9,228)	7,336,869
2032	7,336,869	(185,494)	(242,294)	0	242,294	(1,431,078)	4,161,884	0.21	889,457	(541,621)	190,759	(10,832)	6,975,174
2033	6,975,174	(2,018,331)	(2,707,736)	0	2,707,736	(1,400,428)	4,161,884	0.22	913,537	(486,891)	181,355	(9,738)	6,659,899
2034	6,659,899	(147,903)	(203,794)	0	203,794	(1,419,486)	4,161,884	0.23	938,269	(481,217)	173,157	(9,624)	6,342,215
2035	6,342,215	(905,324)	(1,281,211)	0	1,281,211	(1,224,711)	4,161,884	0.23	963,671	(261,040)	164,898	(5,221)	6,240,852
2036	6,240,852	(839,164)	(1,219,732)	0	1,219,732	(1,332,826)	4,293,709	0.24	1,021,110	(311,715)	162,262	(6,234)	6,085,164
2037	6,085,164	(42,226)	(63,037)	0	63,037	(1,338,436)	4,334,163	0.24	1,058,636	(279,800)	158,214	(5,596)	5,957,982
2038	5,957,982	(35,610)	(54,600)	0	54,600	(1,182,201)	4,334,163	0.25	1,087,296	(94,905)	154,908	(1,898)	6,016,087
2039	6,016,087	(35,610)	(56,078)	0	56,078	(1,156,196)	4,334,163	0.26	1,116,732	(39,464)	156,418	(789)	6,132,252
2040	6,132,252	(2,049,667)	(3,315,173)	0	3,315,173	(1,114,346)	4,334,163	0.26	1,146,965	32,620	159,439	424	6,324,734
2041	6,324,734	(100,207)	(166,464)	0	166,464	(6,948,441)	2,157,860	0.27	586,502	(6,361,938)	164,443	(127,239)	0
Total		(16,794,293)	(20,923,940)	(153,670)	20,923,940	(25,664,864)	79,831,360		17,005,651		3,114,770	(193,141)	

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	\$59,504	
Discount Rate Applied to Post 2041 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	37,858	(7,568)	(7,568)	(174)	7,568	(104)	72,000	0.10	7,275	6,997	511	47	45,414
2023	45,414	(22,907)	(23,527)	(174)	23,527	(1,253)	72,000	0.10	7,472	6,045	681	45	52,185
2024	52,185	(21,701)	(22,892)	(174)	22,892	(4,122)	72,000	0.11	7,674	3,378	887	29	56,479
2025	56,479	(3,478)	(3,769)	(174)	3,769	(6,633)	72,000	0.11	7,882	1,075	1,017	10	58,580
2026	58,580	(8,860)	(9,859)	(174)	9,859	(7,197)	74,000	0.11	8,320	949	1,084	9	60,622
2027	60,622	(13,627)	(15,574)	(174)	15,574	(8,514)	74,000	0.12	8,545	(143)	1,182	(2)	61,659
2028	61,659	(1,493)	(1,752)	(174)	1,752	(10,214)	74,000	0.12	8,777	(1,612)	1,233	(27)	61,253
2029	61,253	(7,298)	(8,799)	(167)	8,799	(10,556)	74,000	0.12	9,014	(1,709)	1,286	(30)	60,800
2030	60,800	(10,259)	(12,703)	(109)	12,703	(11,739)	74,000	0.13	9,258	(2,590)	1,429	(49)	59,590
2031	59,590	(10,895)	(13,856)	(99)	13,856	(13,383)	78,000	0.13	10,023	(3,460)	1,549	(69)	57,611
2032	57,611	(1,921)	(2,510)	0	2,510	(14,824)	84,000	0.13	11,086	(3,737)	1,498	(75)	55,297
2033	55,297	(20,906)	(28,047)	0	28,047	(14,506)	84,000	0.14	11,386	(3,120)	1,438	(62)	53,552
2034	53,552	(1,532)	(2,111)	0	2,111	(14,703)	84,000	0.14	11,694	(3,009)	1,392	(60)	51,875
2035	51,875	(9,378)	(13,271)	0	13,271	(12,686)	84,000	0.14	12,011	(675)	1,349	(13)	52,536
2036	52,536	(8,692)	(12,634)	0	12,634	(13,806)	86,000	0.15	12,630	(1,176)	1,366	(24)	52,702
2037	52,702	(437)	(653)	0	653	(13,864)	88,000	0.15	13,274	(590)	1,370	(12)	53,471
2038	53,471	(369)	(566)	0	566	(12,246)	88,000	0.15	13,633	1,387	1,390	18	56,266
2039	56,266	(369)	(581)	0	581	(11,976)	88,000	0.16	14,002	2,026	1,463	26	59,781
2040	59,781	(21,231)	(34,340)	0	34,340	(11,543)	88,000	0.16	14,381	2,838	1,554	37	64,211
2041	64,211	(1,038)	(1,724)	0	1,724	(71,974)	44,000	0.17	7,385	(64,589)	1,669	(1,292)	(0)
Total		(173,960)	(216,736)	(1,592)	216,736	(265,844)	1,554,000		205,722		25,349	(1,494)	

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	\$422.08
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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	6,240,298	(21,157,877)	(21,157,877)	(713,348)	21,157,877	(290,921)	20,326	422.08	8,579,266	7,574,998	84,244	51,131	13,950,672
2023	13,950,672	(16,794,093)	(17,248,758)	(713,348)	17,248,758	(2,799,831)	20,326	433.51	8,811,532	5,298,354	209,260	39,738	19,498,023
2024	19,498,023	(13,599,670)	(14,346,003)	(713,348)	14,346,003	(4,866,661)	20,326	445.25	9,050,086	3,471,078	331,466	29,504	23,330,072
2025	23,330,072	(15,319,500)	(16,597,720)	(713,348)	16,597,720	(6,666,756)	20,326	457.30	9,295,098	1,914,995	419,941	17,235	25,682,243
2026	25,682,243	(9,317,000)	(10,367,671)	(735,481)	10,367,671	(8,613,144)	21,883	469.68	10,278,038	929,413	475,121	8,597	27,095,374
2027	27,095,374	(8,116,500)	(9,276,308)	(944,436)	9,276,308	(9,879,520)	23,439	482.40	11,306,904	482,948	528,360	4,709	28,111,390
2028	28,111,390	(13,090,000)	(15,365,522)	(944,436)	15,365,522	(11,135,569)	23,439	495.46	11,613,015	(466,990)	562,228	(7,939)	28,198,690
2029	28,198,690	(11,803,750)	(14,230,788)	(944,436)	14,230,788	(13,033,139)	23,439	508.87	11,927,413	(2,050,161)	592,172	(35,878)	26,704,823
2030	26,704,823	(7,516,250)	(9,307,037)	(914,310)	9,307,037	(14,735,675)	23,439	522.65	12,250,323	(3,399,663)	627,563	(63,744)	23,868,980
2031	23,868,980	(7,173,250)	(9,122,785)	(545,426)	9,122,785	(15,919,568)	25,131	536.80	13,490,235	(2,974,759)	620,593	(59,495)	21,455,319
2032	21,455,319	(5,303,900)	(6,928,004)	(545,426)	6,928,004	(16,750,961)	26,823	551.33	14,788,304	(2,508,084)	557,838	(50,162)	19,454,912
2033	19,454,912	(3,160,150)	(4,239,569)	(545,426)	4,239,569	(15,073,923)	26,823	566.26	15,188,666	(430,683)	505,828	(8,614)	19,521,443
2034	19,521,443	(6,487,250)	(8,938,733)	(545,426)	8,938,733	(13,644,041)	26,823	581.59	15,599,868	1,410,401	507,558	18,335	21,457,737
2035	21,457,737	(8,288,000)	(11,729,145)	(545,426)	11,729,145	(13,041,436)	26,823	597.33	16,022,201	2,435,340	557,901	31,659	24,482,637
2036	24,482,637	(10,620,400)	(15,436,853)	(450,705)	15,436,853	(12,668,595)	26,761	613.50	16,417,932	3,298,632	636,549	42,882	28,460,700
2037	28,460,700	(10,620,400)	(15,854,773)	0	15,854,773	(13,383,946)	26,700	630.11	16,823,977	3,440,031	739,978	44,720	32,685,430
2038	32,685,430	(7,293,300)	(11,182,644)	0	11,182,644	(14,061,247)	26,700	647.17	17,279,451	3,218,203	849,821	41,837	36,795,291
2039	36,795,291	(5,492,550)	(8,649,594)	0	8,649,594	(13,542,548)	26,700	664.69	17,747,256	4,204,708	956,678	54,661	42,011,337
2040	42,011,337	(56,000)	(90,576)	0	90,576	(12,774,551)	26,700	682.69	18,227,726	5,453,175	1,092,295	70,891	48,627,699
2041	48,627,699	(28,000)	(46,514)	0	46,514	(58,274,346)	13,350	701.17	9,360,602	(48,913,744)	1,264,320	(978,276)	0
Total		(181,237,840)	(220,116,873)	(10,514,323)	220,116,873	(271,155,376)	476,277		264,057,891		12,119,715	(748,206)	

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	\$45.86
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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	4,921,919	(1,550,584)	(1,550,584)	0	1,550,584	(21,321)	20,326	45.86	932,126	910,806	66,446	6,148	5,905,319
2023	5,905,319	(1,062,387)	(1,091,149)	0	1,091,149	(202,682)	20,326	47.10	957,362	754,680	88,580	5,660	6,754,239
2024	6,754,239	(1,069,266)	(1,127,946)	0	1,127,946	(336,782)	20,326	48.38	983,280	646,499	114,822	5,495	7,521,055
2025	7,521,055	(1,076,296)	(1,166,099)	0	1,166,099	(476,170)	20,326	49.69	1,009,901	533,731	135,379	4,804	8,194,968
2026	8,194,968	(1,601,500)	(1,782,100)	0	1,782,100	(630,039)	21,883	51.03	1,116,696	486,657	151,607	4,502	8,837,734
2027	8,837,734	(1,739,876)	(1,988,495)	0	1,988,495	(854,316)	23,439	52.41	1,228,481	374,165	172,336	3,648	9,387,883
2028	9,387,883	(1,541,465)	(1,809,429)	0	1,809,429	(1,098,331)	23,439	53.83	1,261,739	163,408	187,758	1,634	9,740,682
2029	9,740,682	(1,549,131)	(1,867,657)	0	1,867,657	(1,325,145)	23,439	55.29	1,295,898	(29,247)	204,554	(512)	9,915,478
2030	9,915,478	(711,806)	(881,397)	0	881,397	(1,542,211)	23,439	56.78	1,330,982	(211,228)	233,014	(3,961)	9,933,303
2031	9,933,303	(719,811)	(915,440)	0	915,440	(1,655,358)	25,131	58.32	1,465,697	(189,661)	258,266	(3,793)	9,998,115
2032	9,998,115	(859,025)	(1,122,067)	0	1,122,067	(1,755,195)	26,823	59.90	1,606,730	(148,464)	259,951	(2,969)	10,106,632
2033	10,106,632	(736,349)	(987,866)	0	987,866	(1,714,589)	26,823	61.52	1,650,229	(64,360)	262,772	(1,287)	10,303,758
2034	10,303,758	(1,590,050)	(2,190,917)	0	2,190,917	(1,730,834)	26,823	63.19	1,694,906	(35,928)	267,898	(719)	10,535,010
2035	10,535,010	(1,598,778)	(2,262,585)	0	2,262,585	(1,872,955)	26,823	64.90	1,740,792	(132,163)	273,910	(2,643)	10,674,114
2036	10,674,114	(1,607,698)	(2,336,805)	0	2,336,805	(2,009,807)	26,761	66.66	1,783,788	(226,019)	277,527	(4,520)	10,721,101
2037	10,721,101	(1,747,848)	(2,609,292)	0	2,609,292	(2,089,705)	26,700	68.46	1,827,904	(261,801)	278,749	(5,236)	10,732,812
2038	10,732,812	(780,969)	(1,197,442)	0	1,197,442	(2,151,011)	26,700	70.31	1,877,390	(273,620)	279,053	(5,472)	10,732,773
2039	10,732,773	(790,488)	(1,244,849)	0	1,244,849	(2,078,220)	26,700	72.22	1,928,217	(150,003)	279,052	(3,000)	10,858,821
2040	10,858,821	(800,214)	(1,294,283)	0	1,294,283	(2,021,278)	26,700	74.17	1,980,419	(40,859)	282,329	(817)	11,099,474
2041	11,099,474	(810,154)	(1,345,835)	0	1,345,835	(12,181,783)	13,350	76.18	1,017,018	(11,164,765)	288,586	(223,295)	0
Total		(23,943,695)	(30,772,237)	0	30,772,237	(37,747,728)	476,277		28,689,555		4,362,589	(226,335)	

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	6,245	(111,527)	(111,527)	0	111,527	(1,534)	736,966	0.13	95,203	93,669	84	632	100,631
2023	100,631	(76,413)	(78,482)	0	78,482	(14,578)	737,005	0.13	97,785	83,207	1,509	624	185,972
2024	185,972	(76,908)	(81,129)	0	81,129	(24,223)	736,966	0.14	100,427	76,204	3,162	648	265,985
2025	265,985	(77,414)	(83,873)	0	83,873	(34,249)	736,966	0.14	103,146	68,897	4,788	620	340,290
2026	340,290	(115,190)	(128,179)	0	128,179	(45,316)	725,783	0.14	104,331	59,015	6,295	546	406,145
2027	406,145	(125,142)	(143,025)	0	143,025	(61,448)	697,281	0.15	102,947	41,500	7,920	405	455,970
2028	455,970	(110,871)	(130,145)	0	130,145	(78,999)	697,242	0.15	105,729	26,730	9,119	267	492,087
2029	492,087	(111,423)	(134,333)	0	134,333	(95,312)	697,281	0.16	108,597	13,285	10,334	139	515,844
2030	515,844	(51,197)	(63,395)	0	63,395	(110,925)	697,242	0.16	111,531	606	12,122	7	528,580
2031	528,580	(51,773)	(65,844)	0	65,844	(119,063)	735,504	0.16	120,836	1,773	13,743	23	544,119
2032	544,119	(61,786)	(80,706)	0	80,706	(126,244)	775,604	0.17	130,874	4,630	14,147	60	562,956
2033	562,956	(52,963)	(71,053)	0	71,053	(123,324)	775,604	0.17	134,417	11,094	14,637	144	588,831
2034	588,831	(114,366)	(157,584)	0	157,584	(124,492)	775,604	0.18	138,056	13,564	15,310	176	617,881
2035	617,881	(114,994)	(162,739)	0	162,739	(134,714)	775,604	0.18	141,794	7,080	16,065	92	641,118
2036	641,118	(115,635)	(168,077)	0	168,077	(144,557)	800,261	0.19	150,263	5,705	16,669	74	663,566
2037	663,566	(125,716)	(187,676)	0	187,676	(150,304)	806,907	0.19	155,612	5,308	17,253	69	686,196
2038	686,196	(56,172)	(86,127)	0	86,127	(154,714)	806,945	0.20	159,833	5,119	17,841	67	709,223
2039	709,223	(56,857)	(89,537)	0	89,537	(149,478)	806,907	0.20	164,152	14,674	18,440	191	742,527
2040	742,527	(57,556)	(93,093)	0	93,093	(145,383)	806,945	0.21	168,604	23,222	19,306	302	785,357
2041	785,357	(58,271)	(96,801)	0	96,801	(876,187)	401,733	0.21	86,211	(789,976)	20,419	(15,800)	0
Total		(1,722,175)	(2,213,325)	0	2,213,325	(2,715,044)	14,730,349		2,480,349		239,163	(10,713)	

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	\$0.087160
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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	(4,988)	(406,207)	(406,207)	0	406,207	(5,585)	4,021,383	0.09	350,503	344,917	(137)	2,328	342,120
2023	342,120	(278,314)	(285,849)	0	285,849	(53,097)	4,021,383	0.09	359,992	306,895	5,132	2,302	656,449
2024	656,449	(280,116)	(295,488)	0	295,488	(88,227)	4,021,383	0.09	369,738	281,511	11,160	2,393	951,513
2025	951,513	(281,958)	(305,483)	0	305,483	(124,742)	4,021,383	0.09	379,748	255,005	17,127	2,295	1,225,941
2026	1,225,941	(419,546)	(466,858)	0	466,858	(165,052)	3,963,103	0.10	384,376	219,325	22,680	2,029	1,469,974
2027	1,469,974	(455,796)	(520,927)	0	520,927	(223,805)	3,827,293	0.10	381,254	157,448	28,664	1,535	1,657,622
2028	1,657,622	(403,818)	(474,017)	0	474,017	(287,730)	3,827,293	0.10	391,575	103,845	33,152	1,038	1,795,658
2029	1,795,658	(405,826)	(489,271)	0	489,271	(347,149)	3,827,293	0.11	402,176	55,028	37,709	578	1,888,972
2030	1,888,972	(186,472)	(230,900)	0	230,900	(404,014)	3,827,293	0.11	413,065	9,051	44,391	106	1,942,520
2031	1,942,520	(188,569)	(239,818)	0	239,818	(433,655)	4,037,794	0.11	447,581	13,926	50,506	181	2,007,133
2032	2,007,133	(225,039)	(293,948)	0	293,948	(459,809)	4,161,884	0.11	473,826	14,017	52,185	182	2,073,517
2033	2,073,517	(192,902)	(258,792)	0	258,792	(449,172)	4,161,884	0.12	486,654	37,482	53,911	487	2,165,398
2034	2,165,398	(416,546)	(573,956)	0	573,956	(453,427)	4,161,884	0.12	499,829	46,402	56,300	603	2,268,703
2035	2,268,703	(418,833)	(592,730)	0	592,730	(490,659)	4,161,884	0.12	513,361	22,702	58,986	295	2,350,687
2036	2,350,687	(421,169)	(612,174)	0	612,174	(526,510)	4,293,709	0.13	543,959	17,449	61,118	227	2,429,481
2037	2,429,481	(457,884)	(683,557)	0	683,557	(547,441)	4,334,163	0.13	563,950	16,509	63,167	215	2,509,371
2038	2,509,371	(204,591)	(313,694)	0	313,694	(563,501)	4,334,163	0.13	579,217	15,716	65,244	204	2,590,535
2039	2,590,535	(207,084)	(326,114)	0	326,114	(544,432)	4,334,163	0.14	594,899	50,466	67,354	656	2,709,011
2040	2,709,011	(209,632)	(339,064)	0	339,064	(529,515)	4,334,163	0.14	611,004	81,489	70,434	1,059	2,861,994
2041	2,861,994	(212,236)	(352,569)	0	352,569	(3,191,267)	2,157,860	0.14	312,438	(2,878,829)	74,412	(57,577)	0
Total		(6,272,540)	(8,061,416)	0	8,061,416	(9,888,788)	79,831,360		9,059,143		873,495	(38,862)	

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	\$16.86
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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	(4,168,020)	(57,660)	(57,660)	(443,717)	57,660	(793)	20,326	16.86	342,700	(101,809)	(114,621)	(1,400)	(4,385,850)
2023	(4,385,850)	0	0	(443,717)	0	(6,949)	20,326	17.32	351,978	(98,687)	(127,190)	(1,431)	(4,613,158)
2024	(4,613,158)	0	0	(443,717)	0	(6,949)	20,326	17.79	361,507	(89,158)	(143,008)	(1,382)	(4,846,706)
2025	(4,846,706)	0	0	(443,717)	0	(6,949)	20,326	18.27	371,294	(79,371)	(155,095)	(1,270)	(5,082,442)
2026	(5,082,442)	0	0	(443,717)	0	(6,949)	21,883	18.76	410,558	(40,108)	(165,179)	(652)	(5,288,381)
2027	(5,288,381)	0	0	(443,717)	0	(6,949)	23,439	19.27	451,656	991	(177,161)	10	(5,464,541)
2028	(5,464,541)	0	0	(443,717)	0	(6,949)	23,439	19.79	463,883	13,218	(185,794)	132	(5,636,985)
2029	(5,636,985)	0	0	(394,696)	0	(6,949)	23,439	20.33	476,442	74,798	(197,294)	785	(5,758,696)
2030	(5,758,696)	0	0	0	0	(6,949)	23,439	20.88	489,341	482,392	(215,951)	5,668	(5,486,587)
2031	(5,486,587)	0	0	0	0	(6,949)	25,131	21.44	538,869	531,921	(219,463)	6,915	(5,167,215)
2032	(5,167,215)	0	0	0	0	(6,156)	26,823	22.02	590,721	584,565	(206,689)	7,599	(4,781,739)
2033	(4,781,739)	0	0	0	0	0	26,823	22.62	606,713	606,713	(191,270)	7,887	(4,358,408)
2034	(4,358,408)	0	0	0	0	0	26,823	23.23	623,139	623,139	(174,336)	8,101	(3,901,505)
2035	(3,901,505)	0	0	0	0	0	26,823	23.86	640,009	640,009	(156,060)	8,320	(3,409,236)
2036	(3,409,236)	0	0	0	0	0	26,761	24.51	655,817	655,817	(136,369)	8,526	(2,881,263)
2037	(2,881,263)	0	0	0	0	0	26,700	25.17	672,036	672,036	(115,251)	8,736	(2,315,741)
2038	(2,315,741)	0	0	0	0	0	26,700	25.85	690,230	690,230	(92,630)	8,973	(1,709,167)
2039	(1,709,167)	0	0	0	0	0	26,700	26.55	708,917	708,917	(68,367)	9,216	(1,059,402)
2040	(1,059,402)	0	0	0	0	0	26,700	27.27	728,109	728,109	(42,376)	9,465	(364,203)
2041	(364,203)	0	0	0	0	0	13,350	28.01	373,911	373,911	(14,568)	4,861	(0)
Total		(57,660)	(57,660)	(3,500,712)	57,660	(69,486)	476,277		10,547,829		(2,898,671)	89,061	

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	(299,789)	(4,147)	(4,147)	(31,915)	4,147	(57)	736,966	0.04	28,815	(3,157)	(8,244)	(43)	(311,234)
2023	(311,234)	0	0	(31,915)	0	(500)	737,005	0.04	29,596	(2,818)	(9,026)	(41)	(323,119)
2024	(323,119)	0	0	(31,915)	0	(500)	736,966	0.04	30,396	(2,018)	(10,017)	(31)	(335,185)
2025	(335,185)	0	0	(31,915)	0	(500)	736,966	0.04	31,219	(1,196)	(10,726)	(19)	(347,125)
2026	(347,125)	0	0	(31,915)	0	(500)	725,783	0.04	31,578	(837)	(11,282)	(14)	(359,258)
2027	(359,258)	0	0	(31,915)	0	(500)	697,281	0.04	31,159	(1,256)	(12,035)	(21)	(372,569)
2028	(372,569)	0	0	(31,915)	0	(500)	697,242	0.05	32,001	(414)	(12,667)	(7)	(385,658)
2029	(385,658)	0	0	(28,389)	0	(500)	697,281	0.05	32,869	3,980	(13,498)	42	(395,134)
2030	(395,134)	0	0	0	0	(500)	697,242	0.05	33,757	33,257	(14,818)	391	(376,303)
2031	(376,303)	0	0	0	0	(500)	735,504	0.05	36,573	36,074	(15,052)	469	(354,813)
2032	(354,813)	0	0	0	0	(443)	775,604	0.05	39,611	39,169	(14,193)	509	(329,328)
2033	(329,328)	0	0	0	0	0	775,604	0.05	40,684	40,684	(13,173)	529	(301,288)
2034	(301,288)	0	0	0	0	0	775,604	0.05	41,785	41,785	(12,052)	543	(271,011)
2035	(271,011)	0	0	0	0	0	775,604	0.06	42,917	42,917	(10,840)	558	(238,377)
2036	(238,377)	0	0	0	0	0	800,261	0.06	45,480	45,480	(9,535)	591	(201,841)
2037	(201,841)	0	0	0	0	0	806,907	0.06	47,099	47,099	(8,074)	612	(162,204)
2038	(162,204)	0	0	0	0	0	806,945	0.06	48,376	48,376	(6,488)	629	(119,687)
2039	(119,687)	0	0	0	0	0	806,907	0.06	49,684	49,684	(4,787)	646	(74,145)
2040	(74,145)	0	0	0	0	0	806,945	0.06	51,031	51,031	(2,966)	663	(25,416)
2041	(25,416)	0	0	0	0	0	401,733	0.06	26,093	26,093	(1,017)	339	0
Total		(4,147)	(4,147)	(251,792)	4,147	(4,998)	14,730,349		750,723		(200,489)	6,345	

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	(1,076,358)	(15,105)	(15,105)	(116,241)	15,105	(208)	4,021,383	0.03	105,620	(10,828)	(29,600)	(149)	(1,116,935)
2023	(1,116,935)	0	0	(116,241)	0	(1,820)	4,021,383	0.03	108,479	(9,582)	(32,391)	(139)	(1,159,047)
2024	(1,159,047)	0	0	(116,241)	0	(1,820)	4,021,383	0.03	111,416	(6,645)	(35,930)	(103)	(1,201,725)
2025	(1,201,725)	0	0	(116,241)	0	(1,820)	4,021,383	0.03	114,432	(3,628)	(38,455)	(58)	(1,243,867)
2026	(1,243,867)	0	0	(116,241)	0	(1,820)	3,963,103	0.03	115,827	(2,234)	(40,426)	(36)	(1,286,563)
2027	(1,286,563)	0	0	(116,241)	0	(1,820)	3,827,293	0.03	114,886	(3,175)	(43,100)	(53)	(1,332,890)
2028	(1,332,890)	0	0	(116,241)	0	(1,820)	3,827,293	0.03	117,997	(64)	(45,318)	(1)	(1,378,274)
2029	(1,378,274)	0	0	(103,399)	0	(1,820)	3,827,293	0.03	121,191	15,972	(48,240)	168	(1,410,374)
2030	(1,410,374)	0	0	0	0	(1,820)	3,827,293	0.03	124,472	122,652	(52,889)	1,441	(1,339,170)
2031	(1,339,170)	0	0	0	0	(1,820)	4,037,794	0.03	134,873	133,053	(53,567)	1,730	(1,257,954)
2032	(1,257,954)	0	0	0	0	(1,613)	4,161,884	0.03	142,782	141,169	(50,318)	1,835	(1,165,268)
2033	(1,165,268)	0	0	0	0	0	4,161,884	0.04	146,647	146,647	(46,611)	1,906	(1,063,325)
2034	(1,063,325)	0	0	0	0	0	4,161,884	0.04	150,617	150,617	(42,533)	1,958	(953,283)
2035	(953,283)	0	0	0	0	0	4,161,884	0.04	154,695	154,695	(38,131)	2,011	(834,708)
2036	(834,708)	0	0	0	0	0	4,293,709	0.04	163,916	163,916	(33,388)	2,131	(702,049)
2037	(702,049)	0	0	0	0	0	4,334,163	0.04	169,940	169,940	(28,082)	2,209	(557,983)
2038	(557,983)	0	0	0	0	0	4,334,163	0.04	174,540	174,540	(22,319)	2,269	(403,493)
2039	(403,493)	0	0	0	0	0	4,334,163	0.04	179,266	179,266	(16,140)	2,330	(238,036)
2040	(238,036)	0	0	0	0	0	4,334,163	0.04	184,119	184,119	(9,521)	2,394	(61,045)
2041	(61,045)	0	0	0	0	0	2,157,860	0.04	94,149	94,149	(2,442)	1,224	31,886
Total		(15,105)	(15,105)	(917,083)	15,105	(18,203)	79,831,360		2,729,865		(709,402)	23,067	

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	(6,789)	(94)	(94)	(723)	94	(1)	72,000	0.01	606	(119)	(187)	(2)	(7,096)
2023	(7,096)	0	0	(723)	0	(11)	72,000	0.01	622	(112)	(206)	(2)	(7,416)
2024	(7,416)	0	0	(723)	0	(11)	72,000	0.01	639	(95)	(230)	(1)	(7,742)
2025	(7,742)	0	0	(723)	0	(11)	72,000	0.01	656	(78)	(248)	(1)	(8,070)
2026	(8,070)	0	0	(723)	0	(11)	74,000	0.01	692	(42)	(262)	(1)	(8,374)
2027	(8,374)	0	0	(723)	0	(11)	74,000	0.01	711	(23)	(281)	(0)	(8,678)
2028	(8,678)	0	0	(723)	0	(11)	74,000	0.01	731	(4)	(295)	(0)	(8,976)
2029	(8,976)	0	0	(643)	0	(11)	74,000	0.01	750	96	(314)	1	(9,194)
2030	(9,194)	0	0	0	0	(11)	74,000	0.01	771	759	(345)	9	(8,770)
2031	(8,770)	0	0	0	0	(11)	78,000	0.01	834	823	(351)	11	(8,287)
2032	(8,287)	0	0	0	0	(10)	84,000	0.01	923	913	(331)	12	(7,694)
2033	(7,694)	0	0	0	0	0	84,000	0.01	948	948	(308)	12	(7,042)
2034	(7,042)	0	0	0	0	0	84,000	0.01	973	973	(282)	13	(6,338)
2035	(6,338)	0	0	0	0	0	84,000	0.01	1,000	1,000	(254)	13	(5,578)
2036	(5,578)	0	0	0	0	0	86,000	0.01	1,051	1,051	(223)	14	(4,737)
2037	(4,737)	0	0	0	0	0	88,000	0.01	1,105	1,105	(189)	14	(3,807)
2038	(3,807)	0	0	0	0	0	88,000	0.01	1,135	1,135	(152)	15	(2,810)
2039	(2,810)	0	0	0	0	0	88,000	0.01	1,165	1,165	(112)	15	(1,742)
2040	(1,742)	0	0	0	0	0	88,000	0.01	1,197	1,197	(70)	16	(599)
2041	(599)	0	0	0	0	0	44,000	0.01	615	615	(24)	8	0
Total		(94)	(94)	(5,702)	94	(113)	1,554,000		17,123		(4,663)	145	

**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	2.57%	

Calculated Development Charge per Capita	\$201.48
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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 Transactions	
2022	(1,192,256)	(8,191,735)	(8,191,735)	(1,046,493)	8,191,735	(112,636)	20,326	201.48	4,095,184	2,936,054	(32,787)	19,818	1,730,830
2023	1,730,830	(6,097,095)	(6,262,161)	(1,046,493)	6,262,161	(1,077,983)	20,326	206.93	4,206,053	2,081,577	25,962	15,612	3,853,981
2024	3,853,981	(7,792,917)	(8,220,582)	(1,046,493)	8,220,582	(1,874,672)	20,326	212.53	4,319,923	1,398,757	65,518	11,889	5,330,145
2025	5,330,145	(1,566,323)	(1,697,013)	(1,046,493)	1,697,013	(2,781,719)	20,326	218.29	4,436,876	608,664	95,943	5,478	6,040,229
2026	6,040,229	(484,482)	(539,117)	(1,050,738)	539,117	(2,972,260)	21,883	224.20	4,906,067	883,069	111,744	8,168	7,043,211
2027	7,043,211	(254,413)	(290,768)	(1,093,839)	290,768	(3,034,902)	23,439	230.26	5,397,181	1,268,440	137,343	12,367	8,461,361
2028	8,461,361	(348,056)	(408,561)	(1,128,341)	408,561	(3,073,031)	23,439	236.50	5,543,298	1,341,926	169,227	13,419	9,985,933
2029	9,985,933	(1,731,875)	(2,087,975)	(1,128,341)	2,087,975	(3,153,404)	23,439	242.90	5,693,372	1,411,626	209,705	14,822	11,622,087
2030	11,622,087	(1,201,792)	(1,488,126)	(1,104,964)	1,488,126	(3,405,502)	23,439	249.48	5,847,508	1,337,041	273,119	15,710	13,247,957
2031	13,247,957	(1,274,816)	(1,621,284)	(4,524,881)	1,621,284	(15,240,366)	25,131	256.23	6,439,361	(13,325,886)	344,447	(266,518)	(0)
Total		(28,943,504)	(30,807,322)	(14,217,079)	30,807,322	(36,726,474)	222,074		50,884,822		1,400,220	(149,233)	

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	2.58%	

Calculated Development Charge per Capita	\$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 Transactions	
2022	(29,958)	(205,834)	(205,834)	(26,295)	205,834	(2,830)	736,966	0.16	115,329	86,203	(824)	582	56,003
2023	56,003	(153,202)	(157,349)	(26,295)	157,349	(27,086)	737,005	0.16	118,457	65,075	840	488	122,407
2024	122,407	(195,813)	(206,559)	(26,295)	206,559	(47,105)	736,966	0.17	121,658	48,258	2,081	410	173,156
2025	173,156	(39,357)	(42,641)	(26,295)	42,641	(69,896)	736,966	0.17	124,951	28,760	3,117	259	205,291
2026	205,291	(12,174)	(13,546)	(26,402)	13,546	(74,684)	725,783	0.17	126,387	25,301	3,798	234	234,624
2027	234,624	(6,393)	(7,306)	(27,485)	7,306	(76,258)	697,281	0.18	124,711	20,968	4,575	204	260,371
2028	260,371	(8,746)	(10,266)	(28,352)	10,266	(77,216)	697,242	0.18	128,080	22,512	5,207	225	288,316
2029	288,316	(43,517)	(52,465)	(28,352)	52,465	(79,236)	697,281	0.19	131,555	23,967	6,055	252	318,589
2030	318,589	(30,197)	(37,392)	(27,764)	37,392	(85,570)	697,242	0.19	135,109	21,774	7,487	256	348,106
2031	348,106	(32,032)	(40,738)	(113,665)	40,738	(382,870)	735,504	0.20	146,382	(350,154)	9,051	(7,003)	(0)
Total		(727,264)	(774,096)	(357,201)	774,096	(922,752)	7,198,237		1,272,617		41,387	(4,093)	

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	2.58%	

Calculated Development Charge per Capita	\$0.102528
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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 Transactions	
2022	(46,886)	(749,220)	(749,220)	(95,713)	749,220	(10,302)	4,021,383	0.10	412,303	306,288	(1,289)	2,067	260,180
2023	260,180	(557,643)	(572,740)	(95,713)	572,740	(98,593)	4,021,383	0.11	423,465	229,159	3,903	1,719	494,961
2024	494,961	(712,744)	(751,859)	(95,713)	751,859	(171,459)	4,021,383	0.11	434,930	167,758	8,414	1,426	672,560
2025	672,560	(143,257)	(155,210)	(95,713)	155,210	(254,417)	4,021,383	0.11	446,704	96,574	12,106	869	782,109
2026	782,109	(44,311)	(49,308)	(96,101)	49,308	(271,844)	3,963,103	0.11	452,149	84,203	14,469	779	881,560
2027	881,560	(23,269)	(26,594)	(100,043)	26,594	(277,574)	3,827,293	0.12	448,476	70,859	17,190	691	970,301
2028	970,301	(31,833)	(37,367)	(103,199)	37,367	(281,061)	3,827,293	0.12	460,617	76,358	19,406	764	1,066,828
2029	1,066,828	(158,398)	(190,967)	(103,199)	190,967	(288,412)	3,827,293	0.12	473,088	81,477	22,403	856	1,171,564
2030	1,171,564	(109,917)	(136,105)	(101,061)	136,105	(311,469)	3,827,293	0.13	485,895	73,366	27,532	862	1,273,323
2031	1,273,323	(116,595)	(148,283)	(413,721)	148,283	(1,393,590)	4,037,794	0.13	526,498	(1,280,813)	33,106	(25,616)	0
Total		(2,647,188)	(2,817,654)	(1,300,175)	2,817,654	(3,358,720)	39,395,602		4,564,125		157,241	(15,584)	

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	2.58%	

Calculated Development Charge per Capita	\$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 Transactions	
2022	(658)	(4,523)	(4,523)	(578)	4,523	(62)	72,000	0.03	2,419	1,779	(18)	12	1,115
2023	1,115	(3,366)	(3,457)	(578)	3,457	(595)	72,000	0.03	2,485	1,312	17	10	2,454
2024	2,454	(4,303)	(4,539)	(578)	4,539	(1,035)	72,000	0.04	2,552	939	42	8	3,443
2025	3,443	(865)	(937)	(578)	937	(1,536)	72,000	0.04	2,621	508	62	5	4,017
2026	4,017	(267)	(298)	(580)	298	(1,641)	74,000	0.04	2,767	546	74	5	4,642
2027	4,642	(140)	(161)	(604)	161	(1,676)	74,000	0.04	2,842	562	91	5	5,300
2028	5,300	(192)	(226)	(623)	226	(1,697)	74,000	0.04	2,919	599	106	6	6,012
2029	6,012	(956)	(1,153)	(623)	1,153	(1,741)	74,000	0.04	2,998	634	126	7	6,778
2030	6,778	(664)	(822)	(610)	822	(1,880)	74,000	0.04	3,079	589	159	7	7,533
2031	7,533	(704)	(895)	(2,498)	895	(8,413)	78,000	0.04	3,333	(7,578)	196	(152)	(0)
Total		(15,980)	(17,009)	(7,849)	17,009	(20,276)	736,000		28,016		855	(87)	

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	\$22,263,152	
Discount Rate Applied to Post 2031 Debt Payments	2.60%	

Calculated Development Charge per Capita	\$101.69
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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 Transactions	
2022	11,616,006	(3,060,188)	(3,060,188)	0	3,060,188	(42,078)	20,326	101.69	2,066,914	2,024,836	156,816	13,668	13,811,326
2023	13,811,326	(3,060,188)	(3,143,036)	0	3,143,036	(414,356)	20,326	104.44	2,122,871	1,708,516	207,170	12,814	15,739,826
2024	15,739,826	(3,060,188)	(3,228,128)	0	3,228,128	(800,305)	20,326	107.27	2,180,344	1,380,039	267,577	11,730	17,399,172
2025	17,399,172	(3,060,188)	(3,315,522)	0	3,315,522	(1,198,877)	20,326	110.17	2,239,372	1,040,495	313,185	9,364	18,762,216
2026	18,762,216	(3,060,188)	(3,405,283)	0	3,405,283	(1,609,365)	21,883	113.16	2,476,181	866,816	347,101	8,018	19,984,152
2027	19,984,152	(3,060,188)	(3,497,474)	0	3,497,474	(2,032,857)	23,439	116.22	2,724,055	691,198	389,691	6,739	21,071,780
2028	21,071,780	(3,060,188)	(3,592,161)	0	3,592,161	(2,469,009)	23,439	119.37	2,797,803	328,794	421,436	3,288	21,825,297
2029	21,825,297	(3,060,188)	(3,689,411)	0	3,689,411	(2,918,969)	23,439	122.60	2,873,548	(45,421)	458,331	(795)	22,237,413
2030	22,237,413	(3,060,188)	(3,789,294)	0	3,789,294	(3,386,168)	23,439	125.92	2,951,343	(434,825)	522,579	(8,153)	22,317,015
2031	22,317,015	(3,060,188)	(3,891,882)	0	3,891,882	(25,698,354)	25,131	129.32	3,250,063	(22,448,291)	580,242	(448,966)	0
Total		(30,601,881)	(34,612,380)	0	34,612,380	(40,570,337)	222,074		25,682,495		3,664,129	(392,292)	

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	\$138,429	
Discount Rate Applied to Post 2031 Debt Payments	2.60%	

Calculated Development Charge per Capita	\$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 Transactions	
2022	70,318	(19,028)	(19,028)	0	19,028	(262)	736,966	0.02	14,595	14,334	949	97	85,698
2023	85,698	(19,028)	(19,543)	0	19,543	(2,576)	737,005	0.02	14,991	12,415	1,285	93	99,491
2024	99,491	(19,028)	(20,072)	0	20,072	(4,976)	736,966	0.02	15,396	10,420	1,691	89	111,691
2025	111,691	(19,028)	(20,615)	0	20,615	(7,454)	736,966	0.02	15,813	8,359	2,010	75	122,135
2026	122,135	(19,028)	(21,173)	0	21,173	(10,007)	725,783	0.02	15,995	5,988	2,260	55	130,438
2027	130,438	(19,028)	(21,747)	0	21,747	(12,640)	697,281	0.02	15,782	3,143	2,544	31	136,155
2028	136,155	(19,028)	(22,335)	0	22,335	(15,352)	697,242	0.02	16,209	857	2,723	9	139,743
2029	139,743	(19,028)	(22,940)	0	22,940	(18,150)	697,281	0.02	16,649	(1,501)	2,935	(26)	141,150
2030	141,150	(19,028)	(23,561)	0	23,561	(21,055)	697,242	0.02	17,098	(3,956)	3,317	(74)	140,437
2031	140,437	(19,028)	(24,199)	0	24,199	(159,788)	735,504	0.03	18,525	(141,263)	3,651	(2,825)	0
Total		(190,278)	(215,214)	0	215,214	(252,260)	7,198,237		161,053		23,366	(2,477)	

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	\$504,188	
Discount Rate Applied to Post 2031 Debt Payments	2.60%	

Calculated Development Charge per Capita	\$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 Transactions	
2022	450,618	(69,303)	(69,303)	0	69,303	(953)	4,021,383	0.01	33,881	32,928	6,083	222	489,851
2023	489,851	(69,303)	(71,179)	0	71,179	(9,384)	4,021,383	0.01	34,798	25,414	7,348	191	522,804
2024	522,804	(69,303)	(73,107)	0	73,107	(18,124)	4,021,383	0.01	35,740	17,616	8,888	150	549,457
2025	549,457	(69,303)	(75,086)	0	75,086	(27,151)	4,021,383	0.01	36,708	9,557	9,890	86	568,990
2026	568,990	(69,303)	(77,119)	0	77,119	(36,447)	3,963,103	0.01	37,155	708	10,526	7	580,231
2027	580,231	(69,303)	(79,206)	0	79,206	(46,038)	3,827,293	0.01	36,853	(9,184)	11,315	(154)	582,207
2028	582,207	(69,303)	(81,351)	0	81,351	(55,915)	3,827,293	0.01	37,851	(18,064)	11,644	(307)	575,480
2029	575,480	(69,303)	(83,553)	0	83,553	(66,105)	3,827,293	0.01	38,876	(27,230)	12,085	(477)	559,859
2030	559,859	(69,303)	(85,815)	0	85,815	(76,686)	3,827,293	0.01	39,928	(36,758)	13,157	(689)	535,569
2031	535,569	(69,303)	(88,138)	0	88,138	(581,984)	4,037,794	0.01	43,264	(538,719)	13,925	(10,774)	0
Total		(693,033)	(783,857)	0	783,857	(918,785)	39,395,602		375,053		104,861	(11,746)	

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	\$3,135	
Discount Rate Applied to Post 2031 Debt Payments	2.60%	

Calculated Development Charge per Capita	\$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 Transactions	
2022	1,012	(431)	(431)	0	431	(6)	72,000	0.01	370	364	14	2	1,392
2023	1,392	(431)	(443)	0	443	(58)	72,000	0.01	380	322	21	2	1,738
2024	1,738	(431)	(455)	0	455	(113)	72,000	0.01	391	278	30	2	2,047
2025	2,047	(431)	(467)	0	467	(169)	72,000	0.01	401	232	37	2	2,319
2026	2,319	(431)	(480)	0	480	(227)	74,000	0.01	423	197	43	2	2,560
2027	2,560	(431)	(492)	0	492	(286)	74,000	0.01	435	149	50	1	2,760
2028	2,760	(431)	(506)	0	506	(348)	74,000	0.01	447	99	55	1	2,915
2029	2,915	(431)	(520)	0	520	(411)	74,000	0.01	459	48	61	1	3,025
2030	3,025	(431)	(534)	0	534	(477)	74,000	0.01	471	(6)	71	(0)	3,090
2031	3,090	(431)	(548)	0	548	(3,619)	78,000	0.01	510	(3,109)	80	(62)	0
Total		(4,309)	(4,874)	0	4,874	(5,713)	736,000		4,288		462	(48)	

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11 CURRENT DEVELOPMENT CHARGES 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 MAY 3, 2022)

	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 exemptions.

TABLE 11-4
STATUTORY AND NON-STATUTORY DEVELOPMENT CHARGE EXEMPTIONS

Non-Statutory/Discretionary*	Statutory
<u>Residential</u>	
Relocation of a heritage house, where an area municipality agrees to a similar exemption Affordable rental housing projects owned by a non-profit organization (grant provided equivalent to the development charge payable) Habitat for Humanity developments, where an area municipality agrees to a similar exemption	Additional/second suites in new or existing residential buildings (subject to restrictions under O. Reg 82/98)
<u>Non-Residential</u>	
Institutional	
Public Hospitals receiving aid under the <i>Public Hospital Act, 1990</i> Addition or expansion is less than 50% of the original gross floor area	Public Schools Universities

Non-Statutory/Discretionary*	Statutory
<p>Land owned by and used for the purposes of a private school that is exempt from taxation under the <i>Assessment Act, 1990</i>, where an area municipality agrees to a similar exemption</p> <p>Agricultural uses (e.g., farm buildings)</p> <p>Accessory structures which are less than 100m² of gross floor area</p> <p>Lands, buildings or structures used for cemeteries or burial grounds exempt from taxation under the <i>Assessment Act, 1990</i></p> <p>Building or structure used for a community use owned by a non-profit corporation, where an area municipality agrees to a similar exemption</p> <p>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</p>	<p>Municipal buildings</p> <p>Crown assets</p>
Office	
<p>Addition or expansion is less than 50 per cent of the original gross floor area</p> <p>Accessory structures which are less than 100m² of gross floor area</p>	Crown assets
Industrial	
<p>Accessory structures which are less than 100m² of gross floor area</p>	<p>Addition or expansion is less than 50 per cent of the original gross floor area</p> <p>Crown assets</p>
Retail	
<p>Accessory structures which are less than 100m² of gross floor area when not part of a live-work unit</p>	

*Note: Both residential and non-residential development could be eligible for a Vacant Lot of Record exemption

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.

¹ Development Charges Policies (as per 2007 DC Bylaw Review/Background Study/Development Charge Pamphlet)

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).

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 DCs 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 DC 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 wastewater 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 30 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 Charges 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 Charges 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

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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 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 Bylaw and Background Study, 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. An additional analysis can be found in Attachment 3 to the May Council report titled, “2022 Development Charges Bylaw and Background Study – Final”.

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 that have been reviewed and updated

The following are areas of the Bylaw 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, whilst maintaining the above-mentioned four categories, 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. Treating stacked townhouses as apartments, for the purposes of levying development charges, would therefore be consistent with the Statistics Canada classification of apartments which includes stacked townhouses.

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 Treatment of hospices

To reflect the need for the vital services that hospices provide, and to simplify the existing process, it is being recommended that Section 3.5.1 of the 2022 Bylaw provide a development charge deferral or exemption for hospices, contingent on local municipal matching.

12.2.4 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 second suites in, or ancillary to, new residential buildings.

The Regulation also provides 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.

12.2.5 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.

12.2.6 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 Policies that have been 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

COUNCIL-APPROVED CHANGES TO DEVELOPMENT CHARGES POLICIES

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 Act 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

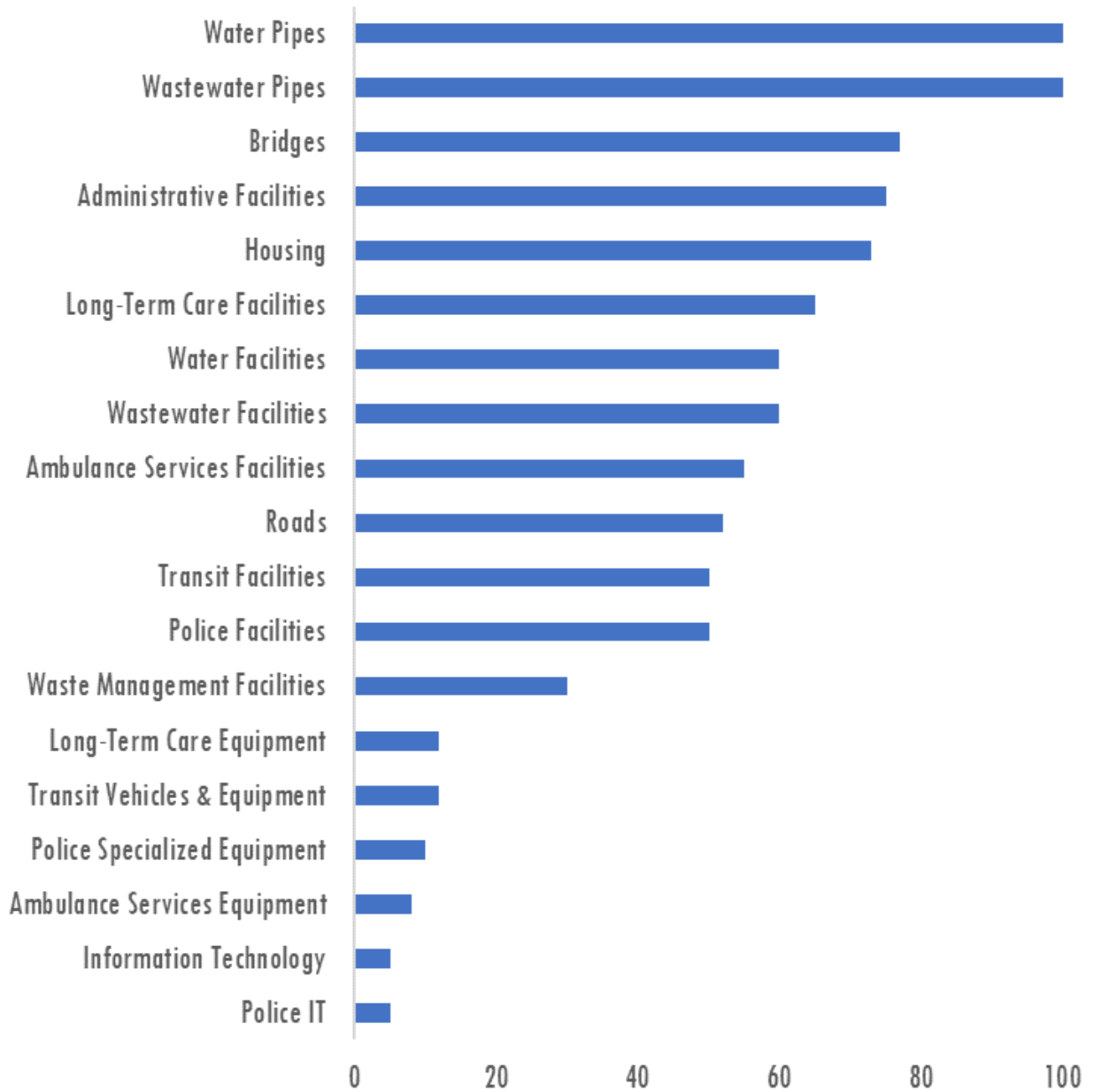
Asset lifecycles have been projected based on two methods depending on whether sufficient condition information is available. Typically, meaningful condition assessment information is not available until determinate signs of deterioration are observable. The two methods are summarized in Table 13.1 below.

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 busroutes was greater than 16,000 km
Capacity	Demand to capacityratio	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 overheadcost 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 starttime	Grade 5 – The percentage of on-time trip starts forconventional and Viva bus routes was greater than94%
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)

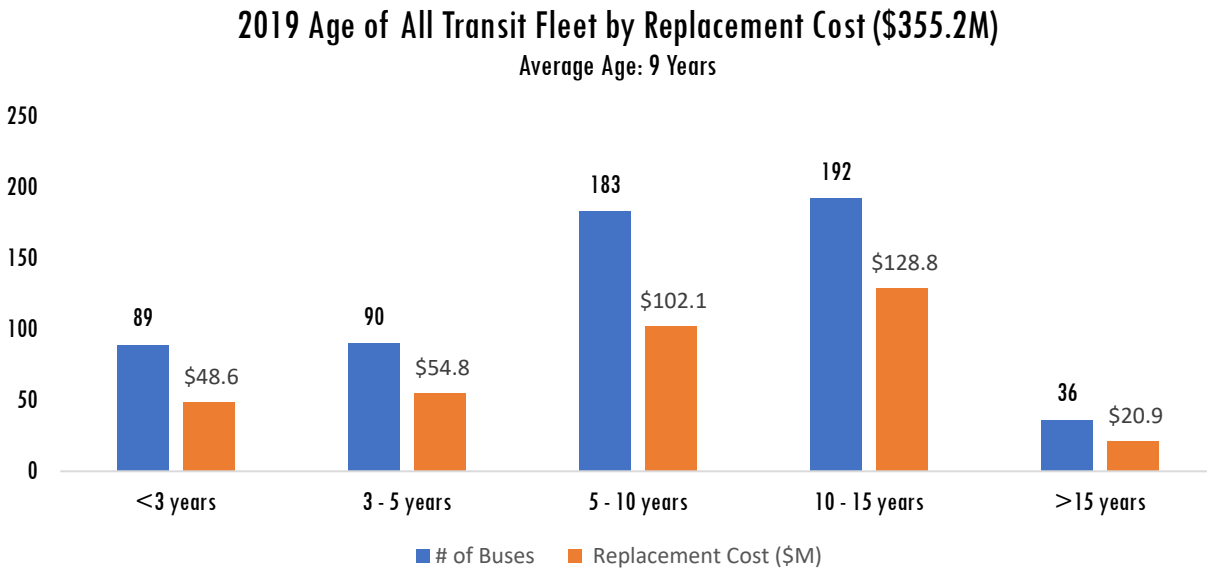
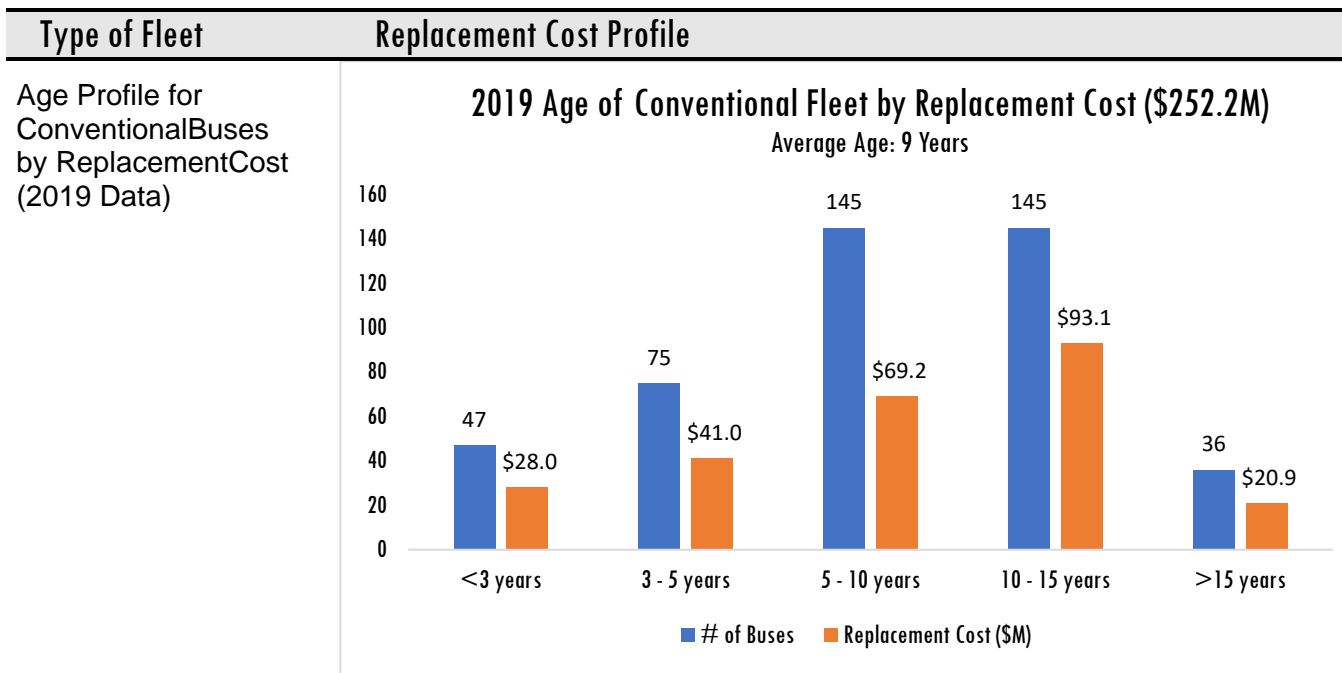
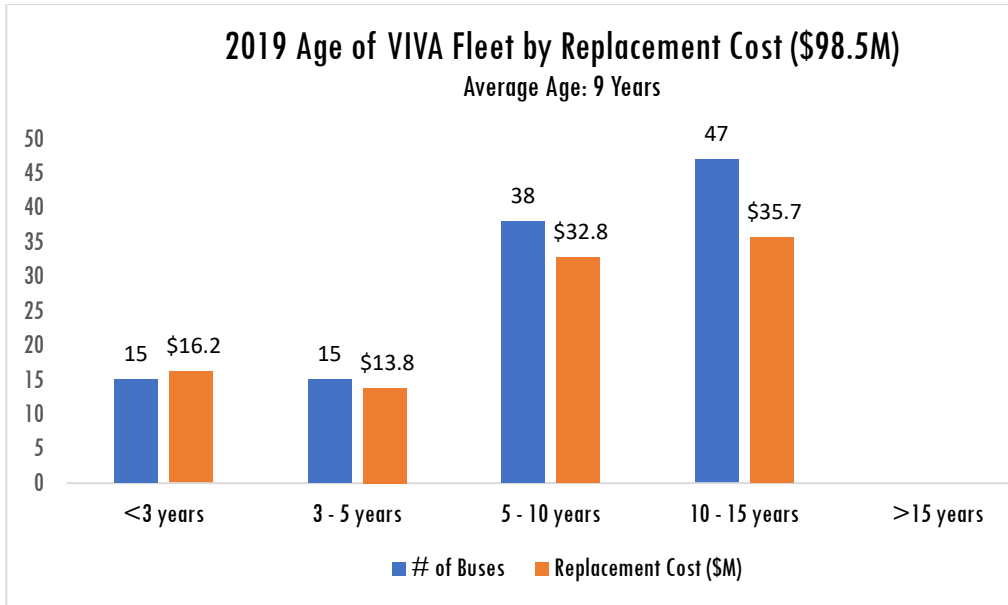


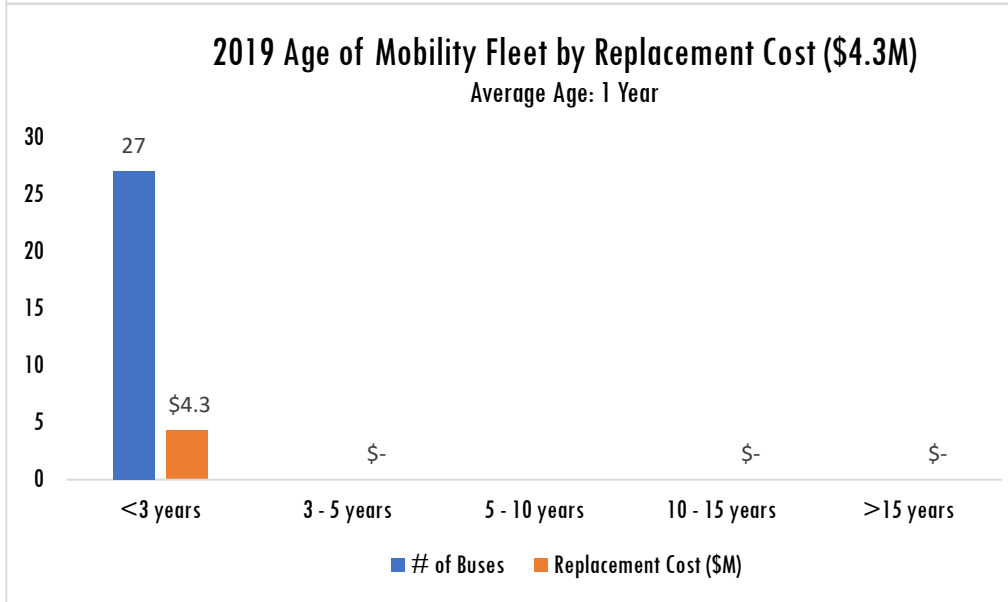
TABLE 13-9
REPLACEMENT COST PROFILE BY TYPE OF FLEET



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

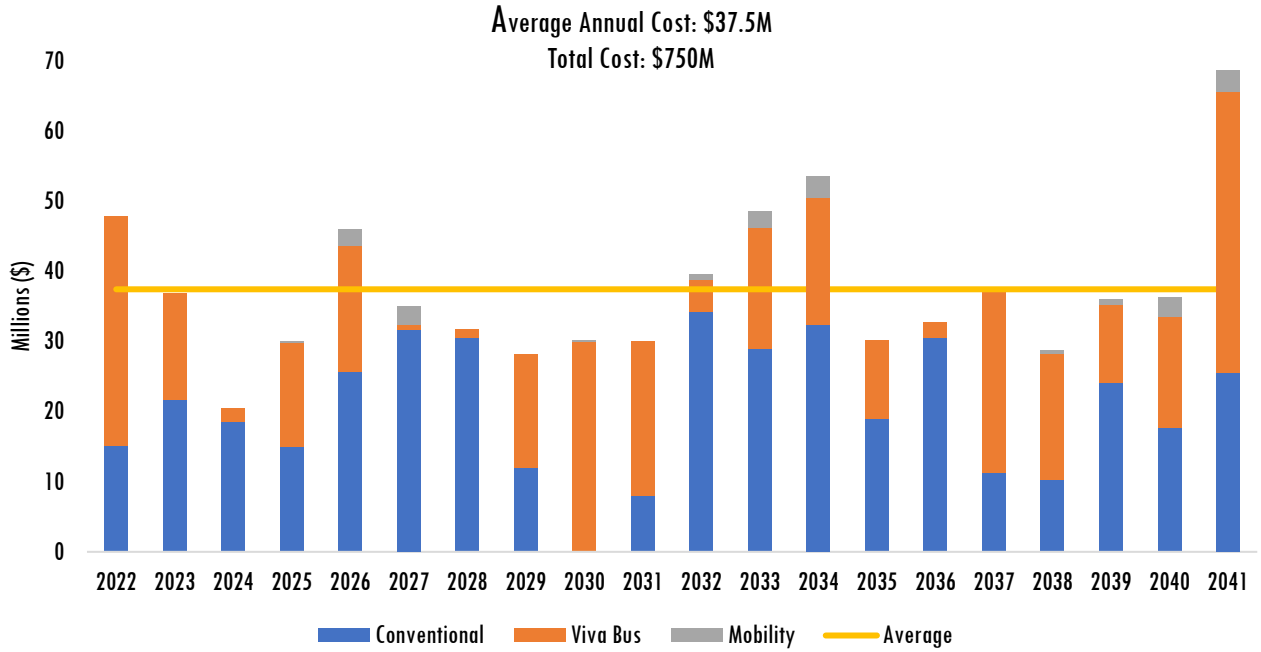
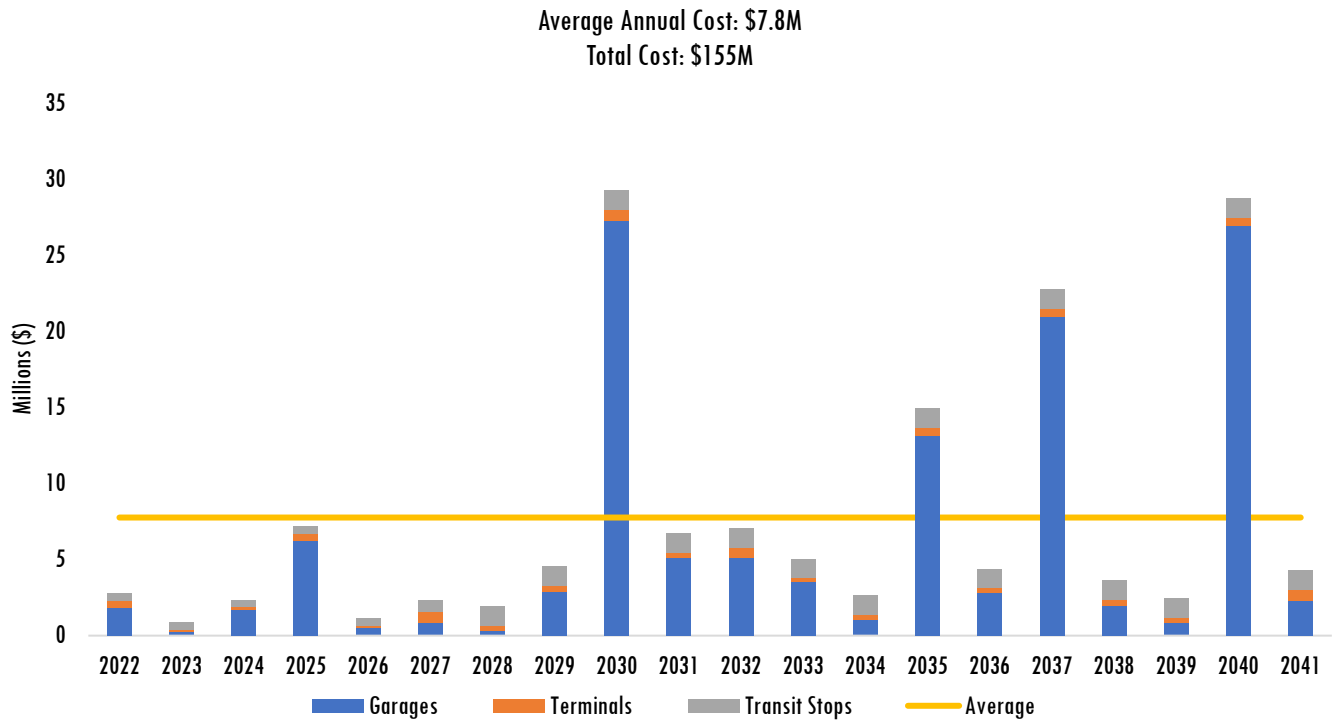
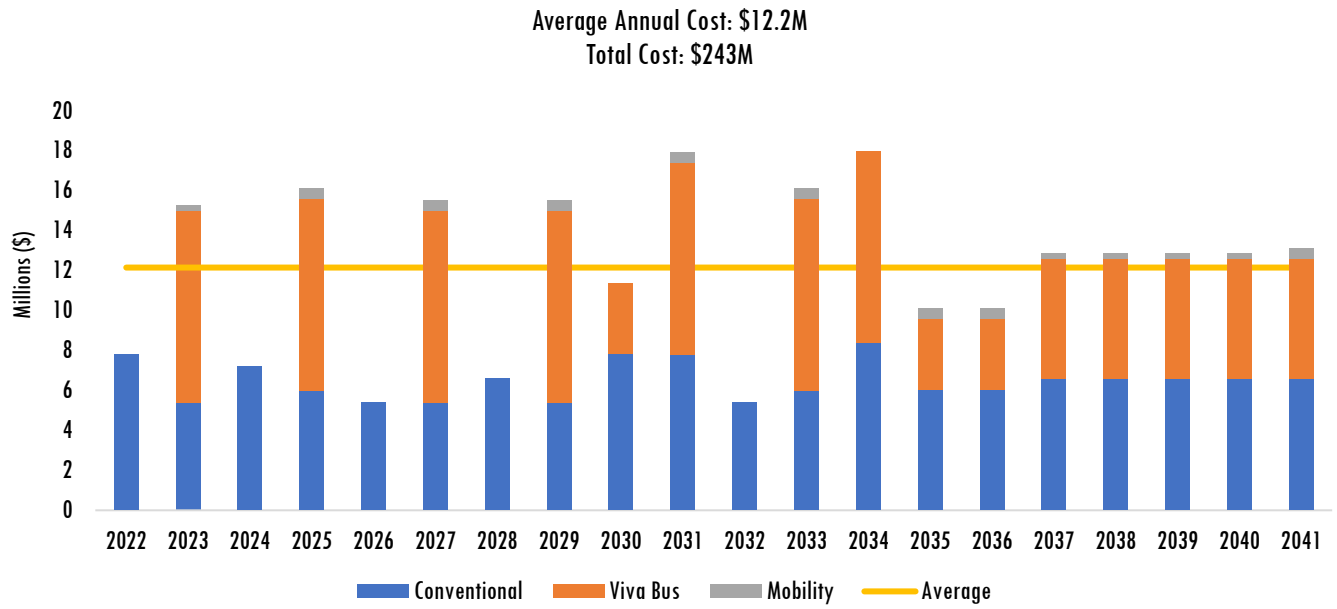


FIGURE 13-5
ANTICIPATED FACILITIES SUSTAINMENT NEEDS

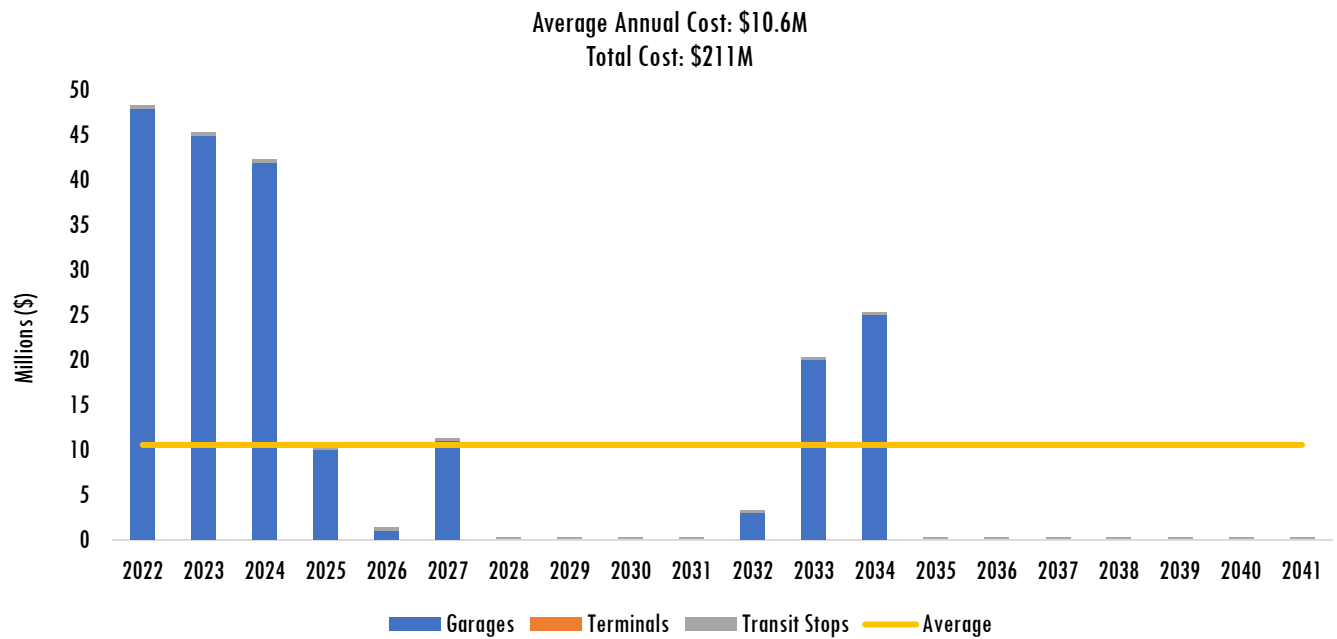


Based on the Transit Business Plan, Transportation Master Plan and Transit AMP, the average annual growth needs for fleet and facilities for 2022 to 2041 is $(\$12.2M + \$10.6M) = \$22.8M$ as indicated in Figures 13-6 and 13-7, below.

**FIGURE 13-6
ANTICIPATED FLEET GROWTH NEED**

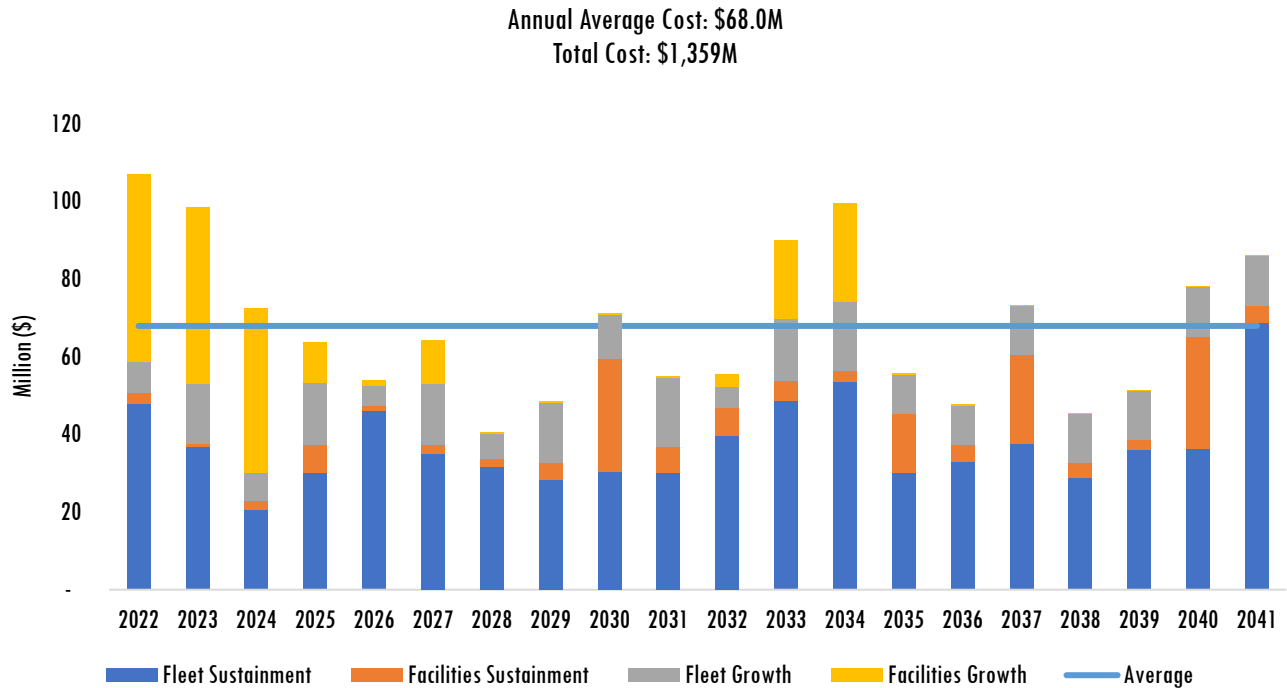


**FIGURE 13-7
ANTICIPATED FACILITIES GROWTH NEEDS**



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.

FIGURE 13-8
INTEGRATED NEEDS FOR FLEET AND FACILITIES



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:

Part I 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 and semi-detached dwellings, rows/multiple unit dwellings, 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.

Part II 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 and semi-detached dwellings, rows/multiple unit dwellings, 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**

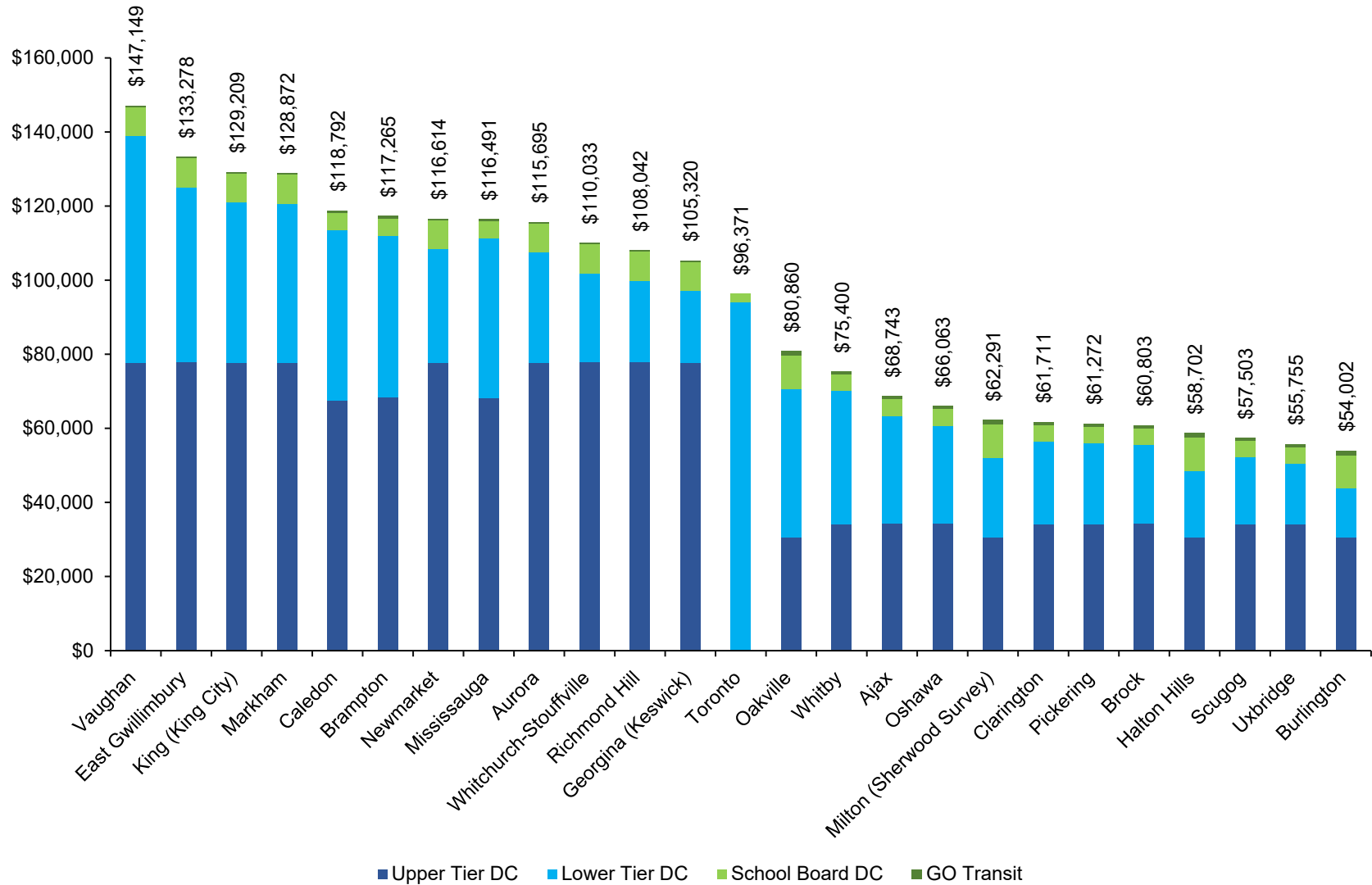


Figure A-2

**Development Charges per Multiple Unit Dwelling
for Greater Toronto Area Municipalities with Proposed York Region Rates**

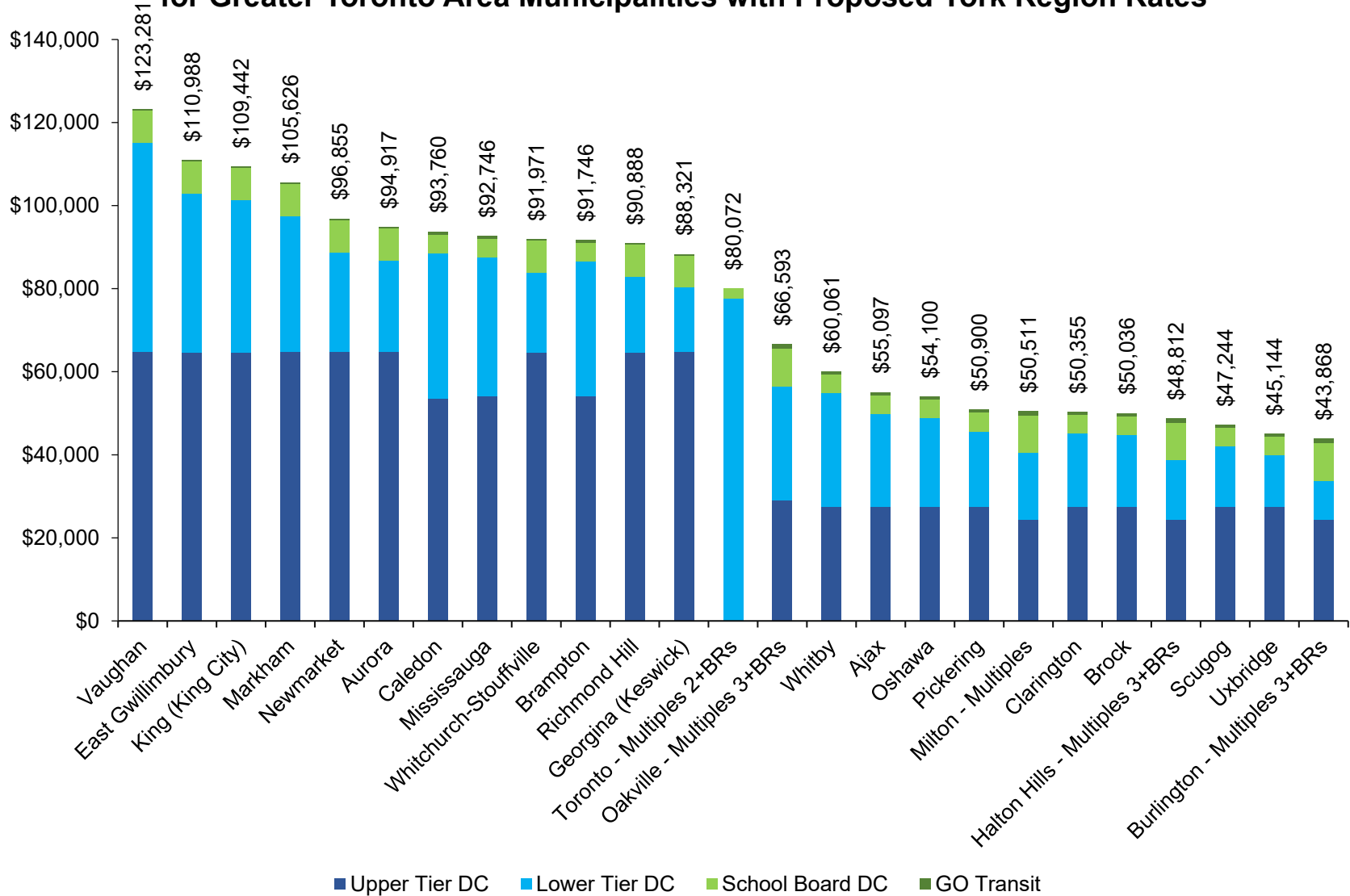


Figure A-3

Development Charges per Large Apartments for Greater Toronto Area Municipalities with Proposed York Region Rates

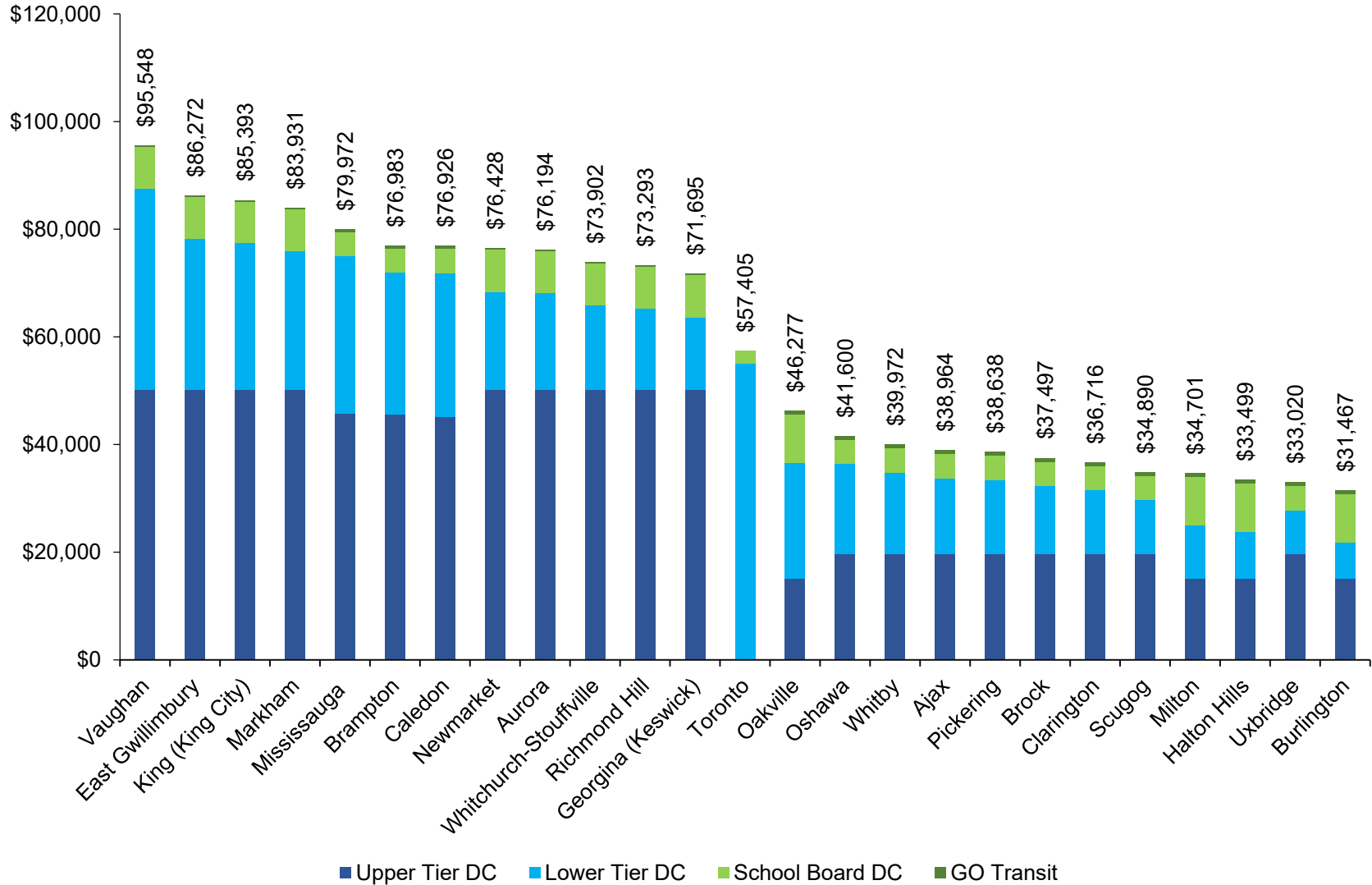


Figure A-4

**Development Charges per Small Apartments For Greater Toronto Area
Municipalities with Proposed York Region Rates**

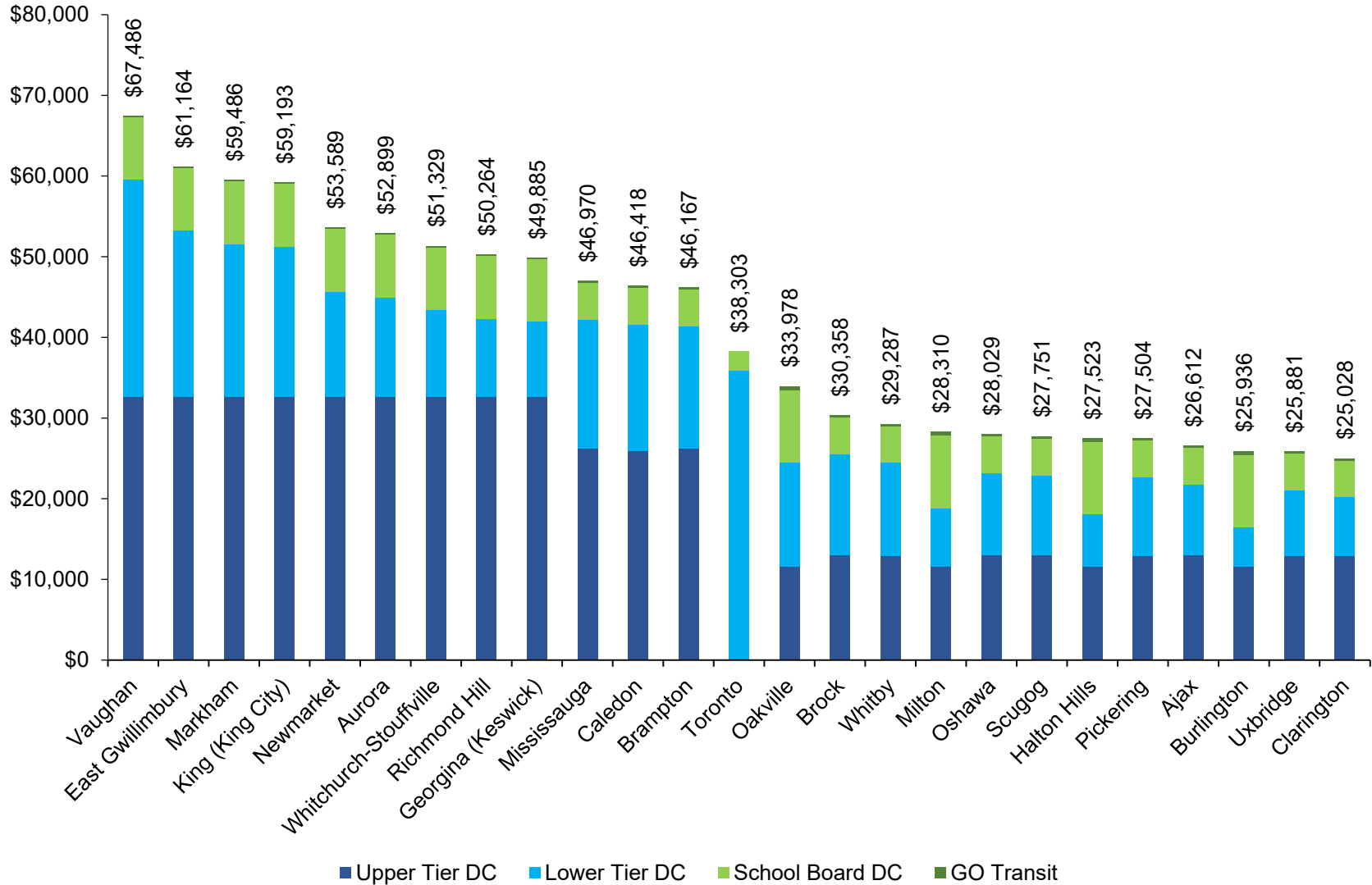


Figure A-5

**Retail Development Charges per Square Foot
for Greater Toronto Area Municipalities with Proposed York Region Rates**

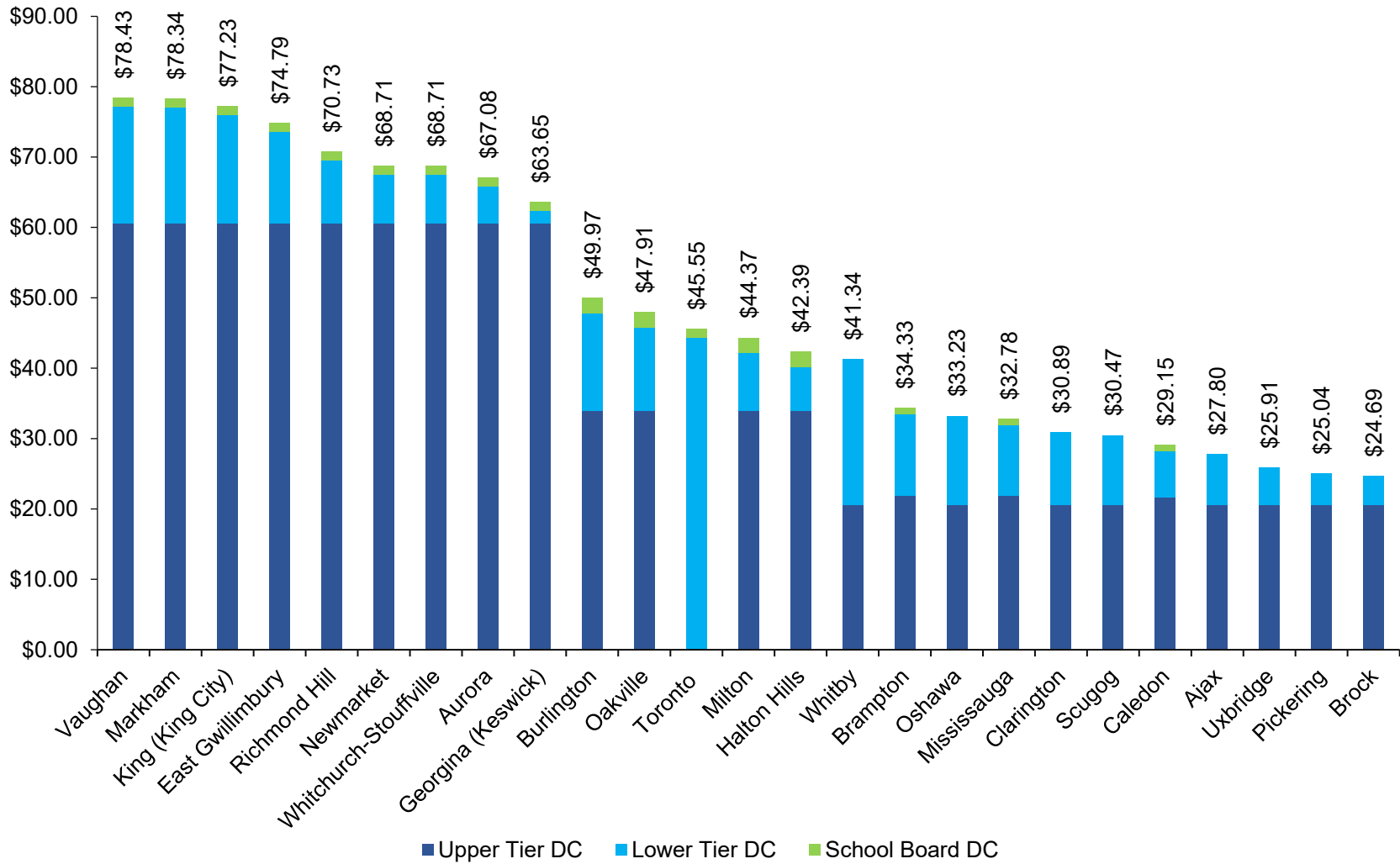


Figure A-6

Industrial Development Charges per Square Foot for Greater Toronto Area Municipalities with Proposed York Region Rates

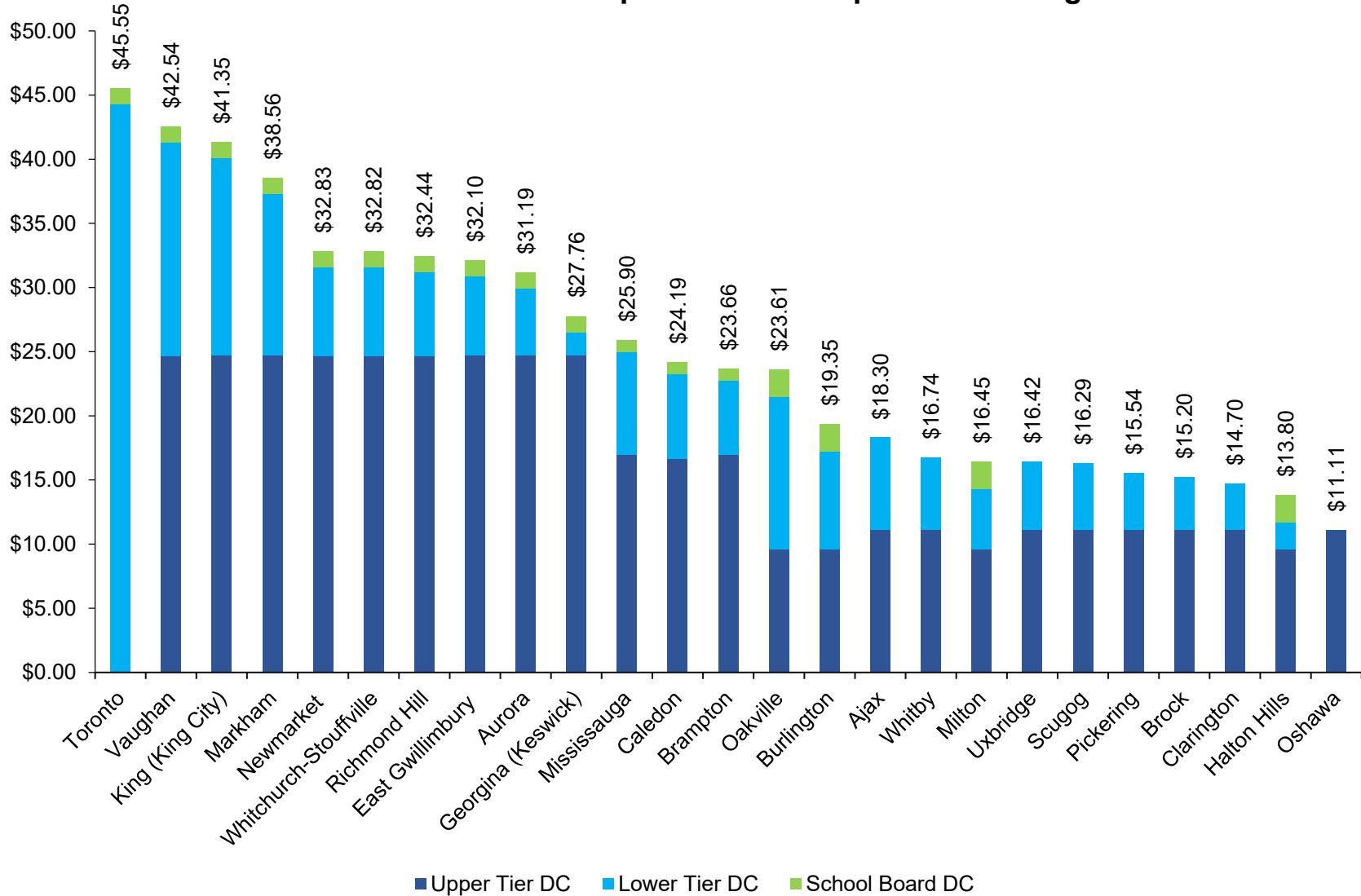


Figure A-7

**Office Development Charges per Square Foot
for Greater Toronto Area Municipalities with Proposed York Region Rates**

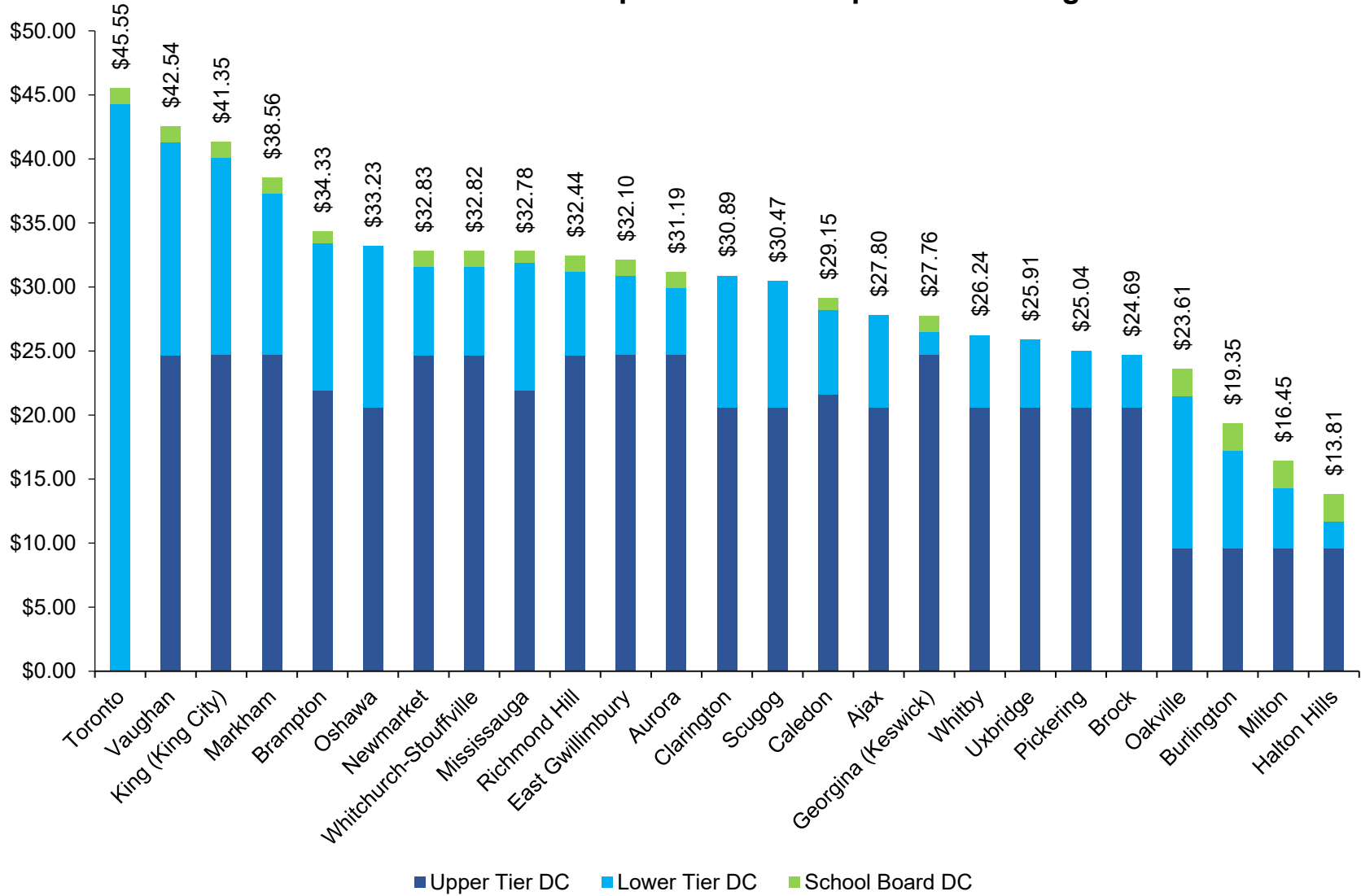


Figure A-8

Development Charges per Single and Semi-Detached Dwelling for Simcoe County and Barrie with York Region Proposed Rates

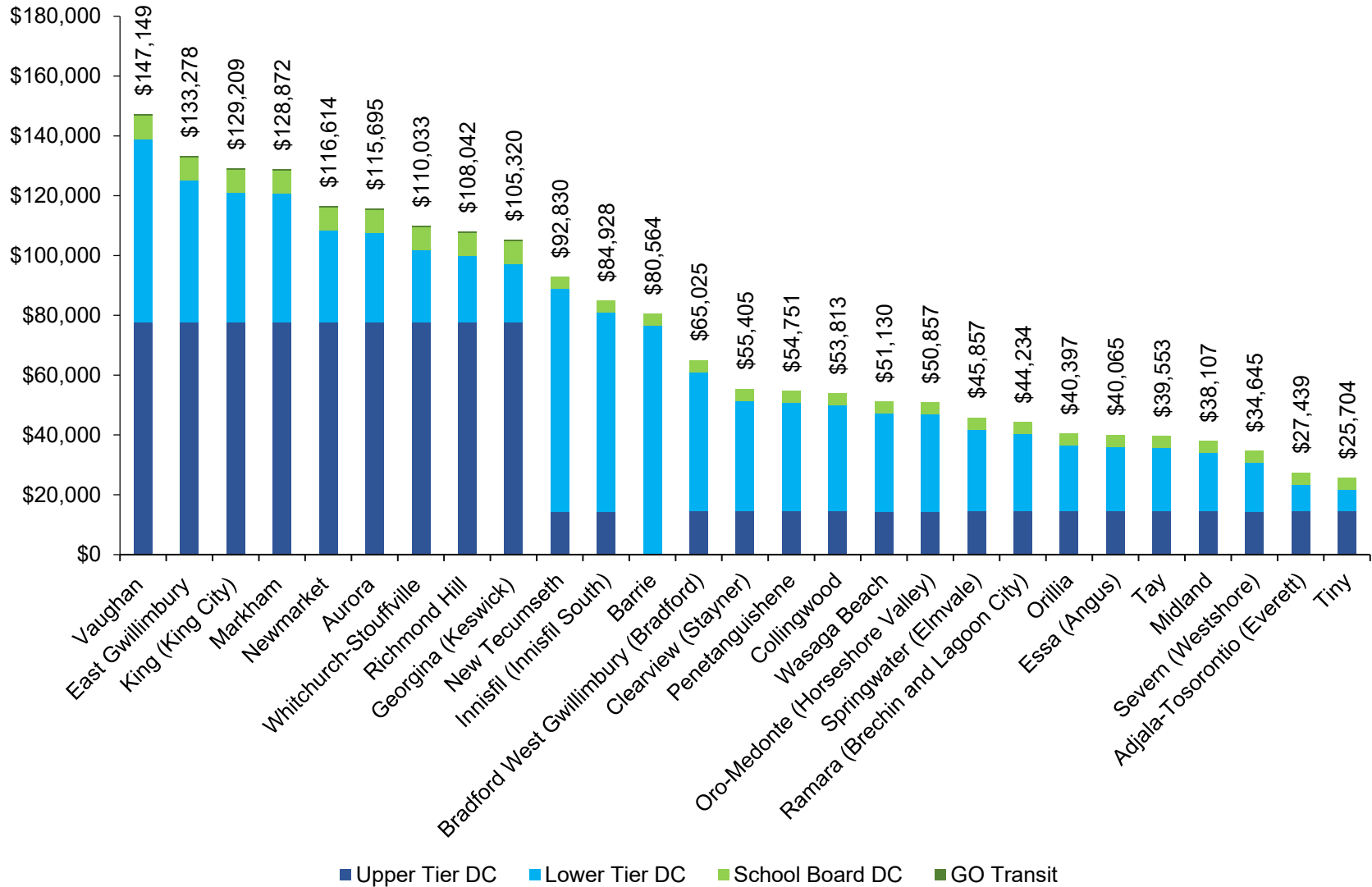


Figure A-9

**Development Charges per Multiple Unit Dwelling
for Simcoe County and Barrie with York Region Proposed Rates**

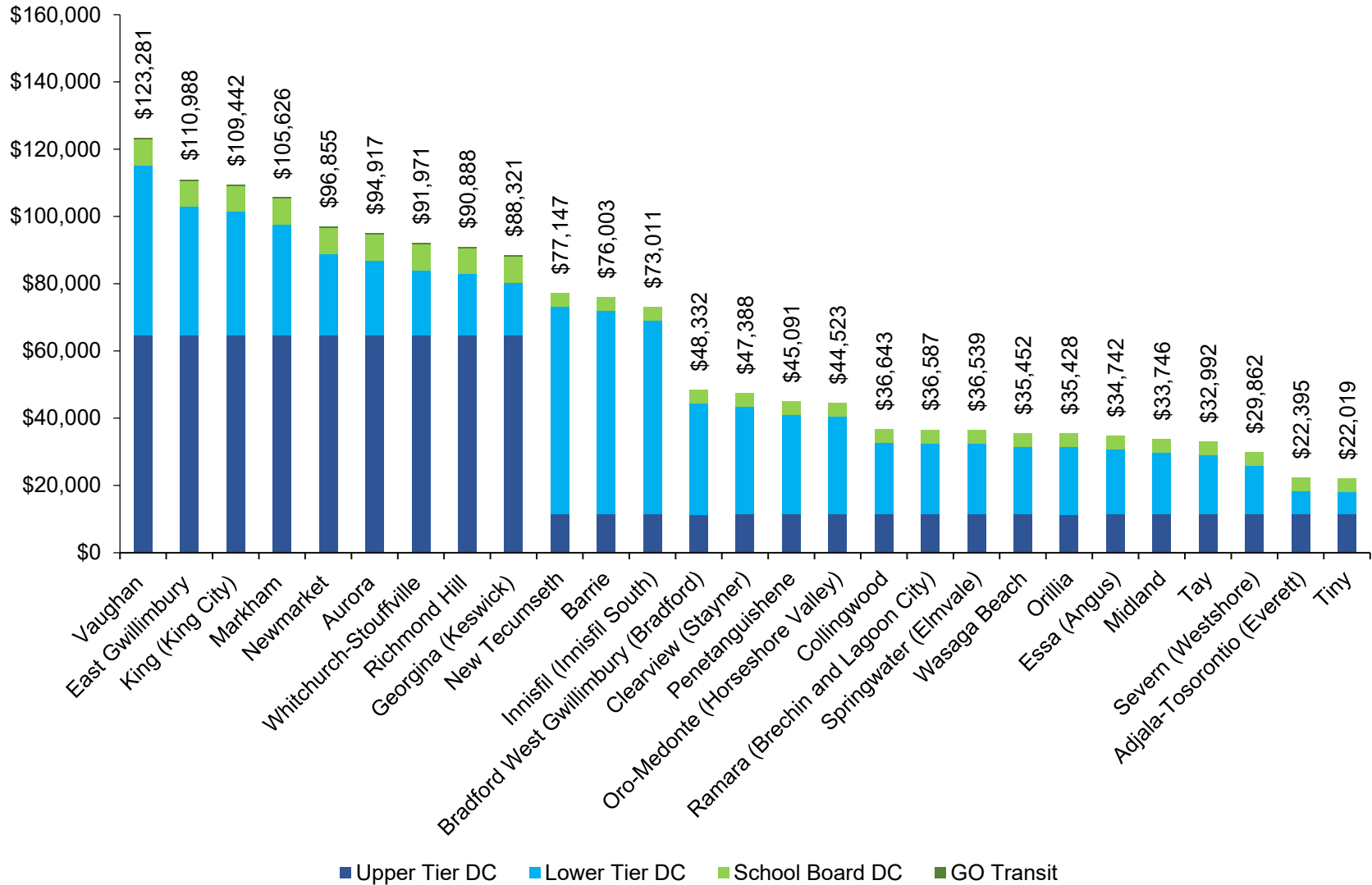


Figure A-10

Development Charges per Large Apartment for Simcoe County and Barrie with York Region Proposed Rates

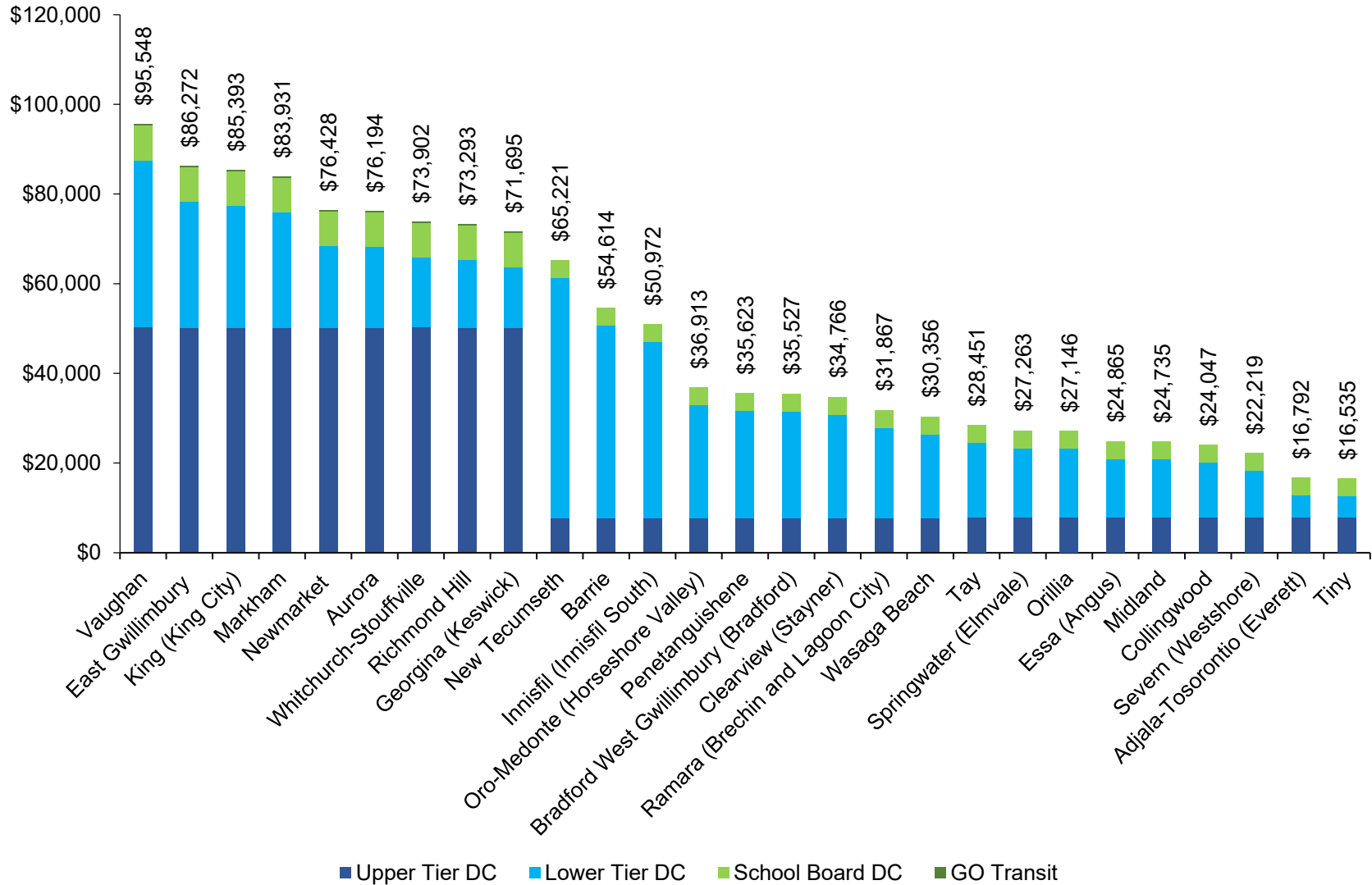


Figure A-11

Development Charges per Small Apartment for Simcoe County and Barrie with York Region Proposed Rates

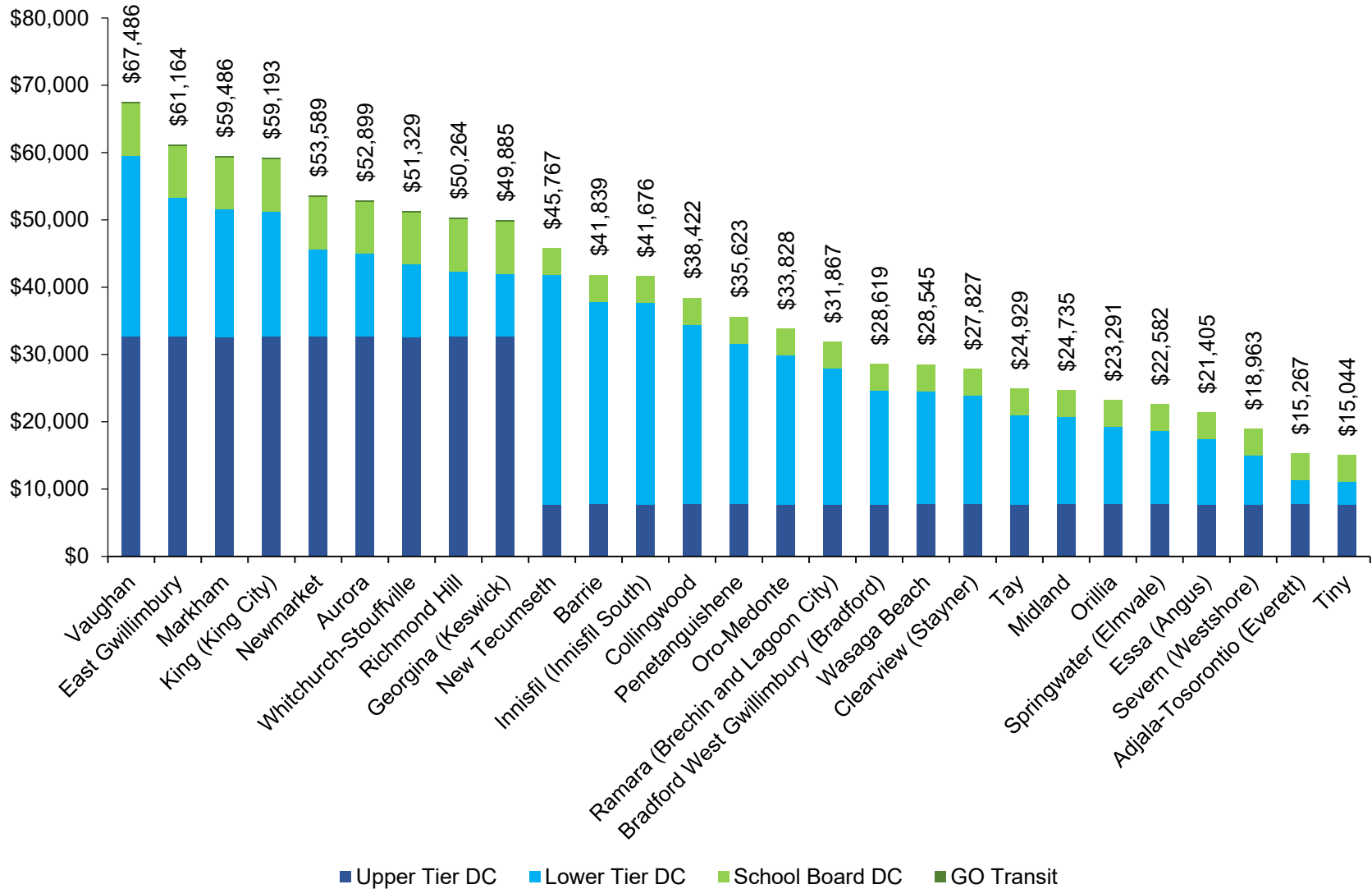


Figure A-12

**Retail Development Charges per Square Foot
for Simcoe County and Barrie with Proposed York Region Rates**

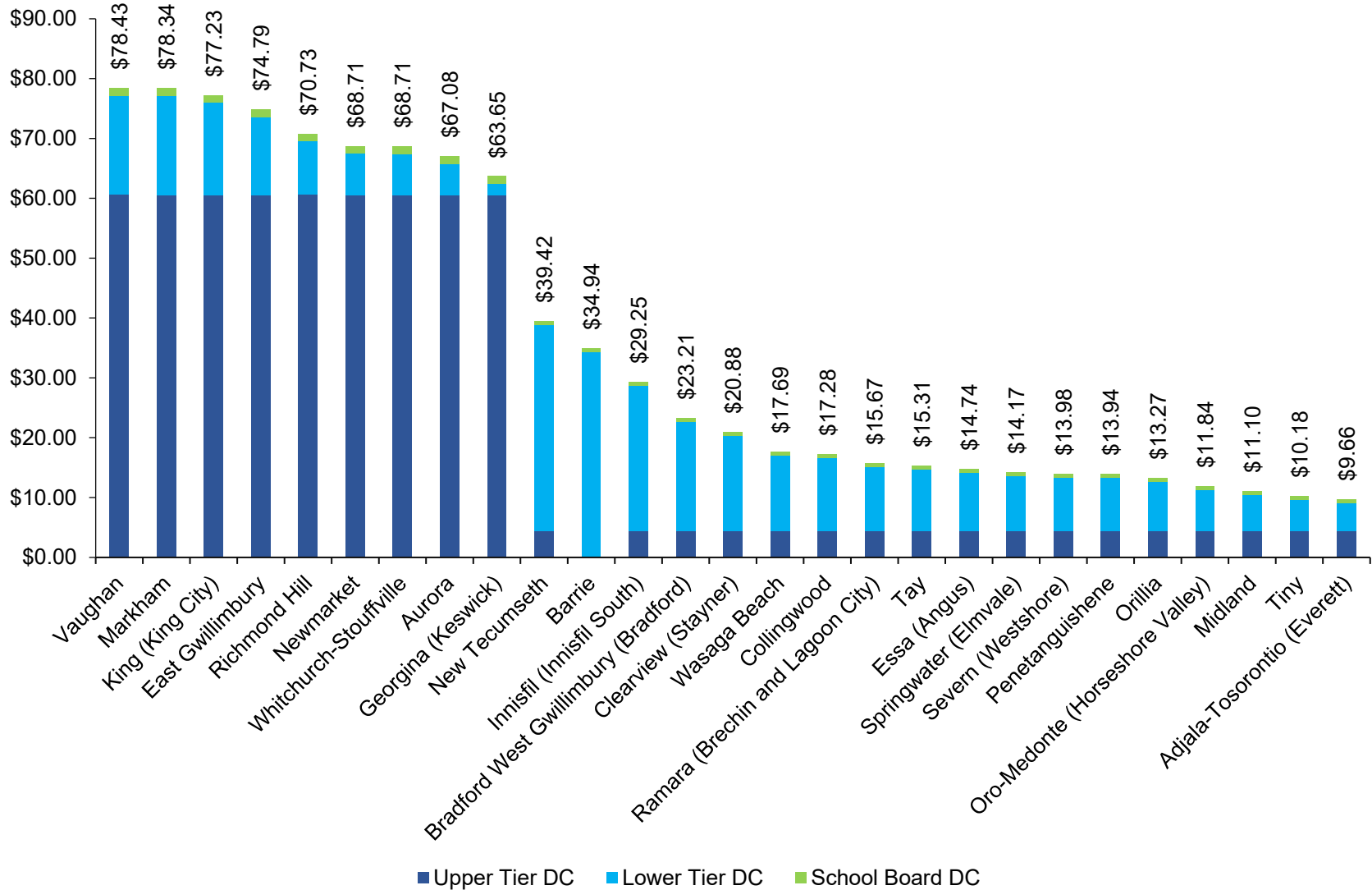


Figure A-13

**Industrial Development Charges per Square Foot
for Simcoe County and Barrie with Proposed York Region Rates**

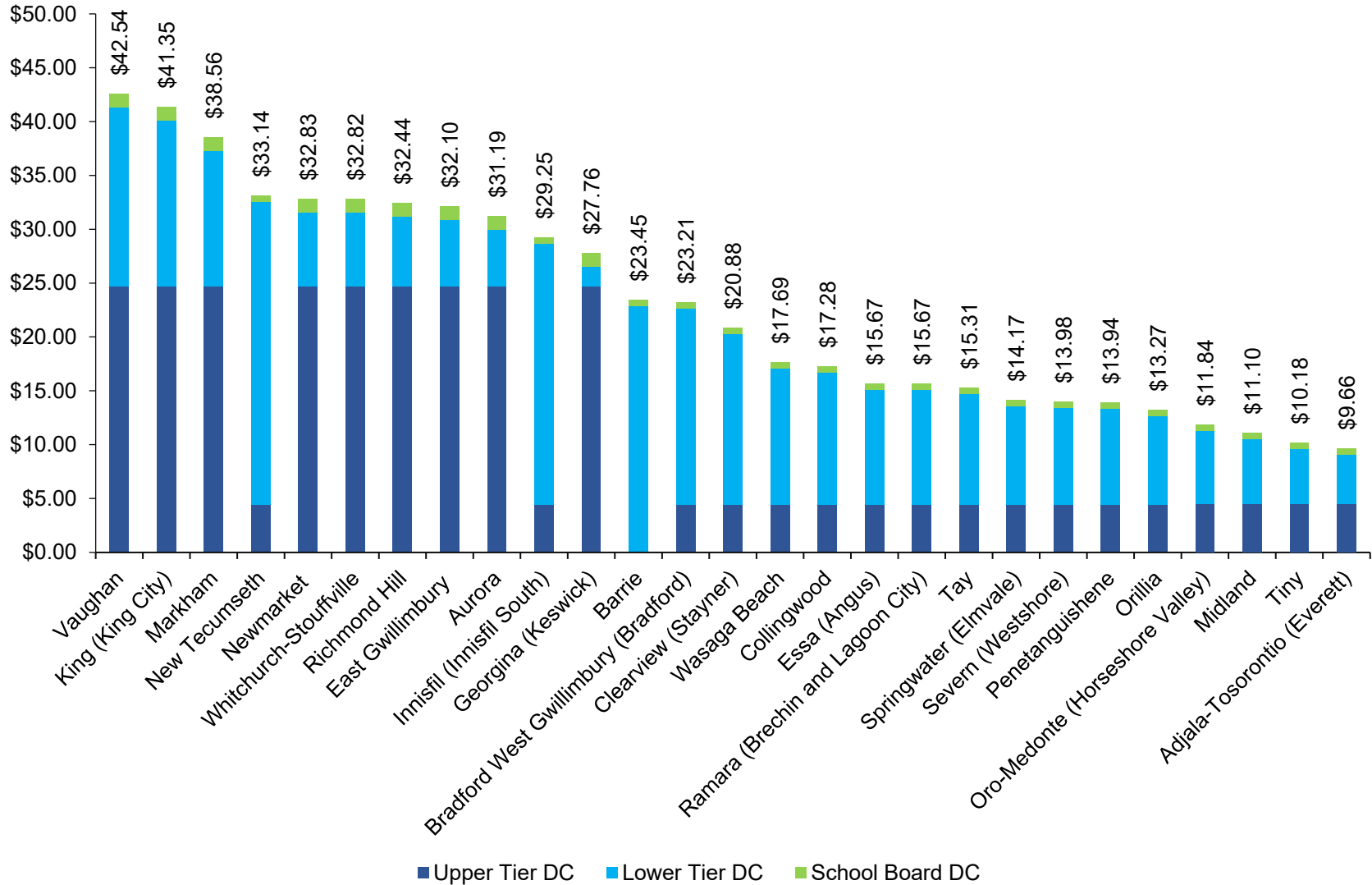
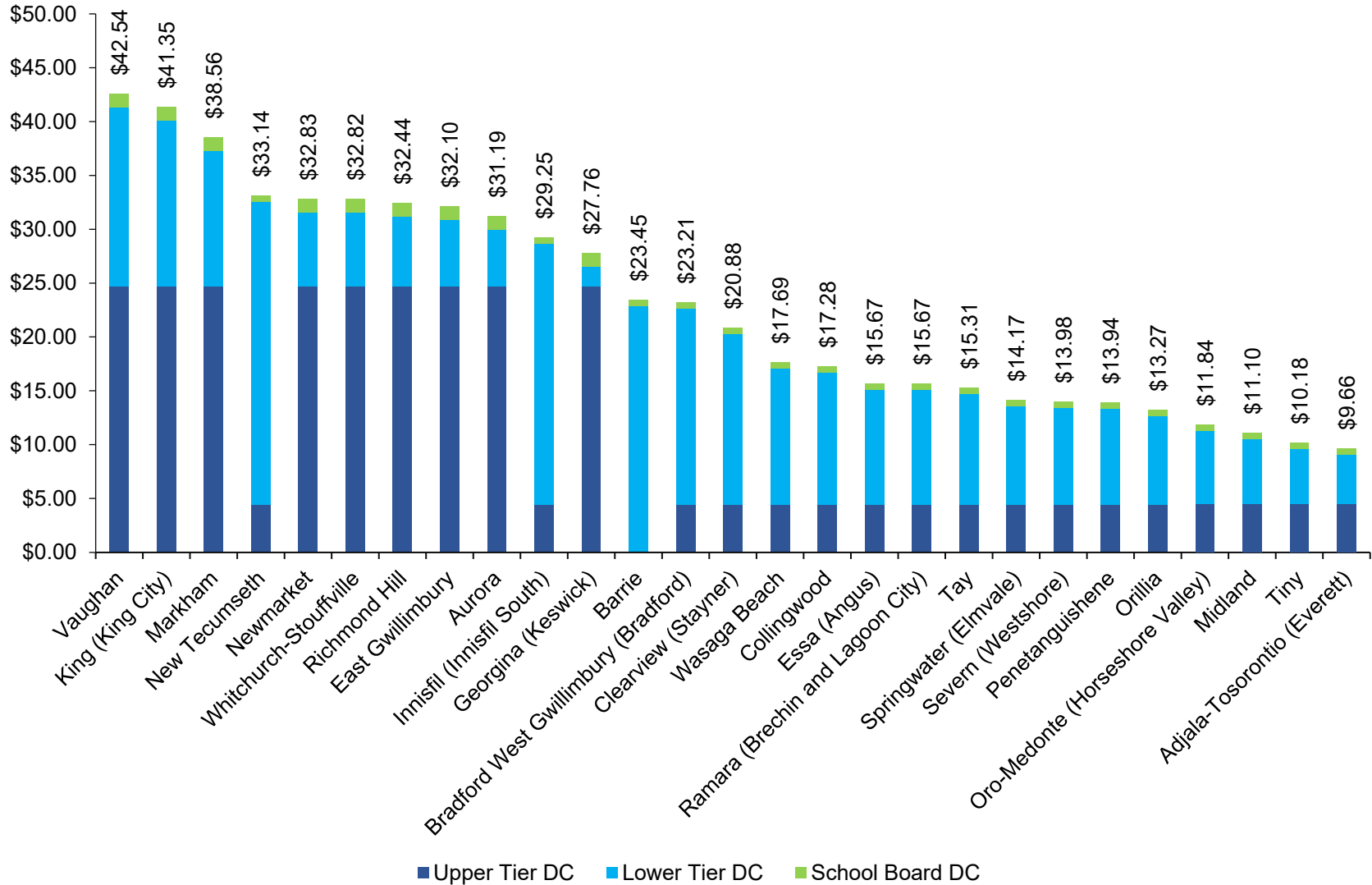


Figure A-14

**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 benefit 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 MTSAs located along the YNSE Richmond Hill Centre, Langstaff-Longbridge, Royal Orchard MTSA, Clark Avenue and Steeles.

ii. 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.

iii. Shares of Population in MTSAs

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 MTSAs 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 MTSAs.

In addition to the shares of population growth in the MTSAs, ridership data suggests that trip origins in the MTSAs 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.

iv. 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

v. 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.

vi. 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: 2022 Development Charges Bylaw

THE REGIONAL MUNICIPALITY OF YORK**BYLAW NO. 2022-XX**

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, 1997*, S.O. 1997, c. 27 (the “Act”) authorizes Regional Council 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 May 5, 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 (2) 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 March 24, 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 May 26, 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 May 26, 2022 that no further public meeting be required and that this bylaw be brought forward for enactment;

The Council of The Regional Municipality of York hereby enacts as follows:

1.0 DEFINITIONS

1.1 In this bylaw, the following definitions apply:

“**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 three (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:

- (a) the assembly of large gatherings of persons for trade, business or educational purposes, or any combination thereof;
- (b) the display of products or services;
- (c) accessory uses may include administrative offices, display areas, show-rooms, training facilities and banquet facilities, but does not include a banquet hall;

“development” means construction, erection or placing of one or more buildings or structures on land or the making of an addition or alteration to a building or structure that has the effect of increasing the size or changing the use thereof from nonresidential to residential or from residential to non-residential and 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 (2) 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 (1) 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 Spadina Subway Extension, Yonge North Subway Extension, police, ambulance services, public health, waste diversion, public works, housing services, court services, growth studies, and long-term care/seniors services;

“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 three (3) and not more than eight (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 four (4) or more storeys above grade, consisting of four (4) or more dwelling units and shall not include a stacked townhouse, which is less than four (4) dwelling units and four (4) 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 (1) 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;

“Region” means The Regional Municipality of York as a municipal corporation and, where the context requires, its geographic area;

“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:

- (a) water;
- (b) wastewater;
- (c) roads;
- (d) transit;
- (e) Toronto-York Spadina Subway Extension;
- (f) Yonge North Subway Extension;
- (g) police;
- (h) ambulance services;
- (i) public health;
- (j) waste diversion;
- (k) public works;
- (l) housing services;
- (m) court services;
- (n) growth studies; and
- (o) long-term care/seniors services.

“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 (1) 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 (3) 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 (1) 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 two (2) dwelling units;

“semi-detached triplex” means one (1) of a pair of triplexes divided vertically one (1) 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 (1) dwelling unit that is not attached to another structure above grade. For greater certainty, a residential building consisting of one (1) 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 three (3) dwelling units, being separated from the other vertically and/or horizontally, each dwelling unit having an entrance to grade or where the entrance is shared with no more than two (2) other units at grade.

“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 three (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 three (3) dwelling units, each of which has a separate entrance to grade;

“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 Spadina Subway Extension;
- (f) Yonge North Subway Extension;
- (g) police;
- (h) ambulance services;
- (i) public health;
- (j) waste diversion;
- (k) public works;
- (l) housing services;
- (m) court services;
- (n) growth studies; and
- (o) long-term care/seniors services.

2.2 The components of the services designated in Section 2.1 are described in Schedule A.

3.0 APPLICATION OF BYLAW RULES

3.1 Development charges shall be payable in the amounts set out in Sections 3.6, 3.9, 3.10 and 3.11 of this bylaw where:

- (a) the lands are located in the area described in Section 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 11.13 of the background study.

Area to Which bylaw Applies

3.2 Subject to Section 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*; or
 - (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 (1) development charge for each service designated in Section 2.1 shall be imposed upon any lands, buildings or structures to which this bylaw applies even though two (2) or more of the actions described in subsection 3.4(a) are required before the lands, buildings or structures can be developed.

- (c) Notwithstanding subsection 3.4(b) and notwithstanding any other Section of this bylaw, if two (2) 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 subsections 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) a hospice;
 - (d) 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;
 - (e) 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;
 - (f) non-residential uses permitted pursuant to Section 39 of the *Planning Act* or any successor thereto;
 - (g) agricultural uses;

- (h) 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 Section 3.10 on the retail component;
- (i) a public hospital receiving aid under the *Public Hospitals Act* or any successor thereto;
- (j) 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), (c) or (d) 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;
 - (iii) 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;
 - (iv) 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;

- (b) 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 Notwithstanding subsection 3.6(a),

- (a) a development charge with respect to regional water services shall not be imposed against the lands identified on the legend shown on Schedule C;
- (b) a development charge with respect to regional wastewater services shall not be imposed against the lands identified on the legend 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 Section 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;
- (iii) 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;
- (iv) 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 Notwithstanding subsection 3.9(a)(iv), 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;
- (iii) 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;
- (iv) 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 Notwithstanding subsection 3.10(a)(iv) 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;
- (iii) 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;
- (iv) 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 Notwithstanding 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 Sections 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 Section 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 Sections 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 Notwithstanding Section 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 Section 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 Section 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 were exempted, 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 Section 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 subsection 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 Section 3.15 and subsection 3.15.1.

Reduction of Development Charges Where Gross Floor Area is Increased

3.16 Notwithstanding 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 Development Charge Interest Policy-Under sections 26.1 and 26.2 of the Development Charges Act, 1997, 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 (1) 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 subsection 3.4(a)(i) to (vi) being required.

3.19 Notwithstanding Section 3.18, development charges with respect to Region-wide Charges imposed under subsection 3.6(a)(ii)(iii)and(iv) 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 Section 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 Sections 3.19 and 3.20, and notwithstanding any other provision of 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 Section 3.18.
- 3.22** Notwithstanding Section 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 Development Charge Interest Policy - Under sections 26.1 and 26.2 of the Development Charges Act, 1997, as may be amended by Regional Council.
- 3.23** Notwithstanding Sections 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 Notwithstanding subsections 3.23(c) and (d), a refund shall not exceed the amount of the development charges paid under Section 3.19

4.0 PAYMENT BY SERVICES

4.1 Notwithstanding the payments required under Sections 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 1, 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 Designated Services
- Schedule B - Residential Development Charges
- Schedule C - Lands Exempt from Residential Development Charge in Regard to Regional Water Supply Services (Kleinburg Community)
- 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 EFFECTIVE DATE

7.1 This bylaw shall come into force on June 17, 2022.

8.0 DATE BYLAW EXPIRES

8.1 This bylaw will expire on June 16, 2027, unless it is repealed at an earlier date.

9.0 REPEAL

9.1 Bylaw Nos. 2017-35 and 2018-42 are hereby repealed effective June 16, 2022.

ENACTED AND PASSED on *, 2022.

Regional Clerk

Regional Chair

*Authorized by Item * of the Committee of the Whole dated *, 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

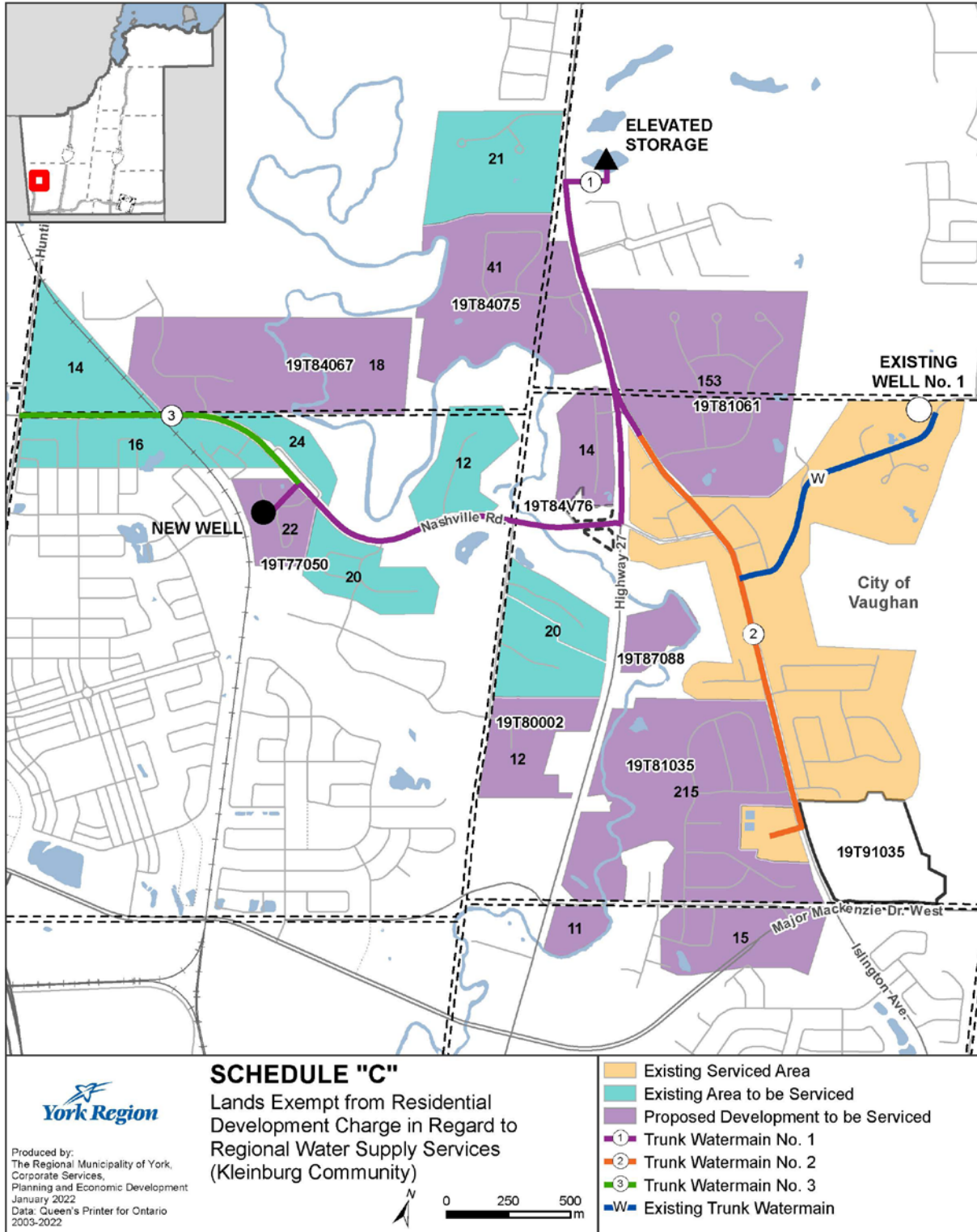
**SCHEDULE B
RESIDENTIAL DEVELOPMENT CHARGES
(\$ per unit)**

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	8,954	7,450	5,781	3,760
Wastewater	20,944	17,425	13,523	8,795
Roads	25,897	21,546	16,721	10,875
Subtotal Hard Services	55,794	46,421	36,024	23,430
<u>General Services</u>				
Transit	7,689	6,397	4,964	3,229
Toronto-York Spadina Subway Extension	3,448	2,869	2,226	1,448
Yonge North Subway Extension	5,837	4,856	3,769	2,451
Public Works	549	456	354	230
Waste Diversion	362	301	234	152
Police	1,078	897	696	453
Housing Services	1,608	1,338	1,038	675
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	21,965	18,275	14,182	9,224
Total	77,758	64,697	50,206	32,654

*Village of Nobleton is excluded in this table and is subject to a separate charge for Wastewater Treatment services

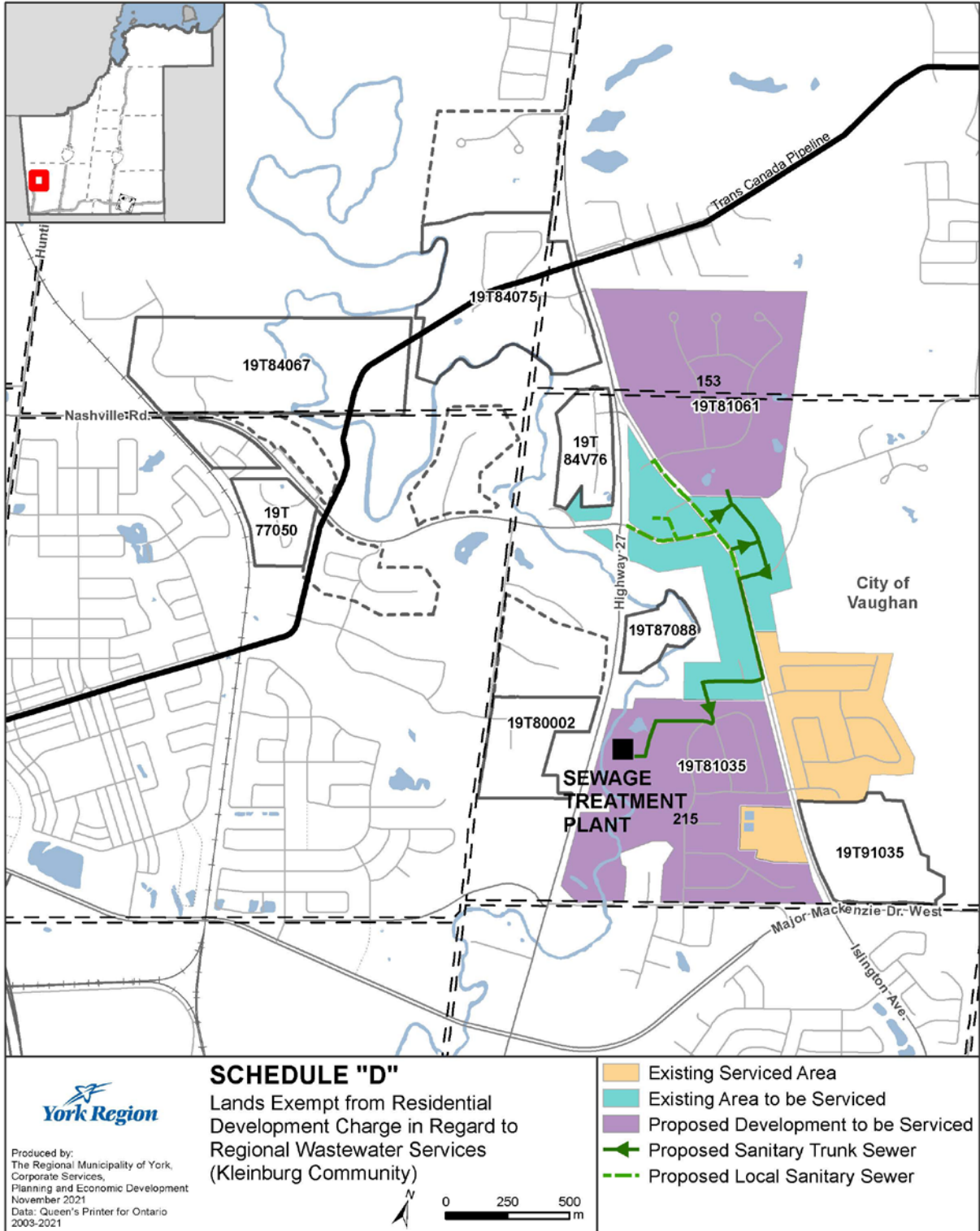
SCHEDULE C


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)




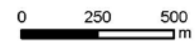


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2003-2021

SCHEDULE "D"

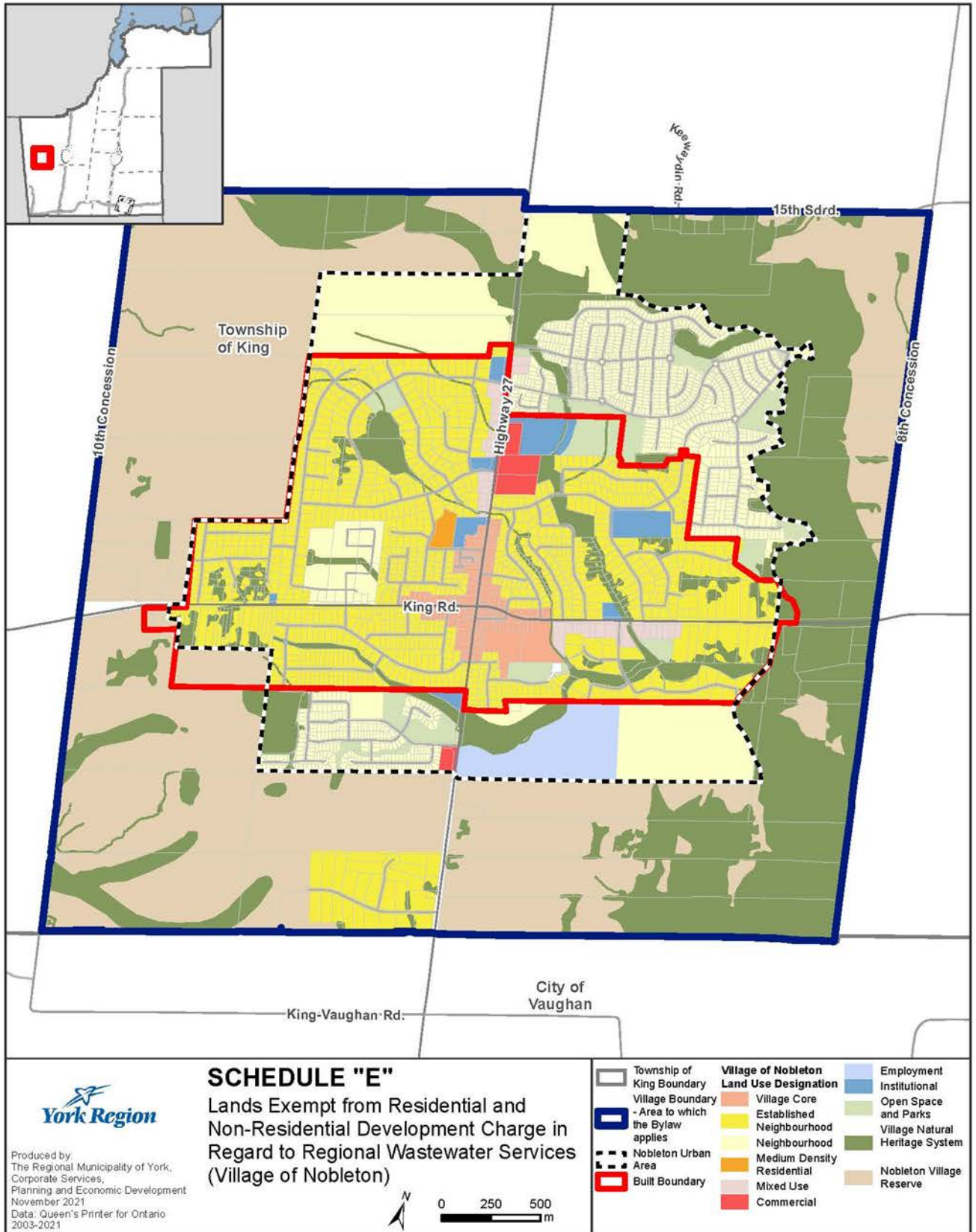
Lands Exempt from Residential
Development Charge in Regard to
Regional Wastewater Services
(Kleinburg Community)

- Existing Serviced Area
- Existing Area to be Serviced
- Proposed Development to be Serviced
- Proposed Sanitary Trunk Sewer
- Proposed Local Sanitary Sewer

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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	4.22	2.79	0.91	45.42	30.03	9.80
Wastewater	9.9	6.58	2.13	106.56	70.83	22.93
Roads	27.39	8.57	4.53	294.82	92.25	48.76
Subtotal Hard Services	41.51	17.94	7.57	446.81	193.10	81.48
General Services						
Transit	7.90	2.54	1.36	85.03	27.34	14.64
Toronto-York Spadina Subway Extension	3.61	1.14	0.62	38.86	12.27	6.67
Yonge North Subway Extension	5.92	1.96	1.04	63.72	21.10	11.19
				0.00	0.00	0.00
Public Works	0.65	0.16	0.10	7.00	1.72	1.08
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	19.1	6.47	3.34	205.59	69.64	35.95
Total	60.61	24.41	10.91	652.40	262.75	117.43

*Village of Nobleton is excluded in this table and is subject to a separate charge for Wastewater Treatment Services. Numbers may not add up due to rounding.

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)	TBDA 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.

2022 DC Bylaw Public Meeting Summary

Request/Feedback	Raised by	Response/Consideration
Not impose/defer DCs on hospices	<ul style="list-style-type: none"> • Council • Deputation 	<p>Amend – Section 3.5.1 of the Bylaw</p> <p>To reflect the need for this vital service and to simplify the existing process, it is being recommended that Section 3.5.1 of the 2022 Bylaw provide a development charge deferral or exemption for hospices, contingent on local municipal matching.</p> <p>If the local municipality provides a development charges exemption, that exemption would be funded through the tax levy or user rates</p>
Provide more information on area-specific development charges, including an inter-jurisdictional scan	<ul style="list-style-type: none"> • Council • Deputation • Communications 	<p>Hold – Maintain Region-wide Uniform rate structure Review as part of next update</p> <p>As required under the Act, staff considered the use of area-specific development charges with every bylaw review.</p> <p>Details on the consideration of area-specific development charges for 2022 Bylaw were provided in the February 2022 Council report (including the Private Attachments).</p> <p>Council endorsed, in principle, the application of a uniform Region-wide rate structure for the 2022 DC bylaw as being most appropriate because:</p> <ul style="list-style-type: none"> • Regional services are managed as a network and the level of service is relatively consistent across the Region. Improvement in one part of the system has an impact on another • Aligns with the use of uniform Region-wide property taxes to fund the non-DC share of costs • Deviation from a uniform approach may set a precedent for other services or projects (e.g., Upper York Water Reclamation Centre) • Data and robust methodologies are available to demonstrate the need for growth-related infrastructure due to projected growth • Uncertainties regarding ongoing negotiations with the Province on the Transit Oriented Communities (TOCs) <p>Hemson Consulting revisited the applicability of area-specific development charges for the Region's services, including a delineation based on Greenfields and Built Boundary. Hemson also developed an in</p>

Request/Feedback	Raised by	Response/Consideration
Extend planning horizon of the Bylaw to 2051	<ul style="list-style-type: none"> • Deputation 	<p>inter-jurisdictional scan of what local and neighboring municipalities do (Attachment 3) and concluded:</p> <ul style="list-style-type: none"> • The Region’s approach to levying development charges on a uniform, Region-wide basis is the most defensible and suitable for the services that the Region provides • Area-specific development charges are most common at lower or single tier municipalities, for infrastructure with a clearly delineated benefitting area (e.g., stormwater) • Area-specific development charges would not be the appropriate mechanism to ‘reduce’ the development charge rates for structure type • Some local and single-tier municipalities do use discounts, funded from non-development charges sources (i.e., taxes or user rates) to reduce the development charge rates in specific geographic areas (e.g., downtown revitalization, office attraction etc.). <p>Hold – Maintain 2041 Planning Horizon Review as part of next update</p> <p>As part of November 2021 report, Council approved a 20-year planning horizon to 2041:</p> <ul style="list-style-type: none"> • It strikes a balance between capturing long-term infrastructure needs while mitigating the forecasting risks with a 30-year planning horizon • Master plans that support growth to 2051 are still under development. However, project costs and timing to 2041 were reviewed by Council as part of budgets and previously approved master plans • Neighbouring municipalities have not used a 30-year horizon for their DC bylaws <p>The Region’s 2022 DC Bylaw may be reviewed prior to its statutory maximum five-year period. The decision would depend on multiple factors, such as major changes in growth and/or cost assumptions. The extension of the planning horizon to 2051 could be part of that review.</p> <p>It should be noted that extending the planning horizon of a bylaw does not necessarily mean higher or lower development charge rates. While extending the planning horizon allows a municipality to include more growth-related project costs, those costs would also be spread across a larger population and employment base.</p>

Request/Feedback	Raised by	Response/Consideration
<p>Consider raising the delineation point for small and large apartments from 700 sq.ft. to 1,000 sq.ft. <u>or</u> create multiple delineation points</p>	<ul style="list-style-type: none"> • Council • Deputation 	<p>Hold – Maintain current delineation at 700 sq.ft. Review as part of next update</p> <p>As part of November 2021 report, Council approved a delineation point of 700 sq.ft. (analysis using 2016 Census and size data of close to 35,000 apartment units confirmed threshold as appropriate). The methodology used was developed in consultation with BILD industry</p> <p>Raising delineation point to 1,000 sq.ft.:</p> <ul style="list-style-type: none"> • Could capture most apartments in the Region as “small apartments” resulting in a de facto conflation of apartment categories, indirectly going against precedent in <i>Halton*</i>, making the 2022 Bylaw vulnerable to appeal • Would result in higher rate for development charge rates for small and large apartments <p>Creating multiple delineation points would require developing new persons per unit and housing mix forecasts which cannot be completed in time for the 2022 Bylaw. In addition, once a delineation point is introduced, it would be difficult to combine the categories in the future (i.e., going against the precedent in <i>Halton</i>).</p>
<p>Clarify the BRT costs/DC rate impact in the 2022 Bylaw</p>	<ul style="list-style-type: none"> • Council • Deputation 	<p>Further information provided</p> <p>To accommodate future growth, the 2022 Bylaw includes \$2.9B in gross BRT costs; \$534M of which is eligible for DC recovery under the 2022 Bylaw:</p> <ul style="list-style-type: none"> • The overall BRT program is estimated to cost \$5.4B over 30 years. It is assumed that 73% or \$3.9B would be funded by senior levels of government and the remaining 27% or \$1.46B would be funded through Regional sources. • The portion that is recoverable under the 2022 Bylaw (\$534M) is approximately 44% of the estimated DC-eligible portion of the overall BRT program. <p>In the 2022 Background Study, the BRT program is divided between:</p> <ul style="list-style-type: none"> • Road improvements (widening) which is included under the Roads Service; and • Transit component (shelters, stations etc.) which is included under Transit Service, subject to a 10-year planning horizon limit.

Request/Feedback	Raised by	Response/Consideration
Revisit benefit to existing and post period benefit deduction assumptions	<ul style="list-style-type: none"> • Deputation 	<p>The DC rate related to the BRT program is about \$5,128 for a single-detached dwelling, or about 7% of the residential DC rates</p>
Develop options to address housing affordability challenges	<ul style="list-style-type: none"> • Council • Deputations • Communications 	<p>No change to overall methodology</p> <p>Staff reviewed assumptions and held additional consultations with stakeholders (e.g., BILD). Some technical changes to roads services Benefit to Existing deduction and Post Period Benefit deduction were made where warranted on a project-specific basis</p> <p>Continued advocacy</p> <p>Review as part of next update</p> <p>Development charges are a cost-recovery tool and not the main driver for market-driven housing prices. Key factors impacting the price of new homes, not within a municipality's control include:</p> <ul style="list-style-type: none"> • Low interest rate environment allowing buyers to afford a higher mortgage • Investors, including foreign buyers, taking up housing stock • An environment in which land prices are appreciating at a rate that makes it more profitable not to build on one's land holdings <p>As part of the 2022 Bylaw review, actions were taken to better align the Region's DC bylaw and policies with The Regional Official Plan objective to support a mix and range of housing options, including:</p> <ul style="list-style-type: none"> • Charging all DC-eligible residential dwellings that are less than 700 square feet (tiny homes), the small apartment rate • Consistent with Statistics Canada's categorization when reporting occupancy data, stacked townhomes will be treated as apartments • Removing the four-storey minimum requirement in the "Development Charges Deferral for Purpose-Built Rental Buildings" policy • Reflecting recent legislative changes premised upon facilitating affordable housing options through Bill 108, <i>More Homes, More Choice Act, 2019</i> which include: <ul style="list-style-type: none"> ○ phase in of development charges payments for rental and non-profit housing ○ exemptions for additional/second suites in existing and new residential buildings <p>A consultant is being procured for the Region's Affordable Housing Implementation Plan to review and update housing affordability policies, which may include a review of financial incentive options for the private market (in parallel with the Community Housing</p>

Request/Feedback	Raised by	Response/Consideration
		<p>Development Master Plan). Financial incentives could be a part of this review, for example:</p> <ul style="list-style-type: none"> • Use of Community Improvement Plans, under the <i>Planning Act</i> and subject to O. Reg 550/06 – “Prescribed Matters — Upper-Tier Community Improvement Plans”, to facilitate development charges reductions, planning fee reductions and/or tax increment equivalent grants • Provision of capital grants for affordable housing
<p>Include additional stakeholders in DC Bylaw consultations</p>	<ul style="list-style-type: none"> • Communication 	<p>Continued and expanded engagement</p> <p>Subsequent to the public meeting, through weekly group meetings and one-on-one communications, staff engaged with interested stakeholders, including deputants, and those who have submitted communication at the public meeting. Topics discussed include:</p> <ul style="list-style-type: none"> • Persons per unit forecast methodology • DC treatment of stacked townhomes • Planning horizon of the 2022 Bylaw • Specific projects in the DC Background Study • DC treatment of hospices
<p>Provide clarification that the 2022 Bylaw timelines, including public meeting and notice for public meeting were in accordance with requirements under the Act</p>	<ul style="list-style-type: none"> • Communication 	<p>Confirmed</p> <p>Office of the Regional Clerk responded, providing clarification that:</p> <ul style="list-style-type: none"> • Under the Act, Council must hold at least one public meeting, with the draft DC bylaw and associated background study being available at least two weeks prior to the meeting • While the 2022 Bylaw and Background Study were tabled at Committee of the Whole on March 3, 2022, both documents were made publicly available on the agenda on February 25, 2022 • The Act requires 20-days’ notice for the public meeting, with the notice being published in all local Metroland newspapers on February 24 • Commensurate with the notice publication, the Region’s DC webpage was updated with the notice information • A link to a supplementary notice was published a week prior to the public meeting, along with the meeting agenda



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MEMORANDUM

To: Members of York Region Council

From: Craig Binning and Nataliya Kelbas, Hemson Consulting

Date: April 22, 2022

Re: ASDC Methodology including Greenfield and Built Boundary delineation

This memorandum provides members of York Region Council with comments on Area Specific Development Charge (ASDC) methodology as part of the ongoing advice on the Region's 2022 DC Background Study development. At the public meeting held on March 24th, 2022, members of Regional Council requested additional information on area-specific development charges, particularly, built-boundary vs greenfield charges.

This memo includes our opinion regarding the appropriateness of the region-wide structure for Regional services, including why a built boundary or greenfield delineation would not be the appropriate mechanism for recovering growth-related costs, supported by an inter-jurisdictional review of uniform vs ASDC structures.

A. BACKGROUND

a) What are ASDCs?

Under section 2(9)(11) of the Development Charges Act (DCA), Council enacting a DC By-law must give consideration to the use of area rating. DCs can be levied on a region-wide basis, area-specific or a combination of the two. Area-specific rate structure has three dimensions: geography, service and development charge rate category.

Dimension	Description
Geography	Infrastructure servicing requirement is directly attributed to a definable geographic area.
Service	The benefiting population or population and employment to a specific service can be clearly isolated.
Development charge rate category	Infrastructure considered for ASDC could be a distinct or sub-category of a development charge rate category.

An area-specific development charge is appropriate when there is a clearly defined geographic area, benefiting development and a specific development charge eligible service. This criteria typically aligns most closely to hard infrastructure or engineering projects such as water towers, water mains, sewer pumping stations, sewer mains and sometimes roads and related infrastructure. ASDCs in Ontario are typically not used for “soft” services or protection services such as social housing, paramedic stations or others. These types of services are typically planned for and delivered on a municipality-wide basis and therefore an area-specific approach would be inappropriate. This report focuses on the use of ASDCs for transit related infrastructure and also examines the use of ASDCs for other services by upper-tier governments.

b) Greenfield vs Built Boundary

One common way to differentiate rates in a developing municipality is to charge a varied rate based on the development being within the built boundary or in a greenfield area. In particular this relates to engineering services of water, wastewater, roads and sometimes stormwater. Typically greenfield development implies that servicing is needing to be extended and so local linear infrastructure or potentially a localized pumping station or water tower. These capital costs in the Region are under the responsibility of the local municipalities. A number of the York Region area municipalities, notably Markham, Vaughan and Richmond Hill, use DC area-rating extensively to reflect difference in servicing costs between greenfield areas and development within the built boundary.

Other services like long-term care/senior, housing, court, growth studies, protection, health and waste diversion benefit all development across the region. Furthermore there is no data available in the Region to support a higher share of cost should be attributed to built boundary or greenfield areas.

In Hemson’s opinion the Region’s use of region-wide DC appropriately reflects the nature of the infrastructure provided by the Region and that a number of the area-municipalities effectively utilize area-rating to reflect geographic differences in more localized linear infrastructure.

c) Other Considerations

Looking beyond development charges, the Region levies property taxes and user rates on a region-wide basis. The non-DC eligible portions of growth-related infrastructure would therefore be collected for in a uniform region-wide manner. In introducing area-specific

recoveries, the way in which the other portions of the capital costs is paid for is given consideration.

B. PRINCIPLES AND CONSIDERATIONS FOR ASDC RATES IN YORK REGION

Area-specific rates would better apportion costs based on servicing requirements where the delineation of the benefitting user is clear. This would result in lower development charges in some areas, and higher charges in others. This effect may provide a financial incentive for developers to build in low cost areas. Excessively high ASDCs may discourage development in the areas contrary to the goals of the Region's Official Plan. Introduction of an ASDC should be reviewed from a feasibility perspective to ensure no adverse effect is created on the Region's planning policies.

Considerations used in evaluating the appropriateness of an area-specific approach include:

- Is the service accessible to everyone across the Region?
- Is the need for service growth determined based on the overall population and employment growth in the Region?
- Is the service managed as a network? Does improvement in one part of the system impact another part of the system?

Service-specific considerations and proposed methodology are detailed in the following section.

C. SERVICE-BASED CONSIDERATIONS

The following section provides a discussion to the methodology used to determine if ASDCs are appropriate recovery mechanisms for DC Services in the Region's 2022 By-law. These services consist of:

- | | | |
|-------------------------|----------------------------------|--------------------|
| ▪ Water | ▪ Waste Diversion | ▪ Housing Services |
| ▪ Wastewater | ▪ Police | ▪ Growth Studies |
| ▪ Roads | ▪ Ambulance Services | ▪ Public Works |
| ▪ Transit | ▪ Public Health | ▪ Court Services |
| ▪ Subways (TYSSE, YNSE) | ▪ Long Term Care/Senior Services | |

Under each service is a description of key considerations and typical DC calculation approaches for each service for which DCs are currently levied in the York Region, supported by several municipal examples. Area rating is most typically restricted to engineered services, although there are some examples of area rating for general services within a small number of Ontario municipalities.

The following section details by service category the appropriateness of using ASDCs for the recovery of growth-related costs.

i. Long Term Care/Senior Services, Housing Services, Court Services, and Growth Studies

These services are typically calculated and levied on a municipal-wide basis for the following reasons:

- Facilities are open and accessible to all residents in the municipality;
- Needs are established and planned for based on municipal-wide population growth;
- For some services like growth studies, increased online and digital material supports a municipal-wide approach; and
- Many facilities have different functions and are destination centres attracting residents from across the region.

While area rating of these services is rare, it may be considered in municipalities with central locations that have well established facilities with sufficient capacity to meet the anticipated needs arising from intensification. This can serve as a rationale for a lower DC rate in central locations. Ottawa applies a hybrid approach, with City-wide charges for protection, studies, recreation and library in addition to area-rated DCs for the broad areas of inside the greenbelt, outside the greenbelt, and rural areas.

York Region does not have clear geographical areas among which there would be any significant difference in the nature of long term care/senior, housing, court, and growth related studies service delivery. The capital costs included in the Region's DC Study align best with the entire geography of the municipality. As such, a region-wide approach to the calculation and applications of these DCs will likely continue to be appropriate.

ii. Protection and Health Services (Police, Ambulance and Public Health)

Similar to social services above, protection and health services benefit all residents and employees in the region. The following factors would be considered in applying an ASDCs to these services:

- Facilities are open and accessible to all residents in the municipality;
- Needs are established and planned for based on municipal-wide population growth;
- For some services such as public health, increased online and digital material supports a municipal-wide approach; and
- Many facilities have different functions (i.e. education) and are destination centres attracting residents from across the region.

There is one instance of the surveyed municipalities where police services are levied on an area-specific basis in Peel Region. In that example, it is to account for the service delivery in Caledon being done by OPP rather than Peel Region Police.

There are no definitive areas in the Region that have differentiated demand on these services and so no ASDC is recommended for protection and health services. A region-wide approach to the calculation and application of these DCs continues to be the most appropriate.

iii. Waste Diversion

Waste diversion services are also driven by, planned for, and delivered on a municipal-wide basis, with typically no significant differences in service delivery or cost across geographic areas. Hemson is not aware of any municipalities that have introduced area rating for waste management services DCs. As such, a region-wide methodology is most appropriate for the recovery of waste diversion DCs.

iv. Water, Wastewater, Roads, Transit and Subway

The engineering services, with the exception of transit, are the most common services to which ASDCs apply as noted in the survey of municipalities.

It is common practice to not levy water or wastewater rates against development which does received servicing. The Region follows that methodology, water and wastewater are only levied against serviced development. This itself does not necessarily constitute an ASDC but does generally follow the built boundary. Of importance to the structure of the delivery of these services in the Region is that the upper-tier is responsible for providing water and wastewater treatment, trunk conveyance and delivery services. Capacity from the Region system is allocated to local municipalities, who are responsible for delivering the services to individual customers.

Of note in the municipal comparison, the Region of Halton levies water and wastewater DCs on Greenfield and Built Boundary DC. In Halton Region's 2022 DC Background Study it

notes, the area specific water and wastewater charges were calculated based on the distribution/collection infrastructure required to service growth planned within the Greenfield and Built Boundary areas. The DC rates relating to the water and wastewater capacity (e.g. plant expansions) are calculated on a Region-wide basis given the difficulty in identifying area specific infrastructure related to capacity projects. Similar to the Region of Halton, York Region levies capacity projects such as plant expansions on a uniform basis. As noted previously, in York Region, the distribution and collection of water and wastewater falls with the local municipalities.

As indicated in the Region's 2022 DC Background Study, uniform residential and employment design unit rates are used to identify and plan for infrastructure needs over the long term.

Another approach is to split the capital programs based on urban and rural areas. For example, in the City of Kitchener, sanitary and water services are levied against suburban areas and an intensification allowance charge for the Central Neighbourhood. This is reflective of the way in which the City has approached the planning of the capital works and the way in which it has collected in the past and likely to continue into the future.

The road network in the Region is generally treated as a single network for the purposes of capital planning. It is also accessible to residents and employees across the Region. Typically regional road infrastructure, where it is not a local service, is recovered for on a region-wide basis.

The use of ASDCs for transit was explored as part of this DC Background Study review and analysis of the Yonge North Subway Extension benefitting area can be found under Appendix B of the 2022 DC Background Study.

Consideration was given to using ASDCs throughout the study period and based on the way in which the Region plans for delivering the services, past methodology and planned capital program a region-wide approach continues to be the most appropriate method for recovering development-related costs.

D. CONCLUDING REMARKS

Of the municipalities surveyed, ASDCs are used in specific cases where there is a clear benefit of the capital works related to the anticipated development. The Region's current approach of levying most services, with the exception of the Nobleton Wastewater rate, on a region-wide basis to be both appropriate and defensible under the Development Charges Act.

A final point is some municipalities such as Niagara Region have reduced DCs for specific areas such as Brownfield redevelopment sites. This type of exemption or reduction in DCs is permitted under the by-law but the shortfall created by this policy initiative cannot be made up from higher DCs elsewhere. Likewise the cities of Brantford provide for DC exemptions and reductions in defined downtown areas, the foregone DC revenues in these areas are funded from property taxes and utility rates. In another example, the City of Kitchener prior to 2019 had an exemption on all DCs in the downtown core. Although it is critical to be mindful of the potential impacts DCs and the DC rate structure could have on various developments, as the DCA is highly prescriptive in nature and therefore other tools such as CIPs, grant programs or others are best suited for achieving policy goals.

E. TABLE OF MUNICIPAL SURVEY

The following table includes the methodology applied in the latest DC Study by municipality.

#	Municipality	Tier	Uniform/Municipal-wide or Area Specific DC
1	Halton Region	Upper	Water and Wastewater Services – area-specific (Built Boundary and Greenfield) including rural if at the time of building permit is issued for the development, a connection of the building to water and/or wastewater services is proposed. Residential Water, Wastewater and Roads Recovery of Early Payment Development Charge – Recovery Area identified as Recovery DC Area (2012-2021) on Schedule “A” of By-law 37-17 where such lands require a servicing allocation under a future allocation program.
2	Peel Region	Upper	Region-wide uniform rates with one exception: The exception is Town of Caledon, which is not serviced by Region of Peel Police but instead pays for OPP services.
3	Durham Region	Upper	Region-wide uniform with one exception Water and Sanitary Sewage ASDC for Seaton Service Area in Pickering

#	Municipality	Tier	Uniform/Municipal-wide or Area Specific DC
4	Waterloo Region	Upper	<p>Region-wide uniform with two exceptions:</p> <p>Rates for Transit are only applicable to the Cities of Cambridge, Kitchener and Waterloo.</p> <p>Library services apply only to Townships of North Dumfries, Wellesley, Wilmot and Woolwich. (The cities have their own Library Boards and recovered under local DCs.)</p>
5	Niagara Region	Upper	<p>Region-wide uniform.</p> <p>Note: DC reductions available in Brownfield Development Areas.</p>
6	Simcoe County	Upper	All services uniform.
7	Toronto	Single	All services uniform.
8	Hamilton, City	Single	All services uniform with the exemption of the Dundas and Waterdown ASDC related to wastewater services (Equalization Tank, diversion forcemain and sanitary sewers).

#	Municipality	Tier	Uniform/Municipal-wide or Area Specific DC
9	Ottawa	Single	<p>City-wide Services & Inside the Greenbelt / Outside Greenbelt / Rural</p> <ul style="list-style-type: none"> ▪ Roads and Related Services ▪ Sanitary (Waste Water) ▪ Water ▪ Stormwater Drainage ▪ Protection ▪ Public Transit ▪ Parks Development ▪ Recreation Facilities ▪ Libraries ▪ Paramedic Services ▪ Affordable Housing ▪ Corporate Studies <p>6 ASDCs</p> <ul style="list-style-type: none"> ▪ Millennium Park (District Parks) ▪ Village of Manotick (Sanitary Sewer & Water) ▪ Village of Richmond (Sanitary Sewer) ▪ Provence Ave (Roads & Sanitary Sewer) ▪ Flag Station Road (Roads) ▪ Trillium Line Extension (Public Transit)
10	Peterborough, City	Single	8 ASDCs for sanitary trunk sewers, stormwater facilities and servicing and planning studies.
11	Windsor	Single	Sandwich South Planning District ASDC for Roads, Sanitary Sewer, Storm Sewer & Municipal Drains, and Water.
12	Brantford	Single	<p>Northern Settlement Expansion Area & Tutela Heights Settlement Area ASDCs –</p> <ul style="list-style-type: none"> ▪ Roads and Related ▪ Water Services ▪ Wastewater Services ▪ Stormwater
13	Aurora	Lower	All services uniform.

#	Municipality	Tier	Uniform/Municipal-wide or Area Specific DC
14	East Gwillimbury	Lower	ASDC for Yonge Street Watermain.
15	Georgina	Lower	ASDCs for Services Related to a Highway, Water, Sewer, and Development-Related Studies in 4 service areas.
16	King	Lower	ASDC for Water Serviced areas (King City, Schomberg & Nobleton) and Wastewater serviced areas (King City & Nobleton). All other services are Township-wide.
17	Markham	Lower	18 ASDCs levied based on land area for mainly Sanitary Sewer and Storm Water Management. Total of 22 ASDCs proposed in 2022 DC Study/By-law.
18	Newmarket	Lower	ASDC for the Northwest Quadrant for services related to a Highway, Water, Wastewater and Stormwater.
19	Richmond Hill	Lower	ASDCs in 8 areas related to the following services: <ul style="list-style-type: none"> ▪ Collector Roads (including new road construction, road improvements, land, intersection improvements, street lighting and signals) ▪ Watermains and Appurtenances ▪ Sanitary Sewers and Appurtenances ▪ Storm Sewers and Appurtenances ▪ Boundary Road Surface Works (sidewalks, landscaping and street lighting) ▪ Studies (including Master Environmental Servicing Plans, Environmental Management Studies, Secondary Plan Studies and Consulting Studies)
20	Vaughan	Lower	Various ASDCs for water, wastewater and stormwater services. Currently have 13 ASDCs in place, proposing to close 1 and create 2 new ones in upcoming DC approval.

#	Municipality	Tier	Uniform/Municipal-wide or Area Specific DC
21	Whitchurch-Stouffville	Lower	All services uniform. Developments not receiving water and/or sewer services are not obligated to pay those charges.
22	Mississauga	Lower	All services uniform.
23	Brampton	Lower	All services uniform.
24	City of Waterloo	Lower	All services uniform.
25	City of Kitchener	Lower	Central Neighbourhoods charged an Intensification Allowance charge as related to engineering works. The Suburban area is allocated other engineering works (Roads, Sanitary, Water, Stormwater, and Engineering Studies).

Regional Council Decision - 2022 Water and Wastewater Master Plan Update

On May 26, 2022 Regional Council made the following decision:

1. Council endorse the 2022 Water and Wastewater Master Plan Update and list of infrastructure projects and programs, exclusive of the Upper York Sewage Solutions project (Attachments 1 and 2)
2. Council approve inclusion of the Upper York Sewage Solution project in the Master Plan Update to meet growth needs in the Towns of Aurora, East Gwillimbury and Newmarket as outlined in Attachment 3
3. The Regional Clerk circulate this report to the Clerks of the local municipalities, conservation authorities (Toronto and Region and Lake Simcoe Region Conservation Authorities), the Director of the Central Region Office, Ministry of the Environment, Conservation and Parks and Ministry of Municipal Affairs and Housing

The original staff report is attached for your information.

Please contact Wendy Kemp, Acting Director, Infrastructure Asset Management at 1-877-464-9675 ext.75141 if you have any questions with respect to this matter.

Regards,

Christopher Raynor (he/him) | Regional Clerk, Regional Clerk's Office, Corporate Services Department

The Regional Municipality of York | 17250 Yonge Street | Newmarket, ON L3Y 6Z1
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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
Environmental Services
April 7, 2022

Report of the Commissioner of Environmental Services

2022 Water and Wastewater Master Plan Update

1. Recommendations

1. Council endorse the 2022 Water and Wastewater Master Plan Update and list of infrastructure projects and programs, exclusive of the Upper York Sewage Solutions project (Attachments 1 and 2)
2. Council approve inclusion of the Upper York Sewage Solution project in the Master Plan Update to meet growth needs in the Towns of Aurora, East Gwillimbury and Newmarket as outlined in Attachment 3
3. The Regional Clerk circulate this report to the Clerks of the local municipalities, conservation authorities (Toronto and Region and Lake Simcoe Region Conservation Authorities), the Director of the Central Region Office, Ministry of the Environment, Conservation and Parks and Ministry of Municipal Affairs and Housing

2. Summary

This report requests Council endorsement of the 2022 Water and Wastewater Master Plan Update (Master Plan Update), which summarizes long-term servicing projects required to meet growth needs to 2051. Upon Council endorsement, staff will notify agencies, Indigenous communities, partners, public and stakeholders of Report finalization and beginning of the review period in accordance with the Municipal Class Environmental Assessment process.

Key Points:

- The Master Plan Update is a long-term servicing plan that identifies infrastructure and programs required to support projected growth to 2051 as envisioned and integrated with the Regional Official Plan and Fiscal Strategy
- To service growth to 2051, \$4.5 billion in new and expanded water and wastewater infrastructure and supporting programs is required. This is an increase of approximately \$200 million since the draft infrastructure plan was shared with Council in [November 2021](#). This increase is primarily due to the introduction of the Water Reclamation Centre Expansion 2 to service additional Whitebelt lands in East

Gwillimbury in response to October 2021 Regional Council motions and other minor refinements

- This Master Plan Update builds on the 2016 plan and continues to meet the servicing needs of our growing communities and supports greater resilience in our water and wastewater systems by using One Water principles to guide decision-making
- Extensive consultation and engagement with a variety of participants, including Indigenous communities, local municipalities, residents and other partners has informed development of the Master Plan Update
- This Master Plan Update highlights the challenges with provision of timely water and wastewater servicing due to protracted Provincial approval timelines and underscores the need for Provincial reform to ensure mandated growth is accommodated

3. Background

Master Plan highlights strategy to achieve water and wastewater servicing requirements and long-term sustainability to support growth to 2051

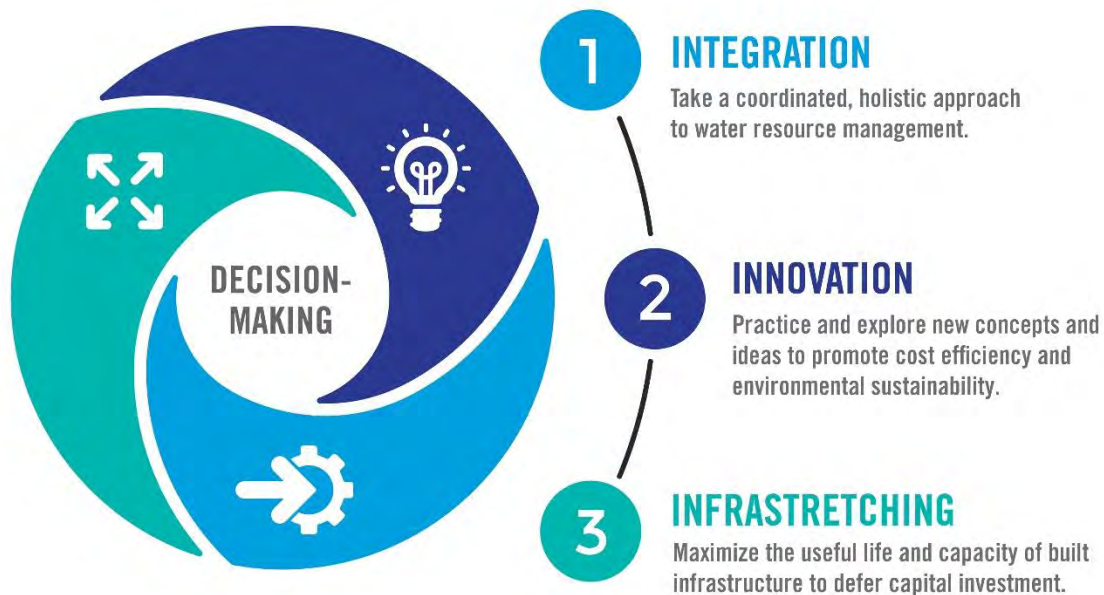
The Water and Wastewater Master Plan is a long-term strategic plan in working towards the Region's Vision of strong, caring and safe communities. As outlined in the [draft Regional Official Plan](#) by 2051 York Region is projected to grow to about 2.03 million residents and employment is projected to grow to 991,000 jobs. The Master Plan Update identifies the infrastructure and programs required to service growth to 2051. This update was integrated with the Municipal Comprehensive Review and Transportation Master Plan using the Council-endorsed principle to align growth with infrastructure, keeping the Fiscal Strategy in mind. Infrastructure costs and timing have informed the Development Charges Bylaw update which will be brought to Council this year.

In alignment with the 2019-2023 Strategic Plan and the Fiscal Strategy, the goal of the Water and Wastewater Master Plan is to develop a long-term servicing strategy that is environmentally sustainable and provides cost-effective and reliable services. To achieve this goal, two key objectives were identified:

- Develop a cost-effective, resilient water and wastewater infrastructure plan to service future growth to 2051 and beyond
- Develop an integrated, long-term approach to provide sustainable water and wastewater services

Three guiding principles have been adopted to guide One Water decision-making and development of strategies to achieve these objectives, as defined in Figure 1 below:

Figure 1
One Water Guiding Principles

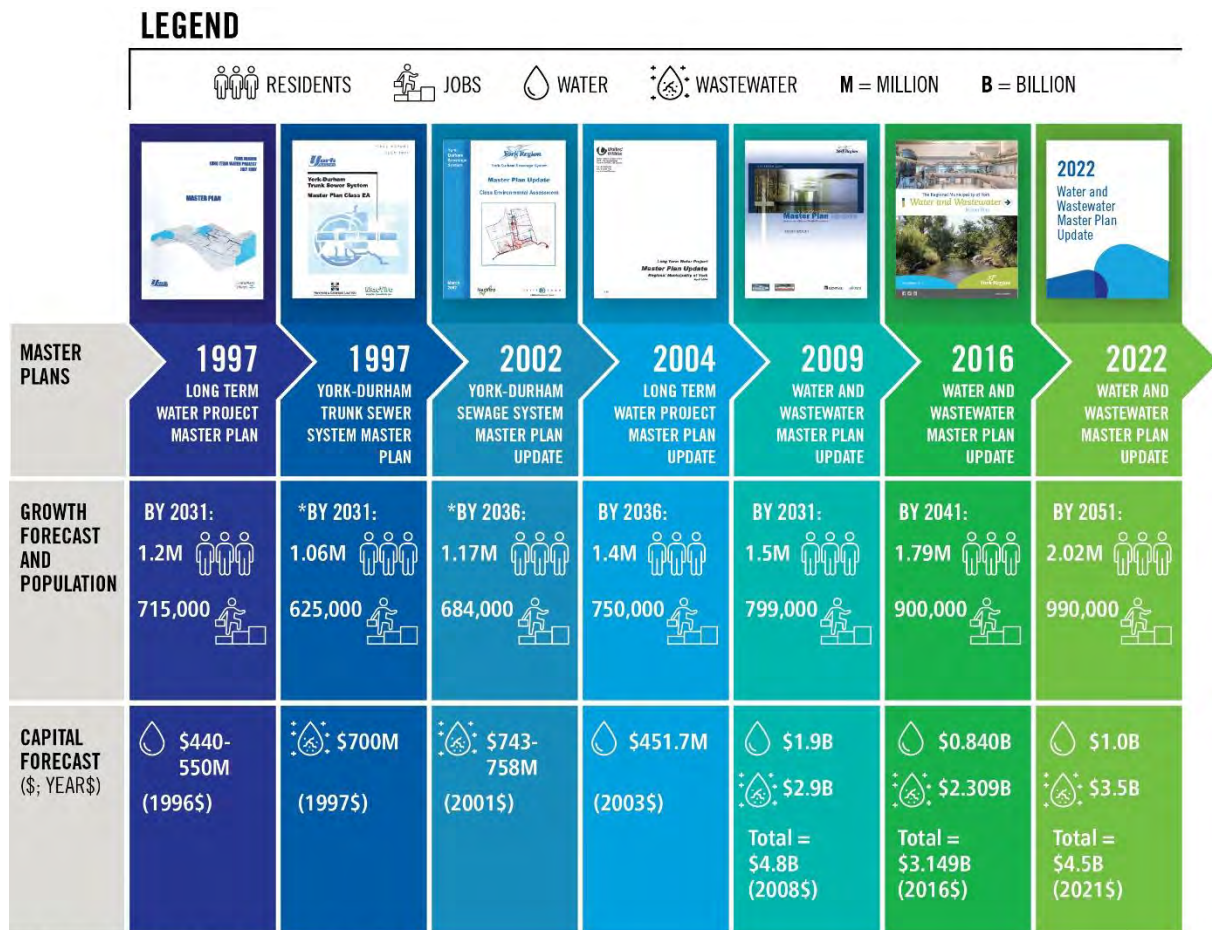


This One Water approach is most effective and fully realized when all three principles are brought together to solve complex problems facing water services and communities. Integrating the Master Plan with demand management and asset management initiatives helps create synergy and increase efficiency. Practicing and exploring innovative new concepts and ideas through the development of the Master Plan and continuing the same throughout the capital planning and delivery processes promotes cost-efficiency and sustainability. York Region recognizes that municipal water systems are part of the larger water cycle in the natural world and that sustainable water and wastewater services benefit communities and the environment while costing less than traditional approaches.

Master Plan is a culmination of previous work and builds upon prior studies

York Region has completed regular updates to the Water and Wastewater Master Plan for over two decades. These iterative updates ensure that long-term strategies reflect evolving needs across the Region (Figure 2). This update, like others before it, was completed according to the Municipal Engineers Association Municipal Class Environmental Assessment process. It builds on strategies identified in the 2016 Master Plan, with adjustments made to account for the revised growth forecast and planning horizon to 2051.

Figure 2
Master Plan History



*Serviced by the York Durham Sewage System only

The 2022 Master Plan Update project plan was provided in the [March 2020](#) report to Regional Council and an update on engagement activities was provided in [June 2021](#). The draft infrastructure plan was shared in [November 2021](#). This work was based on the [March 2021 Land Needs Assessment](#); recognizing the final document would need to reflect any modifications to the population forecast as directed by Council.

Council approved motions that modified the 2051 population forecast in October 2021

Regional Council approved alternatives to the March 2021 Land Needs Assessment at its [October 21, 2021](#) meeting. Approved motions are summarized below:

1. **Township of King – Growth to 2051** – Whitebelt lands not be included to accommodate growth and growth instead be re-directed towards existing and established Villages within Township of King, through a local process
2. **Town of Whitchurch-Stouffville – Future Land Needs for Town of Whitchurch-Stouffville** – a request for Provincial amendment to O. Reg. 140/02: Oak Ridges

Moraine Conservation Plan under the *Oak Ridges Moraine Conservation Act* to permit proposed changes to the settlement area boundary: include a settlement area boundary expansion to include the proposed South Gormley Employment Expansion Area, as well as include a settlement area boundary expansion to the Community of Stouffville to include the proposed Bethesda Lands (in lieu of Whitebelt lands identified in the [September 16, 2021](#) report). Should the Province not support that request, whitebelt lands in Whitchurch Stouffville would be recommended for inclusion in the settlement area boundary.

3. **Town of East Gwillimbury – Include Additional Town of East Gwillimbury Whitebelt Lands in the 2051 Timeframe** – staff designate a minimum of 70% of Whitebelt lands in East Gwillimbury as Community and Employment Areas and include appropriate phasing and front-funding policies in the Regional Official Plan through this Municipal Comprehensive Review
4. **City of Markham – Include Lands West of the Little Rouge as Residential** – the eastern portion of the block bounded by Elgin Mills Road, Kennedy Road, 19th Avenue and Warden Avenue be designated as “Community Area” (as described in the original [motion](#))

This report (see Table 2) highlights changes made to the infrastructure plan since November to align with the [approved growth scenario](#) and showcases how the growth motions made by Regional Council on October 21, 2021 have been addressed in the Master Plan.

4. Analysis

INFRASTRUCTURE PLAN

Master Plan Update confirms 2016 servicing strategies continue to be valid

Through the framework of the Municipal Class Environmental Assessment process for master plans, detailed analysis and evaluation confirmed the high-level strategies identified in the 2016 Master Plan continue to apply. To meet growth needs to 2051:

- Drinking water supply will continue to be met through existing sources and water supply agreements in place with Toronto and Peel
- Additional wastewater treatment capacity will continue to be provided through agreements with Peel and Durham, the Water Reclamation Centre (WRC) proposed by the Upper York Sewage Solutions Individual Environmental Assessment, as well as through stand-alone treatment facilities
- Demand management programs, such as the Long-Term Water Conservation Strategy and Inflow and Infiltration Reduction Strategy, will continue to be integral with managing flows and influencing available capacity in the systems

The preferred servicing strategy, described in detail in [November 2021](#), will not only meet servicing needs of planned growth, but will also enhance system-wide resilience, reduce water age, lower energy consumption and improve water balance. The infrastructure plan as presented in November 2021 has been updated to reflect the approved Council motions as shown in Table 2 below. This resulted in an increase of approximately \$200 million for a total water and wastewater infrastructure cost of \$4.5 billion.

Additional wastewater treatment capacity and timely approval is critical to supporting growth to 2051

Through coordination with the Municipal Comprehensive Review and the Transportation Master Plan Update to align growth with infrastructure, this Master Plan Update emphasizes the principle of infostretching by making best use of the existing system and established long-term servicing agreements. While sufficient water supplies exist, expansion of wastewater treatment capacity is required to meet growth envisioned through the Draft Regional Official Plan.

As reported in the [2021 Servicing Capacity Assignment Status Update](#) there is sufficient capacity assigned within the York Durham Sewage System to support growth for 178,132 persons, over the next six years Region wide (ranges between five to ten years depending on the municipality) based on annual market growth trends.

Sustained investments are planned in the York Durham Sewage System over the coming decades

Elements of the York Durham Sewage System, which collects flows from all local municipalities except Georgina, are expected to reach capacity within the 2051 planning horizon and require significant investment over the next three decades. Works to expand this trunk conveyance system and the Duffin Creek Water Pollution Control Plant are described in the [November 2021](#) report. Regional staff work closely with Durham Region in co-managing our shared wastewater system.

In addition to this master planning work, York Region and Durham Region will jointly complete a Primary System Master Plan following updates to each regional municipality's respective Regional Official Plans. The Primary System consists of the Duffin Creek Plant, Primary Trunk Sewer and some supporting infrastructure located outside the York Region boundary. The Primary System Master Plan will forecast and refine future capital expansion requirements over a 30-year period.

The Region has experienced long delays in getting approvals for key projects. Recent examples include the Upper York Water Reclamation Centre and the Duffin Creek Water Pollution Control Plant outfall capacity expansion, which created uncertainty and added costs. York Region has advocated strongly for changes to the *Environmental Assessment Act* that would allow critical infrastructure to be planned and delivered in a predictable manner while protecting the natural environment.

Twenty-five years ago, York Region Master Plan identified a wastewater project to service growth in Aurora, East Gwillimbury and Newmarket

The 1997 York Durham Sewage System Master Plan first identified a need for a wastewater project to service growth in Aurora, East Gwillimbury and Newmarket. This project eventually became known as Upper York Sewage Solutions. In 2004, the Province of Ontario mandated this project undergo an Individual Environmental Assessment, an unprecedented level of assessment for an infrastructure project required to support already approved growth. In 2009, the Individual Environmental Assessment was publicly launched and in 2010, the Province directed York Region to consider innovative wastewater treatment technologies located within York Region as a possible servicing solution. After more than five years of extensive scientific study and consultation with Indigenous communities, government agencies and the public, York Region submitted the project's Individual Environmental Assessment report to the Province for approval in July 2014.

In October 2021, after more than seven years since the Upper York Sewage Solutions Individual Environmental Assessment was submitted, the Province enacted the [York Region Wastewater Act, 2021](#). This legislation puts an indefinite hold on any decision by the Minister of the Environment, Conservation and Parks on the Upper York Sewage Solutions Environmental Assessment, prevents any further action being taken by York Region to advance this project and seeks to limit the Province's liability for taking these steps. The Province has appointed the York Region Wastewater Advisory Panel to provide confidential advice on options to address wastewater servicing capacity needs in the upper parts of York Region.

York Region staff are hopeful the Province of Ontario's Environmental Assessment modernization approach will speed-up approvals and contribute to economic recovery. The Region advocated for the following changes to the *Environmental Assessment Act* to provide better certainty and reduce costs by:

- Exempting low risk projects from the Environmental Assessment process
- Driving more predictable timelines through defined, time-based processes similar to process for transit projects
- Creating a new 'growth related infrastructure project' designation that is exempt from Ministerial bump-ups
- Enhanced approaches to Indigenous and public engagement

This 2022 Master Plan Update considers the Upper York Sewage Solutions Water Reclamation Centre as a key component of our long-term servicing. This commitment to the Lake Simcoe solution was reaffirmed by Regional Council at their [January 2021](#) meeting. Should the Province issue further direction, implications will be examined and additional assessment will be undertaken and reflected in the next Master Plan update.

Demand management programs help optimize long-term service planning

For many years now, York Region has demonstrated leadership on a variety of demand management approaches to help stretch existing water and wastewater infrastructure capacity. Many of these initiatives arose out of requirements under environmental approvals and have proven to be highly effective at managing demands on Regional and local systems. Both the Long-Term Water Conservation Strategy and the Inflow and Infiltration Reduction Strategy were updated in 2021 and remain integral to long-term service planning, as both programs influence available capacity. These strategies influence the planning of growth infrastructure detailed in the Master Plan. The key areas of program focus for each updated strategy are listed in Table 1.

Table 1
Demand Management Strategies: Key Areas of Program Focus

Strategy	Key areas of program focus
2021 Long-Term Water Conservation Strategy	<ol style="list-style-type: none"> 1. Reduce system losses and sources of non-revenue water 2. Continue to raise conservation awareness 3. Target programming towards conservation among industrial, commercial and institutional water users 4. Continue to advance research in water reuse 5. Demonstrate leadership by improving the efficiency of York Region's own facilities and operations
2021 Inflow and Infiltration Reduction Strategy	<ol style="list-style-type: none"> 1. Enhance partnerships 2. Monitor flows and continue to collect data 3. Advance data analytics and predictive analysis 4. Expand in-the-ground works through assessment and rehabilitation programming 5. Develop and adopt a new development standard for inflow and infiltration management*

* Implementation of the new [Inflow and Infiltration Reduction Standard for Sewers Servicing New Development](#) was approved by Regional Council in February 2022 with local municipalities to implement by December 2024.

The Long-Term Water Conservation Strategy and the Inflow and Infiltration Reduction Strategy are included as appendices to the Master Plan Update. Leveraging the successes of these demand management programs and integrating them into long-term service planning reflects York Region's commitment to sustainable use and management of water resources.

Over the past 23 years, an estimated 27 megalitres a day has been saved because of the Region's Water for Tomorrow and Long-Term Water Conservation Strategy programming, the latter introduced in 2011. This work has translated into declining per capita demand. Between 2016 and 2020, water consumption per capita averaged 194 litres a day for single-detached dwellings, down from 207 litres a day over the previous five-year period. The Region's aspirational goal is to reduce that to an average of 150 litres by 2051.

Since 2011, York Region’s Inflow and Infiltration Reduction Strategy has saved more than 20 million litres of inflow and infiltration a day through partnerships and programs with local municipalities and the development industry. The 2021 update of the Inflow and Infiltration Reduction Strategy builds on these successes and aims to reduce inflow and infiltration by 40 million litres a day by 2031, double the current level of reduction.

Infrastructure plan recalibrated since presented in November 2021 to address approved Regional Council growth motions

On October 21, 2021, Regional Council endorsed a Phased 50-55% Intensification Scenario and provided additional direction on where and how the Region is to accommodate growth to 2051 through [four approved motions](#). Table 2 below summarizes how the Water and Wastewater Master Plan Update has considered and addressed each motion, outlined by local municipality.

Table 2
Servicing Considerations of Approved Motions per Local Municipality

Local municipality subject to motion	Considered and/or addressed through Master Plan Update
Township of King	Township of King will work with the Region to identify additional servicing needs related to the redistributed population growth which has been reallocated from the Whitebelt lands.
Town of Whitchurch-Stouffville	<p>Servicing of South Gormley Employment Expansion is contingent upon removal of provincially imposed regulatory restrictions. As this growth is anticipated in the later years of the forecast post-2041, conceptual servicing options are outlined in Appendix A.7 to the Master Plan Update that can implemented should the provincial regulation change.</p> <p>Servicing of Bethesda Lands is also contingent upon removal of provincial regulatory restrictions. Depending on the magnitude of growth, a review of the wastewater system capacity would be appropriate to ensure existing Regional sewers could accommodate additional flows. No additional water upgrades beyond those already identified for the community of Stouffville are anticipated to be required.</p>
Town of East Gwillimbury	Urban expansion into 70% of the Whitebelt lands in East Gwillimbury triggers the need for a second expansion of the Water Reclamation Centre by 2051.

Local municipality subject to motion	Considered and/or addressed through Master Plan Update
City of Markham	The Infrastructure Plan as presented in November 2021 is sufficient to accommodate growth in lands west of Little Rouge.

In addition to outlining conceptual servicing options for South Gormley, Appendix A.7 of the Master Plan also includes considerations for servicing other communities currently restricted through Provincial policy should those restrictions be lifted in the future (Ballantrae and Vandorf-Preston Lake in Whitchurch-Stouffville and Nobleton in King). The full suite of Master Plan appendices is available online through the links below:

- [Appendix A – Infrastructure](#)
- [Appendix B – Consultation Summary – B.1 to B.4](#)
- [Appendix B – Consultation Summary – B.5 to B.9](#)
- [Appendix C – Demand Management Programs](#)

Council directed growth to East Gwillimbury requires more capacity from the Water Reclamation Centre earlier than previously planned

At the October 21 Council meeting, staff recommended that the forecast limit East Gwillimbury Whitebelt expansion to that which could be accommodated within the initial construction of the Water Reclamation Centre and the first expansion planned for 2041. The remaining Whitebelt area in East Gwillimbury would be serviced through a second expansion anticipated post 2051.

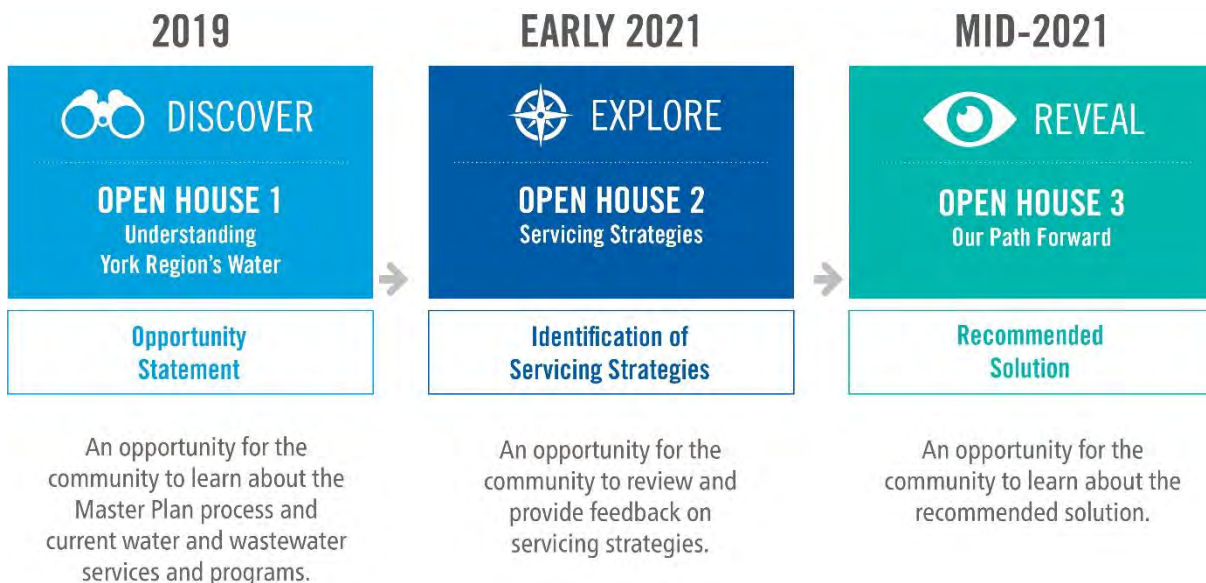
To address Council’s direction to bring 70% of Whitebelt forecast within the planning horizon, the Master Plan was updated to include two expansions of the Water Reclamation Centre by 2051. Given continued delays of provincial approval, resulting in delays of the initial construction to at least 2029, it will be challenging to achieve two expansions of this facility by 2051. Inclusion of the second expansion and other minor adjustments has resulted in an increase of approximately \$200 million, with most of these expenditures set to occur in the last 10 years of the plan. Attachments 2 and 3 contain the complete list of water and wastewater infrastructure projects and programs identified through the 2022 Master Plan Update.

Extensive engagement undertaken as part of Master Plan Update with agencies, Indigenous communities, partners and public

Engagement is an integral component in developing infrastructure needs to support growth to 2051. Over the course of the 2022 Master Plan Update, three rounds of engagement occurred to share information and provide opportunities for feedback. The general

consultation and engagement approach for the Master Plan Update was presented to Council in [June 2021](#). Engagement milestones are illustrated in Figure 3.

Figure 3
Consultation and Engagement Milestones



Engagement throughout the project occurred using a variety of tactics:

- One on one meetings with the local municipalities and regional servicing partners (Region of Durham, Peel Region, and the City of Toronto)
- Meetings with Indigenous communities and the Building Industry and Land Development Association coordinated with the Municipal Comprehensive Review and Transportation Master Plan
- Meetings and correspondence with Ministry of Environment, Conservation and Parks, Office of the Auditor General of Ontario, and Toronto and Region Conservation Authority and Lake Simcoe Region Conservation Authority
- Three public open houses with 1069 online and in-person participants (in-person open houses were hosted prior to the COVID-19 pandemic)

A summary of feedback collected through all public open houses was shared in [June 2021](#) and [November 2021](#). In general, the public has appreciated the opportunity to learn about Regional water and wastewater services. They confirmed that long-term sustainability of servicing and responsible resource management for future generations is a priority. Since then, Regional staff have engaged with Local Municipal Councils on the draft infrastructure plan, described further in the Local Impact section of this report.

IMPLEMENTATION OF MASTER PLAN

Implementation of the Master Plan Update will involve annual monitoring and recalibration of the capital plan as needed

This Master Plan provides a high-level roadmap for delivering servicing over the long-term by establishing future infrastructure project needs. This Master Plan Update has been created with the best available information and understanding. Over time these assumptions will be monitored, as well as close monitoring of capacity utilization in the infrastructure system and development activity. For example, faster than anticipated growth rates in Transit Oriented Communities and Minister's Zoning Order areas could advance the timing of infrastructure projects to respond to servicing needs beyond the original scope of the Master Plan. As more information is known through phasing of growth, servicing needs will have to be reassessed. Updates and course corrections to implementation will happen as things change, or if better information becomes available.

Projects identified in the Master Plan will be implemented through the Environmental Services 10-year capital plan. The capital plan is reviewed annually in conjunction with the annual budget; this process provides an opportunity each year to recalibrate near-term plans to reflect changing circumstances. Shifting circumstances considered in capital plan updates include financial constraints, changes to timing or costs of projects in implementation, shifting asset management needs informed by ongoing condition assessments and coordination with other projects.

Close monitoring of capacity utilization in the infrastructure system and development activity enables the Region to coordinate servicing capacity with growth/development. Demand management programs, which target water conservation and reduction of inflow and infiltration, monitor system flows on an ongoing basis and contribute to capacity available in the Regional system.

Implementation requires monitoring and a continuous partnership approach to balance fiscal, growth and operational considerations

To support growth to 2051, an integrated approach to land use planning will continue to be required to manage the capital plan in line with objectives of the Council approved Fiscal Strategy. As [reported to Council](#) throughout the Municipal Comprehensive Review process, aligning planning for growth with infrastructure and financial planning is of paramount importance to ensure the Region delivers complete communities supported by Regional infrastructure delivered and operated in a financially sustainable way. This more agile approach to managing growth phases new infrastructure in line with actual growth and development charge collections and makes it easier for the Region to maintain financial sustainability.

Capital investments will be closely aligned with timing and location of actual growth as well as with collection of development charges revenues to provide sufficient debt capacity to

finance those infrastructure investments. Prioritization and staging of capital investments will align with actual population growth achieved rather than by set timelines based on the Region's growth forecasts. This financially sustainable approach is based on the actual timing and location of future development in the Region.

Despite best efforts to align growth and capital expenditures with the Fiscal Strategy, requests are received to advance works. The Region may agree to assign development charge credits to the developer group requesting to advance construction timing of Regional infrastructure, subject to the Region's Development Charge Credit Policy. In such cases, the developer will fund 100% of the capital works costs and recover eligible growth-related costs. Generally, to be considered for advancement, development charges must be twice the value of the works for which the development charge credit is being requested.

5. Financial

Total infrastructure and program costs of the 2022 Water and Wastewater Master Plan is approximately \$4.5 billion

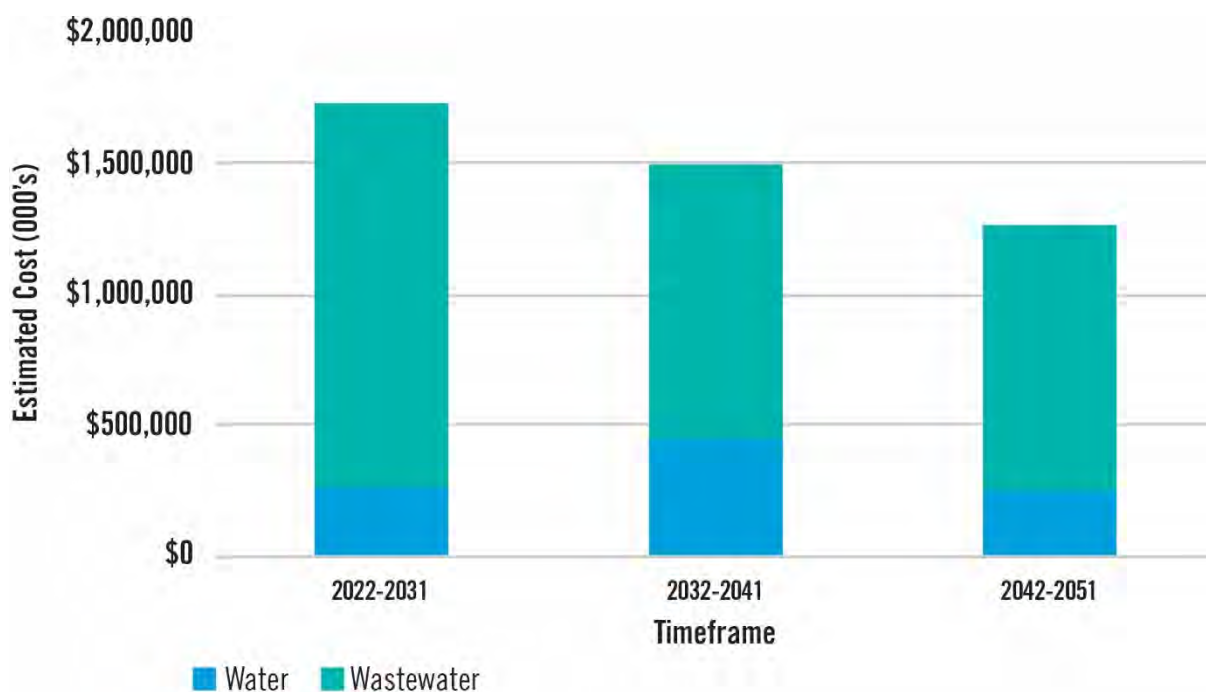
The total cost of projects and supporting programs required to support growth to 2051 identified in this Master Plan is \$4.5 billion, which includes an additional \$1.35 billion in additional water and wastewater infrastructure compared to the 2016 Master Plan. The capital cost of the first 10 years in the Master Plan aligns with the 2022 Environmental Services 10-year capital plan. This level of alignment provides an implementable path for growth capital infrastructure over the next decade. The annual budget process provides a regular opportunity to recalibrate capital costs as required. The non-development charge funded costs to operate, repair and renew assets proposed as capital projects in the Master Plan are accommodated in the 2021 Water and Water User Rates approved by Council in September 2021.

The infrastructure plan as presented in November 2021 has been updated to reflect the approved Council motions and other minor refinements. This resulted in an increase of approximately \$200 million, with most of these expenditures set to occur in the last 10 years of the plan. Attachments 2 and 3 contain the complete list of water and wastewater infrastructure projects and programs identified through the 2022 Master Plan Update.

About 70% of the water and wastewater \$4.5 billion infrastructure plan to 2051 consists of numerous other capital projects in the capital plan which will proceed to implementation subject to Environmental Assessments and approvals.

A breakdown of the capital costs to implement water and wastewater projects identified in the Master Plan is provided in Figure 4.

Figure 4
Growth-related Capital Infrastructure Costs



The majority of the \$4.5 billion in growth-related capital costs is eligible for development charges funding. The proposed 2022 Development Charge Background Study and Bylaw, which has a planning horizon to 2041, uses cost estimates from the Master Plan Update as input. The proposed bylaw is expected to come into effect on June 17, 2022.

6. Local Impact

Local municipal staff and Councils were engaged in developing this Master Plan Update

An offer to present a summary of the Master Plan Update and the recommended draft infrastructure plan was extended to each of the nine Local Municipal Councils, with eight accepting and presentations completed throughout September to November 2021.

A list of each of the presentation dates is shown in Table 3 below:

Table 3
Local Municipal Council Presentations

Date	Local municipality
September 7, 2021	Town of Whitchurch-Stouffville
September 22, 2021	Town of Georgina
September 27, 2021	Township of King
October 4, 2021	Town of Newmarket
October 5, 2021	Town of East Gwillimbury
October 13, 2021	City of Vaughan
October 18, 2021	City of Markham
November 2, 2021*	Town of Aurora
November 10, 2021	City of Richmond Hill

*Information report shared with Aurora at the Town's request.

Feedback was generally positive and indicated a need for:

- Timely wastewater capacity to allow communities to develop in an uninterrupted manner
- Resilient services and robust infrastructure
- Heightened coordination between the Region and local municipalities to plan and service growth, including the role of regional and local infrastructure; phasing of infrastructure to ensure financial sustainability in accordance with new Regional Official Plan policies and dialogue on servicing Minister's Zoning Order areas that fall outside the comprehensive planning process

Local municipal engagement in infrastructure planning continues beyond an active Master Plan Update

This Master Plan Update provides a blueprint of future infrastructure to be delivered to service growth to 2051 in all nine local municipalities. Local municipalities will use the Region's infrastructure plan to guide development of their own infrastructure plans. As the Master Plan is implemented, regular engagement and collaboration between Regional and local staff is essential to ensure that capital investment in infrastructure is optimized, and any constructive adjustments in the infrastructure program be reflected in both Regional and local 10-year capital plans. In addition, active participation of local municipalities in the ongoing long-term water conservation and inflow and infiltration reduction initiatives continues to be

essential to ensure the provision of reliable, sustainable, and cost-effective water and wastewater services over the long-term. Coordination will continue through established partnerships between Regional and local municipality staff for specific issues and through the project-specific environmental assessment process.

7. Conclusion

The Master Plan outlines the Region's strategy to achieve water and wastewater service delivery excellence and long-term environmental and fiscal sustainability. Key infrastructure and programs are identified to support forecasted growth in the Region. Capital expenditure of \$4.5 billion is projected for the Master Plan program, with first 10 years' expenditure at \$1.7 billion aligned with the 2022 Environmental Services 10-year capital plan.

It is recommended that Council endorse the 2022 Water and Wastewater Master Plan Update report. Upon Council endorsement, Regional staff will notify agencies, Indigenous communities, partners, public and stakeholders of the completion of the Master Plan Update and beginning of a 30 day public review period, where interested parties may provide comments on the report. The Master Plan report and associated appendices will be available online at York.ca/waterplan. Following completion of the review period, Regional staff will review and respond to comments, which will be taken into consideration in implementing this Water and Wastewater Master Plan Update.

For more information on this report, please contact Wendy Kemp, Acting Director, Infrastructure Asset Management at 1-877-464-9675 ext.75141. 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

March 2, 2022
Attachments (3)
eDOCS #13695711



2022 DRAFT YORK REGION WATER AND WASTEWATER MASTER PLAN

Strong, caring and safe communities

APRIL 2022



LAND ACKNOWLEDGMENT

We acknowledge York Region is located on the traditional territory of many Indigenous peoples such as the Anishinaabe, Haudenosaunee, Huron-Wendat and Métis peoples and the treaty territories of the Haudenosaunee, the Williams Treaties First Nations, and the Mississaugas of the Credit First Nation. York Region falls under the Nanfan Treaty with the Haudenosaunee, Treaty 13 with the Mississaugas of the Credit First Nation, and the Williams Treaties with the Chippewas of Beausoleil, Georgina Island and Rama First Nations and the Mississaugas of Alderville, Curve Lake, Hiawatha and Scugog Island First Nations. There are also other land claims and treaty rights involving portions of York Region that have not been resolved. The Chippewas of Georgina Island First Nation is the closest First Nation community to York Region. We thank these and other Indigenous peoples for sharing their land with us.



Mayor
Frank Scarpitti
City of Markham



Regional Councillor
Don Hamilton
City of Markham



Regional Councillor
Jack Heath
City of Markham



Regional Councillor
Joe Li
City of Markham



Regional Councillor
Jim Jones
City of Markham



Mayor
David West
City of Richmond Hill



Mayor
Maurizio Bevilacqua
City of Vaughan



Chairman & CEO
Wayne Emmerson



Regional Councillor
Joe DiPaola
City of Richmond Hill

**A Message from York Region Chairman and CEO
and Members of Regional Council**

Whether a long time resident or new to one of our many vibrant communities, one thing all York Region residents can depend on is access to safe, reliable and efficient delivery of water and wastewater services.

As a thriving Region, careful planning is done to ensure key water and wastewater infrastructure, including pipes, sewers and water treatment plants, can effectively meet current and future demands.

The 2022 Water and Wastewater Master Plan Update looks ahead to our future and identifies the infrastructure and programs required to support our projected growth to 2 million residents and nearly 1 million jobs by 2051.

This Master Plan Update builds on the 2016 plan and continues to support greater resiliency in our water and wastewater systems by using One Water principles to guide decision-making.

The new plan integrates water and wastewater initiatives with the Region's Official Plan, the Transportation Master Plan and other strategies to ensure service excellence meets the needs of our rapidly growing Region in the most cost-effective way.

Together, we remain steadfast in our commitment for building strong, caring and safe communities.



Regional Councillor
Mario Ferri
City of Vaughan



Regional Councillor
Carmine Perrelli
City of Richmond Hill



Regional Councillor
Gino Rosati
City of Vaughan



Mayor
John Taylor
Town of Newmarket



Regional Councillor
Linda Jackson
City of Vaughan



Regional Councillor
Tom Vegh
Town of Newmarket



Mayor
Margaret Quirk
Town of Georgina



Regional Councillor
Robert Grossi
Town of Georgina



Mayor
Tom Mrakas
Town of Aurora



Mayor
Virginia Hackson
Town of East Gwillimbury



Mayor
Steve Pellegrini
Township of King



Mayor
Iain Lovatt
Town of Whitchurch-Stouffville



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EXECUTIVE SUMMARY



EXECUTIVE SUMMARY

Executive Summary

The Regional Municipality of York's Water and Wastewater Master Plan is a key document that details how the Region will provide safe, reliable services to new growth over the long term. It evaluates infrastructure systems in a broad land-use and environmental context and describes, at a high level, the projects needed to supply drinking water and manage wastewater in future.

The Master Plan is updated periodically to reflect changing conditions and new information. This update to the 2016 Master Plan followed a process prescribed by the Municipal Engineers Association Municipal Class Environmental Assessment, an approved process under the provincial *Environmental Assessment Act*.

It was undertaken in conjunction with a Municipal Comprehensive Review carried out by the Region that incorporated a new provincial growth forecast into the Regional Official Plan, and with an update to the Transportation Master Plan. This process included extensive consultation and engagement with partners and stakeholders.

While reflecting the new growth forecast to 2051 (shown in Figure E.1 below), this update concludes that the overall direction of the 2016 Water and Wastewater Master Plan remains valid. The update also recognizes how the One Water concept, first described in the 2016 Master Plan, is being more fully incorporated into master planning. One Water helps achieve a sustainable water future by recognizing that water is a finite resource and finding ways to preserve its value in all settings.

Figure E.1 Population and Employment Growth Forecast in York Region Through the Provincial Growth Plan



The preferred strategy set out in 2016 and validated through this update is for future growth in the Region to be serviced largely by leveraging and expanding existing water and wastewater systems. Through existing intermunicipal agreements, most drinking water would continue to come from Lake Ontario, and treated wastewater would mostly be returned to that watershed.

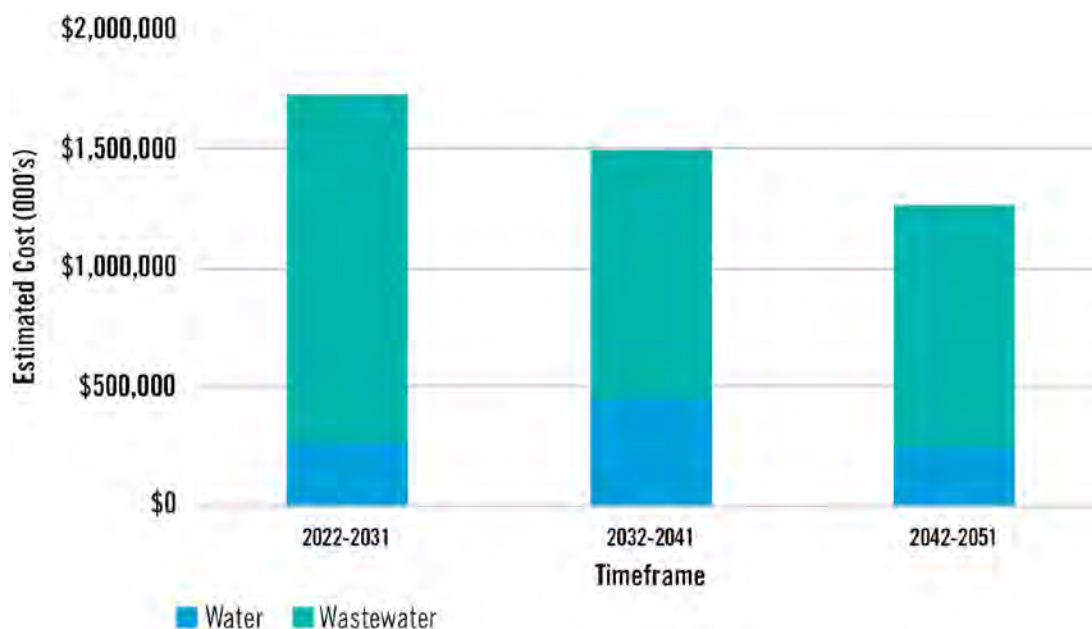
Groundwater will continue to round out our supply in the central area, with Lake Simcoe supplying the northern end of the Region. Communities currently serviced by stand-alone water and wastewater systems will continue to be serviced by those systems, except for Kleinburg in the City of Vaughan which will eventually be connected to the York Durham Sewage System.

EXECUTIVE SUMMARY

The York Durham Sewage System and Duffin Creek Water Pollution Control Plant in Pickering (co-owned with Durham Region) will be upgraded and expanded, with a new York Region-owned Water Reclamation Centre to be established (pending outstanding provincial approvals) in the Lake Simcoe watershed.

The estimated cost to implement the water and wastewater infrastructure projects in this updated Master Plan is \$4.5 billion, comprising \$1.0 billion for water and \$3.5 billion for wastewater. These growth projects and costs will feed into the Region's Development Charges Bylaw as it is updated in 2022. Figure E.2 below shows the planned capital expenditures over the 30-year planning horizon.

Figure E.2 Growth-related Capital Infrastructure Costs



Ongoing programs to manage demand through water conservation and inflow and infiltration reduction are integral to the infrastructure strategy to ensure we can meet increased demand cost-effectively with a continued decline in per-capita water use. This demand management approach is in line with our One Water principles, which are reflected in programs and plans to address climate change and enhance water equity and livability. Water equity ensures that all residents and businesses have access to clean, safe and affordable water services while maximizing community benefits and fostering resilience in the face of a changing climate.

This updated Master Plan meets all applicable regulatory requirements, including a limit on water transfers between the Lake Ontario and Lake Simcoe/Lake Huron watersheds under a bi-national Great Lakes agreement. It also accords with overarching goals and objectives set out in the Region's Vision, Strategic Plan and other corporate and departmental plans. To ensure financial sustainability and in line with principles endorsed by York Regional Council, this Master Plan will better leverage existing infrastructure systems and more tightly align pacing of new capital projects with actual growth.

EXECUTIVE SUMMARY

As this update was finalized, the Region continued to await provincial approval of the Water Reclamation Centre needed to add wastewater capacity in the north. An Individual Environmental Assessment for this project was completed and submitted to the province in mid-2014. Given the rigorous study completed for the Water Reclamation Centre and the time and money invested to date, this project continues to be considered an essential part of the preferred servicing strategy for Aurora, East Gwillimbury and Newmarket.

With completion of this update, the preferred strategy and associated infrastructure plan are carried out through projects funded through the ten-year capital plan. Budgets for specific infrastructure projects are updated as necessary through the Region's annual budget. Over time, the Environmental Services capital plan responds to such factors as new financial constraints, delays or scope changes in project delivery, market constraints and actual growth that differs from forecast.

All forecasts and outlooks are inherently uncertain, and this uncertainty increases as the time horizon extends further into the future. A range of programs, plans, analyses and activities allow for adaptation to changing conditions as plans are implemented in the coming years. Nonetheless, there are limits on the Region's ability to accommodate unexpected circumstances. This underscores the need to seek the right balance – between costs, growth patterns, environmental preservation, and the needs of existing customers – as the Region acts to implement the Master Plan.



1.0 INTRODUCTION

- 1.1 WATER AND WASTEWATER MASTER PLAN PURPOSE
- 1.2 YORK REGION'S ROLES IN WATER AND WASTEWATER
- 1.3 MASTER PLAN ALIGNS WITH THE REGION'S STRATEGIC VISION
- 1.4 HOW THE PLAN UPDATE WAS CARRIED OUT



1.1 WATER AND WASTEWATER MASTER PLAN PURPOSE

1.1 WATER AND WASTEWATER MASTER PLAN PURPOSE

The Regional Municipality of York's Water and Wastewater Master Plan sets out an approach to meet the needs of the Region's growth. To reflect changing conditions and new information, the plan is updated periodically, generally on a five-year cycle. This update reflects revised growth forecasts identified in A Place to Grow: Growth Plan for the Greater Golden Horseshoe and incorporated in the Regional Official Plan.

Since creation of the Region's first master plans in the 1990s, a key purpose has been to ensure the infrastructure serving new growth is cost effective and resilient. The most recent update in 2016 added a new purpose to the plan: to develop an integrated, long-term strategy for sustainable water and wastewater services. This speaks to the need to focus on environmental, social, and financial sustainability beyond the five-year time horizon.



MASTER PLAN OBJECTIVES:

1. Develop a cost-effective, resilient water and wastewater infrastructure plan to service future growth to 2051 and beyond.
2. Develop an integrated, long-term approach to provide sustainable water and wastewater services.

The Water and Wastewater Master Plan informs updates to York Region's Development Charges Bylaw by detailing funding the Region will need to collect in development charges to recover capital investments made in growth-driven capital projects.



THE PROBLEM STATEMENT FOR THIS MASTER PLAN UPDATE IS DEFINED AS FOLLOWS:

"Building on previous Master Plan recommendations, York Region is updating its long-term water and wastewater servicing strategies and infrastructure program to accommodate 2.02 million people and 990,000 jobs by 2051 in accordance with the Regional Official Plan in an environmentally, socially and fiscally responsible manner."

1.2 YORK REGION'S ROLES IN WATER AND WASTEWATER

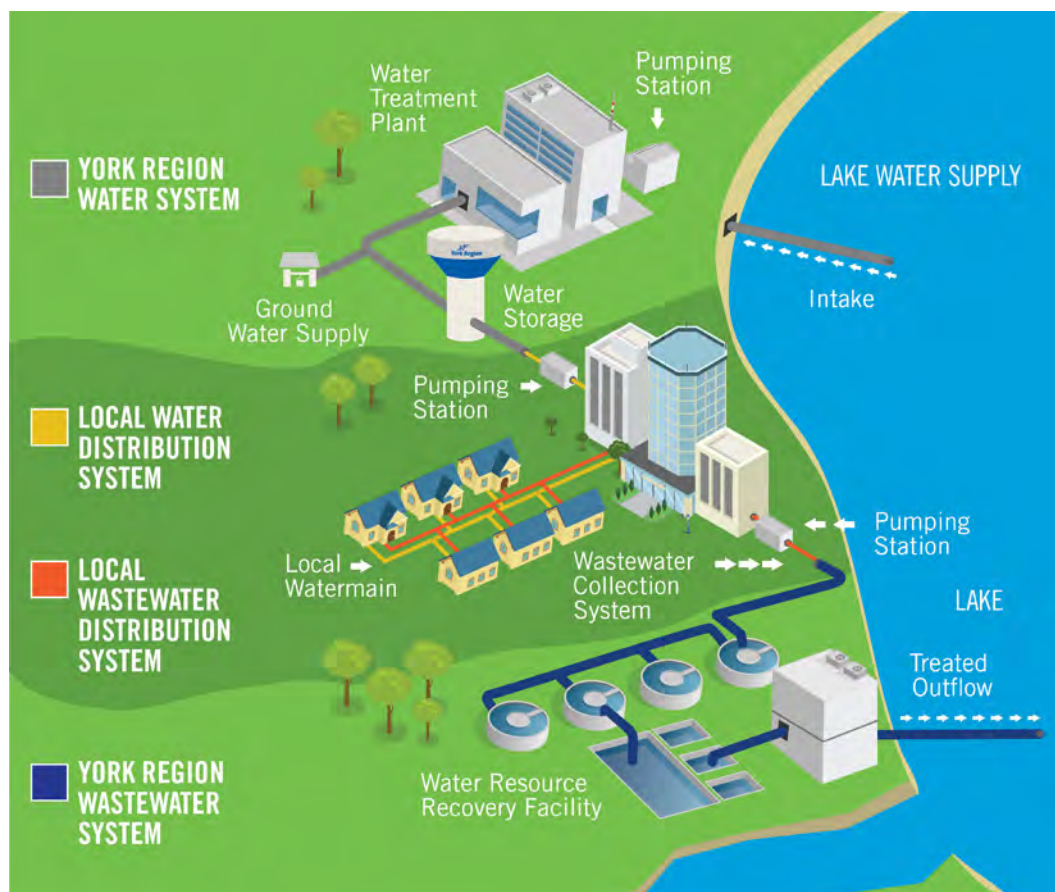
1.2 YORK REGION'S ROLES IN WATER AND WASTEWATER

York Region is a wholesale provider of drinking water, responsible for water production, treatment, storage and bulk supply to its cities and town. Regional transmission mains transfer water to infrastructure owned and operated by the local cities and towns, which in turn distribute it directly to end users.

Similarly, York Region acts as a wholesale provider of wastewater services, collecting wastewater from local municipal sewers and conveying it through a network of trunk sewers and pumping stations to treatment plants.

York Region and its cities and towns share responsibility for water and wastewater systems and services, as shown in Figure 1.1.

Figure 1.1 Regional and Local Water and Wastewater Service Delivery in York Region



York Region works with its nine local municipal partners to coordinate timely service delivery in the short and long term, guided by policies within the Regional Official Plan, and in consultation with conservation authorities on such issues as source water protection.

1.3 MASTER PLAN ALIGNS WITH THE REGION'S STRATEGIC VISION

1.3 MASTER PLAN ALIGNS WITH THE REGION'S STRATEGIC VISION

The Water and Wastewater Master Plan is developed in the context of Regional strategies and plans. As outlined in the diagram below, the Master Plan is a corporate plan providing the key functions of water and wastewater service planning and implementation to 2051:

Figure 1.2 Hierarchy of Regional Strategies and Plans



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

Vision emphasizes the importance of long-term sustainability, which is reflected in Objective 2 of the Master Plan: to develop an integrated, long-term approach to provide sustainable water and wastewater services.

Master Plans for infrastructure are coordinated with updates to the Regional Official Plan in a process known as a Municipal Comprehensive Review. This helps ensure consistent communication with interested parties and better integration of all plans to manage costs. The Regional Official Plan outlines policies to guide growth and economic, environmental and community planning decisions. The Master Plan works in concert with the Regional Official Plan to ensure that servicing can be provided to meet growth demands in the Region.

1.4 HOW THE PLAN UPDATE WAS CARRIED OUT

The Strategic Plan, updated every four years, is a roadmap emphasizing priorities over each term of York Regional Council. In 2019, Regional Council adopted the 2019-2023 Strategic Plan. Specific goals and objectives influencing water and wastewater master planning include:

- Support safe communities by ensuring water meets all relevant standards
- Build sustainable communities and protect the environment by delivering and promoting environmentally sustainable services
- Deliver trusted and efficient services by ensuring reliable, responsive, effective, efficient and fiscally responsible service delivery while managing the Region's assets for current and future generations

These goals and objectives are reflected in this plan through its attention to ensuring delivery of high-quality drinking water and wastewater services using safe, reliable infrastructure that minimizes impacts on the environment and is financially sustainable.

The Regional Fiscal Strategy helps to achieve long-term financial sustainability through carefully managing the Region's capital plan, reserves and debt. Its influence on infrastructure planning is described in Section 4.3. The fiscal strategy also affects the Region's annual budget, which includes a 10-year capital plan that is updated each year.

Other Regional plans play a role in how the Water and Wastewater Master Plan is implemented. These include asset management plans, demand management strategies and climate change plans, discussed in Section 3.3.

Of particular importance is the Region's adoption of a One Water approach to managing water resources. One Water leverages the natural water cycle to make the best use of every source of water, including water that has passed through municipal systems. It also helps minimize the use of other inputs, including energy, to mitigate climate change impacts.

1.4 HOW THE PLAN UPDATE WAS CARRIED OUT

Over time, the Region's master planning process has matured, leading each update to become more streamlined. Building out York Region communities and infrastructure systems focuses increasingly on carefully integrating new components into water and wastewater systems already in place to derive the greatest value possible from both existing and new investments.

The Master Plan Process

This Water and Wastewater Master Plan update, like previous ones, followed guidance of the Municipal Engineers Association on infrastructure master planning set out in its Municipal Class Environmental Assessment document.

Master plans are defined as "long range plans which integrate infrastructure requirements for existing and future land use with environmental assessment planning principles." In other words, a master plan looks at one or more infrastructure systems or groups of related projects in a broad land use and environmental context. This results in a high-level plan that identifies and justifies the need for future individual projects.

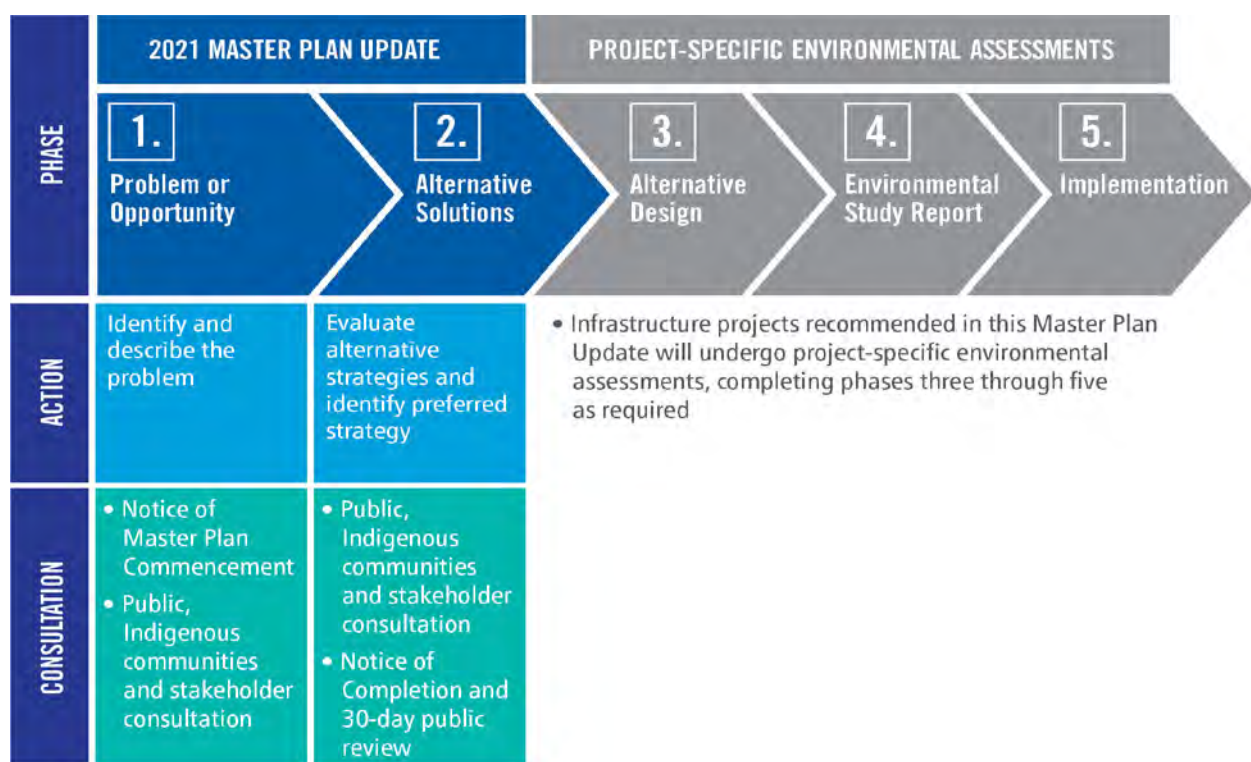
1.4 HOW THE PLAN UPDATE WAS CARRIED OUT

Depending on the nature and complexity of an individual project, it may be subject to further review under the provincial *Environmental Assessment Act*, as discussed in Section 2.6. The Act provides for a municipal class environmental assessment for municipal projects that are similar in nature, are carried out routinely, have a predictable range of environmental effects, and respond to mitigating measures. Most infrastructure projects undertaken by the Region fall within the framework for municipal class environmental assessments.

The Act also provides for a comprehensive environmental assessment process, less frequently used, that applies to large, complex projects with the potential for significant environmental effects. This is referred to as a full or individual environmental assessment.

Figure 1.3 outlines the municipal class environmental assessment process and requirements for each phase. The number of phases to be completed for a particular project depends on the nature of the project. The Municipal Engineers Association requires that a master plan follow, at a minimum, the first two phases of the process. This update to the Master Plan followed phases 1 and 2.

Figure 1.3 Municipal Class Environmental Assessment Process



Note: The Region uses the terms “Alternative Strategies” and “Preferred Strategy” to describe what the Municipal Engineers Association process calls “Alternative Solutions” and “Preferred Solution”

1.4 HOW THE PLAN UPDATE WAS CARRIED OUT

Use of Approach 1 in Preparing the Master Plan

Different approaches can be used to develop a master plan. York Region followed Approach 1 set out in Appendix 4 of the current Municipal Engineers Association Municipal Class Environmental Assessment document.

As part of Approach 1, the Master Plan identifies how each individual project is expected to proceed through the environmental assessment process. In some cases, this will involve following phases 3, 4 and/or 5 as shown in Figure 1.3. This is discussed in more detail in Section 7.1 on implementation.

By providing the rationale for all projects, the Master Plan fulfills the first two phases of the municipal class environmental assessment process and supports any future environmental assessments that may be needed.

Consultation and Engagement Were Key

Consultation and engagement throughout development of a master plan, supported by frequent and timely communication, are key requirements of the master planning process. With this Master Plan update, engagement occurred through various mechanisms, including one-on-one meetings, correspondence and public open houses. After the COVID-19 pandemic was declared in early 2020, face-to-face activities moved to virtual platforms.

Three public open houses held over the course of the update provided a chance for residents and others to learn more about the Master Plan update and the Region's water and wastewater services. The first was delivered in person in fall of 2019 and drew 165 attendees. The second and third took place virtually due to pandemic restrictions: the second in winter 2021 with 83 participants and the third in summer 2021 with 108 participants.

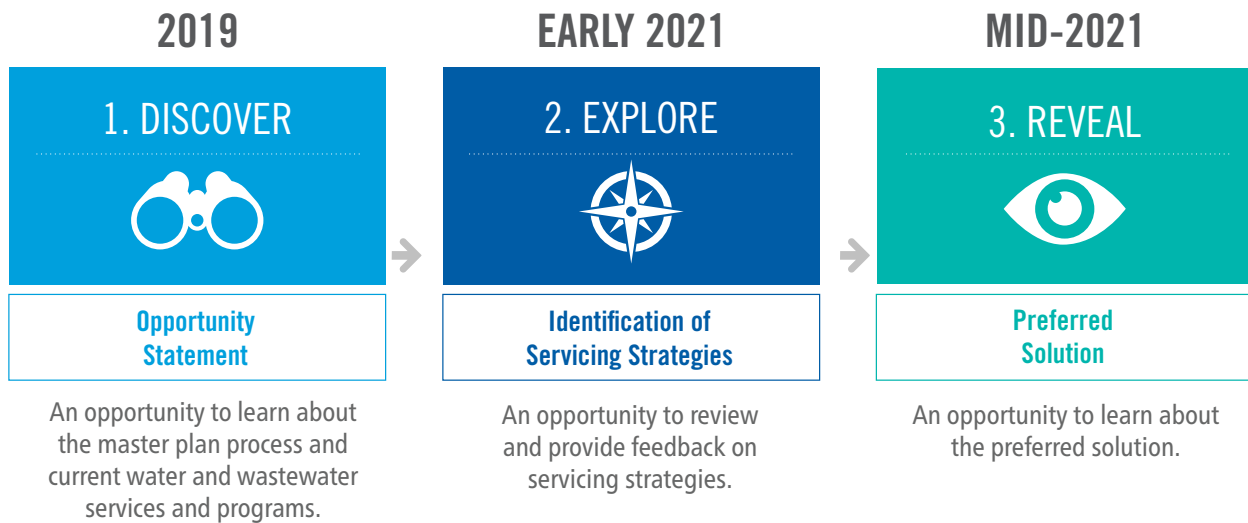
Outreach included notice of open houses through newspaper advertisements as well as group emails and social media. Throughout the process, the Region maintained a dedicated web page on its website (york.ca/waterplan) providing up-to-date information, including open house materials.



1.4 HOW THE PLAN UPDATE WAS CARRIED OUT

Consultation and engagement took place through three phases over the course of updating the Master Plan:

Figure 1.4 Consultation and Engagement Milestones



Those identified as having an interest in the Master Plan update were notified of opportunities to give feedback at each milestone in Figure 1.4. The process was designed to ensure feedback was taken into consideration. More information on the consultation approach and those identified as having an interest can be found in Appendix B.1. Section 2.5 a summary of First Nations and Indigenous communities, partner and stakeholder views, and Appendix B sub-volumes provide notices used to communicate the Master Plan update along with detailed feedback gathered through the open houses.

In the balance of this update:

- **Section 2** outlines the general context for master planning, including factors specific to the Region as well as the regulatory framework that applies to water and wastewater
- **Section 3** provides an overview of the existing Regional systems
- **Section 4** discusses the planning outlook, including forecasts of population and water use, for the period covered by this update
- **Section 5** explains how the preferred servicing strategy was selected
- **Section 6** outlines related infrastructure needs and costs
- **Section 7** outlines implementation, detailed costs and monitoring

2.0 GENERAL CONTEXT



- 2.1 CURRENT YORK REGION POPULATION AND ECONOMY
- 2.2 GEOGRAPHY AND NATURAL ENVIRONMENT
- 2.3 CULTURAL HERITAGE AND ARCHAEOLOGICAL RESOURCES
- 2.4 INDIGENOUS PRESENCE AND STEWARDSHIP
- 2.5 INDIGENOUS, PARTNER AND STAKEHOLDER VIEWS
- 2.6 REGULATORY AND POLICY FRAMEWORK



2.1 CURRENT YORK REGION POPULATION AND ECONOMY

2.1 CURRENT YORK REGION POPULATION AND ECONOMY

Established in 1971, York Region consists of nine local municipalities: the cities of Markham, Richmond Hill and Vaughan; the towns of Aurora, East Gwillimbury, Georgina, Newmarket and Whitchurch-Stouffville and the Township of King.

Its central location directly north of the City of Toronto in the Greater Toronto Area has helped to make the Region one of the fastest-growing and large municipalities in Ontario. At the time of its creation, it had just under 200,000 residents and 50,000 jobs. Over the past 50 years, it has grown more than seven-fold to 1.2 million people and 600,000 jobs in more than 54,000 business establishments across several industries. It has also become one of Canada's most diverse communities.

2.2 GEOGRAPHY AND NATURAL ENVIRONMENT

York Region extends roughly 60 kilometres north from its border with Toronto at Steeles Avenue to the south shore of Lake Simcoe and is approximately 40 kilometres wide. In total, it covers 1,776 square kilometres.

Two geographical features have had a major influence on how the Region delivers drinking water and manages wastewater:

- It is the only municipality of its size in the Greater Toronto and Hamilton Area that lacks direct access to Lake Ontario
- It is divided by the Oak Ridges Moraine, so that its northern half is in the Lake Simcoe/Lake Huron watershed and its southern half is in the Lake Ontario watershed, with the dividing line shown in Figure 2.1

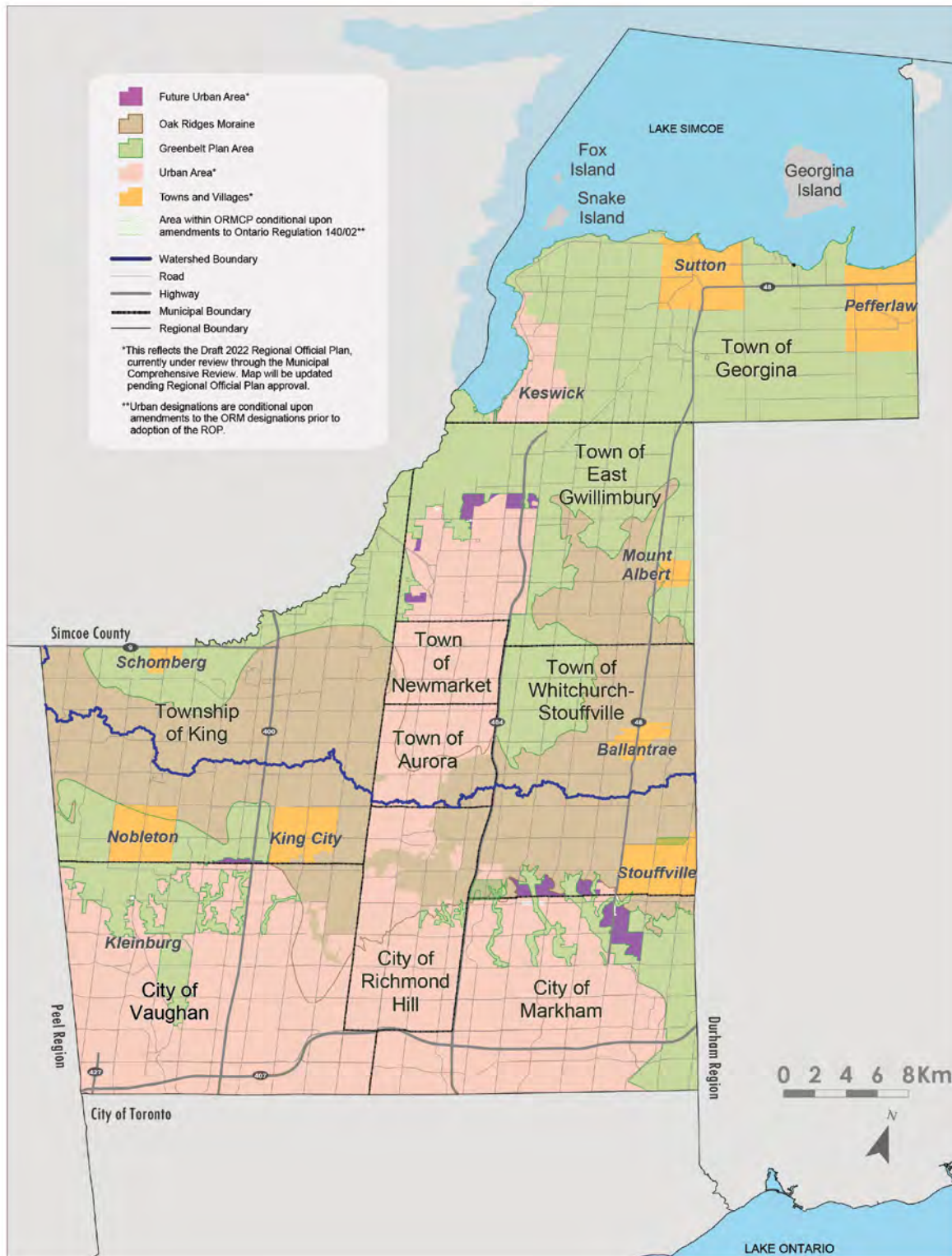
Lack of direct access to Lake Ontario has required the Region to form strong water partnerships with the neighbouring Region of Peel and City of Toronto, which provide drinking water from Lake Ontario that together meet 90% of the needs of York Region's residents. Likewise, the Region has partnered with Durham Region and Region of Peel to return wastewater for treatment and return to Lake Ontario. Combined with the local municipal responsibility for serving customers, this has shaped York Region systems that are dominated by large pipes, storage and treatment facilities and pumping stations.

The second geographical feature — the watershed boundary — is important in light of a bi-national agreement limiting movement of water from one Great Lakes watershed to another. This is discussed in Section 2.6 which summarizes the regulatory framework.

Protection of natural features is a priority for the Region in planning and constructing water and wastewater projects. Figure 2.1 shows the nine cities and towns that make up York Region, along with general land designations.

2.2 GEOGRAPHY AND NATURAL ENVIRONMENT

Figure 2.1 York Region and Local Cities and Towns



Appendix A.1 provides maps of natural environmental features in York Region.

2.3 CULTURAL HERITAGE AND ARCHAEOLOGICAL RESOURCES

2.3 CULTURAL HERITAGE AND ARCHAEOLOGICAL RESOURCES

Archaeological resources in York Region include sites that may contain artifacts, remains of structures, cultural deposits or subsurface strata of human origin.

Physical remains of cultural heritage can be extremely fragile. Policies in the Regional Official Plan commit York Region to responsible archaeological management, and its [Regional Archaeological Management Plan](#) outlines the process for archaeological assessments.

Project-specific environmental assessments will include detailed assessment of archaeological and cultural heritage features and the project's potential impacts and, where applicable, mitigation measures.

2.4 INDIGENOUS PRESENCE AND STEWARDSHIP

The cultural history of what is now York Region began with the arrival of hunting bands in the area roughly 11,000 years ago. Water was central to the lives of these Indigenous peoples: it provided their drinking water, fishing resources and major transportation routes. To this day, many Indigenous people who live in the area continue traditional water-related practices and activities.

For Indigenous peoples, water is viewed as more than just a valuable resource, and is recognized as a sacred gift, the lifeblood of the Earth that connects all living things. In many Indigenous communities, women are recognized as the keepers of the waters, who teach the importance of responsible stewardship of land and water.

The next section summarizes engagement with Indigenous communities and how their feedback was considered.

2.5 FIRST NATIONS AND INDIGENOUS COMMUNITIES, PARTNER AND STAKEHOLDER VIEWS

The Region relies on a range of partners and interested parties to meet residents' service needs. The Region kept the following groups informed of the progress of the update and sought their feedback. The points below summarize their interests and most frequently raised topics and explain how York Region considered the feedback:

First Nations and Indigenous Communities

Engagement with First Nations and Indigenous communities was coordinated with the Municipal Comprehensive Review and Transportation Master Plan update. The Region coordinated engagement individually based on their interest, capacity, and availability as there is currently no provincially approved framework for engaging with First Nations and Indigenous communities. A consultant and Indigenous facilitator supported all engagement activities. The opportunity to engage with and learn from First Nations and Indigenous communities was valuable, as their unique historic and cultural relationship to the land and water gives rise to important perspectives on how to manage the natural environment and water resources. The Region looks forward to continuing these conversations.

Feedback was received from a number of Indigenous communities and is summarized below.

- Indigenous communities encourage York Region to develop lasting, long-term relationships; this would provide a more proactive approach to involve communities in projects and initiatives at the outset allowing time for meaningful engagement and input

2.5 FIRST NATIONS AND INDIGENOUS COMMUNITIES, PARTNER AND STAKEHOLDER VIEWS

- Many comments focused on protecting and sustaining the natural environment to address impacts arising from growth that may affect traditional Indigenous ways of life:
 - Mitigation of environmental threats such as invasive species
 - Impacts of climate change and stormwater
 - Increased public education on the impacts and ways to reduce emerging contaminants entering waterways
 - Ensure Indigenous rights and perspectives are acknowledged in the areas of water and wastewater management and recognizing the sacredness of water

York Region acknowledges the relationship Indigenous communities have with the natural environment and acknowledges the central importance of water in the culture and lives of Indigenous people. York Region is committed to sustainable management and use of water and protection of the natural environment not only in the present, but also over the long term for future generations by:

- Sharing the importance of water and continued need for conservation and stewardship within its communities
- Continuing to deliver high quality water and wastewater services

Implementation of projects identified in the Master Plan will recognize the archeological importance of the lands in York Region to Indigenous communities and will follow applicable regulatory requirements to consult and engage communities with Aboriginal or treaty rights.

Local Cities and Towns

Local cities and towns are partners in delivering water and wastewater services, using infrastructure systems linked to the Region's systems, and face many of the same planning and operating complexities. Their feedback continues to help understand local concerns and provides opportunities to strengthen working partnerships. As the Region and local municipalities are jointly responsible for ensuring infrastructure to accommodate growth will be in place, coordinating local master plans with the Region's supports more integrated infrastructure planning. This is an important consideration in delivering needed capacity.

- Local municipal engagement showed support for timely, well-paced and coordinated infrastructure delivery and planning; in light of near-term wastewater capacity constraints due to delays in provincial approval of Upper York Sewage Solutions (discussed in more detail in Section 2.6), local municipalities were interested in exploring innovative interim servicing solutions with the Region so that development can continue

2.5 FIRST NATIONS AND INDIGENOUS COMMUNITIES, PARTNER AND STAKEHOLDER VIEWS

- o York Region continues to coordinate servicing needs with local municipal partners through ongoing processes, including capacity assignments, project-specific environmental assessments and day-to-day operations. Section 7.1 discusses how infrastructure projects recommended through the master plan are delivered, with careful monitoring and adaption to changing circumstances

Servicing Partners

Our neighbouring municipalities of Durham Region, Peel Region and City of Toronto are important partners to York Region in providing services. York Region has long-term agreements with them for supplying drinking water and/or conveying and treating wastewater through their own infrastructure or, in the case of the York Durham Sewage System, agreements for ownership and operation of our co-owned infrastructure in Durham Region.

- o As with local municipalities, our engagement with Toronto, Peel and Durham staff pointed to an interest in continuing to work together to meet the needs of growth and optimize the infrastructure that provides York Region with water and wastewater services

Conservation Authorities

Conservation authorities are local agencies mandated by the province to ensure that watersheds and the natural habitats they contain are conserved, restored and managed responsibly. The Region straddles two watersheds, so both the the Toronto and Region Conservation Authority and the Lake Simcoe Region Conservation Authority operate within its boundaries. Both frequently partner with the Region on watershed-related initiatives.

- o Conservation authorities expressed significant interest in using the One Water approach mentioned in Section 3.4, as they are frequently involved in implementing specific projects and programs with that focus
- o Conservation authorities highlighted directions for York Region to consider in managing and mitigating impacts of growth and land use decisions on watershed conditions; a summary appears below:
 - o Aim to make the most efficient use of water infrastructure by continuing water conservation activities
 - o Ensure source protection policies are embedded in municipal policies and master planning
 - o Make the best use of existing infrastructure by maximizing efficiencies through optimization
 - o Enhance infrastructure resiliency to accommodate extreme weather events
- o Through engagement on the Master Plan and other initiatives, the conservation authorities also encouraged York Region to continue the dialogue on how best to integrate the One Water approach into watershed planning and master planning

2.5 FIRST NATIONS AND INDIGENOUS COMMUNITIES, PARTNER AND STAKEHOLDER VIEWS

Land Developers

The building and land development industry plans and constructs homes, offices and commercial/industrial buildings that accommodate growth across the Region and must connect to water and wastewater services. Engagement with the York chapter of the Building Industry and Land Development Association (BILD), which represents larger developers in the Greater Toronto Area, was coordinated with the Municipal Comprehensive Review and update to the Transportation Master Plan; land developers who are not BILD members were able to provide input through public open houses.

- The industry is concerned about future system capacity and timing and growth-related costs, which are recovered through development charges on new construction; like local municipalities, they expressed frustration in the protracted provincial approval process for infrastructure solutions to deal with servicing constraints in the towns of Aurora and Newmarket and the communities of Holland Landing, Queensville and Sharon in the Town of East Gwillimbury

Residents and Businesses

Residents and businesses are the ultimate customers of Regional and local municipal water and wastewater services.

- Many of their comments focused on environmental and long-term supply and water quality concerns, which York Region considered in assessing strategies to service growth; water quality, quantity and access are also discussed in Section 7.2 as elements of water equity and livability
- Another area of interest was availability and timing of water and/or wastewater services for a specific community or future employment area; this Master Plan addresses broad-based and Region-wide needs; local municipalities provide service to individual customers, with growth-related projects for their communities generally identified in their secondary plan or servicing master plan

Provincial Ministries and Agencies

As required by the municipal class environmental assessment master plan process, the provincial Ministry of the Environment, Conservation and Parks was kept informed at key milestones. The Ministry of Heritage, Sport, Tourism and Culture Industries was also notified because of its role in heritage preservation, as were other provincial ministries and agencies.

- The Ministry of the Environment, Conservation and Parks provided feedback on the draft report that highlighted guidance and consideration of requirements (including source protection) for future implementation of proposed projects identified in the Master Plan

Despite a variety of perspectives, every group or organization has a role in the sustainability of water and wastewater infrastructure — and in managing water resources as a whole — because of the central importance of water in day-to-day living. In that light, participants were very interested in our One Water approach and saw it as a positive step towards sustainability at a range of scales.

Feedback collected through consultation and engagement was considered as input to the Master Plan and ongoing water and wastewater programs and initiatives. Details can be found in Appendix B and its sub-volumes.

2.6 REGULATORY AND POLICY FRAMEWORK

2.6 REGULATORY AND POLICY FRAMEWORK

Important considerations in planning water and wastewater systems include laws and plans protecting the natural environment and sensitive geographical areas, policies around growth, and guidance around selection, design, and operation of infrastructure.

The following sections cite and describe relevant regulatory and policy considerations. This update to the Water and Wastewater Master Plan has been drafted for consistency with these requirements.

Places to Grow Act, 2005

The provincial *Places to Grow Act, 2005*, gives the Ontario government the power to designate growth areas throughout the province and develop related growth plans.

York Region is part of the Greater Golden Horseshoe, an area of some 10,000 square kilometres in south-central Ontario that is one of the fastest-growing areas in North America. [A Place to Grow, the current growth plan for the Greater Golden Horseshoe](#), provides population and employment forecasts out to 2051.

The plan's policies guide infrastructure planning and investment decisions to accommodate population and employment growth. Key content of relevance to the Water and Wastewater Master Plan is summarized below:

- o **Policy 3.2.1** requires planning for new or expanded infrastructure to be integrated with long-range land use planning scenarios, as well as environmental and financial plans, supported by relevant studies; infrastructure planning should help achieve minimum intensification and density targets in the plan and aim to provide enough infrastructure in strategic growth areas
- o **Policy 3.2.6**, which guides planning of water and wastewater systems, makes optimization and improved efficiency within existing systems priorities; water and wastewater plans should be supported by strategies for energy and water conservation and water demand management and be informed by watershed planning
- o **Policy 4.2.9** requires that municipalities develop and implement strategies in support of water conservation, including objectives around demand management and maximizing reuse and recycling of water

Other sections of the plan reiterate existing policies and legislative requirements as set out below.

Provincial Policy Statement, 2020

The [2020 Provincial Policy Statement](#), issued under the provincial *Planning Act*, provides policy direction on matters of provincial interest related to land use planning and development. As a key part of Ontario's planning system, the statement sets the policy foundation for regulating the development and use of land. Municipal official plans and planning decisions must be consistent with policies of the Provincial Policy Statement.



2.6 REGULATORY AND POLICY FRAMEWORK

York Region Wastewater Act, 2021

In 2014, the Region completed an individual environmental assessment for the proposed Upper York Sewage Solutions initiative. This project would accommodate growth in the towns of Aurora, East Gwillimbury and Newmarket through three main components: a Water Reclamation Centre near the East Holland River in the Lake Simcoe/Lake Huron watershed, a phosphorus offset reduction program and a twinned forcemain (pumped sewer pipe) from the Town of Newmarket to the Town of Aurora. The 2016 Water and Wastewater Master Plan identified Upper York Sewage Solutions as part of its preferred servicing strategy. To date, the provincial government has allowed the forcemain twinning to go ahead but has not rendered a decision on the other components.

In October 2021, the provincial government enacted the *York Region Wastewater Act, 2021*. This legislation puts an indefinite hold on any decision by the Minister of the Environment, Conservation and Parks on the Upper York Sewage Solutions environmental assessment, prevents any further action being taken by York Region to advance this project and seeks to limit the province's liability for taking these steps. The province has also appointed the York Region Wastewater Advisory Panel to provide confidential advice on options to address wastewater servicing capacity needs in the upper parts of York Region.

Given the work and expense already completed in the environmental assessment and other preparation, and the pressing need to meet provincial deadlines for updating the Development Charges Bylaw, the Region will continue to plan for the Upper York Sewage Solutions initiative until it is directed otherwise.

Environmental Assessment Act

As Section 1.4 noted, the Master Plan update identifies a high-level preferred strategy to be implemented through specific projects over the next 30 years. These may be subject to different requirements under the provincial *Environmental Assessment Act*, depending on their nature and scope. Section 7.1 provides more details.

While the Master Plan update was being carried out, the province announced changes to the *Environmental Assessment Act* with the goal of modernization. The Region has experienced long delays in getting approvals for key projects, including not just the Upper York Sewage Solutions initiative, but also expansion of the Duffin Creek Water Pollution Control Plant on Lake Ontario, including the most recent outfall capacity expansion, which created uncertainty and added costs. York Region has advocated strongly for changes that allow critical infrastructure to be planned and delivered in a predictable manner while protecting the natural environment. York Region staff are hopeful the Province of Ontario's Environmental Assessment modernization approach will speed-up approvals and contribute to post-pandemic economic recovery. The Region advocated for the following changes in the *Environmental Assessment Act* to provide better process certainty and reduce costs:

- ◉ Exempting low risk projects from the environmental assessment process
- ◉ Driving more predictable timelines through defined, time-based processes similar to process for transit projects
- ◉ Creating a new 'growth related infrastructure project' designation that is exempt from Ministerial bump-ups
- ◉ Enhanced approaches to Indigenous and public engagement

2.6 REGULATORY AND POLICY FRAMEWORK

Changes to the Act are intended to streamline the environmental assessment process for most projects and will result in changes to the approvals process to be followed for Regional projects. Regulations to implement new environmental assessment processes are currently under development by the province, which will outline the process to be followed for future Regional projects, including those listed in Section 6. The Master Plan has been structured to adapt to this regulatory change when it occurs.

Great Lakes Agreements

The Great Lakes-St. Lawrence River Basin Sustainable Water Resources Agreement between Ontario, Quebec and the Great Lakes states in the United States governs the transfer of water between Great Lakes watersheds. A transfer occurs any time water is taken from one watershed and moved into another and requires unanimous approval from all signatories to the agreement. Regulations under the provincial *Ontario Water Resources Act* support limitations and requirements imposed on transfers set out under these agreements.

In 2010, after gaining approval from all Great Lakes states and provinces, York Region was granted an intra-basin transfer authorizing a transfer of up to 105 million litres of water a day from the Lake Ontario watershed to the Lake Simcoe/Lake Huron watershed with return flow to Lake Ontario. This daily limit is a factor in determining how best to meet the needs of the Region's communities north of the Lake Ontario watershed boundary as they grow. It also underscores the importance to York Region of conservation and greater self-sufficiency in water supply and wastewater treatment.



Protection of the Greenbelt, Oak Ridges Moraine and Lake Simcoe

The Greenbelt, a broad band of land encircling much of south-central Ontario, covers 69% of the land base within York Region's geographic boundaries. The *Greenbelt Plan*, created under the provincial *Greenbelt Act, 2005*, permanently protects natural heritage and water resource systems within it and supports agriculture as its main land use. The Greenbelt Plan prevents York Region from using lands within a "Protected Countryside" area for future urban growth. It restricts building or locating infrastructure in the plan area. Lake-based water and wastewater services cannot be extended to communities in the plan area not already receiving lake-based services unless public health is at risk or an existing settlement area is expanded.

2.6 REGULATORY AND POLICY FRAMEWORK

The Oak Ridges Moraine is a component of the Greenbelt. An important source of groundwater recharge, the moraine is protected by its own provincial legislation and conservation plan under the *Oak Ridges Moraine Conservation Act, 2001*. Generally, where the [Oak Ridges Moraine plan](#) covers a specific geographic area, it takes precedence over policies in the Greenbelt Plan. Future growth cannot generally be accommodated except in approved settlement areas, and there are restrictions on how and where infrastructure can be located. Servicing considerations for select communities located within the Greenbelt and Oak Ridges Moraine are included in Appendix A.7. This information could be used as a basis to consider municipal servicing implications if provincial policy restrictions are removed in the future.

Covering much of the northern part of the Region, Lake Simcoe and its tributaries make up an area of special natural environmental interest, containing wetlands, forests and other natural features. Human-related pressures, including phosphorus loading, led to creation of the provincial *Lake Simcoe Protection Act, 2008* and an associated [Lake Simcoe Protection Plan](#). The Protection Plan limits phosphorus discharges, including those from municipal wastewater treatment facilities and does not allow for any new wastewater treatment facility to be built unless it replaces an existing treatment facility. In addition, Provincial environmental policy often issues competing requirements focused on areas that are easier to regulate, not necessarily the most significant sources. There is a need for more integrated policy thinking to mitigate conflicts like the Hazardous and Special Products Regulation which recommends consumers use up left over fertilizer which conflicts with provincial regulations for controlling non-point sources of nutrients.

In addition to provincial protection, York Region's Official Plan recognizes these systems and key natural features that support healthy ecosystems, such as valleylands, woodlands, streams and lakes. It sets out policies around use, protection and enhancement of the Regional Greenlands System, which includes many of these features. These policies underlie the objective of this Master Plan to deliver sustainable servicing and align with the watershed plans discussed below.

Protection of Watershed Health

Under the provincial *Conservation Authorities Act*, the Toronto and Region Conservation Authority and Lake Simcoe Region Conservation Authority have undertaken watershed and subwatershed planning for decades. This work helped inform the Municipal Comprehensive Review and infrastructure planning. Plans are available on the website of the Toronto and Region Conservation Authority and Lake Simcoe Region Conservation Authority.

Through project-specific environmental assessments, design and construction will meet the Toronto and Region Conservation Authority's [Living City Policies](#), and will fulfil the requirements of Ontario Regulation 166/06 including efforts to avoid, minimize, mitigate and compensate for impacts to the natural heritage and hazard systems.

2.6 REGULATORY AND POLICY FRAMEWORK

Rouge National Urban Park

Created by federal legislation in 2015, the Rouge National Urban Park is a new type of protected area — a national park within an urban area that includes part of the City of Markham and Town of Whitchurch-Stouffville within York Region. Regional infrastructure is located within or close to the park, so this update considered the park’s management plan. When infrastructure work needs to be done in or near the park, the Region will protect its natural features. Both the Rouge National Urban Park agreement and the *Rouge National Urban Park Act* provide a strong foundation for protecting a broad range of Regional interests including: growth management, infrastructure (e.g. water wastewater and roads), agriculture, transit and utilities. The agreement provides for future infrastructure needs, protects easements and allows for maintenance activities including the ongoing rehabilitation of the York Durham Sewage System.

Other Regulatory Considerations

Ontario has put in place a “multi-barrier” approach to safeguard drinking water. This is an integrated system of measures and tools that together prevent or reduce contamination from water source to tap. Legislative elements of the approach include:

- *The Safe Drinking Water Act, 2002*, which sets out rigid requirements for drinking water operations and water quality; the Act imposes a standard of care on those responsible for municipal drinking water systems
- *The Clean Water Act, 2006*, which requires development of watershed-based protection plans for municipal water sources; in each of the 19 watershed-based source protection regions across Ontario, a local committee developed a plan to protect existing and future drinking water sources; York Region is represented on two committees: the South Georgian Bay Lake Simcoe Source Protection Region for the Lake Huron watershed; and the Credit Valley, Toronto and Region and Central Lake Ontario Source Protection Region for the Lake Ontario watershed; as required by source protection plans, the Regional Official Plan evaluates potential growth areas to ensure that current or planned service capacity of groundwater supply wells would not be adversely affected
- *The Ontario Water Resources Act*, which provides for consideration, management and protection of Ontario’s waters by regulating water takings and sewage disposal

The Region is committed to complying with all relevant elements of Ontario’s regulatory and policy framework. Requirements were considered at a high level in developing the Master Plan and will be fully reflected in project-specific environmental assessments.

3.0 OVERVIEW OF WATER AND WASTEWATER IN YORK REGION



3.1 EVOLUTION

3.2 CURRENT SYSTEMS

3.3 CURRENT PROGRAMS AND INITIATIVES SUPPORTING INFRASTRUCTURE

3.4 USING THE ONE WATER APPROACH

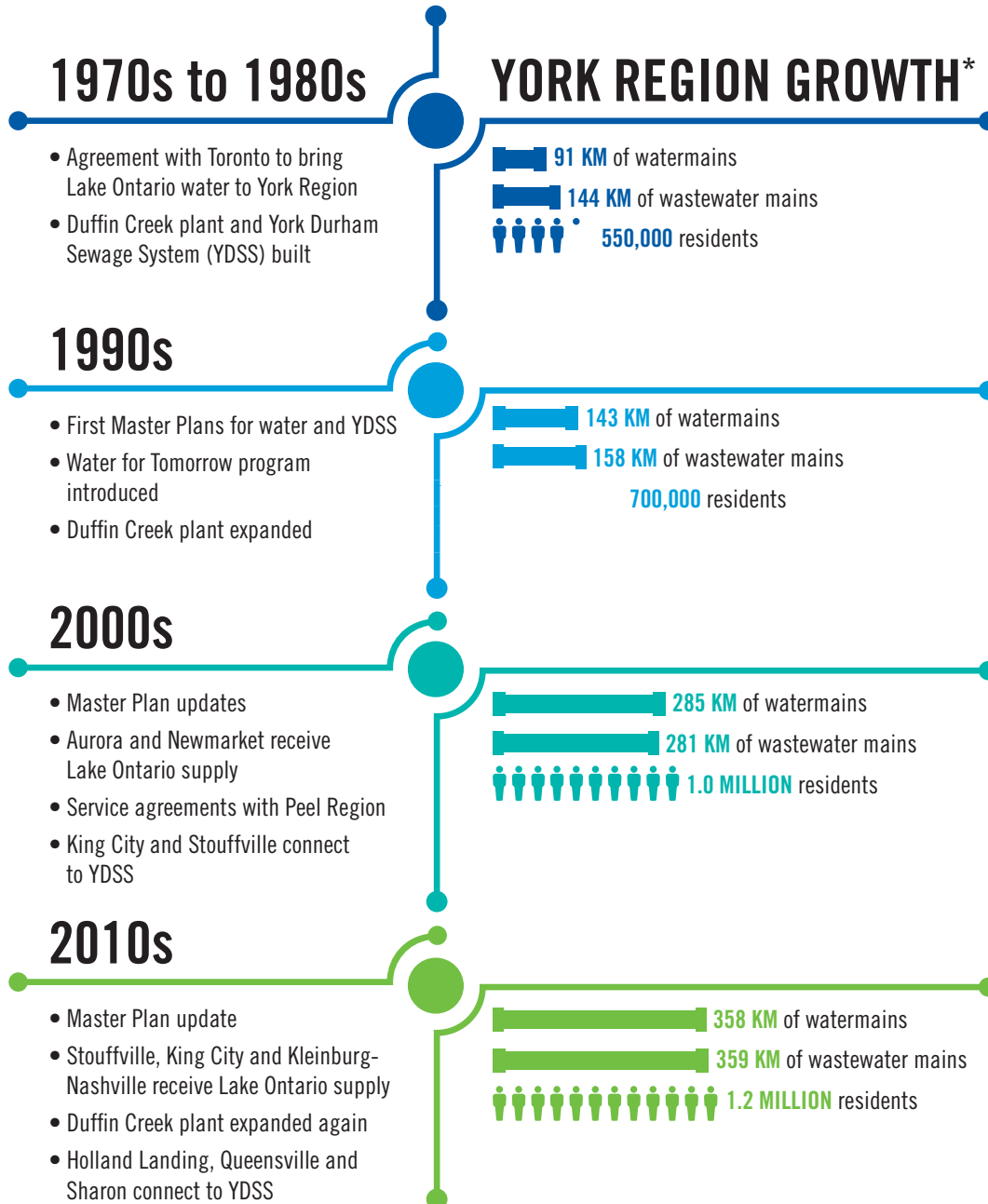


3.1 EVOLUTION

3.1 EVOLUTION

As York Region has grown, its water and wastewater services and systems have evolved to keep pace. Figure 3.1 provides an overview of key decisions and events that have significantly shaped the Region's servicing strategy.

Figure 3.1 York Region Servicing History



*Regional water and wastewater mains only. Length of mains and population cumulative over each decade.

3.2 CURRENT SYSTEMS

3.2 CURRENT SYSTEMS

The following sections provide an overview of water and wastewater systems currently in service.

The Master Plan focuses on municipal servicing only. It excludes developments serviced by privately owned and operated communal water and wastewater systems. Through the Municipal Comprehensive Review, interest was expressed in the provision of water and wastewater services for the communities of Ballantrae, Gormley and Vandorf-Preston Lake in the Town of Whitchurch-Stouffville. These communities were not considered for significant growth nor for provision of municipal servicing because of current provincial policy restrictions. In addition, interest was expressed for an increase in servicing capacity in Nobleton in the Township of King and Mount Albert in the Town of East Gwillimbury, which are not considered for significant growth due to provincial policy restrictions. Appendix A.7 outlines considerations for servicing these communities currently restricted through provincial policy if those restrictions are lifted in the future. It also includes further information about private communal systems.

Water Systems

The Regional water system supplies roughly 123 billion litres of water to residents and businesses annually, enough to fill about 50,000 Olympic-size swimming pools.

Through agreements with neighbouring municipalities, over 90% of York Region's total supply has come from Lake Ontario in recent years, with groundwater supplying close to 7% and water from Lake Simcoe the remaining amount. Groundwater, which is drawn from municipal wells, may be a community's only supply, or in some areas may be mixed with Lake Ontario water.

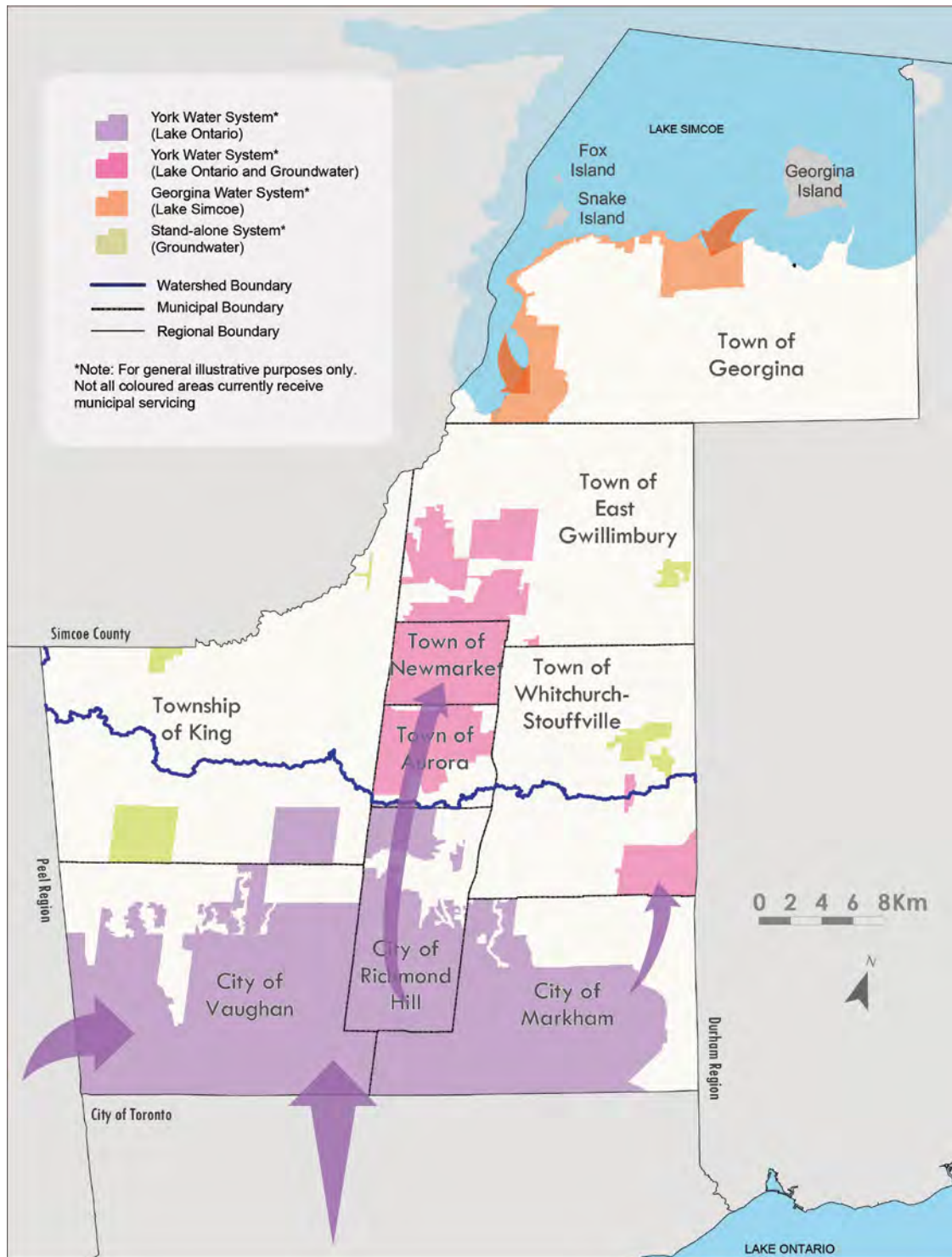
York Region's water infrastructure is made up of:

- The York water system, which is the Region's largest drinking water treatment and supply system; it services the towns of Newmarket and Aurora, parts of the Town of East Gwillimbury (Holland Landing, Queensville and Sharon), King City in the Township of King, the community of Stouffville in the Town of Whitchurch-Stouffville and the cities of Markham, Richmond Hill and Vaughan; this system distributes Lake Ontario water. In the towns of Aurora, Newmarket and East Gwillimbury, Lake Ontario supply is blended with groundwater from the Yonge Street aquifer, and in the community of Stouffville it is supplemented with local groundwater
- The Georgina water system, which draws water from Lake Simcoe to serve residents of the Town of Georgina
- Five stand-alone groundwater supply systems, which service communities in the Greenbelt Plan area where regulation prevents lake-based supply, as explained in Section 2.6. These groundwater systems are in the communities of Ansnorveldt, Nobleton and Schomberg in Township of King; Ballantrae-Musselman's Lake in the Town of Whitchurch-Stouffville; and Mount Albert in the Town of East Gwillimbury

3.2 CURRENT SYSTEMS

Figure 3.2 illustrates York Region’s water systems and sources of supply. Most York Region residents are served by one of these municipal water systems. Many farms and other rural properties, however, rely on private on-site water systems such as wells.

Figure 3.2 York Region Water Systems and Sources of Supply in 2021

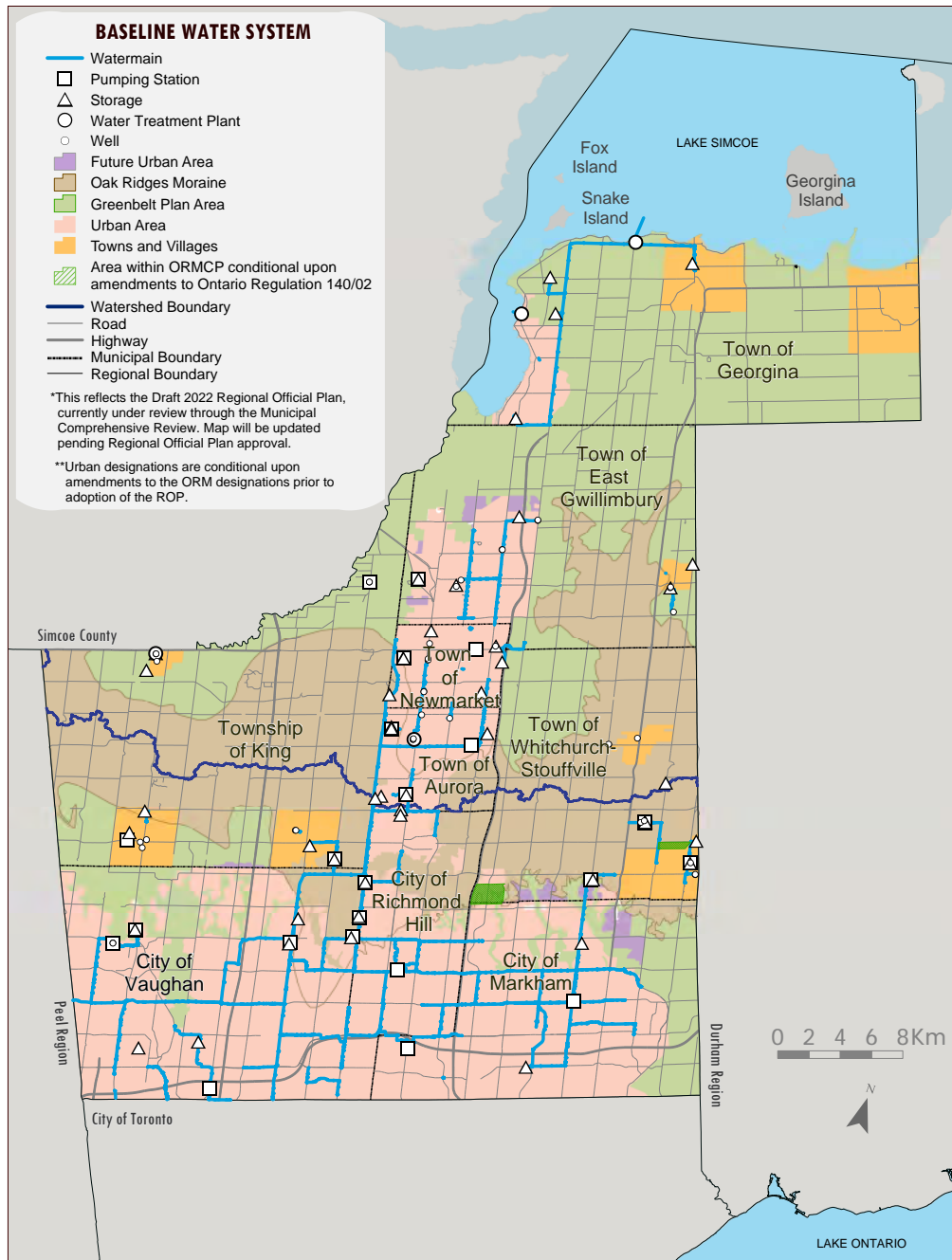


3.2 CURRENT SYSTEMS

The water system is continually evolving as new infrastructure is constructed, modified or taken off-line. For the purpose of this Master Plan, the baseline water infrastructure system included all infrastructure in place or under construction before January 2022. The baseline is shown in Figure 3.3.

The baseline was the starting point from which this Master Plan update assessed the need for any additional water servicing. Appendix A.2 provides a detailed discussion of York Region's current water infrastructure system.

Figure 3.3 York Region's Baseline Water Infrastructure Systems in 2021



3.2 CURRENT SYSTEMS

Wastewater Systems

As with water supply, York Region has agreements with neighbouring municipalities for wastewater treatment:

- With Durham Region, it co-owns the Duffin Creek Water Pollution Control Plant, trunk sewers and other infrastructure located in Pickering; the Duffin Creek plant treats about 85% of the Region's wastewater
- Through the York-Peel servicing agreement, Peel Region treats about 10% of the Region's wastewater

The balance of wastewater is treated at seven water resource recovery facilities wholly owned by the Region. Of the total treated annual wastewater flow, about 95% is discharged into the Lake Ontario watershed and 5% into the Lake Simcoe/Lake Huron watershed.

Regional wastewater infrastructure includes:

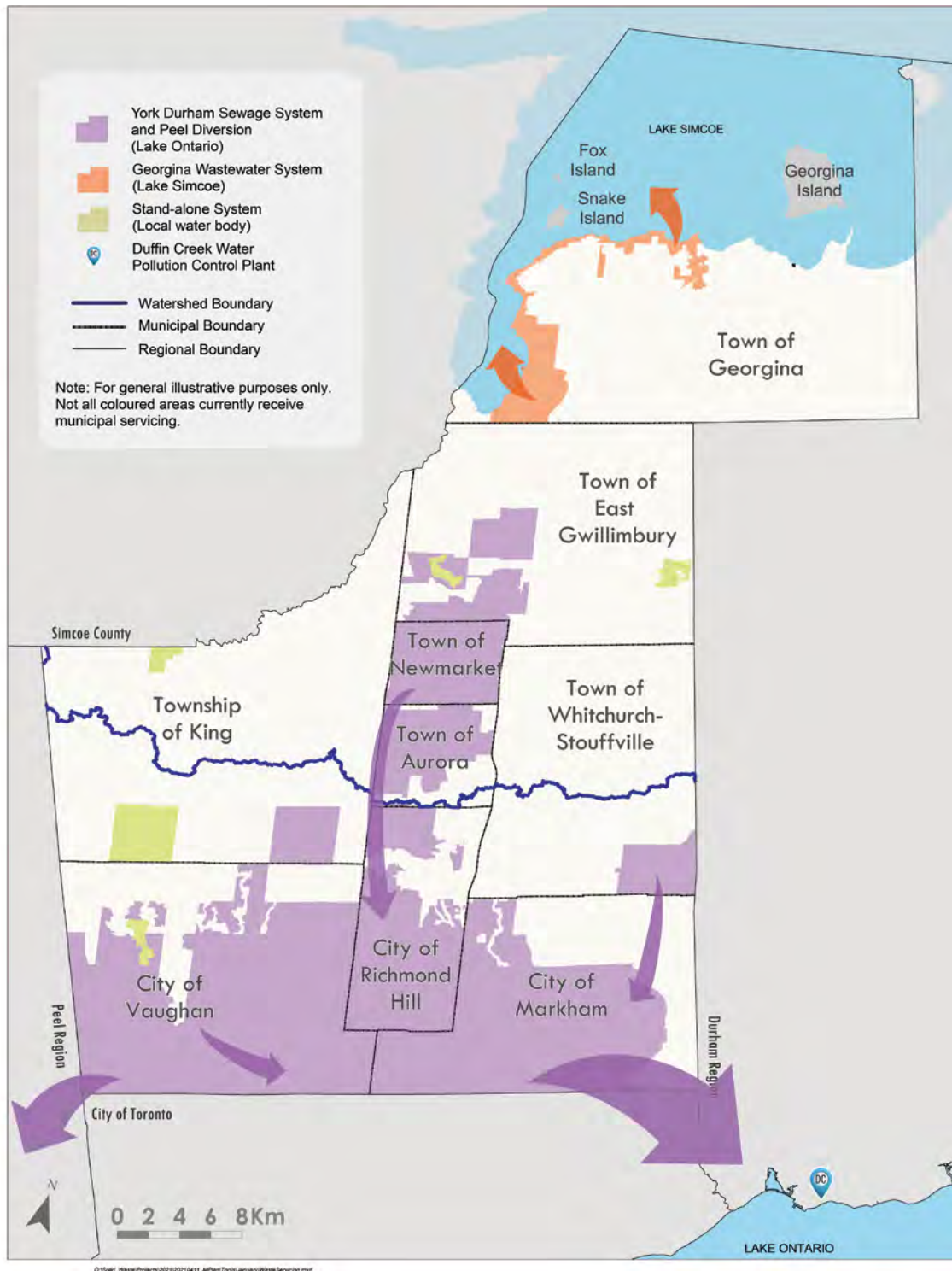
- The York Durham Sewage System, which broadly refers to the Duffin Creek Water Pollution Control Plant, other wastewater infrastructure in the City of Pickering and an associated sewer network that serves the cities of Markham, Richmond Hill and Vaughan; the towns of Aurora and Newmarket; the community of Stouffville in the Town of Whitchurch-Stouffville; King City in the Township of King and parts of the Town of East Gwillimbury (Holland Landing, Queensville and Sharon)
- The Peel Diversion System, which conveys flows from part of the City of Vaughan for treatment in the Peel Region system
- The Keswick and Sutton water resource recovery facilities in the Town of Georgina in the Lake Simcoe/Lake Huron watershed
- Stand-alone wastewater systems in four communities: Nobleton in the Township of King, and Kleinburg in the City of Vaughan in the Lake Ontario watershed, and Holland Landing (also connected to the York Durham Sewage System) and Mount Albert in the Town of East Gwillimbury and Schomberg in Township of King in the Lake Simcoe/Lake Huron watershed



3.2 CURRENT SYSTEMS

Figure 3.4 illustrates York Region's wastewater systems and receiving water bodies. Most residents in York Region are connected to municipal services. Many farms and other rural properties rely on private servicing such as wells and septic systems.

Figure 3.4 Regional Wastewater Systems in 2021

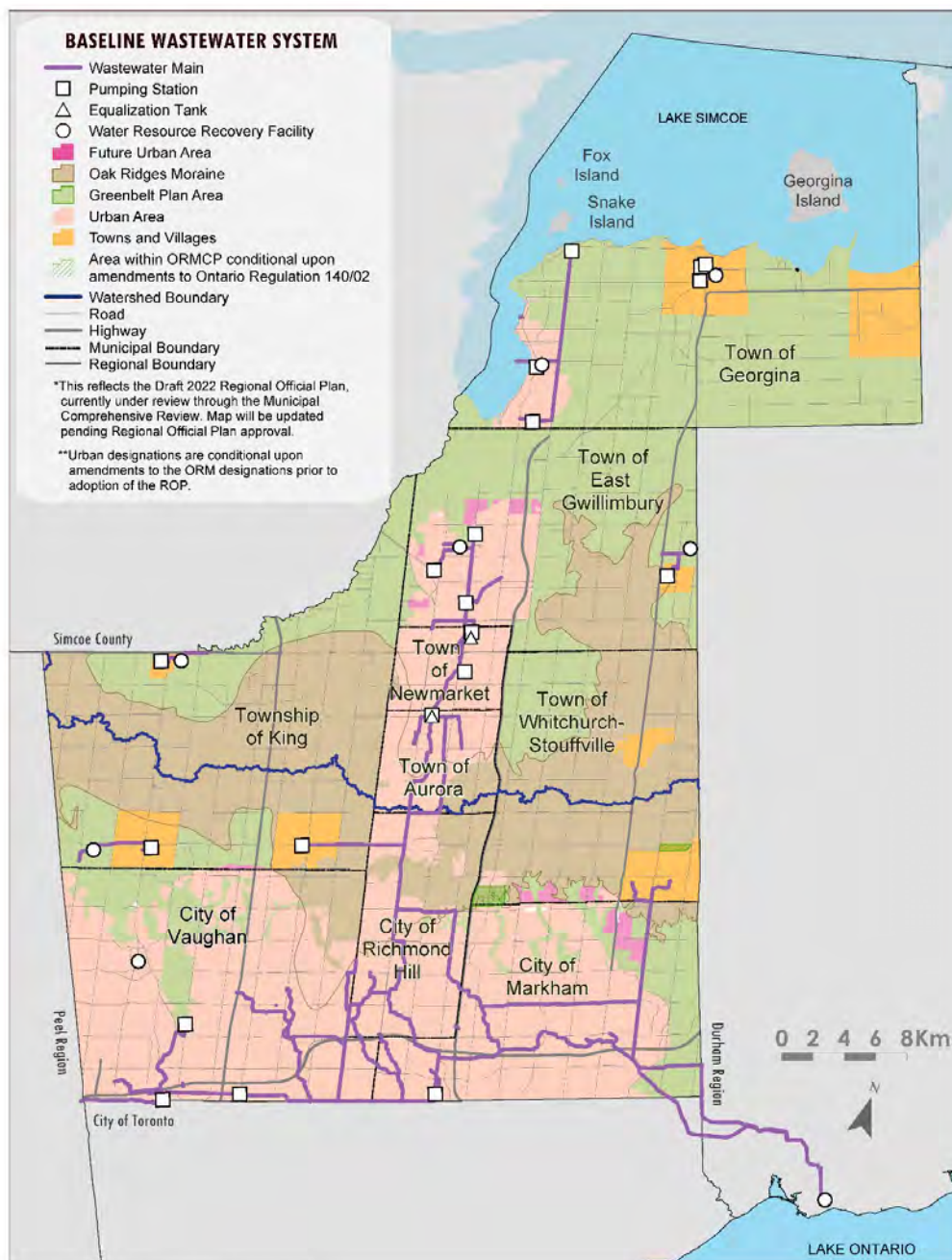


3.2 CURRENT SYSTEMS

The baseline wastewater infrastructure systems are shown in Figure 3.5.

A detailed explanation of York Region's existing wastewater infrastructure systems can be found in Appendix A.2. Like our regional water systems, our wastewater infrastructure systems constantly evolve. This Master Plan update considers all infrastructure in place or under construction before January 2022 as the baseline in assessing the need for additional wastewater servicing.

Figure 3.5 York Region's Baseline Wastewater Infrastructure Systems in 2021



3.3 CURRENT PROGRAMS AND INITIATIVES SUPPORTING INFRASTRUCTURE

3.3 CURRENT PROGRAMS AND INITIATIVES SUPPORTING INFRASTRUCTURE

Going hand in hand with the 30-year plan for new infrastructure projects set out in this Master Plan is a suite of programs and initiatives, including those outlined below, to manage system demand, care for assets and address climate change. By reducing the burden on infrastructure, such programs lessen or defer the need to expand and add to systems, and are key to efficient and cost-effective servicing.

Water Conservation

Since York Region introduced the 1997 Long-Term Water Supply Master Plan and the Water for Tomorrow program, water conservation plans have been key to managing the demand for water. Over the past 23 years, an estimated 27 megalitres a day has been saved because of the Region's Water for Tomorrow and Long-Term Water Conservation Strategy programming, the latter introduced in 2011.

This work has translated into declining per capita residential consumption. Between 2016 and 2020, water consumption per capita averaged 194 litres a day for single-family households, down from 207 litres a day over the previous five-year period. This value excludes total system demand, which includes total consumption from all sectors, including non-revenue water. The Region's aspirational goal is to reduce residential consumption to an average of 150 litres by 2051. It is important to note that while this goal is valuable to discourage wasting water and to price services equitably, water and wastewater systems must be designed based not on average flows, but on the highest expected flows, as discussed in Section 4.2. York Region manages demand on water and wastewater systems through programs that encourage communities, residents and businesses to consider how much water they use, when they use it and how they dispose of it.

The Region's Long-Term Water Conservation Strategy and programs, updated in 2021, emphasize cost-effective opportunities to realize long-term water savings, as described further in Section 7.2. The updated strategy is available in Appendix C.1.

Inflow and Infiltration Reduction

Groundwater and water from rain or snow storm events can get into the sanitary sewer and treatment system through processes called inflow and infiltration.

The results can include sewage backups in basements, higher costs to treat wastewater because of the extra water and possible overflows at pumping stations or spills to the natural environment. The problem is expected to worsen because climate change is resulting in more frequent and severe rain, ice and snowstorms, and temperature fluctuations that can bring rapid snow melt.

Since 2011, York Region's Inflow and Infiltration Reduction Strategy has been integral to the Region's water demand management, saving more than 20 million litres of inflow and infiltration a day through partnerships and programs with local municipalities and the development industry. The 2021 update of the Inflow and Infiltration Reduction Strategy builds on these successes and aims to reduce inflow and infiltration by 40 million litres a day by 2031, double the current level of reduction. This will further optimize the wastewater system and improve system resiliency in the face of extreme weather, as described in Section 7.2. The updated strategy is available in Appendix C.2.

3.3 CURRENT PROGRAMS AND INITIATIVES SUPPORTING INFRASTRUCTURE

Asset Management

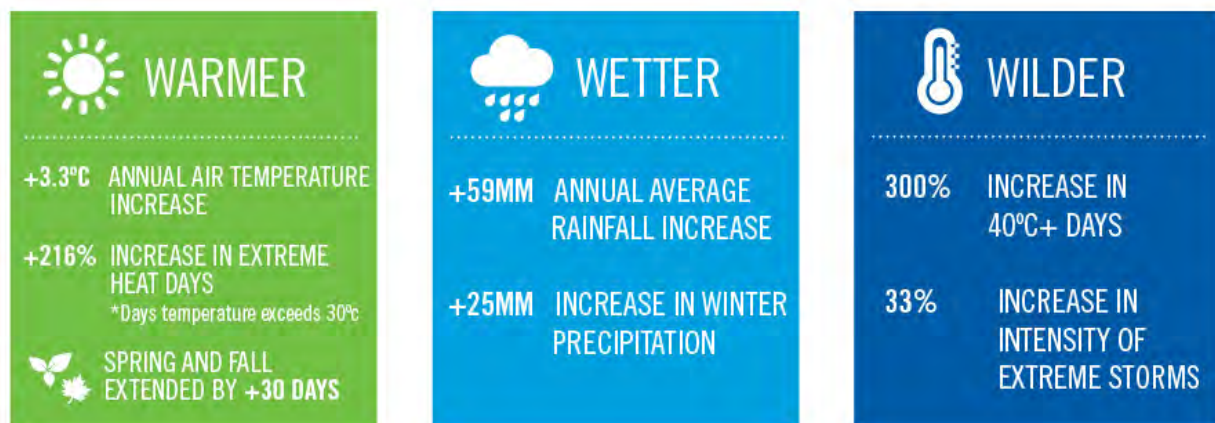
Asset management planning for municipal infrastructure is another provincial regulatory requirement under Ontario Regulation 588/17 influencing infrastructure planning. The Region developed a Corporate Asset Management Policy and related plan with the goal of minimizing costs of infrastructure over its entire life cycle, from construction through operation to decommissioning. The Corporate Asset Management Plan, adopted by Regional Council in 2018, considers inspection, repair, renewal, replacement and other needs over a 100-year time horizon. In recognition of the importance of managing and maintaining infrastructure assets to ensure sustainable service delivery, a comprehensive Water and Wastewater Asset Management Plan was developed in 2017 to provide input to the [Corporate Asset Management Plan](#). Updates to both of these asset management plans are anticipated by 2024. To ensure financial sustainability, reserves are maintained through the water and wastewater user rates to recover the full costs of providing services, including day-to-day operating expenses and contributions to reserves to cover current and future rehabilitation and replacement costs. This principal of full cost recovery is a long-standing Regional commitment that is outlined in the Region's [Water and Wastewater Financial Sustainability Plan](#).

To get the most value from investments and minimize disruption to communities, the Region looks for alignment with the timing of this renewal work with growth-related projects, wherever possible.

Climate Change and Energy Conservation

As outlined in [York Region's draft Climate Change Action Plan](#), a changing climate is already bringing more extreme and less predictable weather (Figure 3.6), which puts additional pressure on infrastructure.

Figure 3.6 Predicted Climate Trends for York Region by 2050



3.3 CURRENT PROGRAMS AND INITIATIVES SUPPORTING INFRASTRUCTURE

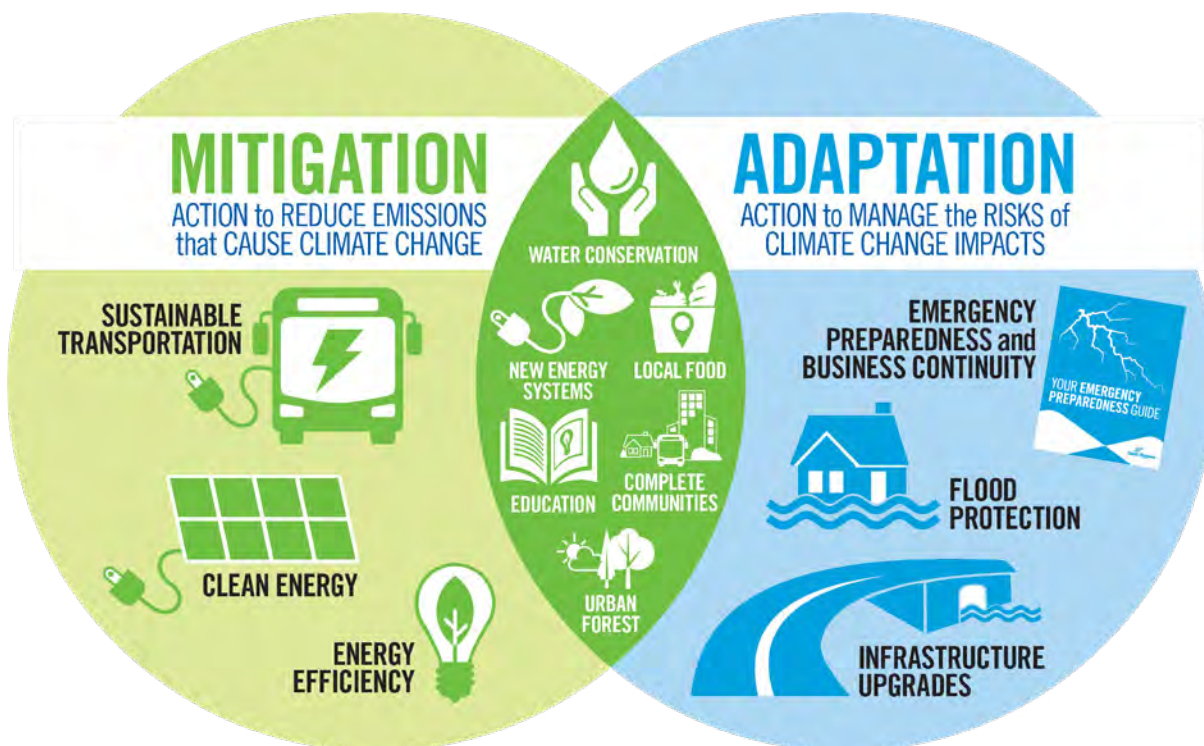
Addressing climate change calls for two approaches: mitigation and adaptation. Mitigation refers to reducing greenhouse gas (GHG) emissions to slow human-induced global warming. Adaptation refers to taking action to reduce negative impacts associated with existing and future climate change. Examples of mitigation and adaptation actions are illustrated in Figure 3.7.

The Region is committed to mitigating impacts of climate change with a goal of achieving net-zero GHG emissions by 2050. York Region's [Energy Conservation and Demand Management Plan](#) lays out programs and projects to reduce energy use and GHG emissions associated with the delivery of Regional services. The plan is updated every five years as required under the *Electricity Act, 1998*. The last update, completed in 2019, features short, medium and long-term GHG reduction targets to 2051.

The main use of energy in water and wastewater systems is for pumping and wastewater aeration. Energy use can be reduced by operating more efficiently and encouraging water conservation. In line with the Energy Conservation and Demand Management Plan, potential GHG emissions were considered in selecting a preferred strategy, as described in Section 5, Table 5.2: Results of Evaluating Two Alternative Water Servicing Strategies.

Even with substantial mitigation efforts, York Region will continue to feel climate change impacts, and needs to adapt to these and take action to reduce its negative impacts. As the plan is implemented, making sure assets are resilient in the face of expected higher temperatures and wetter/drier extremes may call for updating design requirements.

Figure 3.7 Examples of Mitigation and Adaptation Actions



3.4 USING THE ONE WATER APPROACH

3.4 USING THE ONE WATER APPROACH

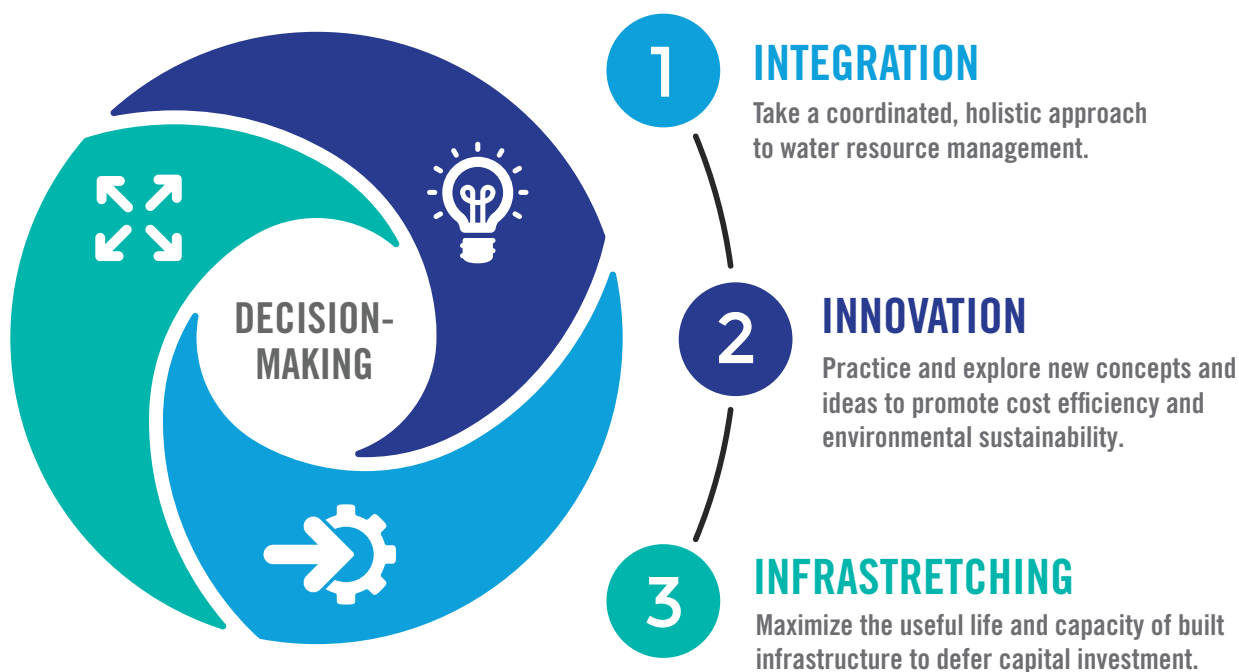
An important purpose of this Master Plan update is ensuring long-term sustainability of water and wastewater systems, following the direction of York Regional Council at the time of the 2016 update.

The Region is increasingly using an integrated One Water approach to work towards greater sustainability. Adopted by utilities around the world, One Water recognizes that all sources of water – drinking water, wastewater, recycled water, rainwater, stormwater and more – are part of a finite global resource. By leveraging previously untapped sources of water and natural instead of built solutions, One Water benefits communities and the environment while costing less than traditional approaches.

Recognizing municipal water systems as part of the larger water cycle in the natural world aligns with the circular economy concept that focuses on conserving, reusing and repurposing resources, not just extracting, using and disposing of them.

In York Region, the three guiding principles of One Water are integrate, innovate and 'infrastructure' as defined in Figure 3.8 below.

Figure 3.8 One Water Guiding Principles



3.4 USING THE ONE WATER APPROACH

Integrate

- One Water recognizes all forms of water are ultimately connected in a complex, living system
- To better manage and protect that living system, people must work together to share and connect their plans, practices, knowledge and information
- Integrating also means working together within the Region to create a collaborative One Water culture by adopting whole systems thinking, joining up plans and practices, and building relationships with entities throughout and even beyond the Region

Innovate

- Innovative solutions to complex problems are needed to enhance systems and services by better matching water sources and water uses; innovation can be a new idea, product or new way of doing things that achieves more with the same or fewer resources
- One Water should inspire and support innovative approaches that add value to water services for the benefit of residents, businesses and the environment

Infrastretch

- The One Water approach is critical to making infrastructure more resilient, reliable and cost effective
- Infrastretching is a term used by York Region which means maximizing the useful capacity and useful life of built infrastructure to minimize and/or defer capital investment; this principle focuses on the physical water and wastewater assets as well as on supportive green infrastructure



Water Reuse Research Demonstration Project

York Region continues to explore new opportunities to expand its One Water approach through research and innovation.

In 2020, the Region completed the award-winning Water Reuse Research Demonstration Project, which involved reusing treated wastewater effluent for irrigation at a sod farm. The project received the Ontario Water Works Association (OWWA) 2020 Water Efficiency Award.

The demonstration project identified some limitations in applying reused water, including salt content from water softeners used in the area. York Region is now researching potential non-agriculture applications, for example, street tree irrigation or other commercial or industrial uses by nearby businesses. Through an economic feasibility study in 2022, York Region hopes to identify businesses that can use reused water from wastewater or dewatering sites.

3.4 USING THE ONE WATER APPROACH



Natural Infrastructure to Mitigate Hazards of Changing Climate

Impacts of climate change are particularly magnified for people living in urban areas, where urban heat island effect will increase temperatures on average 1 to 3 degrees Celsius, and in extreme cases 12 degrees Celsius compared to surrounding rural areas. Heat waves have been identified as the primary weather-related disaster causing death in the world.

To help mitigate the hazards of extreme temperatures and flooding, York Region, with funding provided through the Federal Disaster Mitigation and Adaptation Fund, is adding more than 400,000 trees, seedlings and shrubs in urban areas.

In the face of climate change, an investment in natural infrastructure is a sound, cost-effective investment for the long term, with benefits that increase over time.

Our One Water approach is most effective and fully realized when all three of these principles are brought together to solve complex problems facing water services and communities.

One Water goes far beyond the Region's own actions. Just as the natural water cycle operates at different scales, from small ponds and creeks to vast oceans, One Water ideas and initiatives can take place at the household, business, community or watershed level.



Big Data Analytics and Machine Learning for Improved Wastewater System Response and Forecasting

York Region aims to enhance wastewater system resiliency by using a model powered by machine learning that can quickly and accurately predict the sanitary sewer system's response to rainfall.

The model is based on real-time data collected from over 350 monitoring locations. It will help inform smarter operational decisions and improve the design and management of infrastructure with better confidence and greater cost effectiveness.



4.0 OUTLOOK



- 4.1 UPDATE TO GROWTH PLAN FORECASTS AND EXPECTED INTENSIFICATION
- 4.2 WATER AND WASTEWATER FLOW PROJECTIONS
- 4.3 FISCAL AND LAND USE PLANNING IMPLICATIONS



4.1 UPDATE TO GROWTH PLAN FORECASTS AND EXPECTED INTENSIFICATION

4.1 UPDATE TO GROWTH PLAN FORECASTS AND EXPECTED INTENSIFICATION

This updated Master Plan refines the long-term servicing strategy that was outlined in 2016. The refinements largely reflect revised planning projections to 2051 developed through the Municipal Comprehensive Review, which informed the updated Regional Official Plan.

These planning projections are based on 2020 Ontario government updates to population and employment forecasts in A Place to Grow: Growth Plan for the Greater Golden Horseshoe. Provincial direction is outlined in Section 2.6.

In addition to updating forecasts in 2020, the province extended the forecast period by 10 years, from 2041 to 2051. Overall, significant growth is expected across York Region by 2051, as shown in Figure 4.1. This represents the addition of roughly 800,000 people and 345,000 jobs between 2021 and 2051, the greatest percentage growth of any Greater Toronto and Hamilton Area municipality.

Figure 4.1 Population and Employment Growth Forecast in York Region through the Provincial Growth Plan

YORK REGION'S **POPULATION** is EXPECTED to GROW from



YORK REGION'S **EMPLOYMENT** is EXPECTED to GROW from



4.1 UPDATE TO GROWTH PLAN FORECASTS AND EXPECTED INTENSIFICATION



The province requires municipalities to identify and plan for infrastructure needed to support its growth forecasts. York Region and other regional municipalities, in coordination with local municipal planners, distribute provincial projections to the local level.

Updated figures for York Region, taken from the Municipal Comprehensive Review, are shown in Table 4.1 and Figure 4.2 below.

In southern York Region communities, urban boundaries will expand considerably in the cities of Markham and Vaughan. Areas of high intensification are also planned, with greater density of residents and jobs than was expected in 2016.

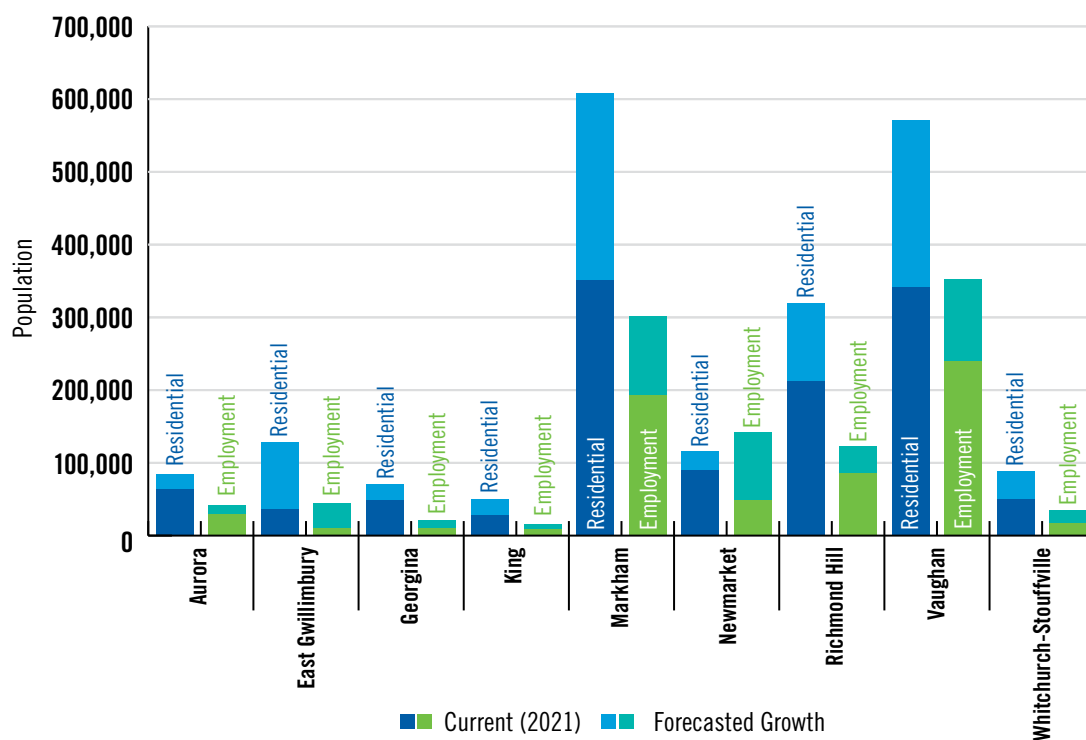
Table 4.1 Distribution of Population and Employment in York Region to 2051

Local Municipality	Population	Employment
Aurora	84,700	41,300
East Gwillimbury	127,600	43,700
Georgina	70,100	20,700
King	50,100	16,400
Markham	608,800	301,700
Newmarket	115,900	58,500
Richmond Hill	319,800	122,800
Vaughan	570,600	351,600
Whitchurch-Stouffville	88,200	34,500
York Region	2,035,800	991,200

Major growth is also forecast in the north, particularly in the Town of East Gwillimbury, where significant new land will be brought into the urban boundary. Moderately higher growth than set out in 2016 is planned in the towns of Aurora, Newmarket and Georgina.

4.1 UPDATE TO GROWTH PLAN FORECASTS AND EXPECTED INTENSIFICATION

Figure 4.2 Where New Population and Employment will go by 2051



On October 21, 2021, York Regional Council approved a growth scenario for the 2022 Regional Official Plan update. This scenario includes 50% intensification annually to 2041 and 55% annually from 2041 to 2051. Four motions were approved with respect to growth and urban expansion in the City of Markham, Township of King and the towns of East Gwillimbury and Whitchurch-Stouffville. Section 6 and Appendix A.7 further discuss how water and wastewater servicing has been considered for each motion.

As well as providing the Regional forecast, the province sets out minimum intensification and density targets through A Place to Grow. The emphasis is on compact growth that is ideally supported by transit.

Transit has become a more important consideration with extension of the subway line from the City of Toronto into York Region. A link to Vaughan Metropolitan Centre was completed in 2017, triggering major high-intensity development in that area. More recently, the provincial and federal governments announced their support for the Yonge North Subway Extension Project, extending the Yonge line to the Langstaff Gateway area near Highway 7 and Yonge Street in Richmond Hill, which is a Regional priority.

The Region has also introduced a new framework in the Regional Official Plan for major transit station areas, which aims to support the development of transit-supportive communities around higher order transit stations. Over 70 major transit station areas have been identified across the Region, supported by a comprehensive set of policies, mapping and density targets to help guide local municipalities on planning for major transit station areas.

4.2 WATER AND WASTEWATER FLOW PROJECTIONS

4.2 WATER AND WASTEWATER FLOW PROJECTIONS

Projections of expected water and wastewater flows are a key input to planning future servicing.

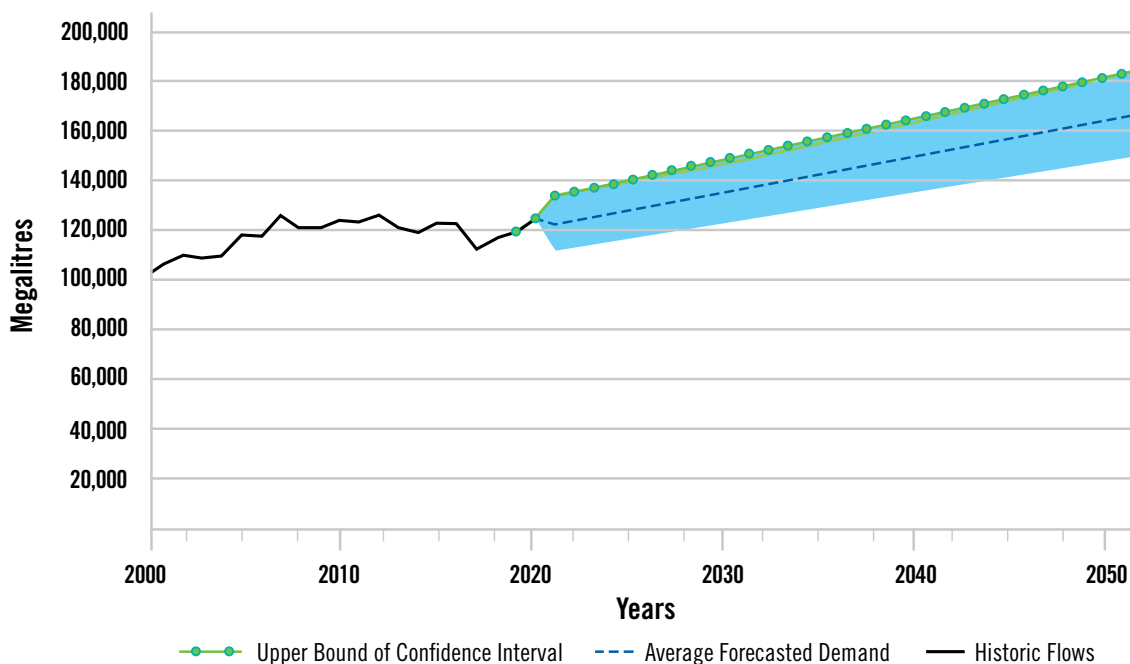
Forecast Water Flows

The model used by the Region to forecast annual water demand was first developed in 2015 as part of a water and wastewater user rate study. Since then, it has been regularly monitored and was recently reviewed for the [2021 update to the user rate study](#) and this Master Plan.

The model was developed by analyzing how demand for water in York Region is affected by population growth, price changes and average summer weather. Generally, demand goes up as population grows, although this is offset somewhat by declining per capita water consumption. Price increases also tend to moderate consumption increases. Summer weather that is drier and/or hotter than average boosts consumption, while cool, wet weather reduces it.

For infrastructure master planning, the forecast model uses the population forecasts in the Municipal Comprehensive Review, water prices as set out in the 2021 user rate study and average summer temperatures in York Region. The updated projection to 2051 is shown in the graph below:

Figure 4.3 Forecast Annual Regional Water Demand to 2051



The light blue shaded band shows the 95% confidence interval above and below the average. Statistically, actual demand can be expected to fall within this band 95% of the time. This is a reminder that all forecasts are subject to uncertainty.

4.2 WATER AND WASTEWATER FLOW PROJECTIONS

For greater certainty that adequate servicing will be in place when needed, and in line with previous master plans, the Region used the upper bound of the projection in Figure 4.3 – that is, the highest predicted demand within the 95% confidence interval – as the starting point for planning.

This gave a forecast for total water demand across the Region. Table 4.2 shows the design consumption rates for residential and employment sectors. The table shows that per person daily water consumption in litres per capita per day (Lpcd), whether at home or in a workplace, is expected to decrease over time because of water conservation efforts. These rates underpinned the analysis of future water needs.

Table 4.2 Residential and Employment Water Consumption Design Rates to 2051

Design Rate	Year					
	2021	2026	2031	2036	2041	2051
Residential (Lpcd)	221	214	207	200	195	195
Employment (Lpcd)	161	159	158	155	151	151

While these design rates are useful in determining general water needs, water consumption varies from day to day and can increase sharply during the summer, especially during a long spell of hot, dry weather. For this reason, design of water infrastructure inflates average demand by a “peaking factor” to consider consumption expected on highest demand day of the year. Other localized factors affecting water demand, such as proportion of residential to employment areas, are also factored into analysis of future needs in different areas.

Appendix A.4 provides more information on water demand forecasting and Appendix A.3 outlines technical design criteria. The Region monitors actual flows on an ongoing basis and regularly reviews design rates, updating them as needed as part of master plan updates – typically on a five-year cycle.

Considering Long-term Impacts of Working From Home on Water Demand Forecasting

Working from home during the pandemic shifted the usual consumption pattern between industrial/commercial/institutional (ICI) and residential with the residential share increasing and the ICI share dropping as businesses were closed and many residents began working from home. Despite this change in relative use by these sectors there was no discernible impact on total Regional water use. Impacts of any lasting changes in consumption patterns due to the pandemic will continue to be monitored and considered in future modelling.



4.3 FISCAL AND LAND USE PLANNING IMPLICATIONS

Wastewater Flow Projection

In dry weather, flows collected in the wastewater system correlate well with the amount of drinking water consumed.

Design of wastewater systems must consider “wet weather flow” conditions because some water inevitably enters the sanitary sewer system as a result of rainfall or snowmelt. This drives peak flows that the system must accommodate. The Region sizes its wastewater system to handle flows that would result from a 25-year storm event – a storm of such size and intensity that it would typically happen only once every 25 years.

For this Master Plan update, the Region reviewed its 25-year design storm to consider the latest measured flow data as well as the potential for climate change to result in more extreme weather events. This review found that the current design storm continues to be valid.

Appendix A.3 and A.4 provide more information on technical design criteria and wastewater flow forecasting respectively.

4.3 FISCAL AND LAND USE PLANNING IMPLICATIONS

The Master Plan is guided by the Region’s capacity to pay for new infrastructure. In particular, it needs to consider the impact of providing service to more people and more jobs in the Region, especially in areas of higher growth and intensification.

Growth-related infrastructure is primarily funded by development charges levied on new development. The provincial *Development Charges Act, 1997* governs 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 inform the development of the development charge background study and bylaw. The Region’s Development Charges Bylaw is being updated, with the revised bylaw to be in place by June 2022.

Infrastructure is designed to achieve economies of scale and is built before growth happens and development charges are collected. Debt is needed to bridge the gap between when infrastructure investments are made and when costs are recovered through development charges, but this approach must be used judiciously to avoid unsustainable debt levels and manage risk associated with timing of collections.

In recent years, the Region has experienced lower than forecast development and, as a result, lower than expected development charge collections. The lower development charge collections in turn increase the Region’s need to issue debt to bridge the timing between expenditure and development charge collections. As well, in some cases, infrastructure investments have been made in areas where growth has not happened as expected. Rising costs to deliver capital projects and delays in receiving approvals also contributed to increasing debt pressure.

4.3 FISCAL AND LAND USE PLANNING IMPLICATIONS



The Regional Fiscal Strategy, which aims to strike a balance between current and long-term financial needs, is addressing these impacts. The strategy achieves balance by carefully managing the capital plan, building reserves for future needs and limiting the use of development-charge-supported debt. Greater accuracy in forecasting growth, supported by continual monitoring and adjustment in plans as needed, also helps the Region provide the right service at the right time.

Through the Municipal Comprehensive Review and updates to the master plans, two key goals were to distribute local municipal growth to better leverage existing infrastructure systems and more tightly align the pacing of new capital projects with actual growth. These goals promote financial sustainability and were in line with principles endorsed by York Regional Council in [June 2019](#). They are key to creating fiscal room for the next generation of infrastructure projects, including the Region's share of the Yonge North Subway Extension. Phasing growth is important to ensure that communities are developed as complete communities, that residents will have access to a wide range of services and amenities within the same community (such as schools, parks, libraries, transit and jobs) in a timely manner. Phasing new communities is further outlined in the Draft Regional Official Plan policy 4.2.2.

Major changes in planning can affect servicing plans, as they may require infrastructure to be upsized, projects to be advanced and/or new projects added. Section 7.1 provides more details on how the Region takes an adaptive approach to implementation to accommodate such changes.

5.0 OPTIONS FOR SERVICING GROWTH



5.1 ARRIVING AT A PREFERRED STRATEGY FOR SERVICING

5.2 THE 2016 DIRECTION TO MEET GROWTH NEEDS

5.3 SCREENING THE CONCEPTS

5.4 DEVELOPING ALTERNATIVE STRATEGIES TO ADDRESS WATER AND WASTEWATER SERVICING NEEDS

5.5 EVALUATING ALTERNATIVE STRATEGIES



5.1 ARRIVING AT A PREFERRED STRATEGY FOR SERVICING

5.1 ARRIVING AT A PREFERRED STRATEGY FOR SERVICING

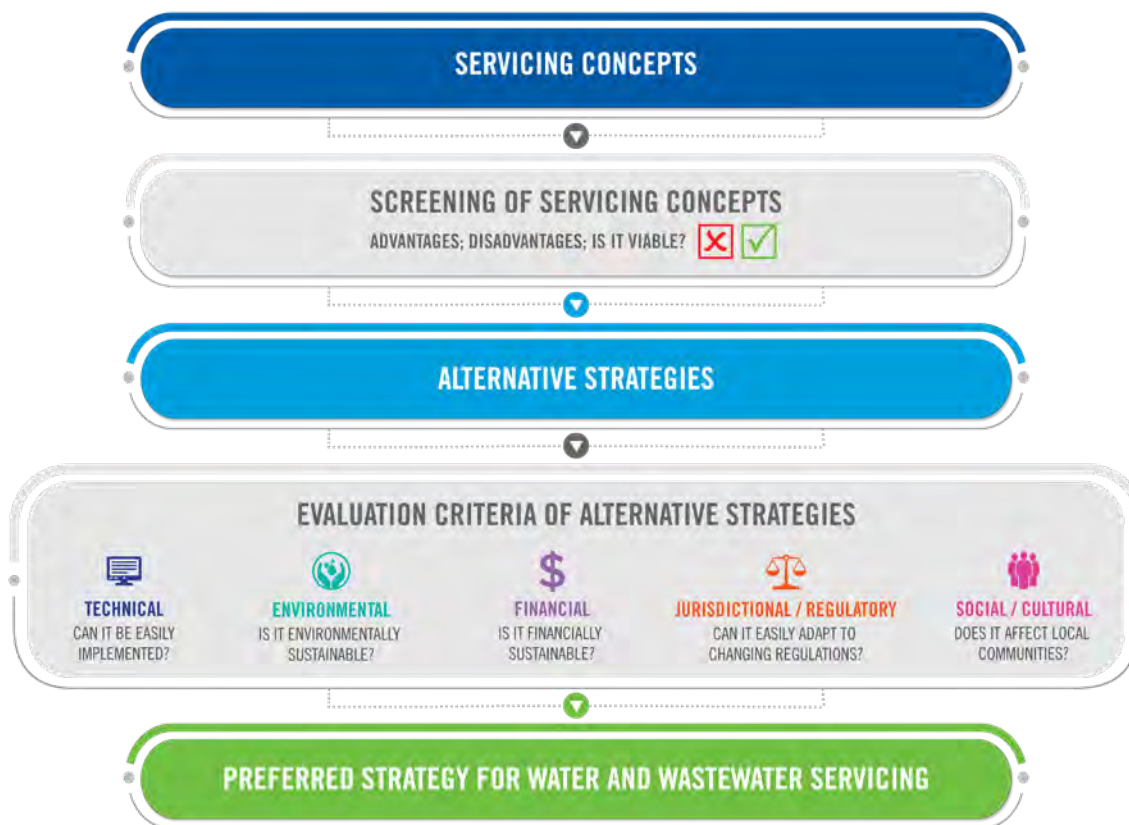
The Municipal Engineers Association framework for master planning considers water and wastewater servicing needs in the context of the whole servicing system.

This Master Plan update identified a preferred strategy for servicing through a two-stage process:

1. Screening of servicing concepts, which are various techniques or tools available to the Region that could be used independently or in combination to address servicing needs at a conceptual level
2. Developing and evaluating alternative strategies; these evolve from the servicing concepts to yield comprehensive and feasible approaches to address water and wastewater servicing needs

The diagram in Figure 5.1 shows the process:

Figure 5.1 Identifying a Preferred Strategy



The starting point for the review was the preferred strategy identified in the 2016 Master Plan update and subsequent studies and analyses.

5.2 THE 2016 DIRECTION TO MEET GROWTH NEEDS

5.2 THE 2016 DIRECTION TO MEET GROWTH NEEDS

The preferred strategy from the previous Master Plan update is referred to as the 2016 Servicing Strategy. It planned for future growth in the Region to be serviced largely by leveraging and expanding existing water and wastewater systems. Most drinking water would continue to come from Lake Ontario, and most wastewater would be returned to that watershed for treatment.

Key elements of the 2016 Servicing Strategy are:

- Introduce water supply from Lake Simcoe to supplement the current Lake Ontario and groundwater supply in the Town of East Gwillimbury and parts of the Town of Newmarket, and return wastewater flows to Lake Simcoe via the proposed Water Reclamation Centre and related infrastructure
- Continue to supply the cities of Markham, Vaughan and Richmond Hill and part of the Township of King with Lake Ontario water and return the related wastewater flows to Lake Ontario via the York Durham Sewage System
- Continue to supply the towns of Whitchurch-Stouffville and Aurora and most of the Town of Newmarket with blended groundwater and Lake Ontario water and return wastewater flows via the York Durham Sewage System. A portion of wastewater flows from the Town of Newmarket will be treated at the Water Reclamation Centre
- Continue to supply the Town of Georgina with Lake Simcoe water and return wastewater flows via the Keswick and Sutton water resource recovery facilities
- Continue to supply stand-alone communities with groundwater and return wastewater flows to individual water resource recovery facilities in those communities

Since 2016, the Region has been moving ahead on approved projects from the 2016 Servicing Strategy:

- York Regional Council approved adding a new pump to the Maple Pressure District 8 pumping station in the City of Vaughan
- The province approved the environmental assessment for additional water and wastewater service in northeast Vaughan
- The province approved the environmental assessment for the Duffin Creek Water Pollution Control Plant outfall strategy
- The Region commissioned a new twin forcemain (pumped sewer pipe) between the towns of Newmarket and Aurora in 2021, making the system more reliable and resilient

5.3 SCREENING THE CONCEPTS

The province permitted twinning of the forcemain from Upper York Sewage Solutions to go ahead owing to system security concerns, making it the only component of the proposed Upper York Sewage Solutions initiative yet approved. As a result of delays in approving the other components, York Regional Council authorized two interim projects in 2018 to provide capacity to meet growth needs in the towns of Aurora, East Gwillimbury and Newmarket:

- Upgrades to the Aurora sewage pumping station, completed in 2021
- A new pumping station near the intersection of Yonge Street and Henderson Drive in the Town of Aurora, on which construction started in summer 2021

The costs and disruptions related to these projects would have been avoided if the province had provided timely approval of Upper York Sewage Solutions, which remains valid to this day and has been awaiting a provincial decision on the environmental assessment since it was submitted in 2014.

The 2016 strategy also included continuing demand management programs like water conservation and inflow and infiltration reduction. These programs, which support environmental and financial sustainability, fit well with the One Water approach that the Region began integrating into its planning in 2016.

5.3 SCREENING THE CONCEPTS

At a high level, the following concepts for servicing new growth are theoretically available to York Region:

1. Do nothing
2. Limit growth
3. Expand and optimize the infrastructure system
4. Implement demand management measures



Optimize

Optimization, also called infrastretching, means maximizing the useful capacity and useful life of built infrastructure to minimize and/or defer capital investment. An example of this is managing the timing of flows in the wastewater pipe network to smooth peak flows at capacity bottlenecks. Optimization can allow for system expansion to be done strategically, as needed.

To screen these servicing concepts, the Region considered applicable regulations, technical and financial implications, and potential impact on the natural environment and communities at a high level to assess the advantages and disadvantages of each servicing concept. Table 5.1 describes each of the concepts as well as results of screening.

5.3 SCREENING THE CONCEPTS

Table 5.1 Screening of Water and Wastewater Servicing Concepts

Concepts	Description	Advantages	Disadvantages	Is this option viable?
Do nothing	A hypothetical concept that acknowledges growth will occur but provides no plan or action to ensure additional water and wastewater servicing needs are met.	<ul style="list-style-type: none"> • No costs for new or expanded infrastructure • No construction impacts 	<ul style="list-style-type: none"> • Inadequate service to residents and businesses; potential for wastewater spills; inability to service future growth • Public health risk and inability to comply with <i>Safe Drinking Water Act, 2002</i> and <i>Ontario Water Resources Act</i> 	<p>No</p> <p>This option would put York Region in direct violation of <i>Ontario Water Resources Act</i> and <i>Safe Drinking Water Act, 2002</i>.</p>
Limit growth	A concept that limits growth to what existing water and wastewater systems can serve so as not to trigger new growth infrastructure needs.	<ul style="list-style-type: none"> • No costs for new or expanded infrastructure • No construction impacts 	<ul style="list-style-type: none"> • Inadequate servicing to meet Regional Official Plan and A Place to Grow targets 	<p>No</p> <p>This option puts York Region in direct violation of <i>Places to Grow Act, 2005</i>.</p>
Expand and optimize existing systems	Leverage existing infrastructure systems and expand strategically as needed.	<ul style="list-style-type: none"> • Enables long-term growth in line with <i>Places to Grow Act, 2005</i> • Ensures compliance with <i>Safe Drinking Water Act, 2002</i> and <i>Ontario Water Resources Act</i> • Makes best use of existing plans and agreements (i.e. Region's capital plan, long-term agreements with Durham, Toronto and Peel) 	<ul style="list-style-type: none"> • Capital costs may be significant • Construction impacts residents and businesses and potentially impacts the natural environment 	<p>Yes</p> <p>This option is an essential component of long-term servicing that meets the needs of York Region's communities now and in the future.</p>
Demand management	Continue efforts to conserve water, reduce inflow and infiltration, and explore water reuse.	<ul style="list-style-type: none"> • Reduces new infrastructure needs, costs and impacts, including impacts on natural environment • Aligns with regulation and legislation 	<ul style="list-style-type: none"> • Can't meet future servicing needs alone • Requires ongoing costs to deliver programs • Difficult to predict impacts on consumption over the long term 	<p>Yes</p> <p>This concept is a key to integrated water management and cost-efficient servicing.</p>

5.4 DEVELOPING ALTERNATIVE STRATEGIES TO ADDRESS WATER AND WASTEWATER SERVICING NEEDS

This screening stage confirmed that high-level concepts for long-term servicing remain the same as in the 2016 Master Plan: expand and optimize the existing system and continue measures to manage demand.

Both concepts are needed because managing all future demand without new infrastructure would not be feasible and expanding the system without demand management would not make best use of financial or water resources.

5.4 DEVELOPING ALTERNATIVE STRATEGIES TO ADDRESS WATER AND WASTEWATER SERVICING NEEDS

The second stage of the process involved developing and evaluating high-level alternatives, called alternative strategies, based on these two concepts.

Alternative Strategies for Water Servicing

At the Regional scale, this update confirmed that future water supply capacity as outlined in the 2016 Master Plan is sufficient to service future growth, even though the planning horizon has been extended to 2051.

The 2016 update explored two alternative strategies and both were carried forward for review in this update. These strategies are referred to as the York Water System with Northern Connection and York Water System without Northern Connection strategies. They appear in Figures 5.2 and 5.3. Both strategies assume continued water conservation efforts. In addition, most long-term drinking water needs would be met through:

- Continued use and expansion of Lake Ontario water supply to service the cities of Markham, Richmond Hill and Vaughan, and King City in the Township of King
- Continued use of groundwater supply blended with Lake Ontario water to service the towns of Aurora, Newmarket, East Gwillimbury (the communities of Holland Landing, Sharon and Queensville) and community of Stouffville
- Continued use of groundwater supplies in communities serviced by stand-alone systems
- Continued use of Lake Simcoe water supply to service the Town of Georgina

These two alternative strategies differ only in how they would meet future demand for drinking water in the north end of the York Water System:

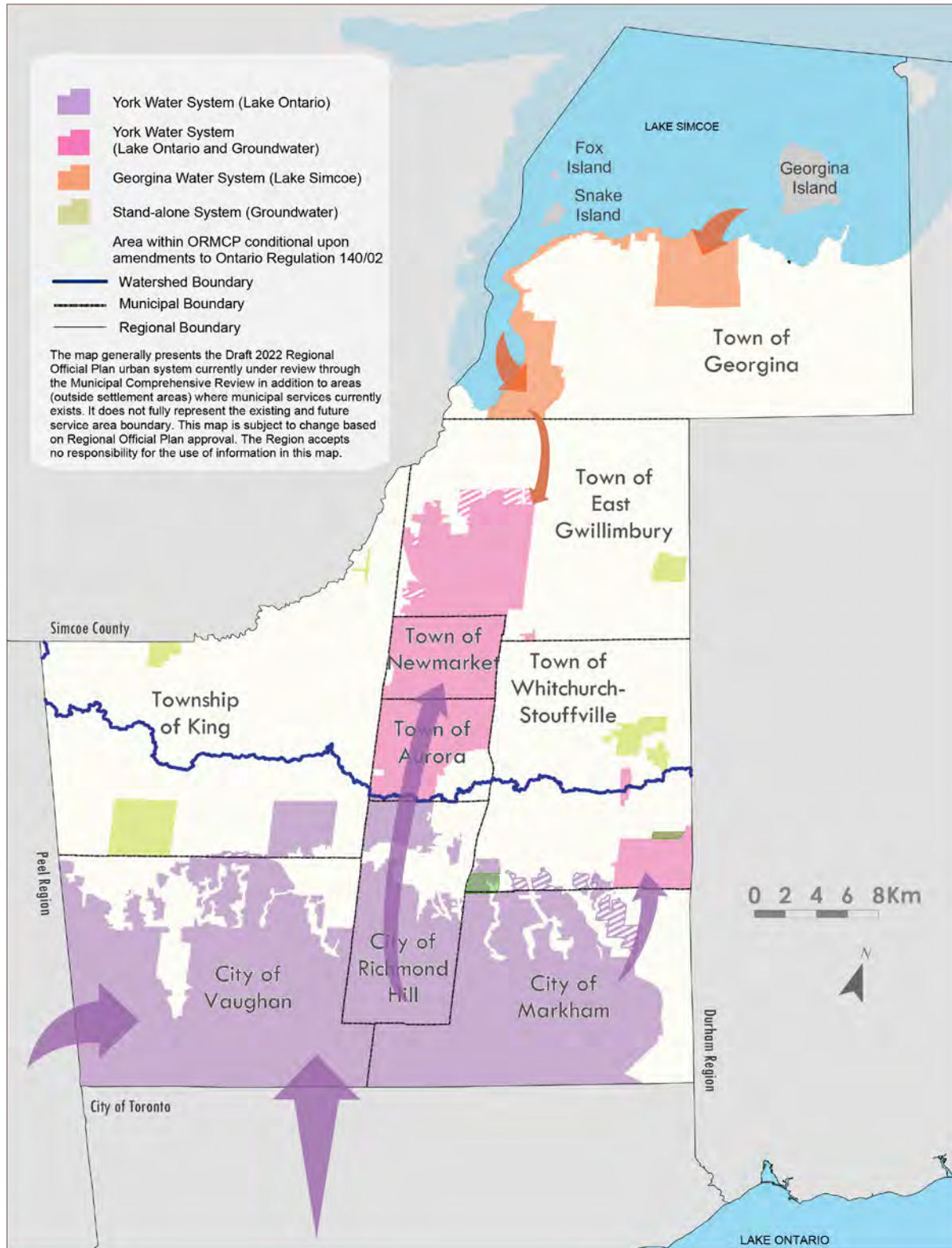
- **Strategy 1:** York Water System with Northern Connection, shown in Figure 5.2, proposes a future connection to bring water from Lake Simcoe to service a portion of the increased demand, including growth in the Town of East Gwillimbury
- **Strategy 2:** York Water System without Northern Connection, shown in Figure 5.3, supports future demand in the north wholly through a blended supply of groundwater and Lake Ontario water

As the Region's infrastructure systems are mature, the two alternative strategies for water servicing are very similar to each other and to existing arrangements. They can be considered alternative refinements to the existing system.

This update revisited these two alternative refinements and confirmed that the York Water System with Northern Connection Strategy, which was selected in 2016, remains preferred today. Benefits anticipated from the preferred strategy are discussed in Section 5.5.

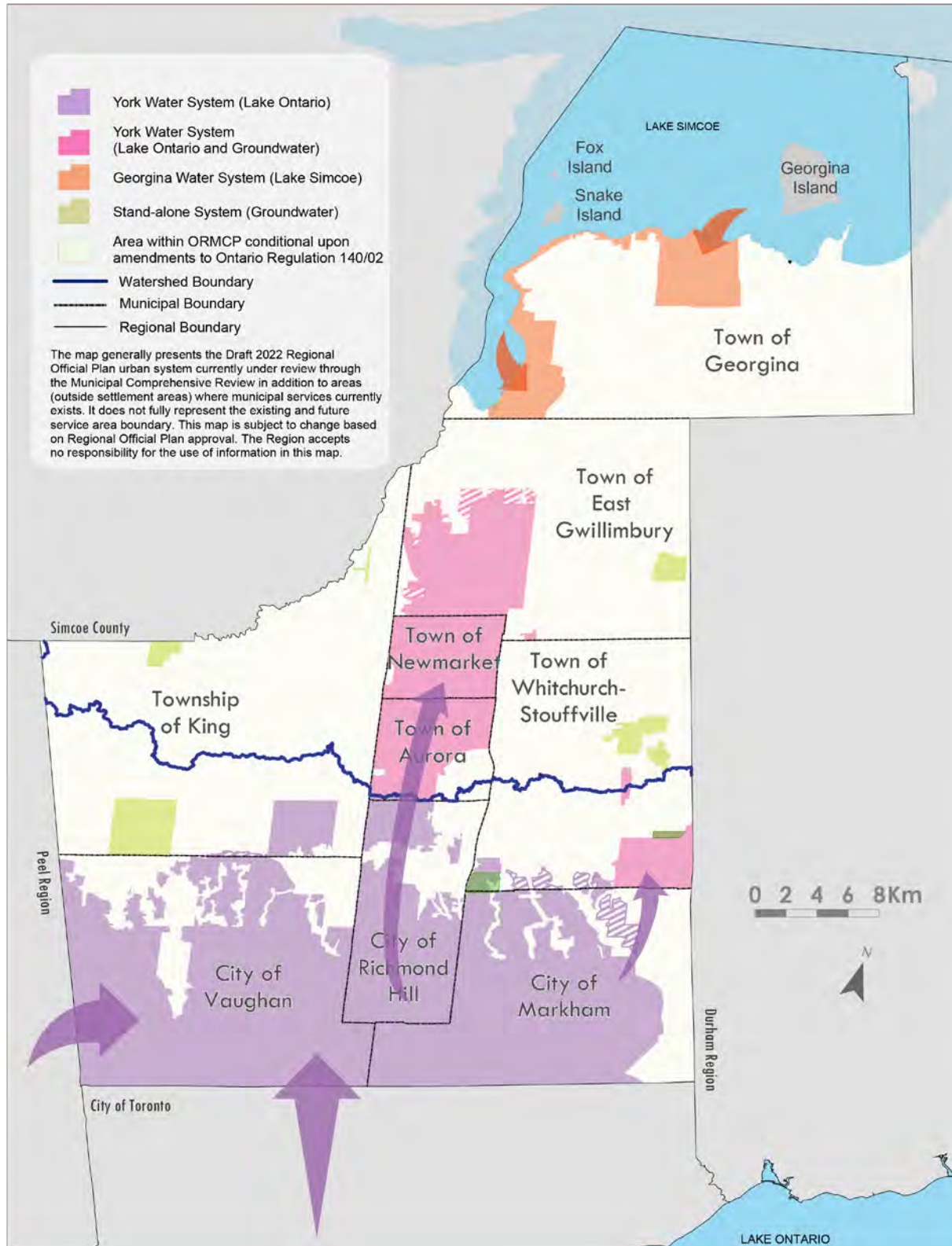
5.4 DEVELOPING ALTERNATIVE STRATEGIES TO ADDRESS WATER AND WASTEWATER SERVICING NEEDS

Figure 5.2 Strategy 1: York Water System with Northern Connection



5.4 DEVELOPING ALTERNATIVE STRATEGIES TO ADDRESS WATER AND WASTEWATER SERVICING NEEDS

Figure 5.3 Strategy 2: York Water System without Northern Connection



5.4 DEVELOPING ALTERNATIVE STRATEGIES TO ADDRESS WATER AND WASTEWATER SERVICING NEEDS

Preferred Strategy for Wastewater Servicing

As was the case in 2016, analysis of future wastewater needs showed that additional treatment and conveyance capacity will be needed to accommodate expected growth.

This update identified only one preferred strategy for wastewater servicing, which aligns with the direction set out in the 2016 Master Plan:

- o Continued use of the York Durham Sewage System, including future expansion of the Duffin Creek Water Pollution Control Plant and the collector system, to service most of the Region's population
- o Implementing the proposed Upper York Sewage Solutions by building and later expanding (subject to future environmental assessment(s)) a Water Reclamation Centre to service the Town of East Gwillimbury and a portion of the Town of Newmarket (this project also involves implementing a phosphorus offset program in the Lake Simcoe watershed)
- o Continued use of the Peel Diversion System with increase in sewage flows from York up to agreed-upon limits to service areas in the City of Vaughan
- o Continued use and future expansion of the Georgina Wastewater System to service the Town of Georgina
- o Continued use and limited future expansion of stand-alone systems
- o Continued inflow and infiltration initiatives to reduce burden on wastewater systems

This multi-faceted wastewater servicing strategy was the only one considered because:

- o Future growth is expected to be spread throughout different sewersheds/wastewater systems, requiring increased capacity in several areas
- o The advantages of Upper York Sewage Solutions were confirmed through extensive study and an individual environmental assessment

A key component of the preferred strategy is the Water Reclamation Centre proposed as part of Upper York Sewage Solutions. This initiative, which is still awaiting a provincial decision, is described in Section 2.6 above.

The Region has worked to build understanding and knowledge of the value of water reclamation, including completing a pilot project in which treated wastewater was used safely to irrigate non-food crops like sod, showing its value as a resource, not a waste product.

The protracted delay in approval of the Upper York Sewage Solutions individual environmental assessment continues to bring uncertainty to servicing plans and has put the Region's mandate under the Growth Plan for the Greater Golden Horseshoe in jeopardy. York Regional Council reaffirmed the Lake Simcoe solution as identified through the individual environmental assessment in [January 2021](#).

Given the rigorous study this Upper York Sewage Solutions project has undergone, the time and money invested to date, the absence of a decision from the province and direction from York Regional Council, Upper York Sewage Solutions continues to be considered an essential part of the preferred strategy to meet growth needs of three York Region communities (East Gwillimbury, Newmarket and Aurora) located north of the watershed boundary.

5.5 EVALUATING ALTERNATIVE STRATEGIES

Major growth is expected elsewhere in the Region, particularly in the southern York Region communities, and this will require significant expansion of the York Durham Sewage System. The preferred strategy addresses this need as well.

5.5 EVALUATING ALTERNATIVE STRATEGIES

Two alternative strategies for water servicing were evaluated using several criteria, as outlined in Table 5.2 below, to determine the preferred strategy.

The evaluation for water servicing used the 2016 Master Plan assessment as a basis, including applying the same criteria, weighting and scoring. For each criterion, if one strategy was superior to the other, it received a score of 1 and the other received a score of 0. If both performed the same against the criterion, they both received a score of 1. A weighted score was then determined for each category of criteria, which included technical, environmental, financial, social and regulatory/jurisdictional considerations. The sum of the weighted criteria category scores yielded the total score for each alternative strategy.

This evaluation also incorporated the following new information:

- Updated flow projections from growth forecast to 2051
- Updated costs associated with each strategy
- High-level assessment of greenhouse gas emissions from each strategy

Table 5.2 summarizes the evaluation. Appendix A.5 provides more details, including the rationale for scoring of each criterion. The evaluation was completed at a high level aligned with a master plan process level of detail, with more in-depth analyses to be undertaken through project-specific environmental assessments.

As this Master Plan considers only one wastewater strategy to be feasible, no evaluation of wastewater alternatives was required.



5.5 EVALUATING ALTERNATIVE STRATEGIES

Table 5.2 Results of Evaluating Two Alternative Water Servicing Strategies

Criteria category weighting	Evaluation criteria	Description of evaluation criteria	York Water System with Northern Connection	York Water System without Northern Connection
Technical 27%	Constructability	Volume and complexity of construction associated with strategy.	0	1
	Redundancy of supply/service	Improvement in redundancy of supply or service.	1	0
	Resilience to climate change	Ability of the strategy to reliably provide service under a changing climate.	1	1
	Water age	Impact on water age in the distribution system.	1	0
	Operations and maintenance	Requirement for additional and or new operations and maintenance resources. The complexity and maintainability of new assets.	1	1
	Energy efficiency and potential for GHGs	Energy intensity associated with the alternative in kWh/ML.	1	0
	Total technical score		5/6	3/6
Technical weighted score		23/27	14/27	
Environmental 27%	Aquatic vegetation and wildlife	Potential impacts (from construction/ongoing operations) on local aquatic species/habitats, including locally significant or at-risk aquatic species.	0	1
	Terrestrial vegetation and wildlife	Potential impacts (from construction/ongoing operations) on local terrestrial species/habitats, designated areas, locally significant or at-risk species.	1	1
	Regional water balance	Intra-basin water balance of water transferred between Lake Ontario to Lake Huron basins. Based on average annual daily transfer in ML/d.	1	0
	Construction impacts on groundwater resources	Potential impact on groundwater quantity or quality during construction.	1	1
	Total environmental score		3/4	3/4
Environmental weighted score		20/27	20/27	
Financial 21%	Capital cost	Initial capital and commissioning costs to implement the strategy.	1	1
	Lifecycle cost	Lifecycle costs expected over a 100-year period.	1	1
	Total financial score		2/2	2/2
Financial weighted score		21/21	21/21	
Jurisdictional/ Regulatory 15%	Land requirements	Area of non-Regional land or length of easements required.	1	1
	Direct access to water supply	Improvement of direct access to water supply.	1	0
	Adaptability to changing regulation	Ability of strategy to adapt to anticipated changes in drinking water quality and wastewater effluent requirements.	1	1
	Total jurisdictional/regulatory score		3/3	2/3
Jurisdictional/Regulatory weighted score		15/15	10/15	
Social/Cultural 10%	Archaeological sites	Potential impact on registered/known archaeological features during construction or ongoing operations.	1	1
	Cultural/Heritage features	Potential impact on known cultural landscapes and built heritage features during construction or ongoing operations.	1	1
	Impacts during construction	Potential construction impacts due to noise, dust, odour or traffic.	1	1
	Long-term community impact	Long-term impact on local community and businesses, e.g. land use compatibility.	1	1
	Total social/cultural score		4/4	4/4
Social/Cultural weighted score		10/10	10/10	
Total score		89/100	75/100	

5.5 EVALUATING ALTERNATIVE STRATEGIES

The updated evaluation confirmed that Strategy 1: York Water System with Northern Connection, which links Lake Simcoe to the north end of the York Water System, had the highest score and remains the preferred strategy for water servicing.

While the two alternative strategies ranked the same across several criteria, the York Water System with Northern Connection Strategy's technical and jurisdictional/regulatory advantages gave it the higher score. Looking in more detail at the scores in Table 5.2, the preferred strategy would:

- Reduce water age in parts of the Region, reducing potential water quality challenges
- Reduce energy consumption and emit fewer GHGs
- Improve water balance between the Lake Ontario and Lake Simcoe/Lake Huron watersheds, as explained in more detail below
- Improve the security of water supply by enabling flow between two water systems

Both alternative strategies for water servicing comply with the regional Great Lakes framework described in Section 2.6 that controls movement of water between Great Lakes drainage basins, including the limit set on the Region's transfer of water from Lake Ontario to the Lake Huron basin.

The advantage of the preferred strategy is that by serving some of the growth in the north with water sourced from the north, it relies less on water pumped from and returned to Lake Ontario. This reduces the volume of water transferred from one basin to another, while still supporting growth to 2051. While the cost to construct the alternative strategy is estimated to be lower, the difference is only 1%, which is negligible at this conceptual stage.

The preferred strategy (illustrated in Figure 5.4) would be implemented in tandem with the wastewater servicing strategy (illustrated in Figure 5.5).

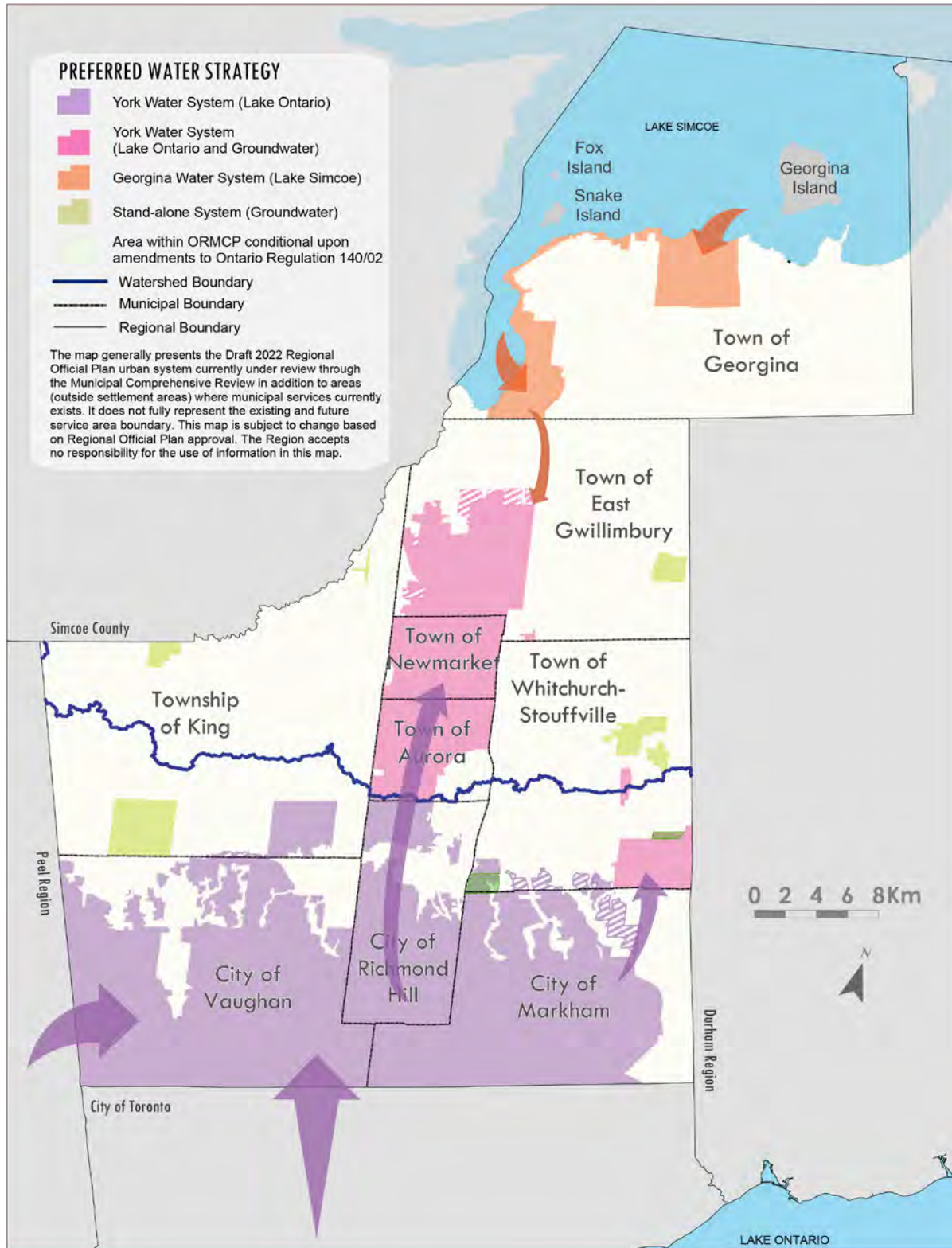
The combined water and wastewater strategy aligns with and advances principles of One Water because:

- The wastewater strategy's Water Reclamation Centre would apply state-of-the-art technology to turn used water from municipal systems into a safe, valuable resource instead of a waste product; the Region is interested in exploring future opportunities for water reuse in the future; the province does not currently have a water reuse framework in place; any future projects and initiatives for water reuse would be subject to additional approvals
- Wise decisions about design of water and wastewater infrastructure combined with programs to manage demand would inf stretch assets to prolong their life and reduce costs

In sum, the combination of Strategy 1: York Water System with Northern Connection and the preferred strategy for wastewater servicing represents a more holistic solution to address the needs of providing reliable, high-quality servicing and stewardship of watershed health.

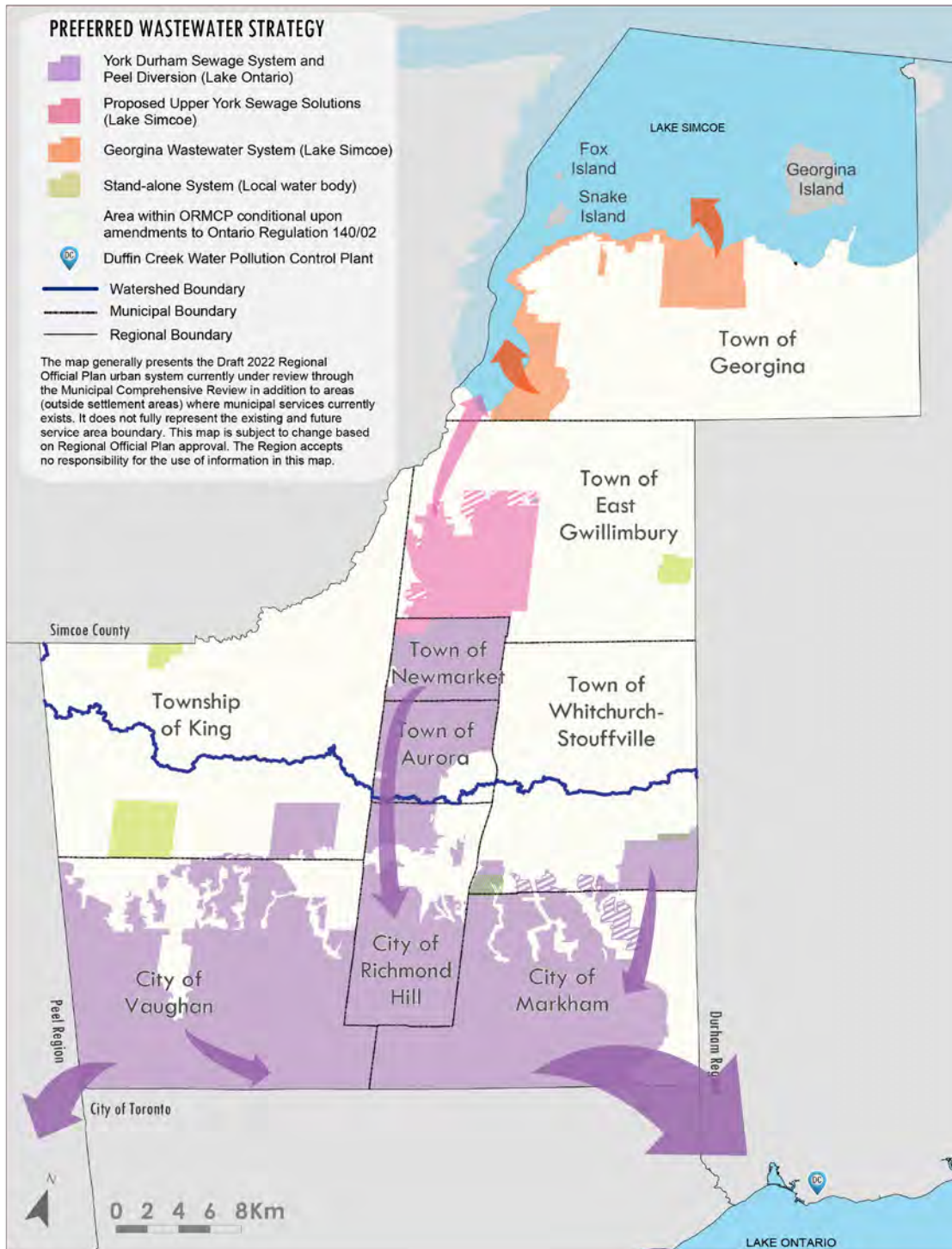
5.5 EVALUATING ALTERNATIVE STRATEGIES

Figure 5.4 Preferred Strategy for Water Servicing: York Water System with Northern Connection



5.5 EVALUATING ALTERNATIVE STRATEGIES

Figure 5.5 Preferred Strategy for Wastewater Servicing



Section 6 describes the detailed infrastructure plan related to the high-level preferred strategies, while Section 7 discusses implementation.



6.0 THE INFRASTRUCTURE PLAN

6.1 REGIONAL PROJECTS TO ADDRESS REGION-WIDE SERVICING NEEDS

6.2 CITIES OF MARKHAM, RICHMOND HILL AND VAUGHAN

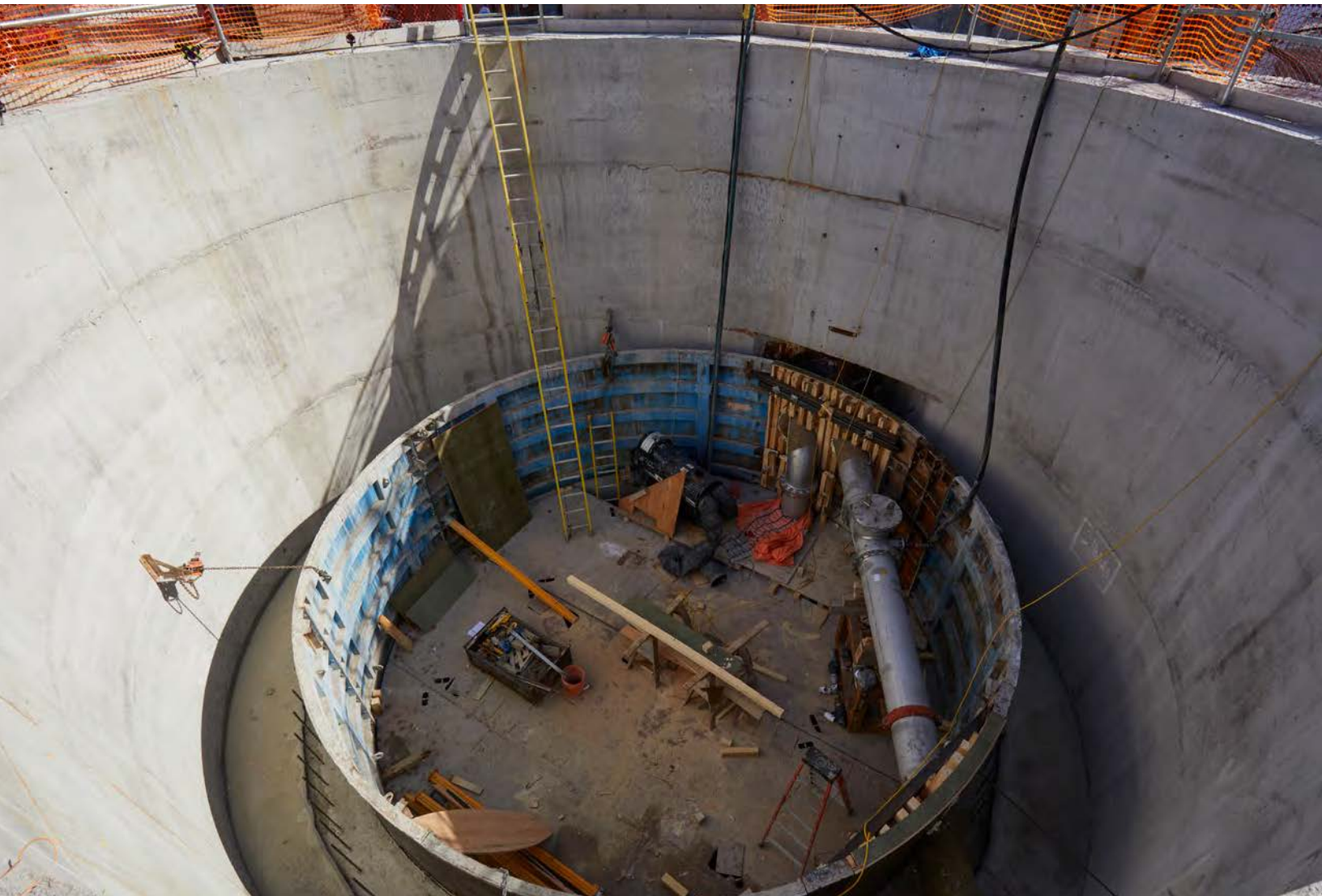
6.3 TOWNSHIP OF KING

6.4 TOWN OF WHITCHURCH-STOUFFVILLE

6.5 TOWNS OF AURORA, EAST GWILLIMBURY AND NEWMARKET

6.6 TOWN OF GEORGINA

6.7 UPDATED COST ESTIMATES



6.0 THE INFRASTRUCTURE PLAN

THE INFRASTRUCTURE PLAN

Through the servicing strategy, the Water and Wastewater Master Plan provides the overall vision for how the Region will provide safe, reliable services to new growth over the long term. This long-term vision involves delivering projects that expand existing infrastructure and make systems more robust. This section outlines the infrastructure plan and identifies projects and costs to meet growth needs to 2051.

While the preferred water and wastewater servicing strategy is similar to the strategy identified in the 2016 Master Plan, there have been some changes. This update focused on refining details of the 2016 infrastructure plan to take into account the new 2051 planning horizon and updated Regional Official Plan. This resulted in some changes to expected infrastructure sizing, timing and costs. Refinements also considered how to reduce lifecycle costs and make the system overall more resilient.

Master plans identify the need for specific groups of projects to meet servicing needs and describe them at a high level to help plan for and guide future work. At this stage, however, projects are conceptual in nature. Details of specific solutions – including location, final size and choice of technology – are defined as specific projects are carried out, reflecting new information as it becomes available.

As in 2016 Master Plan, this update identified upgrades and expansions to parts of the system to bring additional water supply to communities where local capacity would otherwise be constrained. Projects are planned and phased to address needs that vary across local municipalities in future years, as well as to meet overall Regional needs. For wastewater, upgrades and expansions of infrastructure will be needed to convey and treat wastewater flows from different catchment areas.

Table 6.1 highlights all the growth-related water and wastewater projects including phasing, cost and local municipality serviced. Section 6.7 provides details on the methodology used in calculating project costs. Figure 6.1 shows water-related infrastructure projects and expected phasing, while Figure 6.2 shows wastewater-related projects and phasing.

The following sections summarize the water and wastewater projects needed to support growth. As the Regional water and wastewater systems are designed to serve multiple municipalities, projects have been grouped accordingly.



6.0 THE INFRASTRUCTURE PLAN

Table 6.1 Growth-related Water and Wastewater Projects

MP ID	Project description	Estimated expenditures 2022-2051 (000's)	Planned implementation timeframe	Environmental Assessment (EA) Process	Municipality partially or fully serviced by this project								
					Town of Aurora	Town of East Gwillimbury	Town of Georgina	Township of King	City of Markham	Town of Newmarket	City of Richmond Hill	City of Vaughan	Town of Whitchurch-Stouffville
Cost-shared programs													
W1	Toronto Water Supply - Cost-Shared Works Continue implementation of cost-shared capital projects within the City of Toronto to permit gradual increase of water supply to York Region in accordance with current Servicing Agreement.	\$ 77,800	Ongoing	Various	X	X		X	X	X	X	X	X
W2	Peel Water Supply - Cost-Shared Works Continue implementation of cost-shared capital projects within Region of Peel to permit gradual increase of water supply to York Region in accordance with current Servicing Agreement.	\$ 16,160	Ongoing	Various	X	X		X		X	X	X	
WW1	Peel System Cost-Shared Works Continue implementation of cost-shared projects in the Region of Peel to allow diversion of York wastewater flows for treatment in Peel wastewater system in accordance with current Servicing Agreement.	\$ 8,370	Ongoing	Various								X	
Water and wastewater treatment													
WW10	Duffin Creek Water Pollution Control Plant Outfall Effluent Strategy Optimize capacity of existing Duffin Creek Water Pollution Control Plant Outfall.	\$ 12,340	2022-2031	Class EA completed 2019	X			X	X	X	X	X	X
WW11	Duffin Creek Water Pollution Control Plant Stage 1 and 2 Chlorine Chamber Expansion Construct a new chlorine contact chamber to increase the Duffin Creek Water Pollution Control Plant disinfection capacity.	\$ 15,480	2022-2031	Schedule A	X			X	X	X	X	X	X
WW21	Upper York Water Reclamation Centre Construct a new Water Reclamation Centre in East Gwillimbury to accommodate growth and allow decommissioning of Holland Landing Lagoons as recommended in the Individual Class Environmental Assessment completed in 2014 (pending approval). This project will provide an overall benefit to the Lake Simcoe watershed through the integral phosphorus offsetting program component of Upper York Sewage Solutions.	\$ 549,940	2022-2031	Individual EA completed 2014, pending approval	X	X				X			
WW19	Holland Landing Lagoon Decommissioning Decommission Holland Landing Lagoons following commissioning of the new Water Reclamation Centre	\$ 1,100	2022-2031	Schedule A+		X							
WW23	Keswick Wastewater Servicing Increase capacity of Keswick Water Resource Recovery Facility as recommended in the completed Class Environmental Assessment and implement growth related upgrades at Keswick Sewage Pumping Station.	\$ 41,820	2022-2041	Class EA completed 2006				X					
WW13	Nobleton Wastewater Servicing Increase capacity of the Nobleton wastewater system to accommodate the population identified in the recently completed Class Environmental Assessment.	\$ 21,970	2032-2041	Class EA completed 2021				X					

6.0 THE INFRASTRUCTURE PLAN

Table 6.1 Growth-related Water and Wastewater Projects (continued)

MP ID	Project description	Estimated expenditures 2022-2051 (000's)	Planned implementation timeframe	Environmental Assessment (EA) Process	Municipality partially or fully serviced by this project								
					Town of Aurora	Town of East Gwillimbury	Town of Georgina	Township of King	City of Markham	Town of Newmarket	City of Richmond Hill	City of Vaughan	Town of Whitchurch-Stouffville
Water and wastewater treatment (continued)													
W8	Nobleton Water Servicing Increase Nobleton well supply capacity in coordination with wastewater treatment expansion to accommodate the population identified in the recently completed Class Environmental Assessment.	\$ 7,600	2032-2041	Class EA completed 2021				X					
W25	Georgina Water System Upgrades Expand Georgina Water Treatment Plant to its ultimate permitted capacity of 50 million litres per day and upgrade Georgina Water System disinfection system to allow integration with York Water System.	\$ 21,810	2032-2041	Class EA completed 1998		X	X						
WW12	Duffin Creek Water Pollution Control Plant Growth Expansions Implement several upgrades to optimize and/or expand Duffin Creek Water Pollution Control Plant beyond the current capacity including a new outfall to accommodate growth in the York Durham System service area. Upgrades to be implemented in phases and are expected to be confirmed by future planning and EA studies.	\$ 757,900	2032-2051	Schedule C	X			X	X	X	X	X	X
WW22	Upper York Servicing Infrastructure Expansions 1 and 2 Expand the Water Reclamation Centre subject to a future Class Environmental Study to accommodate growth in East Gwillimbury and Newmarket.	\$ 428,110	2032-2041 2042-2051	Schedule C		X				X			
WW24	Sutton Wastewater Servicing Expand Sutton Water Resource Recovery Facility to service growth in Sutton as recommended by the completed Class Environmental Assessment study and increase capacity of High Street and Woodriver Bend Sewage Pumping Stations.	\$ 56,320	2032-2041	Class EA completed 2010			X						
Transmission, conveyance and pumping projects													
W4	West Vaughan Water Servicing Phase 1 - Improve pressure district interconnection in the Woodbridge service area prior to storage expansion. Phase 2- Increase storage capacity in Woodbridge and Kleinburg to accommodate growth in West Vaughan.	\$ 25,020	2032-2041 2042-2051	Schedule A Schedule B								X	
W5	York Peel Feedermain Upgrade Install three pressure reducing valves along connection points to the York-Peel Feedermain to maintain acceptable pressures within Pressure District 6 distribution system as Peel supply increases to meet system demands.	\$ 3,400	2022-2031	Schedule A	X	X		X		X	X	X	
W6	Northeast Vaughan Water Servicing Construct new Pressure District 8 and 9 pumping stations, two new Pressure District 8 elevated tanks and associated watermains to connect the Northeast Vaughan urban expansion area to the existing system as recommended by the completed Northeast Vaughan Class Environmental Assessment.	\$ 100,040	2022-2031	Class EA completed 2019								X	

6.0 THE INFRASTRUCTURE PLAN

Table 6.1 Growth-related Water and Wastewater Projects (continued)

MP ID	Project description	Estimated expenditures 2022-2051 (000's)	Planned implementation timeframe	Environmental Assessment (EA) Process	Municipality partially or fully serviced by this project								
					Town of Aurora	Town of East Gwillimbury	Town of Georgina	Township of King	City of Markham	Town of Newmarket	City of Richmond Hill	City of Vaughan	Town of Whitchurch-Stouffville
Transmission, conveyance and pumping projects (continued)													
W10	Richmond Hill Langstaff Gateway Provincial Urban Growth Centre Water Servicing Install water system connections to service the proposed urban growth centre in Pressure District 6 as recommended by the completed Class Environmental Assessment.	\$ 3,550	2022-2031	Class EA completed 2015						X		X	
W15	Aurora East Booster Pumping Station Upgrades Expand Aurora East Booster Pumping Station capacity including pipe upgrades and dedication of watermains to service growth in the east area of the north system.	\$ 11,440	2022-2031	Schedule A	X						X		
W16	Orchard Heights Reservoir Inlet Upgrade Increase size of inlet and outlet piping at Orchard Heights Reservoir to facilitate increase of Lake Ontario water supply into communities in the north system as demand increases.	\$ 1,550	2022-2031	Schedule A	X	X					X		
W17	Eagle to Kirby Pumping Station Watermain Install a new transmission main to connect Yonge Street watermain to the Glenway Reservoir and facilitate filling of the reservoir as demand increases due to growth in Newmarket Central and Newmarket West Pressure Districts.	\$ 11,950	2022-2031	Schedule A+		X					X		
W18	Newmarket West Water Servicing Expand Kirby Pumping Station capacity and construct a new elevated tank and associated watermains to service growth in the Newmarket West Pressure District.	\$ 28,570	2032-2041	Schedule B		X					X		
W20	Green Lane Leslie Street Watermain Phase 1 - Install a new transmission main along Green Lane to service growth and allow connection of Newmarket and East Gwillimbury delivery systems. Phase 2 - Install a new transmission main along Leslie Street to bring additional Lake Ontario supply as demand increases in the northeast parts of the system.	\$ 30,990	2022-2031 2032-2041	Schedule A+		X					X		
W21	East Gwillimbury Water Servicing Phase 1 - Install a new transmission main to accommodate growth along Woodbine Avenue corridor. Phase 2 - Install a new transmission main Queensville Sideroad to provide additional supply to Holland Landing.	\$ 42,820	2022-2031 2042-2051	Schedule A+		X							

6.0 THE INFRASTRUCTURE PLAN

Table 6.1 Growth-related Water and Wastewater Projects (continued)

MP ID	Project description	Estimated expenditures 2022-2051 (000's)	Planned implementation timeframe	Environmental Assessment (EA) Process	Municipality partially or fully serviced by this project								
					Town of Aurora	Town of East Gwillimbury	Town of Georgina	Township of King	City of Markham	Town of Newmarket	City of Richmond Hill	City of Vaughan	Town of Whitchurch-Stouffville
Transmission, conveyance and pumping projects (continued)													
WW2	West Vaughan Sewage Servicing Phase 1 - Increase capacity of Humber Sewage Pumping Station and construct a new gravity sewer to service growth in western parts of Vaughan as recommended by the completed Class Environmental Assessment study. Phase 2 - Construct a gravity sewer from the Kleinburg Water Resource Recovery Facility to connect to the north end of West Vaughan Sewage Servicing - Phase 1 to service growth in northwest Vaughan and Kleinburg. The projects allow decommissioning of the Kleinburg Water Resource Recovery Facility.	\$ 389,250	2022-2031 2032-2041	Class EA completed 2013								X	
WW3	Northeast Vaughan Wastewater Servicing Construct new gravity sewer pipe to convey flows generated in northeast Vaughan area to the existing Langstaff Collector and York Durham Sewage System upgrades as recommended by the completed Class Environmental Assessment.	\$ 171,630	2022-2031	Class EA completed 2019								X	
WW4	York Durham Sewage System Conveyance Optimization Install a flow gate at the Bathurst Collector to attenuate flows during wet weather conditions. Twin a segment of pipe conveying flows into the Newmarket Sewage Pumping Station to optimize existing wastewater conveyance capacity to service growth.	\$ 6,560	2022-2031	Schedule A					X	X	X	X	
WW7	Richmond Hill Langstaff Gateway Provincial Urban Growth Centre Wastewater Servicing Construct gravity sewer to convey flows from Richmond Hill - Langstaff Gateway Regional Urban Centre to the Richmond Hill Collector as recommended by the completed Class Environmental Assessment.	\$ 15,180	2022-2031	Class EA completed 2015					X		X		
WW9	Primary Trunk Sewer Construct a new trunk sewer from the terminus of the Southeast Collector at Valley Farm Road to the Duffin Creek Water Pollution Control Plant to service growth in the overall York Durham Sewage System service area.	\$ 228,600	2022-2031	Schedule C	X			X	X	X	X	X	X
WW14	King City Wastewater System Upgrades Phase 1 - Optimize capacity of King City Sewage Pumping Station to accommodate interim growth in King City. Phase 2 - Expand King City wastewater pumping capacity and construct a new forcemain to accommodate long term growth in King City.	\$ 47,880	2022-2031 2042-2051	Schedule B				X					
WW15	Yonge Street Sewer Twinning Increase conveyance capacity of Yonge Street Sewer to accommodate growth and allow rehabilitation of existing sewer.	\$ 65,930	2022-2031	Schedule B	X			X		X	X		

6.0 THE INFRASTRUCTURE PLAN

Table 6.1 Growth-related Water and Wastewater Projects (continued)

MP ID	Project description	Estimated expenditures 2022-2051 (000's)	Planned implementation timeframe	Environmental Assessment (EA) Process	Municipality partially or fully serviced by this project								
					Town of Aurora	Town of East Gwillimbury	Town of Georgina	Township of King	City of Markham	Town of Newmarket	City of Richmond Hill	City of Vaughan	Town of Whitchurch-Stouffville
Transmission, conveyance and pumping projects (continued)													
WW16	York Durham Sewage System Interim Servicing Construct a new sewage pumping station and connecting sewer to the York Durham Sewage System as recommended by completed Class EA. This project allows growth before the Water Reclamation Centre is commissioned.	\$ 25,450	2022-2031	Class EA completed 2019	X	X				X			
WW20	East Queensville Sewage Pumping Station and Forcemain Construct a new sewage pumping station just south of Queensville Sideroad and west of Highway 404 along with forcemain connecting to the West Queensville Sewage Pumping Station to service growth in parts of Queensville.	\$ 16,320	2022-2031	Schedule B		X							
W3	East Woodbridge Pumping Station Decommissioning Decommission East Woodbridge Pumping Station, subject to outcome of a repurposing study.	\$ 1,260	2032-2041	Schedule A+									
W7	Vaughan Storage Expansion Phase 1 - Construct first phase of a new reservoir to accommodate growth in Pressure District 6, a key centre through which supply is delivered to other pressure districts. Phase 2 - Construct a second phase of the new Vaughan reservoir and implement works to expand the Pressure District 9 Vaughan system including a new elevated tank and associated connecting watermain.	\$ 1,260	2032-2041	Schedule A+							X		
W9	North Richmond Hill Pumping Station Decommissioning Decommission North Richmond Hill Pressure District 8 Pumping Station, subject to outcome of repurposing study.	\$ 1,470	2032-2041	Schedule A+									
W11	North Markham Water Servicing Construct a new reservoir, a new water pumping station and associated water-mains to connect the new facilities to the existing system. This project is required to support Markham urban expansion north of Elgin Mills Road and allow the implementation of the York East Water Servicing project (W13).	\$ 112,720	2032-2041	Schedule B					X				
W12	Stouffville Water Servicing Expand Stouffville storage capacity to service new development. Project is expected to be implemented in phases to maximize utilization of existing infrastructure. Phase 1 - Increase capacity of Stouffville Zone 2 booster pumping station before new storage facility is introduced. Phase 2 - Construct a new elevated tank and connecting watermain to provide long term storage capacity need in the service area.	\$ 15,330	2032-2051	Schedule B									X

6.0 THE INFRASTRUCTURE PLAN

Table 6.1 Growth-related Water and Wastewater Projects (continued)

MP ID	Project description	Estimated expenditures 2022-2051 (000's)	Planned implementation timeframe	Environmental Assessment (EA) Process	Municipality partially or fully serviced by this project							
					Town of Aurora	Town of East Gwillimbury	Town of Georgina	Township of King	City of Markham	Town of Newmarket	City of Richmond Hill	City of Vaughan
Transmission, conveyance and pumping projects (continued)												
W13	York East Water Servicing Phase 1 - Construct a new pumping station at the new Markham reservoir site (W11), a new Reservoir in Aurora and associated watermain to bring additional Lake Ontario supply to the north water system as demand increases. Phase 2 - Construct a new pumping station at the new Aurora reservoir and associated watermain to service development on the eastern parts of the north system as demand increases.	\$ 148,530	2032-2041 2042-2051	Schedule B	X	X				X		
W23	Holland Landing Storage Expansion Install a new elevated tank and connecting watermain to accommodate growth in Holland Landing and allow replacement of existing Holland Landing East Elevated Tank.	\$ 10,340	2032-2041	Schedule B		X						
W24	West Park Heights Pumping Station and Watermain Construct a new pumping station, assumed to be located adjacent to the existing West Park Heights Reservoir in Keswick, and associated watermain to allow integration of York and Georgina Water Systems.	\$ 47,950	2032-2041	Schedule C		X	X					
WW6	Leslie Street Sewage Pumping Station and Forcemain Phase 1 - Increase Leslie Street Sewage Pumping Station capacity. Phase 2 - Construct a new forcemain connecting the station to downstream York Durham Sewage System as flows increase due to growth.	\$ 65,240	2032-2041 2042-2051	Schedule A+					X		X	X
WW8	North Markham Trunk Sewer Construct a new gravity sewer to servicing of Markham urban expansion.	\$ 43,200	2032-2041	Schedule B					X			
WW17	Newmarket Diversion Sewer Construct a new sewer to divert flows from the Newmarket Pumping Station to the Sharon Trunk Sewer as flows increase due to growth.	\$ 29,800	2032-2041	Schedule B						X		
WW18	East Gwillimbury Sewage Pumping Station Expansions Increase capacity of West Queensville, Second Concession and Holland Landing Sewage Pumping Stations to service growth. Works are expected to be accommodated within the original building footprint.	\$ 7,040	2032-2041	Schedule A+		X						

6.0 THE INFRASTRUCTURE PLAN

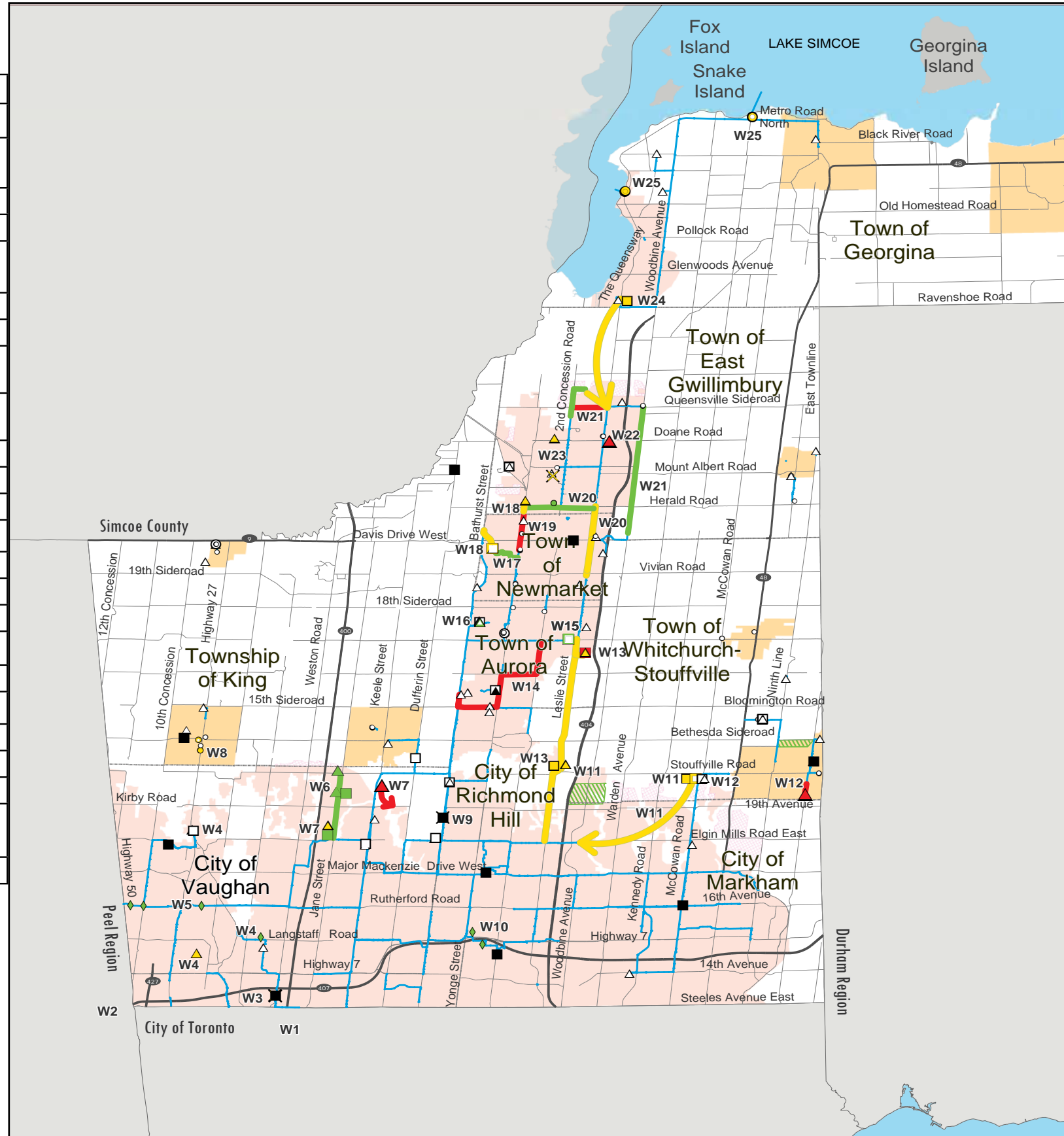
Table 6.1 Growth-related Water and Wastewater Projects (continued)

MP ID	Project description	Estimated expenditures 2022-2051 (000's)	Planned implementation timeframe	Environmental Assessment (EA) Process	Municipality partially or fully serviced by this project								
					Town of Aurora	Town of East Gwillimbury	Town of Georgina	Township of King	City of Markham	Town of Newmarket	City of Richmond Hill	City of Vaughan	Town of Whitchurch-Stouffville
Transmission, conveyance and pumping projects (continued)													
W14	Bloomington - Bayview Watermain Construct a new watermain along Bloomington Road from Aurora South Reservoir to Bayview Avenue, and along Bayview Avenue connecting Wellington Watermain.	\$ 82,560	2042-2051	Schedule B	X	X				X			
W19	Yonge Street Watermain Construct a new watermain on Yonge Street from Gladman Road to Green Lane to service proposed intensification along the Yonge Street corridor and connect the Newmarket Central and Holland Landing Pressure Districts.	\$ 46,200	2042-2051	Schedule A+		X				X			
W22	Queensville Elevated Tank No. 2 Construct a new elevated tank and connecting watermain to accommodate growth in Queensville and Sharon, and allow replacement of the Newmarket East Elevated Tank.	\$ 11,290	2042-2051	Schedule B		X				X			
WW5	York Durham Sewage System Expansion Continue to expand York Durham Sewage System to support new developments including: A new relief sewer to divert flows from the Central Collector sewershed to the proposed Richmond Hill Langstaff sewer. Twinning a section of existing Steeles Collector Sewer to accommodate intensification in the Leslie Street Drainage Area. A new gravity sewer to support growth in the area serviced by Markham Collector which is expected to reach capacity as flows increase.	\$ 324,510	2042-2051	Schedule B					X		X	X	
Demand management and supporting programs													
PROGRAM	Water For Tomorrow Program	\$ 29,770	Ongoing	None	X	X	X	X	X	X	X	X	X
PROGRAM	Water Master Plan Update	\$ 7,060	Ongoing	Schedule B	X	X	X	X	X	X	X	X	X
PROGRAM	Water System Capacity Assessment	\$ 21,220	Ongoing	None	X	X	X	X	X	X	X	X	X
PROGRAM	Inflow and Infiltration Reduction	\$104,170	Ongoing	None	X	X	X	X	X	X	X	X	X
PROGRAM	Wastewater Master Plan Update	\$7,070	Ongoing	Schedule B	X	X	X	X	X	X	X	X	X
PROGRAM	Wastewater System Capacity Studies	\$58,610	Ongoing	None	X	X	X	X	X	X	X	X	X

6.0 THE INFRASTRUCTURE PLAN

Figure 6.1 Long-term Water Infrastructure Plan

W1	Toronto Water Supply - Cost-Shared Works
W2	Peel Water Supply - Cost-Shared Works
W3	East Woodbridge Pumping Station Decommissioning
W4	West Vaughan Water Servicing
W5	York Peel Feedermain Upgrade
W6	Northeast Vaughan Water Servicing
W7	Vaughan Storage Expansion
W8	Nobleton Water Servicing
W9	North Richmond Hill Pumping Station Decommissioning
W10	Richmond Hill Langstaff Gateway Provincial Urban Growth Centre Water Servicing
W11	North Markham Water Servicing
W12	Stouffville Water Servicing
W13	York East Water Servicing
W14	Bloomington - Bayview Watermain
W15	Aurora East Booster Pumping Station Upgrades
W16	Orchard Heights Reservoir Inlet Upgrade
W17	Eagle to Kirby Pumping Station Watermain
W18	Newmarket West Water Servicing
W19	Yonge Street Watermain
W20	Green Lane Leslie Street Watermain
W21	East Gwillimbury Water Servicing
W22	Queensville Elevated Tank No. 2
W23	Holland Landing Storage Expansion
W24	West Park Heights Pumping Station and Watermain
W25	Georgina Water System Upgrades



LONG TERM WATER INFRASTRUCTURE PLAN

New Infrastructure

- Projects 2022 - 2031
- Projects 2032 - 2041
- Projects 2042 - 2051

Infrastructure Expansion

- Projects 2022 - 2031
- Projects 2032 - 2041
- Projects 2042 - 2051

Decommission

- Decommission

Alignment to be Determined

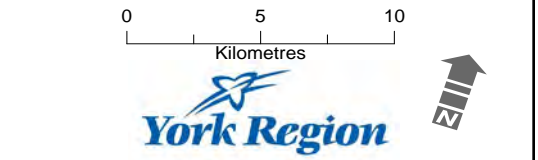
- Alignment to be Determined

Existing Infrastructure

- Pumping Station
- Storage
- Water Treatment Plant
- Well
- Interconnection / Pressure Improvement
- Existing Watermain
- Future Urban Area*
- Urban Area*
- Towns and Villages*
- Area within ORMCP conditional upon amendments to Ontario Regulation 140/02**
- Road
- Highway
- Municipal Boundary
- Regional Boundary

*This reflects the Draft 2022 Regional Official Plan, currently under review through the Municipal Comprehensive Review. Map will be updated pending Regional Official Plan approval.

**Urban designations are conditional upon amendments to the ORM designations prior to adoption of the ROP.

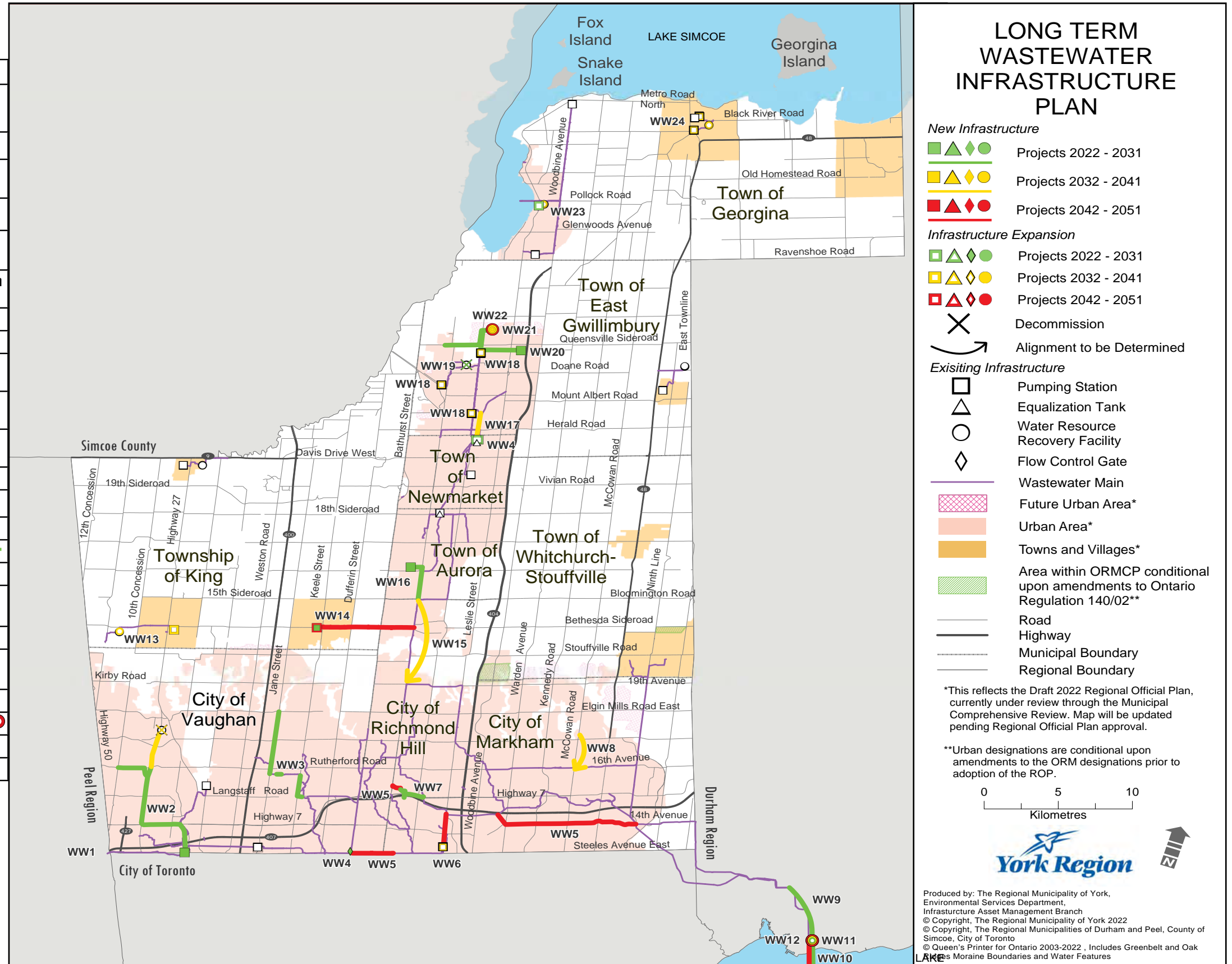


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6.0 THE INFRASTRUCTURE PLAN

Figure 6.2 Long-term Wastewater Infrastructure Plan

WW1	Peel System Cost-Shared Works
WW2	West Vaughan Sewage Servicing
WW3	Northeast Vaughan Wastewater Servicing
WW4	York Durham Sewage System Conveyance Optimization
WW5	York Durham Sewage System Expansion
WW6	Leslie Street Sewage Pumping Station and Forcemain
WW7	Richmond Hill Langstaff Gateway Provincial Urban Growth Centre Wastewater Servicing
WW8	North Markham Trunk Sewer
WW9	Primary Trunk Sewer
WW10	Duffin Creek Water Pollution Control Plant Outfall Effluent Strategy
WW11	Duffin Creek Water Pollution Control Plant Stage 1 and 2 Chlorine Chamber Expansion
WW12	Duffin Creek Water Pollution Control Plant Growth Expansions
WW13	Nobleton Wastewater Servicing
WW14	King City Wastewater System Upgrades
WW15	Yonge Street Sewer Twinning
WW16	York Durham Sewage System Interim Servicing
WW17	Newmarket Diversion Sewer
WW18	East Gwillimbury Sewage Pumping Station Expansions
WW19	Holland Landing Lagoon Decommissioning
WW20	East Queensville Sewage Pumping Station and Forcemain
WW21	Upper York Water Reclamation Centre
WW22	Upper York Servicing Infrastructure Expansions 1 and 2
WW23	Keswick Wastewater Servicing
WW24	Sutton Wastewater Servicing



6.1 REGIONAL PROJECTS TO ADDRESS REGION-WIDE SERVICING NEEDS

6.1 REGIONAL PROJECTS TO ADDRESS REGION-WIDE SERVICING NEEDS

Several projects are particularly significant to the infrastructure system as a whole because they are critical to support Region-wide growth to 2051.

The York Water System services most of York Region, supplying drinking water to every local municipality except the Town of Georgina. Cost-shared projects with the City of Toronto and Peel Region identified in the 2016 Master Plan have been carried forward in this update to continue to increase supply of Lake Ontario water to the York Water System and support growth to 2051.

The York Durham Sewage System, which similarly collects wastewater flows from all local municipalities except the Town of Georgina, is expected to reach capacity and require significant investment within the 2051 planning horizon. Various projects to upgrade this system support most of the growth in York Region, and include:

- Substantial new work to expand the Duffin Creek plant beyond what was foreseen in the 2016 Master Plan given the longer planning horizon and twinning of the Primary Trunk Sewer that brings flows into the plant
- Upgrades and twinning of significant portions of the network of sewer pipes and pumping stations that bring flows into the Primary Trunk Sewer and eventually the Duffin Creek plant; while these projects will be located in Durham Region, as well as the cities of Vaughan, Markham and Richmond Hill, they will convey increased flows from growth occurring throughout York Region

In addition, York Region and Durham Region will complete a Primary System Master Plan following updates to their respective Regional Official Plans. This joint plan will forecast and refine future capital expansion requirements over a 30-year period for the Primary System, which consists of the Duffin Creek plant, Primary Trunk Sewer and some supporting infrastructure located outside the York Regional boundary. Appendix A.8 discusses some requirements and details that will be considered as the Primary System Master Plan is developed.



6.2 CITIES OF MARKHAM, RICHMOND HILL AND VAUGHAN

6.2 CITIES OF MARKHAM, RICHMOND HILL AND VAUGHAN

The southern cities of Vaughan, Markham and Richmond Hill are serviced by the most mature sections of the Region's York Durham Sewage System and York Water System. These systems also extend to serve communities further north, including the towns of Aurora, Newmarket, East Gwillimbury and Whitchurch-Stouffville and King City in the Township of King.

By 2051, the cities of Vaughan, Markham and Richmond Hill are expected to be home to about three-quarters of the Region's two million residents. To accommodate this growth, the Regional system will continue to supply Lake Ontario-based drinking water through the York Water System and return the related wastewater flows using the York Durham Sewage System.

Large infrastructure projects will be needed to connect expanded urban areas in west Vaughan, northeast Vaughan and north Markham to Regional water and wastewater systems. More localized upgrades will address intensification, including in the Richmond Hill/Langstaff Gateway area and growth areas in the City of Vaughan. The plan also identifies water expansion projects to support system resiliency for the entire York Water System.

The plan includes decommissioning the Kleinburg Water Resource Recovery Facility post 2036 and connecting the wastewater system in this area to west Vaughan infrastructure, in line with a completed environmental assessment.

York Regional Council passed a number of motions at a special meeting on October 21, 2021. One of the motions designated a portion of lands west of the Little Rouge as residential. The infrastructure plan developed for this Master Plan Update is sufficient to accommodate the growth associated with approval of this motion.



6.3 TOWNSHIP OF KING

6.3 TOWNSHIP OF KING

Although forecast to grow to approximately 50,000 residents by 2051, Township of King is expected to remain the smallest municipality in the Region. In King City, existing drinking water supplies through York Water System are expected to be adequate to meet growth needs to 2051 and wastewater needs will be addressed through phased upgrades to the King City wastewater system, which pumps flows into the greater York Durham Sewage System.

In Nobleton, increased servicing needs for wastewater and water to support expansion to 10,800 people have been identified for the stand-alone water resource recovery facility and groundwater wells through the recently completed environmental assessment. Servicing requirements for growth in Nobleton beyond 10,800 people was considered (see Appendix A.7) and was deemed not feasible due to provincial policy constraints and very high costs for further expansions/upgrades to the system.

One of the motions passed by York Region Council at its special meeting on October 21, 2021 redistributed population growth of roughly 3,200 people from whitebelt/future urban areas – agricultural and rural lands outside settlements and the Greenbelt – as previously planned, to existing settlement areas in Township of King. The Township of King will work with the Region to identify any additional servicing needs related to this redistribution through ongoing monitoring processes.

6.4 TOWN OF WHITCHURCH-STOUFFVILLE

A combination of Lake Ontario water through the York Water System and groundwater wells in Stouffville will continue to meet drinking water needs in the Town of Whitchurch-Stouffville, which is expected to grow to over 88,000 residents by 2051. Additional capacity will be provided by:

- Optimizing supply and storage of groundwater from wells, in line with a completed environmental assessment
- Eventually expanding the pumping station bringing Lake Ontario water into the Town of Whitchurch-Stouffville and adding a new storage facility

Wastewater flows will continue to be conveyed through the York Durham Sewage System for treatment at the Duffin Creek plant, with no new projects required in the Town of Whitchurch-Stouffville.

One of the motions passed by York Region Council at its special meeting on October 21, 2021 included adding areas in Gormley and Bethesda within the urban boundary to address growth interest.

Servicing of South Gormley Employment Expansion is contingent upon removal of provincial regulatory restrictions. As this growth is anticipated in the later years of the forecast post-2041, conceptual servicing options are outlined in Appendix A.7 that can implemented should provincial regulations change.

Servicing of Bethesda is also contingent upon removal of provincial regulatory restrictions. Depending on the magnitude of growth, a review of the wastewater system capacity would be appropriate to ensure existing Regional sewers could accommodate additional flows. No additional water upgrades beyond those already identified for the community of Stouffville are anticipated to be required.

6.5 TOWNS OF AURORA, EAST GWILLIMBURY AND NEWMARKET

6.5 TOWNS OF AURORA, EAST GWILLIMBURY AND NEWMARKET

For York Region communities in the Lake Huron watershed, expansion of the servicing system to support growth must give special consideration to a limit on the transfer of drinking water across watershed boundaries and the requirement to balance returning wastewater flows, as described in Section 2.6.

All three communities are expected to grow and together have approximately 328,000 residents by 2051 or about 16% of the Region's total population. The greatest expansion is planned in the Town of East Gwillimbury, where population will more than quadruple to reach over 127,000 people.

This growth will require additional drinking water, which will be provided by increasing supply from the current sources — Lake Ontario and groundwater — and adding a small amount of new Lake Simcoe supply:

- Several projects will bring more Lake Ontario water north into the towns of Aurora, Newmarket and East Gwillimbury
- Groundwater will continue to supply part of the water need, supported by such projects as the Green Lane and Leslie Street watermain
- Water supply from Lake Simcoe will be provided through a new infrastructure connection between the north end of the York Water System and the Georgina Water System
- A few local upgrades will accommodate areas expected to grow significantly

Wastewater flows from these communities will also require upgrades to the system in phases to convey these additional flows southward into the York Durham Sewage System, as well as northward to the proposed Upper York Sewage Solutions Water Reclamation Centre.

As noted in Section 5.2, York Region has put in place several interim solutions to address the shortfall in servicing capacity resulting from delayed approval of two key elements of Upper York Sewage Solutions.

One of the motions passed by York Region Council at its special meeting on October 21, 2021 designated an urban area expansion into 70% of whitebelt lands in East Gwillimbury. This triggers the need for a second expansion of the Water Reclamation Centre by 2051. Given the continued delays of provincial approval, resulting in delays of the initial construction to at least 2029, it will be challenging to achieve two expansions of this facility by 2051.

Mount Albert Water Resource Recovery Facility was designed in 2004 to provide wastewater servicing for the ultimate population for the community of 6,000 people. With increased community density, there remains some land available for further development and a desire by the local municipality to complete the community to 8,000 persons. Since 2014, the Region has undertaken several studies to determine the feasibility of expanding capacity at the Mount Albert Water Resource Recovery Facility. These studies outlined significant costs to meet stringent phosphorus limits outlined the Lake Simcoe Protection Plan. More recently, a group of landowners funded an optimization study to see if the existing infrastructure could be stretched to complete the community. At the time of writing this report, discussions are ongoing between landowners, Town of East Gwillimbury staff and York Region staff regarding the potential to expand servicing capacity in Mount Albert from 6,000 to 8,000 people. No agreement has been finalized. Further information about the past study and proposed works can be found in appendix A.7.

6.6 TOWN OF GEORGINA

In addition, using the One Water principle of infrastretching, the Region in partnership with local municipalities and developers have found opportunities through inflow and infiltration reduction works to provide servicing capacity in constrained areas. Recently, inflow and infiltration works in the Town of Newmarket have supported non-profit housing initiatives. The Region will continue to look for opportunities to leverage inflow and infiltration reduction in other municipalities with capacity constraints to generate capacity to support non-profit housing initiatives.

6.6 TOWN OF GEORGINA

The Regional system will continue to supply the Town of Georgina, which is expected to roughly double in population to approximately 70,000 residents, with water from Lake Simcoe and return wastewater flows achieved via the Keswick and Sutton water resource recovery facilities.

Consistent with previous master plans, expansion of the Georgina Water Treatment Plant in line with the completed environmental assessment will provide increased water supply from Lake Simcoe.

The additional water supply will also support growth in the northern portions of the York Water System to build further resiliency in water supply sources.

As previous master plans have noted, the Keswick and Sutton water resource recovery facilities will be expanded as determined by completed environmental assessments and will service planned growth. Flows to the plants continue to be monitored, and once flows reach 70% of capacity, consideration will be given to include facility expansions in the 10-year capital plan, subject to available funding at that time. In addition, some upgrades to sewage pumping stations in Sutton will be needed to address constraints in the conveyance network.



6.7 UPDATED COST ESTIMATES

6.7 UPDATED COST ESTIMATES

The estimated cost of the infrastructure plan, including supporting programs, is an important input into the Region's Development Charges Bylaw. Costing models are used to develop conceptual estimates for the Master Plan. These models leverage the best available information from past and recent Regional projects to produce unit cost rates for various components that make up identified projects. Costs associated with engineering and technical studies, contingencies and/or project-specific requirements are also factored in. Further information on the cost estimation methodology is available in Appendix A.6.

The estimated cost to implement the infrastructure identified in the preferred servicing strategy is \$4.5 billion and this total is broken down in Table 6.2 below.

Table 6.2 Summary of Master Plan Expenditures for Growth Capital Projects (\$000's) to 2051

System	Year			Total (\$000's)
	2022-2031	2032-2041	2042-2051	
Water	\$273,640	\$452,880	\$252,950	\$979,470
Wastewater	\$1,461,010	\$1,042,100	\$1,008,390	\$3,511,500
Total	\$1,734,650	\$1,494,980	\$1,261,340	\$4,490,970

Wastewater infrastructure makes up more than three-quarters of total costs. Substantial expansion of treatment capacity and the wastewater pipe network is needed. In comparison, water infrastructure and treatment capacity to service long-term growth are largely in place now, although additional water infrastructure is required to address specific constraints and growth areas.

Costs are highest in the first 10-year period from 2022-2031 because the proposed Upper York Water Reclamation Centre is planned to be completed during this timeframe (pending provincial approvals). Projects (like West and Northeast Vaughan Infrastructure) underway to connect expanded urban areas in the City of Vaughan to existing systems also represent a significant share of costs in this first decade.

Investment needs will continue into the following decades as the York Durham Sewage System, which handles the bulk of the Region's wastewater, is reaching capacity. Major works will focus on expanding its two components, the Duffin Creek plant and related sewer network. Other projects will expand and add to water and wastewater infrastructure to service communities in the Lake Simcoe watershed.

7.0 IMPLEMENTING THE PLAN

- 7.1 DELIVERING INFRASTRUCTURE PROJECTS
- 7.2 ACHIEVING A SUSTAINABLE WATER FUTURE



7.1 DELIVERING INFRASTRUCTURE PROJECTS

7.1 DELIVERING INFRASTRUCTURE PROJECTS

BUDGET AND CAPITAL PLAN

The Master Plan is prepared with the best currently available knowledge and information and is intended to guide actions and decisions at a high level.

Once the Master Plan is completed, the preferred strategy and associated infrastructure plan are carried out through projects undertaken as part of the York Region 10-year capital plan. The 10-year plan includes growth projects identified in the Master Plan and renewal projects to maintain asset condition as identified in the Asset Management Plan.

The 10-year capital plan is updated annually. As well as rolling forward one year, the updated plan responds to such other factors as new financial constraints, delays or scope changes in project delivery, population increases or growth patterns that differ from forecast, and changes in asset management needs informed by condition assessments.

ENVIRONMENTAL ASSESSMENTS

The municipal class environmental assessment process sets out the scope and level of investigation for different types of projects based on the nature of a project and potential environmental effects. Projects are classified into different schedules that contain descriptions of proposed works. Schedule B and C projects require project-specific class environmental assessments, following the requirements of the *Environmental Assessment Act*. An alternative process are full or individual environmental assessments under Part II of the Act for large scale projects that are not capable of being addressed by the municipal class environmental assessment process.

Project-specific environmental assessments provide a detailed inventory of relevant environmental conditions and assess potential impacts. The process includes consultation with Indigenous peoples, regulatory agencies and the public. Where applicable, measures to avoid or mitigate impacts are identified. Through this process, project needs and assumptions made in the Master Plan are re-evaluated and defined in further detail and a preferred solution is identified.

As discussed in Section 2.6, several changes are in progress to the environmental assessment process set out by the *Environmental Assessment Act*. As these changes come into effect, York Region will adapt how it undertakes projects to remain in compliance with the Act.



7.1 DELIVERING INFRASTRUCTURE PROJECTS

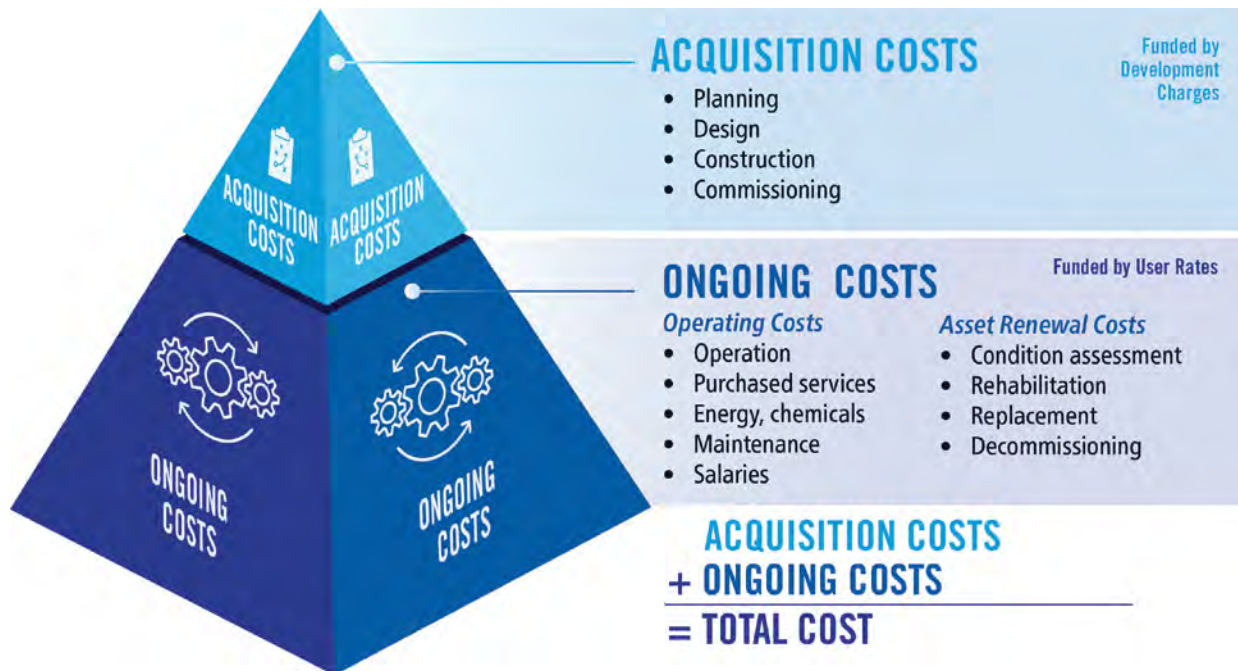


LONG-TERM FINANCIAL SUSTAINABILITY

Long-term financial sustainability of the water and wastewater system is driven by the total cost of providing services. Managing these costs is critical so services remain affordable to residents and businesses.

With new infrastructure, acquisition costs often receive more attention than ongoing costs of operation, repair and renewal. While acquisition costs can be substantial, ongoing costs over the entire useful life of an asset are generally higher. New growth-related assets will need to be replaced eventually. As well, the Region has ongoing costs related to agreements with partner municipalities. Figure 7.1 shows all of these costs of servicing, as well as how they are funded.

Figure 7.1 - Total Cost of Servicing

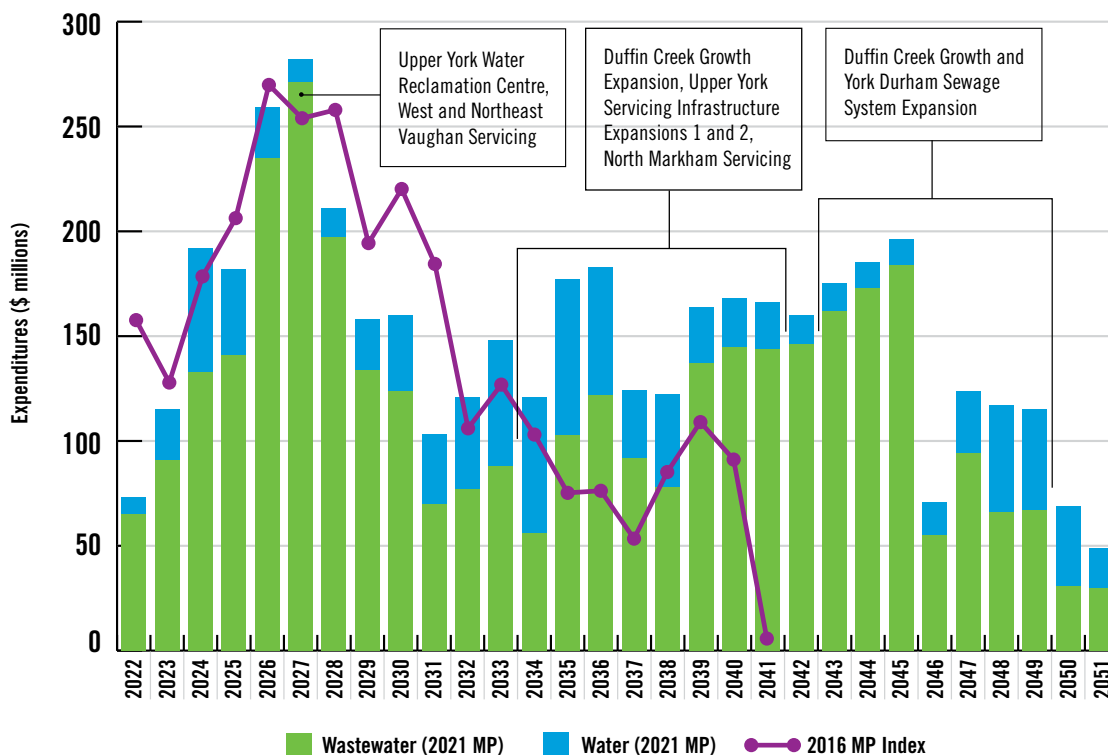


7.1 DELIVERING INFRASTRUCTURE PROJECTS

Acquisition Costs

The estimated cost of acquiring new infrastructure identified in this Master Plan update is \$4.5 billion. Expected timing of investments is shown in Figure 7.2. Together with remaining capacity in the existing system, this new infrastructure will support growth to 2051.

Figure 7.2 - Estimated Costs to Acquire Growth-related Infrastructure



Note: All costs are expressed in 2020 dollars and do not account for inflation

As noted in Section 6.7, wastewater components of the infrastructure plan make up most of the investment needed. Peaks in the graph reflect major project expenditures to implement the Upper York Water Reclamation Centre, Duffin Creek plant expansions and servicing urban expansion areas.

Expenditures are weighted in the first 10 years and, to a lesser degree between 2032 and 2041, as key systems need to be expanded or improved so that servicing is in place to support growth in later years.

7.1 DELIVERING INFRASTRUCTURE PROJECTS

Compared to the previous Master Plan, this update includes over a billion dollars of additional infrastructure to support the extended planning horizon to 2051. Costs were updated for projects carried forward from the 2016 Master Plan, to account for inflation and changes to scope and sizing, which contributed to the higher cost of the infrastructure program. To provide servicing to 2051, a few large projects are required including:

- ◉ Water Reclamation Centre Expansion 2 - estimated cost over \$200 million
- ◉ Duffin Creek Water Pollution Control Plant Expansions - estimated cost over \$500 million
- ◉ York Durham Sewage System Conveyance Expansion - estimated cost approximately \$325 million
- ◉ Plus a few additional smaller projects including York East Water Servicing and King City Wastewater - estimated cost over \$150 million

Ongoing Costs

As new infrastructure components are added to the existing water and wastewater asset base, they increase the Region's ongoing costs. As shown in Figure 7.1, ongoing costs include both day-to-day operating costs and renewal costs.

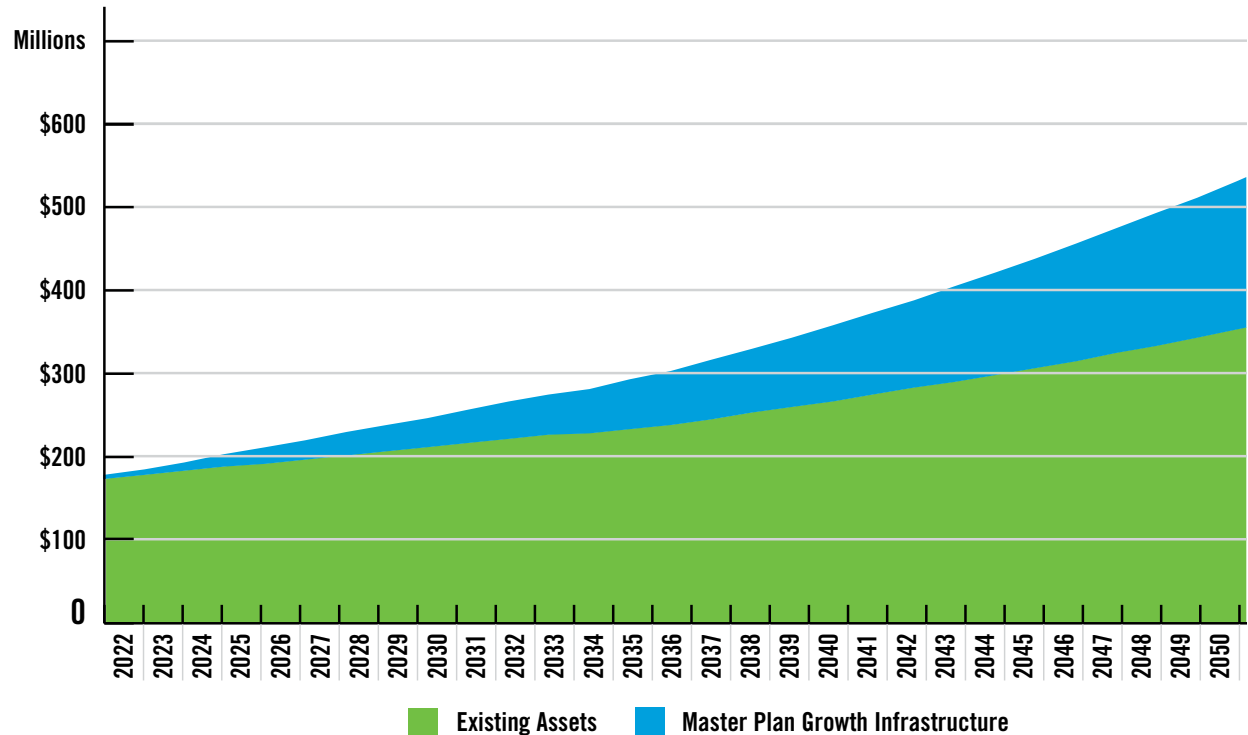
New infrastructure contributes to higher day-to-day operating costs as additional assets will require energy and chemical inputs, staffing and routine maintenance. Another source of future operating costs to support growth will also come from purchased services through the Region's long-standing servicing agreements with neighbouring regions and the City of Toronto. These purchased services include water services provided by Peel Region and the City of Toronto, a wastewater service agreement with Peel Region and the co-ownership and operating agreements with Durham Region for the York Durham Sewage System primary system including the Duffin Creek plant.



7.1 DELIVERING INFRASTRUCTURE PROJECTS

Figure 7.3 shows expected operating costs associated with both the Region's existing system and the new water and wastewater infrastructure needed to support growth. The area in green shows the incremental increase in operating costs as more assets are brought online to service growing communities. Operating costs associated with the existing asset base shown in blue are also expected to increase over time in pace with inflation.

Figure 7.3 Operating Cost of Water and Wastewater Systems



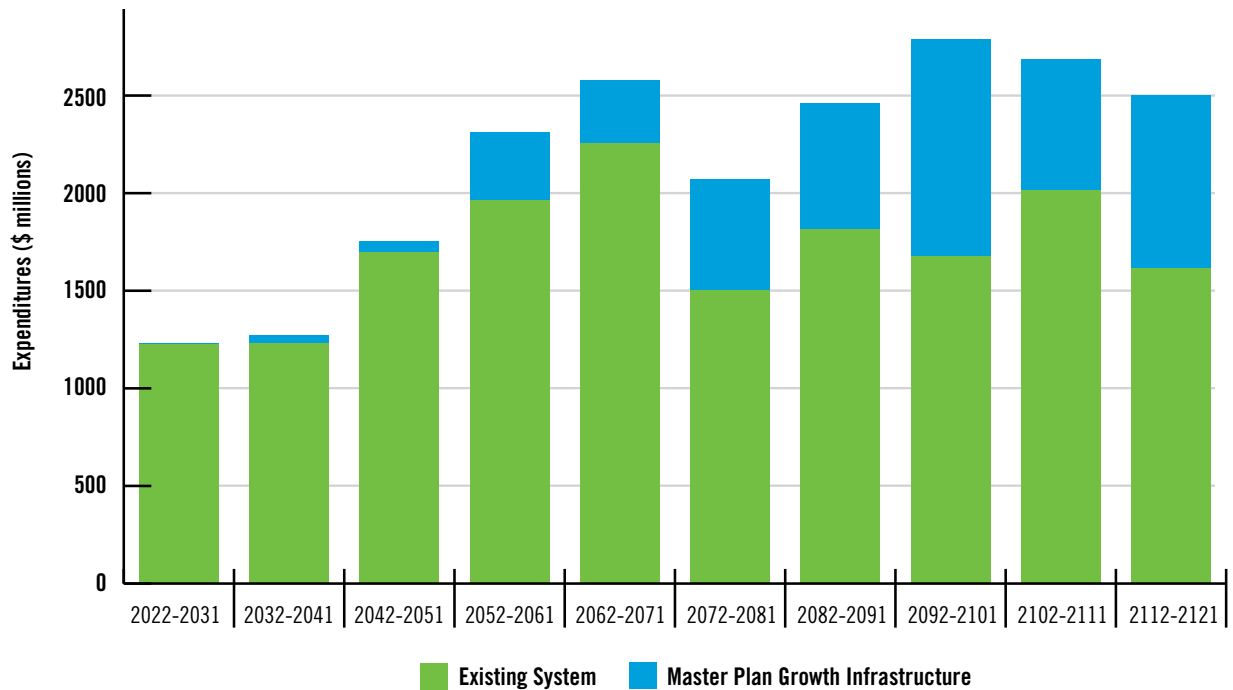
Note: Dollar amounts include inflation

As assets age, they will need to be rehabilitated and eventually replaced. This spending is known as renewal costs and over the past 5 years, has averaged about \$100 million annually. Together, existing and new assets will require more than \$20 billion in renewal costs over the next 100 years.

As shown in Figure 7.4, water and wastewater renewal needs are expected to be lower in the near term as the Region's water and wastewater systems are still relatively young. As the new infrastructure identified in this Master Plan ages, incremental renewal costs are expected to increase over time as different components come due for renewal. The Region uses a 100-year time frame for renewal needs that reflects the long life of most major water and wastewater assets. Together, existing and new assets will require more than \$20 billion in renewal costs over the next 100 years.

7.1 DELIVERING INFRASTRUCTURE PROJECTS

Figure 7.4 Estimated Cost of Renewal for Water and Wastewater Assets Over the Next 100 Years



Note: Dollar amounts are before inflation

Funding

The Region follows provincial requirements and industry best practice in funding the costs of water and wastewater services.

York Region's costs to acquire water and wastewater assets to meet growth needs are primarily funded by development charge revenue, as discussed in Section 4.3. Development charges are collected from developers to support growth-related infrastructure provided by the municipality.

As recommended by industry groups and other authorities, user rates pay for the full costs of providing ongoing services. Full costs are made up of day-to-day operating expenses and larger, more sporadic costs to rehabilitate and replace assets. The latter are covered by a share of user rate revenue that goes each year into asset replacement reserves. The Region's [Water and Wastewater Financial Sustainability Plan](#) explains how user rates fully fund capital needs without the use of debt in a manner that is fair to both current and future generations.

Financial sustainability of water and wastewater systems is not just about having the upfront capital to build assets but also being able to pay ongoing costs. Should anticipated growth not be realized, the Region may face two financial pressures: reduced collections of development charges and lower-than-forecast revenues from end users. For this reason, the Region will continue to leverage existing infrastructure systems as much as possible and more tightly align pacing of new capital projects with actual growth, as discussed in Section 4.3.

7.1 DELIVERING INFRASTRUCTURE PROJECTS

Considering Total Cost of Servicing to Make Better Decisions

Decisions about the type and design of an asset used to provide service can have a profound impact on costs over its entire useful life. This is an important aspect of infrastructure planning and implementation. By the time infrastructure is commissioned, up to 95% of the opportunity to influence or reduce these costs has already passed.

The Master Plan provides the first key opportunity to minimize these costs. In evaluating potential alternative strategies to service planned growth, it considers both the upfront acquisition cost and ongoing costs. The Master Plan is also the first point for deciding whether new assets are required, what types of new assets should be considered, where they are needed and when they need to be built or acquired.

In moving from master planning to implementing specific projects, the Region will make the next level of decisions that influence total costs. These decisions around design elements like technology or material or location of assets for ease of access must balance financial considerations with technical, reliability, safety and other needs.

MONITORING AND ADAPTING

This Master Plan provides a high-level roadmap for delivering servicing over the long term by determining the need for future infrastructure projects and supporting programs using the best available information and understanding. Over time, assumptions need to be monitored. Updates and course corrections will happen as things change or better information becomes available.

Potential Sources of Change from Plan

The further a forecast looks into the future, the higher the level of uncertainty. Over the next 30 years, growth patterns will continue to evolve and servicing needs may change as a result.

In particular, the pace of high-density development is very likely to increase over time in response to market demand. The exact location and timing of these elements of growth are uncertain, as are its impacts.

Minister's Zoning Orders can bring additional uncertainty to growth plans as they are sometimes approved without local or Regional input, which means infrastructure plans may not reflect increased service population. Where approval is given through a Minister's Zoning Order, it will be out of sync with planned services in the expected time frame because the Master Plan did not foresee the related development.

Aside from growth happening differently than envisioned, infrastructure projects are conceptual at this stage. Thus, implementation might be more complex and timing of delivery longer than originally considered. The Region might also face fiscal constraints that could require changes to future infrastructure identified in the plan as the Region continues to grow.

7.1 DELIVERING INFRASTRUCTURE PROJECTS

Ways of Monitoring and Adapting

One Water principles were adopted to guide the decision-making process of the Master Plan and will continue to be instrumental in the ongoing monitoring and adaptation during implementation.

One Water's holistic approach provides a framework for adaptive management through:

- Integration, which means creating synergies and increasing efficiency in systems by closely monitoring the effects of demand management and asset management initiatives
- Innovation, which involves exploring new concepts and ideas throughout implementation to promote cost-efficiency and environmental sustainability
- Infrestretching, which maximizes useful capacity and life of the existing system and established long-term servicing agreements

Figure 7.5 shows the range of programs, plans, analyses and activities in the Environmental Services department and across the Region that support adaptation to changing conditions.

Figure 7.5 Integrated Approach to Water and Wastewater Service Delivery



7.1 DELIVERING INFRASTRUCTURE PROJECTS

Closely monitoring available capacity in the infrastructure system and development activity enables the Region to coordinate servicing capacity with growth/development, as the province requires municipalities at a minimum to provide a three-year supply of residential units. Demand management programs to encourage water conservation and reduce inflow and infiltration help make more capacity available in the Regional system.

The Region's proactive management of water and wastewater servicing capacity will effectively support development needs while minimizing risks associated with over-extending the infrastructure system.

Three key elements of proactive capacity management include:

- Modeling to understand available system capacity and near-term restrictions
- Monitoring including both flow monitoring and allocation tracking
- Coordinated management of capacity assignment and continued refinement of infrastructure plans as needed and where feasible when development needs deviate from master plans

The 10-year capital plan sets out sequencing of projects/programs to meet growth and asset management needs. The capital plan is reviewed each year as part of the budget, which provides an opportunity to recalibrate plans to reflect changing circumstances. Shifting circumstances considered in capital plan updates include financial pressures, changes to projects in implementation and coordination with other projects including asset management works or infrostretching and optimization initiatives. Recalibrating inevitably involves trade-offs. Within a fixed budget, adding, advancing or expanding a project means something else has to be reduced or removed, and related spending may never be recouped.

Limitations

While the Region strives for flexibility in implementing infrastructure, there are limits on its ability to accommodate unexpected circumstances:

- Large Regional infrastructure projects take considerable time: seven years from plan to completion is typical, but larger projects can take more than a decade
- The size of projects means that they must be timed appropriately; expanding or adding infrastructure earlier than planned can have both financial and operational consequences, the latter because of such potential impacts as poor water quality
- Infrostretching has its limits; pushing existing assets too far beyond their capacity can increase operating risks and may reduce the level of service to existing users beyond acceptable limits
- Prolonged delays in receiving provincial approvals result in major costs and risks that the Region cannot reasonably plan for; this Master Plan update continues to consider the Water Reclamation Centre a key component of long-term servicing for the three municipalities in the Upper York area; should the province render a decision requiring a different direction, there would be numerous implications including considerations outside of this Master Plan update

7.2 ACHIEVING A SUSTAINABLE WATER FUTURE

These factors underscore the need to continually seek the right balance — between costs, growth patterns and the needs of existing customers. Monitoring growth, system capacity and evolving circumstances are key to adapting service delivery to needs as they change.

Over the next 30 years, as growth and development patterns become clearer, municipal comprehensive reviews and master plan updates will provide several opportunities to recalibrate the water and wastewater servicing plan. In addition, timing of delivery can be adjusted through the budget process.

7.2 ACHIEVING A SUSTAINABLE WATER FUTURE

The Region considers One Water the best approach for managing water resources wisely because it is based on understanding and leveraging the natural water cycle. This approach strives to make the best use of every source of water, including water that has passed through municipal systems. One Water can provide innovative solutions to complex problems that are effective and benefit communities and the environment while costing less than traditional approaches. It also helps minimize use of other inputs, including energy, to mitigate climate change impacts.

Ongoing collaboration with key partners like the conservation authorities and local municipalities is key to advancing One Water using its principles of integration, innovation and infstretching. With its broad impacts and influences, One Water is woven throughout the sections below, which touch on existing and potential new initiatives to address water challenges and opportunities. The Region will continue integrating One Water into its approaches to planning and delivering solutions to help define a sustainable future.



THROUGH PARTNERSHIPS AND INNOVATION,
 💧 **ONE WATER** MAKES THE BEST
 POSSIBLE USE OF WATER FROM EVERY SOURCE
 TO SUSTAIN **HEALTHY PEOPLE,**
HEALTHY COMMUNITIES AND A
HEALTHY ENVIRONMENT. 💧

7.2 ACHIEVING A SUSTAINABLE WATER FUTURE

DEMAND MANAGEMENT

Long-Term Water Conservation Strategy

Demand management plays an integral role in planning the Region's water and wastewater infrastructure. Managing water demand through water conservation and efficiency adds real capacity to existing and future infrastructure systems, in turn reducing the amount of energy consumed and GHG emissions released and is a prime example of the One Water principle of infstretching.

A September 2021 update to the Region's Long-Term Water Conservation Strategy identified four overarching objectives:

1. Promote the responsible use of water as a resource
2. Apply a One Water approach to enhance water system sustainability and promote efficiency
3. Reduce water consumption as population increases for sustainable long-term servicing
4. Be a water efficiency and conservation influencer for residents, the industry and regulatory partners

The strategy's five program areas focus on cost-effective ways to realize long-term water savings:

1. Support Regional and local cities and towns' efforts to reduce system losses and other sources of non-revenue water
2. Continue to raise awareness and engage residents and students on conserving water, especially in outdoor uses, and encourage greater water efficiency in new residential developments
3. Support conservation among industrial, commercial and institutional water users through programs and targeted incentives
4. Continue to advance research into centralized municipal and decentralized water reuse
5. Demonstrate leadership by improving the efficiency of York Region's own facilities and operations

Appendix C.1 provides the full updated strategy.

To successfully deliver this Master Plan update, the Region will require support from its local cities and towns and the province, as well as collaboration with other jurisdictions and stakeholders. It will implement, evaluate and refine its programs over the next five years.

7.2 ACHIEVING A SUSTAINABLE WATER FUTURE

Inflow and Infiltration Reduction Strategy

Reducing inflow and infiltration from the wastewater systems provides real capacity to existing systems and defers the need for future infrastructure to service growth; this is a prime example of the One Water principle of infrastrretching. Integrating inflow and infiltration reduction into day-to-day operational needs and decision making and implementing advanced technologies and intelligent information systems are also examples of the integration and innovation principles of One Water.

In September 2021, the Region's Inflow and Infiltration Reduction Strategy was updated. Main objectives of the 2021 strategy update are:

- Ensure continuous progress is made towards reaching the 2031 inflow and infiltration reduction target of 40 million litres a day; this target is required to meet the Southeast Collector Trunk Sewer individual environmental assessment condition of approval set by the province in 2010
- Support Regional growth and sustainability goals while balancing overall cost and benefits
- Refine partnership framework to enhance inflow and infiltration reduction programming at both the Region and nine local municipalities
- Continue to be an inflow and infiltration reduction leader, promoting innovation, adaptation, and digital integration in data collection and analysis to drive actions towards the long-term reduction target

The strategy update is organized around five program areas:

1. Enhance partnerships among York Region, local municipalities and the development community, all of which have a role to play in reducing unnecessary water entering the sanitary sewer system
2. Monitor flows and continue to collect data to set local municipal inflow and infiltration reduction targets and pinpoint high-priority areas for local improvement efforts
3. Advance data collection and analytics by installing more meters in Regional trunk sewers and using innovative tools to analyze flow data and better plan and track work
4. Expand assessment and rehabilitation programming, refine policies and bylaws and enhance partnership initiatives with developers for continued inflow and infiltration reduction in existing sanitary sewer systems
5. Develop and adopt a new development standard for inflow and infiltration management consistently across the Region and introduce monitoring requirements for the prevention of inflow and infiltration in new sanitary sewer systems

Appendix C.2 provides the full updated strategy.

7.2 ACHIEVING A SUSTAINABLE WATER FUTURE



CLIMATE CHANGE ACTIONS

York Region's draft Climate Change Action Plan identifies actions in priority areas to help address climate change. These actions focus on corporate-specific actions and community-level activities to improve resilience to climate change and achieve integration and co-benefits through implementation. Integrating efforts to mitigate and adapt is the most effective way to manage climate change risks.

The plan is founded on the following goal:

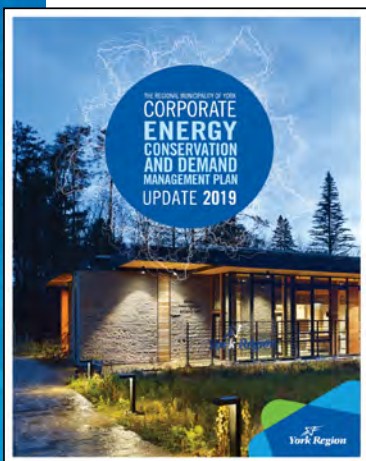
Working together, the strong, caring and safe communities of York Region will continue to thrive under changing climate conditions.

It aims to achieve two major outcomes:

- Reduce GHG emissions with a long-term goal of becoming a net-zero Region by 2050
- Increase resilience and capacity of the Region to withstand and respond to current and future climate events

7.2 ACHIEVING A SUSTAINABLE WATER FUTURE

As noted in Section 3.3, the corporate [Energy Conservation and Demand Management Plan](#) looks for ways to reduce emissions across Regional government. Currently, approximately 90% of the energy used in water and wastewater facilities is from electricity. The plan, updated most recently in 2019, also identified energy savings from reducing water consumption, since water supply and wastewater conveyance both require energy for pumping, and from putting efficiency measures in place at individual facilities.



Energy Conservation and Demand Management Plan

The Energy Conservation and Demand Management Plan (2019) identified a suite of projects, initiatives and other activities to position York Region to achieve its long-term aspirational goal of net-zero carbon emissions.

- Continued implementation of water conservation and inflow and infiltration reduction programs
- **Energy conservation** and **process** optimization measures like improvements to heating and cooling systems and pump optimization
- **Renewable Energy** measures include implementing heat recovery systems and installing photovoltaic solar

Climate adaptation is also important. Adapting means taking action to reduce negative impacts of existing and future climate change. Regular maintenance and inspection keep our infrastructure in a good state of repair, which helps make it more resilient in case of extreme weather events. Some of this work, on wastewater infrastructure, is done in partnership with conservation authorities and servicing partners.

In recent years, climate change adaption measures have been implemented to improve the Region's resiliency to a changing climate. For example, drinking water sources have been evaluated using 10-year drought scenarios to understand risks to groundwater sources, which drove development of specific policies under the Source Protection Plans for York Region. For wastewater systems, a 25-year design storm scenario was used to allow for sufficient consideration of climate change on wastewater capacity. To build on this work, a [climate change roadmap](#) has been completed in 2020 to identify and address the highest future climate risks to York Region's water and wastewater infrastructure as shown in Figure 7.6. It focuses on:

- Designing systems for climate resilience
- Improving corporate internal governance and culture regarding climate change
- Improving the capacity to adapt at an operational level
- Building knowledge of climate risks
- Reducing negative impacts to the environment from the servicing system

7.2 ACHIEVING A SUSTAINABLE WATER FUTURE



Many of the 33 actions outlined in the roadmap were developed to directly align with actions discussed in the draft Climate Change Action Plan so that it can serve as a component of the broader corporate plan. Over the next five years, work will be undertaken to update design guidelines, embed climate change lens in the Environmental Assessment process, update emergency operating and business continuity procedures to address high risks, refine odour management programs and develop performance metrics to measure progress toward a resilient water and wastewater system.

The Region will continue to implement initiatives and monitor climate risks that increase resilience of infrastructure and delivery of water and wastewater services.

Figure 7.6 Climate Risks to Regional Water and Wastewater Infrastructure

CLIMATE EVENT	EFFECT	RISK	IMPACTED ASSET	
 TEMPERATURE INCREASE AND EXTREME HIGH TEMPERATURES	Increased microbial activity	Odour events	Sewage pumping stations	
	 EXTREME RAINFALL	Poor raw water quality	Treated water quality weakens	Water treatment plants
		Power outages/equipment failures	Loss of service	Water treatment plants and pumping stations
		Corrosion/breaks	Odour events and spills to the environment	Wastewater mains
		Disinfectant breaks down more quickly	Treated water quality weakens	Water pumping stations, watermains and storage facilities
 DROUGHT	High demand for water	Decreased availability of water	Groundwater wells	

7.2 ACHIEVING A SUSTAINABLE WATER FUTURE



Blue-green Infrastructure: One Water in Action

The power of combining all three elements of One Water is illustrated by what is called “blue-green infrastructure.” It innovates by integrating natural processes — the use of trees, other vegetation and landscaping to enhance community well-being by improving flood protection, urban heat island mitigation and water quality improvements. In addition to having a positive benefit on the environment, blue-green infrastructure saves money by avoiding or reducing the use of built facilities and processing.

One important application of blue-green infrastructure is using landscaping and vegetation around buildings and along waterways to reduce the threat of flooding. Heavy rainfall can easily overwhelm eavestroughs and other runoff channels, resulting in flooded basements and low-lying areas, stormwater getting into sanitary sewers and waterways overflowing their banks. Simple measures such as disconnecting downspouts from municipal storm systems and collecting water in rain barrels instead, planting trees and shrubs, sloping land away from buildings and reducing paved areas can significantly reduce these risks.

Both Lake Simcoe and Toronto and Region conservation authorities are encouraging York Region and local cities and towns to support integration of green infrastructure into asset management planning and to continue to monitor and support the region’s forest assets, including street trees.

In York Region and across Canada, the value of blue-green infrastructure is recognized through the federal Disaster Mitigation and Adaptation Fund (DMAF), which encourages actions like the planting of street trees to absorb storm water instead of relying completely on municipal sewer systems. York Region has successfully received DMAF support to manage the effects of climate change by planting more trees in the right places. This work helps reduce water run-off in urban areas and reduces the impact of heat islands.

7.2 ACHIEVING A SUSTAINABLE WATER FUTURE

WATER EQUITY AND LIVEABILITY

Around the world, growth, economic trends and changes in the climate are raising concerns about equitable access to safe, reliable water and wastewater services. These same factors are raising questions about how communities can remain liveable in the coming decades as growth drives the need for more infrastructure projects.

Water equity provides a new lens with which to view the services York Region provides to residents and businesses in partnership with local municipalities.

The [US Water Alliance](#) has identified a [framework](#) to advance water equity, which from a York Region perspective would be built on three pillars:

- Ensure all users of municipal systems have access to clean, safe, affordable water service
- Maximize community benefits of water and wastewater solutions
- Foster community resilience in the face of a changing climate

Access to Clean, Safe, Affordable Water Services

The first pillar is a reminder that water equity relates to the cleanliness and safety of supply as well as its affordability. As part of the recent update to the [Financial Sustainability Plan](#) for the Region's water and wastewater, affordability of water bills was reviewed using new standards that take lower-income households into consideration. The conclusion was that rates continue to be affordable for most residents but the high cost of housing in the Region may be creating challenges that go beyond the affordability of water bills. The recommended best practice for water and wastewater utilities is to consider affordability support programs for low income households, rather than keep water rates and wastewater services low for all customers. Some help is available to those facing financial challenges, including water-specific financial relief programs in two local municipalities.



7.2 ACHIEVING A SUSTAINABLE WATER FUTURE



Water Quality Management

Drinking water varies from place to place and can be influenced by factors such as hardness, chlorine and even age (how long water stays in a pipe). Groundwater tends to be harder than surface water, picking up minerals like calcium and magnesium as it travels slowly through sediments. It may also contain other minerals like iron and sodium. Drinking water is highly regulated and measures of water quality include both health/safety requirements as well as aesthetic targets. The Region and local cities and towns work together to maintain a safe drinking water system and ensure water quality that meets provincial standards.

A multi-barrier approach, underpinned by stringent provincial regulations, proactively protects drinking water and public health. Some elements include source water protection, training of operators, system audits, a strict provincial inspection and enforcement program, as well as extensive water quality sampling and system monitoring. For example, in 2021, York Region collected and performed 16,639 laboratory-analyzed tests and approximately 40 million point-in-time readings were recorded by 376 continuous monitoring analyzers.

In the long-term, some infrastructure-related examples of water quality management include:

- Timing new water infrastructure carefully to limit oversizing, which can lead to increased water age
- Upgrading treatment at some York Region groundwater well facilities to improve the quality of water in communities; groundwater treatment upgrades (valued at over \$100 million) will be phased at multiple York Region well facilities over the next 15 years; groundwater wells diversify water supplies available to the Region which supports flexible and resilient servicing in the face of changing climate
- Renewal of several York Region water storage facilities (valued at over \$100 million over the next 10 years) to keep water storage facilities (like reservoirs and water towers) in good condition
- Enhancing maintenance and cleaning of water storage facilities and distribution system
- Researching emerging contaminants and anticipating operational challenges to identify potential risks early

While not specifically growth-related, water quality continues to be key consideration in long-term service planning.

7.2 ACHIEVING A SUSTAINABLE WATER FUTURE

York Region is a leader in supplying drinking water that meets stringent provincial standards. In 2020, 100% of laboratory-analyzed samples were within regulated standards, and all provincial inspections of the Region's drinking water systems scored 100%. These scores reflected systems and operations in communities across the Region. Through a focus on operations excellence including implementing an Integrated Management System (comprising the Drinking Water Quality Management Standard along with ISO 14001) the Region is working to ensure our drinking water remains safe now and into the future.

Maximize Community Benefits of Water and Wastewater Solutions

Traditional infrastructure projects can be disruptive to communities during construction and historically have impacted the natural environment, for example, by covering or altering existing watercourses.

While a regulatory framework to minimize environmental damage and mitigate impacts is now in place, newer approaches like One Water show how working with natural processes can significantly reduce the impacts of built solutions.

Similar work on this front is taking place around the world. For example, the [Water Services Association of Australia](#) is investigating how to broaden traditional approaches to improve community outcomes.

One of their important goals is liveability. This can guide York Region, local cities and towns and conservation authorities on several fronts, including:

- Providing and encouraging “blue-green” infrastructure and traditional blue infrastructure (water and wastewater infrastructure recommended through this Master Plan) that aligns with One Water approaches
- Using water and greening to reduce heat in the urban landscape, providing resilience to heat events and improving air quality
- Engaging with communities to educate and encourage water-related initiatives at every scale, including individual properties

The Australian water association has developed a [framework](#) that provides guidance on leading, building capacity, engaging the community and developing the right policy and regulatory arrangements to make communities more livable through water-based initiatives. This may provide a roadmap as York Region acts on this Master Plan.

Foster Community Resilience in the Face of a Changing Climate

Community resilience in the face of a changing climate is a key goal of the Region's draft Climate Change Action Plan, which includes a commitment to an equitable transition as communities address climate challenges. Climate change impacts will not affect every resident or every area the same way. Having more information about specific vulnerabilities will be essential in developing the right responses to differing climate change impacts. The Region will continue to guide and encourage the creation of complete communities and will also work to ensure infrastructure systems are built and maintained for both the current and future climate.

7.2 ACHIEVING A SUSTAINABLE WATER FUTURE

MEASURING SUCCESS

To achieve York Region's vision of strong, caring, safe communities, the Region sets and measures progress on key priorities set out in the [2019 to 2023 Strategic Plan](#). Annual reporting ensures objectives are met. Delivering and promoting environmentally sustainable services stress the importance of demand management activities. Ensuring fiscally responsible, reliable, and responsive service delivery means services are delivered to the residents and business in the Region in the most efficient and effective way possible. Successful implementation of this Master Plan will be evaluated by providing available capacity to ensure we meet the Provincial Policy Statement 2020. Municipalities must as a minimum provide three-year supply of residential units, with an option to consider a five-year servicing supply. This performance indicator is also outlined in the Regional Official Plan and reported to Council as part of the capacity monitoring report.

Developing a deeper understanding of current and potential water equity concerns and opportunities in York Region could provide a broader view of the impact that water plays in York Region's residents' lives, health and enjoyment and in the economic vitality of its communities.

A growing number of United States and international utilities have been developing One Water initiatives to respond to regional water challenges. Research is being carried out by the [Water Research Foundation](#) to help utilities and municipalities identify effective strategies and viable technological, policy, institutional, and financial pathways towards One Water. The Region will continue to review and integrate knowledge and learnings from other jurisdictions into its own programs and plans as it advances toward a sustainable water future.





8.0 CONCLUSION



8 CONCLUSION



CONCLUSION

Achieving the goals of the Region's Vision will depend on operating water and wastewater systems responsibly and efficiently, and meeting growth needs prudently.

This Master Plan update, which outlines \$4.5 billion in growth projects, supports those goals. It aligns with the Municipal Comprehensive Review process by ensuring there is enough capacity in the right areas of the Region at the right time as the Region's population reaches a forecast 2.02 million by 2051.

The Master Plan is a dynamic document that will be recalibrated as needed to ensure investments align with actual growth. The plan is expected to be updated within the next five years in coordination with the next updates to the Regional Official Plan and Transportation Master Plan. As with this and previous plans, it will seek out the views of residents, Indigenous communities, municipal councils and staff and others to help inform its direction.

Safe and reliable water and wastewater services are central to social, environmental, and economic well-being. The COVID-19 pandemic that began two years ago has served as a reminder of how quickly and dramatically conditions can change, and how public service delivery must be ready to respond. Sobering new studies, as well as reports of unprecedented severe weather around the world, underscore the need to address climate change and protect people and the environment.

8 CONCLUSION

Wisdom harnessed to technology can go a long way in creating a better social order, a world in which all creation can survive and enjoy life to the fullest.

Intebeja Mani (John Snow)

Chief of the Stoney Nation,

These Mountains Are Our Sacred Places


Meeting such challenges requires well-designed and maintained systems supported by highly proficient staff and leading-edge technology.

And it requires the wisdom to understand that water is a precious and finite resource.

Demand management programs like water conservation, inflow and infiltration reduction and energy conservation and demand management play an integral role in planning and delivering the Region's water and wastewater services. That is why sustainable planning for infrastructure is increasingly linked to the One Water approach, which recognizes the value of water in all forms and settings and stresses the need to support and work with natural processes.

York Region will also maintain rates that cover the costs of operating and renewing water and wastewater assets and help prevent water being wasted. It will continue to work with local municipalities, partners, the development industry and others to turn the principles of One Water into action.

With this 2022 Master Plan update, York Region remains at the forefront in delivering water and wastewater services that depend on excellence in building and operating complex systems. By embodying the leading-edge principles of One Water, it will contribute to building stronger communities across York Region and a healthier, more resilient environment for all.



Intebeja Mani (1933 - 2006) was a visionary Indigenous leader, statesman, philosopher and spiritual leader. As Chief of the Stoney Nation, Mani helped protect the rights of all Indigenous peoples by bringing attention to Indigenous issues. He is immortalized through his teachings and writings.

2022 DRAFT YORK REGION
**WATER AND WASTEWATER
MASTER PLAN**

Strong, caring and safe communities

APRIL 2022



Infrastructure projects identified through the 2022 Water and Wastewater Master Plan (not including Upper York Sewage Solutions)

Project description	Estimated expenditures 2022-2051 (000's)	Planned implementation timeframe
Cost-shared programs		
Toronto Water Supply - Cost-Shared Works Continue implementation of cost-shared capital projects within the City of Toronto to permit gradual increase of water supply to York Region in accordance with current Servicing Agreement.	\$ 77,800	Ongoing
Peel Water Supply - Cost-Shared Works Continue implementation of cost-shared capital projects within Region of Peel to permit gradual increase of water supply to York Region in accordance with current Servicing Agreement.	\$ 16,160	Ongoing
Peel System Cost-Shared Works Continue implementation of cost-shared projects in the Region of Peel to allow diversion of York wastewater flows for treatment in Peel wastewater system in accordance with current Servicing Agreement.	\$ 8,370	Ongoing
Water and wastewater treatment		
Duffin Creek Water Pollution Control Plant Outfall Effluent Strategy Optimize capacity of existing Duffin Creek Water Pollution Control Plant Outfall.	\$ 12,340	2022 - 2031
Duffin Creek Water Pollution Control Plant Stage 1 and 2 Chlorine Chamber Expansion Construct a new chlorine contact chamber to increase the Duffin Creek Water Pollution Control Plant disinfection capacity.	\$ 15,480	2022 - 2031
Holland Landing Lagoon Decommissioning Decommission Holland Landing Lagoons following commissioning of the new Water Reclamation Centre.	\$ 1,100	2022 - 2031
Keswick Wastewater Servicing Increase capacity of Keswick Water Resource Recovery Facility as recommended in the completed Class Environmental Assessment and implement growth related upgrades at Keswick Sewage Pumping Station.	\$ 41,820	2022 - 2041
Nobleton Wastewater Servicing Increase capacity of the Nobleton wastewater system to accommodate the population identified in the recently completed Class Environmental Assessment.	\$ 21,970	2032 - 2041
Nobleton Water Servicing Increase Nobleton well supply capacity in coordination with wastewater treatment expansion to accommodate the population identified in the recently completed Class Environmental Assessment.	\$ 7,600	2032 - 2041

Georgina Water System Upgrades Expand Georgina Water Treatment Plant to its ultimate permitted capacity of 50 million litres per day and upgrade Georgina Water System disinfection system to allow integration with York Water System.	\$ 21,810	2032 - 2041
Duffin Creek Water Pollution Control Plant Growth Expansions Implement several upgrades to optimize and/or expand Duffin Creek Water Pollution Control Plant beyond the current capacity including a new outfall to accommodate growth in the York Durham System service area. Upgrades to be implemented in phases and are expected to be confirmed by future planning and EA studies.	\$ 757,900	2032 - 2051
Sutton Wastewater Servicing Expand Sutton Water Resource Recovery Facility to service growth in Sutton as recommended by the completed Class Environmental Assessment study and increase capacity of High Street and Woodriver Bend Sewage Pumping Stations.	\$ 56,320	2032 - 2041

Transmission, conveyance and pumping projects

West Vaughan Water Servicing Phase 1 - Improve pressure district interconnection in the Woodbridge service area prior to storage expansion. Phase 2- Increase storage capacity in Woodbridge and Kleinburg to accommodate growth in West Vaughan.	\$ 25,020	2022 - 2031 2032 - 2041
York Peel Feedermain Upgrade Install three pressure reducing valves along connection points to the York-Peel Feedermain to maintain acceptable pressures within Pressure District 6 distribution system as Peel supply increases to meet system demands.	\$ 3,400	2022 - 2031
Northeast Vaughan Water Servicing Construct new Pressure District 8 and 9 pumping stations, two new Pressure District 8 elevated tanks and associated watermains to connect the Northeast Vaughan urban expansion area to the existing system as recommended by the completed Northeast Vaughan Class Environmental Assessment.	\$ 100,040	2022 - 2031
Richmond Hill Langstaff Gateway Provincial Urban Growth Centre Water Servicing Install water system connections to service the proposed urban growth centre in Pressure District 6 as recommended by the completed Class Environmental Assessment.	\$ 3,550	2022 - 2031
Aurora East Booster Pumping Station Upgrades Expand Aurora East Booster Pumping Station capacity including pipe upgrades and dedication of watermains to service growth in the east area of the north system.	\$ 11,440	2022 - 2031
Orchard Heights Reservoir Inlet Upgrade Increase size of inlet and outlet piping at Orchard Heights Reservoir to facilitate increase of Lake Ontario water supply into communities in the north system as demand increases.	\$ 1,550	2022 - 2031

<p>Eagle to Kirby Pumping Station Watermain Install a new transmission main to connect Yonge Street watermain to the Glenway Reservoir and facilitate filling of the reservoir as demand increases due to growth in Newmarket Central and Newmarket West Pressure Districts.</p>	\$ 11,950	2022 - 2031
<p>Newmarket West Water Servicing Expand Kirby Pumping Station capacity and construct a new elevated tank and associated watermains to service growth in the Newmarket West Pressure District.</p>	\$ 28,570	2032 - 2041
<p>Green Lane Leslie Street Watermain Phase 1 - Install a new transmission main along Green Lane to service growth and allow connection of Newmarket and East Gwillimbury delivery systems. Phase 2 - Install a new transmission main along Leslie Street to bring additional Lake Ontario supply as demand increases in the northeast parts of the system.</p>	\$ 30,990	2022 - 2031 2032 - 2041
<p>East Gwillimbury Water Servicing Phase 1 - Install a new transmission main to accommodate growth along Woodbine Avenue corridor. Phase 2 - Install a new transmission main Queensville Sideroad to provide additional supply to Holland Landing.</p>	\$ 42,820	2022 - 2031 2042 - 2051
<p>West Vaughan Sewage Servicing Phase 1 - Increase capacity of Humber Sewage Pumping Station and construct a new gravity sewer to service growth in western parts of Vaughan as recommended by the completed Class Environmental Assessment study. Phase 2 - Construct a gravity sewer from the Kleinburg Water Resource Recovery Facility to connect to the north end of West Vaughan Sewage Servicing - Phase 1 to service growth in northwest Vaughan and Kleinburg. The projects allow decommissioning of the Kleinburg Water Resource Recovery Facility.</p>	\$ 389,250	2022 - 2031 2032 - 2041
<p>Northeast Vaughan Wastewater Servicing Construct new gravity sewer pipe to convey flows generated in northeast Vaughan area to the existing Langstaff Collector and York Durham Sewage System upgrades as recommended by the completed Class Environmental Assessment.</p>	\$ 171,630	2022 - 2031
<p>York Durham Sewage System Conveyance Optimization Install a flow gate at the Bathurst Collector to attenuate flows during wet weather conditions. Twin a segment of pipe conveying flows into the Newmarket Sewage Pumping Station to optimize existing wastewater conveyance capacity to service growth.</p>	\$ 6,560	2022 - 2031
<p>Richmond Hill Langstaff Gateway Provincial Urban Growth Centre Wastewater Servicing Construct gravity sewer to convey flows from Richmond Hill - Langstaff Gateway Regional Urban Centre to the Richmond Hill Collector as recommended by the completed Class Environmental Assessment.</p>	\$ 15,180	2022 - 2031

<p>Primary Trunk Sewer Construct a new trunk sewer from the terminus of the Southeast Collector at Valley Farm Road to the Duffin Creek Water Pollution Control Plant to service growth in the overall York Durham Sewage System service area.</p>	\$ 228,600	2022 - 2031
<p>King City Wastewater System Upgrades Phase 1 - Optimize capacity of King City Sewage Pumping Station to accommodate interim growth in King City. Phase 2 - Expand King City wastewater pumping capacity and construct a new forcemain to accommodate long term growth in King City.</p>	\$ 47,880	2022 - 2031 2042 - 2051
<p>Yonge Street Sewer Twinning Increase conveyance capacity of Yonge Street Sewer to accommodate growth and allow rehabilitation of existing sewer.</p>	\$ 65,930	2022 - 2031
<p>York Durham Sewage System Interim Servicing Construct a new sewage pumping station and connecting sewer to the York Durham Sewage System as recommended by completed Class EA. This project allows growth before the Water Reclamation Centre is commissioned.</p>	\$ 25,450	2022 - 2031
<p>East Queensville Sewage Pumping Station and Forcemain Construct a new sewage pumping station just south of Queensville Sideroad and west of Highway 404 along with forcemain connecting to the West Queensville Sewage Pumping Station to service growth in parts of Queensville.</p>	\$ 16,320	2022 - 2031
<p>East Woodbridge Pumping Station Decommissioning Decommission East Woodbridge Pumping Station, subject to outcome of a repurposing study.</p>	\$ 1,260	2032 - 2041
<p>Vaughan Storage Expansion Phase 1 - Construct first phase of a new reservoir to accommodate growth in Pressure District 6, a key centre through which supply is delivered to other pressure districts. Phase 2 - Construct a second phase of the new Vaughan reservoir and implement works to expand the Pressure District 9 Vaughan system including a new elevated tank and associated connecting watermain.</p>	\$ 61,020	2032 - 2041 2042 - 2051
<p>North Richmond Hill Pumping Station Decommissioning Decommission North Richmond Hill Pressure District 8 Pumping Station, subject to outcome of repurposing study.</p>	\$ 1,470	2032 - 2041
<p>North Markham Water Servicing Construct a new reservoir, a new water pumping station and associated watermains to connect the new facilities to the existing system. This project is required to support Markham urban expansion north of Elgin Mills Road and allow the implementation of the York East Water Servicing project (W13).</p>	\$ 112,720	2032 - 2041

<p>Stouffville Water Servicing Expand Stouffville storage capacity to service new development. Project is expected to implemented in phases to maximize utilization of existing infrastructure. Phase 1 - Increase capacity of Stouffville Zone 2 booster pumping station before the new storage facility is introduced. Phase 2 - Construct a new elevated tank and connecting watermain to provide long term storage capacity need in the service area.</p>	\$ 15,330	2032 - 2051
<p>York East Water Servicing Phase 1 - Construct a new pumping station at the new Markham reservoir site (W11), a new Reservoir in Aurora and associated watermain to bring additional Lake Ontario supply to the north water system as demand increases. Phase 2 - Construct a new pumping station at the new Aurora reservoir and associated watermain to service development on the eastern parts of the north system as demand increases.</p>	\$ 148,530	2032 - 2041 2042 - 2051
<p>Holland Landing Storage Expansion Install a new elevated tank and connecting watermain to accommodate growth in Holland Landing and allow replacement of existing Holland Landing East Elevated Tank.</p>	\$ 10,340	2032 - 2041
<p>West Park Heights Pumping Station and Watermain Construct a new pumping station, assumed to be located adjacent to the existing West Park Heights Reservoir in Keswick, and associated watermain to allow integration of York and Georgina Water Systems.</p>	\$ 47,950	2032 - 2041
<p>Leslie Street Sewage Pumping Station and Forcemain Phase 1 - Increase Leslie Street Sewage Pumping Station capacity. Phase 2 - Construct a new forcemain connecting the station to downstream York Durham Sewage System as flows increase due to growth.</p>	\$ 65,240	2032 - 2041 2042 - 2051
<p>North Markham Trunk Sewer Construct a new gravity sewer to servicing of Markham urban expansion.</p>	\$ 43,200	2032 - 2041
<p>Newmarket Diversion Sewer Construct a new sewer to divert flows from the Newmarket Pumping Station to the Sharon Trunk Sewer as flows increase due to growth.</p>	\$ 29,800	2032 - 2041
<p>East Gwillimbury Sewage Pumping Station Expansions Increase capacity of West Queensville, Second Concession and Holland Landing Sewage Pumping Stations to service growth. Works are expected to be accommodated within the original building footprint.</p>	\$ 7,040	2032 - 2041
<p>Bloomington - Bayview Watermain Construct a new watermain along Bloomington Road from Aurora South Reservoir to Bayview Avenue, and along Bayview Avenue connecting Wellington Watermain.</p>	\$ 82,560	2042 - 2051

Yonge Street Watermain Construct a new watermain on Yonge Street from Gladman Road to Green Lane to service proposed intensification along the Yonge Street corridor and connect the Newmarket Central and Holland Landing Pressure Districts.	\$ 46,200	2042 - 2051
Queensville Elevated Tank No. 2 Construct a new elevated tank and connecting watermain to accommodate growth in Queensville and Sharon, and allow replacement of the Newmarket East Elevated Tank.	\$ 11,290	2042 - 2051
York Durham Sewage System Expansion Continue to expand York Durham Sewage System to support new developments including: A new relief sewer to divert flows from the Central Collector sewershed to the proposed Richmond Hill Langstaff sewer. Twinning a section of existing Steeles Collector Sewer to accommodate intensification in the Leslie Street Drainage Area. A new gravity sewer to support growth in the area serviced by Markham Collector which is expected to reach capacity as flows increase.	\$ 324,510	2042 - 2051

Demand management and supporting programs

Water For Tomorrow Program	\$ 29,770	Ongoing
Water Master Plan Update	\$ 7,060	Ongoing
Water System Capacity Assessment	\$ 21,220	Ongoing
Inflow and Infiltration Reduction	\$ 104,170	Ongoing
Wastewater Master Plan Update	\$ 7,070	Ongoing
Wastewater System Capacity Studies	\$ 58,610	Ongoing

Upper York Sewage Solutions projects identified in the 2022 Water and Wastewater Master Plan

Project description	Estimated expenditures 2022-2051 (000's)	Planned implementation timeframe
Wastewater treatment		
Upper York Water Reclamation Centre Construct a new Water Reclamation Centre in East Gwillimbury to accommodate growth and allow decommissioning of Holland Landing Lagoons as recommended in the Individual Class Environmental Assessment completed in 2014 (pending approval). This project will provide an overall benefit to the Lake Simcoe watershed through the integral phosphorus offsetting program component of Upper York Sewage Solutions.	\$ 549,940	2022 - 2031
Upper York Servicing Infrastructure Expansions 1 and 2 Expand the Water Reclamation Centre subject to a future Class Environmental Study to accommodate growth in East Gwillimbury and Newmarket.	\$ 428,110	2032 - 2041 2042 - 2051

Regional Council Decision - Affordable Housing in York Region – 2021 Measuring and Monitoring

On May 26, 2022 Regional Council made the following decision:

1. The Regional Clerk circulate this report to the Ministry of Municipal Affairs and Housing, Building Industry and Land Development Association – York Chapter (BILD) and local municipalities.

The original staff report is attached for your information.

Please contact Paul Bottomley at 1-877-464-9675 ext. 71530 if you have any questions with respect to this matter.

Regards,

Christopher Raynor (he/him) | Regional Clerk, Regional Clerk's Office, Corporate Services Department

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
Planning and Economic Development
May 5, 2022

Report of the Commissioner of Corporate Services and Chief Planner

Affordable Housing in York Region – 2021 Measuring and Monitoring

1. Recommendations

The Regional Clerk circulate this report to the Ministry of Municipal Affairs and Housing, Building Industry and Land Development Association – York Chapter (BILD) and local municipalities.

2. Summary

This report provides the 2021 affordable housing measuring and monitoring annual summary (Attachment 1).

Key Points:

- Annual affordable housing measuring and monitoring provides an assessment of the affordability of new ownership housing and the supply of new purpose-built rental housing each year
- A lack of new affordable housing options continues to be a challenge for York Region
- Less than 1% of new ownership units were affordable in 2021
- A total of 275 new purpose-built rental units were constructed in 2021, representing 4% of all new units monitored (rental and ownership), and there is growing interest in developing purpose-built rental housing with 2,885 units proposed across 15 buildings
- The Affordable Private Market Housing Implementation Plan and Community Housing Master Plan are under development to help address affordability challenges
- Different partners have a role in supporting the housing needs of residents and workers, including all levels of government, the development industry, housing providers and other partners

3. Background

Affordable housing options are required for complete communities and to attract population and employment growth

Communities with housing options that meet the needs of residents and workers have associated positive economic, environmental, and social outcomes. In York Region and across the GTHA, there has been declining housing affordability rates over recent years. In [January 2021](#), the correlation between the Region not achieving growth targets and the lack of affordable housing options was identified. In February 2021, Council declared an [affordable housing crisis](#), and formed a [Housing Affordability Task Force](#) comprised of the Chairman and the mayors of each local municipality. To identify opportunities to address and fund housing needs an [Affordable Private Market Housing Implementation Plan](#) and [Community Housing Master Plan](#) are being developed. While these plans are being advanced, Council continues to actively explore and develop avenues to support a mix and range of housing options, including:

- Through the 2022 DC Bylaw, charging any homes below 700 sq. ft. the small apartment rate
- Broadening eligibility to the Region's 36-month development charge deferral for purpose built rental buildings
- Endorsing a feasibility study and public benefits review of a [Vacant Homes Tax](#)

Affordable housing targets in the Regional Official Plan are monitored annually

The York Region Official Plan requires 35% of new housing in the Region's centres and key development areas be affordable, and 25% of new housing outside of those areas be affordable. The Draft Regional Official Plan includes a new purpose-built rental target of 1,000 units per year, with local municipal targets based on share of growth over the forecast time period. The ownership affordability threshold used in this measuring and monitoring exercise is based on the Provincial definition set out in the Provincial Policy Statement, which benchmarks the maximum affordable house price to the 6th decile of the household income distribution (i.e. the highest household income of the lowest earning 60% of households). It is assumed that 30% of gross household income can be spent on mortgage, mortgage insurance and property taxes. In 2021, York Region's annual household income at the 6th decile was \$132,008 which allows for a maximum affordable house price of \$535,809.

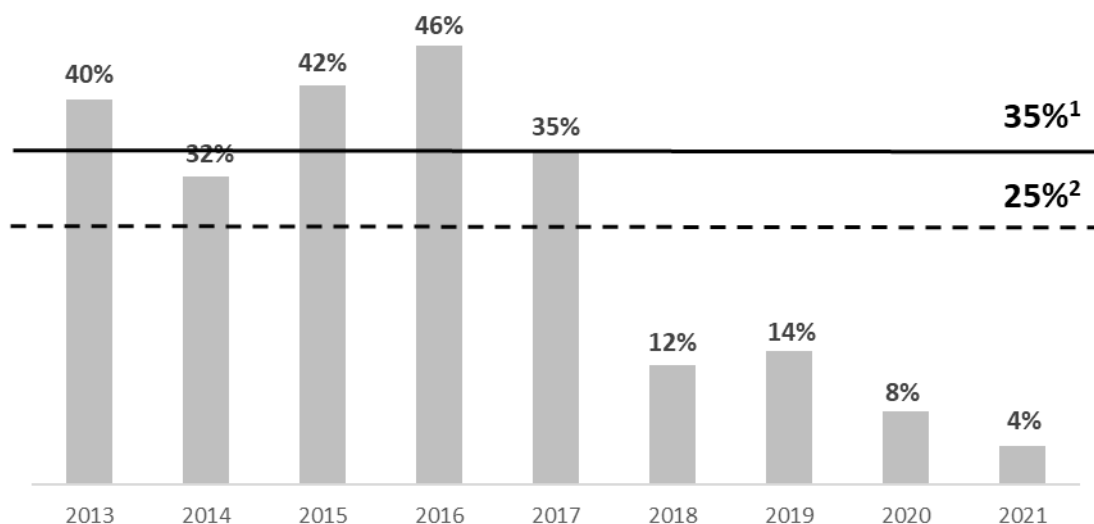
Due to data limitations, rent prices for new rental units are not available to comprehensively monitor affordability. As a result, this exercise monitors the number of new purpose-built rental units. While all increases to rental supply are positive, an affordable rental threshold of 125% average market rent by bedroom type has been established for negotiating affordability in new developments. The maximum 2021 rental thresholds range from \$1,224 for a bachelor to \$2,270 for a three-bedroom apartment.

4. Analysis

Like most municipalities, affordable housing continues to be out of reach for many in York Region

In 2021, 4% of new units were either below the Provincially defined affordable housing threshold for ownership or were constructed as purpose-built rental housing. This was a decrease from 8% in 2020, reflecting ongoing declines in affordability (Figure 1).

Figure 1
Percent of New Affordable Units, 2013-2021



1. York Region Official Plan requires that 35% of new housing in Regional Centres and Key Development Areas be affordable
2. York Region Official Plan requires that 25% of new housing outside of Regional Centres and Key Development Areas be affordable

Source: York Region Planning and Economic Development, 2021

The significant drop in affordability between 2017 and 2018 represents the tipping point where the majority of condominium units were no longer affordable. In 2017 half of all high-density units were affordable, including 11% of two-bedroom units. In 2018, only a quarter of high-density units were affordable, none of which were in two-bedroom units or larger. In York Region, among all new housing units sold (ownership) or completed (rental) in 2021, 96% were ownership units and 4% were rental. Since 2015, the rental stock has delivered an increasing proportion of the affordable housing supply. For the first time ever, in 2021 the Region was almost fully reliant on the rental market to provide affordable options.

There is growing interest in developing purpose-built rental housing

In 2021, the new purpose-built rental supply consisted of 136 private purpose-built rental units in the City of Vaughan and 139 secondary suites registered with local municipalities.

Forty-five (45) of the private purpose-built rental units received a development charge deferral through the Region's Affordable Development Charge Deferral for Purpose-Built Rental Buildings policy. As reported in the 2021 Regional Centres and Corridors Update report on this agenda, there is growing interest in building purpose-built rental housing, with 2,885 units proposed across 15 buildings.

Rental condominiums also contribute to the rental stock, however, the number of units in the secondary rental market are not monitored through this analysis as those units are monitored for ownership affordability. In 2021, approximately 31% of condominium units that permit rentals were rented as part of the secondary market (approximately 15,000 units). There was an increase of over 1,300 rented condo units between 2020 and 2021. Generally, the secondary market is more expensive than the purpose-built rental market and offers less security of tenure. In 2021, the average rents for units in the secondary market (\$2,214) exceeded the average affordable rental threshold (\$1,803).

Home ownership is beyond reach for most households not already in the ownership market

In 2021, 0.15% of new ownership units were affordable based on the Provincial definition which provides a threshold based on a gross household income of \$132,008, or the 6th decile of the income distribution. To better assess affordability throughout the income spectrum, an analysis was conducted for households at the 4th decile and above (Table 1). Households below the 4th decile generally require additional support for housing.

Table 1
Percent of Affordable Ownership by Income Decile

Decile	Maximum Gross Household Income	Maximum Affordable House Price (Threshold)	% Units Sold Under Threshold ¹
4 th	\$88,300	\$357,312	0%
5 th	\$109,185	\$441,825	0%
6 th	\$132,008	\$535,809	0.15%
7 th	\$158,990	\$650,320	3%
8 th	\$194,395	\$800,513	43%
9 th	\$253,367	\$1,056,041	76%

Source: York Region Planning and Economic Development, 2021

1. Figures represent % of units affordable within each decile. For example, 0.15% of new units were affordable to households in the 6th decile and 76% of new units were affordable to households in the 9th decile

Virtually no new ownership housing units in 2021 were affordable based on Provincial definitions, and this drops to no options when the 4th and 5th income deciles are evaluated. When higher deciles are assessed, affordability pressures persist. In 2020, households with incomes of approximately \$160,000 could afford 3% of new units and households with incomes of approximately \$195,000 could afford 43% of units. At the 9th decile, 76% of new housing is considered affordable. The remaining 24% of new housing in 2021, or almost a quarter of the new housing supply, was affordable to households earning over \$253,367, the highest earning 10% of households.

Housing affordability for first time homebuyers and renters is a key focus area

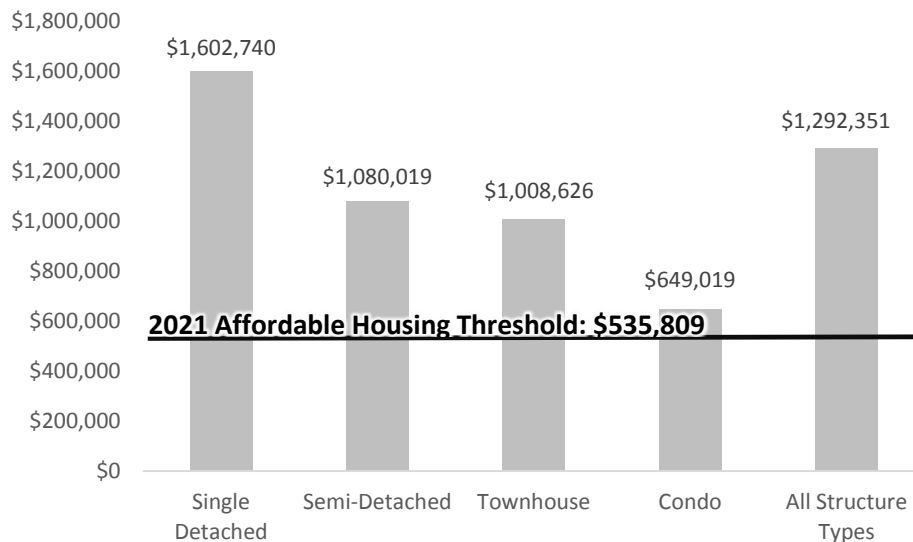
Between the first affordable housing monitoring exercise in 2013 and 2020, there was an overall trend towards an increasing proportion of affordable ownership units found in smaller sized (1-bedroom or less), high density units. High density bedroom type information was limited for the 2021 analysis so monitoring looked at the median price of all units within developments. Based on this approach, in 2021 no new high-density units were identified as affordable. While these findings are consistent with the trend of declining affordability since 2018, the updated approach to monitoring is not as robust as in past years, and some affordable ownership units within the high-density category may not have been captured. Only 10 ownership units in the Region were recorded as affordable in 2021, being 10 ground related units in the Town of Newmarket. This most recent analysis yields almost no affordable options based on Provincial definitions and best available data.

There are several factors on both the demand and supply side that contribute to the affordability of new homes. In York Region, there is a healthy [housing supply](#), with almost 50,000 residential units draft approved, registered or in ministers zoning orders, representing approximately 6 years of growth. Other factors impacting affordability include interest rates, accumulated appreciation in housing and the associated commodification of the housing stock, the amount and type of immigration received and the type of housing that is built (i.e. smaller sized units with modest finishes are generally more affordable).

Notably, assets are not considered when calculating what households are able to afford. It is important to provide a mix and range of housing options for all residents and workers. Those that require the greatest focus when considering approaches to increasing affordability are those that are working to access the housing market for the first time and may not have assets in existing real estate, accumulated wealth at their disposal or the ability to benefit from intergenerational wealth transfers.

Affordability in the resale market is increasingly limited

The primary focus of this monitoring exercise is on the affordability of new homes, to assess progress towards achieving Official Plan targets. Average resale prices are also evaluated against the monitoring threshold to assess resale affordability. As is shown on Figure 2, the average price of resale housing across all structure types was above the affordable threshold in 2021.

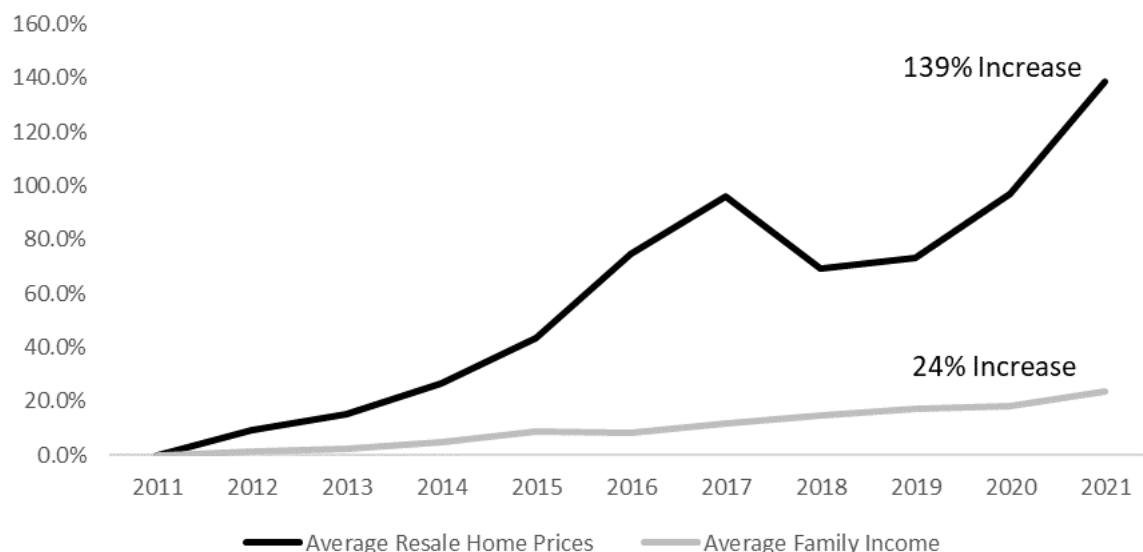
Figure 2**Affordable Housing Threshold and Average Resale Home Prices, 2021**

Source: York Region Planning and Economic Development, 2021

The average prices of resale condominiums in 2021 were more than 20% or \$100,000 above the affordable housing threshold. Average prices of townhouses were more than 80% above the threshold, semi-detached more than double the threshold and the average price of a single detached resale unit was almost 3 times the affordable threshold.

Comparing average resale house price increases over time to average household incomes highlights that affordability challenges are increasing (Figure 3). Despite a market correction that caused a slight decline in 2018 for resale house prices, there has been rapid growth in resale housing prices compared to lower growth in average household incomes from 2011 to 2021. Between 2011 and 2021, average resale home prices increased by 139% whereas average income increased by only 24%. Over time, home ownership has become increasingly out of reach for many households. Low interest rates increase buying power and may have contributed to some lower income households to accessing the market over the last decade. As both house prices and interest rates are anticipated to continue to rise over the coming months, this combination will likely preclude many households from becoming first time home buyers.

Figure 3
Percent Increase: Average Resale Home Prices and Average Family Income, 2011-2021



Source: York Region Planning and Economic Development, 2021

To effectively address housing challenges, all orders of government have a role to play. In [April 2022](#), Council received a report outlining comments and concerns on Bill 109, which is meant to begin implementing the Ontario More Homes for Everyone Plan. As provided to Council in [April 2022](#), the 2022 [Federal Budget](#) includes substantial investments in the housing system that will work to address both supply and affordability challenges.

Updates to the Affordable Housing Measuring and Monitoring Guidelines are planned for 2023

Achieving Regional Official Plan affordability targets is increasingly challenging. Updates to the methodology used for the housing affordability analysis communicated through this report are planned for 2023. The updated method will strive to 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 that are identified through the Community Housing Master Plan and Affordable Private Market Housing Implementation Plan.

The three main elements of the monitoring exercise are the Regional Official Plan affordability targets, affordability thresholds, and the approach to monitoring. Each of these elements will be reviewed for potential updates. The updated 2021 census base data is anticipated to be delivered in time to inform the affordable housing monitoring update, which will evaluate the 2022 calendar year and be made available in spring 2023.

Monitoring new housing for affordability supports the Region’s corporate performance management framework

The annual affordable housing measuring and monitoring exercise 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”. This exercise supports the Regional Official Plan by tracking progress towards meeting housing affordability targets.

5. Financial

The work completed for the 2021 measuring and monitoring of affordable housing has been completed in accordance with the approved Planning and Economic Development business plan and budget.

Lower growth rates because of a lack of affordable housing impact the Region’s ability to collect Development Charges to pay for infrastructure and complete community initiatives. [Research](#) by the Toronto Board of Trade and WoodGreen estimated that the direct and indirect economic costs of the GTA’s housing affordability crisis are between \$5.88 billion and \$7.98 billion per year.

6. Local Impact

Local municipalities are key partners in addressing housing affordability. Each year, local municipalities support data collection for this report. Data results and methodology are shared with local municipal partners. Local municipalities continue to partner with York Region to find new solutions to the housing crisis that respond to the local municipal context. Collaboration with local municipalities will continue to assess and address affordable housing needs across York Region. The housing challenges outlined impact all local municipalities, requiring continued collaboration and ongoing support to deliver solutions.

7. Conclusion

The affordability of new ownership housing and the supply of new rental housing is monitored on an annual basis. The 2021 analysis identifies a continuation of a downward trend of ownership affordability and an ongoing lack of new purpose-built rental supply, with only 0.15% of new ownership units affordable and 275 new rental units identified. Ownership affordability and challenges attracting purpose-built rental developments is an issue in York Region, across the GTHA and, increasingly, throughout southern Ontario.

Council has declared a housing affordability crisis and formed a Task Force to help address affordability issues in the private market. Staff are working to develop comprehensive plans to help enhance, focus and streamline support in both the private and community housing segments of the market.

No one level of government or industry partner can solve housing affordability challenges alone. Work continues in collaboration with partners and local municipalities to find innovative, evidence-based solutions to the affordability of housing across York Region.

For more information on this report, please contact Paul Bottomley at 1-877-464-9675 ext. 71530. Accessible formats or communication supports are available upon request.

Recommended by:



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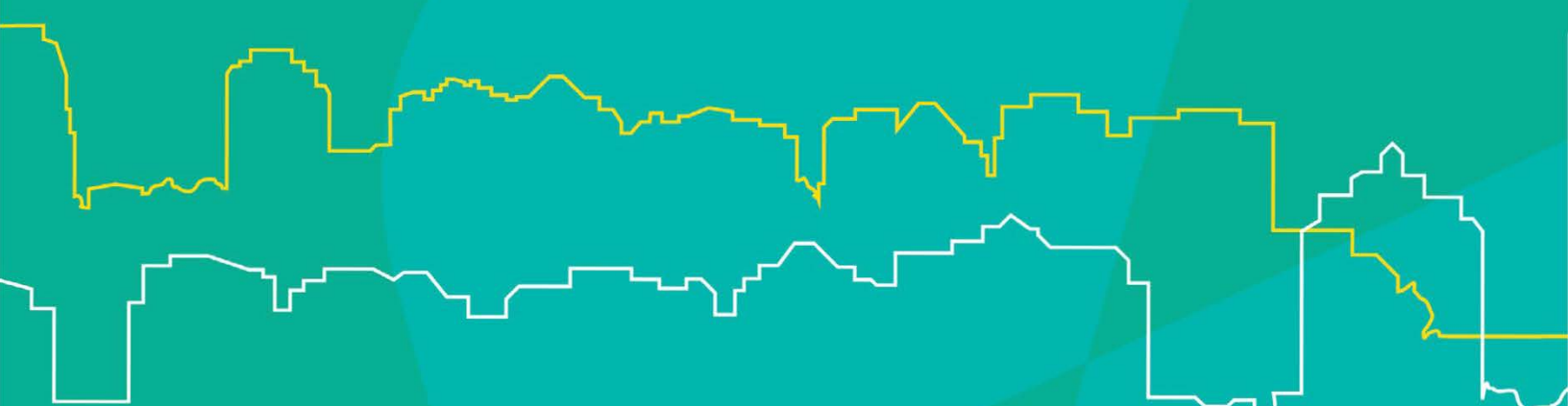
Approved for Submission:



Bruce Macgregor
Chief Administrative Officer

April 21, 2022
Attachment (1)
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AFFORDABLE HOUSING in YORK REGION 2021 MEASURING and MONITORING



MAY 2022

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Affordable Housing is a Key Component of Complete Communities

Complete communities include a full mix and range of housing options for people of all ages, abilities, and income levels. Communities with housing options that meet the needs of residents and workers have associated positive economic, environmental, and social outcomes. While affordability of new housing has always been a priority for York Region, rapidly rising house prices prior to and during the COVID pandemic has resulted in the Region declaring a Housing Affordability Crisis and forming a Housing Affordability Task Force. To help respond to the housing crisis, two strategies are under development: the Affordable Private Market Housing Implementation Plan will identify action, advocacy, and partnership approaches for the Region to take to help address affordability in the private market, and the Community Housing Master Plan will contemplate a 40-year plan to fund and develop more community and non-profit homes across York Region. Affordable housing monitoring through the exercise captured in this report provides a mechanism to gauge the impact of any actions taken to address the housing crisis and allows for results-based accountability decision making.

Affordable housing monitoring is conducted each year

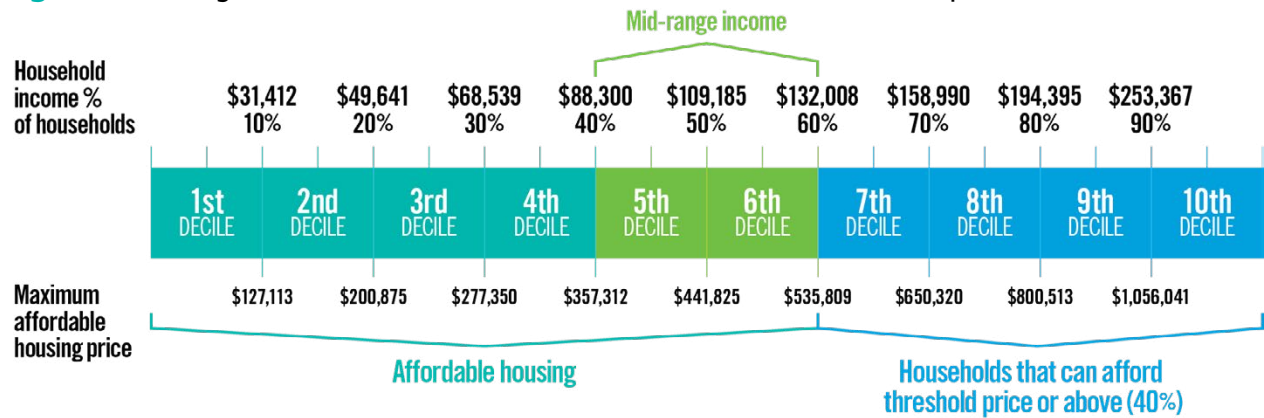
Provincial policy requires York Region to establish and implement affordable housing targets. The 2010 York Region Official Plan requires that 35% of new housing in Regional Centres and Key Development Areas, and 25% of new housing outside of those areas be affordable. Through the 2021 Draft York Region Official Plan, it is recommended that these policies be updated to require 35% of new housing in Regional Centres and Major Transit Station Areas, and 25% of new housing outside of those areas be affordable. The effect of the affordability policies in the existing and proposed Official Plan is to direct more affordability to high density nodes well serviced by transit. The update in terminology aligns with Provincial updates and direction.

The [York Region Affordable Housing Measuring and Monitoring Guidelines](#) establish a standardized approach to identify and measure the supply of new affordable units to monitor progress each year in meeting the Official Plan affordable housing targets and to help inform decision making around housing need. The methodology laid out in the Guidelines was last updated in 2018. The Guidelines will be reviewed through a continuous improvement lens for the next monitoring exercise, which will monitor the 2022 calendar year and be presented to Council in spring 2023. This review will examine affordable housing targets, the methodology to set the affordable housing thresholds, and the approach to monitoring new units.

Maximum affordable housing thresholds are calculated annually for rental and ownership tenures

Affordable housing thresholds are calculated annually for both ownership and rental units, based on Provincial legislation and definitions in the York Region context. The thresholds provide the upper limits of what is considered “affordable” from a land use planning perspective. Ownership thresholds are used throughout this report to determine the affordability of both new high density and ground related ownership housing supply. The affordable threshold for ownership housing is the maximum price that households at the sixth decile of the income distribution can afford to pay and includes the cost of a mortgage, mortgage insurance, and property taxes. It is assumed that the minimum allowable down payment is provided¹ and that the Bank of Canada posted rate for a 5-year fixed mortgage is paid. As displayed in **Figure 1**, the maximum ownership threshold for York Region in 2021 is \$535,809 and based on a household income of \$132,008.

¹ For CMHC-insured mortgage loans, individuals need a minimum down payment of 5% of the purchase price for the first \$500,000, 10% of the portion of the house price that is greater than \$500,000 and less than \$1 million, and 20% down for the portion of the purchase price that is over \$1 million.

Figure 1 York Region Household Income Distribution and Affordable Ownership Thresholds, 2021²

Source: York Region Planning and Economic Development, 2022. Based on Statistics Canada, Bank of Canada and Canada Mortgage and Housing Corporation data

The rental threshold identified in both the Affordable Housing Measuring and Monitoring Guidelines and the 2021 Draft Regional Official Plan is 125% of region-wide average market rent by bedroom type. This threshold is used for negotiating affordability in new developments. However, the affordability of new rental product can not be monitored due to data limitations. As such, this exercise monitors the supply of new purpose-built rental units year over year, including community housing units, private purpose-built rental units, and additional residential units (second suites) that have been registered with the local municipality.

2021 Local Maximum Affordable Ownership Housing Thresholds Range from \$431,994 to \$535,809

Table 1 provides the maximum local municipal affordable ownership thresholds for 2021. The ownership affordability thresholds are based on the Provincial definition set out in the Provincial Policy Statement, which benchmarks the maximum affordable house price to the 6th decile of the household income distribution (i.e., the highest household income of the lowest earning 60% of households). As average household incomes vary between local municipalities, ownership thresholds are calculated both on a region-wide basis and by local municipality. Where the local municipal threshold exceeds the regional threshold (\$535,809), the Regional threshold is used for affordable housing commitment and monitoring purposes in order to help achieve region-wide affordability. Where the local municipal threshold is below the regional threshold, the local municipal threshold is used for affordable housing monitoring purposes. This helps to best reflect the local municipal context and the incomes of residents, impacting how affordability is defined across York Region's nine local cities and towns.

Table 1: 2021 Affordable Ownership Thresholds

Local Municipality	Local Municipal Threshold	Thresholds Used for Commitments and Monitoring
Aurora	\$592,518	\$535,809
East Gwillimbury	\$571,438	\$535,809
Georgina	\$431,994	\$431,994
King	\$662,630	\$535,809
Markham	\$511,151	\$511,151
Newmarket	\$527,634	\$527,634
Richmond Hill	\$512,898	\$512,898
Vaughan	\$593,616	\$535,809
Whitchurch-Stouffville	\$565,647	\$535,809

Source: York Region Planning and Economic Development, 2022. Based on Statistics Canada, Bank of Canada and Canada Mortgage and Housing Corporation data

² The figure simplifies York Region's housing market and represents all households in York Region. The figure separates York Region's households into ten separate decile groups based on household income, each decile representing 10% of the total household population.

York Region's Housing Affordability Targets are not being achieved with only 4% Affordable New Units, Challenging Delivery of a Complete Communities

Table 2 displays the number and percentage of new affordable units in 2021 by local municipality and tenure based on the thresholds in **Figure 1**. For monitoring purposes, all rental units are coded as affordable due to data limitations of rents charged on new rental units. Average market rents reported by CMHC Rental Market Housing report are used to establish the affordable rental housing thresholds and are evaluated in **Table 5**.

Table 2: New Affordable Housing Monitoring Analysis, 2021

Local Municipality	Ownership Units		Rental Units	All Units	
	Total Units	Per cent Affordable	Total Rental Units	Total Units	Per cent Affordable
Aurora	142	0% (0 units)	5	147	3% (5 units)
East Gwillimbury	468	0% (0)	6	474	1% (6)
Georgina	216	0% (0)	12	228	5% (12)
King	167	0% (0)	-	167	0% (0)
Markham	685	0% (0)	16	701	2% (16)
Newmarket	359	0% (10)	29	388	10% (39)
Richmond Hill	713	0% (0)	-	713	0% (0)
Vaughan	3,720	0% (0)	200	3,920	5% (200)
Whitchurch-Stouffville	409	0% (0)	7	416	2% (7)
York Region	6,879	0% (10)	275	7,154	4% (285)

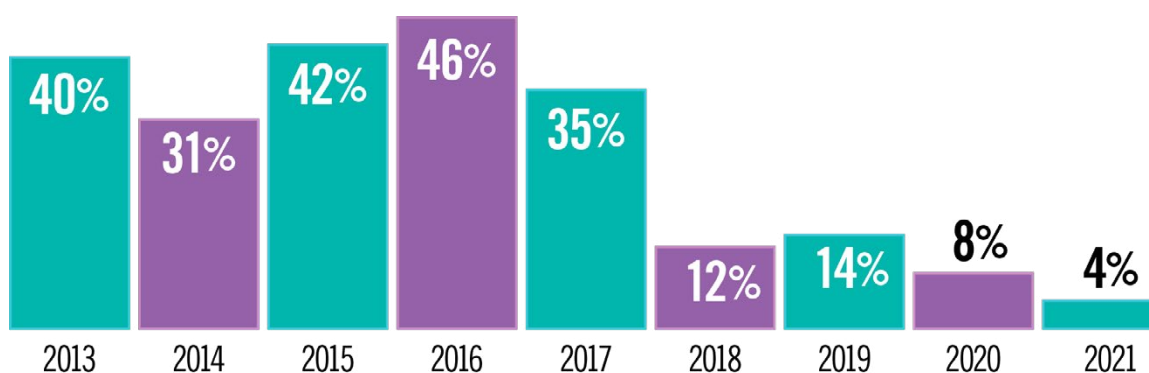
Source: York Region Planning and Economic Development, 2022. Based on Teranet, RealNet and Canada Mortgage and Housing Corporation data

In previous years, the monitoring exercise yielded information on the number of bedrooms in the high-density portion of the ownership analysis, allowing for commentary on the provision of affordable family-sized units. The data has been re-packaged by Altus Group, and bedroom count information is no longer available. High density unit monitoring has always been based on the median of the range of sale prices. Previous datasets provided the median sale price range by bedroom type, whereas the 2021 dataset provides sale price range by development, resulting in fewer units being captured as affordable as the smaller sized units are not isolated for monitoring purposes. Due to the repackaging of the high-density data, some smaller sized affordable units may not have been captured, resulting in an under estimation of overall affordability.

Declining Affordability Continued in 2021, Impacting the Region's Ability to Achieve Growth Targets

Figure 2 provides an overview of the percentage of new ownership and rental units below the affordable thresholds from 2013, when the Region began tracking affordability, to 2021. Affordability rates have continued a downward trend, with only 4% of new units identified as affordable in 2021. Similar to recent years, in 2021 affordable housing options were not consistently represented in all local municipalities and across all unit types and tenures.

Figure 2: New Units below York Region's Affordable Threshold, 2013 to 2021



During 2021 it was [identified](#) that the Region is not achieving growth targets, in part due to the lack of affordable housing options, which in turn impacts timing of infrastructure delivery and complete community initiatives. Council declared an [affordable housing crisis](#), and formed a [Housing Affordability Task Force](#) comprised of the Chairman and the mayors of each local municipality. The Region has shown strong financial and policy support to do its part to help address housing need. In order to enhance, focus and streamline support, comprehensive plans to address and fund housing need are being developed through the upcoming [Affordable Private Market Housing Implementation Plan](#) and [Community Housing Master Plan](#).

Historically some affordable high density affordable units were available for smaller sized households

Since affordable housing monitoring began in 2013, there had been increasing reliance on high density units to deliver ownership affordability. In 2013, 35% of affordable ownership units were found in the ground related stock; this has declined to 1% in 2019 and 2020. In 2021, 100% of the ownership affordability was found through ground related product, however; this only accounted for 10 back to back townhouse units in the Town of Newmarket. While house prices have been increasing disproportionately to incomes, some high-density units historically had remained under the affordability thresholds. For the first time, in 2021 we are reporting almost no affordability in the ownership market due to a combination of raising prices and the revised approach to monitoring units in the high density market because of changes to how sales data is reported by Altus. As explained earlier, previous monitoring exercises included a bedroom type analysis for the high-density stock. Bedroom type analysis monitoring began in 2014, when 48% of affordable units were 1-bedroom or less; this increased to 99% in 2019 and 2020. The increased reliance on smaller sized (1-bedroom or less) high density units to deliver ownership affordability options does not provide options for many residents, especially given the increased prevalence of work at home jobs during the pandemic and the associated need for space.

Purpose-built rental housing is key component to a healthy housing systems

As ownership housing prices rapidly increase, the importance of a healthy rental housing stock is heightened. As of 2016, York Region had the lowest proportion of its housing stock in rental tenure in the GTHA at 14%. At that time, 62% of the York Region rental stock was estimated to be in the secondary rental market, with 19% in high-rise developments and 43% in ground related units. Updated 2021 tenure statistics will be released and reported on later this year.

Due to data limitations, all rental units are reported as “affordable” for monitoring purposes. In 2021 there were 275 new purpose-built rental units, including 136 purpose built rental units in Vaughan, and 139 new registered secondary suites region wide. Since 2015, the rental stock has delivered an increasing proportion of the total affordable supply, from 4% in 2015 to 96% in 2021. This is not an indicator of an increase in rental supply, rather it is reflective of the decline in ownership affordability over the period. There has been an average of approximately 240 new purpose-built rental units³ built per year since monitoring began in 2013, with variations year over year based on completion dates for single developments. There are indicators of an increased interest in rental development, and 2,885 units are proposed in 15 buildings across the Region. The Draft York Region Official Plan includes a purpose-built rental target of 1,000 units per year, with local municipal targets based on share of growth over the time period.

Lower income households have fewer housing options

Per Provincial direction, affordable ownership housing thresholds and analysis are benchmarked to the sixth decile of the income distribution, which provides the highest household income of the lowest earning 60% of households. As the ownership housing thresholds provide an upper limit, they do not address the need for an appropriate range of housing for households with incomes below this limit. To understand housing need throughout the income spectrum, the Region reviews affordability using thresholds that are affordable to 40% and 50% of households (units that are measured to the fourth and fifth deciles on **Figure 1**). This evaluates depth of affordability for households below the upper threshold, and identifies that affordability only applies to the highest earning households being monitored.

Based on this analysis, the 2021 maximum affordable price for the lowest earning 50% of households was \$441,825, and no new units fell below this price, a decline from 2% in 2020 and a further indicator of the erosion of affordability over time.

Higher income households also face affordability challenges

To gain a better understanding of affordability challenges facing York Region residents and workers throughout the income spectrum, the Regional also evaluates affordability for higher income households (**Table 3**).

When looking at higher income households, the percentage of affordable ownership units rose to only 3% for the seventh income decile group, 43% for the eighth income decile group, and 76% for the ninth decile group. This analysis helps to better understand the housing affordability challenges facing regional residents, showing that many of the units that are affordable are only affordable to a portion of households in the upper income deciles. This analysis determines that gaps in the housing market exist even for households beyond those identified by the provincial as in need of affordable housing.

³ Includes new private purpose built, community housing and registered additional residential units .

Table 3: New Affordable Ownership Housing Supplemental Monitoring Analysis, 2021

Monitoring Decile	Maximum Gross Household Income	Maximum House Price (Threshold)	Percent Units Sold Under Threshold*
4 th Decile (Supplemental Analysis)	\$88,300	\$357,312	0%
5 th Decile (Supplemental Analysis)	\$109,185	\$441,825	0%
6 th Decile (Primary Analysis)	\$132,008	\$535,809	0.15%
7 th Decile (Supplemental Analysis)	\$158,990	\$650,320	3%
8 th Decile (Supplemental Analysis)	\$194,395	\$800,513	43%
9 th Decile (Supplemental Analysis)	\$253,367	\$1,056,041	76%

Source: York Region Planning and Economic Development, 2022. Based on Teranet, RealNet and Canada Mortgage and Housing Corporation data.
* Figures represent percent of units affordable within each decile. For example, 0.15% of new units were affordable to households in the 6th decile and 76% of new units were affordable to households in the 9th decile.

As is shown through this breakdown, there is no point at which there is equilibrium between the number of households to be housed and the availability of new affordable ownership housing. Even at the ninth decile, representing all but the highest earning 10% of households, only 76% of new housing is affordable. The remaining 24% of new housing in 2021 was only affordable to households earning over \$253,367.

New purpose-built rental units are limited

The affordability of new rental stock cannot be monitored due to data limitations regarding rents charged for new units. As such, all new rental units are currently reported as “affordable”, and this analysis monitors the supply of new purpose-built rental units. Most non-luxury purpose-built rental housing units would be affordable to mid-range income earners and are reasonably considered affordable in York Region. Rental units include community housing, registered secondary suites and purpose-built rental housing. In 2021, only 275 rental units were built in York Region. Of that total, 136 units were private purpose-built rental housing, and the remaining 139 were registered secondary suites. In 2021, there were no new community housing units built.

Rental condominiums also contribute to the rental stock, however, units in the secondary rental market are not monitored through this analysis, as those units have already been monitored for ownership affordability. In 2021, approximately 31% of condominium units that permit rentals were rented out in the secondary market (approximately 15,000 units, or approximately 25% of all condominiums in the Region). In general, the secondary market is more expensive than the purpose-built rental market and offers less security of tenure. In 2021 the average rents for units in the secondary market (\$2,214) exceeded the average affordable rental threshold (\$1,803).

2021 Affordable Rent Thresholds range from \$1,224 to \$2,270

The Provincial definition of rental affordability is based on 100% average market rent (AMR), as determined by the annual Canada Mortgage and Housing Corporation (CMHC) survey. In 2018, Regional Council endorsed the updated York Region Affordable Housing Measuring and Monitoring Guidelines and an updated rental threshold of 125% AMR by bedroom type. This higher threshold is a better reflection of rents that can reasonably be achieved in the private stock given that the existing stock, which is used to form the threshold, is generally aged and not reflective of current building code and amenity standards. Thresholds by bedroom type encourage affordability in all unit sizes, whereas the previous single threshold approach drove affordability to smaller unit sizes. The maximum 2021 rental thresholds range from \$1,224 for a bachelor to \$2,270 for a three-bedroom apartment (**Table 4**).

To help increase the purpose-built rental supply, Council approved development charge deferrals for affordable purpose-built rental buildings, subject to criteria. One of the criteria to access the program is that rents cannot exceed 175% AMR by bedroom type, which based on the 2021 data is affordable to households in the 3rd (bachelor units) through 6th (3+ bedroom units) income deciles.

Table 4: Private Purpose-Built Average Market Rents by Bedroom Type, 2021

Bedroom Type	100% AMR	125% AMR (Affordable Threshold)	175% AMR
Bachelor	\$151,703	\$611,073	32%
1 Bedroom	\$185,486	\$752,770	59%
2 Bedrooms	\$241,754	\$988,560	83%
3+ Bedrooms	\$185,486	\$752,770	59%

Source: CMHC Rental Market Report 2021. Private Apartment Rent, Table 1.1.2.

For the first time since the affordable housing monitoring exercise began in 2013, average market rents have marginally declined year over year for all but the larger 3+ bedroom units. Bachelor units declined from \$995 to \$979 (-1.6%), 1-bedroom units declined from \$1,369 to \$1,328 (-3.0%), 2-bedroom units declined from \$1,537 to \$1,506 (-2.0%) and 3+ bedroom units increased from \$1,743 to \$1,816 (4.2%). The decline in rents was not observed in other GTA municipalities.

The existing housing stock provides limited affordable housing options

When average resale prices are benchmarked against the affordable thresholds, there are limited affordable ownership options in all municipalities. **Table 5** provides at which decile resale housing is affordable on average by municipality and structure type. The only resale product that is affordable based on the primary analysis to the sixth decile of the income distribution is condominiums in East Gwillimbury. At the seventh decile, resale condominiums in King, Newmarket and Richmond Hill are also affordable on average, and at the eighth decile, condominiums are affordable in all municipalities. At the ninth decile (maximum household income of \$253,367), there are some ground related products that are affordable on average. Resale single detached housing is only affordable to the top earning 10% of households based on average prices by local municipality.

Table 5: Resale Housing Market and Ownership Affordability by Income Decile, 2021

Municipality	Single Family Detached	Semi-Detached	Town/Row	Condominium
Aurora		9th Decile	9th Decile	8th Decile
East Gwillimbury		9th Decile	9th Decile	6th Decile
Georgina		9th Decile	9th Decile	8th Decile
King				7th Decile
Markham				8th Decile
Newmarket			9th Decile	7th Decile
Richmond Hill				7th Decile
Vaughan			9th Decile	8th Decile
Whitchurch-Stouffville				8th Decile

Source: York Region Planning and Economic Development, 2022. Based on Teranet, RealNet/Altus and Canada Mortgage and Housing Corporation, and Toronto Regional Real Estate Board data.

For the 2021 analysis, approximately 75% of ownership sales were in the resale market. Lack of affordability in the resale market is one indicator of the rapidly rising price increases in the ownership housing market in comparison to increases in incomes.

Rapidly rising home prices contribute to income inequality

Between 2020 and 2021 the average price of a resale home increased by over 20%. Increases in home prices outpace increases in income, consumer goods and most other assets. As such, those that are homeowners have reaped financial benefits not available to non-owner households, thus increasing the divide between the rich and the poor. Future work to address housing challenges will focus on those that do not currently have a stake in the real estate market. This may include enhancing home ownership opportunities or working to increase the supply of purpose-built rental housing.

The York Region Official Plan and 10-Year Housing and Homelessness Plan provide a policy foundation to support more affordable housing options

The York Region Official Plan is being updated. The housing related policies in the updated Draft Regional Official Plan streamline and enhance existing policies to align with Provincial direction and incorporate best practices. This policy foundation is meant to support future work to address housing challenges. The Regional Official Plan focuses on land use planning related approaches to affordability and is supplemented by the Region's 10-Year Housing and Homelessness Plan, which provides a roadmap to help ensure residents have access to a range of housing options and services at all ages and stages of their lives.

Affordable Housing Implementation Plans are under development

To identify and potentially fund on the ground approaches to housing affordability, two plans are currently under development:

1. The Affordable Private Market Housing Implementation Plan will identify actions, advocacy and partnership approaches to address private market housing gaps in the short, medium, and long term.
2. The Community Housing Master Plan will contemplate a 40-year plan to fund and develop more community and non-profit homes across the Region.

These Plans will work hand in hand to help identify solutions to affordability challenges in both the community housing (non-profit) and private segments of the housing market.

Updates to the Affordable Housing Measuring and Monitoring Guidelines are planned for 2023

Updates to the methodology used for the housing affordability analysis communicated through this report are planned for 2023. The updated method will strive to 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 that are identified through the Community Housing Master Plan and Affordable Private Market Housing Implementation Plan.

The three main elements of the monitoring exercise are listed below, and will be reviewed for potential updates:

- 1. Targets:** The Draft York Region Official Plan requires that 35% of new housing in Major Transit Station Areas and Regional Centres be affordable, and that 25% new housing outside of those areas be affordable. The targets will be reviewed for overall appropriateness and more nuanced approaches may be considered
- 2. Affordability Thresholds:** The method to establish the affordable housing thresholds will be reviewed, and the incorporation of utility and/or condo fees will be considered. Tying rental thresholds to household incomes rather than to market averages will be considered
- 3. Monitoring:** The method to monitor new ownership and rental units will be reviewed and updated approaches will be explored

The updated 2021 census base data is anticipated to be delivered in time to inform the affordable housing monitoring update, which will evaluate the 2022 calendar year and be made available in spring 2023.

AFFORDABLE HOUSING in YORK REGION 2021 MEASURING and MONITORING

For more information on housing affordability
in York Region please contact:

PLANNING SERVICES
1-877-464-9675 Extension 71508

Regional Council Decision - Bayview Avenue/Prospect Street Cycling Improvements - Town of Newmarket

On May 26, 2022 Regional Council made the following decision:

1. Lane Designation Bylaw 2020-53 be amended to designate bicycle lanes on Bayview Avenue/Prospect Street (Y.R. 34) between 1st Street/Pearson Street and Mulock Court and between Srigley Street and Timothy Street, in the Town of Newmarket, as outlined in this report.
2. Parking Bylaw 2017-37 be amended to prohibit stopping on both sides of Bayview Avenue/Prospect Street (Y.R. 34) between Srigley Street and Mulock Drive (Y.R. 74), in the Town of Newmarket, as outlined in this report.
3. Posted speed limit on Bayview Avenue/Prospect Street (Y.R. 34) between Davis Drive (Y.R. 31) and 265 metres south of Mulock Drive (Y.R. 74), in the Town of Newmarket, be reduced to 40 km/h.
4. The Regional Clerk circulate this report to the Clerk of the Town of Newmarket and Chief of York Regional Police.
5. The Regional Solicitor prepare the necessary bylaws.

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 (he/him) | Regional Clerk, Regional Clerk's Office, Corporate Services Department

The Regional Municipality of York | 17250 Yonge Street | Newmarket, ON L3Y 6Z1
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The Regional Municipality of York

Committee of the Whole
Transportation Services
May 5, 2022

Report of the Commissioner of Public Works

Bayview Avenue/Prospect Street Cycling Improvements Town of Newmarket

1. Recommendations

1. Lane Designation Bylaw 2020-53 be amended to designate bicycle lanes on Bayview Avenue/Prospect Street (Y.R. 34) between 1st Street/Pearson Street and Mulock Court and between Srigley Street and Timothy Street, in the Town of Newmarket, as outlined in this report.
2. Parking Bylaw 2017-37 be amended to prohibit stopping on both sides of Bayview Avenue/Prospect Street (Y.R. 34) between Srigley Street and Mulock Drive (Y.R. 74), in the Town of Newmarket, as outlined in this report.
3. Posted speed limit on Bayview Avenue/Prospect Street (Y.R. 34) between Davis Drive (Y.R. 31) and 265 metres south of Mulock Drive (Y.R. 74), in the Town of Newmarket, be reduced to 40 km/h.
4. The Regional Clerk circulate this report to the Clerk of the Town of Newmarket and Chief of York Regional Police.
5. The Regional Solicitor prepare the necessary bylaws.

2. Summary

This report seeks Council approval to designate bicycle lanes on Bayview Avenue/Prospect Street between 1st Street/Pearson Street and Mulock Court and between Srigley Street and Timothy Street, in the Town of Newmarket. Amendments to the Parking Bylaw and speed limit revisions would be necessary to support the proposed cycling improvements.

Key Points:

- Bicycle lanes on Bayview Avenue/Prospect Street would provide a connection to the East-West Bikeway and future Mulock Drive multi-use path
- Designating bicycle lanes requires a bylaw approved by Council

- Parking/stopping would no longer be permitted where cycling improvements are recommended
- A speed limit reduction is proposed to provide consistency and a safer environment for cyclists
- On-street signage would be coordinated with the implementation of cycling pavement markings

3. Background

The Region's Lane Designation Bylaw allows for the exclusive use of certain classes of vehicles on Regional roads

Bylaw 2020-53 designates specific lanes on Regional roads for the exclusive use of certain classes of vehicles. Only the assigned vehicle class is permitted to operate in a designated lane, unless exempted by the bylaw. To add or remove a lane designation, the bylaw requires amendment. Currently, there are no lane designations along Bayview Avenue/Prospect Street in the Town of Newmarket.

Parking is currently permitted along certain sections of Bayview Avenue/Prospect Street

The *Municipal Act, 2001* gives a municipal council the authority to pass bylaws respecting highways, including parking and traffic.

Parking Bylaw 2017-37 identifies several parking/stopping prohibitions and restrictions along Bayview Avenue/Prospect Street between Mulock Drive and Srigley Street, primarily on the east side of the road. Under the general provisions of the bylaw, parking is limited to a maximum of three consecutive hours anytime along the remaining sections of this corridor.

Speed limits are set based on principles defined in the Regional speed limit policy

In 2011, Council approved and adopted a policy for [Establishing Speed Limits on Regional Roads](#) that provides guidelines in setting speed limits on Regional roads to assist in ensuring a consistent approach. The guidelines reference industry standards that help the policy remain current as industry-accepted best practices evolve. The *Highway Traffic Act* gives a municipal council the authority, by bylaw, to revise speed limits under 100 km/h in its jurisdiction.

A recent road resurfacing project has presented an opportunity to make cycling improvements on Bayview Avenue/Prospect Street

A road resurfacing project, including the rehabilitation of existing pavement along Bayview Avenue/Prospect Street between Mulock Drive and Gorham Street, was undertaken in fall of 2021. As part of this project, additional road works and permanent pavement markings will be installed. This presents an opportunity for the Region, in collaboration with the Town of

Newmarket, to implement bicycle lanes within the existing pavement width that can better accommodate the community's current and future needs of the roadway.

4. Analysis

Bicycle lanes on Bayview Avenue/Prospect Street would provide a connection to the East-West Bikeway and future Mulock Drive multi-use path

There are currently bicycle lanes on both sides of Prospect Street between Timothy Street and Srigley Street as part of the East-West Bikeway corridor in the Town of Newmarket.

Implementation of additional bicycle lanes would support a Region-wide active transportation network integrated with local municipal pedestrian and cycling infrastructure and transit. The recommended on-street bicycle lanes would connect to the existing East-West Bikeway and access to future planned infrastructure, including:

- Mulock Drive multi-use path proposed from Harry Walker Parkway to Bathurst Street
- Mulock GO Station Secondary Plan
- Mulock future community park and outdoor green space

A virtual public information centre was held on February 16, 2022

A virtual public information centre (PIC) was held on February 16, 2022. Attendees were presented with a recommended and alternative option for cycling improvements along Bayview Avenue/Prospect Street, followed by a question and answer period with Regional and Town staff.

The recommended option (Figure 1) consisted of bicycle lanes on both sides of the road between Mulock Court and 1st Street/Pearson Avenue and shared lanes with "sharrow" pavement markings (Figure 2) between 1st Street/Pearson Avenue and Timothy Street, due to limited pavement width. This option requires the elimination of parking/stopping on both sides of the road. An alternative option was also proposed with the addition of sharrow pavement markings along the entire corridor while maintaining existing parking.

Figure 1
Recommended Option
Proposed On-Street Cycling Along Bayview Avenue/Prospect Street



Figure 2
Sharrow Pavement Markings



Forty-seven participants attended the PIC, and more than 60 comments were received by email or on the dedicated [Social Pinpoint](#) webpage, which was open for two weeks following the PIC. Many comments received were positive and in support of the staff recommended option. Feedback received was largely focused on ensuring pavement markings and signage are consistent with best practices and that speed and safety concerns were taken into consideration.

Designating bicycle lanes requires a bylaw approved by Council

Designating lanes for the exclusive use of bicycles would allow for the separation of cyclists from motorists on the road. Bicycle lanes can be delineated from motor vehicle lanes by either pavement markings and/or physical barriers. Delineating lanes helps improve safety and comfort for cyclists by reducing the potential for conflict and injuries and helps improve overall traffic flow along the two-lane corridor.

The recommended bicycle lane designations are detailed in Attachment 1.

Parking/stopping would no longer be permitted where cycling improvements are recommended

A bicycle lane must provide a continuous, unobstructed travel path for cyclists. Vehicles that stop or park in a bicycle lane become obstacles that cyclists must manoeuvre around by moving in and out of the adjacent traffic lane. This also introduces the potential for “dooring”, where a vehicle occupant opens a door to exit a vehicle in the path of an approaching cyclist, which can result in significant injury. Unsafe manoeuvres by motorists could result if cyclists are merging in and out of vehicle lanes to go around vehicles. The benefits of a bicycle lane are minimized if parking or stopping is permitted.

While there are no bicycle lanes proposed between 1st Street/Pearson Street and Timothy Street, an increase in cycling activity is anticipated along this section as it connects the proposed bicycle lanes to the north and south. Therefore, all existing parking between Mulock Drive and Srigley Street will be eliminated.

The Parking Bylaw would require amendment to remove several existing parking prohibitions and restrictions along this corridor, as outlined in Attachment 2. These regulations would be replaced with a stopping prohibition as outlined in Attachment 3. The stopping prohibition would be necessary to provide an unobstructed travel path for cyclists at all times.

A speed limit reduction is proposed to help improve safety for cyclists

Improving pedestrian and cyclist safety continues to be a priority for the Region as pedestrians and cyclists are most vulnerable to injuries in a collision.

Bayview Avenue/Prospect Street between Mulock Drive and Davis Drive is primarily a residential area with more than 100 private accesses fronting the Regional roadway with a posted speed limit of 50 km/h. Pickering College, near the south end of the corridor, has a designated school zone with a 40 km/h speed limit in effect during school operating hours.

Reducing the speed limit between 265m south of Mulock Drive and Davis Drive from 50 km/h to 40 km/h may improve safety for pedestrians and cyclists in the area and increase compliance within the existing school zone by eliminating speed transitions at each end of the school zone. This would also create consistency with speed limits on the surrounding local roads. Attachment 4 outlines details of the speed limit revision are outlined in Attachment 4.

On-street signage would be coordinated with the cycling pavement markings

Subject to Council approval, bicycle lanes and stopping prohibition signage would be implemented in coordination with the cycling pavement markings. The Region, in partnership with the Town of Newmarket, is developing a communications plan that includes on-street signage, media alerts, social media and information posted on York.ca.

Speed limit changes would be implemented prior to the installation of cycling pavement markings to allow for drivers to adjust to the new speed limits in advance. When speed limits are changed on Regional roads, a NEW sign is placed above each speed limit sign at the beginning of the speed zone. The NEW sign would remain in place for approximately 60-90 days.

5. Financial

Costs associated with the installation of pavement markings and the manufacture and installation of all signage associated with the bicycle lanes, stopping prohibitions and speed limit reduction are included in the approved 2022 Transportation Services Operating Budget.

6. Local Impact

The Region and the Town of Newmarket have collaborated on the proposed bicycle lanes along Bayview Avenue/Prospect Street. A joint Public Information Centre was held, and public general feedback received has been incorporated into the new road reconfiguration through pavement markings, signage and speed modifications.

The proposed cycling improvements along Bayview Avenue/Prospect Street would expand the Region's active transportation network, provide connections to existing the East-West Bikeway and the future Mulock Drive multi-use path. Additionally, it would provide an alternative transportation mode option for travellers.

7. Conclusion

This report seeks Council approval to designate bicycle lanes on Bayview Avenue/Prospect Street between 1st Street/Pearson Street and Mulock Court and between Srigley Street and Timothy Street, in the Town of Newmarket.

Staff recommend introducing bicycle lanes between Mulock Court and 1st Street/Pearson Street and shared lanes between 1st Street/Pearson Street and Timothy Street. As part of this initiative, parking/stopping would no longer be permitted between Mulock Drive and Srigley Street. The posted speed limit would be reduced to 40 km/h between 265m south of Mulock Drive and Davis Drive to provide consistency and a safer operating environment for cyclists.

Bylaw amendments would be required before exclusive lane designations, stopping prohibitions and speed limit revisions can be implemented. Subject to Council approval, the Regional Solicitor will prepare the necessary bylaws when required and forward applicable copies to the Town of Newmarket and Chief of York Regional Police.


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

General Manager, Interim Transition – Transportation



Erin Mahoney, M. Eng.

Commissioner of Public Works

Approved for Submission:



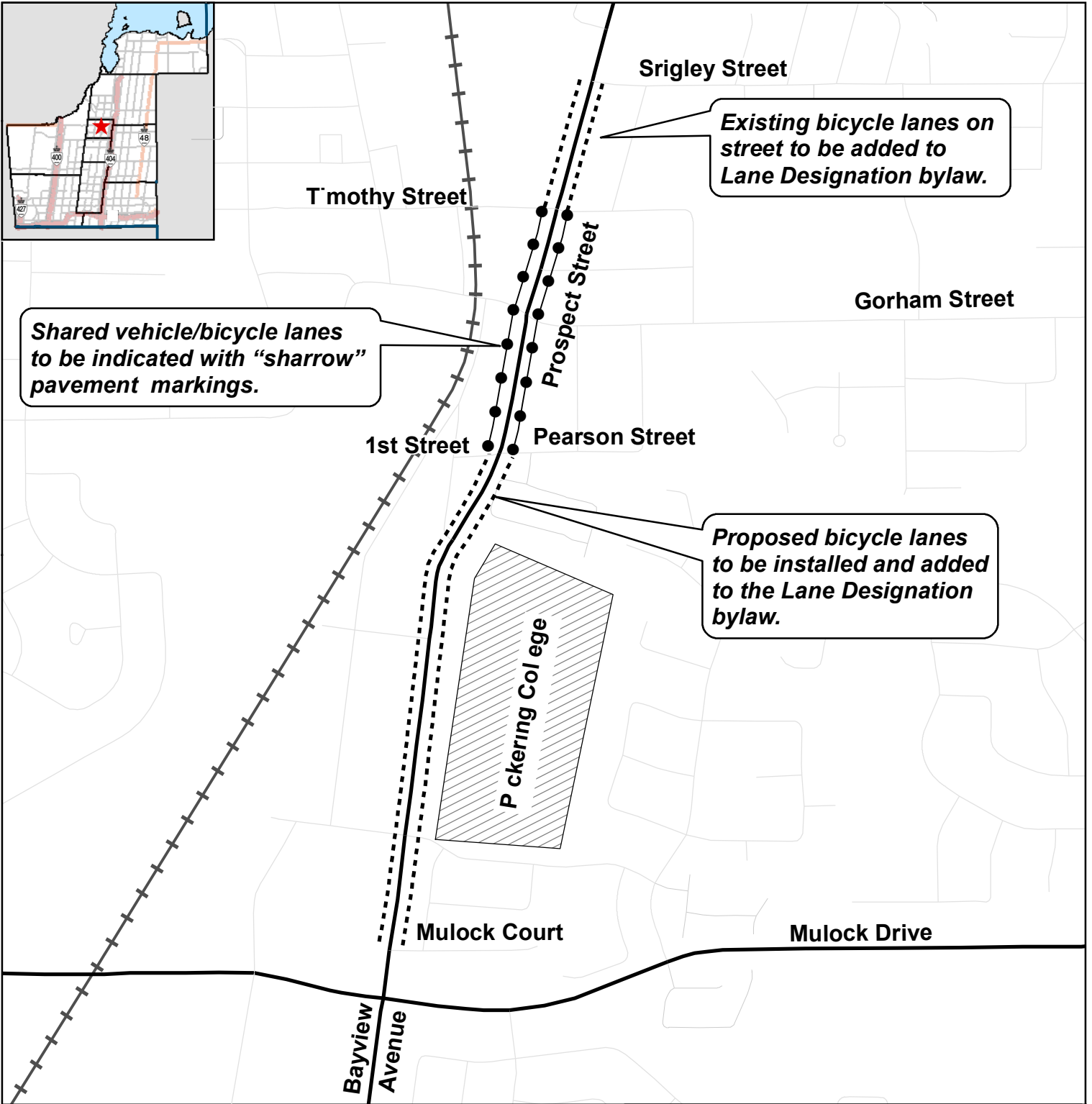
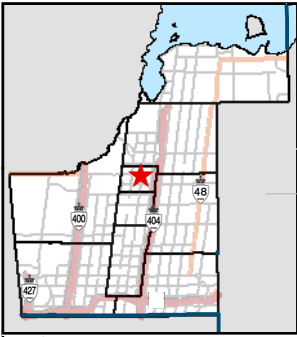
Bruce Macgregor

Chief Administrative Officer

April 14, 2022
Attachments (4)
13687165

Table 1
Bicycle Lanes to be Designated

Highway	Portion of Highway	Limits	Class	Times and Days
Bayview Avenue/ Prospect Street (Y.R. 34) Town of Newmarket	Northbound curbside lane or boulevard as marked	From the north limit of Mulock Court to the south limit of 1 st Street/Pearson Street	Bicycles	24 hours, 7 days a week
Bayview Avenue/ Prospect Street (Y.R. 34) Town of Newmarket	Southbound curbside lane or boulevard as marked	From the north limit of Mulock Court to the south limit of 1 st Street/Pearson Street	Bicycles	24 hours, 7 days a week
Prospect Street (Y.R. 34) Town of Newmarket	Northbound curbside lane or boulevard as marked (existing)	From the north limit of Timothy Street to the south limit of Srigley Street	Bicycles	24 hours, 7 days a week
Prospect Street (Y.R. 34) Town of Newmarket	Southbound curbside lane or boulevard as marked (existing)	From the north limit of Timothy Street to the north limit of Srigley Street	Bicycles	24 hours, 7 days a week



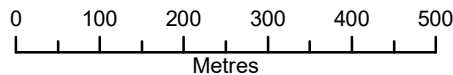
Shared vehicle/bicycle lanes to be indicated with "sharrow" pavement markings.

Existing bicycle lanes on street to be added to Lane Designation bylaw.

Proposed bicycle lanes to be installed and added to the Lane Designation bylaw.

Proposed Bicycle Lane Designations Bayview Avenue/Prospect Street Cycling Improvements May 5, 2022

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Roads and Traffic Operations
Transportation Operations, Public Works
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Legend

- Proposed Bicycle Lanes
- Shared Lanes with proposed "Sharrow" Pavement Markings
- Regional Road
- Local Road
- + + + + Railway Track



Table 2
Parking Restrictions to be Removed

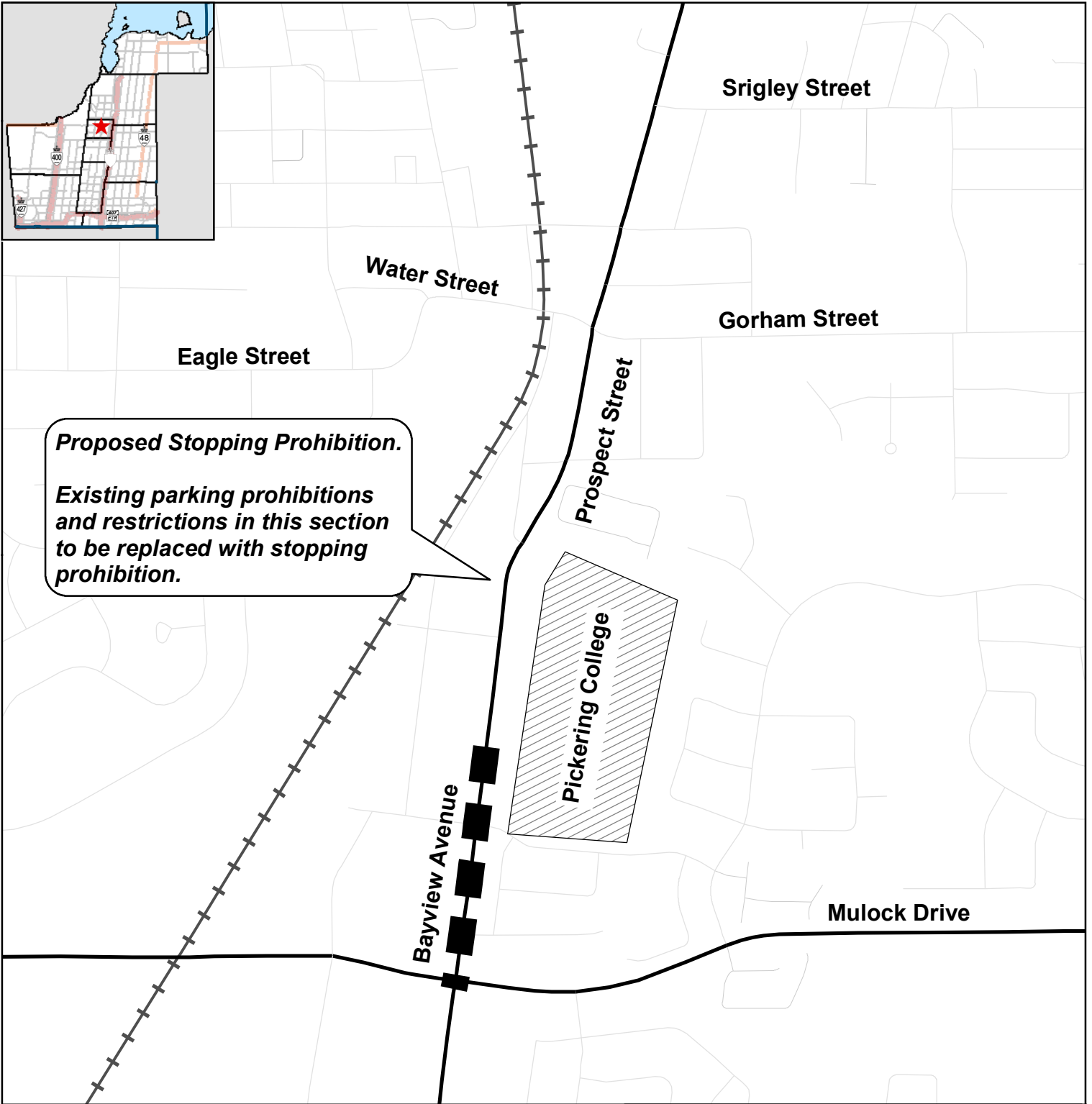
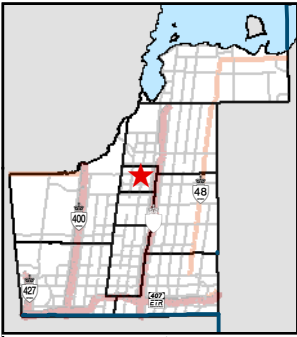
Portion of Highway	Limit	Time of Day
Bayview Avenue (Y.R. 34) Town of Newmarket	From the south limit of Mulock Drive (Y.R. 74) to 151 metres north of the north limit of College Street East side	'No Parking' 24 hours, 7 days a week
Bayview Avenue (Y.R. 34) Town of Newmarket	From the north limit of Mulock Drive (Y.R. 74) to 18 metres north of the north limit of Mulock Drive (Y.R. 74) West side	'No Parking' 24 hours, 7 days a week
Bayview Avenue (Y.R. 34) Town of Newmarket	From 18 metres south of the south limit of Penrose Street to 18 metres north of the north limit of Penrose Street West side	'No Parking' 24 hours, 7 days a week
Bayview Avenue (Y.R. 34) Town of Newmarket	From 18 metres south of the south limit of College Street to 18 metres north of the north limit of College Street West side	'No Parking' 24 hours, 7 days a week
Bayview Avenue/Prospect Street (Y.R. 34) Town of Newmarket	From 18 metres south of the south limit of 2nd Street to 18 metres north of the north limit of 2nd Street West side	'No Parking' 24 hours, 7 days a week
Prospect Street (Y.R. 34) Town of Newmarket	From 151 metres north of the north limit of College Street to the south limit of Pearson Street East side	'No Parking' 24 hours, 7 days a week
Prospect Street (Y.R. 34) Town of Newmarket	From 18 metres north of the north limit of 2nd Street to 18 metres south of the south limit of Pearson Street West side	'No Parking' 8:00 a.m. to 6:00 p.m. Monday to Friday

Portion of Highway	Limit	Time of Day
Prospect Street (Y.R. 34) Town of Newmarket	From 18 metres south of the south limit of Pearson Street to 30 metres north of the north limit of Pearson Street West side	'No Parking' 24 hours, 7 days a week
Prospect Street (Y.R. 34) Town of Newmarket	From the north limit of Pearson Street to 30 metres south of the south limit of Gorham Street East side	'No Parking' 24 hours, 7 days a week
Prospect Street (Y.R. 34) Town of Newmarket	From 100 metres north of the north limit of Gorham Street to 30 metres north of the north limit of Srigley Street East side	'No Parking' 24 hours, 7 days a week
Prospect Street (Y.R. 34) Town of Newmarket	From 18 metres south of the south limit of Timothy Street to 30 metres north of the north limit of Srigley Street West side	'No Parking' 24 hours, 7 days a week
Prospect Street (Y.R. 34) Town of Newmarket	From 22 metres north of the north limit of Gorham Street/Water Street to 18 metres south of the south limit of Timothy Street West side	'Parking Restricted' Any time, 2 hours maximum
Prospect Street (Y.R. 34) Town of Newmarket	From the north limit of Gorham Street/Water Street to 100 metres north of the north limit of Gorham Street/Water Street East side	'No Stopping' 24 hours, 7 days a week
Prospect Street (Y.R. 34) Town of Newmarket	From the south limit of Gorham Street/Water Street to the north limit of Pearson Street Both sides	'No Stopping' 24 hours, 7 days a week

Portion of Highway	Limit	Time of Day
Prospect Street (Y.R. 34) Town of Newmarket	From the north limit of Gorham Street/ Water Street to 22 metres north of the north limit of Gorham Street/Water Street West side	'No Stopping' 24 hours, 7 days a week
Prospect Street (Y.R. 34) Town of Newmarket	From 25 metres north of the north limit of Water Street to 72 metres south of the south limit of Timothy Street West side	'Accessible Parking' Any time, 2 hours maximum

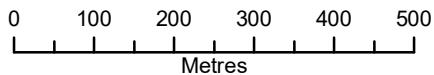
Table 3
New Stopping Prohibitions

Portion of Highway	Limit	Time of Day
Bayview Avenue/Prospect Street (Y.R. 34) Town of Newmarket	From the south limit of Mulock Drive to 30 metres north of the north limit of Srigley Street Both sides	'No Stopping' 24 hours, 7 days a week







Proposed Stopping Prohibition.
Existing parking prohibitions and restrictions in this section to be replaced with stopping prohibition.

Proposed Stopping Prohibition
Bayview Avenue/Prospect Street
Cycling Improvements
May 5, 2022



Legend

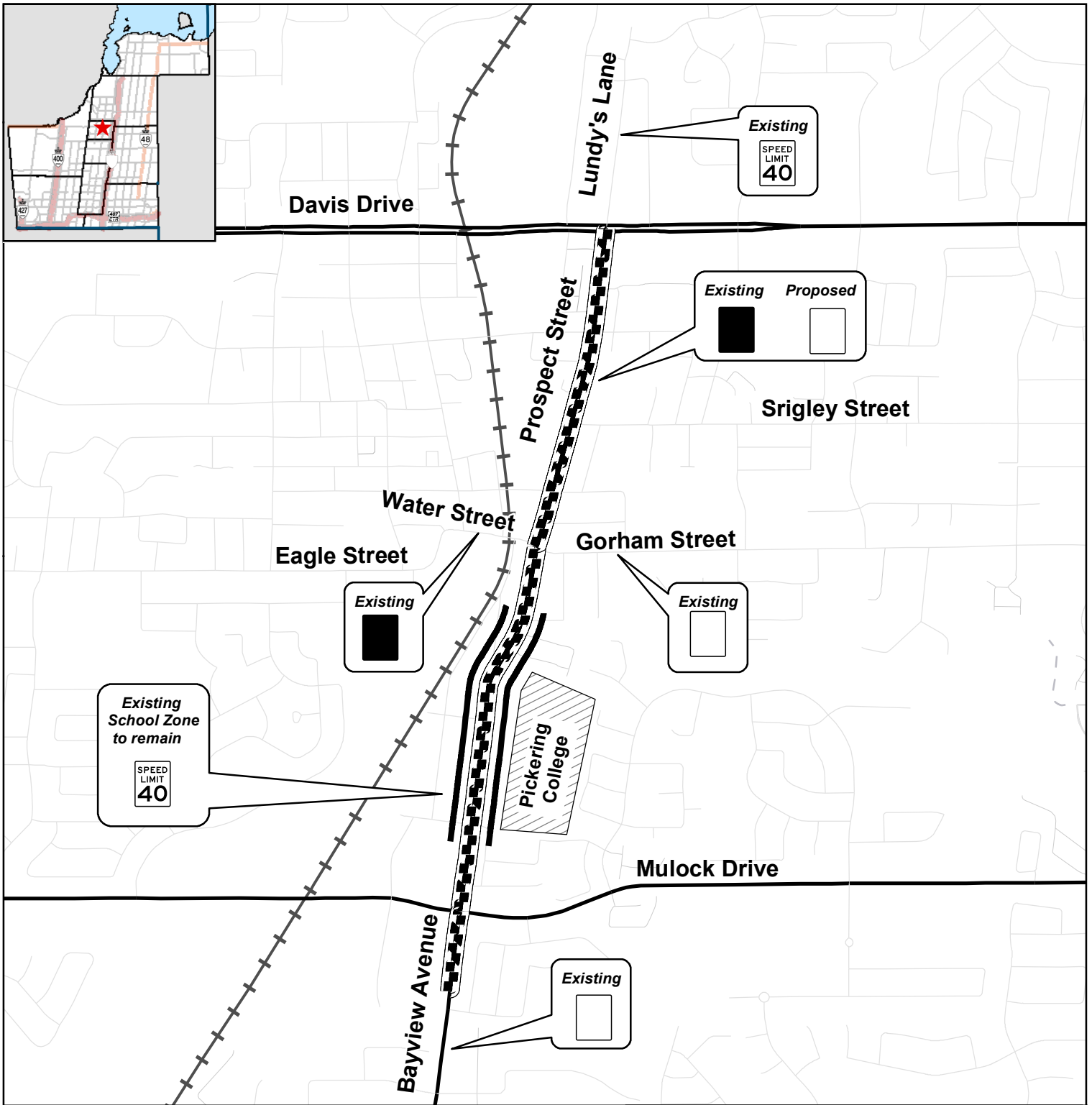
-  Proposed Stopping Prohibition
-  Regional Road
-  Local Road
-  Railway Track

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Table 4
Speed Limit Revisions

Regional Road	Municipality	Existing Speed	Proposed Speed	Justification
Bayview Avenue/Prospect Street (Y.R. 34) From 265 metres south of Mulock Drive (Y.R 74) to Davis Drive (Y.R. 31)	Town of Newmarket	50 km/h	40 km/h	Improved traffic operation and consistency with existing school zone speed limit









Proposed Speed Limit Revisions
Bayview Avenue/Prospect Street
Cycling Improvements
 May 5, 2022

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 Roads and Traffic Operations
 Transportation Operations, Public Works
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Legend

-  Existing School Zone (40 km/h)
-  50 to 40 km/h
-  Regional Road
-  Local Road
-  Transit Rapidway
-  Railway Track

Regional Council Decision - Community Safety and Well-Being Plan for York Region

On May 26, 2022 Regional Council made the following decision:

1. Council approve the revised version of the Community Safety and Well-Being Plan for York Region (Attachment 1).
2. Council direct Commissioner of Community and Health Services to submit the Community Safety and Well-Being Plan for York Region to the Ministry of the Solicitor General in accordance with requirements set out under the *Police Services Act, 1990*.
3. The Regional Clerk circulate this report to Clerks of local municipalities, York Regional Police Services Board and Human Services Planning Board of York Region.
4. The Province be requested to provide dedicated Provincial funding to the Region to implement the Plan and that the Regional Chair convey this in a letter to the Solicitor General on behalf of Council.

The original staff report is attached for your information.

Please contact Joseph Silva, Director, Strategies and Partnerships Branch at 1-877-464-9675 ext. 77201 if you have any questions with respect to this matter.

Regards,

Christopher Raynor (he/him) | Regional Clerk, Regional Clerk's Office, Corporate Services Department

The Regional Municipality of York | 17250 Yonge Street | Newmarket, ON L3Y 6Z1
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The Regional Municipality of York

Committee of the Whole
Community and Health Services
May 5, 2022

Report of the Commissioner of Community and Health Services

Community Safety and Well-Being Plan for York Region

1. Recommendations

1. Council approve the Community Safety and Well-Being Plan for York Region (Attachment 1).
2. Council direct Commissioner of Community and Health Services to submit the Community Safety and Well-Being Plan for York Region to the Ministry of the Solicitor General in accordance with requirements set out under the *Police Services Act, 1990*.
3. The Regional Clerk circulate this report to Clerks of local municipalities, York Regional Police Services Board and Human Services Planning Board of York Region.

2. Summary

Under the *Police Services Act, 1990*, the Region is required to develop a Community Safety and Well-being Plan (Plan). The proposed Plan is attached for Council approval.

- The Province requires plans identify and assess risks to community safety and well-being, and include strategies to reduce priority risks
- To develop the Plan, the Region engaged with residents and collaborated with community partners, including the Human Services Planning Board of York Region, York Regional Police, local municipalities, school boards and service providers
- The Plan's goal is to enhance safety and well-being through proactive, targeted, community-driven actions
- The Plan focuses on communities that can benefit the most, leverages and enhances community assets, and strengthens local capacity to drive change
- The Human Services Planning Board of York Region, approved by Council as the Advisory Committee to the Plan, as required under the *Police Services Act, 1990*, supports approval of the Plan

3. Background

Preparation and adoption of a Community Safety and Well-Being Plan is required under the *Police Services Act, 1990*

A Community Safety and Well-Being Plan is a long-term tool to enhance safety by focusing on social development and preventative actions to improve well-being. In preparing Plans, the Province requires municipalities to consult with an Advisory Committee and members of the public to develop a plan and has published a planning framework to guide municipalities in this process (see pages 8 to 9 of the Plan for details). In [June 2018](#) Council designated the [Human Services Planning Board of York Region](#) as the Advisory Committee for the Plan.

Council direction informed preparation of the Plan, including taking a place-based approach, prioritizing risks and establishing Community Action Tables

Development of the Plan has been underway for several years, including during—and leveraging lessons learned from—the COVID-19 pandemic. The following outlines key components and phases of the process to prepare the Plan.

- U** 1. **Using data to inform planning:** Data, such as the [Ontario Marginalization Index](#), showed that while only 4% of York Region census tracts scored in the highest level of marginalization, there are areas that could benefit from more support.
- A** 2. **Adopting a place-based approach:** In [November 2019](#) Council approved a place-based approach. Based on data and supported by consultations, northern Georgina, central Newmarket, south-central Richmond Hill and south-central Markham were identified in [June 2020](#) as “focus areas” for the first iteration of the Plan.
- E** 3. **Engaging and listening to the community:** Over 700 stakeholders, including residents and community agencies, were engaged. A clear and consistent feedback was that solutions are more effective when developed by and alongside communities.
- I** 4. **Identifying priority risks for action:** Data and consultations identified mental well-being, housing stability and economic stability as priorities for the focus areas.
- E** 5. **Establishing Community Action Tables to develop action plans and drive change:** In [May 2021](#) Council approved Community Action Tables for each focus area to develop possible solutions to address the top risks in their community. Community Action Tables were established in Fall 2021 and have engaged with residents, service providers and other partners to develop local action plans, attached as appendices to the proposed Community Safety and Well-Being Plan.

See pages 12 to 26 of the Plan for more information on the process used to develop the Plan.

4. Analysis

Six key objectives underpin the Plan and set strategic direction for how the Region will work with communities to enhance safety and well-being

Table 1

Community Safety and Well-Being Plan Strategic Objectives

Objective	Key Components
1. Bringing partners together and strengthening community capacity	Community Action Tables will be supported to design, develop and deliver local actions through their Community Action Plans
2. Leveraging strengths, and bridging gaps where they exist	Existing plans and programs will be leveraged, and if needed strengthened, to address risks and improve service alignment and navigation
3. Targeting efforts to communities that can benefit most	Place-based actions will be advanced in the focus areas; data and consultations will inform possible future areas of focus
4. Focusing on top opportunities for action, and prioritizing preventative initiatives	Actions will take a preventative approach, and will focus on priority risks of mental well-being, housing stability and economic stability
5. Getting up for success by mobilizing resources and collaborating to drive change	The Region, with partners, will align resources, pursue funding and advocate to senior levels of government for required policy change
6. Delivering the Plan and building on success	The Region, with partners, will implement and evaluate the Plan while providing strategic direction and oversight

See pages 28 to 41 of the Plan for more information on the strategic objectives and actions.

To implement the Plan, the Region will build on momentum established, partnerships forged and lessons learned over the past few years, and will look to scale up successes to maximize impact

The Region will play a stewardship role, working with partners including York Regional Police, local municipalities, and agencies and residents on Community Action Tables (see pages 40 to 43 of the Plan for more information on implementation). Regional staff will track progress and engage with York Regional Council and the Human Services Planning Board of York Region as the Plan is implemented. Refresh of the Plan will be informed by provincial regulations, when released.

The Partnership with Council's [Vision](#) of strong, safe, caring communities and York Region's 2019 to 2023 Strategic Plan: From Vision to Results

It is a key activity referenced in [York Region's 2019 to 2023 Strategic Plan: From Vision to Results](#): “develop a community safety and well-being plan to enhance collaboration, engagement and outreach with our community and policing partners.”

5. Financial

No dedicated provincial funding to support Community Safety and Well-being Plans has been identified or committed. However, to support implementation of the Plan for York Region, proactive steps and partnerships have been, or will be, established.

Through the 2021 and 2022 budget processes, Council approved three staff resources (\$440,952 in total salary and benefits funded through tax levy) to support the development and implementation of the Plan. Council-approved changes to the Region's [Community Investment Fund](#) (100% tax levy-funded) made the program more flexible and nimble, further enabling it to serve as a possible source of funding to support initiatives under the Plan. The Region has also partnered with United Way Greater Toronto to flow up to \$140,000 in United Way Quick Action Grants until March 2023 for smaller-scale community projects, and with York Regional Police to explore access to policing grants. A Funders Table will be established by the Region to mobilize resources for Community Action Table initiatives and other activities.

The Region will continue to pursue opportunities through senior levels of government to obtain additional funding to support Plan initiatives. Any additional resources that may be needed will be identified as part of future budget processes.

6. Local Impact

Local municipal staff have provided valuable support and insight into the development of the Plan and will be key partners in implementation. The Plan's place-based approach further enables planning and action to be focused where they are needed most. As the Plan evolves, there will be opportunities to scale up successful initiatives to other areas.

7. Conclusion

The Plan provides a foundation for proactive, locally-driven actions that respond to the unique and evolving needs of York Region communities. Taking a place-based and collaborative approach provides an opportunity to build on the strengths of diverse communities, leverage Regional and local municipal initiatives, and develop targeted strategies that reflect community needs and address specific service gaps. The Plan provides opportunities to learn from initiatives and scale up successes, to help create strong, caring, safe communities across all of York Region.

For more information on this report please contact Joseph Milva, Director, Strategies and J Partnerships Branch at 1-877-464-9675 ext. 77201. Accessible formats or communication J supports are available upon request.



Recommended by: J

Catherine Chislett
Commissioner of Community and Health Services J



Approved for submission:

Bruce Macgregor
Chief Administrative Officer J

B

April 14, 2022
Attachment (1)
eDOC #13430163 J



Community Safety and Well-Being Plan for York Region
2022 to 2026



Land Acknowledgement

We acknowledge York Region is located on the traditional territory of many Indigenous peoples such as the Anishinaabeg, Haudenosaunee, Huron-Wendat and Métis peoples and the treaty territories of the Haudenosaunee, Mississaugas of the Credit First Nation and Williams Treaties First Nations. This land is now home to many diverse Indigenous peoples. York Region is located within the boundaries of the Nanfan Treaty, Treaty 13 and the Williams Treaties. There are also other land claims and treaty rights involving portions of York Region that have not been resolved. The Chippewas of Georgina Island First Nation is a Williams Treaty First Nation and the closest First Nation community to York Region.



Mayor
Frank Scarpitti
City of Markham



Regional Councillor
Don Hamilton
City of Markham



Regional Councillor
Jack Heath
City of Markham



Regional Councillor
Joe Li
City of Markham



Regional Councillor
Jim Jones
City of Markham



Mayor
David West
City of Richmond Hill



Mayor
Maurizio Bevilacqua
City of Vaughan



Chairman & CEO
Wayne Emmerson



Regional Councillor
Joe DiPaola
City of Richmond Hill



Regional Councillor
Mario Ferri
City of Vaughan



Regional Councillor
Gino Rosati
City of Vaughan



Regional Councillor
Linda Jackson
City of Vaughan



Mayor
Margaret Quirk
Town of Georgina



Regional Councillor
Robert Grossi
Town of Georgina



Mayor
Tom Mrakas
Town of Aurora



Mayor
Virginia Hackson
Town of East Gwillimbury



Mayor
Steve Pellegrini
Township of King



Mayor
Iain Lovatt
Town of Whitchurch-Stouffville

A Message from York Region Chairman and CEO and Members of Regional Council

York Regional Council is proud to share our first *Community Safety and Well-Being Plan for York Region*. The 2022 to 2026 plan reflects what we heard from our residents and partners about what is important as we work collectively to enhance safety and well-being in our communities.

This plan is a long-term tool to enhance safety by focusing on well-being and builds on a strong foundation of collaborative relationships with community partners across York Region. It serves as an important call to action to address community safety and well-being issues that are important to all residents and recognizes this is a responsibility shared by all.

Together, we will collaborate to tackle the most pressing concerns and use our collective strengths to champion initiatives that will drive true change across our communities and help foster an environment where everyone feels safe and supported.

With a strong appreciation of the past and great hope for the future, we invite you to join York Region in this journey as we continue to foster strong, caring, safe communities for all residents, and build a York Region where every person can thrive, and every community reaches its full potential.



Regional Councillor
Carmine Perrelli
City of Richmond Hill



Mayor
John Taylor
Town of Newmarket



Regional Councillor
Tom Vegh
Town of Newmarket



OUR VISION

Strong, Caring, Safe Communities

OUR MISSION

Working together to serve our thriving communities – today and tomorrow

OUR CORPORATE VALUES

Integrity Commitment Accountability Respect Excellence



Throughout the Community Safety and Well-Being Plan for York Region, we have included a young creatives community spotlight to showcase a selection of photos, artwork and poetry from youth artists in our community. We are pleased to share these with our readers and thank the artists who contributed their work for inclusion in this Plan.



This cover image for the Community Safety and Well-Being Plan for York Region was created by Mya Salawu, Keira Salawu, and Stella Salawu as part of the Young Creatives Art Competition.

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Executive Summary

The 2022-2026 Community Safety and Well-Being Plan for York Region (Plan) takes a strengths-based, partnerships approach to enhancing the safety and well-being of residents and communities. Focused on social development and prevention, its goal is to enhance safety and well-being through proactive, targeted, community-driven actions.

Through Community Action Tables and other collaborative initiatives, the Plan brings partners together and builds community capacity to drive change. It leverages strengths and a variety of assets, including Regional and local municipal Plans, and bridges gaps where they exist. Focusing on those communities that can benefit the most, the Plan includes locally-driven actions delivered over the next four-years to address issues linked to the priority areas of mental well-being, housing stability and economic stability.

The Plan was developed with input and support from residents and partners, including community service providers, local municipalities, York Regional Police and the [Human Services Planning Board of York Region](#) (HSPB). The HSPB, approved by York Regional Council as the Advisory Committee to the Plan as required under the *Police Services Act, 1990*, provided valuable insight and endorses the Plan.

Leveraging what we learned during the COVID-19 pandemic, the Plan includes actions and initiatives that will help support equitable recovery from the pandemic as we continue to build strong, safe, caring communities in York Region.

01 About Community Safety and Well-Being Plans

Under the *Police Services Act, 1990* the Province requires upper-tier and single-tier municipalities to develop a Community Safety and Well-Being Plan. These municipal plans are intended to help foster communities where “everyone is safe, has a sense of belonging, opportunities to participate, and where individuals and families are able to meet their needs for education, healthcare, food, housing, income, and social and cultural expression.”¹

In preparing and implementing Community Safety and Well-Being Plans, the Province requires municipalities to:

- Identify and prioritize risks that contribute to crime, victimization, and harm
- Identify strategies to reduce prioritized risks and set measurable outcomes
- Consult with an Advisory Committee and prescribed members of the public
- Implement the Plan, and monitor, evaluate and report on its impact and outcomes

Ontario's Community Safety and Well-Being Planning Framework

A Community Safety and Well-Being Plan is a long-term tool to enhance safety by focusing on well-being. It recognizes challenges and experiences are diverse, and the collective safety and well-being of communities is a responsibility shared by all.

To help municipalities prepare their plans, the province provided a frameworkⁱⁱ for community safety and well-being planning that target risk factors and social development and prevention approaches (green and blue rings in Figure 1.1).

This approach takes the perspective of "crime prevention through social development," and recognizes the role "multiple, complex social, economic, health and environmental factors" play in individual and community safety and well-being. These factors are often referred to as social determinants of health - factors that keep people safe and well, such as having adequate income, meaningful work, education, community connection, stable housing and healthy food. The term "risks" is used in this type of work to refer to characteristics or conditions in individuals, families, communities or society that may negatively affect these factors and increase likelihood of harms.

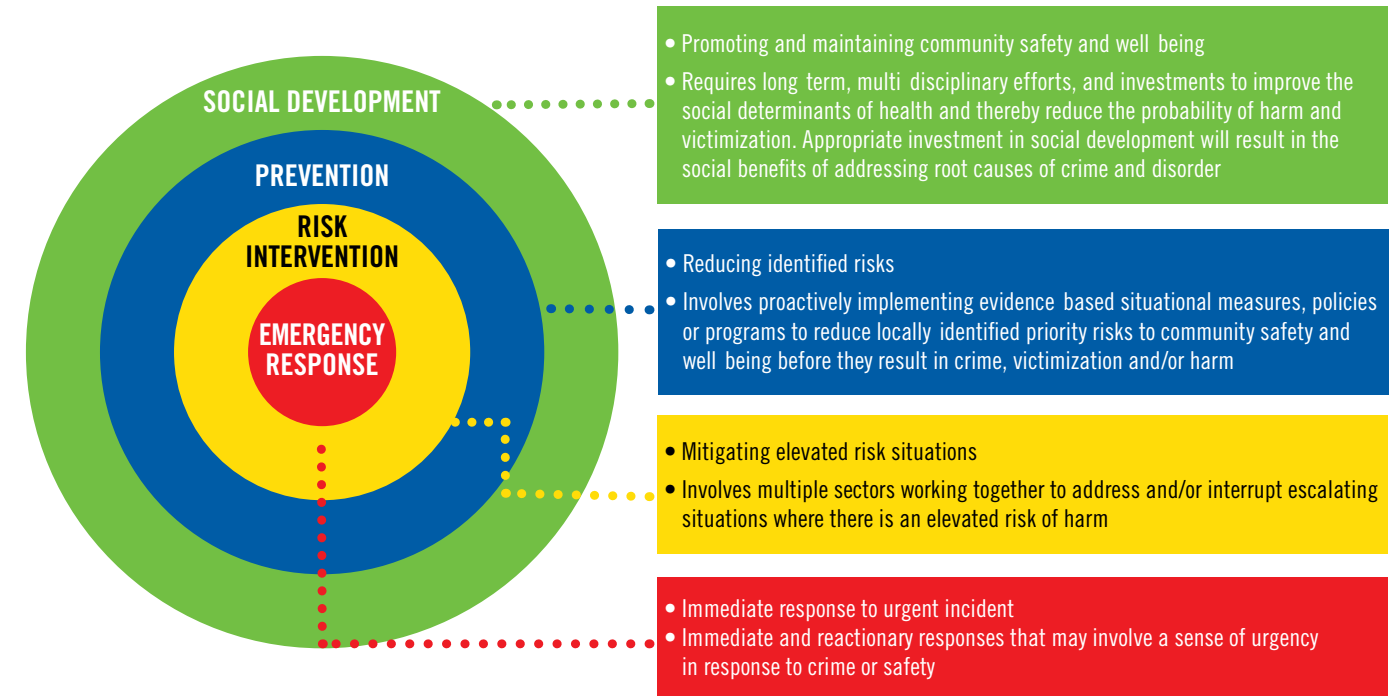
By addressing root causes and focusing on proactive actions to reduce risks to safety and well-being, the Plans are intended to mitigate incidence and severity of crime, victimization and harm that require more complex and costly response and intervention, such as through the justice, homelessness or healthcare systems.

What are the Social Determinants of Health?

Our health is determined by the conditions of our everyday lives, and by systems that help keep us healthy and support us when we get sick. The social, economic, political, and environmental conditions, or social determinants of health, in which people live also matter. Social determinants of health are estimated to account for 50% of all health outcomesⁱⁱⁱ. For more information on the social determinants of health, see Appendix 6.

The Province's Community Safety and Well-Being Planning Framework shown in Figure 1.1 guided development of the Plan for York Region.

Figure 1.1: Ontario's Community Safety and Well-Being Planning Framework



Community safety and well-being planning is not about "re-inventing the wheel". It is about recognizing the great work already happening - within individual communities, through networks of agencies and service providers, and existing human service plans - and collaborating and coordinating to do more with those resources using local experience and expertise.

Benefits of a Community Safety and Well-Being Plan

Safety and well-being are a shared responsibility of all community members requiring an integrated approach to bring diverse partners together to address common goals. No one sector or organization can address complex social challenges alone. Multi-sectoral partnerships and engagement are essential to developing strategies to help mitigate risks and improve the overall well-being of communities. This includes the involvement of residents, the not-for-profit community and government.

Community Safety and Well-Being Plans provide a framework to help mobilize community members to share insights about their communities, establish shared goals, strategize together, collaborate and share resources. It provides an opportunity to:

- Leverage resources, plans and programs more effectively
- Target supports to respond to needs on the ground
- Learn and scale promising practices for greater impact

York Region at a Glance

DIVERSE REGIONAL MUNICIPALITY OF CLOSE TO

1.2 MILLION RESIDENTS UP 5.7% since 2016¹

16.8% of residents lived in **low income** families in 2019
15.6% of children aged 0 to 17 lived in **low income** families in 2019 compared to 17.6% in Ontario³

70% AGED 25-64 had a **post-secondary education**²

8.7% Average **unemployment** rate between 2020 and 2021⁴

VACANCY RATE as of October 2021⁵

Apartments **1.8%**
 Condominiums **0.5%**




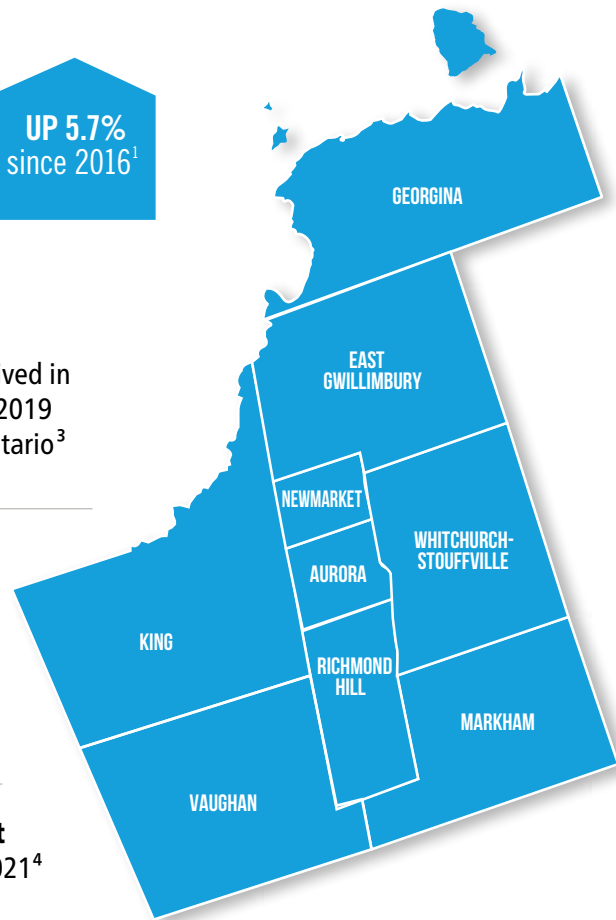
AVERAGE RENT IN 2021⁶

Apartments **\$1,442** UP 13.8% over 2018
 Condominiums **\$2,214** UP 10.6% over 2018

73% aged 12 and older reported very good or excellent mental health in 2017⁷



\$105,421 AVERAGE ANNUAL FAMILY INCOME IN 2019³

49% OF RESIDENTS

self-identified as a member of a visible minority group.² The largest groups were:

Chinese **45%**
 South Asian **22%**
 West Asian **8%**



47% OF RESIDENTS were immigrants²

OVER 120 DIFFERENT LANGUAGES

were most spoken at home. Among them, the top **non-official languages** were Cantonese, Mandarin, Persian, Russian and Italian²

Young Creatives COMMUNITY SPOTLIGHT



Hi, my name is Melinda and I am 14 years old. During my free time I love creating art, as well as watching dramas and baking!

To me, community safety and well-being means that everyone in the community is able to feel connected with each other. You know where to go for help when needed and feel that being a part of the community positively impacts your mental health.

Throughout my artwork I showed a few ways that people are able to take care of their mental health. While school/work/life can often get stressful it's important for people to have some time for themselves. Taking time to read a book, do some gardening or even spending time outside with nature are great ways to help take your mind off of things.

Melinda

¹ Statistics Canada, 2021 Census.
² Statistics Canada, 2016 Census.
³ Statistics Canada, Centre for Income and Socioeconomic Well-being Statistics, T1 Family File, 2019. A person is in low income when their family income is below the Census Family Low Income Measure (CFLIM-AT) threshold associated with their family size.
⁴ Statistics Canada, Labour Force Survey - LFS characteristics by 2016 Census Division boundaries - two year average estimates.

⁵ Canada Mortgage and Housing Corporation, Rental Market Survey Data Tables, Greater Toronto Area, 2018 and 2021. A 3% vacancy rate is considered healthy as it is the point where the market can adequately meet demand.
⁶ Canada Mortgage and Housing Corporation, Rental Market Survey Data Tables, Greater Toronto Area, 2018 and 2021.
⁷ Canadian Community Health Survey 2017, Statistics Canada, Share File, Ontario Ministry of Health and Long-Term Care

02 THE PATH

Developing the Plan for York Region

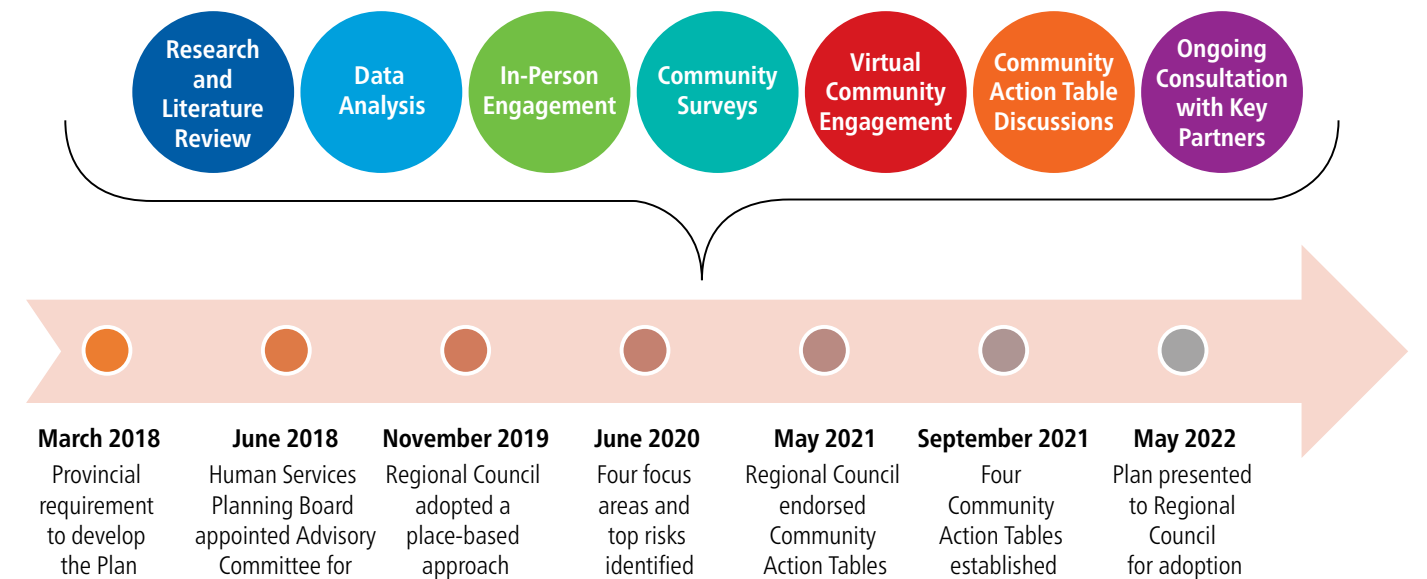
The Community Safety and Well-Being Plan for York Region helps achieve the Region’s vision of strong, caring, safe communities.

Creating the Plan for York Region is an outcome of more than two years – including through the COVID-19 pandemic – of research, outreach and engagement with residents from communities across York Region and partners. This process involved listening closely to understand and capture what residents want and need to improve the safety and well-being of their communities.

We have been developing key elements of the Plan in a phased approach, building on what we learned from previous stages of work. Figure 1.2 provides an overview of the development process, including milestones.

Appointed by York Regional Council as the Advisory Committee for the Plan, the Human Services Planning Board of York Region (HSPB) – a multi-sector collaborative of human service agencies, government and community leaders – provided valuable advice and insight throughout this process. See Appendix 5 for the members of the 2019-2022 HSPB.

Figure 1.2: Development of the Community Safety and Well-Being Plan, including key milestones



There were five phases of the Plan development process. These phases provided insights that informed the direction and key elements of the Plan.

PHASE 1

Collecting and using local data to inform planning

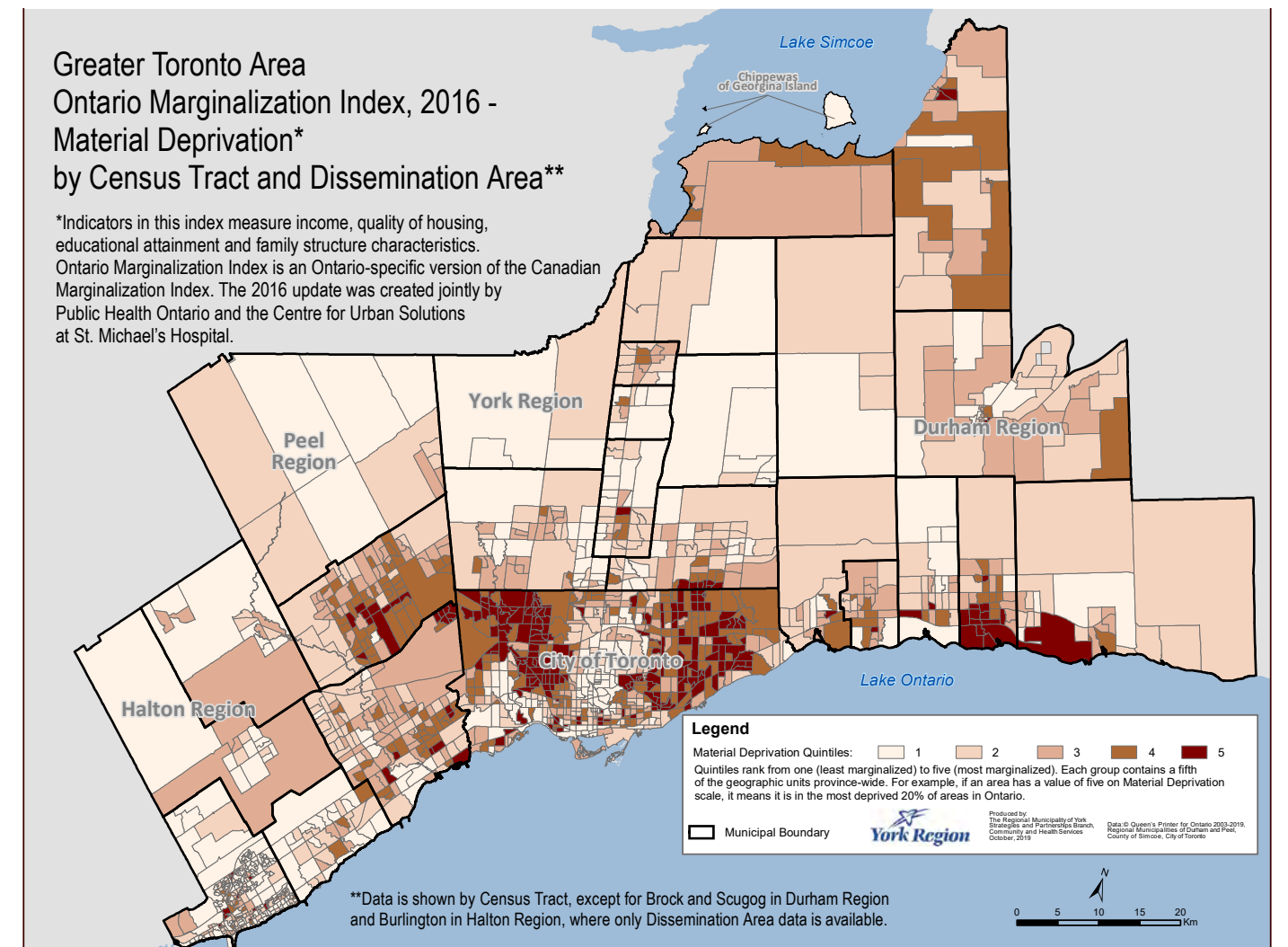
To understand safety and well-being in York Region, data and community indicators were used to analyze a broad range of factors that affect safety and well-being, including household income, employment, crime, education and early childhood development.

To get a broader perspective, we used the publicly available Ontario Marginalization Index,^{iv} which integrates social determinants of health data to understand well-being in communities across Ontario, specifically its Material Deprivation Domain (Figure 1.3). Each geographic area is associated with a material deprivation quintile, from one – the least deprived – to five, the most deprived (darkest red in Figure 1.3).

York Region fares well compared to neighbouring municipalities. Only 4% of census tracts in York Region were in the fifth quintile, the most marginalized category group compared to 32% of census tracts in Toronto, 11% in Durham and 10% in Peel. Only Halton had a lower proportion of geographic areas in the most marginalized category at 2%.

However, while 96% of York Region communities have more favourable Material Deprivation scores, this analysis showed there are areas that would benefit from more support – a key insight informing the Plan.

Figure 1.3: Ontario Marginalization Index*



*Note: The lightest colour represents areas that are the least marginalized provincially and the dark red represents areas that are the most marginalized.

PHASE 2

Adopting a place-based approach

What is a place-based approach?

A collaborative, long-term approach to build thriving communities delivered in a defined geographic location. This approach to planning is ideally characterized by partnering, shared design, shared stewardship, and shared accountability for outcomes and impacts. Place-based approaches are used to respond to complex, interrelated, challenging issues, drawing on local strengths and reflecting local conditions.^v

The places where we live, work and play define who we are and what we do. They determine the nature of relationships with neighbours and the communities we create.

While York Region overall is home to vibrant, diverse and growing communities, there are opportunities to improve outcomes in certain areas. Using a place-based approach for the Plan provides an avenue to achieve this objective.

Given the diversity and complexity of York Region communities, the Plan uses data and information to focus efforts on geographic areas that can benefit most (referred to as “focus areas” in the Plan). It also allows for community safety and well-being strategies to differ between places to reflect specific context and leverage local assets, better addressing the unique needs of each community.

With this insight, York Regional Council endorsed adopting a place-based approach as the foundation for the development of the Plan.

Through data and community consultation, four communities were identified as focus areas for the Plan and include northern Georgina, central Newmarket, south-central Richmond Hill and south-central Markham. Refer to Figure 1.6 for details on the focus areas.

Young Creatives COMMUNITY SPOTLIGHT

POEMS

Coming together—
these letters
symbolizing the unity of life itself;
we are more powerful together
when we embrace individuality
and connect openly
like the words of beautiful poetry
carrying the wisdom we need,
but fail to hear
over the voices of fear.

Being alive,
It's all enchanting
poetry
enhancing
the potency
of this power
we so often devour
with greed and insecurity...
Had it been brought up in a better home,
would the flower blossom into love?
If we weren't so alone
in this shell of personalization,
would we
come to see
how peaceful it is.

Tell us about yourself?

I have a deep passion for the arts which make up our world. Words are my release, and as a creator, I feel a deep rooted responsibility to help others get closer to divinity, closer to life. I love the simple things in life— I just live to see how close I can get to inner peace.

What does community safety and well-being mean to you?

Community safety and well-being to me, means setting a solid foundation of Love and openness in which all beings can flourish, individually and collectively.

Describe your piece

The pieces I wrote encapsulate the bittersweet taste of freedom. What are beautiful moments without people to share them with? I want to create a domino effect through art, which touches the hearts of us in a way that make us say “I love being alive”. Hopefully then, as a community, we can strive to make a better functioning society.

—Jaydon James

PHASE 3

Engaging and listening to the community

Throughout the planning process we consulted residents and community partners in York Region to understand their perceptions of safety and well-being and how they feel about the communities in which they live.

During the COVID-19 pandemic, these consultations took place through online surveys and virtual public meetings. Participants included residents, community leaders, subject matter experts, service providers, school boards, York Regional Police, local mayors and municipal staff. We also engaged the community through collaborative forums, including the York Region Community Partnership Council, which includes agencies serving newcomers, and the York Region Accessibility Advisory Committee. Between August 2020 and March 2021, over 700 members of the public and stakeholders from across York Region participated in the engagement process.

These consultations identified mental well-being, housing stability, and economic stability as key areas of concern. We heard that residents, at times, do not know where to go for help, or how to access resources, particularly supports that are culturally appropriate. We also heard about the importance of a strong, non-profit sector to help address resident and community needs, and were reminded that solutions need to be planned and implemented with community members who know their neighbourhoods the most. Figure 1.4 provides additional key insights from these consultations.

Figure 1.4: Community Consultation Summary

Community Safety and Well-Being Plan for York Region: Consultation Highlights and Key Themes

PARTICIPANTS IN FOUR FOCUS AREAS IDENTIFIED THESE TOP RISKS TO SAFETY AND WELL-BEING:

- Mental Well-Being
- Housing Stability
- Economic Stability

KEY FEEDBACK INCLUDED:



Learning from COVID-19: Insights and solutions

The World Health Organization declared COVID-19 a pandemic on March 11, 2020, and by mid-March, Ontario had declared a state of emergency.

COVID-19 impacted York Region communities including increased reliance on government supports due to job and income loss, isolation, racism, increased domestic violence, opioid use, escalated incidence of homelessness, and increased stress and anxiety. Residents and communities in the southern part of York Region, including racially diverse residents, newcomers and people living in poverty, were among the hardest hit in Ontario. Given this context, the Plan reflects and includes strategies to address community needs that have been exacerbated by COVID-19.

The pandemic also underscored the need and value of collaborative community action in improving safety and well-being of residents. Together with United Way Greater Toronto, York Region created the COVID-19 Community Coordination Initiative, which helped community agencies exchange information, share resources and integrate approaches to address the evolving needs of residents through these unprecedented times. The insights gained through this initiative helped identify and better understand issues in the community, as well as possible strategies to address them. This helped inform the Plan and made it more responsive to residents' needs. It also provided an opportunity to test the collaborative place-based approach that forms the foundation of the Plan.



Young Creatives COMMUNITY SPOTLIGHT

Tell us about yourself?

My name is Avery Lee. I'm a high school student from Vaughan, Ontario, with a passion for all types of art. In school, I like to focus on subjects such as Computer Science, Geography, and Visual Arts (duh). In my spare time, I like to draw, swim, crochet, and skateboard. I'm a competitive swimmer, so I also like to stay active. My parents are immigrants from China, and I was born in Florida before moving to Ontario. I like to seek out leadership opportunities and initiatives within my community on a regular basis in order to better connect with the people around me. For example, I completed several months worth of volunteer work last summer in crop farm maintenance, which was used to supply food to those who needed it. I also participated in an anti-Asian-hate protest in early 2021 at Nathan Phillips Square in an effort to, well, stop Asian hate. All in all I would say I'm very active in my community and am always looking for ways to chip in.

What does community safety and well-being mean to you?

To me, community safety and well-being means having people you can trust and talk to, whether that be in school, in the workplace, or in the general community. This sort of community bond is what really makes a safe and sustainable society. Additionally, community safety and well-being means listening to the people, to the voices of those who are most affected by societal issues. This way, we can all learn from each other and grow together. Well-being to me is all about connecting to those around you and working for the collective good.

Describe your piece

This art piece is titled "The Difference It Makes", 'it' being community safety and well-being. It depicts a city park in two different scenarios: one where there is no communal safety, and one where there is. The 'good' scenario is being caused by the (not literal) music that the girl on the park bench is listening to, where the music represents community safety and well-being. The overall message of the piece is that a sense of community and well-being makes all the difference. To create the piece, I used the digital software Krita as well as traditional pencil for the initial sketch. I hope you enjoy it!

— Avery Lee

PHASE 4

Identifying priority risks for action

Throughout the planning process we engaged residents and community partners in York Region to understand and prioritize the top risks in each focus area. Community consultations identified the following top priorities for action to improve safety and well-being:

Mental well-being



Housing stability



Economic stability



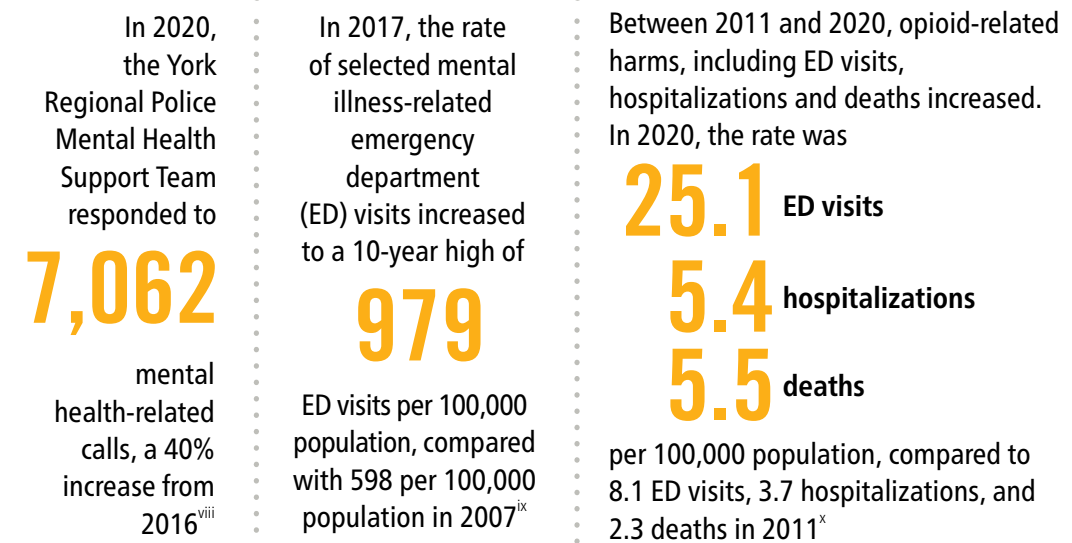
Mental Well-being



The World Health Organization defines mental well-being and health as “a state of well-being in which an individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and is able to make a contribution to his or her community^{vi}.”

Mental well-being influences how we think, behave, relate to and interact with one another. It shapes whether we feel like we belong and have opportunities to participate in civic life, and our ability to reach our full potential. Struggles with mental well-being can go undiagnosed and may result in higher risk for unemployment, poverty and homelessness, engagement in risky behaviours, and increased dropout rates among school-aged children and youth^{vii}.

A snapshot of mental well-being across York Region



What we heard from consultations:

- Mental health and well-being supports are not always available when needed
- There is a lack of awareness about what supports are available or where individuals can go to access support
- Many families have difficulty navigating the mental health system and they often feel ill-equipped to manage the mental health needs of their children/youth
- Mental health and well-being supports are not always offered in culturally appropriate or sensitive ways. There may also be language or cultural barriers to accessing services
- Stigma around mental health prevents some people from seeking help

York Region Mental Health and Addictions Hub

The Canadian Mental Health Association York Region and South Simcoe is working with local health and social service partners to establish a [York Region Mental Health and Addictions Crisis Hub](#). The first of its kind in York Region, the Hub will provide non-medical intervention to help stabilize and connect people to services. The Hub will play a crucial role in meeting the growing need for mental health and addiction services in York Region.

Housing stability

Housing stability means having an affordable place to live that is safe, secure, comfortable, and located in one's chosen community. It also means a person can find or keep housing when their needs change. To be affordable, housing costs should not exceed 30% of income. York Region declared an affordable housing crisis in [February 2021](#), as the demand for affordable housing surpassed supply and the lack of affordable options made it difficult to meet the needs of all residents.



A snapshot of housing stability across York Region

The increasing cost of housing has outpaced income, making it harder for residents to make ends meet^{xi}

Based on 2016 Census,

52%

of **renters** spent more than 30% of their income on housing

32%

of **all households** spent more than 30% of their income on housing

3% is considered a healthy rental vacancy rate. In 2021, the vacancy rate for purpose-built units was

1.8%

which was the lowest in the Greater Toronto Hamilton Area, signifying high rental demand relative to supply^{xii}

In 2021, average rents were **\$1,442** per month. This is a **13.8%** increase over 2018.^{xii}

In contrast, the estimated gross average income for rental households was **\$70,923**^{xiii}

In 2021, there were

15,679

households on the subsidized housing waitlist. On average, between 2008 and 2021, about 327 subsidized units became available each year^{xiv}

York Region has the lowest number of legacy social housing units relative to its population compared to other service managers participating in Municipal Benchmarking Network Canada reporting, at **16 units** per 1,000 households in 2020, compared to a median of **37 units** per 1,000 households in Ontario^{xv}

The average rent for a 1-bedroom apartment in York Region in 2021 was **\$1,328**, whereas the shelter allowances for a single person receiving Ontario Works or Ontario Disability Support Program are **\$390** and **\$497** respectively^{xvi}

What we heard from consultations:

- Several factors impact housing affordability, including mortgage rates, energy costs, household incomes, job stability and the supply of affordable housing options
- The housing system leaves many residents in precarious housing situations, living in inadequate or unaffordable units, or unable to find suitable rental housing
- The cost to rent is out of reach for many people, particularly those who rely on government income supports
- Finding affordable housing is difficult and waitlists for community housing are long
- The unaffordability of housing causes many to relocate to areas far from jobs and support services and to endure substantially longer commutes with negative impacts to their health
- Many tenants do not know their legal rights. They fear eviction if they report sub-standard housing conditions or building code violations
- Multi-generational or multi-family households are becoming more common
- Overcrowding in the home can limit the availability of quiet space, causing distraction and disruption, and impacting children's/youth's ability to learn remotely or complete homework

Economic stability

Economic stability allows people to access resources essential to life, including financial resources, affordable, adequate and suitable housing, nutritious food, and stable employment that provides an adequate income. When people face income inequality, economic factors have a greater impact on their well-being, and capacity to adapt positively to life challenges.



A snapshot of economic stability across York Region

In 2019, **119,070** adults (aged 18 to 64) and **38,540** children/youth (aged 17 and under) were experiencing low income in York Region^{xvii}

Business closures from COVID-19 led to unusually high unemployment rates, reaching a peak of **13.7%** in July 2020, compared to an average of about **4.5%** in 2019. While the unemployment rate decreased to **8%** by December 2020, it climbed again to **9.7%** in March 2021, following a new round of pandemic-related closures and lockdowns^{xviii}

43,230

or **3.6%** of residents relied on government payment from social assistance* in 2019^{xix}

*Note: includes Ontario Works, Ontario Disability Support Program, Emergency Assistance, Temporary Care Assistance and Assistance for Children with Severe Disabilities

43%

of working adults reported being in precarious employment (i.e., temporary and contract or other forms of employment that either receive no benefits beyond a wage or are unable to confirm they would be with their current employer for at least 12 months)^{xx}

Racialized populations and recent immigrants have been disproportionately affected by economic instability. In 2016, **34.3% (17,625)** of all recent immigrants and **16.5% (89,260)** of the total visible minority population experienced low income^{xxi}. This represents an increase from 2011, in which **28.7%** of all recent immigrants and **14.4%** of the total visible minority population experienced low income

51,410

residents moved here from another country in the last 5 years resulting in a **4.7%** increase in York Region's population^{xxii}

What we heard from consultations:

- There is a lack of employment opportunities for youth seeking to gain experience
- Many adults need to take multiple part-time jobs, meaning there are fewer entry-level opportunities for youth
- There is a dependence on government assistance. Employment opportunities that offer comparable or higher income and stability are lacking, which does not incentivize people to pursue employment over assistance
- Closures during the pandemic led to an increased reliance on government income supports
- Precarious employment and lack of full-time employment are issues
- Access to, and affordability of, transportation affects employment options and access to support services
- Living with a low income can negatively affect safety, mental well-being and housing stability

PHASE 5

Establishing Community Action Tables to help develop plans and drive change

What is an Ontario Health Team?

Ontario Health Teams were introduced by the Province in 2019. Their vision is to better connect different parts of the healthcare system by bringing together, as one team, parents, families, communities, providers and system leaders to deliver more coordinated care for people in a defined geographic area.

One clear and consistent feedback from community consultations was that solutions to address issues are most effective when developed by and alongside local communities. Solving these problems requires a collaborative, multi-stakeholder community development approach. This means bringing together a wide range of community members, including residents and partners, to develop and implement community-focused and locally-driven actions.

To help develop the Plan, we established Community Action Tables in each of the focus areas. The Tables are community-driven, and membership includes residents, service providers and representatives of York Region, local municipalities, York Regional Police, United Way Greater Toronto, school boards and the Ontario Health Teams. Community Profiles for each focus area can be found in Appendices 1 to 4.

The Community Action Tables have been working together, developing local, place-based plans to inform the work going forward. In implementing the Plan, the Community Action Tables will play an important role in making changes that strengthen communities.

Young Creatives COMMUNITY SPOTLIGHT

Tell us about yourself.

My name is Tahira, I am six years old and I am in grade 1. I like kitties and I want to win.

What does Community Safety and Well-Being mean to you?

It means to me everybody (The Complex) is being safe and friends and family are safe. When we are on the road, we are safe and everybody is happy.

Describe your art.

My art is about sunset. It is called "The Colourful Sunset." I like it because drawing art is fun and I want to win!

03 THE PLAN

Strategic Framework and Actions

The Plan aligns with and supports the achievement of [York Regional Council's Vision](#) of strong, caring, safe communities and is a key activity referenced in York Region's [2019 to 2023 Strategic Plan: From Vision to Results](#).

Inspired by York Region's vision, the goal and strategic objectives of the Plan are:



Aligned with the timeframe for other Regional plans, this first iteration of the Plan will take a four-year planning and implementation horizon.

STRATEGIC OBJECTIVE 1

Bringing partners together and strengthening community capacity

KEY ACTIONS

- Strengthen place-based community development by establishing Community Action Tables
- Support and invest in Community Action Tables to design, develop and deliver local initiatives with collective impact

Placing communities at the heart of planning will enhance their capacity to identify and respond locally to the kinds of challenges that can impact safety and well-being. We will strengthen place-based community development by supporting Community Action Tables in each of the focus areas identified in the Plan.

What we have done and can build on:

- Four Community Action Tables were established in Fall 2021 to help develop the Plan. The Tables represent a key part of the community infrastructure to bring community members together to identify priority areas for action and develop solutions
- Each Community Action Table developed their own Community Action Plan, naming actions needed to reach their short, medium and long-term goals. The Community Action Plans reflect priority issues identified by residents and other stakeholders. They outline a mix of early actions to build momentum and enthusiasm in the community, and longer-term projects. The Community Action Plans for each focus area are included in Appendices 1 to 4.

What is community development?



The United Nations defines community development as “a process where community members come together to take collective action and generate solutions to common problems.” It puts communities at the heart of making the decisions that directly affect them. Communities are engaged in identifying issues that are important to them, and in developing and carrying out actions to address those issues.

Community development recognizes that locally-developed solutions are often the best answer to local problems, as they build on community knowledge, expertise and resources.

Community development also helps build local capacity to act, which in turn can lead to stronger and more cohesive communities.

Figure 1.5 shows examples of common initiatives emerging from each Table.

Figure 1.5: Common Community Action Table initiatives

PRIORITY RISKS	COMMUNITY ACTION TABLE INITIATIVES
<p>Mental well-being</p> 	<ul style="list-style-type: none"> • Improve access and awareness of services available in the community • Strengthen culturally-relevant services by working with local service providers and people with experience • Use Service Navigators to help individuals and families access key supports and services • Create Youth Mental Health Peer Support Teams
<p>Housing stability</p> 	<ul style="list-style-type: none"> • Hold education workshops on issues related to housing (e.g., tenancy rights, eviction prevention, housing options, financial literacy) • Develop mobile, multi-sectoral, integrated response models to support people experiencing issues related to homelessness • Explore developing a Roommate Connector Program to support safe and effective roommate matching
<p>Economic stability</p> 	<ul style="list-style-type: none"> • Sponsor job fairs in the community and attract local businesses to participate in them • Create a Pathways Program for Youth to explore higher education and pathways to employment • Host employment readiness workshops with a focus on transitional supports, coaching, interview skills, and resume writing

What’s ahead and how we will make progress:

- The Community Action Tables will be supported and strengthened to enable them to effectively develop and implement actions that they have identified. This involves pursuing sustainable sources of funding to support the operation of the Tables and specific projects driven by them
- The Region will work with partners, including York Regional Police and local municipalities, to provide strategic, logistical and operational support to the Community Action Tables, including setting the strategic direction through the Plan, ensuring a level of consistency in governance, measurement and evaluation of activities, facilitating and supporting knowledge exchange on promising practices, and offering training and development opportunities to those involved in the Tables
- As the Plan unfolds, we anticipate membership of the Community Action Tables will evolve and expand, as we strive for planning, action and decision-making to be inclusive and community-centred

STRATEGIC OBJECTIVE 2

Leveraging strengths, and bridging gaps where they exist

KEY ACTIONS



Community safety and well-being planning builds on great work already happening across communities, including Regional and local municipal plans and strategies. This Plan leverages existing community assets – and will help build new ones, if needed – to understand and address issues and gaps.

What we have done and can build on:

- Community Action Tables have initiated asset mapping to identify existing resources and strengths within their communities. These maps will inform and support their solutions and actions
- There are existing navigation systems, such as York Region’s Access York and FindHelp Information Services (211), to connect residents to programs and services. We have heard through consultations that these assets can be strengthened further to address gaps in access and navigation

What is an asset map?

Asset mapping includes identification, data collection and mapping the locations of community assets, including local institutions, organizations, services and resident associations that serve as positive community resources in a focus area.

What are Children, Youth and Families Situation Tables?

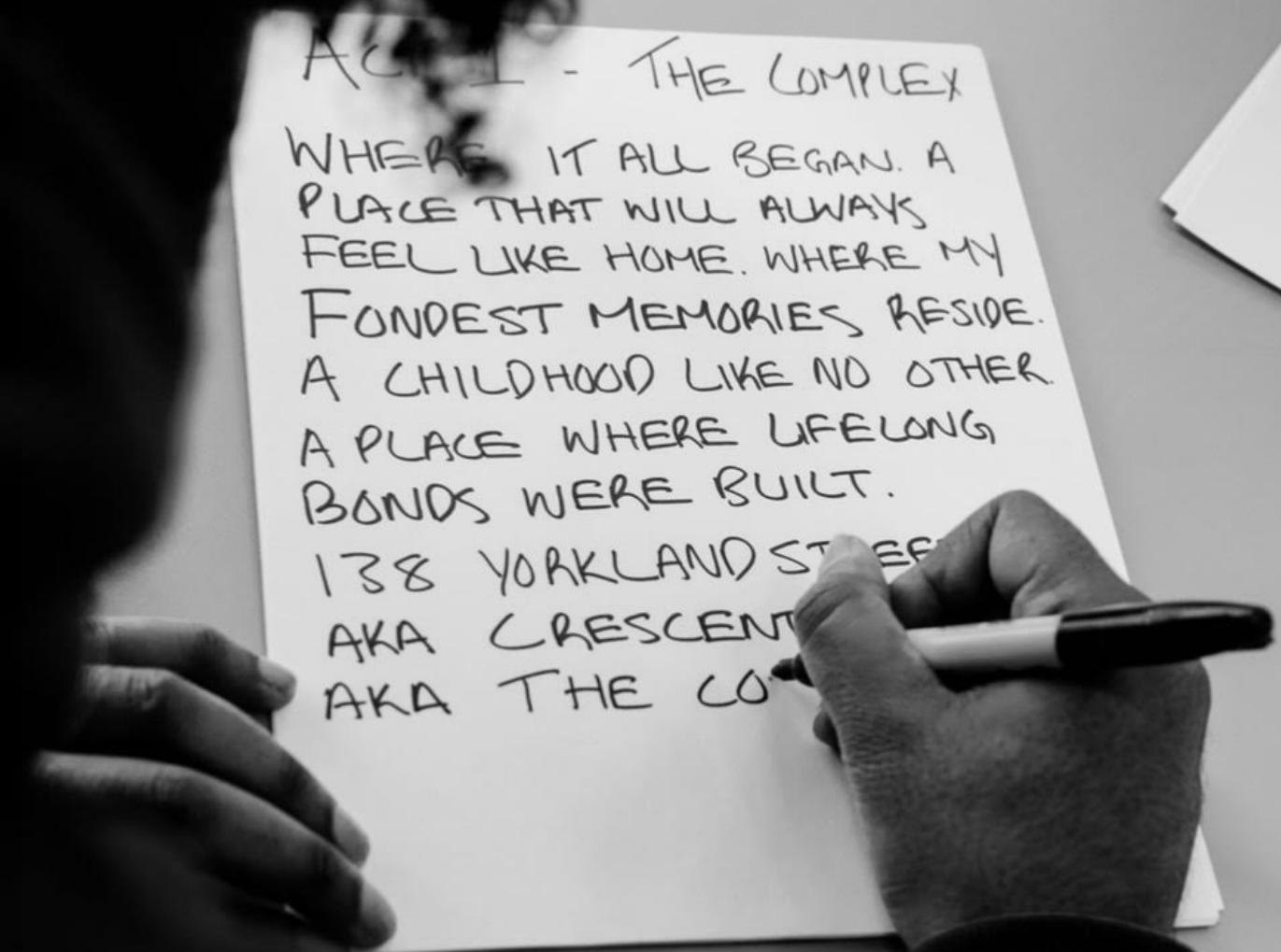
Children, Youth and Families Situation Tables bring together diverse service providers to collaborate and mobilize appropriate short-term interventions to address situations of Acutely Elevated Risk (AER), which are situations that indicate a high probability of harm. These Tables aim to increase community safety and well-being by responding to situations of AER before crisis occurs.

Resources to implement these Tables, and participation at the Tables, come from a variety of sources (e.g., police, provincial government, local municipality, community agencies), in the form of funding and in-kind support.

What's ahead and how we will make progress:

- Community Action Tables will continue to refine and leverage the asset maps they are developing, keep them current and distribute to residents, service providers and navigators that serve the focus area. These maps will help improve resident and service provider awareness of resources available in the community, making it easier to access them
- Under the Plan, the Region will work with partners to identify, promote and help strengthen service access and navigation tools
- Multi-sector planning and response tables, such as Children, Youth and Families Situation Tables, will be established to help improve service navigation and support residents who are experiencing vulnerability
- The Plan will leverage existing plans and programs to test and adapt services. For example, Regional and local plans and programs establish a strong framework and foundation for understanding and addressing the issues that are important to residents of the focus areas. Examples include:
 - York Region's 10-year Housing and Homelessness Plan, [Housing Solutions: A Place for Everyone](#), [York Region Economic Development Action Plan: 2020 to 2023](#), [The Inclusion Charter for York Region](#) and [York Regional Police Business Plan: Our roadmap for 2020 to 2022](#)
 - Georgina's [Economic Strategy and Action Plan](#)
 - Newmarket's [Council Strategic Priorities](#)
 - Richmond Hill's [Affordable Housing Strategy](#)
 - Markham's [Diversity Action Plan](#)

Young Creatives COMMUNITY SPOTLIGHT



The Complex - Jamal Omar, 20, student, studying photography

- Community safety and well-being is about loving where you come from and embracing your neighbourhood and community members.

- My art is a photo & poem. Pictured in the photo is a lawyer, poet and community activist talking about how much his neighbourhood (Crescent Village Housing, 138 Yorkland St. Richmond Hill, ON) means to him.

- Jamal

STRATEGIC OBJECTIVE 3

Targeting efforts to communities that can benefit the most

KEY ACTIONS

- Using data, advance place-based planning and actions in identified focus areas: northern Georgina, central Newmarket, south-central Richmond Hill and south-central Markham
- Working with partners and informed by data and evidence, scale up successful initiatives to other communities in York Region, where needed

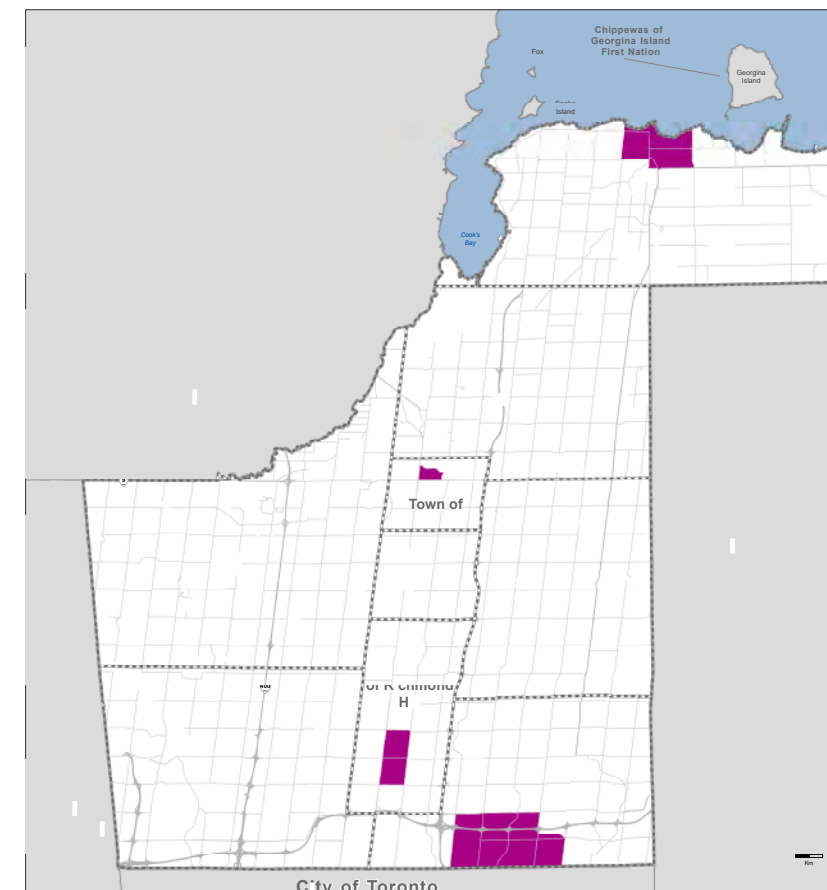
Place-based initiatives aim to achieve change by bringing cross-sector organizations together to address the underlying causes of complex social problems in a more holistic and collaborative way. Place-based planning is central to the Plan. It concentrates on areas of highest opportunity and shifts focus to communities that can benefit most from targeted planning and action.

We can leverage targeted actions we roll out in the focus areas, apply what we learn and scale up successful practices to other communities that may benefit most.

What we have done and can build on:

- We analyzed population and program data and consulted with the community to identify areas to focus on for the first iteration of the Plan
- The focus areas identified and approved by Council are northern Georgina, central Newmarket, south-central Richmond Hill and south-central Markham, highlighted in Figure 1.6. Information about these communities can be found in Appendices 1 to 4

Figure 1.6: Community safety and well-being focus areas



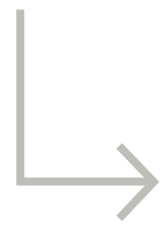
What's ahead and how we will make progress:

- Place-based planning and actions will be driven by the work of the Community Action Table in each of the focus areas, engaging with key partners and leveraging assets to address local issues
- As the Plan is rolled out, we will monitor the performance of place-based initiatives and look for opportunities to scale up successful projects to other York Region communities. This will help increase impact across the Region
- We will use evidence from data and community surveys, supported by consultations with community partners, to inform consideration of new focus areas for future iterations of the Plan

STRATEGIC OBJECTIVE 4

Focusing on top opportunities for action, and prioritizing preventative initiatives

KEY ACTIONS



Address priority issues related to mental well-being, housing stability and economic stability through preventative solutions

Supported by data, consultations in the four focus areas provided opportunities to delve deeper into community concerns and obtain perspective on the issues residents felt were influencing their safety and well-being. Community members identified and prioritized the top risks of greatest concern in each focus area (Figure 1.7).

Figure 1.7: Priority risks by focus area



Mental well-being, housing stability and economic stability issues have long-term impacts on safety and well-being. The good news is these issues can improve with targeted actions, including initiatives designed to shift focus from response to prevention. Under the Plan, the first priority and set of actions focus on understanding and implementing preventative actions, to avoid more costly interventions down the road.

What we have done and can build on:

- The Community Action Tables engaged their communities to better understand the issues and factors influencing the priority risks for their focus areas
- The Tables identified preventative solutions based on local context and collective actions. Actions for each of the focus areas are in Appendices 1 to 4

What is ahead and how we will make progress:

- Community Action Tables will further develop, refine and implement their local plans, and measure the effectiveness of their actions. This process will involve engaging local stakeholders, including residents and service providers, to generate innovative ideas, and design and roll out initiatives

STRATEGIC OBJECTIVE 5

Setting up for success by mobilizing resources and collaborating to drive change

KEY ACTIONS



For the Plan to succeed, dialogue and planning must translate into action. Leveraging existing resources is a good start, but Community Action Tables are identifying actions that require new and additional funding and policy supports. York Region will mobilize resources, including funding, so that actions, including those from the Community Action Tables, can be appropriately planned and successfully implemented.

What we have done and can build on:

- Changes to the Region's Community Investment Fund approved in Fall 2021 have enabled the program to serve as a funding source to support implementation of the Plan. The Fund is currently helping support the operation of the Community Action Tables
- Other partners have introduced resources to support the Community Action Tables. For example, United Way Greater Toronto has distributed Quick Action Grants for initial projects driven by local residents and agencies participating in the Community Action Tables
- Regional staff have been working with partners to actively pursue funding from different levels of government to support implementation of the Plan

What's ahead and how we will make progress:

- As specific projects are developed and finalized by Community Action Tables, the Region's Community Investment Fund can serve as a potential funding source
- The Region will work with partners to establish and manage a Funders Table, which will include other funders, organizations and community stakeholders, potentially including partners from the private sector where appropriate, to provide resources and align investments for greater impact
- Partners will continue to pursue additional sources of funding, from different levels of government, to support implementation of community actions and initiatives
- As required and where appropriate, the Region, Community Action Table participants and other partners will advocate to the provincial and federal governments for broad policy and program change to enhance community safety and well-being



STRATEGIC OBJECTIVE 6

Delivering the Plan and building on success

KEY ACTIONS



To support effective and coordinated roll-out of the Plan, the Region will play a critical stewardship role, working with partners to implement the Plan while taking the lead on coordinating overall strategic direction and providing management and oversight for the Plan. Through this, we will continue to work closely with partners and listen to what residents tell us, putting the community at the heart of safety and well-being planning.

What we have done and can build on:

- We engaged with and received direction from York Regional Council throughout the development of the Plan
- We also engaged the HSPB (the Advisory Committee for the Plan), York Regional Police, York Regional Police Services Board, and Mayors and staff of the four focus area municipalities
- We started to put in place Regional resources to support the implementation and evolution of the Plan, including evaluation, monitoring and reporting activities to track performance and outcomes
- The Community Action Tables that have been initiated reflect diverse membership, including key community partners and leaders. These partnerships will be critical in the successful implementation and evolution of the Plan

What's ahead and how we will make progress:

- The Region will steward and implement the Plan, including evaluating and reporting on progress, in collaboration with partners
- To help monitor performance of the Plan and identify areas of success that we can leverage, and issues we need to address, the Region will establish a multi-sectoral Evaluation Group to assess performance of the Plan and advise on possible improvements
- The Region, Community Action Table participants and partners will engage the community to raise awareness of the Plan, identify and foster opportunities for involvement, and build support for the Plan



04

Measuring Impact and Outcomes

Change does not happen overnight. Community development requires time, collective effort and commitment. Measuring progress is an important aspect of this work and imperative to the Plan’s success. It will tell us about issues across the Region that are negatively impacting safety and well-being and demonstrate progress in improving conditions across communities so everyone can thrive.

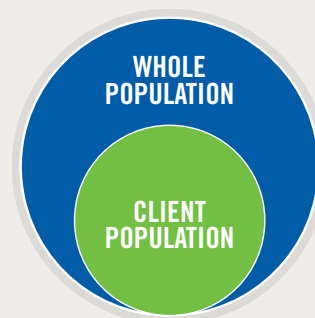
To assess whether the work is making a difference, we will use a results-based accountability framework, consisting of quantitative community (population) indicators and performance measures, and qualitative data from community surveys and consultations. Community indicators can measure the safety and well-being of the communities, while performance measures help us understand the performance and impact of specific programs/initiatives.

Community indicators – for safety and well-being broadly, and those related to the priority risks of mental well-being, housing stability and economic stability – are shown in Figure 1.8. The directions identified in, and driven by, the Plan should, over time, help move the needle on safety and well-being indicators, both within focus areas and across the Region.

Performance measures identified for specific programs/initiatives can be found in Appendices 1 to 4. The Community Action Tables will develop and refine performance measures as new actions are identified, and existing ones evolve, under their Community Action Plans.

What is results-based accountability (RBA)?

RBA is a disciplined way of thinking and acting to improve complex social problems. It consists of community accountability and performance accountability measures.



Community Accountability
The well-being of our communities



Performance Accountability
The well-being of client populations (Programs, Organizations, Agencies, Service Systems)

Figure 1.8 Community Safety and Well-Being Plan for York Region - Indicators

	Indicator Title	Indicator	Data Source
Community Well-Being	Sense of belonging to local community	% of residents who report very strong or somewhat strong sense of belonging to local community	York Region’s Annual Community Opinion Report
	Quality of life	% of residents who rate quality of life in York Region as excellent or good	York Region’s Annual Community Opinion Report
Community Safety	Crime rate	Crime rate per 100,000 population	York Regional Police’s Annual Statistics Report
	Hate crime	Total # of hate crime incidents % of total hate crime incidents where principal motivation factor is race/ethnicity, religion, or sexual orientation	York Regional Police’s Annual Statistics Report
	Perception of safety	% of residents who rate York Region as a very or somewhat safe place to live	York Region’s Annual Community Opinion Report
Mental Health	Self-reported mental health status	% of residents who rate their mental health as very good or excellent	Canadian Community Health Survey
	Mental health-related dispatched calls for York Regional Police service	# of calls related to mental health and share of all dispatched calls for service	York Regional Police’s Annual Statistics Report
Housing Stability	Housing unaffordability	% of tenant and owner households spending 30% or more of total household income on shelter costs	Statistics Canada’s Census
	Core housing need	% of tenant and owner households living in core housing need	Statistics Canada’s Census
	Perception of housing unaffordability	% of residents who report somewhat or strongly disagree that they can afford housing in York Region	York Region’s Annual Community Opinion Report
Economic Stability	Low income	% of residents who are living with low-income	Statistics Canada’s Centre for Income and Socioeconomic Well-being Statistics, T1 Family Files
	Unemployment rate	% of labour force who are unemployed	Statistics Canada’s Labour Force Survey
	Perception of personal financial situation	% of residents who report their personal financial situation is a lot or a bit better than last year	York Region’s Annual Community Opinion Report

*Note: Indicators may be revised (e.g., new metrics introduced that better capture progress and outcomes, both across the Region and in the focus areas) as the Plan is rolled out.

To follow progress and for more information, please visit York Region’s Community Safety and Well-Being Plan [website](#).

05

Conclusion

York Region's first Community Safety and Well-Being Plan benefits from the valuable insights and experiences of several partners across the human services sector who recognize the important need for collaborative planning and efforts to enhance resident and community safety and well-being.

The Plan provides a solid foundation for proactive, locally-driven, targeted actions that respond to the unique and evolving needs and build on the strengths of York Region's diverse and thriving communities.

Looking ahead, the Plan includes an implementation pathway that leverages the momentum we have established for collective impact, bringing together partners and mobilizing resources to implement actions that will make a positive difference in York Region's communities. As we implement the Plan, we will monitor promising practices, learn from them and look to scale them up to other communities and contexts.

We will rely on data, evidence and results of the actions we and our partners undertake to review and update the Plan regularly, and make sure it continues to respond to changing needs as we continue to foster strong, safe, caring communities in York Region.



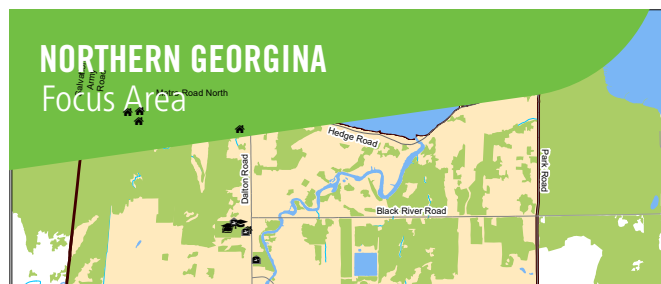
06 APPENDICES

Community Action Plans 2022 - 2026

Community Action Plans have been developed by each Community Action Table, which includes residents, community agencies, municipal and police staff, and other stakeholders. The Action Plans identify initiatives that can be implemented within each focus area. The initiatives are intended to address priority needs identified by the community, foster engagement, collaboration and partnerships, and improve quality and access to services residents need.

Some of the initiatives in the Community Action Plans will be implemented more immediately, building on planning and initial actions that are already underway. As community partners work together to move actions from the idea stage to the implementation stage, residents can expect to see and benefit from these early initiatives (identified as "Early Actions for 2022", towards the end of each Community Action Plan section), paving the way for more activities as the Community Safety and Well-Being Plan rolls out.

APPENDIX 1



Community Action Table Partners

- ACCES Employment
- CAYR Community Connections
- Community Action Program for Children (CAPC)
- Family Services York Region
- Job Skills
- JVS Toronto
- Routes Connecting Communities
- Residents
- Sandgate Women's Shelter of York Region
- Social Planning Council York Region
- Southlake Community Ontario Health Team
- The Town of Georgina
- York Region District School Board
- York Region Transit
- York Regional Police
- York University

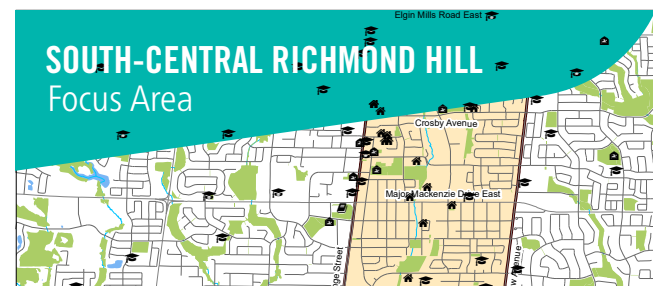
APPENDIX 2



Community Action Table Partners

- Blue Door
- Canadian Mental Health Association York Region and South Simcoe
- John Howard Society of York Region
- Krasman Centre
- LOFT Community Services/Crosslinks
- Newmarket African Caribbean Canadian Association
- Newmarket Church of Christ
- Maple Leaf Public School
- Residents
- Social Planning Council York Region
- Southlake Community Ontario Health Team
- The Town of Newmarket
- United Way Greater Toronto
- York Region District School Board
- York Regional Police
- York Support Services Network

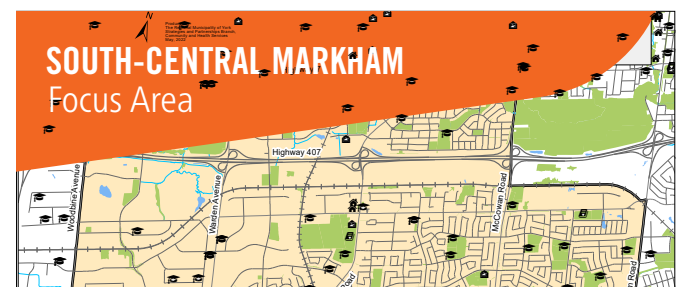
APPENDIX 3



Community Action Table Partners

- 360°Kids
- Autism Ontario
- Blue Door
- Canadian Centre for Men and Families
- Canadian Mental Health Association York Region and South Simcoe
- Catholic Community Services of York Region
- Centre of Equality Rights in Accommodation
- CHATS-Community & Home Assistance to Seniors
- Family Services York Region
- Home on the Hill Supportive Housing and Services
- Krasman Centre
- L'Arche Daybreak
- OnRichmond Hill
- Residents
- Richmond Hill Online Resident Community
- Richmond Hill Umbrella Residents Group
- Richmond Hill United Church
- The City of Richmond Hill
- United Way Greater Toronto
- Village of Richmond Hill Business Improvement Area
- Welcome Centre Immigrant Services
- York Region District School Board
- York Regional Police
- York Support Services Network

APPENDIX 4



Community Action Table Partners

- 105 Gibson Centre
- 360°Kids
- Agincourt Community Services Association
- Canadian Mental Health Association York Region and South Simcoe
- Care First Ontario
- Centre for Immigrant and Community Services
- Centre of Equality Rights in Accommodation
- Ebenezer United Church
- Family Services York Region
- John Howard Society of York Region
- Markham Stouffville Hospital
- Residents
- Social Services Network
- The City of Markham
- The Cross-Cultural Community Services Association
- United Way Greater Toronto
- Volunteer Markham
- Yellow Brick House
- York Catholic District School Board
- York Region District School Board
- York Regional Police
- York University



NORTHERN GEORGINA

Community Profile



Northern Georgina (NG) is a community of 6,826 people. Data shows that there is a high population of seniors (65+). Residents tend to report poor overall health in this area, and it can be difficult to access health services without a car. There is a high percentage of Indigenous people compared to the York Region average. While residents in this area tend to have a diploma, certificate or degree, the percentage of residents living with low income is relatively high.

Population



BY AGE

	YR	NG
0-14	17.6%	14.5%
15-24	13.2%	10.2%
25-54	41.4%	37.4%
55-64	13.2%	16.0%
65+	14.6%	21.7%



CITIZENSHIP STATUS



All data covered in this profile is from Statistics Canada, 2016 Census.

KNOWLEDGE OF OFFICIAL LANGUAGES

	YR	NG
English Only	87.7%	94.5%
French Only	0%	0%
English & French	6.6%	4.8%
No English or French	5.6%	0.7%

TOP 5 NON-OFFICIAL LANGUAGES SPOKEN MOST OFTEN AT HOME

Russian Mandarin Cantonese Tamil Gujarati

Housing

HOUSING OWNERSHIP

	YR	NG
Owned Households	85.8%	81.5%
Tenant Households	14.2%	18.5%

SELECTED FAMILY CHARACTERISTICS

	YR	NG
Lone-Parent Households	13.8%	18.9%
Multiple Family Households	5.7%	2.6%

AVERAGE NUMBER OF PEOPLE PER HOUSEHOLD

York Region	North Georgina
3.1	2.4

% PAYING 30% OR MORE ON HOUSING

	YR	NG
Owned Households	28.1%	27%
Tenant Households	51.8%	57%

RESIDENTS RECEIVING SOCIAL ASSISTANCE BENEFITS

YR	NG
4.5%	7.1%

Income



LOW INCOME RESIDENTS

York Region	North Georgina
16.9%	20.4%

Education

AGED 25-64 YEARS

	YR	NG
Less than High School	7.5%	14%
High School or Equivalent	19.5%	30%
Post-Secondary Certificate Diploma or Degree	73%	56%

All data covered in this profile is from Statistics Canada, 2016 Census.

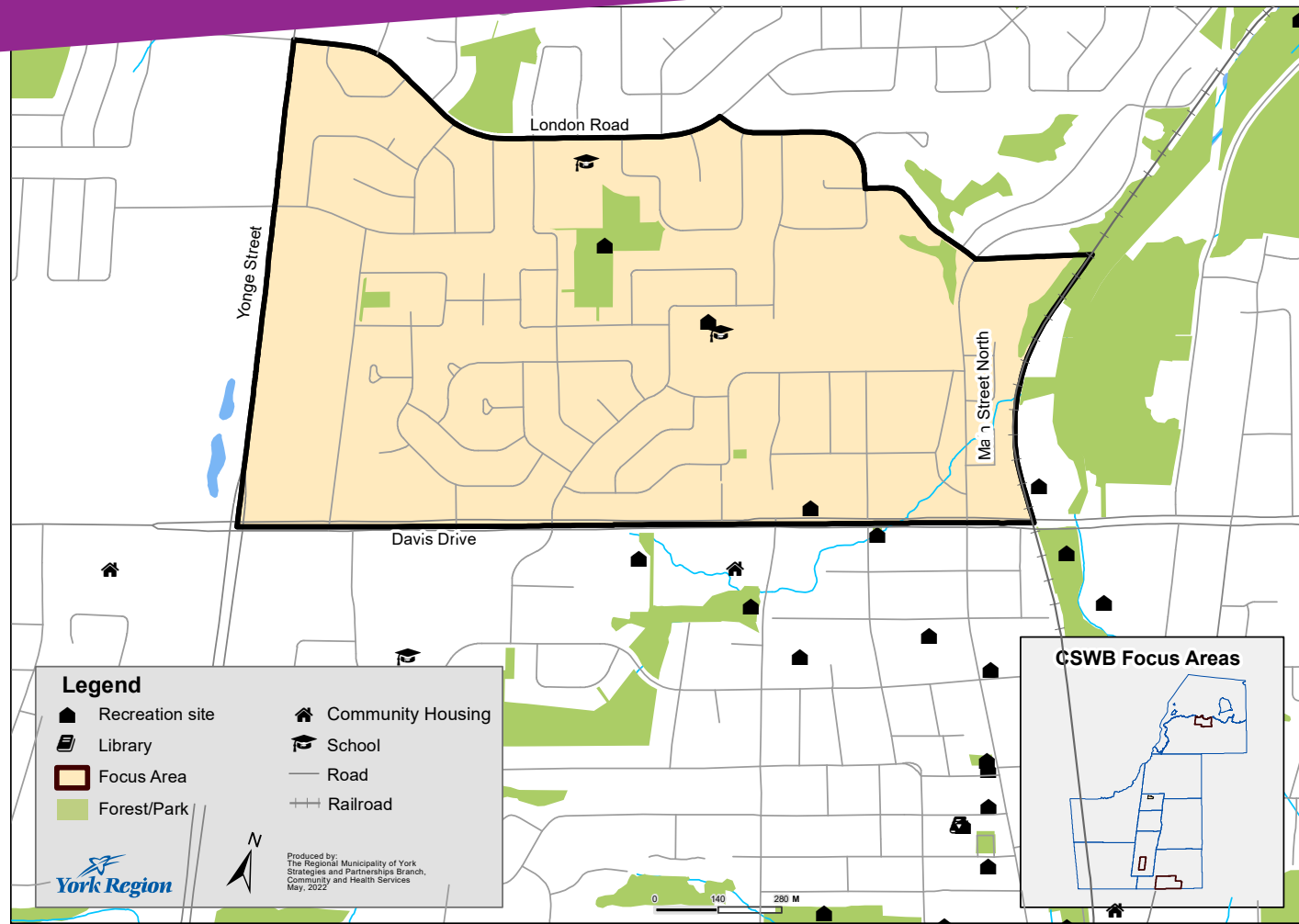
Northern Georgina - Community Action Plan 2022 to 2026

Actions*	ST	MT	LT
Mental Well-Being			
1. Conduct a resident mental well-being survey to inform community projects and service delivery	●		
2. Create and maintain a community resource Asset Map	●		
3. Share resources to increase access to information and connections to mental health supports	●		
4. Improve coordination and integration of services with established community networks	●		
5. Build partnerships across the focus area for referrals and supports	●		
6. Build Resident-led Ambassador Groups to encourage resident participation in CAT actions	●		
7. Host social and cultural inclusion activities (e.g., community kitchens, free tax clinics, festivals, peer-support groups, and coffee chats for parents)	●		
8. Create Youth Peer Support Teams in local high schools		●	
9. Partner with school boards to explore opportunities to address mental well-being			●
10. Offer Mental Health First Aid Training in a variety of community settings		●	
11. Create more in-person Substance Use and Addiction Workshops		●	
12. Explore opportunities to increase access to the Parent Support Program		●	
13. Explore opportunities to offer Grief Counselling Training to community and grassroots organizations		●	
14. Explore options to increase Mental Health Workers in the community			●
15. Explore alternative funding and service models for mental health			●
16. Develop a Food Program model that adapts to cultures, offering diverse foods		●	
17. Partner with local farmers to address local food security			●
18. Find more accessible spaces for communities (e.g., community gardens)		●	
19. Explore expanding accessible transportation in Georgina			●
Economic Stability			
20. Work with local service providers to review and strengthen culturally-relevant services, including delivery in multiple languages	●		
21. Host Employment Readiness Workshops with a focus on transitional supports, coaching, interview skills, and resume writing	●		
22. Develop Employment Training and Support Program for people living with developmental/mental health issues	●		
23. Conduct Employer Workshops with a focus on preparing the workplace for a diverse range of workers (e.g., youth, women, Indigenous, newcomer, etc.) and job shadowing/coaching opportunities	●		
24. Sponsor/support local Job Fairs	●		
25. Establish partnerships to promote local job creation including youth employment opportunities	●		
26. Create Pathways Programs for Youth to explore higher education and pathways to employment		●	
27. Develop Youth Peer Mentorship Program		●	
28. Explore developing Youth Business Program with partners		●	
29. Host Career Training Workshops targeted for young women		●	
30. Explore Paid Internship/Apprenticeship Program with schools and colleges		●	
31. Explore developing a program to support single mothers to obtain education and employment			●
32. Conduct a feasibility study for the creation of a Working Centre for Northern Georgina	●		
33. Advocate for work incentives/bonus to start work		●	
34. Advocate for a livable wage			●
35. Partner with stakeholders on transportation for employment reasons, incentives for hiring locally, training and apprenticeship programs for skilled workers, and subsidies for working mothers			●

*Short-term (ST) actions are intended to be initiated in the focus area within the first year of the 4-year planning cycle, medium-term (MT) within 2 years, long-term (LT) within the last 3-4 years. Once initiated, actions may be ongoing. Details on how the CAT will deliver some early actions in 2022 can be found on the next page.

Northern Georgina - Early Actions for 2022

Action	Action Description	Performance Measures
Mental Well-Being		
Mental Well-being Engagement Events	Through the provision of community kitchens, tax clinics, weekly community luncheons, and festivals, residents will receive resources to improve awareness of community services available throughout Georgina.	# residents and partners engaged # events
Youth Peer Support Teams in Schools	Through the identification, training and support of youth peer workers, the youth peer support teams will hold monthly awareness building sessions in the local community.	# peer workers recruited and trained # youth engaged # sessions
Enhanced Community Resource Asset Map	Raise awareness of resources and supports available in Georgina through the creation and maintenance of a resource asset map. Community ambassadors and other resident leaders will lead this project, including the development of a marketing strategy.	# resources identified # focus groups # surveys administered # sessions # residents engaged
Economic Stability		
Community Job Fairs	Coordinate with agencies hosting job fairs, collaborate to host a larger Spring and Fall job fair. Create and implement a marketing strategy using community ambassadors to promote the job fairs.	# employers recruited # residents participated # partners engaged - Surveys pre and post job fair - resident participants - Surveys pre and post job fair - employer participants
Employment Readiness Workshops	Host workshops for local residents focused on transitional supports, coaching, interview skills, resume preparation etc., to increase the likelihood of job seekers finding meaningful employment.	# residents trained # residents and partners engaged # workshops
Employers Workshops	Host workshops with a focus on preparing the workplace for a diverse range of workers (i.e., youth, women, Indigenous peoples, newcomers, mature job seekers). Local employers will gain an understanding of barriers and/or gaps in their workplaces.	# workshops # employers surveyed and trained - Greater than 80% of the employers participating in the workshop express a greater understanding of how to better prepare their workplace for a diverse range of workers
Feasibility Study	Conduct research (site visits and interviews) on Working Centre models across Ontario. The research will explore the establishment of a multi-service Working Centre in North Georgina that will provide a variety of services/programs to support socio-economic needs. Residents will provide input and develop ownership on the approach for a future organization aimed to assist them with their basic needs (food, employment, participation, training, advocacy, etc.).	# residents engaged Final report developed



Central Newmarket (CN) is a community of 4,978 people. Data shows that the largest age group is adults aged 25 to 54. A high percentage of Indigenous people live in this area compared to the York Region average. The number of lone-parent families is higher than the York Region average. Renter households are three times higher (46.2%) than the York Region average (14.2%). Approximately 83% have high school or equivalent education..

Population

York Region **TOTAL** 1,109,909

CENTRAL NEWMARKET **4,978**

BY AGE

	YR	CN
0-14	17.6%	15.1%
15-24	13.2%	13.2%
25-54	41.4%	41.6%
55-64	13.2%	15.4%
65+	14.6%	14.9%

% OF INDIGENOUS PERSONS

YR **0.5%**

CN **2.2%**

CITIZENSHIP STATUS

YR	90.2%	9.8%
CN	95.3%	4.7%

SELF-IDENTIFIED VISIBLE MINORITIES **16%**

All data covered in this profile is from Statistics Canada, 2016 Census.

KNOWLEDGE OF OFFICIAL LANGUAGES

	YR	CN
English Only	87.7%	93.3%
French Only	0%	0%
English & French	6.6%	5.5%
No English or French	5.6%	1.1%

TOP 5 NON-OFFICIAL LANGUAGES SPOKEN MOST OFTEN AT HOME

Persian Spanish Tagalog Khmer Russian

Housing

HOUSING OWNERSHIP

	YR	CN
Owned Households	85.8%	53.8%
Tenant Households	14.2%	46.2%

SELECTED FAMILY CHARACTERISTICS

	YR	CN
Lone-Parent Households	13.8%	17.7%
Multiple Family Households	5.7%	3.2%

AVERAGE NUMBER OF PEOPLE PER HOUSEHOLD

York Region **3.1**

Central Newmarket **2.6**

% PAYING 30% OR MORE ON HOUSING

	YR	CN
Owned Households	28.1%	20%
Tenant Households	51.8%	47%

RESIDENTS RECEIVING SOCIAL ASSISTANCE BENEFITS YR **4.5%** CN **10.4%**

Income

AVERAGE INDIVIDUAL INCOME

YR **\$50,997**

CN **\$41,425**

LOW INCOME RESIDENTS

York Region **16.9%**

Central Newmarket **18.7%**

Education

AGED 25-64 YEARS

	YR	CN
Less than High School	7.5%	17%
High School or Equivalent	19.5%	30.9%
Post-Secondary Certificate Diploma or Degree	73%	52.1%

All data covered in this profile is from Statistics Canada, 2016 Census.

Central Newmarket - Community Action Plan 2022 to 2026

Actions*	ST	MT	LT
Mental Well-Being			
1. Create a Community Bulletin Board Program to provide frequent updates on community programs	●		
2. Create and maintain a community resource Asset Map	●		
3. Develop a Service Fair Roadshow to support access and awareness of services	●		
4. Develop a Resident Champion Program to provide education and mentoring for service navigation		●	
5. Develop self-serve program to improve service navigation (e.g., hotline, directory for mental health and housing, which are the priority risks in this focus area)		●	
6. Create community connections and host mental health events in collaboration with partners	●		
7. Create child/youth-specific community programming with schools to support after-school engagement		●	
8. Explore options to provide additional interpretation services (e.g., for parents to connect with teachers) and increase culturally-accessible information (e.g., translation services)	●		
9. Engage youth in opportunities to volunteer and offer support to the community		●	
10. Create peer/community mentorship opportunities to share skills, and encourage learning	●		
11. Host workshops to support skill building and community learning (e.g., CPR, financial planning, etc.)	●		
12. Adapt available spaces for multi-use (e.g., using school yard for community ice rink, parking lot for events)	●		
13. Increase access to recreation programming and space		●	
14. Increase access to green spaces to connect residents		●	
15. Explore using the Street Outreach Van to offer new services (e.g., clinician support)		●	
16. Increase affordable transit (e.g., funding additional routes to key community resources such as food pantry, community centres, etc.)		●	
17. Assess need and options to increase street lighting to promote safe pedestrian engagement	●		
Housing Stability			
18. Provide education/awareness workshops (e.g., legal clinic, financial literacy, tenant rights, etc.)	●		
19. Explore partnerships to support residents to understand their housing options	●		
20. Identify people at risk and make connections to them (e.g., referral system to support proactive outreach)	●		
21. Increase availability of Housing Support Service Workers to help residents navigate and access services		●	
22. Create a centralized community hub for social services which addresses short and long-term needs			●
23. Explore Roommate Connector Program to support safe and effective roommate matching		●	
24. Explore shared living space programs (e.g., with seniors and youth) and options to adopt and support symbiotic relationships			●
25. Explore options to help landlords increase building maintenance quality	●		
26. Explore options to support privacy in congregate living settings	●		
27. Collaborate with partners to understand barriers to increasing housing supply and Advocate for change (e.g., housing coalition, new affordable housing, by-laws to regulate accessible housing processes)			●
28. Increase safety monitoring of neighbourhood (e.g., implement Community Watch Program to complement police services)		●	
29. Explore opportunities to improve safer living and community spaces		●	
30. Enhance supports for vulnerable residents (e.g., childcare signup, meal delivery, Tool Lending Program)		●	
31. Partner with local farmers/grocery stores to create low-cost food access opportunities (e.g., farmers market at school parking lot)		●	
32. Support vulnerable residents by exploring options to increase access to cell phones with prepaid minutes and food gift cards	●		
33. Increase access to resources through additional mobility shuttles and service locations		●	

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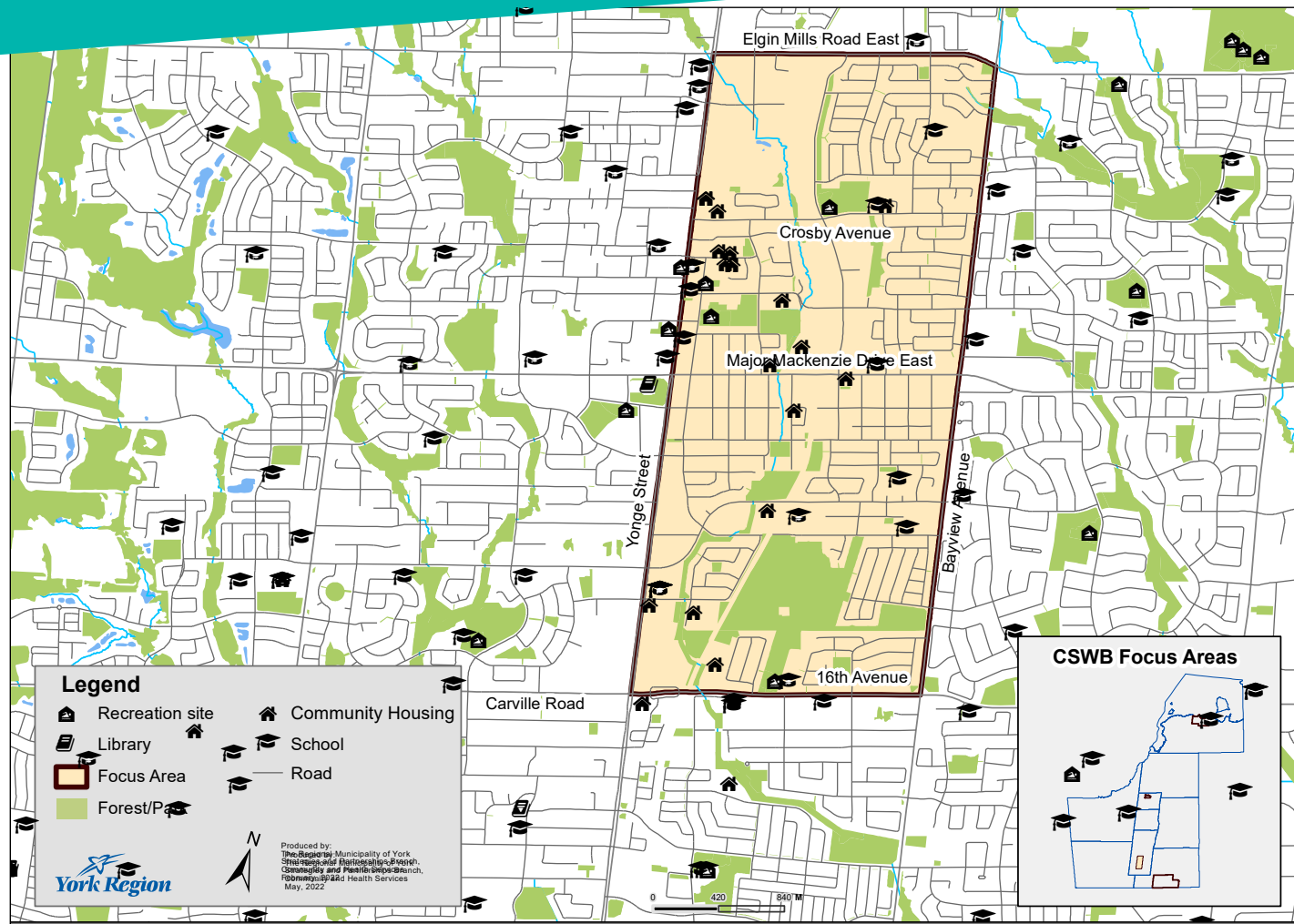
Central Newmarket - Early Actions for 2022

Action	Action Description	Performance Measures
Mental Well-Being		
Child Focused Mental Wellness Awareness Workshops	Organize and facilitate mental health workshops with accompanying resources (i.e., for service navigation) for students at local schools (e.g., Maple Leaf Public School and Canadian Martyrs Catholic Elementary School).	# partners, children, teachers engaged # workshops
Adult Focused Service Navigation Workshop Series	Organize and facilitate a service navigation workshop series for community residents. Workshop will take place at upcoming community events and in existing community programs.	# partners, residents engaged # workshops # of different events and programs where workshops were held
Senior Focused Service Navigation Workshop Series	Organize and facilitate workshops for seniors with accompanying resources (e.g., for service navigation) at a location in the community (e.g., Newmarket Senior's Meeting Place, Chartwell Alexander Muir Retirement).	# partners, residents engaged # workshops # of locations where workshops were held
Housing Stability		
Community-based Housing Supports Drop-Ins	Arrange community-based service providers to set-up a booth at upcoming community events and community programs to hold drop-in support sessions.	# partners, residents engaged # support sessions # of different events and programs where sessions were held
Housing Rights Community Information Session	Organize and facilitate multiple information sessions for residents about housing rights and options across the community. Through this initiative, there will be increased knowledge, understanding and access to relevant resources for community members related to housing information and essential needs through providing information as well as onsite direct referrals and connections to services.	# partners, residents engaged # workshops
Community Financial Literacy Education Sessions and Community Led Free Tax Clinics	Host education sessions aimed at increasing understanding of financial literacy and supports, to increase knowledge about existing community-based service providers as well as to assist people with tax filing and problem-solving with the goal of increasing household finances from tax benefits.	# partners, residents engaged # financial literacy workshops # tax clinics

APPENDIX 3

SOUTH-CENTRAL RICHMOND HILL

Community Profile



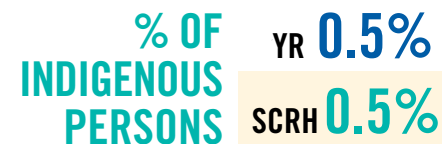
South-central Richmond Hill (SCRH) is a community of 25,988 people. Data shows that the largest age group is adults aged 25 to 54. There is a high population of seniors (65+), and the number of lone-parent families is higher than the York Region average. While residents in this area tend to have a diploma, certificate or degree, the percentage of residents living with low income is relatively high, suggesting that some residents may be underemployed.

Population



BY AGE

YR	SCRH
17.6%	13.4%
13.2%	11.8%
41.4%	40.3%
13.2%	14.1%
14.6%	20.4%



CITIZENSHIP STATUS



All data covered in this profile is from Statistics Canada, 2016 Census.

KNOWLEDGE OF OFFICIAL LANGUAGES

	YR	SCRH
English Only	87.7%	87.2%
French Only	0%	0.1%
English & French	6.6%	6.7%
No English or French	5.6%	6.0%

TOP 5 NON-OFFICIAL LANGUAGES SPOKEN MOST OFTEN AT HOME

Persian Cantonese Russian Mandarin Arabic

Housing

HOUSING OWNERSHIP

	YR	SCRH
Owned Households	85.8%	57.9%
Tenant Households	14.2%	42.2%

AVERAGE NUMBER OF PEOPLE PER HOUSEHOLD

York Region	South-central Richmond Hill
3.1	2.4

SELECTED FAMILY CHARACTERISTICS

	YR	SCRH
Lone-Parent Households	13.8%	15.7%
Multiple Family Households	5.7%	2.8%

% PAYING 30% OR MORE ON HOUSING

	YR	SCRH
Owned Households	28.1%	36.8%
Tenant Households	51.8%	51.2%

RESIDENTS RECEIVING SOCIAL ASSISTANCE BENEFITS

YR	SCRH
4.5%	10.4%

Income



LOW INCOME RESIDENTS

York Region	South-central Richmond Hill
16.9%	25.9%

Education

AGED 25-64 YEARS

	YR	SCRH
Less than High School	7.5%	8.7%
High School or Equivalent	19.5%	23.1%
Post-Secondary Certificate Diploma or Degree	73%	68.2%

All data covered in this profile is from Statistics Canada, 2016 Census.

South-central Richmond Hill - Community Action Plan 2022 to 2026

Actions*	ST	MT	LT
Mental Well-Being			
1. Finalize and maintain a comprehensive asset map of services to share with residents and partners	●		
2. Examine and support how institutions and organizations are making their services culturally-relevant (e.g., race, language, ethnicity)	●		
3. Explore options for increasing culturally-accessible information (e.g., translation services)	●		
4. Create list of community spaces available for community use	●		
5. Create a Community Bulletin Board Program to provide frequent updates regarding community programs and services	●		
6. Develop Mobile Service Program to better coordinate services with partners and build resident awareness of resources and services	●		
7. Develop Little Libraries and arts programs to connect with residents	●		
8. Implement youth and other community engagement events about mental health and substance use	●		
9. Use community gardens and green spaces to connect with residents	●		
10. Increase low-cost/free Recreation Programming for youth and adults			●
11. Negotiate use of space to offer services (e.g., library, mall)	●		
12. Examine, co-create, and execute a culturally-relevant Campaign that can reframe mental health as health (e.g., public awareness/anti-stigma, education to support mental health literacy for all)			●
13. Increase availability and visibility of Support Workers within the community		●	
14. Expand Food Donation and Delivery programs to support food stability	●		
15. Identify local shower facilities for people experiencing homelessness	●		
16. Explore need for and possible locations of Safe Injection Sites and Needle Exchange	●		
17. Increase safety monitoring of neighbourhood (e.g., implementing trauma-informed Community Watch Program to complement police services)		●	
18. Examine options for increased Street Lighting at night	●		
19. Increase LGBTQ2+ signage throughout community	●		
Housing Stability			
20. Provide education/awareness workshops, and develop and deliver communication campaigns to improve awareness of housing supports (e.g., legal clinic, financial literacy, tenant rights)	●		
21. Identify people at risk and make connections to them (e.g., referral system to support outreach)	●		
22. Explore developing Roommate Connector Program to support safe and effective roommate matching		●	
23. Increase availability of Housing Support Workers to help residents navigate and access services		●	
24. Enhance supports for vulnerable residents (e.g., sign-up for childcare, meal delivery shifts, community Tool Lending Program)		●	
25. Collaborate with partners to understand barriers to increasing housing supply and advocate for change (e.g., housing coalition, new affordable housing options, by-laws to regulate accessible housing)			●
26. Explore options to work with partners to improve housing quality (e.g., Landlord Education and Maintenance Incentives)			●

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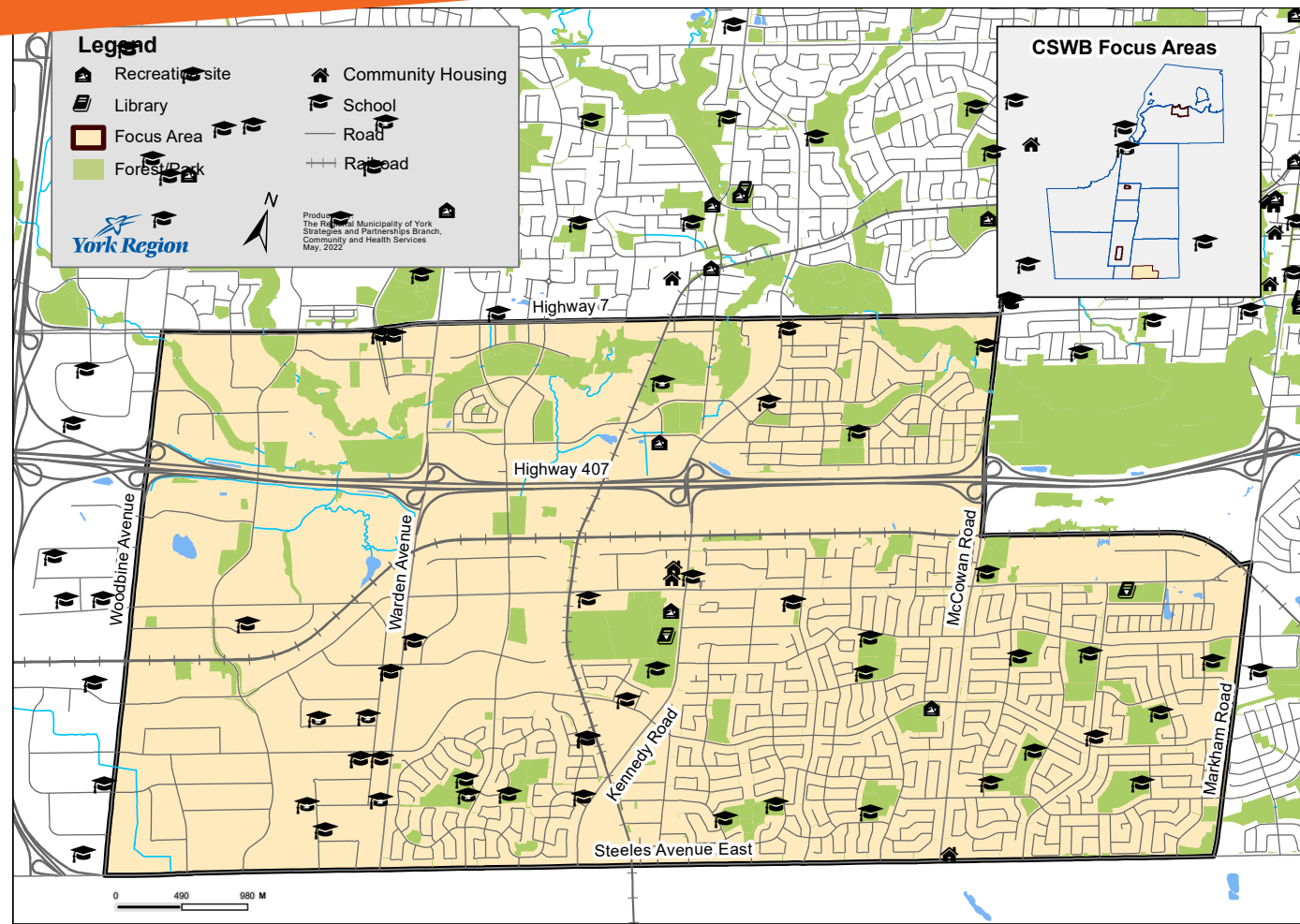
South-central Richmond Hill Early Actions for 2022

Action	Action Description	Performance Measures
Mental Well-Being		
Community Photography Contest	<p>This project aims to promote connection to community and belonging through engaging residents in a photography contest within their neighbourhood, asking them to "show us what makes you feel at home in Richmond Hill".</p> <p>This project will increase community resident engagement, connection to community and sense of belonging through participating in the contest via submissions, voting and experiencing displays. Ten viewing locations of submissions will be created with community partners.</p>	<p># submissions</p> <p># residents and partners engaged</p>
Youth Mental Health Workshop Series	Deliver Mental Health for Youth Workshops, to youth and school staff, to better support youth mental health. CAT partners will engage peer support/individuals with lived experience to support workshop content/delivery.	<p># partners, youth, teachers and community staff engaged</p> <p># workshops</p>
Housing Stability		
Housing Stability Education Week	Organize and facilitate multiple information sessions for residents about housing rights and options across the community. A locally driven marketing strategy will be created.	<p># partners, residents engaged</p> <p># support sessions</p> <p># of different events and programs where sessions were held</p>
Community-based Housing Supports Drop-Ins	Arrange community-based service providers to set-up a booth at upcoming community events and community programs to hold drop-in support sessions.	<p># support sessions</p> <p># residents and partners engaged</p> <p># of different events and programs where booths were set-up</p>
Creation of Language Friendly Housing Information Tools	Increase access to information about housing supports, options and rights by removing language barriers. Partners will identify top languages spoken in the focus area and utilize residents to identify trusted resources needing translation.	<p># residents engaged</p> <p># tools translated</p> <p># languages the tools were translated into</p>
Multi-Lingual Online Community Awareness Campaign	Community awareness campaign to inform residents where to find information about housing rights and options and connect with supports.	<p>Creation of Facebook advertisement campaign</p> <p># residents and partners engaged</p>

APPENDIX 4

SOUTH-CENTRAL MARKHAM

Community Profile



South-central Markham (SCM) is a community of 79,561 people. Data shows that the largest age group is adults aged 25 to 54. Almost 93% of residents self-identify as visible minorities. The number of residents without knowledge of either of Canada's official languages is 12 percentage points higher than the York Region average, which may contribute to social/cultural isolation. Additionally, almost 29% of the population in this area lives with low income.

Population

York Region TOTAL 1,109,909

SOUTH-CENTRAL MARKHAM 79,561

BY AGE

	YR	SCM
0-14	17.6%	14.6%
15-24	13.2%	13.7%
25-54	41.4%	42.4%
55-64	13.2%	14.3%
65+	14.6%	14.9%

% OF INDIGENOUS PERSONS

YR 0.5%

SCM 0.2%

CITIZENSHIP STATUS



SELF-IDENTIFIED VISIBLE MINORITIES 92.8%

All data covered in this profile is from Statistics Canada, 2016 Census.

KNOWLEDGE OF OFFICIAL LANGUAGES

	YR	SCM
English Only	87.7%	78.8%
French Only	0%	0.1%
English & French	6.6%	3.5%
No English or French	5.6%	17.7%

TOP 5 NON-OFFICIAL LANGUAGES SPOKEN MOST OFTEN AT HOME

Cantonese Mandarin Tamil Urdu Punjabi

Housing

AVERAGE NUMBER OF PEOPLE PER HOUSEHOLD

York Region	South-central Markham
3.1	3.5

HOUSING OWNERSHIP

	YR	SCM
Owned Households	85.8%	81%
Tenant Households	14.2%	19%

% PAYING 30% OR MORE ON HOUSING

	YR	SCM
Owned Households	28.1%	36.4%
Tenant Households	51.8%	49.8%

SELECTED FAMILY CHARACTERISTICS

	YR	SCM
Lone-Parent Households	13.8%	16.2%
Multiple Family Households	5.7%	15.5%

RESIDENTS RECEIVING SOCIAL ASSISTANCE BENEFITS

YR	SCM
4.5%	6.5%

Income

AVERAGE INDIVIDUAL INCOME

YR	SCM
\$50,997	\$33,867

LOW INCOME RESIDENTS

York Region	South-central Markham
16.9%	28.8%

Education

AGED 25-64 YEARS

	YR	SCM
Less than High School	7.5%	27.1%
High School or Equivalent	19.5%	28.3%
Post-Secondary Certificate Diploma or Degree	73%	51.4%

All data covered in this profile is from Statistics Canada, 2016 Census.

South-central Markham - Community Action Plan 2022 to 2026

Actions*	ST	MT	LT
Mental Well-Being			
1. Conduct asset mapping to create an inventory of services and identify those that are culturally specific	●		
2. Implement a communication strategy to raise awareness of services and service navigation tools, such as FindHelp Information Services (211) and York Region's Access York	●		
3. Engage residents of all cultures to better understand and address barriers to service access	●		
4. Explore the use of community space for programs and networking		●	
5. Help residents find services by creating a System Navigator role		●	
6. Find a centralized place where the System Navigator can connect residents to services		●	
7. Develop or enhance existing Student and Parent Ambassador Programs to support service navigation and build connections		●	
8. Enhance service coordination between community partners to support warm transfers			●
9. Host focus groups with service providers to develop new models of virtual/in-person service delivery	●		
10. Work with service providers to improve triage, reduce waitlists and provide rapid follow-up supports			●
11. Reduce stigma around mental well-being through public education and awareness		●	
12. Host events to bring people together and improve the community's sense of belonging	●		
13. Identify and understand relationships across cultures (resident to resident) and develop a Culturally Diverse Stories Project about mental wellness	●		
14. Strengthen partnerships with faith-based and cultural organizations to better engage the community			●
15. Build resident civic engagement skills	●		
16. Advocate/create/support opportunities for community agencies and residents to participate in government decision-making			●
Housing Stability			
17. Create a platform to improve community outreach using social media		●	
18. Share information on resources and services at existing hubs, faith-based centres and libraries	●		
19. Educate tenants on their rights and build awareness of eviction prevention programs	●		
20. Host education and awareness building sessions on housing issues, (e.g., documenting lived experiences along the housing continuum)	●		
21. Examine service pathways to better understand and address barriers	●		
22. Initiate a Community Watch Program for vulnerable populations to complement police services		●	
23. Create opportunities for tenant-led initiatives and resident capacity building	●		
24. Conduct research to better understand issues surrounding second suite apartments	●		
25. Explore the use of spare bedrooms for temporarily housing community members		●	
26. Explore what is the long-term effect on infrastructure, revenue generation, etc. with illegal rentals			●
27. Examine how to integrate Community Action Table work with other organizations that have similar mandates (e.g., Affordable Housing Coalition)	●		
28. Advocate to implement the Rights to Housing Framework and bylaws to support housing affordability		●	

*Short-term (ST) actions are intended to be initiated in the focus area within the first year of the 4-year planning cycle, medium-term (MT) within 2 years, long-term (LT) within the last 3-4 years. Once initiated, actions may be ongoing. Details on how the CAT will deliver some early actions in 2022 can be found on the next page.

South-central Markham – Early Actions for 2022

Action	Action Description	Performance Measures
Mental Well-Being		
Host focus groups with local service providers to develop new models of virtual/in-person service delivery	Engage residents and service providers to identify lessons learned and impacts of virtual mental health services. Create a best practice guide to support service providers in their planning as we transition out of COVID-19 response	# agencies engaged # residents engaged # of engagement sessions Development and distribution of best practice guide
Create an inventory and develop an ethno-specific service guide of mental well-being resources and services	Engage residents to learn about their experiences and knowledge of mental health and ethno-specific mental health services. Bring together York University research students/faculty, community ambassadors and agencies to support the creation of a community service guide	# of Outreach Activities # of residents engaged Development of Inventory, updated as appropriate # of residents engaged with service guide # of agencies engaged with service guide Development and distribution of service guide
Housing Stability		
Community Led Housing Stability Summit	Building off the annual City of Markham Housing Summit, host a Community Led Housing Summit, bringing together resident leaders, grassroots organizations for a day of action	# of grassroots organizations involved in planning # of grassroots organizations attended # of residents involved in planning # of residents attended # of agencies engaged/attending
Housing and Homelessness Awareness Building Campaign	Engage those with lived experience along the housing continuum through storytelling, where various materials will be created (e.g., videos, print, etc.) to raise awareness of these issues	# of Residents engaged in planning process # of residents reached # of materials/tools created and made available
Housing Support Workshops	Connect residents, partners and agencies to information about tenant rights and housing supports (e.g., eviction prevention and rent supplement programs)	# of workshops held # of residents reached # of partners engaged
Capacity Building to Support Civic Engagement	Build civic engagement skills to support community voices in informing policy decision making through workshops	# of workshops held # of residents reached # of partners engaged
Use community spaces, identified through asset mapping, for resident/grassroot developed engagement tools in relation to housing supports	Consolidate resources and services into one large poster/flyer foldout/visual which supports housing knowledge without taking away multiple program flyers	# of spaces utilized # of resources consolidated # of residents reached

APPENDIX 5

2019-2022 Human Services Planning Board
of York Region Membership**Regional Government Sector**

Wayne Emmerson, Chairman and Chief Executive Officer, The Regional Municipality of York

John Taylor, Mayor, Town of Newmarket

Mario Ferri, Regional Councillor, City of Vaughan

Jack Heath, Regional Councillor, City of Markham, (HSPB Co-Chair)

Education Sector

Eugene Pivato, Associate Director of Education, York Catholic District School Board

Cecil Roach, Associate Director of Education, Equitable Outcomes and Schools,
York Region District School Board

Dr. Rhonda L. Lenton, President and Vice-Chancellor, York University

Healthcare Sector

David Stolte, Vice President, Strategy and Redevelopment, Mackenzie Health

Rebecca Shields, Chief Executive Officer, Canadian Mental Health Association York Region
and South Simcoe, (HSPB Co-Chair)

Community Safety Sector

Chief Jim MacSween, York Regional Police

Jennifer Fang, The Regional Municipality of York Police Services Board

Non-Profit Community Organizations Investment Sector

Nation Cheong, Senior Vice President, Community Opportunities and Mobilization,
United Way Greater Toronto

Michael Braithwaite, Chief Executive Officer, Blue Door

Children, Youth and Family Services Sector

Clovis Grant, Chief Executive Officer, 360°kids

Dean Rokos, Chief Executive Officer, York Hills Centre for Children, Youth and Families

Seniors/Healthy Aging Sector

Christina Bisanz, Chief Executive Officer, CHATS-Community & Home Assistance to Seniors

Training-Education/Labour Market/Business Community Sector

Darryl Gray, Director, Education and Training, Toronto and Region Conservation Authority

Chris Emanuel, President and Chief Executive Officer, Newmarket Chamber of Commerce

Al Wilson, Executive Director, Workforce Planning Board of York Region

Community and Social Support Based-Services Sector

Christin Cullen, Executive Director, John Howard Society of York Region

Medhat Mahdy, President and Chief Executive Officer, YMCA of Greater Toronto

Liora Sobel, Executive Director, Women's Centre of York Region

Colleen Zakoor, Executive Director, Community Living Central York

Advisors and Resources

Charles Beer, Principal, Counsel Public Affairs

Debbie Gwilt-McPhail, Service Delivery Manager (Acting),
Ministry of Labour Labour, Training and Skills Development

Daryl Chong, President and Chief Executive Officer, Greater Toronto Apartment Association

Noor Din, Chief Executive Officer, Human Endeavour

Alfred Lam, Executive Director, Centre for Immigrant and Community Services

Nadia Venafro, Affordable Housing Consultant, Canada Mortgage and Housing Corporation



APPENDIX 6

Key Social Determinants of Health



End Notes

- i Ontario Ministry of the Solicitor General. Community safety and well-being planning framework: Booklet 3 – A shared commitments in Ontario. Retrieved from: <https://www.ontario.ca/document/community-safety-and-well-being-planning-framework-booklet-3-shared-commitment-ontario>
- ii Ontario Ministry of the Solicitor General. Community safety and well-being planning framework: Booklet 3 – A shared commitments in Ontario. Retrieved from: <https://www.ontario.ca/document/community-safety-and-well-being-planning-framework-booklet-3-shared-commitment-ontario>
- iii The Standing Senate Committee on Social Affairs, Science and Technology. (2009). Final Report of Senate Subcommittee on Population Health. A Healthy Productive Canada: a determinant of health approach. Retrieved from: <https://sencanada.ca/content/sen/committee/402/popu/rep/rephealth1jun09-e.pdf>
- iv Created by Public Health Ontario in partnership with St. Michael's Hospital
- v Queensland Government, Place-based approaches. Retrieved from: <https://www.chde.qld.gov.au/about/initiatives/place-based-approaches/place-based-approachesinformation-for-community-service-providers>
- vi World Health Organization. The Global Health Observatory, Health and Well-Being. Retrieved from: <https://www.who.int/data/gho/data/major-themes/health-and-well-being>
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Regional Council Decision - Long-Term Care Transformation: Second Draft National Standard

On May 26, 2022 Regional Council made the following decision:

1. Council, in its role as Committee of Management for York Region's long-term care homes, Newmarket Health Centre and Maple Health Centre, endorse staff feedback on draft national standards for the operations and infection, prevention and control of long-term care homes, provided in Attachment 1, submitted to the Canadian Standards Association Group on April 11, 2022
2. The Regional Clerk circulate this report to the local municipalities, York Region Members of Provincial Parliament and Members of Parliament, Minister of Long-Term Care, Minister of Health, Minister of Seniors and Accessibility, Ontario Health Central Region, Home and Community Care Support Services Central, Ontario Health Teams in York Region, AdvantAge Ontario, Ontario Long-Term Care Association and the Association of Municipalities of Ontario

The original staff report is attached for your information.

Please contact Lisa Gonsalves, General Manager, Paramedic and Seniors Services at 1-877-464-9675 ext. 72090 if you have any questions with respect to this matter.

Regards,

Christopher Raynor (he/him) | Regional Clerk, Regional Clerk's Office, Corporate Services Department

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
Community and Health Services
May 5, 2022

Report of the Commissioner of Community and Health Services

Long-Term Care Transformation: Second Draft National Standard

1. Recommendations

1. Council, in its role as Committee of Management for York Region's long-term care homes, Newmarket Health Centre and Maple Health Centre, endorse staff feedback on draft national standards for the operations and infection, prevention and control of long-term care homes, provided in Attachment 1, submitted to the Canadian Standards Association Group on April 11, 2022
2. The Regional Clerk circulate this report to the local municipalities, York Region Members of Provincial Parliament and Members of Parliament, Minister of Long-Term Care, Minister of Health, Minister of Seniors and Accessibility, Ontario Health Central Region, Home and Community Care Support Services Central, Ontario Health Teams in York Region, AdvantAge Ontario, Ontario Long-Term Care Association and the Association of Municipalities of Ontario

2. Summary

The federal government made a commitment in [2020](#) (Throne Speech) to “take any action it can to support seniors.” In response, the Standards Council of Canada, Health Standards Organization, and the Canadian Standards Association Group agreed to align to develop two new complementary national standards for long-term care that “would be shaped by the needs and voices of Canada’s long-term care home residents, workforce, local communities, as well as broader members of the public: 1) [CAN/HSO 21001:2022](#) Long-Term Care Services standard, and 2) [CSA Z8004: Operation and Infection Prevention and Control of Long-term Care Homes](#) (see Analysis section for more details on these organizations). In [April 2022](#), Council was provided with the Region’s submission on the first of the two draft national standards ([CAN/HSO 21001:2022](#) Long-Term Care Services standard). This report provides Council with a report on the second of the two national standards.

Key Points:

- The Canadian Standards Association Group released a draft national standard for long-term care ([CSA Z8004: Operation and Infection Prevention and Control of Long-term Care Homes](#)) on February 10, 2022, with feedback due by April 11, 2022

- Obtaining Council's endorsement of the Region's submission (Attachment 1) on the draft national standard prior to their submission was not possible due to the deadlines for feedback. The Canadian Standards Association Group could not accept additional commentary after the closing date

3. Background

York Region operates two of the 29 Long-Term Care Homes in the Region

York Region operates two long-term care homes, Maple Health Centre and Newmarket Health Centre, with a total of 232 beds (5.7% beds).

Table 1
Long-Term Care Homes Operated in York Region

Operator Type	Number of Homes	Approximate Number of Beds*
Private	14	1,701
Not-For-Profit	13	2,108
Municipal	2	232
Total	29	4,041

* Includes 320 new beds at Mon Sheong ([Stouffville 1](#)) completed in September 2021

York Region has been influential in advocating for legislative and regulatory changes in the long-term care sector at both provincial and federal levels

The long-term care sector is undergoing a significant period of transformation in response to longstanding challenges and issues magnified by the COVID-19 Pandemic. A report to Council [April 2022](#) provided a summary of this work to date.

Standards for the Operations and Infection Prevention and Control of Long-Term Care Homes is the second of two draft National Standards issued

The Standards Council of Canada accredits standards development organizations and coordinates Canada's input in international standardization work. Both the Health Standards Organization (described in the [April 2022](#) report to Council) and the [Canadian Standards Association](#) Group are accredited as Standards Development Organizations with the Standards Council of Canada.

The Health Standards Organization released the first of two draft national standards for long-term care ([CAN/HSO 21001:2022](#) Long-Term Care Services) on January 28, 2022. The Region responded to this on by March 27, 2022 (April 2022 [Attachment 2](#)).

On February 10, 2022, the Canadian Standards Association Group issued the second of the two national standards ([CSA Z8004: Operation and Infection Prevention and Control of Long-term Care Homes](#)). The new standard provides over 500 recommendations for the safe operation and infection prevention and control of long-term care homes.

CSA Z8004 provides guidance on safe operating practices, design, and infection prevention and control in long-term care homes while incorporating a people centred perspective. The Standard takes into consideration what is required during normal, day to day circumstances, as well as in the occurrence of catastrophic events such as epidemics, and pandemics. CSA Z8004 does not cover administrative topics such as pricing, insurance or reimbursement nor does it address matters related to medical practice, professional obligations, resident care, and services (such as bathing frequency, feeding and assistive measures, quality indicators for care, dementia and age friendly care).

4. Analysis

Draft National Standards for the Operations and Infection Prevention and Control of Long-Term Care Homes broadly align with existing accreditation standards but need funding and Provincial support ahead of implementation

Our Homes are accredited through the Commission on Accreditation of Rehabilitation Facilities. The new draft National Standard developed by the Canadian Standards Association Group's references the Commission on Accreditation of Rehabilitation 2021 Aging Services Manual. As the Region's Homes are [accredited](#) with the Commission on Accreditation of Rehabilitation Facilities, they are well positioned to meet these National Standards if they become a mandatory requirement.

The draft national standards prepared by these two organizations are not federally or provincially legislated at this time and there is no immediate impact on the operations of our long-term care Homes or members of the Committee of Management (Regional Council). Implementing either or both national standards would require additional provincial support and funding.

Staff gathered feedback through internal consultations with staff at the Homes and comments received from York Region Public Health. Sector organizations like the Ontario Long-Term Care Association and [AdvantAge Ontario](#) also made submissions. The Association of Municipalities Ontario wrote to both the provincial and federal governments regarding the implementation of these standards. Staff also provided input into the submissions made by sector organizations. The Region's submission (Attachment 1) was generally supportive of the standards and made the following key suggestions:

- Implementing enhanced infection, prevention and control standards requires Homes to work more closely with their local public health units
- An integrated health care system is required to support the core principles that residents and families are partners in care

- Establishing policies and procedures to create an operating environment that focuses on the people-centred perspective, requires additional funding and resources
- Complying with these standards would require the Province to update to the [Long-Term Care Home Design Manual 2015](#) (such as resident bathrooms being 3-piece not 2-piece, having more dedicated hand hygiene sinks and a café style laundromat) and would require substantial funding to retrofit existing Homes

Due to timing, it was not possible to bring our response to York Regional Council for endorsement prior to submission and the Canadian Standards Association Group advised staff that they could not accept any additional commentary from Council following the closing date of April 11, 2022.

5. Financial

The national standards are not federally or provincially legislated for Ontario at this time. If this changes, there may be an impact on the capital and operating budgets of the Homes. The Region's two long-term care homes are funded through a combination of fees and services**, provincial subsidy and net tax levy. The provincial subsidy includes a [quality attainment premium](#) that both Homes receive (approximately \$30,500 per annum in total for both Homes) by achieving and maintaining accreditation ([2020 Long-Term Care and Seniors Community Program Annual Performance Updates](#)).

In 2020, the net tax levy supported 44.6%* of the operating costs of the Region's two long-term care Homes.

Table 2
2020 Long-Term Care Operating Costs

Operating Costs*	\$ Million	% of Total Revenue
Fees and Subsidies**	\$5.3	13.9%
Provincial Subsidy	\$15.7	41.4%
York Region Net Tax Levy	\$16.9	44.6%
Total	\$37.9	100%

*2020 values exclude COVID-19 expenses/revenues. The Region recognized \$7.2M in 2020 extraordinary COVID-19 expenses that were 100% funded by the Province.

** Fees and services include resident contributions and other sources of revenues, such as donations

6. Local Impact

There is no local impact

7. Conclusion

Staff will continue to monitor how the federal standards or changes to accreditation may influence the legislative and regulatory landscape of long-term care and report back to Council as appropriate.

For more information on this report, please contact Lisa Gonsalves, General Manager at 1-877-464-9675 ext. 72090. Accessible formats or communication supports are available upon request.



Recommended by:

Katherine Chislett
Commissioner of Community and Health Services



Approved for Submission:

Bruce Macgregor
Chief Administrative Officer

April 14, 2022
Attachment (1)
eDOCS # 13722071

ATTACHMENT 1**SUBMISSION TO THE HEALTH STANDARDS ORGANIZATION ON PROPOSED NATIONAL STANDARDS FOR LONG-TERM CARE SERVICES**

Submitted by: The Regional Municipality of York

Date: April 11, 2022

Introduction

This submission to the Canadian Standards Association Group on the proposed new National Standard for Operation and Infection Prevention and Control of Long-term Care Homes (New Standard) (CSA Z8004) presents important considerations that build on York Region's existing advocacy:

- Submission to the [Ontario Long-Term Care COVID-19 Commission](#) and
- Submission to the Ministry of Long-Term Care on our [Analysis of Ontario's Long-Term Care COVID-19 Commission's Final Report and Recommendations for Urgent Provincial Action](#)
- [Submission](#) to the Ministry of Long-Term Care on Proposed New Regulation Under the Fixing Long-Term Care Act, 2021
- [Submission](#) to the Health Standards Organization on draft National Standards for Long-Term Care Services ([CAN/HSO 21001:2022](#))

The new National Standard for Operation and Infection Prevention and Control of Long-Term Care Homes are an important step towards strengthening long-term care service delivery and protecting residents if implemented.

Recommendations for amendments to the proposed new long-term care standards

York Region's general comments on the proposed standards are structured to align with the format of the online public review site (respondents can submit a comment or a proposed change or both where applicable). Where applicable, York Region's proposed amendments to the wording of national standard criteria are highlighted yellow.

1. Recommendations

Section	National Standard Criteria	York Region Comments	Proposed Change
General	<p>This Standard provides requirements for the safe operation and infection prevention and control of long-term care homes. This Standard is intended for use by operational staff, infection prevention and control personnel, directors of care, architects, designers, engineers, governmental bodies, and residents and families.</p> <p>Engineers, architects, and designers will likely benefit from using this Standard alongside other detailed Canadian Standards Association Standards (see Clause 2). Long-term care homes in Canada can be subject to local, provincial, or territorial building and fire regulations, or in the absence of, the National Building and Fire Code of Canada.</p>	<p>Each reference to a Canadian Standards Association standard within this standard (CSA Z8004) should include additional language regarding meeting requirements set by local applicable Acts, Regulations relevant standards, protocols and directives.</p> <p>This Standard refers to Public Health in various ways (public health, local public health, public health unit, regional public health authority). Language should be streamlined for consistency throughout the Standard to appropriately reflect the role of local public health across provinces (such as the use of one term throughout the Standards).</p>	None
Overview	<p>The Standard provides an overview of operations including, but not limited to, visitor policies, nutrition and food, waste management, and communication. Guidance is provided for a transdisciplinary assessment team, and quality improvement including risk management and quality auditing.</p>	<p>Consider developing a Federal/Provincial Standard for creating policies and procedures, to create standardization amongst all long-term care homes (such as policy templates).</p>	None

Section	National Standard Criteria	York Region Comments	Proposed Change
	Infection prevention and control requirements are incorporated regarding program elements, hand hygiene, personal protective equipment, cleaning and disinfection, procurement, laundry, considerations for resident belongings, infection prevention and control and design considerations for resident bedrooms and washrooms, and anti-microbial stewardship.		
3.1	Definition of “Authority having jurisdiction” — a federal or provincial regulatory body responsible for enforcing the requirements of a specific codes or standards, or for approving equipment, materials, an installation, or a standard operating procedure for personnel.	Definition should include local/regional authorities.	Definition of “Authority having jurisdiction” — a federal, provincial or local/regional regulatory body responsible for enforcing the requirements of a specific codes or standards, or for approving equipment, materials, an installation, or a standard operating procedure for personnel.
3.1	Definition of “Transdisciplinary assessment team” — a group comprising representatives from various disciplines in the long-term care home that work together so that appropriate infection, prevention and control measures, cleaning and disinfection measures and operations policies and procedures are followed. This includes directors, managers, and leaders from various disciplines in	Include language regarding “consultation with local public health (as appropriate in relation to infection, prevention and control and communicable diseases).”	Definition of “Transdisciplinary assessment team” — a group comprising representatives from various disciplines in the long-term care home that work together so that appropriate infection, prevention and control measures, cleaning and disinfection measures and operations policies and procedures are followed. This includes directors, managers, and leaders from various disciplines in

Section	National Standard Criteria	York Region Comments	Proposed Change
	the long-term care home, including risk management team representatives, infection control professionals, occupational health professionals, residents, families, and others to oversee that the appropriate cleaning and disinfection measures are followed.		the long-term care home, including risk management team representatives, infection control professionals, occupational health professionals, residents, families, and others such as consultation with local public health to oversee that the appropriate cleaning and disinfection measures are followed.
4.1.2	The core principles shall be based on residents and families as partners in care.	We support this Standard. The Province has yet to implement the Ontario's Long-Term Care COVID-19 Commission recommendation 28 that advocates for Ontario Health to work with the Ministry of Long-Term Care as local/regional Ontario Health Teams are implemented to ensure a coordinated continuum of care that includes all long-term care homes. Having an integrated health care system would help to ensure core principles are based on residents and families as partners in care.	None
4.3.4	long-term care homes shall respect that residents who do not have capacity to consent to sexual and intimate acts are still sexual beings with sexual and intimacy needs.	We support this Standard. As suggested by the Health Standards Organization's draft National Standards for Long-Term Care Services (CAN/HSO 21001:2022 ; sections 2.3.5 and 4.1.4), an ethical decision-making framework should be developed for the sector along with standardized education and training provided for management and staff.	None
4.3.5	long-term care homes should support staff to adopt approaches to	We support this Standard. As suggested by the Health Standards Organization's draft	None

Section	National Standard Criteria	York Region Comments	Proposed Change
	resident sexual expression and intimacy that avoids making assumptions and recognizes people's diversity and individual choice, while assisting staff to address their own attitudes and behaviour towards sexual expression.	National Standards for Long-Term Care Services (CAN/HSO 21001:2022 ; sections 2.3.5 and 4.1.4), an ethical decision-making framework should be developed for the sector along with standardized education and training provided for management and staff.	
5.1.1	long-term care homes shall establish policies and procedures to create an operating environment that focuses on the people-centred perspective. long-term care homes should incorporate resident and family input into the creation of operating policies and procedures as these are important to health and quality of life.	We support this Standard. Developing people-centred or emotional models of care requires additional funding and support. The City of Toronto identified costs associated with implementing these models at around \$5 million for its 10 homes. We have not undertaken an analysis of the cost to implement this at our homes.	None
5.1.4	long-term care homes should establish formal and informal partnerships and collaborations with other parts of the healthcare system such as local hospitals, community services, primary care, and public health so that expertise and resources are shared to prevent avoidable hospitalizations, promote access to specialized supports (for example, geriatric specialists, palliative care, spiritual health, and mental health services), and in specific situations such as infectious	We support this Standard. We believe that the Ontario Government should consider identifying and establishing a service system manager for seniors' care to coordinate and bring together the currently fragmented seniors' services sector (such as the one that exists for housing and children's services).	None

Section	National Standard Criteria	York Region Comments	Proposed Change
	disease outbreaks, epidemics, and pandemics.		
5.3.1	Visitor policies and procedures should include education around infection, prevention and control requirements (for example, routine practices for non-isolated residents, hand hygiene, personal protective equipment, donning and doffing and additional precautions as required).	None	Visitor policies and procedures should include education around infection, prevention and control requirements (for example, routine practices for non-isolated residents, hand hygiene, personal protective equipment, screening, cleaning, disinfection, donning and doffing and additional precautions as required).
5.3.4	long-term care homes shall have an operational plan in place for visitor management during regular operations (for example, personal protective equipment, hand hygiene and infection, prevention and control education), and during outbreaks, epidemics, or pandemics that shall include provisions prescribed by the authority having jurisdiction.	None	long-term care homes shall have an operational plan in place for visitor management during regular operations (for example, personal protective equipment, hand hygiene and infection, prevention and control education), and during outbreaks, epidemics, or pandemics that shall include provisions prescribed by the authority having jurisdiction. The operational plan for visitor management should be reviewed with the Residents' Council and Family Councils annually at a minimum.
5.3.5	long-term care homes shall have an operational plan in place that enables safe access to a resident, while mitigating exposure to other residents within a building, to	None	long-term care homes shall have an operational plan in place that enables safe access to a resident, while mitigating exposure to other residents within a building, to

Section	National Standard Criteria	York Region Comments	Proposed Change
	support visitation during outbreaks, epidemics, or pandemics.		support visitation during outbreaks, epidemics, or pandemics. The operational plan shall include a visitor log for contact tracing purposes.
5.3.6	The transdisciplinary assessment team shall establish a program that prevents staff, family, essential caregivers and visitors from entering the long-term care home when they are ill with a transmissible enteric or respiratory infection.	<p>Passive screening if part of the Acute Respiratory Infection screenings, such as those recommended by Provincial Infectious Diseases Advisory Committee (PIDAC): https://www.publichealthontario.ca/en/health-topics/infection-prevention-control/best-practices-ipa.</p> <p>Ongoing active screening requires additional provincial funding as staffing and supplies for pandemic measures are temporary.</p>	Add a note: Passive and active screening to be in place for all staff and visitors
5.4.4	Policies and procedures shall be developed and implemented for cleaning of the long-term care home and supply of housekeeping equipment and cleaning supplies.	None	<p>Add a section: Policies and procedures shall be developed and implemented for monitoring and auditing of cleaning and disinfecting processes (results to be shared with infection, prevention and control team or committee at the home).</p> <p>Add a section: Policies and procedures shall be developed and implemented for waste and water maintenance</p>
5.5.3	long-term care homes shall accommodate dietary restrictions and create tailored culturally appropriate meal plans.	We support this Standard. While our homes strive to ensure quality, appropriate and sufficient meals for residents as described,	None

Section	National Standard Criteria	York Region Comments	Proposed Change
		achieving this requires additional Ontario Government funding .	
5.7.3	The transdisciplinary assessment team shall undertake a formal, comprehensive risk assessment and management exercise. This exercise shall be documented and shall consider all risk elements associated with the form and function of the long-term care home.	None	The transdisciplinary assessment team shall undertake an annual formal, comprehensive risk assessment and management exercise. This exercise shall be documented and shall consider all risk elements associated with the form and function of the long-term care home.
5.7.4	For occupied buildings the transdisciplinary assessment team shall conduct a re-assessment process yearly at a minimum. Changes to the original assessment shall be clearly justified and documented.	None	For occupied buildings the transdisciplinary assessment team shall conduct a re-assessment process yearly at a minimum an annual Infection, Prevention and Control organizational assessment . Changes to the original assessment shall be clearly justified and documented.
5.7.7	The transdisciplinary assessment team shall determine the types of care needs which the long-term care home will provide. The long-term care home shall have specific provision of heating, ventilation, and air conditioning systems for airborne infectious isolation, medical gas systems, electrical systems, IT	Due to existing infrastructure in a current home, the requirement for “specific provision of heating, ventilation, and air conditioning systems for airborne infectious isolation” may be a challenge. This should be incorporated into new designs or renovations alongside negative pressure rooms for airborne pathogens (these should also be included in the Long-Term Care Home Design Manual 2015). The current Provincial	The transdisciplinary assessment team shall determine the types of care needs which the long-term care home will provide. The new long-term care homes shall have specific provision of heating, ventilation, and air conditioning systems for airborne infectious isolation, medical gas systems, electrical systems, IT

Section	National Standard Criteria	York Region Comments	Proposed Change
	systems, communication systems, and plumbing.	funding is insufficient to undertake larger infrastructure modification projects.	systems, communication systems, and plumbing.
5.8.2	<p>Where catastrophic events create staffing shortages (for example, snowstorms and flooding, but also including during outbreaks, epidemics, and pandemics), plans for the following operations shall be assessed for implications in both the short term and long term:</p> <ol style="list-style-type: none"> 1. staff re-assignment and re-deployment; 2. additional hours; 3. clinical management working; 4. use of essential caregivers to be engaged in resident care; and 5. use of contract staff. 	None	<p>Where catastrophic events create staffing shortages (for example, snowstorms and flooding, but also including during outbreaks, epidemics, and pandemics), plans for the following operations shall be assessed for implications in both the short term and long term:</p> <ol style="list-style-type: none"> 1. staff re-assignment and re-deployment; 2. additional hours; 3. clinical management working; 4. use of essential caregivers to be engaged in resident care; and 5. use of contract and specialty staff.
5.9	<p><u>Waste Management</u></p> <p>Note: See Z317.10 for more information on waste management processes and procedures. Waste handling includes the following components:</p> <ol style="list-style-type: none"> 1) waste handling within the long-term care home (generation, storage, collection, transportation, segregation, etc.) and 	None	<p>Add a note: Waste Management plans should incorporate cleaning and disinfection of transport containers and outlines routes of travel for safe waste transport within the long-term care home</p>

Section	National Standard Criteria	York Region Comments	Proposed Change
	2) waste disposal to a licensed facility (landfill, transfer station, etc.).		
5.9.1.1	The waste management system shall incorporate requirements for packaging, collection, storage, handling, treatment, segregation, and disposal of waste materials within the long-term care home.	None	The waste management system shall incorporate requirements for packaging, collection, storage, safe handling of waste within the facility , treatment, segregation, and disposal of waste materials within the long-term care home.
5.9.4.6	Environmental services shall consult transdisciplinary assessment team for assistance and direction on proper waste management operations.	None	Environmental services shall consult with transdisciplinary assessment team for assistance and direction on proper waste management operations.
6.2.3	long-term care home shall establish a process to collect equity, diversity, and inclusion data appropriate to residents and the external environment. long-term care home shall use this data in correlation with infection, prevention and control data and measure results achieved. long-term care home shall analyze the data to determine any areas of disparity.	Consider defining or providing examples of equity, diversity, and inclusion data to be collected.	None
6.3.3	Audit reports shall be publicly posted, and accessible for residents and family.	We support the increased transparency, accountability and enforcement driving the current legislative changes in the Ontario long-term care sector.	A summary of audits reports shall be publicly posted, and accessible for residents and family.

Section	National Standard Criteria	York Region Comments	Proposed Change
7	Infection Prevention and Control	None	<p>Add section:</p> <p>Personal Service Settings in long-term care homes:</p> <ul style="list-style-type: none"> • long-term care homes should ensure Personal Service Settings in long-term care homes follow legislative and regulatory requirements or best practice, including ensuring compliance among independent operators providing Personal Services • long-term care homes should keep a log of independent operators providing Persons Services to residents
7.1.2	infection, prevention and control policies and procedures shall be reviewed annually and revised as needed, when practices from the authority having jurisdiction are updated (for example, from local jurisdictions, national and provincial bodies, international agencies).	None	infection, prevention and control and outbreak management policies and procedures shall be reviewed annually, at a minimum or as new best practice and or directives are released, and revised as needed, when practices from the authority having jurisdiction are updated (for example, from local jurisdictions, national provincial, and local/regional bodies, international agencies).
7.1.3	The infection, prevention and control program shall be based on best practices, guidelines and	We support this Standard. Provincial Governments should be responsible for	The infection, prevention and control program shall be based on best practices, guidelines,

Section	National Standard Criteria	York Region Comments	Proposed Change
	recommendations from national and provincial bodies and international agencies, as well as incorporate significant findings from the current scientific literature.	identifying the significant findings from the current scientific literature.	recommendations and significant findings from current scientific literature outlined by national and provincial bodies and international agencies (for example included in standards and protocols).
7.1.4	Each long-term care home shall have an infection, prevention and control trained representative who can assist in infection, prevention and control processes and procedures. The infection, prevention and control trained representative should be a dedicated role based on the organizational risk assessment.	The proposed <i>Fixing Long-Term Care Act, 2021</i> Regulations identify this new position. This new position requires new and sustainable funding from the Ontario Government.	Each long-term care home shall have an infection, prevention and control trained representative who can assist in infection, prevention and control processes and procedures. The infection, prevention and control trained representative should be a dedicated role based on the organizational risk assessment, and in accordance with any legislative and regulatory requirements or best practice.
7.1.5	The infection, prevention and control program should describe the culture, scope and foundational framework necessary for the development of a successful infection, prevention and control program.	None	The infection, prevention and control program should describe the culture, scope and meet requirements set by legislative and regulatory requirements or best practice to achieve a foundational framework necessary for the development of a successful infection, prevention and control program.
7.1.6	infection, prevention and control program elements shall include:	None	infection, prevention and control program elements shall include:

Section	National Standard Criteria	York Region Comments	Proposed Change
	<p>1. infection, prevention and control program impact, collaboration and engagement;</p> <ul style="list-style-type: none"> • development of relationships with other departments within the organizations (for example, Occupational Health and Safety, Environmental Services as well as between internal and external partners (for example, residents, families, essential caregivers, contracted services); 		<p>1. infection, prevention and control program impact, collaboration and engagement;</p> <ul style="list-style-type: none"> • development of relationships with other departments within the organizations (for example, Occupational Health and Safety, Environmental Services as well as between internal and external partners (for example, residents, families, essential caregivers, contracted services, local public health unit);
7.1.6	<p>infection, prevention and control program elements shall include:</p> <p>2. infection, prevention and control Education;</p> <ul style="list-style-type: none"> • Educational programs tailored to the infection, prevention and control program priorities, services and resident populations; • Core competencies continuing education for all staff in infection, prevention and control at onboarding and annually; and • education for residents, families, and visitors. 	None	<p>infection, prevention and control program elements shall include:</p> <p>2. infection, prevention and control Education;</p> <ul style="list-style-type: none"> • Educational programs tailored to the infection, prevention and control program priorities, services and resident populations; • Core competencies continuing education for all staff and volunteers in infection, prevention and control at onboarding and annually; and • education for residents, families, and visitors; and

Section	National Standard Criteria	York Region Comments	Proposed Change
			<ul style="list-style-type: none"> providing “just in time” supplementary education when a home is in outbreak.
7.1.6	infection, prevention and control program elements shall include: 5. hand hygiene program (see Clause 7.2);	None	infection, prevention and control program elements shall include: 5. hand hygiene and routine practices program (see Clause 7.2);
7.1.6	12. outbreak, epidemic, pandemic management; <ul style="list-style-type: none"> Outbreak Management Team have been identified specific to an outbreak, epidemic, pandemic response plan. Persons involved may include a director of care/manager, medical director, Infection Control Professional (infection control professional), public health liaison, Occupational Health and Safety experts, and any other long-term care home-specific leadership roles; 	None	12. outbreak, epidemic, pandemic management; <ul style="list-style-type: none"> Outbreak Management Team have been identified specific to an outbreak, epidemic, pandemic response plan. Persons involved may include a director of care/manager, medical director, Infection Control Professional (infection control professional), public health liaison, environmental services, Occupational Health and Safety experts, and any other long-term care home-specific leadership roles; Add an annex: template infection, prevention and control policy and procedures for long-term care home use

Section	National Standard Criteria	York Region Comments	Proposed Change
7.2.1.1	Hand hygiene shall be the responsibility of the organization and all individuals involved in healthcare.	None	Hand hygiene shall be the responsibility of the organization and all individuals involved in healthcare in accordance with local legislative acts and regulations.
7.2.1.3	<p>All Health Care Workers shall perform hand hygiene according to the World Health Organization five moments of hand hygiene:</p> <ol style="list-style-type: none"> 1. Before touching a resident or their environment 2. Before clean/aseptic procedures 3. After bodily fluid exposure/risk 4. After touching a resident 5. After touching resident environment 	Best practices for hand hygiene varies between jurisdictions, for example Ontario uses a best practice of the four moments of hand hygiene.	<p>All Health Care Workers shall perform hand hygiene according to the World Health Organization five moments of hand hygiene, or in accordance with legislative and regulatory requirements or best practice:</p> <ol style="list-style-type: none"> 1. Before touching a resident or their environment 2. Before clean/aseptic procedures 3. After bodily fluid exposure/risk 4. After touching a resident 5. After touching resident environment
7.2.1.5	<p>Hand hygiene shall be performed at the point of care. When hands are not visibly soiled, alcohol-based hand rub containing 70% to 90% alcohol should be used. When hands are visibly soiled, hands shall be washed with soap and water.</p> <p>Notes:</p> <ol style="list-style-type: none"> 1) The Public Health Agency of Canada's Hand Hygiene Practices in Healthcare Settings 		Add a note: For certain pathogens, for example during clostridium difficile or norovirus outbreaks, the soap and water method is the preferred method

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	<p>recommends 60 to 90% alcohol; however, 70% is preferred.</p> <p>2) In long-term care homes, the point of care can include the bedside, resident chair, or common areas.</p>		
7.2.1.6	Hand hygiene sinks shall be dedicated to that purpose and not used for any other purpose.	Dedicated hand hygiene sinks are not currently included in the Long-Term Care Home Design Manual 2015 .	In new long-term care homes, hand hygiene sinks should be required on every Home Area and shall be dedicated by Staff to that purpose and not used for any other purpose.
7.2.2 7.2.2.2	<p><u>Hand Hygiene Program</u></p> <p>Compliance results of hand hygiene audits and strategies shall be posted in areas where staff, residents and families are able to access and participate.</p>	We support the increased transparency, accountability and enforcement driving the current legislative changes in the Ontario long-term care sector.	<p><u>Hand Hygiene Program</u></p> <p>A summary of compliance results of hand hygiene audits and strategies shall be posted in areas where staff, residents and families are able to access and participate.</p>
7.2.2.4	<p>Education programs should include, but not be limited to, the following topics:</p> <ul style="list-style-type: none"> • why hand hygiene is so important; • the moments when hand hygiene shall be performed; • how to perform hand hygiene; • up to date practices; • skin care; • factors that impact the effectiveness of hand hygiene; and 	None	<p>Education programs should include, but not be limited to, the following topics:</p> <ul style="list-style-type: none"> • why hand hygiene is so important; • the moments when hand hygiene shall be performed; • how to perform hand hygiene; • up to date practices; • hand care program including topics such as, skin care, barrier creams, jewellery, nail enhancement, allergic reactions to alcohol-based hand rub;

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	<ul style="list-style-type: none"> how hand hygiene practices are the responsibility of everyone in long-term care 		<ul style="list-style-type: none"> factors that impact the effectiveness of hand hygiene; and how hand hygiene practices are the responsibility of everyone in long-term care
7.2.2.5	<p>long-term care homes should have safety coaches assigned to encourage and support hand hygiene compliance for staff, residents and families.</p> <p>Notes:</p> <ol style="list-style-type: none"> These safety coaches will serve as role models for the organization and will be instrumental in driving safety related change in LTC. See Canadian Standards Association Z317.12 for more information on resident and family engagement. Resident and family engagement has been shown to increase resident safety by identifying risks and innovations; playing a role in reducing transmission of infections; and increasing hand hygiene rates in health care workers when they are invited to monitor hand hygiene. 	Consider adding a definition for a safety coach.	None

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7.2.3.4	Resident hand hygiene shall occur before and after meals and toileting.	This would be difficult for staff to police.	Resident hand hygiene shall occur before and after meals (including snacks) and toileting (if eating and toileting are supported by staff or volunteers).
7.3	<p><u>Personal Protective Equipment (personal protective equipment)</u></p> <p>Note: See Public Health Agency of Canada's Routine Practices and Additional Precautions for Preventing the Transmission of Infection in Healthcare Settings for more information.</p>		Add note: Add a list of Provincial best practice Documents from all provinces that have local best practices on Routine Practices and Additional Precautions
7.3.1.2	<p>long-term care homes shall establish policies and procedures for:</p> <ul style="list-style-type: none"> • adequate resourcing, • training, • audits and feedback, • safety and personal protective equipment coaches, • buddy programs, • appropriate doffing locations, and • safe disposal of used personal protective equipment. 	There is new one-time provincial funding to back-fill some educational requirements at homes (such as the preceptor resource and education program). However, a permanent, formal buddy program would require additional base funding from the Ontario Government.	<p>long-term care homes shall establish policies and procedures using Provincial or Federal best practices for:</p> <ul style="list-style-type: none"> • adequate resourcing, • training, • audits and feedback, • safety and personal protective equipment coaches, • buddy programs, • appropriate doffing locations, and • safe disposal of used personal protective equipment.
7.3.1.3	personal protective equipment shall be worn according to the resident risk assessment and in accordance	personal protective equipment is worn when conducting a point of care or risk assessment.	personal protective equipment shall be worn according to the resident risk assessment and in accordance

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	<p>with Routine Practices and Additional Precautions.</p> <p>Prior to initiating resident care activities, a risk assessment shall be conducted to determine the likelihood of contact with bodily fluids, excretion, secretion, non-intact skin or mucous membranes or equipment or environmental surfaces contaminated with the above.</p> <p>The selection of personal protective equipment shall be based on the nature of the interaction with the resident and/or the likely mode of transmission of infectious agents.</p> <p>Personal protective equipment should be donned just prior to the interaction with the resident and removed immediately following the interaction for which the personal protective equipment was required and disposed on the appropriate receptacle.</p>		<p>with Routine Practices and Additional Precautions.</p> <p>Prior to initiating resident care activities, a point of care risk assessment shall be conducted to determine the likelihood of contact with bodily fluids, excretion, secretion, non-intact skin or mucous membranes or equipment or environmental surfaces contaminated with the above.</p> <p>Personal Protective Equipment is worn when conducting a point of care or risk assessment.</p> <p>The selection of personal protective equipment shall be based on the nature of the interaction with the resident and/or the likely mode of transmission of infectious agents. Personal protective equipment should be donned just prior to the interaction with the resident and removed immediately following the interaction for which the personal protective equipment was required and disposed on the appropriate receptacle.</p>
7.3.1.5	long-term care home shall have a personal protective equipment committee for evaluation, selection and usage of personal protective equipment. Membership shall	None	long-term care home shall have a personal protective equipment committee for evaluation, selection and usage of personal protective equipment. Membership shall

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	<p>include infection control professional, Occupational Health, and purchasing personnel.</p> <p>Note: personal protective equipment selection needs to comply with guidelines from the authority having jurisdiction.</p>		<p>include an infection, prevention and control designate, infection control professional, Occupational Health, and purchasing personnel.</p> <p>Note: personal protective equipment selection needs to comply with guidelines from the authority having jurisdiction.</p>
7.3.1.6	<p>personal protective equipment shall be readily accessible for staff and available at point of care outside of resident rooms and stored in a manner that prevents contamination (for example, covered carts, closed cabinets).</p>	None	<p>personal protective equipment shall be readily accessible for staff and essential caregivers and be available at point of care outside of resident rooms and stored in a manner that prevents contamination (for example, covered carts, closed cabinets).</p>
7.3.1.9	<p>long-term care home staff shall be properly fitted for items such as eye protection, masks, respirators, gloves, gowns.</p>	<p>Staff should be able to choose certain personal protective equipment from a selection available (such as gloves being available in common sizes: small, medium and large).</p>	<p>long-term care home staff shall be properly fitted for respirators. Suitable sizes of other items such as eye protection, masks, gloves and gowns should be available.</p>
7.3.2.2	<p>long-term care home shall provide personal protective equipment donning and doffing education to all staff, students, and essential care providers upon onboarding and yearly thereafter.</p>	None	<p>long-term care home shall provide personal protective equipment donning and doffing education to all staff, students, and essential care providers upon onboarding and yearly thereafter. “Just in time” education should be provided during outbreaks.</p>

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7.3.2.3	personal protective equipment donning and doffing shall be audited regularly and results reported to a quality and risk or joint health and safety committee. Practice improvement activities shall be documented.	Hand hygiene, personal protective equipment and cleaning and disinfection auditing and process improvements should be discussed at transdisciplinary assessment team meetings, in consultation with local public health as appropriate. Settings should set organizational goals when low compliance is noted, and this should be shared and monitored.	None
7.3.3.2	long-term care homes shall store additional personal protective equipment supplies in the event of an outbreak, epidemic, pandemic or catastrophic event. Note: This storage can be off-site, but must be readily available.	Standards and protocols need to provide for definitions of the type and number of resources, supplies and personal protective equipment to be made available. Feasibility cannot be assessed without a clearer definition of what is required.	None
7.3.3.4	Appropriate and proper use of personal protective equipment shall include: <ul style="list-style-type: none"> • point-of-care risk assessment to determine need for personal protective equipment • using the correct technique for putting on and taking off personal protective equipment • using the correct technique when wearing personal protective equipment (for example, not to self-contaminate) 	Standards need to use consistent terminology and avoid repetition. A list of Provincial best practice documents from all provinces that have local best practices on Routine Practice and Additional Precautions should be available.	Appropriate and proper use of personal protective equipment shall include: <ul style="list-style-type: none"> • point-of-care risk assessment to determine need for personal protective equipment • using the correct technique for donning and doffing personal protective equipment • using the correct technique when wearing personal protective equipment (for example, not to self-contaminate)

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	<ul style="list-style-type: none"> discarding personal protective equipment 		<ul style="list-style-type: none"> discarding personal protective equipment
7.4.1.1	<p>The transdisciplinary assessment team shall create cleaning and disinfection policies and procedures in compliance with Canadian Standards Association Z317.12. These include, but are not limited to:</p> <ul style="list-style-type: none"> incorporating input from residents and families in cleaning and disinfection processes; assessing residents and families' satisfaction with cleaning and disinfection policies and procedures; quality management system and auditing; cleaning and disinfection technologies; education, training, and monitoring; cleaning and disinfection of specialized areas; care, maintenance, and storage of personal protective equipment related to cleaning; health and safety for cleaning and disinfection procedures; pest control management; cleaning and disinfection of sinks and drains; and 	None	<p>The transdisciplinary assessment team shall create cleaning and disinfection policies and procedures in compliance with Canadian Standards Association Z317.12 and requirements set legislative and regulatory standards, protocols and directives. These include, but are not limited to:</p> <ul style="list-style-type: none"> ensuring there is staff engagement on development of cleaning and disinfection protocols within the setting incorporating input from residents and families in cleaning and disinfection processes; assessing residents and families' satisfaction with cleaning and disinfection policies and procedures; quality management system and auditing; cleaning and disinfection technologies; education, training, and monitoring; cleaning and disinfection of specialized areas;

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	<ul style="list-style-type: none"> waste handling. 		<ul style="list-style-type: none"> care, maintenance, and storage of personal protective equipment related to cleaning; health and safety for cleaning and disinfection procedures; pest control management; cleaning and disinfection of sinks and drains; and waste handling.
7.4.1.4	All common areas, both resident and staff (for example, lounge spaces, locker rooms, showers and change areas, meditation rooms) shall be on a regular cleaning and disinfection schedule.	None	Following the requirements set by local applicable Acts, Regulations, relevant standards, protocols and directives, all common areas, both resident and staff (for example, lounge spaces, locker rooms, showers and change areas, meditation rooms) shall be on a regular cleaning and disinfection schedule.
7.4.1.5	Dusting should be done at a time that residents are not in the associated room.	None	Add a note: Wet dusting should be recommended opposed to dry dusting.
7.4.1.6	A long-term care home shall adopt national, provincial or territorial best practice guidelines that are based on emerging scientific evidence, and shall be reviewed and incorporated in cleaning and disinfection policies and procedures (for example, Public Health Agency of Canada).	None	A long-term care home shall adopt national, provincial or territorial best practice guidelines that are based on emerging scientific evidence, and shall be reviewed and incorporated in cleaning and disinfection policies and procedures (for example, Public Health Agency of Canada, provincial

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			cleaning, disinfection and sterilization best practices).
7.4.2.2	The transdisciplinary assessment team shall standardize the selection of cleaning and disinfection products.	None	The transdisciplinary assessment team shall standardize the selection of cleaning and disinfection products. The transdisciplinary assessment team should review all new equipment purchased and ensure appropriate cleaning and disinfection protocols are in place for new equipment as outlined in the organizations policy and procedures.
7.4.2.5	The use of automated dispensing systems or ready-to-use products shall be preferred over manual dilution. Automatic dispensers shall be calibrated according to the manufacturer's instructions for use. Calibration may be completed by a third-party company.	Automated dispensing systems may be cost prohibitive for some Homes. This section should focus on auditing practices are in in place to ensure cleaning and disinfection processes are followed, testing of disinfectant levels are checked and logs are maintained	The use of automated dispensing systems or ready-to-use products shall be preferred over manual dilution. Automatic dispensers shall be calibrated according to the manufacturer's instructions for use. Calibration may be completed by a third-party company. Compliance and auditing of product use and dilutions systems should be completed and logged daily.
7.4.3	Subsection title: <u>Care and storage of cleaning, disinfection and medical supplies</u>	None	Add a note: Cleaning products and disinfectants to be safely stored away from other medical supplies/food
7.4.4.2	Cracked or torn furnishings shall be removed and repaired so that they	None	All furnishings should be composed of smooth non-absorbent material. The Organization/Operator must

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	can be effectively cleaned, or replaced.		<p>purchase furnishings that can be cleaned and disinfected frequently and can withstand the purchased products used by the Facility.</p> <p>Cracked or torn furnishings shall be removed and repaired so that they can be effectively cleaned, or replaced. An infection, prevention and control Audit should include inspection of all surfaces including furnishings in areas like the nursing station.</p>
7.4.4.3	Decluttering of resident rooms should occur on a regular basis (for example, every 2 months).	Decluttering should occur more often when surveillance indicates an increase in illness, during outbreaks, when resident is placed on precautions or when items impede proper cleaning and disinfecting of surfaces.	<p>Decluttering of resident rooms and nursing stations should occur on a regular basis (for example, every 2 months).</p> <p>Add a note: Nursing stations should always be free from clutter.</p>
7.4.4.4	<p>Items that are brought into the home by residents for their bedrooms shall not be shared between residents.</p> <p>Note: See Clause 8.2.2 for more guidance on personal items.</p>	long-term care homes should have policy and procedures on what items are acceptable to be brought into the home and this should be shared with families.	None
7.4.5.1.1	Washroom cleaning and disinfection policies and procedures shall be in compliance with Canadian Standards Association Z317.12.	None	Washroom cleaning and disinfection policies and procedures shall be in compliance with Canadian Standards Association Z317.12 and follow the requirements set by local applicable Acts, Regulations,

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			relevant standards, protocols and directives.
7.4.5.1.4	<p>Cleaning and disinfection of bedpans and urinals shall:</p> <ol style="list-style-type: none"> 1. not be done manually; 2. be cleaned and disinfected in conformance with Canadian Standards Association Z314; and 3. Be done in a soiled utility room, and not in a resident washroom. 	None	<p>Cleaning and disinfection of bedpans and urinals shall:</p> <ol style="list-style-type: none"> 1. not be done manually; 2. be cleaned and disinfected in conformance with Canadian Standards Association Z314; and 3. Be done in a soiled utility room, and not in a resident washroom by safely transporting waste from a resident's room to a soiled utility room (for example, through the use of kick doors vs hand opening systems and/or touchless entry).
7.4.5.2.3	<p>Toilet brushes and swabs shall not be shared between resident washrooms and shall be discarded:</p> <ol style="list-style-type: none"> 1. Upon resident discharge; 2. Daily for enteric symptomatic residents (for example, diarrhea, vomiting); and 3. When visibly soiled or damaged. 	None	<p>Toilet brushes and swabs shall not be shared between resident washrooms and shall be discarded:</p> <ol style="list-style-type: none"> 1. Upon resident discharge; 2. Daily for enteric symptomatic residents (for example, diarrhea, vomiting); and 3. When visibly soiled or damaged; and 4. For residents with Clostridium difficile or when residents are placed on any precautions.
7.4.5.2.4	LTCHs shall have a system in place to identify the cloth for use in		LTCHs shall have a system in place to identify the cloth for use in

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	bathroom cleaning and disinfection (e.g., color coded system such as “red for bed and blue for the loo”, labelling).		<p>bathroom cleaning and disinfection (e.g., color coded system such as “red for bed and blue for the loo”, labelling). (e.g., Red for blood and body fluids (Toilets), Blue for high touch surfaces and Green for low touch surfaces):</p> <ul style="list-style-type: none"> • Clothes to be changed frequently with no double dipping into disinfectant, • Cleaning should be conducted in a manner from clean to dirty and cleaning supplies to be changed between room cleaning (e.g., from unaffected rooms to affected rooms in an outbreak or when illness is reported) • Within room from cleaning should be conducted in areas clean to dirty areas, with bathroom areas being last
7.4.5.3.1	Visitor bathrooms shall be cleaned regularly at least once per day or as needed.	None	Visitor bathrooms shall be cleaned regularly at least once per day or as needed. Cleaning frequency should be increased when bathrooms are soiled. A log should be posted indicating when bathroom was last cleaned.

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7.4.5.3.2	Visitors shall not use resident bathrooms.	We support this Standard. However, this would be difficult for the homes to police.	Visitor policies shall advise visitors that they are not to use resident bathrooms.
7.4.6.1	Shared medical equipment (for example, bath lifts, slings) used in the long-term care home, including purchased, rented, borrowed or donated equipment and equipment used for research purposes, shall be cleaned and disinfected between each resident use.	Dedicated equipment is best practice if not able to, then shared medical equipment (such as bath lifts and slings) used in the Home, including purchased, rented, borrowed or donated equipment and equipment used for research purposes, shall be cleaned and disinfected between each resident use, following the manufacturers instructions for use for cleaning and disinfectant of shared equipment.	<p>Add the following sections:</p> <ul style="list-style-type: none"> long-term care home to have a tagging system or way to log that shared equipment has been cleaning and disinfected Disinfectants (such as wipes) to be provided close to or attached to shared equipment if feasible to support cleaning and disinfection.
7.4.6.8	<p>Hallway and circulation areas must always be kept free and clear of all equipment (for example, cleaning and disinfection supplies).</p> <p>Note: personal protective equipment donning and doffing supplies and equipment may have to be placed in hallways during periods of outbreak, epidemic or pandemic.</p>	None	Add to note: If in outbreak, all personal protective equipment supply carts and equipment should be designated to the outbreak area (such as a cohorted home area).
7.5.1.3	long-term care homes shall establish policies and procedures for laundry services, including safe work practices for processing of soiled and clean laundry so that clean textiles remain hygienically clean. These policies and	None	long-term care homes shall establish policies and procedures for laundry services, including safe work practices for processing of soiled and clean laundry so that clean textiles remain hygienically clean. These policies and procedures should follow the

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	<p>procedures should include, but not be limited to:</p> <ul style="list-style-type: none"> • area design including adequate ventilation; • provisions for strict separation of soiled laundry from clean laundry; • detergent dispensing; • temperature regulation; • handling; • transport, • receiving and storage of soiled laundry and handling; and • transport and storage of clean textiles. <p>Notes: Laundry in long-term care homes includes textiles (for example, sheets, towels, face cloths, pillow cases, blankets), reusable isolation gowns provided by the long-term care home, and resident clothing.</p>		<p>requirements set by legislation and regulatory standards or best practice and include, but not be limited to:</p> <ul style="list-style-type: none"> • area design including adequate ventilation; • provisions for strict separation of soiled laundry from clean laundry; • detergent dispensing; • temperature regulation; • handling; • transport, • receiving and storage of soiled laundry and handling; and • transport and storage of clean textiles, and PPE
7.5.1.7	<p>Staff and residents shall be instructed in the appropriate procedures for commercial and domestic washer and dryer use.</p>	None	<p>Staff and residents shall be instructed in the appropriate procedures for commercial and domestic washer and dryer use. This includes having procedures for families who take home residents' clothes to clean and then bring them back.</p>
7.5.2.1	<p>Care shall be taken in the handling of soiled laundry to prevent</p>	None	<p>Care shall be taken in the handling of soiled laundry to prevent</p>

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	<p>dispersal of microorganisms including the following procedures:</p> <ol style="list-style-type: none"> 1. soiled textiles shall be handled as little as possible with minimum agitation and shaking; 2. staff shall gently remove one piece of laundry at a time to avoid dispersal of microorganisms and skin cells; 3. staff shall check each piece of laundry for foreign objects (for example, sharps, dentures, hearing aids) at point of use prior to being placed in soiled textile hamper; 4. staff shall remove heavy soiling before placing laundry in soiled textile hamper; and 5. soiled laundry shall be placed directly into the soiled laundry hamper or container and not on the floor, window sill, chair etc. 		<p>dispersal of microorganisms including the following procedures:</p> <ol style="list-style-type: none"> 1. Conducting risk assessments, personal protective equipment and storage requirements for soiled laundry 2. soiled textiles shall be handled as little as possible with minimum agitation and shaking; 3. staff shall gently remove one piece of laundry at a time to avoid dispersal of microorganisms and skin cells; 4. staff shall check each piece of laundry for foreign objects (for example, sharps, dentures, hearing aids) at point of use prior to being placed in soiled textile hamper; 5. staff shall remove heavy soiling before placing laundry in soiled textile hamper; and 6. soiled laundry shall be placed directly into the soiled laundry hamper or container and not on the floor, window sill, chair etc.
7.5.2.6	<p>Segregation and special considerations shall be taken in the handling of heavily soiled laundry (for example, special washing, or discarding).</p>	<p>Changes are needed to the Long-Term Care Home Design Manual 2015 to support the implementation of these Standards.</p>	<p>Segregation and special considerations shall be taken in the handling of heavily soiled laundry (for example, special washing, or discarding). Laundry areas should be equipped with a hand wash basin.</p>

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7.5.4.2	If it is necessary to use a laundry chute, policies and procedures shall be established, in consultation with infection control professional, for its use.	None	If it is necessary to use a laundry chute, policies and procedures shall be established, in consultation with infection control professional, for its use. Chutes must be closed during increased illness/outbreak
7.7.2	A long-term care home audit shall be conducted at least every two years, and more often for specific situations. A third party may be used to complete the organizational audit. Auditors shall be credible, objective, precise, and motivating.	None	<p>A long-term care home audit shall be conducted at least every two years, and more often for specific situations. A third party may be used to complete the organizational audit. Auditors shall be credible, objective, precise, and motivating. infection, prevention and control organizational risk assessment should be conducted annually:</p> <ul style="list-style-type: none"> • Environmental Services Program should be audited yearly as part of the infection, prevention and control Organizational Risk Assessment; • Environmental Services Procedure Audits should be done at least quarterly or when there is an increase in illness/infection; and • During an outbreak audit should be done weekly or at least once during the span of the outbreak
8.1.2.1	The location and design of hand hygiene sinks and alcohol-based	None	The location and design of hand hygiene sinks and alcohol-based

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	hand rub products shall be developed by new and existing long-term care homes via an organizational risk assessment in consultation with transdisciplinary assessment team and shall be consistent with the infection control risk assessment.		hand rub products should be developed by new and existing long-term care homes via an infection, prevention and control organizational risk assessment in consultation with transdisciplinary assessment team and shall be easily accessible at point of care and consistent with the infection control risk assessment.
8.1.2.2	Health care workers shall have access to dedicated hand hygiene sinks.	None	Add notes: <ul style="list-style-type: none"> • Ideally hand hygiene wash basins should be touchless and equipped with liquid soap and paper towels and • hand air dryers are not recommended.
8.2.1.4	<p>For existing long-term care homes with multi-resident bedrooms, a single bedded room shall be incorporated on each resident household or within each neighborhood.</p> <p>The single room may be used as a short-term palliative care bedroom, to allow management of residents with transmissible infections, or as an activity and multi-purpose room (for example, for ritual and prayers).</p> <p>Where single bedded rooms are provided for these purposes, they</p>	<p>We support this Standard. The use of isolation rooms during the COVID-19 pandemic has assisted the continuity of admissions, the management of residents with transmissible infections and for short-term palliative care accommodations. These spaces have been fully funded at 100% of the level of care funding while occupancy targets are suspended. However, pre-pandemic funding policies would not provide for this, so the cost of unoccupied rooms would need to be funded by each Home.</p>	<p>For existing long-term care homes with multi-resident bedrooms, a single bedded room shall be incorporated on each resident household or within each neighborhood.</p> <p>The single room may be used as an isolation or short-term palliative care bedroom, to allow management of residents with transmissible infections, or as an activity and multi-purpose room (for example, for ritual and prayers).</p>

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	<p>shall be designed as acute respiratory infections in accordance with Canadian Standards Association Z8000 and shall incorporate heating, ventilation, and air conditioning requirements in accordance with Canadian Standards Association Z317.2.</p> <p>The single bedded room should be of a residential character, and provided with a nurse call system.</p>		
8.2.2.1	All resident bedrooms in new long-term care homes should be single resident bedroom	We support this Standard. The funding arrangements for long-term care homes in Ontario need to be re-envisioned. We have advocated for the Ontario government to urgently implement an enhanced funding model for long-term care.	None
8.2.3.1	<p>Each resident bedroom should have a dedicated 3-piece washroom.</p> <p>Note: See Canadian Standards Association Z8000 for guidance on resident washroom design and construction.</p>	3-piece washrooms are not included in the Long-Term Care Home Design Manual 2015 and would incur substantial retrofit costs for existing Homes who do not comply.	None
8.2.4.1	All residents shall have direct access to the outdoors without having to leave the household.	This change would need to be included in the Long-Term Care Home Design Manual 2015 and would incur substantial retrofit costs for existing Homes who do not comply.	None
8.2.6.2	The laundry room shall be accessible and should resemble a small lounge or café style	This change would need to be included in the Long-Term Care Home Design Manual	None

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	laundromat where residents can socialize, and visit with each other or family and friends.	2015 and would incur substantial retrofit costs for existing Homes who do not comply.	
8.3.3.2	<p>Staff rooms shall be designed for rest, and include:</p> <ul style="list-style-type: none"> • lockers • 2-piece washroom; • reclining seating, • dining table for shared meals • view to the outdoors • general purpose sink, • coffee station and • warming station (for example, microwave and toaster oven) that may be placed behind lockable closed doors. Full instructions of how appliances work shall be provided and updated regularly 	None	<p>Staff rooms shall be designed for rest, and include:</p> <ul style="list-style-type: none"> • lockers • 2-piece washroom; • reclining seating, • dining table for shared meals • view to the outdoors • general purpose sink and dedicated hand wash sink equipped with liquid soap and paper towels, • coffee station and • warming station (for example, microwave and toaster oven) that may be placed behind lockable closed doors. Full instructions of how appliances work shall be provided and updated regularly <p>Add notes:</p> <ul style="list-style-type: none"> • Entry to breakrooms to set up personal protective equipment stations and hooks within breakrooms to store clean eye protection; and • Breakrooms should be set up in a manner to allow for 2 meters between tables and capacity

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			limits should be posted in these areas.
9.5.2.1	Perimeter protection for resident exploring management will provide an audio-visual alarm at the door, elevator door access at the location, and the nearest nurse call system.	Additional funding is required to support Homes using innovative and current technologies to promote resident safety and wellbeing.	None
10.1.9	<p>Considerations for selecting information technologies shall include:</p> <p>12. Audits:</p> <ul style="list-style-type: none"> a) hand hygiene; b) education; and c) environmental audits. 	None	<p>Considerations for selecting information technologies shall include:</p> <p>12. Audits:</p> <ul style="list-style-type: none"> a) hand hygiene; b) Routine practices c) personal protective equipment audits d) Breakroom areas e) education; and f) environmental audits.
11.1.3	Environmental services and housekeeping activities shall be enhanced and auditing outbreak, epidemic, or pandemic protocol compliance (for example, hand hygiene and personal protective equipment) shall be initiated during outbreaks, epidemics, and pandemics.	None	Environmental services and housekeeping activities shall be enhanced and auditing outbreak, epidemic, or pandemic protocol compliance (for example, hand hygiene and personal protective equipment) shall be initiated during outbreaks, epidemics, and pandemics. infection, prevention and control self-assessments should be completed weekly during an outbreak and every 2 weeks when not in outbreak.

Section	National Standard Criteria	York Region Comments	Proposed Change
11.2.3	<p>The transdisciplinary assessment team shall identify all building utility systems for the long-term care home that can be interrupted during a catastrophic event. These may include:</p> <ol style="list-style-type: none"> 1. Natural gas; 2. Fuel oil; 3. Electrical power; 4. Domestic water; 5. Sanitary service (for example, sewer or onsite sewage handling and/or treatment); 6. Storm water service; 7. Telephone; and 8. Internet. 	None	<p>The transdisciplinary assessment team shall identify all building utility systems for the long-term care home that can be interrupted during a catastrophic event. These may include:</p> <ol style="list-style-type: none"> 1. Natural gas; 2. Fuel oil; 3. Electrical power; 4. Domestic water; 5. Sanitary service (for example, sewer or onsite sewage handling and/or treatment); 6. Storm water service; 7. Telephone; and 8. Internet; and 9. Backup generators for power.
11.2.4	<p>The transdisciplinary assessment team shall identify all critical external support services for the operation of the long-term care home. These may include:</p> <ol style="list-style-type: none"> 1. Food services; 2. Home care; 3. Medical supplies; 4. Textiles; 5. personal protective equipment; 6. Waste management; and 7. Third party building maintenance. 	None	<p>The transdisciplinary assessment team shall identify all critical external support services for the operation of the long-term care home. These may include:</p> <ol style="list-style-type: none"> 1. Food services; 2. Home care; 3. Medical supplies; 4. Textiles; 5. personal protective equipment; 6. Waste management; and 7. Third party building maintenance; and 8. Staffing.

Section	National Standard Criteria	York Region Comments	Proposed Change
11.3.3	Plans for outbreak, epidemic, and pandemic management in a household, neighbourhood or throughout the long-term care home, shall include protocols and procedures for detection, identification, investigation, response, control, staffing levels and stakeholder communication including external reporting.	None	Plans for outbreak, epidemic, and pandemic management in a household, neighbourhood or throughout the long-term care home, shall include protocols and procedures for detection, identification, investigation, response, control, staffing levels, supplies required, consultation with Local Public Health Units and stakeholder communication including external reporting.
12.6.1	<p>Upon hire, on-the-job training is an integral part of the learning process and should (at minimum) cover the following topics:</p> <ol style="list-style-type: none"> 1. EVS-specific policies and procedures; 2. fundamentals of EVS, including cleaning and disinfection of resident areas; 3. cleaning and disinfection of administrative/public areas; and 4. IPAC policies and procedures such as: <ol style="list-style-type: none"> a. Routine practices; b. additional precautions; and c. hand hygiene; 5. OHS; 6. WHMIS; 7. EVS equipment; 8. quality auditing program; and 		<p>Upon hire, on-the-job training is an integral part of the learning process and should (at minimum) cover the following topics:</p> <ol style="list-style-type: none"> 1. EVS-specific policies and procedures; 2. fundamentals of EVS, including cleaning and disinfection of resident areas; 3. cleaning and disinfection of administrative/public areas; and 4. IPAC policies and procedures such as: <ol style="list-style-type: none"> a. Routine practices; b. additional precautions; and c. hand hygiene; 5. OHS; 6. WHMIS; 7. EVS equipment; 8. quality auditing program; and 9. hands-on training; and

Section	National Standard Criteria	York Region Comments	Proposed Change
	9. hands-on training.		10. Cleaning and disinfection of multi-use medical equipment.
Annex F	<p>The following risk reduction strategies should be adopted by long-term care homes:</p> <p>2. personal protective equipment including</p> <p>a. Gowns:</p> <ul style="list-style-type: none"> i. use a gown when it is anticipated that a procedure and resident care activities likely to generate splashes or sprays of blood, body fluids, secretions or excretions; ii. use long sleeve gowns if contamination of uniform, clothing or skin is anticipated; iii. the gown should be put on immediately before the task and must be worn properly (i.e. tied at the top and around the waist); iv. discard used gown immediately after removal into appropriate receptacle; and v. do not re-use gown or go room to room wearing the same gown. 	<p>Information about proper disposal of reusable gowns and handling and transporting of reusable gowns should be included here.</p>	<p>The following risk reduction strategies should be adopted by long-term care homes:</p> <p>2. personal protective equipment including</p> <p>a. Gowns:</p> <ul style="list-style-type: none"> i. use a gown when it is anticipated that a procedure and resident care activities likely to generate splashes or sprays of blood, body fluids, secretions or excretions; ii. use long sleeve gowns if contamination of uniform, clothing or skin is anticipated. Use fluid resistant gowns where there is a risk of outerwear becoming wet; iii. the gown should be put on immediately before the task and must be worn properly (i.e. tied at the top and around the waist); iv. discard used gown immediately after removal into appropriate receptacle; and

Section	National Standard Criteria	York Region Comments	Proposed Change
			v. do not re-use gown or go room to room wearing the same gown.
Annex F	The following risk reduction strategies should be adopted by long-term care homes: 3. Safe handling of sharps	Information on procedures for sharps disposable should be included here.	Add a note: Bring sharps container to sharps. Do not carry sharps to container.
Annex F	The following risk reduction strategies should be adopted by long-term care homes: 7. Waste: i. Handle waste carefully to prevent personal contamination and transfer to other residents; and ii. waste handlers should wear protective apparel appropriate to their risk (for example, gloves, protective footwear).	None	The following risk reduction strategies should be adopted by long-term care homes: 7. Waste: i. Handle waste carefully to prevent personal contamination and transfer to other residents; and ii. waste handlers should wear protective apparel appropriate to their risk (for example, gloves, protective footwear); and iii. Utilize transport carts; bring cart to waste and not carry waste in hallway.

Regional Council Decision - Regional Greening Strategy Refinement and 2021 Achievements

On May 26, 2022 Regional Council made the following decision:

1. Council adopt the refined Regional Greening Strategy
2. The Regional Clerk circulate this report to the Clerks of the local municipalities, Chippewas of Georgina Island First Nation, Environment and Climate Change Canada, Natural Resources Canada, Ontario Ministry of Northern Development, Mines, Natural Resources and Forestry, Ontario Ministry of the Environment, Conservation and Parks, Lake Simcoe Region Conservation Authority and Toronto and Region Conservation Authority

The original staff report is attached for your information.

Please contact Laura McDowell, General Manager Interim Transition, Environmental, Public Works at 1-877-464-9675 ext. 75077 if you have any questions with respect to this matter.

Regards,

Christopher Raynor (he/him) | Regional Clerk, Regional Clerk's Office, Corporate Services Department

The Regional Municipality of York | 17250 Yonge Street | Newmarket, ON L3Y 6Z1
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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
Environmental Services
May 5, 2022

Report of the Commissioner of Public Works

Regional Greening Strategy Refinement and 2021 Achievements

1. Recommendations

1. Council adopt the refined Regional Greening Strategy
2. The Regional Clerk circulate this report to the Clerks of the local municipalities, Chippewas of Georgina Island First Nation, Environment and Climate Change Canada, Natural Resources Canada, Ontario Ministry of Northern Development, Mines, Natural Resources and Forestry, Ontario Ministry of the Environment, Conservation and Parks, Lake Simcoe Region Conservation Authority and Toronto and Region Conservation Authority

2. Summary

This report seeks adoption of a refined Regional Greening Strategy (Greening Strategy) and presents a refined approach for delivering key priorities over the next 10 years. The refined Greening Strategy is presented in Attachment 1. This report also provides Council with an update on activities and significant Greening Strategy achievements for 2021.

Key Points:

- The Greening Strategy is an evolving program that adapts to deliver on-the-ground action to achieve the Region's natural environment priorities
- First adopted in 2001, and last refined in 2012, the Greening Strategy has supported planting over 1.7 million trees and securing 1,518 hectares of land for conservation
- In 2021, the Greening Strategy resulted in planting of 92,154 trees and shrubs, securing 142 hectares of land for conservation, inspiring and informing residents through 57 events and leveraged \$2.8 million in external funding
- To ensure it meets changing needs of the Region's diverse communities and environmental challenges, the Greening Strategy was identified for a 10-year review and refinement

- Public and stakeholders communicated strong support for the Greening Strategy as well as a desire to take action at the individual and community levels to create a healthy natural environment
- The refined Greening Strategy commits to continuing and expanding core programs, developing new partnerships and piloting new programs to offer residents more opportunities to get involved

3. Background

Greening Strategy contributes to creating and maintaining sustainable natural environments and communities

Since its adoption in 2001 and refinement in 2012, the Greening Strategy has been used as a tool to implement the York Region Official Plan vision for a Sustainable Natural Environment. Delivery is achieved through partnerships and on-the-ground actions that protect and enhance the natural environment and the Regional Greenlands System. Actions result in the protection and enhancement of natural features including forests, wetlands and grasslands (Figure 1).

Figure 1

Key Strategies and Plans Deliver on Regional Official Plan Objectives



Green infrastructure, including trees, forests and other natural features, provide an array of environmental and health benefits to residents such as cleaning air and water, providing shade and cooling our communities, reducing stormwater runoff and removing and storing carbon from the atmosphere (Figure 2).

Figure 2
Benefits of the Natural Environment



Twenty years of successful Greening Strategy implementation demonstrate on-the-ground results

Delivered through four action areas, Environmental Land Protection and Preservation, Enhancement and Rehabilitation, Stewardship and Education, and Leadership, Innovation and Knowledge, the Greening Strategy has supported planting more than 1.7 million trees and shrubs and securing 1,518 hectares of lands for conservation. Over the past 20 years, a Regional investment of \$19 million has secured \$108 million in conservation lands through land securement partnerships, donations from landowners, and funding secured through grants.

Innovative actions implemented through the Greening Strategy have been recognized through numerous awards including:

- 2021 York Region designation as a Tree City of the World by the Arbour Day Foundation and the Food and Agriculture Organization of the United Nations
- 2019 Lieutenant Governor's Ontario Heritage Award for Excellence in Conservation
- 2019 Green World Awards (Silver) for Environmental Best Practices

The Greening Strategy remains a key delivery mechanism for achieving Region canopy and woodland cover targets.

4. Analysis

Greening Strategy continues to adapt and deliver through challenging COVID-19 circumstances

In 2021, Greening Strategy programs and implementation partners continued to adapt to challenges posed by COVID-19. Programming evolved to meet deliverables and provide residents with options to meet their needs while aligning with COVID-19 public health measures.

Greening Strategy partners operated by adapting their programming to ensure safe and effective practices, including digital and socially distanced outcomes. These actions resulted in over 92,000 trees and shrubs being planted, including creation of 36 hectares of woodland. Outreach events remained lower than normal with 57 events delivered (Table 1). Additional outcomes included the planting of 3,520 pollinator friendly plants and distribution of 2,170 pollinator friendly seed packets.

Table 1
Greening Strategy 2021 Achievements

Action Area	Goal	Target (Minimum)	2021 Achievement
Enhancement and Rehabilitation	Enhance and rehabilitate the natural environment on both public and private lands	Plant 70,000 trees and shrubs	92,154 trees and shrubs planted
Environmental Land Protection and Preservation	Restore linkages and protect core natural areas including forests, wetlands and significant habitat	Increasing area (hectares) of environmental lands secured	142 hectares of environmental land secured
Stewardship and Education	Educate residents about the value of the natural environment and provide opportunities to connect with nature and inspire action	100 outreach events Engage 50,000 residents	57 outreach events Over 50,000 residents engaged
Leadership, Innovation and Knowledge	Share knowledge, demonstrate leadership and be innovative in protecting the natural environment	Host four technical regional forums Present at two science and technology forums	20 forums hosted with agencies and local municipalities 18 presentations at science and technology forums

York Region was the 2021 recipient of Susan Wiecek Forestry Education Award

In February 2022, York Region received the 2021 Susan Wiecek Forestry Education Award. The award, issued by Forests Ontario, is presented to individuals or organizations for outstanding contributions to forestry education in Ontario. In the past six years, over 250,000 residents have been engaged through 1,100 events hosted by York Region. During COVID-19, Discover Your Forest Kits were created reaching over 1,330 residents.

With funding support from Infrastructure Canada, the Region acquired 142-hectare property to expand the York Regional Forest

In 2019, York Region was approved for \$10 million in funding through Infrastructure Canada's Disaster Mitigation and Adaptation Fund (DMAF) to implement a natural infrastructure project. The project will result in over 400,000 trees and shrubs being planted across the Region, including establishing 100 hectares of new woodland by 2027.

In 2021, the Region secured 142 hectares of land with approximately 82 hectares available for tree planting. The Region leveraged DMAF funding towards the purchase of the property. In addition to establishing new woodlands and protecting existing woodlands, the property will be operated as a York Regional Forest tract, increasing access to green space for residents.

Greening Strategy identified for a 10-year review and refinement in 2021

With 2021 marking the 20-year anniversary of the Greening Strategy and 10 years since the last refinement, the Greening Strategy was reviewed to ensure it meets the changing needs of the Region's diverse communities and environmental challenges. The review ensures our Greening Strategy remains consistent with new and updated Corporate documents such as Vision, draft Regional Official Plan and draft Climate Change Action Plan.

Consultation with the public, staff and stakeholders was key to informing the refined Greening Strategy. A public survey was completed in the fall of 2021, with 935 responses received. Stakeholders were consulted multiple times, including a workshop with representatives from 22 organizations such as local municipalities, conservation authorities, school boards and other organizations. Public and stakeholder input provided insights on the importance of the Greening Strategy and identified opportunities to improve delivery of on-the-ground actions.

Refined Strategy commits to continued delivery of award-winning programs with opportunities to expand activities through new innovative partnerships

The Greening Strategy refinement process confirmed that Action Areas and associated programs remain relevant, effective and supported by the public and stakeholders. The refined Greening Strategy retains these Action Areas and looks to expand on the success of existing programs by increasing access and capacity (Attachment 1).

The refined Greening Strategy includes continuing emphasis on tree planting and expanding programming to support restoration and enhancement of other types of natural features including wetlands, prairies, hedgerows, as well as pollinator habitat and invasive species management. The Greening Strategy also demonstrates commitment to ongoing collaboration with the agricultural community and related organizations to promote and deliver programs.

Partnerships will continue to be the primary delivery mechanism for the Greening Strategy, allowing the Region to effectively implement programs and efficiently use available funding. Partnerships leverage expertise and additional funding, which often matches or surpasses the investment made by the Region. Actions in the refined Greening Strategy focus on exploring new partnerships with municipalities, school boards, libraries, businesses and non-profit organizations.

Greening Strategy leverages innovative and digital technology to deliver on corporate Vision and Strategic Plan

The refined Greening Strategy continues to support the Region's vision for a sustainable environment and healthy communities and Official Plan policies including a Sustainable Natural Environment, Complete Communities and Agricultural System. The policy review identified that our Greening Strategy remains aligned with key Regional priorities. The Greening Strategy continues to contribute to the Region's 2051 canopy cover target of 40% and woodland cover target of 25%, demonstrating the Region's commitment to on-the-ground action. These actions are supported through innovative digital approaches, including the development and implementation of a tree planting prioritization tool, to identify priority areas to increase canopy cover, and the use of LiDAR to improve accuracy in canopy cover assessments and improved planning for York Regional Forest trails.

Actions in the refined Greening Strategy are also vital to implementation of the draft York Region Climate Change Action Plan, aiding in achieving outcomes under the four priority action areas. Greening Strategy actions, including tree planting and natural feature enhancement, provide numerous benefits that support climate change mitigation including carbon sequestration, regulating climate, improving air quality and enhancing water storage. These actions support creating more resilient communities, that can adapt to and manage the impacts of climate change.

Public and stakeholder consultation demonstrates strong interest in protecting and improving the natural environment

Throughout the fall of 2021 and the beginning of 2022, staff completed multiple stakeholder consultations and a public survey to understand changing needs of residents and partners. Through this engagement, strong support for the Greening Strategy and a desire for York Region to continue and expand programs was communicated.

Stakeholders from local municipalities, environmental organizations and conservation authorities provided feedback on the Greening Strategy. Stakeholders emphasized the importance of the Greening Strategy in achieving on-the-ground actions, as well as delivery

of climate change initiatives. Stakeholder identified the key role the Greening Strategy plays in creating beneficial networks that support partners in implementing more on-the-ground actions.

The public survey gauged current levels of understanding and awareness of the Greening Strategy, perceived importance of the natural environment, and feedback on the Region's role in protecting and restoring the natural environment. Respondents overwhelmingly believe York Region should invest in protecting and enhancing the natural environment with 96% of respondents indicating this activity is very important.

The survey also showed a high level of interest from respondents in participating in a variety of programs offered through the Greening Strategy, including tree planting and educational events. All existing action areas continue to be valued by respondents with a strong desire to see more tree planting, opportunities to learn about and experience the natural environment, and securing land for conservation.

Areas cited as new opportunities for the Greening Strategy included better promotion of the Greening Strategy and programs, native tree and plant sales, fruit tree planting initiatives, and restoration of a variety of habitat types.

Agricultural community consulted to identify partnership opportunities

Agricultural land in York Region plays a significant role in protecting and restoring environmental features, functions and corridors. A workshop was held in early 2022 with the agricultural community to discuss the role agriculture lands play in meeting Greening Strategy objectives and opportunities to collaborate on initiatives in the future.

Key outcomes from this meeting include:

- Recognizing the role of agriculture lands in protecting natural heritage features, creating linkages between natural areas, providing habitat for wildlife and helping to mitigate climate change
- Collaborating to promote program and funding opportunities to farmers for natural feature protection and enhancement
- Partner with agriculture organizations to recognize the important role agricultural lands play through existing natural environment programming and events

The Region is committed to ongoing dialogue and collaboration with the agriculture community on Greening Strategy initiatives.

Region will pilot programs that give residents more options to get involved

Residents communicated a desire for more opportunities to participate in Greening Strategy programming. The refined Greening Strategy proposes a series of actions to support increased awareness of the Strategy and opportunities to get involved. Pilot programs to increase involvement include a Region-wide native tree and plant sale, exploring

opportunities to support and promote fruit trees and expanding educational opportunities to experience the natural environment.

5. Financial

Through partnerships, the Greening Strategy leverages in-kind resources and external funding for each action area. In 2021, \$1,940,000 was approved in the operating budget for the Greening Strategy, including \$795,500 for environmental land purchases (Table 2). The remaining \$1,144,500 supports operating programs and partnerships including large scale reforestation, backyard tree planting, outdoor education, and land securement agreements. In 2021, program partners leveraged an additional \$433,000 in funding for program delivery and the Region leveraged \$2.4 million in funding for land securement and urban tree planting from Infrastructure Canada's Disaster Mitigation and Adaptation Fund. Over the past 20 years, a Regional investment of \$19 million has secured \$108 million in conservation lands through leveraging additional funding and land donations.

Table 2
Greening Strategy 2021 Operating Budget Overview

Program	2021 Expenditures*	2022 Budget
Environmental Land Purchases	\$795,500	\$806,000
Greening Strategy Implementation	\$1,144,500	\$1,309,000
Total Operating Budget	\$1,940,000	\$2,115,000

*actual 2021 expenditures

To implement the refined Greening Strategy and deliver on residents' desire for more opportunities to contribute to the natural environment, an annual operating budget increase of \$50,000 per year over four years is required. This additional funding will be requested through the Region's multi-year budget process. Staff will continue to seek opportunities to leverage external funding to support Greening Strategy delivery.

Land prices continue to increase throughout the Region limiting our ability to secure conservation lands within existing budgets. The Region is experiencing an increased demand for public green space. Staff will explore funding opportunities to address market pressures and increasing demand and bring forward requests for additional funding for conservation land securement through the multi-year budget process.

6. Local Impact

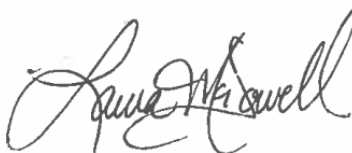
Through Greening Strategy programs, local municipalities and residents take action to protect and enhance the Region's natural environment. Local municipalities and non-government organizations have benefited directly from the Greening Strategy through on-the-ground actions or direct support for their programs. The refined Greening Strategy ensures that actions and programs remain relevant and beneficial to Regional and local municipal strategic priorities. Program delivery will continue to provide local municipalities and residents with opportunities to enhance and experience the natural environment.

7. Conclusion

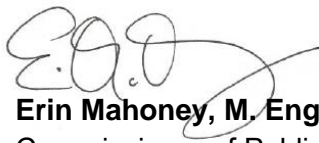
The Regional Greening Strategy has been an innovative and impactful means to protect and enhance the Region's natural environment over the past 20 years. Through implementation of the Greening Strategy, over 1.7 million trees and shrubs have been planted and 1,518 hectares of conservation lands secured. Through this refinement process, Region residents have re-affirmed the critical role the Greening Strategy plays in protecting the natural environment and creating healthy, livable communities. The refined Greening Strategy positions York Region as leader in developing and implementing innovative and collaborative natural environment programs that deliver measure results.

For more information on this report, please contact Laura McDowell, General Manager Interim Transition, Environmental, Public Works at 1-877-464-9675 ext. 75077. Accessible formats or communication supports are available upon request.

Recommended by:



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Approved for Submission:



Bruce Macgregor
Chief Administrative Officer

April 13, 2022
Attachments (1)
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MARCH 2022
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ATTACHMENT 1

THE REGIONAL MUNICIPALITY OF YORK GREENING STRATEGY

STEPS TO A HEALTHIER ENVIRONMENT





Family fun in the forest

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Photo: Forest Canopy

THE GREENING STRATEGY: STEPS TO A HEALTHIER ENVIRONMENT

York Region's Greening Strategy puts into action the Region's commitment to a healthier, more resilient natural environment.

Caring for and enhancing all green spaces across York Region -- from backyards to forests and everything in between -- is important to build healthy communities that support residents' physical and mental well-being. Trees and other natural features act as green infrastructure, which has been identified as a critical aspect of creating sustainable and resilient communities by using natural processes and plants to help purify air and water. Leveraging

nature this way is much less costly than building infrastructure for the same purpose.

Healthy green spaces also benefit birds, pollinators, other wildlife in the face of pressures from growth and climate change. Meadows and prairies dotted with wildflowers are especially important for native bees and butterflies. Wetlands are home to many diverse life forms, feeding and sheltering at least one third of all at-risk species across North America. Large areas of woodland are essential to the survival of deep-forest birds like the colourful cerulean warbler, which is a threatened species in Ontario.

First approved by Regional Council in 2001, the Greening Strategy has since been refined to reflect evolving policy direction as well as emerging priorities. This newest refinement continues to focus on protecting and preserving important green spaces, enhancing and rehabilitating natural features throughout the Region, inspiring and educating the community, and embracing innovation while sharing knowledge.

As well as continuing programs to increase the tree cover in the Region, the refined Strategy gives more thought to how meadows, prairie, wetlands, hedgerows, other rural lands and naturalized urban areas can contribute to ecosystem and community health.

Another important strand in this update is broader community involvement. This includes acknowledging and embracing the heritage of the Indigenous peoples who were the first to live here, and a commitment to engage with First Nations and Indigenous communities through involvement in implementation of the Strategy. It also means committing to engage often and meaningfully with the Region's agricultural community, which has long had an important stewardship role. Finally, it means recognizing that public green spaces should be accessible to everyone in the Region and should feel welcoming to all who want to enjoy them.

BENEFITS OF THE NATURAL ENVIRONMENT



Enhanced air
and water
quality



Reduced
flooding risks



Opportunities to
be physically
active in nature



Healthy and
sustainable
communities



Improved mental
health outcomes



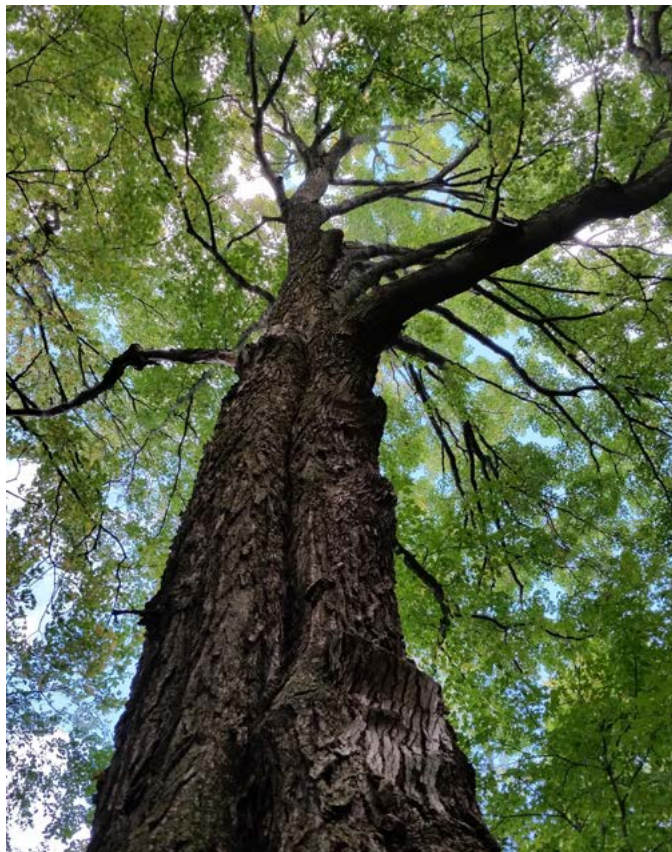
A legacy for
future
generations



Climate change
mitigation



Habitat for
wildlife



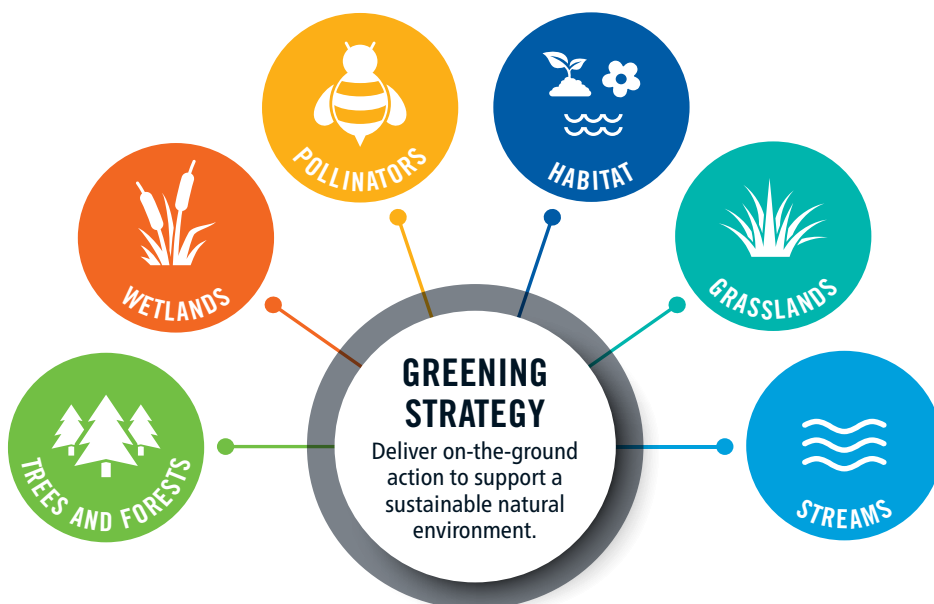
Photos: Maple Tree Canopy, Outdoor Education, Photo Contest - Pale Green Weevil, Bendor and Graves tall grass prairie

THE FOUNDATIONS OF THE GREENING STRATEGY

The Greening Strategy enacts policies set out in several key Regional documents, including the Region's Vision and Strategic Plan, the Regional Official Plan, and the draft Climate Change Action Plan. The guidance in those documents focuses the Strategy on supporting healthy, sustainable and connected green spaces. An important focus for the Region is the Greenland System, which includes ecologically important areas like the York Regional Forest. To nurture a wide range of life forms, the Region needs to provide and protect these areas, and also encourage residents and others to provide a wide range of habitats in all settings.

The Greening Strategy is one element of a wide range of

programs and plans across Regional government that contribute to a more sustainable environment, such as the draft Climate Change Action Plan and the Agriculture and Agri-Food Sector Strategy. There are important linkages between the Greening Strategy and other plans, especially the Water and Wastewater Master Plan, which also advocates for greater use of green infrastructure. In addition, the Greening Strategy is connected to the Regional Official Plan and the Transportation Master Plan, both of which envision a Region of more compact growth in which active and eco-friendly transportation options are more widely available, especially by using trails and paths in green spaces.



The Greening Strategy supports the draft Climate Change Action Plan:

- Encouraging and funding the planting of trees and shrubs is the most cost-effective means of capturing carbon across the Region to reduce greenhouse gas emissions. Protecting and enhancing wetlands, ponds and grasslands also enables storage of large amounts of carbon.
- In addition, these natural assets and areas help prevent floods by absorbing heavy rain and snowmelt, an increasingly important role as climate change triggers more extreme weather.
- Encouraging greater use of green infrastructure by government, businesses and homeowners reduces the need for built infrastructure and the energy it uses.
- Promoting plantings, especially of native species, on as many different types of land as possible nurtures native pollinators, birds and other wildlife as climate change makes them more vulnerable to threats.

THE GREENING STRATEGY DEPENDS ON EVERYONE GETTING INVOLVED

More than ever, achieving the goals of the Greening Strategy will depend on working together. Providing more habitat in more settings, including private land, helps biodiversity. Biodiversity is critical because the more different life forms that an ecosystem includes, the more resiliency that ecosystem has against pressures from climate change, urbanization and invasive species.

This means that everyone can play a role -- gardeners, businesses, farmers, home builders, schoolkids and community organizations, as well as municipal and other levels of government. While protected areas within the Greenland Systems are critical, a rich and diverse natural environment also depends on leveraging the land around homes, businesses, schools and other institutions, as well as agricultural land that is not actively planted with crops. Biodivcanada, Canada's biodiversity clearing house, notes that backyard and neighbourhood habitats are crucial in holding together an increasingly fragmented natural landscape.

The Region will also continue to work with partner organizations to maximize impacts. By partnering, the Region is able to leverage more funding for Greening Strategy goals -- in some cases, resulting in five times the Region's own investment. This can include the partner's own funding as well as funds from other levels of government, such as Environment Canada's Ecological Gifts program for land securement

Photo: Spring Forest Festival tree planting



Farming plays a key stewardship role

The agriculture industry is a vital and thriving part of York Region's economy, and the Region is home to some of the most productive farmland in Ontario. Farmers have long been at the forefront of protecting land, air and water and continue to have a strong stewardship role in York Region. This is reflected in the Region's Vision, which notes that the agricultural sector contributes to natural habitat and acts as a carbon sink.

In addition to producing food, local farmlands help to mitigate climate change and create important habitat linkages allowing our wildlife to travel between forests and fields. In addition to fields, farmlands also often contain key natural heritage features such as wetlands, streams, woodlands and trees that are protected and cared for by farmers.

While the Region has developed an Agriculture and Agri-Food Sector Strategy to support the industry, the Greening Strategy includes actions to partner with farmers to support this stewardship and recognize the role of farmlands in meeting Greening Strategy goals.

ACHIEVEMENTS

‘Amazing program’ delivered through LEAF partnership

York Region supports a program for planting trees on homeowner’s yards that’s delivered by a non-profit known as LEAF (Local Enhancement and Appreciation of Forests). The program offers full service and do-it-yourself options for planting. As a homeowner from Newmarket put it: “A big, beautiful tree that supports our local wildlife, cools my porch, and beautifies my home... delivered to my door with mulch! What more could you ask for? This is an amazing program with prices that can’t be beat and unique trees that can be hard to source. Thanks to the Town of Newmarket and York Region for subsidizing and prioritizing our urban canopy cover. Our native trees are an important part of solving our climate and biodiversity crisis.”

Naturalizing one York Region property adds 18,000 trees

York Region always looks at opportunities to naturalize its own properties. An example is the water resource recovery facility on Doane Road between Centre Street and the York-Durham Line. Through partnerships with the Lake Simcoe Region Conservation Authority and community plantings, more than 18,000 tree seedlings were planted on the site between 2015 and 2018.



Bill Fisch Forest Stewardship and Education Centre certified as ‘living building’

In 2018 the unique and inspiring Bill Fisch Forest Stewardship and Education Centre in the York Regional Forest became the first building in Canada and only the twenty-first in the world to be certified under the Living Building Challenge. The certification assesses a building’s performance from the perspectives of site, water, energy, health, materials, equity and beauty. The building previously received Leadership in Energy and Environmental Design (LEED®) Platinum certification. Its innovative features include all-wood construction using Forest Stewardship Council certified or recycled wood; solar panels, LEDs, heat pumps, and triple-glazed windows that allow the building to generate more energy than it uses; and water supply from rain and snow melt.

Photos: Bill Fisch Forest Stewardship and Education Centre, Bendor and Graves Reforestation



ACHIEVEMENTS

'Discover Your Forest' kits met the challenge of lockdowns

When in-person events had to be put on hold during the COVID-19 pandemic, staff responded by creating a quarterly Discover Your Forest Kit. These kits included the Everyday Guide to the York Regional Forest and self-guided activities developed by partners like Forests Ontario, LEAF, the Toronto and Region Conservation Authority and the Lake Simcoe Region Conservation Authority. In total, more than 1,000 kits were distributed, reaching over 3,000 participants.

Grow Your Legacy: before and after

The Grow Your Legacy Program supports largescale tree-planting projects to create or expand woodlands on private and public lands. This program is implemented through partnerships with the two conservation authorities active in York Region, Toronto and Region for the Lake Ontario watershed and Lake Simcoe Region for the Lake Simcoe/Lake Huron watershed. They work directly with landowners to plan and carry out tree planting. The program is funded by the Region, landowner and other sources.

Photo: Monarch butterfly on a cup plant at the Bendor and Graves prairie

New property will grow the Forest and trail system

In 2021, York Region secured a 142-hectare (350-acre) property in the Town of East Gwillimbury to expand the York Regional Forest. Plans included increasing woodland cover through tree planting on 82 hectares and promoting outdoor recreation by adding trails.



ACHIEVEMENTS SINCE THE INCEPTION OF THE GREENING STRATEGY

 **1,700,000 +**
trees and shrubs planted

 **149,000+**
Participants in Region and partner-led Greening Strategy Programs



York Region was recognized in 2021 as a Tree City of the World by the Food and Agriculture Organization of the United Nations and The Arbour Day Foundation

 **1,518 Hectares**
(almost 3,800 acres)
Lands secured by York Region and partners

 **\$108,000,000**
Value of lands secured for conservation

REFINED GREENING STRATEGY RESPONDS TO RESIDENTS' INPUT

To help shape the refined Greening Strategy, a public survey was carried out in the fall of 2021. The goals included learning how much residents know about the Greening Strategy, asking for their opinions on existing programs and finding out what they view as important in the next 10 years.

The survey found that:

- 96% of respondents believe it is very important for York Region to invest in protecting and enhancing the natural environment
- More than half of respondents are interested in taking part in Greening Strategy programs
- Key areas in which the Region should take action through the Strategy are:
 - › Land Protection and Preservation: Securing land to protect existing natural features
 - › Enhancement and Rehabilitation: Naturalizing public lands
 - › Stewardship and education: Providing opportunities for residents and others to experience nature
 - › Leadership, Innovation and Knowledge: Working with local municipalities and organizations to develop coordinated programs and efforts
 - › While many respondents were familiar with specific programs, only 68% had heard of the Greening Strategy.

The results of the survey show the Region is on the right track and residents are very interested in getting involved. As a result, the major goals of the Greening Strategy remain the same, and this refinement provides more ways for residents to take part, commits to growing partnerships, aims to protect species at risk and pollinators throughout the landscape, and expands programs to enhance and rehabilitate habitats like wetlands. In addition, the Region will commit to raising awareness of the Greening Strategy and connecting residents to the programs that matter most to them.



Photos: Discover your forest kit - Social media post, L.E.A.F. National Tree Day Marita Park 2014, Enjoying time together in the forest. YR forest photo contest

GREENING STRATEGY ACTION AREAS

Environmental Land Protection and Preservation

A healthy, extensive and connected natural heritage system is essential for biodiversity, and public green spaces are important amenities that provide recreation opportunities and support the physical and mental well-being of residents. Connecting green spaces provides corridors that link larger areas and make it easier for trees and plants to thrive and for birds and other wildlife to find food and shelter.

Large protected natural areas help the Region mitigate and adapt to the impacts of climate change including reducing the risk of flooding, protecting source water, and facilitating species migration.

Goal: Protect and enhance natural areas and create and strengthen connections and corridors

Projects and Programs

- Partnerships to protect land for conservation
- Secure land to expand the York Regional Forest for public use

Actions

- Review and refine criteria for evaluating securement opportunities
- Review and refine agreements with current and new partners
- Seek opportunities to expand York Regional Forest through land securement



Community stewardship and education

York Region residents are clearly interested in how they can make the environment healthier and more sustainable. This includes understanding the value of the natural environment, how to plant and care for natural elements, and encouraging residents to take advantage of the mental and physical health benefits of green spaces.

Goal: Inspire stewardship and action through education and facilitating connections with nature

Projects and Programs

- Natures Classroom Program
- Events in the York Regional Forest
- In School Education Programs (Treebee and Envirothon)
- Promoting the benefits of trees to residents

Actions

- Refine Nature's Classroom Program based on results of Visitor Experience Plan for the York Regional Forest
- Explore opportunities to promote awareness of natural environment programs specific to agricultural properties
- Recognize role of agricultural lands in a healthy natural environment in educational programming
- Increase awareness and promote Greening Strategy, programs, and achievements
- Partner with new educational partners, such as libraries and local municipalities, to enhance community learning opportunities
- Develop Discover your Forest welcome kit for forest newcomers

Photo: Grow Your Legacy photo shoot

GREENING STRATEGY ACTION AREAS

Enhancement and Rehabilitation

Creating and improving natural features is critical to the health of our communities. Planting trees, shrubs and pollinator plants, restoring streams and wetlands, and establishing new forests, hedgerows and meadows ensure a sustainable environment for future generations. Enhancing the natural environment relies on partnerships with residents, schools, businesses, and others to strengthen the entire ecosystem across the Region. From a backyard tree or a school pollinator garden to a large forest, the benefits provided increase the quality of life for everyone in the Region.

Goal: Enhance and rehabilitate the natural environment on public and private lands.

Projects and Programs

- Grow Your Legacy Large Scale Tree Planting Program
- Backyard Tree Planting Program
- Community tree planting to naturalize public land
- Stream and Wetland Rehabilitation Program
- Schoolground Greening Program
- York Region Property Naturalization
- Greening Action Partnership Fund
- Supporting and promoting pollinator habitat

Actions

- Review and refine Grow Your Legacy partnership agreements and program criteria to increase planting
- Implement micro-grant funding program for community groups, schools, and organizations for natural environment enhancement and restoration projects
- Partner with local municipalities to refine Backyard Tree Planting Program and target priority areas
- Pilot a planting program partnership targeting Industrial, Commercial and Institutional lands
- Review and refine agreements for schoolground planting partnerships
- Work with existing conservation partners and agriculture communities to improve access to funding programs for farmlands
- Pilot a Region-wide native tree, shrub, and plant sale
- Review and refine stream, wetland and riparian rehabilitation program and explore opportunities to expand
- Explore new and innovative partnerships to plant trees, shrubs, and pollinator plants, including fruit trees



Photos: Sustainable timber harvest, Ontario Turtle Conservation Centre staff representative holding a snapping turtle - 2017 Spring Forest Festival - YR forest photo contest, Water in a low area on a cold winter day - YR forest photo contest, 2016 Envirothon

GREENING STRATEGY ACTION AREAS



Photos: Picking the best trees for street tree planting, 2016 Field Tour—street tree and horticulture, Structural soil installation on Donald Cousens Parkway Fall 2009, Accessible Trail in Hollidge Tract Ribbon cutting for opening of YRF first Accessible Trail—September 20, 2010

Innovation and knowledge

York Region continues to demonstrate leadership in the protection and promotion of the natural environment through its policies, programs and use of leading-edge approaches. Through inclusive forums and technical working groups, the Greening Strategy provides opportunities for York Region, its partners, and neighbouring Regions to share successes and challenges and learn from one another.

Goal: Seek and transfer knowledge and demonstrate leadership and innovation in the protection and promotion of the natural environment.

Projects and Programs

- Hosting forums and working groups to support Greening Strategy Objectives
- Working with public health to share knowledge and partnership opportunities
- Conducting forest studies in partnership with local municipalities
- Sharing knowledge through forums and workshops

Actions

- Work with partners to share best practices and consistent messaging to improve resident knowledge relating to the natural environment such as climate change, invasive species and other topics of interest
- Partner with research and education institutions to support innovation and build a body of knowledge in Natural Heritage and Forestry
- Explore opportunities to partner with First Nations, including incorporating traditional ecological knowledge into Greening Strategy Programs
- Expand and refine existing forum to encourage collaboration and knowledge sharing among local municipal environmental advisory committees
- Explore options to assess and report on biodiversity across the Region

ACTING ON THE GREENING STRATEGY

This refinement continues valuable activities and programs that have contributed to protection of more natural features in the Region, a healthier and larger tree cover, enhancement of other habitat types like prairie, and education and outreach to show more people the benefits of a closer connection to nature. In response to what residents would like to see, as well as emerging science, it expands on programs and efforts to encourage biodiversity, use land more sustainably, and prevent greenhouse gases from entering the environment.

These will be very important goals over the next 10 years, as the Region grows and urbanizes and the need to mitigate climate change impacts becomes more pressing. Healthier and more diverse natural features will also help residents, as well as native wildlife, better manage climate change impacts by reducing flood risks, providing summer cooling and winter shelter, and making York Region a more green and welcoming place.

With this refinement, the Region invites residents, businesses and others to become involved. To stay up to date on Greening Strategy programs and activities at york.ca/yrf

Photos: YR forest photo contest, Street Tree Survey curbside sign-October 2020, Spring Forest Festival, YR forest photo contest - editors choice





FORESTRY

1-877-464-9675

york.ca/forestry

Regional Council Decision - Toronto Global Membership and Foreign Direct Investment Realignment

On May 26, 2022 Regional Council made the following decision:

1. Council approve participation with the Toronto Global partnership at the Municipal Collaborator level of \$50,000.
2. The report be circulated by the Regional Clerk to local municipalities, Toronto Global, and the Ministry of Economic Development Job Creation and Trade.

The original staff report is attached for your information.

Please contact Jonathan Wheatle, Director, Economic Strategy at 1-877-464-9675 ext. 71503 if you have any questions with respect to this matter.

Regards,

Christopher Raynor (he/him) | Regional Clerk, Regional Clerk's Office, Corporate Services Department

The Regional Municipality of York | 17250 Yonge Street | Newmarket, ON L3Y 6Z1
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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
Planning and Economic Development
May 5, 2022

Report of the Commissioner of Corporate Services and Chief Planner

Toronto Global Membership and Foreign Direct Investment Realignment

1. Recommendations

1. Council approve participation with the Toronto Global partnership at the Municipal Collaborator level of \$50,000.
2. The report be circulated by the Regional Clerk to local municipalities, Toronto Global, and the Ministry of Economic Development Job Creation and Trade.

2. Summary

This Report provides a summary of Toronto Global's new proposed funding and membership model with municipal partners. It outlines the approach for York Region's continued involvement with Toronto Global at the reduced funding level set by the organization while reallocating funds and refocusing staff support on a "made in York Region" Foreign Direct Investment (FDI) partnership framework.

Key Points:

- York Region is a top destination for FDI in the GTA and Canada
- Toronto Global was formed in 2016 as a partnership between all three government levels to deliver centralized FDI attraction services in the Greater Toronto Area (GTA)
- While Toronto Global made a positive impact on FDI attraction into the GTA, the overall share of results in 905 jurisdictions, including York Region, remains low
- York Region's last joint municipal funding agreement with Toronto Global expired March 31, 2022. Municipal funders identified operations and governance concerns
- Toronto Global has proposed a new partnership model going forward
- Assessment on the new model provides a benefit for continued involvement with Toronto Global at a lower funding level
- Remaining budget will be redirected towards a "made in York Region" FDI partnership framework which will include support for local municipal FDI attraction efforts

3. Background

York Region is a top destination for Foreign Direct Investment (FDI) in the Greater Toronto Area (GTA)

FDI has contributed to substantial net economic benefits to the Region's economy with over 500 foreign companies providing an estimated 60,000 jobs, roughly 10% of all local employment. With over 60% of the total, the U.S. is the largest source country of FDI in York Region. Information & Communications Technology (ICT) represents the sector with the greatest share of FDI at 30%.

The Region is home to an impressive list of foreign companies, many of which are industry leaders. This includes such names as IBM, AMD, Huawei, Aviva Insurance, Honda, Johnson & Johnson, GM, Toshiba, Philips, GE, Hyundai, Siemens, Staples, Mars Wrigley, Qualcomm, and Adidas. While the FDI activity in York Region has slowed since the COVID-19 pandemic, the Region continued to see foreign investments, particularly in warehousing and distribution and technology sectors. Global corporations with recent investments include, Walmart, Amazon, Tesla, LGC, GEH, Syntronic and Cepheid.

York Region's largest local municipalities have longstanding FDI attraction programs focused on key international markets. The smaller communities have taken a more opportunistic approach to FDI attraction and planning for investment attraction readiness. York Region also delivers collective promotion of the Region as a destination for business and talent under the 'York Link' umbrella and provides on-request support to local municipalities with FDI clients. Through the collective work of the local municipalities, the Region, and external economic development and real estate partners, over 30 new foreign investments have been attracted to the communities yielding about 6,000 new jobs in the last five years.

Toronto Global was formed in 2016 as a partnership between all levels of government to attract FDI into the GTA

York Region has been funding collaborative FDI attraction in the GTA for over 20 years, previously through the Greater Toronto Marketing Alliance (GTMA) and in the last 6 years through the Toronto Global investment attraction organization.

Toronto Global was formed and first funded in 2016 as a revitalized FDI partnership between all 3 levels of government and became fully operational in early 2017. The organization acts as the investment promotion agency for the entire GTA, responsible for investment lead generation, servicing prospective clients, and international marketing of the Toronto Region. The primary objective of Toronto Global is to work with foreign investor clients to assist in the establishment of new business operations in the Toronto Region.

Toronto Global provides an additional avenue for supporting Regional Council's priority for business growth and job creation.

Funding for Toronto Global is largely provided by the federal and provincial governments

Toronto Global's total funding from all government levels over the last 6 years was roughly \$36M, including York Region's share of about \$2M. Table 1 summarizes Toronto Global's funding by stakeholder in the last fiscal year of the previous agreement.

Table 1
Toronto Global funding by stakeholder - previous agreement

Municipality/Stakeholder	Core Funding in FY 2021/2022	Share of Total Funding
Government of Canada	\$2,000,000	30.5%
Government of Ontario	\$2,500,000	38.1%
City of Toronto	\$926,384	14.1%
York Region	\$342,696	5.2%
City of Mississauga	\$236,792	3.6%
Durham Region	\$214,735	3.3%
City of Brampton	\$173,887	2.7%
Halton Region	\$166,503	2.5%
Total	\$6,561,000	100%

Source: Toronto Global.

Toronto Global leads and handles FDI sales and client services in-house with municipal involvement on a case-by-case basis

As GTA's dedicated FDI attraction organization, Toronto Global receives inbound investment leads and inquiries from Provincial and Federal FDI agencies and economic officers in Canadian embassies and consulates worldwide. There is a team of in-house investment advisors handling all aspects of FDI attraction including prospecting, sourcing of opportunities, investment sales and client services. This end-to-end and client-centric model is aimed at ensuring consistent and competitive customer service to meet client specific location needs and deliver better investment results for the GTA.

The investment advisors reach out to municipal partners on a case-by-case basis for support with location- specific client inquiries or opportunities. York Region encourages and facilitates direct engagement between local-municipal economic development staff and Toronto Global's investment and marketing teams to support the best possible handling of referred investment inquiries or clients.

On average, about 15 FDI inquiries per year were shared with York Region and its local municipalities. This represents a small share of over 300 FDI clients the organization typically has in its active sales pipeline that are deemed to have “strong potential to locate in the Toronto Region”.

Opportunities received from Toronto Global range significantly in terms of quality and economic potential. These are assessed by regional staff to facilitate direct follow-up between Toronto Global and local municipalities, with regional support. Ownership of, and responsibility for, the client remains with Toronto Global until the file is won, lost or closed.

Although Toronto Global conducts FDI activities on behalf of the funding municipalities, several funders have continued independent FDI missions or activities: namely Toronto, Mississauga, Brampton and Durham Region. Local municipalities in both Halton and York Region have also continued separate FDI programs.

York Region’s last joint municipal funding agreement with Toronto Global expired March 31, 2022

The last joint municipal agreement with Toronto Global expired on March 31, 2022. This marked the sixth year of funding the organization under 2 three-year funding agreements approved by Regional Council in 2016 and 2019. The Provincial government agreement continues until June 2022, with the Federal government agreement continuing into 2023. Toronto Global has started discussions with upper-tier government partners to secure continued commitment for multi-year support on similar funding terms.

Under previous agreements with municipal funding partners, Toronto Global’s annual business plan and its multi-year strategic plan were approved by the organization’s municipal Mayors and Chairs Strategy Council and a separate private sector Board of Directors. Municipal staff from funding partners had no decision-making authority but provided operational and strategic guidance to Toronto Global staff, through the municipal Economic Development Officers (EDO) Management Council.

4. Analysis

Toronto Global has made a positive impact on FDI attraction into the GTA, however most of the business investments are not within the 905 areas

Toronto Global’s overall impact on attracting FDI into the GTA and promoting the internationally recognized ‘Toronto’ brand globally, has been positive. Between January 2017 and February 2022, Toronto Global facilitated about 170 investment projects leading to the creation of over 9,650 jobs and capital expenditures of roughly \$1.9 billion across the GTA.

The City of Toronto received roughly 80% of Toronto Global’s total investment wins and 65% of new jobs created. This contrasts with 20% of investments and 35% of jobs in all of the GTA’s 905 municipalities combined. This ratio is disproportionately low compared with the 905 jurisdictions’ combined share of the municipal funding (55%) or collective share of GTA’s business establishments with about 60%. Table 2 shows the investments since 2017.

Table 2
Distribution of FDI Results by Municipal Funding Partner
January 1, 2017 - March 1, 2022

Municipal Partner	Investments	Jobs Created
City of Toronto	135	6,145
City of Mississauga	17	3,082
York Region	5	155
Halton Region	6	103
City of Brampton	1	30
Durham Region	2	80
Total	166	9,595

Source: Toronto Global.

The Toronto Global outcomes in York Region between January 1, 2017 and March 1, 2022 are 5 investments with 155 jobs combined (3 year period hiring estimates). This represents only 3% of Toronto Global's total facilitated investments in the Toronto Region and less than 2% of total jobs. These results are disproportionately low when compared to either York Region's 17% share of Toronto Global's total municipal funding or 20% share of GTA's business establishments (businesses with employees). Based on these comparisons, the original goal of funding Toronto Global to attract significant greenfield FDI to York Region beyond what is organically realized, was not met to a satisfactory extent.

On the marketing front, Toronto Global's efforts to promote the Toronto Region globally has been beneficial to all stakeholders, exemplified by the significant exposure for its Amazon HQ2 bid in 2017 and more recently through a series of regionally focused promotional campaigns. Toronto Global also developed a capacity for business research and collecting competitive data on the GTA to support FDI marketing, client sales and partner data requests.

Throughout the term of the municipal funding agreement, 905 partners raised concerns with the existing model

Over the past 5 years municipal funders provided continuous improvement advice to Toronto Global through the Mayors and Chairs Strategy Council and the EDO Management Council. Through this process, there was formal correspondence on key concerns to be addressed to improve the outcomes for all municipal partners including:

- Consideration for revising the funding formula for members

- Refocusing on the original core mandate of greenfield FDI attraction to prevent scope creep into other economic development service areas such as business retention and expansion (BR&E)
- Revising the 75/25 investment targets split between Toronto and the 905 communities
- Other improvement suggestions around opportunities pipeline and client sales practices, corporate name, and organizational structure

With this on-going input, the share of investment projects in GTA's 905 regions eventually increased. In the 2021-22 reporting year, investment in the 905 represented roughly 20% of all investments and over 35% of resulting jobs facilitated by Toronto Global, compared with 15% of both investments and jobs in 2019-20. While this is an improvement, the collective share of 905 jurisdictions of Toronto Global's investment results remain low.

Toronto Global has proposed a new partnership framework with municipalities including a revised funding structure and governance model going forward

In response to low 905 results, feedback provided by the municipalities and a best practice study, a new funding model and governance structure is being proposed. The new funding arrangement leverages the same support from the Provincial and Federal governments but has a two-tier membership for the founding municipalities. There will also be a change to the EDO Management Council, Mayors and Chairs Strategy Council and the Board.

This new model proposes two categories with flat fee membership options for existing municipal partners:

1. "Principal Contributor" with an annual fee of \$2,000,000, or
2. "Municipal Collaborator" with a \$50,000 annual fee

According to Toronto Global, both membership levels offer the same benefits in terms of service delivery. This will include lead generation, client servicing, research and marketing activities enhanced with regional knowledge and collaboration support. One such program is the new Supply Chain Onshoring Resilience and Expansion (SCORE) program in partnership with FedDev Ontario. The difference between membership levels, apart from cost, is at the board level where Principal Contributors have two board seats while Municipal collaborators collectively share one board seat.

The governance model proposed in the new partnership framework is seen in Table 3 and detailed in the draft term sheet provided by Toronto Global outlining the membership benefits and services in Attachment 1.

Table 3 summarizes the key differences between past municipal funding agreements in 2016-2022 and the proposed membership model.

Table 3**Key Differences Between Previous and New Municipal Membership Model**

Item	Previous Membership Model	New Membership Model
Agreement term	3 years	3 years with renewal option for 2 additional years
Membership eligibility	Cities of Toronto, Brampton, Mississauga, and the Regional municipalities of Durham, Halton and York	No change
Municipal funding	Proportional by population size (\$343,000 annually for York Region in 2021-22)	Annual flat fee - \$2M as “Principal Contributor” or \$50,000 as “Municipal Collaborator”
Board of Directors	Multi-layered: private sector Board and Mayors & Chairs Strategy Council	Single and expanded private-public Board of Directors
Role of municipal partner staff	EDO Management Council for two-way dialogue. No decision-making role.	Joint Advisory Committee for two-way dialogue including annual presentation to the Board. No decision-making role.
Services to municipal funding partners	End-to-end lead generation and servicing of FDI opportunities; marketing of the Toronto Region; research and data on the Toronto Region	Same core FDI sales, marketing and research services plus enhanced regional collaboration; Supply Chain Support program; optional ‘fee-for-service’ for member-requested support

The new membership model helps address concerns regarding funding levels and improved regional collaboration

The new term sheet addresses some of the concerns previously identified by the 905 municipal funding partners including changes to the funding level and improvement to regional collaboration. Toronto Global has indicated that the key concern, business retention and expansion engagement in local communities can be addressed in individual agreements.

Toronto Global has indicated that the new municipal membership model is supported by upper levels of government.

There is a rationale for continued York Region membership with Toronto Global as a “Municipal Collaborator”

As directed by Regional Council in the [November 5, 2020](#) report, staff undertook an assessment of continued membership in Toronto Global beyond March 31, 2022. The assessment covered return on investment considerations and stakeholder feedback on the new proposed model.

York Region has seen only 3% of Toronto Global’s total investment wins in the GTA over the last 5 years and less than 2% of the resulting job creation. In fact, the new \$50,000 annual membership fee option is approximately 2% of the 2019-2022 municipal funding and is in line with the investments obtained in the Region.

Regional staff consulted with local municipal staff between October 2021 and March 2022 to discuss Toronto Global and an approach to regional FDI programming going forward. Overall, the local municipalities see value in continued regional membership from a collaborative GTA marketing perspective. Continued membership in Toronto Global under the new funding structure will leverage significant funding from the Provincial and Federal governments for the promotion of the collective ‘Toronto Region’ brand. It also allows York Region to access centralized FDI services and initiatives that are designed to strengthen and enhance regional collaboration that benefits all Toronto Global stakeholders.

Local municipal partners identified concerns similar to those outlined earlier in this report, primarily lack of Board representation and the process for servicing leads. Some expressed specific interest in a parallel FDI attraction framework focused on the Region’s value propositions and local-municipal FDI priorities. Reduced funding of Toronto Global would allow York Region to redirect resources towards a “made in York Region” FDI partnership in support of, and in collaboration with, local municipalities, as outlined in the next section.

Discussions among 905 municipal funding partners also suggest consensus on the collective value of increased visibility and similar concerns related to the flow of investment leads from senior government agencies, business retention & expansion scope creep and Board representation.

Based on this assessment, a case still exists for York Region’s future involvement with the Toronto Global partnership at the “Municipal Collaborator” funding level of \$50,000 annually. Participating at this level will leave significant funds that can be redirected to other economic development initiatives including pursuing parallel FDI programs.

As a Toronto Global “Municipal Collaborator”, regional resources can be freed up to provide more direct support to local-municipal FDI and investment readiness programs and priorities

In the new model, York Region will continue supporting GTA’s Toronto Global partnership at the “Municipal Collaborator” membership level on behalf of the local municipalities. The remaining budget will be reallocated towards a new “made in York Region” regional FDI support partnership framework in support of, and collaboration with, local municipalities. This will include expanding regional economies-of-scale FDI marketing as well as direct funding and operational support of local-municipal FDI attraction or investment readiness initiatives.

The core annual budget of approximately \$340,000 formerly allocated to funding Toronto Global will be split into three portions:

- The Region’s new annual Toronto Global membership fee (including annual cost of living increases), and collaborative GTA member initiatives organized through Toronto Global.

- Local municipal cost sharing to support FDI prospecting, lead generation or investment readiness initiatives. Goals and outcomes will be defined by the local municipalities.
- Enhanced marketing and promotion of York Region as a destination for FDI business and talent in the GTA.

This approach to a new regional FDI support partnership framework was shared with local-municipal economic development officers on March 11, 2022. All local municipalities are eligible to receive funding according to specified criteria in an application process that will be developed and shared directly with local-municipal staff over the coming months.

This realigned approach offers several benefits:

- Continued involvement with the wider GTA partnership between all 3 levels of government, including access to Toronto Global centralized FDI services that benefit York Region's local municipalities directly and indirectly
- Frees up funding and Regional staff capacity to focus on the FDI attraction business strengths, value propositions and priorities unique to York Region
- More direct and focused support of all York Region local municipalities with their FDI attraction priorities with increased collaboration opportunities
- Expands and complements, rather than duplicate or overlap with Toronto Global's activities or the independent local-municipal FDI programs in York Region
- Avoids replicating within York Region a centralized top down FDI lead generation and sales model that has not met direct needs of many local municipal stakeholders, previously with the GTMA and more recently with Toronto Global

Staff will report to Regional Council annually on outcomes and initiatives under the new Regional FDI support partnership as part of the Economic Development Action Plan update.

5. Financial

Funding of Toronto Global is included in the Planning and Economic Development annual operating budget. Following changes in Toronto Global's membership model with municipal partners, York Region will reallocate the remaining budget towards a new Regional FDI support partnership framework, including enhanced Regional FDI marketing and direct funding support for local-municipal FDI attraction or investment readiness initiatives. Table 4 below summarizes details of the reallocation of the former Toronto Global budget.

Table 4
Reallocated Use of Former Toronto Global Core Annual Budget

Item	Previous Funding Amount	Reallocated Funding Amount	Reallocated Funding Use
Toronto Global Membership Fee	~\$340,000 annually	\$70,000 annually	Includes a \$50,000 membership fee and \$20,000 for collaborative GTA initiatives and membership fee inflation increases
Enhanced FDI Marketing by York Region	N/A	Up to \$135,000 annually	Allocated to enhancing marketing and promotion of York Region as a destination for FDI business and talent in the GTA
Local-municipal FDI Partnership Fund	N/A	Up to \$135,000 annually	Up to \$15,000 per municipality available via an application process, to support local municipal efforts on a cost sharing basis for professional FDI prospecting, lead generation or investment readiness initiatives that have defined goals and measurable, reportable outcomes

6. Local Impact

York Region's continued involvement with the Toronto Global partnership will leverage significant funding from all three levels of government to extend the collective reach of the internationally recognized "Toronto" brand and gain access to centralized FDI opportunities and services that benefit York Region's local municipalities directly and indirectly.

The Region's reduced membership fee in Toronto Global enables redirection of a large share of the Region's former FDI funding budget towards a "made in York Region" FDI partnership framework in support of, and in collaboration with, local municipalities.

Based on consultation with local municipalities and assessment of the strengths and gaps related to the Toronto Global partnership, York Region staff believe this multi-pronged strategy will best support local FDI attraction efforts and priorities.

7. Conclusion

York Region has funded Toronto Global since inception to deliver centralized, FDI attraction services in the GTA. The Region's funding under the previous agreement was about \$340,000 in 2021-2022. This joint municipal funding agreement expired on March 31, 2022.

While Toronto Global made a positive impact on FDI attraction into the GTA, the overall share of results in 905 jurisdictions, including York Region, remains low. As a result, municipal funding partners identified several areas of concern related to the organization's

operations and governance model. Moreover, several GTA municipal jurisdictions, including local municipalities in York Region, also maintained existing FDI programs.

Toronto Global has proposed a new multi-year partnership framework with municipal members as of April 1, 2022. This includes a revised governance model with operational enhancements and a significantly reduced “Municipal Collaborator” annual membership option of \$50,000, and “Principal Contributor” option of \$2M. This is available for existing member municipalities.

Based on the new model, return on investment of the previous partnership and stakeholder consultations, staff recommend continued membership with Toronto Global as a “Municipal Collaborator”. This allows a large share of the budget to be directed towards a “made in York Region” FDI partnership framework. It will result in direct funding and professional support of local municipal FDI attraction or investment readiness projects and priorities.

Consultations on the new approach with local municipalities over the next few months will define the criteria, funding application process and reporting process for local municipal FDI initiatives. The new Regional FDI framework will be fully rolled out in early 2023 and reported on annually as part of the Economic Development Action Plan update.

For more information on this report, please contact Jonathan Wheatle, Director, Economic Strategy at 1-877-464-9675 ext. 71503. 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

April 21, 2022
Attachment (1)
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TORONTO GLOBAL MEMBERSHIP BENEFITS & SERVICES TERM SHEET (DRAFT)

This Term Sheet (Draft) has been prepared to describe, at a high-level, the proposed benefits and services that Toronto Global (the Organization) will provide to member municipalities under a refreshed funding and governance model. This Term Sheet (Draft) is designed to initiate discussion with- and feedback from- prospective members for the purposes of finalizing a definitive Municipal Membership Agreement.

Definitive Agreement: The parties intend to execute a definitive Municipal Membership Agreement embodying the agreed terms that are the result of the discussion and feedback process. The parties shall use their reasonable best efforts to execute the definitive Municipal Membership Agreement in an expedient fashion.

Organization Mandate: Toronto Global is the Investment Promotion Agency for the Toronto Region, responsible for international marketing, lead generation and end-to-end investment opportunity servicing. The primary objective of the organization is to work with foreign investor clients to assist in the establishment of new business operations in the Toronto Region. The organization undertakes this mandate in collaboration with our Municipal Members from across the region.

Organization Name: To clarify that Toronto Global represents the entire Toronto Region as a regional Investment Promotion Agency, the organization proposes to replace the existing tagline, "Your Region for Business", with a new tagline, "A Regional Partnership".

Municipal Membership Eligibility: Membership in Toronto Global will be offered to existing municipal funders; namely: The City of Toronto, the City of Brampton, the City of Mississauga, and the regional municipalities of Durham, Halton and York.

Membership Types and Fees: Eligible municipalities can select from two membership types with corresponding annual fees. The two membership types differ only in terms of seats on the Board of Directors as further described in the "Board of Directors" section below. All members will receive the services and benefits outlined as "Services Provided".

<i>Membership Type</i>	2022-23	2023-24	2024-25	2025-26	2026-27
Principal Contributor	\$2,000,000	\$2,000,000*	\$2,000,000*	\$2,000,000*	\$2,000,000*
Municipal Collaborator	\$50,000	\$50,000*	\$50,000*	\$50,000*	\$50,000*

** Membership fees subject to increase annually at rate of inflation. Additionally, any proposed increase to annual municipal membership fees would be supported by a corresponding business plan to clearly articulate the additional service members would receive from Toronto Global in exchange.*

Note: No private sector funding is proposed at this time.

The City of Toronto: The City of Toronto has confirmed their commitment to joining Toronto Global as a Principal Contributor for a minimum of three (3) years and up to five (5) years at an annual membership fee of not less than \$2,000,0000 beginning in 2022-23 and subject to the City of Toronto's budgetary approval process in subsequent years. Further, as part of the annual budgetary process, the City of Toronto will consider an increase to the Principal Contributor fees in each subsequent year as proposed by Toronto Global and supported by a corresponding business plan.

Board of Directors: The new proposed Board of Directors will be expanded in size to include both private and public sector representation, offering seats to Municipal Members (as further described) and other funding partners, thus eliminating the existing Mayor's and Chair's Strategy Council.

- + A **Principal Contributor** will be provided with *two (2) permanent seats* on the Board of Directors for the duration of the term of the definitive Municipal Membership Agreement. One seat is reserved for the Mayor or Chair (as relevant). The second seat is reserved for a private citizen appointee.
- + Collectively, **Municipal Collaborators** will be provided with *one (1) permanent seat* on the Board of Directors. Each Municipal Collaborator will be eligible for the seat on a bi-annual rotating basis selected by the Municipal Collaborators every two years. The seat is reserved for the Mayor or Chair of the selected Municipal Collaborator.
- + **Provincial and Federal Funding Partners** will also each be offered *one (1) permanent seat* on the Board of Directors.
- + The remaining board seats will be comprised of **Private Sector** representatives selected with consideration given to achieving a balance of regional representation, relevant expertise, and diversity.

Joint Advisory Committee: The (relevant) economic development officers of all Municipal Members together with (relevant) Toronto Global staff will form a Joint Advisory Committee for the collaboration and coordination of investment attraction to the Toronto Region. It will be co-chaired by a (relevant) member of Toronto Global's Executive Management Team and a Municipal Member representative that is selected by the Municipal Members for a two-year term. The Joint Advisory Committee will replace the existing EDO Management Council.

The Joint Advisory Committee will provide a forum for open, frank, honest and forward-looking two-way dialogue, coordination, productive interaction, and shared purpose among the Member Municipalities and the organization. The committee will undertake an Annual Planning Workshop to identify annual collaborative initiatives (as outlined in the "Services Provided") and will create relevant working groups as determined necessary by the committee to coordinate planning of collaborative initiatives or to discuss other relevant matters as agreed. The Co-Chairs will also provide an annual presentation to the Board of Directors on the activities and progress of the Joint Advisory Committee.

Services Provided: Toronto Global will undertake or provide the following activities and services for the benefit of all Municipal Members.

Service/Activity	Description
Regional Knowledge and Collaboration	Toronto Global will create one (1) new Regional Specialist/Coordinator position focused on coordinating

	<p>and delivering the services further outlined in this table to enhance and streamline current regionally focused activities and engagement</p> <p>While the Organization is open to feedback to ensure this role will provide value to Municipal Members, the overall objective of this position is to dedicate resources designed to further support efforts (1) to embed strong regional expertise within Toronto Global to better support and strengthen the regional value proposition and marketing efforts and (2) to align the lead generation activities of Toronto Global's international market business development teams with the strengths and objectives of Municipal Members.</p> <p>To accelerate embedding regional knowledge within Toronto Global and strengthen collaboration efforts, it is proposed that the Regional Specialist position could be filled <i>through a secondment</i> from a Member Municipality on an annually rotating basis.</p>
Marketing	<p>Toronto Global will undertake at least <i>one major regional marketing initiative per year</i> put forward by the Joint Advisory Committee (subject to budget constraints and operational alignment). The agreed collaborative project will be identified and resourced in the organization's Annual Business Plan and be included in Toronto Global's annual CECI application.</p> <p>All members will continue to benefit from the range of ongoing marketing activities conducted by Toronto Global, including:</p> <ul style="list-style-type: none"> + Always-in-Market Pay per Click Campaign marketing the Toronto Region + Client announcements + Social media presence + Website and search engine optimization + Weekly news monitor + Completion of the 905 regional campaign series currently in-progress with campaigns tailored to remaining 905 municipalities
Lead Generation and Servicing	<p>Supported by the Regional Specialist, Toronto Global will undertake customized lead generation initiatives for Municipal Members aligned to their economic development priorities.</p> <p>Toronto Global will undertake one collective international mission together with all Municipal Members each year (subject to budget constraints and operational alignment). The destination and focus of the mission will be recommended by the Joint Advisory Committee and identified and resourced in the organization's Annual Business Plan. The Organization will be responsible for coordinating travel</p>

	<p>logistics, developing a mission schedule and securing one-on-one pre-qualified investor meetings for each participating Municipal Member. Each participating Member Municipality will be responsible for covering their own travel related costs.</p> <p>Toronto Global will provide end-to-end servicing of qualified investment opportunities sourced by the Organization.</p> <p>Toronto will provide proposal development and other reasonable supporting services for Municipal Member sourced investment opportunities as requested by Municipal Members.</p> <p>Toronto Global will maintain and annually update a service provider list organized by type of service and location of service provision (which will be reviewed annually by the Joint Advisory Committee).</p>
Research	<p>Toronto Global will undertake at least one major regional research initiative per year put forward by the Joint Advisory Committee (subject to budget constraints and operational alignment). The agreed collaborative project will be identified and resourced in the organization's Annual Business Plan and be included in Toronto Global's annual CECI application.</p> <p>Toronto Global will continue development and maintenance of a content library system containing regional value proposition material.</p> <p>Toronto Global will continue development, maintenance and management of research tools and databases to support investment attraction efforts and ad hoc Municipal Member research and information requests</p>
Supply Chain Support	<p>Toronto Global will offer the following Supply Chain services to Member Municipalities for at least the duration of Toronto Global's SCORE Program funding, currently confirmed until March 31, 2023:</p> <ul style="list-style-type: none"> + Regional supply chain mapping and gap analysis for Life Sciences, Food and Beverage and Advanced Manufacturing + Supply chain sector expertise for Life Sciences, Food and Beverage and Advanced Manufacturing + Access to an allotted number of professional consulting hours to address local or company specific supply chain issues

Annual Planning Workshop: Toronto Global operates on an April 1 – March 31 fiscal calendar. Annual planning will commence in the Fall of each year with a Joint Advisory

Committee Planning Workshop to identify and recommend collaborative and regionally focused research and marketing initiatives, joint missions and other potential lead generation projects for the year ahead so that they can be put forward for potential reimbursement of up to fifty (50) percent of eligible expenses through the Government of Canada's CanExport Community Investments (CECI) Program.

Annual Report: Toronto Global will (continue to) produce a comprehensive annual report that includes a breakdown of activities/services and results for each municipal member.

Fee for Service: Should Municipal Members request services beyond the agreed "Services Provided", Toronto Global will provide on a fee-for-service basis provided the Organization has sufficient resources.

Regional Council Decision - Update on Residential Sustainable Development Incentive Programs

On May 26, 2022 Regional Council made the following decision:

1. Council approve the updated Sustainable Development Incentive Programs which continues the Sustainable Development through LEED Program and terminates York Region's Servicing Incentive Program.
2. Council request local municipalities with programs tied to York Region's Servicing Incentive Program update their policies to reflect termination of this program.
3. The Regional Clerk circulate this report to the Clerks of local municipalities and Building Industry and Land Development Association for information.

The original staff report is attached for your information.

Please contact Karen Whitney, Director, Community Planning at 1-877-464-9675 ext. 71505 if you have any questions with respect to this matter.

Regards,

Christopher Raynor (he/him) | Regional Clerk, Regional Clerk's Office, Corporate Services Department

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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
Planning and Economic Development
May 5, 2022

Report of the Commissioner of Corporate Services and Chief Planner
and Commissioner of Public Works

Update on Residential Sustainable Development Incentive Programs

1. Recommendations

1. Council approve the updated Sustainable Development Incentive Programs which continues the Sustainable Development through LEED Program and terminates York Region's Servicing Incentive Program.
2. Council request local municipalities with programs tied to York Region's Servicing Incentive Program update their policies to reflect termination of this program.
3. The Regional Clerk circulate this report to the Clerks of local municipalities and Building Industry and Land Development Association for information.

2. Summary

This report informs Council of findings from the Region's Sustainable Incentive Development Programs review conducted in 2021. Advancements in sustainable development through Federal and Provincial building codes and consumer appliance standards are setting a higher level for new developments. As a result of these changes and the Region's new [Inflow and Infiltration Reduction Standards for Sewers Servicing New Development](#) (I&I Standards), introduced in February 2022 and approved by Council on February 24, 2022, the Region will be terminating the Servicing Incentive Program for low-rise development. The Sustainable Development through Leadership in Energy and Environmental Design (LEED) Program for high-rise development will continue to be offered.

Key Points:

- Previously, due to the absence of stringent standards, the Region demonstrated leadership with two voluntary programs that offered servicing allocation incentives to sustainably designed and constructed new residential developments
 - Sustainable Development through LEED Program for high-rise development
 - Servicing Incentive Program for low-rise development

- Updates to the Ontario Building Code have improved water conservation requirements in new homes
- Local municipalities have introduced robust initiatives to achieve sustainable development goals
- Inflow and Infiltration (I&I) reduction standards for sewers are key measures in the Servicing Incentive Program
- Council approved new I&I Standards in February 2022 that exceed the requirements set out in the Servicing Incentive Program
- Servicing Incentive Program is being terminated because new I&I Standards exceed Servicing Incentive Program thresholds
- LEED program benchmarks are regularly updated to reflect industry standards, and these will continue to be available for high rise developments

3. Background

York Region introduced a high-rise Sustainable Development Program in 2007 and a low-rise program in 2009 to promote residential sustainable development

York Region strives to build healthy and sustainable communities that make efficient use of infrastructure and resources. New development should be designed and built with innovative features, elements and material that can respond to current and future climate events. In 2007, the Region implemented the [Sustainable Development through LEED](#) Program. In 2009, the Sustainable Home Incentive Program was introduced for low-rise development, which was replaced in 2014 with the [Servicing Incentive Program](#). Both programs are voluntary and require the achievement of water conservation and wastewater flow reduction measures beyond the Ontario Building Code and design standards. In exchange for implementing this higher standard, the Region provides servicing capacity assignment credits.

Sustainable Home Incentive Program was endorsed in 2009 to promote sustainability in new low-rise developments and evolved to the water conservation and reduction of wastewater flow focused Servicing Incentive Program. This was done after consultation with Regional staff, local municipal building staff, engineering and planning staff, conservation authority staff, the Building Industry and Land Development Association (BILD), and program applicants. Residential projects that meet program criteria may qualify for servicing capacity assignment credits of up to 20% (Figure 1).

Sustainable Development through LEED Program is available to high-rise developments and offers servicing capacity assignment credits of up to 30%. This program strives to achieve sustainability through water conservation and wastewater flow reduction, in addition to other sustainability criteria such as stormwater management practices, Regional transit-oriented design, three-stream waste management, and through construction resource and waste

management (Figure 1). New developments applying to the program must obtain a minimum LEED Canada Silver certification.

Figure 1

Comparison of Servicing Incentive Programs

Sustainability Measures



Program Criteria	LEED	SIP
Water Conservation	✓	✓
Wastewater Flow Reduction	✓	✓
Stormwater Management Practices	✓	
Regional Transit-Oriented Design	✓	
Three Stream Waste Management	✓	
Construction Resource and Waste Management	✓	
Certification	LEED & P.Eng.	P.Eng.
Incentive	Up to 30%	Up to 20%

Review of sustainability criteria in Regional servicing incentive programs was required due to changes in policy and regulations

Since the last program review in 2014, Federal and Provincial legislation and policies have directed municipalities to take further action towards creating more sustainable, climate-resilient communities. Ministry of the Environment, Conservation and Parks is currently updating Provincial design guidelines for sewage works and formalizing new design criteria to accompany the guidelines on reducing water and energy use. Updates to the Ontario Building Code have improved energy and water conservation requirements for new developments. Findings from the review indicate new requirements are now similar to Servicing Incentive Program, demonstrating the increased application of enhanced standards. York Region continues to advocate for changes to the Ontario Building Code to require net-zero carbon and climate resilient buildings.

Over the years, local municipalities have introduced different strategies to promote sustainable developments including their own set of sustainable development guidelines. The three cities of Markham, Richmond Hill, and Vaughan have adopted the Sustainability Metrics Program while Aurora, East Gwillimbury, Georgina, King, Newmarket, and Stouffville promote sustainable development through their programs and policies.

Review of Servicing Incentive Programs is required to align with local sustainable initiatives and to confirm servicing allocation incentives are applicable given the changes in building standards.

Regional Servicing Incentive Programs have helped infra-stretch capacity and informed development of new I&I reduction standards

For over 10 years, Regional Sustainable Development Programs have been effective to drive more sustainable development. To date, approximately 2,600 high rise units have earned servicing credits through the LEED Program at the Region. These are located in Markham, Newmarket, and Vaughan, with another 400 units in Newmarket underway. Over 5,000 low-rise units have participated in Servicing Incentive Program and earned credits, with another 7,000 units registered needing to submit conformity plans to receive their servicing allocation credits. Implementation of this program and verification of proven reductions has helped inform the new I&I reduction standards.

Since 2015, the Servicing Incentive and LEED Programs have helped to stretch York Durham Sewage capacity, having provided over 4,100 persons of additional capacity including over 1,300 persons of capacity in municipalities impacted by delays in Upper York Sewage Solutions.

4. Analysis

Program review included assessment of legislation, Regional standards, and industry best practices, as well as consultation with BILD

In 2021, the Region assessed sustainability measures of its Servicing Incentive and LEED Programs and non-governmental sustainable building standards and certification (e.g., EnergyStar, BuiltGreen, Passive House, Net Zero Home, WELL). A matrix was developed assessing a variety of sustainable development programs, presenting options suitable for the Region's continued efforts in championing for sustainable development.

BILD was consulted in 2021, and developers recognize the key role they play in delivering sustainable development. Developers identified several sustainable initiatives that have been implemented within their own development projects. BILD indicated there are several barriers to adopting sustainable construction practices including financial constraints, knowledge gaps in sustainable measures, additional time required to coordinate projects, and lack of demand or market acceptance for sustainable construction from industry partners and home purchasers. Throughout the development of the new I&I Standards, BILD and other industry groups were

engaged to collectively develop the Standard that will lead to more watertight sewers and align practices to one uniform approach.

A review of the water efficiency improvements associated with the Ontario Building Code and Region's new I&I Standards were carried out. Discussed below are findings of updated legislation and Regional standards.

Changes in standards establish a higher baseline for environmental performance, reducing the need for servicing incentives and triggers a need to end the Servicing Incentive Program, with LEED sustainability measures remaining

Water conservation and I&I measures are key components of Servicing Incentive Program. Given changes to the Ontario Building Code and the Region's new I&I Standards discussed below, the Region will end the Servicing Incentive Program and will continue to infra-stretch through implementation of our new stringent sewer design standards. LEED Program's broader sustainability measures are continuously updated to reflect industry standards. The Region will continue to offer the LEED Program for high-rise development to support servicing allocation in constrained areas of the Region.

Changes to the Ontario Building Code provide similar savings as the Servicing Incentive Program

On January 1, 2019, the Ministry of Municipal Affairs and Housing implemented changes to the Ontario Building Code which included new requirements in support of the provincial Climate Change Action Plan.

The requirement for installation of water efficient fixtures in new home construction supports water conservation. Prior to these changes, Servicing Incentive Programs provided savings beyond the Ontario Building Code. However, updates to the Ontario Building Code have lessened the gap between its requirements and those of Servicing Incentive Programs and LEED.

Regional I&I reduction standards incorporated into Servicing Incentive Program requirements for higher performance

The need for I&I reduction or prevention in new development was first identified in 2011 through York Region's I&I Reduction Strategy that required the Region and its local municipalities to find and remove 40 million litres per day (MLD) of I&I by 2031. In [February 2022](#), Council approved a [new I&I Standards](#) for the Region that local municipalities will fully implement by December 2024 for all construction. In the interim, local municipalities will require these new standards as a condition of approval of development applications until local design and construction standards are updated to ensure new developments are built to these new standards. This new I&I Standards introduces generally higher requirements than the ones in Servicing Incentive Programs and establishes a new baseline for all developments. Incentives were a tool to encourage developers to go above and beyond the baseline standard. By establishing a new

higher level of practice for all ground level developments in York Region, the servicing incentive is no longer warranted.

Sustainable growth management is necessary in achieving targets set out in the Regional Official Plan and Regional Climate Change Action Plan

Building sustainably is a key component in achieving targets set out in Regional Official Plan and Regional Climate Change Action Plan. Council's direction to coordinate and align efforts to address climate change is complemented through sustainable building practices. Staff will consolidate findings of programs review to share with local municipal staff that highlights current sustainable development best practices. Staff will continue to explore other incentives options, pilot projects and educational opportunities to continue to promote sustainable residential development.

5. Financial

There are no financial implications in ending the Servicing Incentive Program. Resources will continue to be in place to support the conformity work required to honour the remaining 7,000 units that are registered in the current Servicing Incentive Program.

6. Local Impact

Local municipalities support ending the Servicing Incentive Program

On September 17, 2021, Regional staff discussed ending the Servicing Incentive Program with the Planning Commissioners and Directors from all the local municipalities. They were supportive of ending the program given changes to Ontario Building Code and new I&I standards. Local municipal staff expressed interest in sharing and understanding each other's sustainability programs. The Region has agreed to consolidate findings from review of the incentive programs and share with local municipalities by end of year.

Municipalities will need to update programs or policies tied to the Servicing Incentive Program

Further discussions were conducted with the Town of East Gwillimbury and Town of Newmarket because of existing policies or agreements.

Town of Newmarket Servicing Allocation Policy currently requires all eligible residential development proposals participate in the Region's Servicing Incentive Program. Town staff will be updating their Servicing Allocation Policy to reflect the end of the Servicing Incentive Program.

Town of East Gwillimbury and the Region entered into a tri-party Development Charge Credit agreement in 2009 with a developer group to advance construction of the York Durham Sewage System in the communities of Holland Landing, Queensville, and Sharon. The remaining developers that are party to this original agreement that have not constructed are eligible to continue with Servicing Incentive Program requirements through the Town's Sustainable Development Incentive Program. This is not transferable to other lands owned by the developer. New development not tied to this agreement will meet new I&I standards and will not be eligible for servicing incentives, unless accessed through the Town of East Gwillimbury's reserve capacity assignment as part of agreement.

7. Conclusion

In 2007, the Region implemented the Sustainable Development through LEED Program (high-rise) and in 2014 introduced the Servicing Incentive Program for low-rise development replacing an earlier program known as Sustainable Home Incentive Program. Both programs are voluntary and require the achievement of water conservation and wastewater flow reduction measures beyond the Ontario Building Code. In exchange for this higher standard, the Region provided servicing capacity assignment credits. Since 2015, the Servicing Incentive and LEED Programs have helped to stretch York Durham Sewage capacity, having provided over 4,100 persons of additional capacity including over 1,300 persons of capacity in municipalities impacted by delays in Upper York Sewage Solutions.

Due to updates to the Ontario Building Code and the new Regional I&I Reduction Standards approved by Council in February 2022, the Region will end its Servicing Incentive Program. The Region will continue to offer the LEED Program for high-rise development to support servicing allocation in constrained areas of the Region. Resources will remain in place to honour the remaining 7,000 units registered in the current Servicing Incentive Program. Local municipal staff support ending the Servicing Incentive Program and will need to update their related policies.

Results of the program review will be consolidated to share with local municipal staff highlighting current sustainable development best practices. Staff will continue to explore other incentives options, pilot projects and educational opportunities to continue to promote sustainable residential development.

For more information on this report, please contact Karen Whitney, Director, Community Planning at 1-877-464-9675 ext. 71505. Accessible formats or communication supports are available upon request.

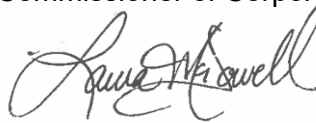


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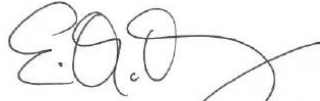
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Approved for Submission:

Bruce Macgregor
Chief Administrative Officer

April 21, 2022
13778955

Regional Council Decision - York Region's Circular Economy Roadmap

On May 26, 2022 Regional Council made the following decision:

1. Council endorse York Region's Circular Economy Roadmap (Attachment 1)
2. Regional Clerk circulate this report and Attachment 1 to local municipal councils, the Ministry of Environment, Conservation and Parks and the Circular Cities and Regions Initiative

The original staff report is attached for your information.

Please contact Laura McDowell, General Manager, Interim Transition, Environmental, Public Works at 1-877-464-9675 ext. 75077 if you have any questions with respect to this matter.

Regards,

Christopher Raynor (he/him) | Regional Clerk, Regional Clerk's Office, Corporate Services Department

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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
Environmental Services
May 5, 2022

Report of the Commissioner of Public Works

York Region's Circular Economy Roadmap

1. Recommendations

1. Council endorse York Region's Circular Economy Roadmap (Attachment 1)
2. Regional Clerk circulate this report and Attachment 1 to local municipal councils, the Ministry of Environment, Conservation and Parks and the Circular Cities and Regions Initiative

2. Summary

In 2020, York Region's Integrated Waste Management Master Plan the [SM4RT Living Plan](#) was updated to include an aspirational vision of "a world in which nothing goes to waste". A key objective of this plan was to encourage and inspire the community to advance the circular economy and to look for opportunities to further circularity through York Region's internal operations and service delivery. York Region's Circular Economy Roadmap (Attachment 1) has been developed to guide the Region in implementing the circular economy.

Key Points:

- Implementation of the circular economy supports the Region's Vision and each of the four Strategic Plan priority areas – economic vitality, healthy communities, sustainable environment and good government
- The circular economy is gaining interest amongst leaders and stakeholders in Canada and around the world as a strategy to reduce waste and our dependence on finite virgin materials
- Engagement to inform the development of this roadmap showed strong interest across Regional departments and community partners
- This Roadmap will foster collaboration across the Region and its communities to maximize impact and accelerate the circular economy

3. Background

A circular economy eliminates waste and pollution, and conserves resources. It is a shift from a throw-away to a circular mindset. This approach extends the lifecycle of goods, food and resources through better design and continuous reuse, so nothing goes to waste. In a circular economy, innovators will design more durable, reusable, repairable and recyclable products and consumers will access many alternatives to ownership such as renting, borrowing and sharing. In a municipal context, the Region's One Water philosophy looks for opportunities for water demand management, leak prevention, innovative reuse while ensuring environmental and health protection is well aligned with the circular economy.

In 2020, [Council approved an update](#) to York Region's Integrated Waste Management Master Plan (SM4RT Living Plan) with the visionary goal of "a world in which nothing goes to waste". This goal cannot be achieved alone as evidenced in the plan's objective to "encourage and inspire the community to advance the circular economy". York Region's Circular Economy Roadmap (the Roadmap) supports several implementation actions under that objective including supporting partnerships, examining alignment with internal operations and regional priorities, and researching, consulting and sharing information on the circular economy. This report outlines the process and recommendations in the Roadmap (Attachment 1) and next steps for advancing this leading work.

Governments across Canada are leveraging policies, programs and \$200 billion in annual spending power to advance a circular economy

Advancing a circular economy presents an opportunity to reduce greenhouse gas emissions by an [estimated 39%](#) through cleaner manufacturing, reduced materials, transportation and waste. According to the World Economic Forum, the circular economy translates to a [\\$4.5 trillion economic opportunity](#) globally by reducing supply chain risks and maximizing local and sustainable growth. Municipal governments are playing a strong role in supporting circular transitions through their policies and programs. According to the Circular Innovation Council, through procurement alone, [Canadian governments spend \\$200 billion annually, with 80% of it spent at the local government level](#). This represents an enormous opportunity for local governments to influence markets and support innovation while meeting waste reduction, climate change and asset management goals.

The circular economy is gaining momentum across Canada. As noted in Table 1 below, all levels of government, private sector and community organizations are implementing circular initiatives. York Region's commitment to advancing a circular economy demonstrates our leadership in sustainability in the municipal sector.

Table 1
Examples of Circular Economy Activities

Canadian Sector	Activities
Federal Government	Innovative policy, legislation and operational commitments to support circularity including: Canada-wide Strategy on Zero Plastic Waste , Greening Government Strategy that includes circular procurement; exploring right-to-repair legislation ; developing recycled content regulations ; federal climate plan actions such as the 2 billion trees initiative for reforestation, federal net-zero accountability act and carbon pricing
Provincial Government	Working with municipalities and producers on major changes in waste management to support circularity including: Resource Recovery and Circular Economy Act , Extended Producer Responsibility , Food and Organic Waste Policy Statement , Excess soils regulation
Municipal Governments	Using various policy and operational levers to support circular transition and driving collaboration: Circular Cities and Regions Initiative , City of Toronto circular procurement , Metro Vancouver construction demolition waste , City of Mississauga sustainable procurement , Our Food Future in Guelph/Wellington County ; Lake Simcoe Region Conservation Authority phosphorus offsetting policy
Commercial	Individual players are piloting circular and low waste solutions at the local (Replenish General Store , Comfy Cotton Diaper Reuse Service) and national scale (Ikea , Tim Hortons and Sobeys) and making national and global commitments such as the Global Plastics Pact
Community	Reuse charities have long been leaders in this sector (Habitat for Humanity ReStore , Furniture Bank) and demand for second hand goods is growing due to economic and environmental concerns

4. Analysis

Advancing a circular economy builds on Council’s waste management leadership supporting the Region’s overall Vision including our net zero target

The concept of the circular economy is not new to York Region and its local municipal partners. York Region is a leader in waste diversion, developing innovative programs to engage the community in waste prevention through the early years of the SM4RT Living Plan. Programs such as Repair Cafés, Curbside Giveaway Days, textile donation bins and the Lendery have helped our residents reduce waste and keep materials in use. Initiatives like the Circular Economy Initiatives Fund, and Good Food achieve broader benefits by engaging more partners and increasing capacity to deliver circular solutions in other sectors of our community.

Advancing a circular economy provides many benefits beyond waste reduction. As noted in Attachment 1, the circular economy can support all areas of the Region’s Vision. Actions in this area also align with Environmental, Social and Governance (ESG) frameworks described by the Region’s external auditor in their KPMG Audit Planning report presented in [January 2022](#) to Audit Committee.

Departments across the Region are already identifying, and piloting projects and programs aligned with circular economy, achieving efficiencies to reduce costs and lessen environmental impacts. For example, the pilot program “Making Old Asphalt New Again” was designed by Road Operations in conjunction with Transportation Capital Planning to reduce costs and lessen the environmental impact of our road projects. Since 2016, this asphalt recycling program has saved the Region \$1.8 million and diverted over 112,000 tonnes of asphalt from landfill. Another example led by Environmental Services builds on leading water conservation practices by exploring the feasibility of water and other resource reuse practices from groundwater dewatering and treated wastewater effluent at several Region sites. The team is also working on implementing wastewater energy transfer technologies within York Region to contribute to our climate action goals and greenhouse gas emission reduction targets.

The Roadmap was developed to coordinate efforts, increase collaboration across departments and external partners. It will identify opportunities, address barriers, scale up successes and learnings and provide focus for new initiatives to advance the circular economy within the Region.

Circular Cities and Regions Initiative provided expert guidance to support York Region’s Circular Economy Roadmap development

In 2021, York Region was accepted into the Canadian Circular Cities and Regions Initiative (CCRI) delivered by the Federation of Canadian Municipalities, National Zero Waste Council, Recycling Council of Alberta and Recyc-Quebec. The one-year pilot brought together a peer-to-peer network of 15 participating municipalities across Canada, all committed to advancing the circular economy within their communities. The program provided education, tools and support for each participating municipality to develop their own circular economy roadmap.

Work involved 13 interactive leadership sessions with experts and municipal leaders, two facilitated workshops with each municipality's staff, and a summary document providing guidance on opportunities and outcomes from the workshops. The Region will be sharing outcomes of our Roadmap journey with CCRI through a webinar in June 2022. Plans for ongoing networking and support tools developed through the CCRI will help guide participants in implementing their roadmaps.

Internal and community stakeholders shared ideas and examples of circular economy opportunities to inform development of the Roadmap

In developing the Roadmap, staff engaged with internal departments and external stakeholders to uncover existing circular examples, and identify opportunities to advancing the circular economy throughout the Region. Internal leaders from all departments at the Region were included in the two CCRI facilitated workshops to identify alignments between circular economy, their strategic priorities, and current processes and projects. As illustrated in Attachment 1, champions from across the corporation shared great projects that are already occurring and highlighted the opportunity to maximize learning and capture best practices. Opportunities identified included: creating a process to evaluate circular products and services against current offerings; gathering baseline information on current asset renewal and disposal practices; reviewing and updating policies on disposal of assets to facilitate reuse; and more education and awareness on circular economy concepts, including benefits and business cases for the municipal sector.

Community stakeholders representing 33 organizations/businesses with an interest in circular economy identified opportunities for the Region to support circular transition within the community. Participants indicated the Region could be most impactful by building community awareness and celebrating successes, developing tools for businesses, and providing opportunities for leaders and innovators to network and spark new collaborations. There was strong support for creating a community circular economy working group to advise the Region on programming, share ideas and experiences and act as ambassadors within the community.

Roadmap process identified five cross-cutting action areas for research, pilots, policy development and partnerships over the next three years

Ideas generated through engagement and best practices from leading communities informed selection of the Roadmap's action areas. As described in Attachment 1, these areas offer the greatest potential to address common challenges, provide benefits aligned with Region's Vision and Strategic Plan priorities and build local capacity to accelerate the circular economy.

1. Sustainable Food Systems
2. Reuse and Sharing
3. Community Capacity and Connections
4. Circular Procurement

5. Asset Management and Built Environment

The first three action areas are community-led, where York Region will influence, facilitate, and contribute to circular integration alongside partners, residents and businesses. The last two action areas represent opportunities for York Region to advance corporate priorities through circularity and demonstrate our continued commitment to making the same changes asked of residents and businesses in the community.

Using collaborative pilots, scaled up over time allows implementation with minimal risk while maximizing learning and capacity building

Table 2 shows initial projects to support action areas in the Roadmap. Implementation of actions will be led by the relevant service area, with support from Environmental Services, acting as connectors and coaches in circular economy practices. The approach involves piloting actions, evaluating and sharing outcomes to scale up successes, building knowledge, and expertise in circular economy practices. This approach has worked well previously in developing innovative programs with our local municipal and community partners through the SM4RT Living plan. Community-led actions build on existing partnerships developed under SM4RT Living. A community based, circular economy working group will be established to help guide and support external action areas. A competitive, transparent application process for that group will ensure balanced representation from a variety of sectors and communities, to provide valuable, unbiased advice and support.

Table 2
Early implementation Actions

Early Actions (1 to 3 years)	Lead/Support Departments
Establish knowledge hub for ongoing staff engagement and learning	Environmental Services
Establish community working group to guide external action areas	Environmental Services
Implement asphalt and sand recycling programs	Transportation Services
Explore a sustainable procurement framework	Finance/ Environmental Services/ all departments
Develop single use plastics programming for businesses and community	Environmental Services/ Economic Development/ Community and Health Services
Identify pilot opportunities for circularity in asset management, including review of disposal practices and policies	Environmental Services/ Corporate Asset Management

Implement wastewater energy transfer system within York Region	Environmental Services
Identify funding partnerships to support Agri-food innovation hub in York Region	Economic Development/ Environmental Services

5. Financial

Implementing the Circular Economy Roadmap will help achieve long term cost savings

Applying a circular lens to operations and service delivery will save money in the long term as we find ways to offer our services more efficiently and with less waste. Tools such as a sustainable procurement framework and updated asset management policies that incorporate full lifecycle costing and best value criteria will be crucial to evaluating the financial, environmental and social benefits and payback as projects are implemented.

As with many of the SM4RT Living projects, working with external partners has enabled development of the Roadmap using existing staff resources and budget. The Region successfully applied to the CCRI, which provided consulting support and staff training needed to develop the Roadmap. Many of the external projects fit within the work of the SM4RT Living Plan and can be funded through existing resources and partnerships, including funding of community projects through the Circular Economy Initiatives Fund. Opportunities to seek funding and in-kind contributions from external sources will be explored as projects are developed by the Region and community partners.

6. Local Impact

Local municipalities continue to partner on SM4RT Living programs as well as leveraging and adapting learnings from Roadmap actions

Local municipalities have been key players in the success of York Region's waste reduction and diversion programs under SM4RT Living. They will continue to advance the circular economy through delivery and expansion of reduction, reuse and diversion programs as part of their existing work. They also play a vital role in capacity building through new programs supporting businesses to reduce their reliance on single use items, corporate commitments to waste reduction at facilities and events, and climate change mitigation actions.

Existing channels for communication and collaboration between local and regional teams at the staff, management and council levels can also be leveraged to share outcomes of pilots and lessons learned. This information can then be used to scale up impacts across common functions such as procurement, asset management, climate change mitigation and waste management where appropriate.

7. Conclusion

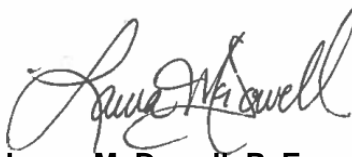
Strategic planning process can be leveraged to imbed circular economy lens in work across the corporation over the next term of council

Advancing the circular economy requires a change in mindset from the current linear approach to owning, using and disposing of resources to one where we focus on keeping the value of resources in the system with better design, maximizing use and recovery. Implementing changes over time will focus on experimentation, continuous improvement, and collaboration. Engagement and learning across departments and in the community will help to build knowledge, showcase successes, identify new champions and additional opportunities to advance the circular economy. By focusing efforts on the Roadmap's action areas such as sustainable food systems, circular procurement, reuse and sharing, and asset management, the Region can advance key priorities including climate change mitigation, energy and water demand management, economic vitality and quality of life for our residents.

A corporate-wide commitment to applying the circular lens to programs and processes is needed to enable change and achieve the Region's long-term vision including our net zero target. Approaches to imbedding circular economy principals into corporate priorities for the next term of council is being explored as part of the strategic planning and departmental performance planning process.

For more information on this report, please contact Laura McDowell, General Manager, Interim Transition, Environmental, Public Works at 1-877-464-9675 ext. 75077. Accessible formats or communication supports are available upon request.

Recommended by:



Laura McDowell, P. Eng.
General Manager, Interim Transition - Environmental



Erin Mahoney, M. Eng.
Commissioner of Public Works

Approved for Submission:



Bruce Macgregor
Chief Administrative Officer

April 13, 2022
Attachments (1)
13779087



York Region Circular Economy ROADMAP

April 2022



INTRODUCTION

Cities and regions are where people, knowledge and ideas come together, where innovation is cultivated, and where most waste is generated and natural resources consumed. These dynamics position local governments at the heart of the circular economy transition, with an opportunity to lead the way in their communities.

A circular economy eliminates waste and pollution and conserves resources. It is a shift from a throw-away to a circular mindset that extends the life cycle of goods, food and resources through better design and continuous reuse, so nothing goes to waste.

In a circular economy, instead of industries, manufacturers and consumers taking and using resources for a short period of time and then disposing of them, they will be kept in use. Innovators will design products that are more durable, reusable, repairable and recyclable. This circular shift will lessen impacts on the environment, allowing its resources to recover and regenerate.

Transitioning to a circular economy brings numerous benefits on a global scale, including:

- Greater climate change mitigation and greenhouse gas reduction (potential of 39% decrease globally) as a result of cleaner manufacturing, 28% less virgin material use, reduced need for transportation of goods, waste collection and processing¹
- Stronger global economic well-being, with an estimated \$4.5 trillion in economic benefits and lower supply chain risk from using recycled and locally sourced materials and services²
- Healthier communities and environment by fostering local food systems, reducing air pollution and litter impacts on local ecosystems and waterways

The [SM4RT Living Plan](#) is York Region's long term waste management master plan, first completed in 2014 and updated in 2020 with the visionary goal of "a world in which nothing goes to waste". The plan reinforces York Region's continued leadership in waste management with a strong focus on waste prevention, reduction, and reuse, along with waste diversion programs and infrastructure needs.

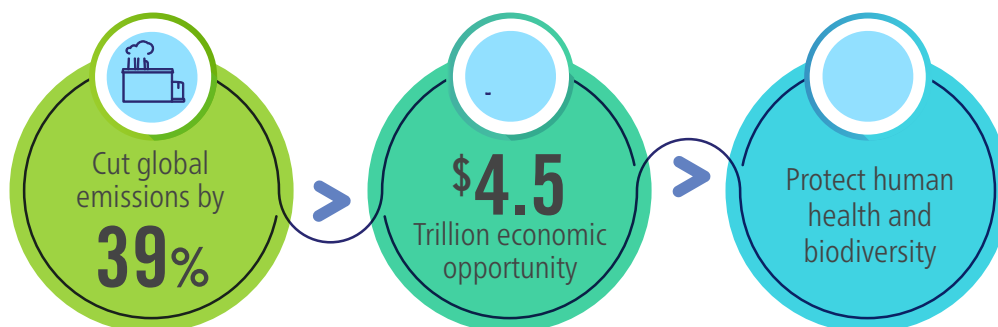
This Circular Economy Roadmap builds on objective three of the SM4RT Living Plan to "inspire people across the Region to embrace SM4RT Living and advance the circular economy" and will act as a guiding tool to provide direction, commitment and focus. The roadmap will identify linkages, and opportunities for collaboration to advance York Region as a circular economy.

The Circular Economy Roadmap is a living document and will evolve as we continue to learn, innovate and build capacity over time.

¹ [Circle Economy, \(2021\). The Circularity Gap Report.](#)

² [World Economic Forum, \(2020\). Circular Economy and Material Value Chains.](#)

Global Scale Benefits of a Circular Economy



ROADMAP JOURNEY

Nearly half of global greenhouse gas emissions comes from making and using products and food. **Our current system is not sustainable.** A recent study by the Council of Canadian Academies (2021) looked at the state of the circular economy in Canada. It estimated a circularity rate of only 6.1% (the percentage of recycled source materials entering the economy) with 94% of Canadian manufacturing relying on extracting or importing new raw materials. Most materials are thrown away at the end of life as waste, including reusable, durable goods, resulting in 73% of waste generated from all sectors of the economy (primarily institutional, commercial, and industrial) still going to landfill. If Canada maintains a circularity rate of just 6.1% while population and economic growth continues, over the next 20 years, waste generation and greenhouse gas emissions could increase by 40%.³

The circular economy is gaining momentum amongst leaders and stakeholders in Canada and around the world. Over time, increase resilience and economic prosperity while reducing dependence on finite resources and fossil fuels.

In Canada, multiple levels of government are taking action to increase circularity:

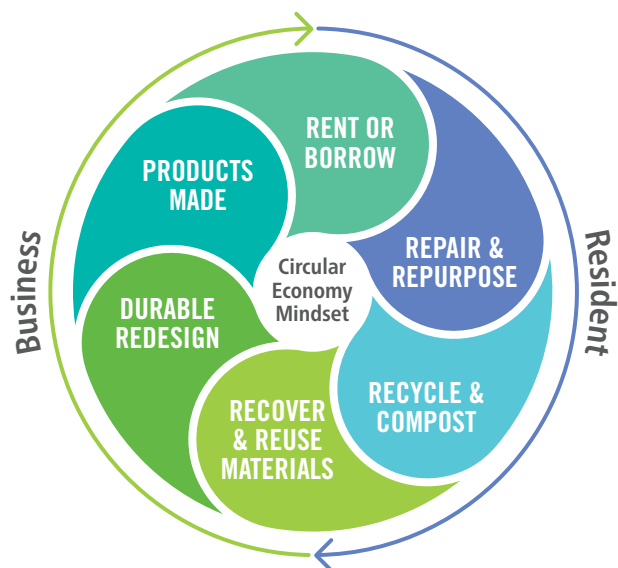
- Federal: Canada-wide Strategy on Zero Waste Plastic banning certain single-use plastics; implementing circular procurement opportunities; exploring right-to-repair legislation
- Provincial: Made-in-Ontario Environment Plan; Resource Recovery and Circular Economy Act and continuing shift to extended producer responsibility (EPR) for product packaging, electronic waste and other materials
- Municipalities: Zero waste strategies; circular procurement; community waste reduction initiatives being implemented in neighboring communities such as Cities of Toronto, Guelph and Mississauga.

³Council of Canadian Academies, (2021). Turning Point.

York Region is a leader in waste diversion developing innovative programs to engage the community in waste prevention. Since 2014, the Region with its local municipalities and community partners have implemented:

- Repair Cafés, Curbside Giveaway Days and the three Lendery locations offering residents an opportunity to repair and reuse items keeping them in use longer
- The Circular Economy Initiatives Fund supporting local non-profits and charities who reduce waste and accelerate the circular economy in the Region
- Textile recycling bins at municipal and multi-residential sites across the Region
- The Good Food Program encouraging residents to reduce avoidable food waste and improve their health

It's time to focus on the circular economy and lead by example, inspiring and empowering our communities to tackle climate change and biodiversity loss, address social needs such as food security and create resiliency and jobs by rethinking how we design, use and manage resources, including waste.



ROADMAP JOURNEY

The [Ellen McArthur Foundation](#), a global leader in research and engagement on the circular economy, identified five key policy tools that municipalities can use to support a transition to the circular economy. These include:



While no single policy tool can deliver a complete circular economy transition, each is a step along the way to be used together with others.

Vision

A roadmap or strategy

Engagement

Consulting, convening, partnering, building awareness and capacity

Urban Management

Urban planning, asset management and public procurement

Economic Initiatives

Financial support or incentives, education for businesses

Regulations

Procedures and bylaws



ROADMAP JOURNEY

Circular Cities and Regions Initiative

In 2021, York Region was accepted into the [Canadian Circular Cities and Regions Initiative](#) (CCRI) pilot, aimed at advancing circular economy knowledge sharing and capacity in the Canadian municipal government sector. This pilot was developed and delivered jointly by the National Zero Waste Council, The Federation of Canadian Municipalities, and two provincial recycling councils (Recycling Council of Alberta and Recyc-Quebec).

The one-year pilot brought together a national peer-to-peer network of 15 participating municipalities from across Canada, all committed to advancing the circular economy within their communities. The CCRI was supported by an Advisory Group of international and Canadian experts, who provided advice and mentorship throughout the pilot.

The CCRI pilot provided education, networking opportunities and consulting support to develop a roadmap for each participating municipality.

York Region waste staff engaged with internal departments across the Region in 2021, sharing an overview of the circular economy, its benefits, and opportunities for operations. Two internal workshops facilitated by CCRI brought together approximately 50 Regional decision-makers from all departments to identify potential opportunities and actions that could advance the circular economy within their department and help inform recommendations for the roadmap.

Three workshops with external partners and community stakeholders were held to gain knowledge on existing work, identify key priorities and target areas and generate interest for future circular work within the Region.

Through these discussions, stakeholders shared that a lot of great work is already happening internally and within the community. Key themes emerged to inform this roadmap.

- Sharing knowledge and circular tools will help empower staff to identify, implement and evaluate circular economy pilots and cross departmental collaborations
- Researching emerging materials, technologies and practices can inform circular design standards, pilot opportunities and best practices for infrastructure asset management
- Leveraging Regional buying power to encourage innovation is one of the biggest opportunities identified by leading municipalities
- Piloting new community programs by building on existing and successful collaborations in food and reuse sectors increases community capacity for circularity
- Showcasing innovation and leadership, and facilitating connections to spark new ideas



STRATEGIC ALIGNMENT

The SM4RT Living plan is driving the work on the circular economy. It is the guiding document, identifying the connections between circularity, waste policy and programming and links to the broader goals of York Region's Vision and the Regional Official Plan.

York Region's Vision sets the foundation for all Regional strategies and initiatives, with four priority areas: economic vitality, healthy communities, sustainable environment, and good government. The principles of a circular economy align and support each of these priority areas and strengthen the commitment to strong, caring, safe communities.



**ECONOMIC
VITALITY**

The transition to a circular economy offers opportunities for new and existing businesses to thrive through innovation, knowledge sharing, efficiency and reduced regulatory risk. For instance, using circular economy principles to find ways to prevent waste through local food supply chains can advance the

Agriculture and Agri-Food Sector Strategy's goal to create businesses that are more competitive, innovative, and sustainable to our future food production and security. As a leader in circularity, York Region can help local businesses meet customer and regulatory expectations on sustainability, waste reduction and climate change mitigation using tools and data to help them understand new risks, requirements and opportunities.



**HEALTHY
COMMUNITIES**

There is a natural connection between SM4RT Living, circular economy and healthy communities. For over seven years, York Region's Good Food program has been helping residents reduce food waste through awareness and education, while building food skills,

knowledge, overall literacy and access to local food systems. Reuse programming such as Repair Cafés and Lenderies provide social connections, and skill sharing opportunities. Seniors are important contributors to the success of Repair Cafés, supporting York Region's Seniors Strategy while reducing waste. York Region's Circular Economy Initiatives Fund (CEIF) provides funding support to charities and non-profit organizations who are implementing circular projects that support vulnerable residents, building on years of leadership from the charitable reuse sector.



**SUSTAINABLE
ENVIRONMENT**

As humans, our impact on climate change and planetary boundaries has come to the forefront globally in the past decade, with calls for government action at all levels. Direct action to reduce emissions is not enough to mitigate impacts and reach climate targets. The

circular economy is a key tool for municipalities seeking to address climate change through internal operations and community transformation to a low carbon economy. Many of York Region's key sustainability plans align with circular principles already, including the draft Climate Change Action Plan, One Water, Greening Strategy, The Energy Conservation and Demand Management Plan, and the SM4RT Living Plan. The circular lens allows for more collaboration to implement actions in areas such as asset management, procurement, and public education.



**GOOD
GOVERNMENT**

The circular economy strengthens York Region's ability to deliver trusted and efficient services and demonstrate corporate commitment to sustainability. This roadmap will increase public confidence by showcasing York Region as a leader in the circular economy,

committed to making the same sustainable changes in operations and policy that we ask residents and business to implement through community engagement, education and bylaws. The circular economy will remove barriers to recycling and reuse of materials, and cultivate cooperation among community groups, businesses, and the Region. Circularity will enable policies that maximize the use of assets and capital, supporting a reliable, responsive, effective, efficient and fiscally responsible service delivery.

“Circularity will enable policies that maximize the use of assets and capital, supporting a reliable, responsive, effective, efficient and fiscally responsible service delivery.”

CIRCULARITY IN ACTION

Circularity is already taking shape at York Region, as people consider how they can use resources more wisely and look for more sustainable ways to live and operate. However, action is happening independently resulting in duplication of effort and missed opportunities to learn and expand. This roadmap presents an opportunity to bring those interested and involved together to discuss and share ideas, focus efforts and strategically ignite further action. The following represent key examples of circularity currently in action at York Region.

Making Old Asphalt New Again

York Region Road Operations together with Transportation Capital Planning and Delivery began an asphalt recycling program in 2016. Road contractors collect and grind up old asphalt for reuse in future road operation projects such as levelling shoulders, wash-out repairs, and backfilling. This program has expanded over time and since 2016 has diverted over 112,000 tonnes of asphalt from landfill saving approximately \$1.8 million.

17150 Yonge Street – New Facility Built to LEED Gold Sustainability Standards

In 2021 construction was completed on York Region's new facility at 17150 Yonge Street. This building was designed to a high standard of energy efficiency, sustainability and circularity, being awarded a LEED® Gold Certification. Environmental benefit was a key driver in the design, construction and functionality of the building, matching York Region's ongoing commitment to environmental stewardship. Green construction practices enabled over 86% of construction waste to be diverted from landfill or reused on other projects. Construction materials were sourced locally with over 37% coming from within 800 meters of the building, while 20% of the materials have recycled content. Other key environmental features include low-flow water fixtures contributing to water savings of 2.7 million litres, 25% green roof coverage providing habitat for wildlife such as butterflies, bees and birds, with the remaining roof designed to be reflective, minimizing the heat island effect (reducing heat loss in the winter and heat gain in the summer).

Reuse and Repair Programming

York Region provides many opportunities for residents to participate in the circular economy through reuse and repair programs. Three Lendery locations, in partnership with local libraries across the Region, allows residents to borrow items rather than purchase. Curbside Giveaway Days, in partnership with local cities and towns, encourages residents to give away gently used items rather than throwing them away as garbage. Repair Cafés, in partnership with community organizations throughout the Region, encourage and provide a space for residents to repair broken items for free, keeping items in use longer.

York Region Food Network – Food Gleaning Program

Working with local farms since 2013, York Region Food Network offers a seasonal food gleaning program which enables participants to visit fields after harvest and gather any remaining vegetables and fruits free-of-charge that would otherwise be wasted and plowed after harvest. This grassroots program is geared to low and moderate-income residents to increase access to healthy and nutritious food and reduce food waste. In 2021, this program distributed over 14 tonnes. of healthy and nutritious gleaned produce to 2,638 people.



ACTION AREAS

This roadmap builds on work already happening in York Region, identifying areas of focus that have the greatest potential impact to bring together different departments, and external partners to collaborate on projects and accelerate the circular economy.

Five cross-cutting action areas were identified to leverage circularity within the Region.

1. Sustainable Food Systems
2. Reuse and Sharing
3. Community Capacity and Connections
4. Circular Procurement
5. Asset Management and Built Environment

The first three action areas have a strong community component, where York Region will influence, facilitate, and contribute to circular integration alongside our community partners and local municipalities. The last two action areas, Circular Procurement and Asset Management & Built Environment, represent opportunities for York Region to take action internally, create resilience through circularity and lead by example.

These action areas use existing structures both internally, through regional plans and strategies and externally through existing partnerships and programming. They encourage innovation and identify promising practices to explore and develop, data and research gaps, and knowledge sharing and engagement opportunities.



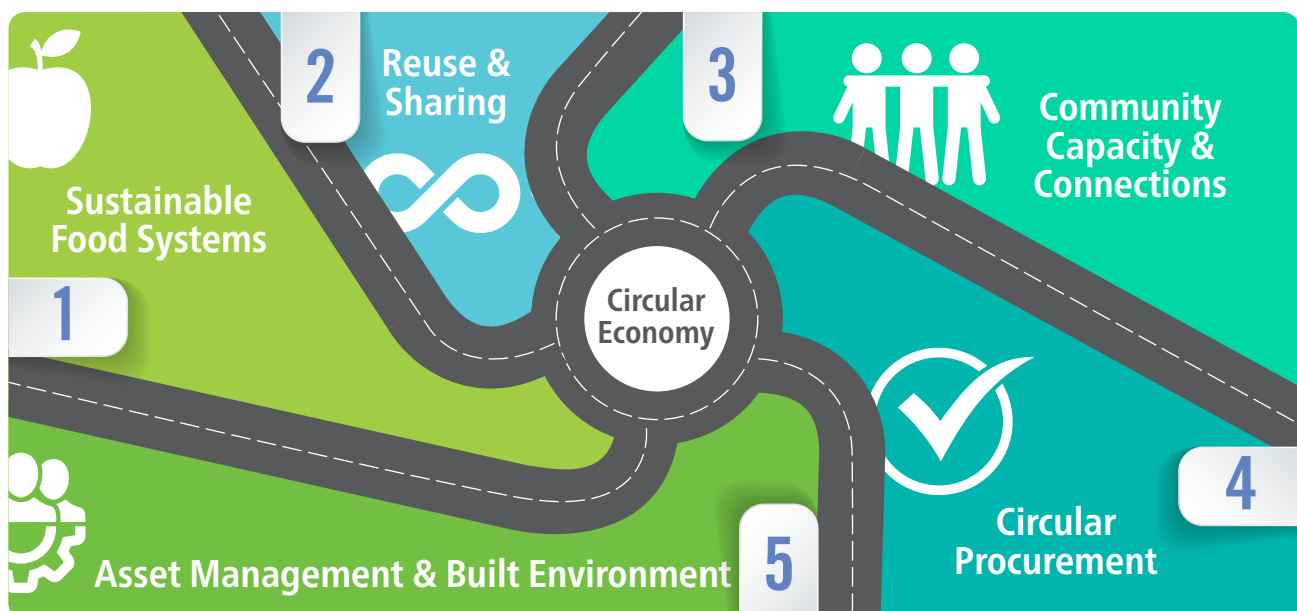
Sustainable Food Systems

Reduce food and packaging waste, improve food literacy and support a sustainable local system.

York Region is a leader in providing programming that enhances food literacy and food waste reduction efforts. The Region's focus to strengthen community partnerships, support local agriculture and agri-food sector, and enhance programming will reach a wider and more diverse audience. This focus will reduce demand and high costs of food waste processing and promote equitable access to healthy, sustainable food systems.

Action Items

- | | |
|----|-----------------------------------------------------------------------------------|
| A) | <i>Food literacy and food waste reduction programming</i> |
| B) | <i>Advocacy on legislation, regulation and policy related to food circularity</i> |
| C) | <i>Supporting a circular food economy in York Region</i> |



ACTION AREAS



Reuse and Sharing

Increase community resilience and reduce waste generation through the development of vibrant sharing and reuse networks and initiatives.

Enabling equal opportunity for residents and businesses to participate in the circular economy through reuse, repair and sharing initiatives, strengthens both the social and environmental resilience of our community. A focus to grow existing and implement new and more accessible programming for the community and implement reuse practices at the Region can reduce waste significantly.

Action Items

- | | |
|----|----------------------------------------------|
| A) | <i>Reuse, repair and sharing programming</i> |
| B) | <i>Internal waste reduction efforts</i> |



Community Capacity and Connections

Build community capacity to adopt the circular economy through engagement, education and networking.

Businesses and community organizations will play an essential role in integrating circularity into the lives of York Region residents. Building circular economy capacity through awareness, education and investment will help community leaders recognize how this circular transition can benefit their work. Creating a Circular Economy Working Group composed of champions who can advise, support and facilitate opportunities in their own sectors locally will strengthen community capacity and create widespread, diverse connections.

Action Items

- | | |
|----|-------------------------------------------------------------------|
| A) | <i>Engaging and educating community leaders</i> |
| B) | <i>Facilitating circular collaborations</i> |
| C) | <i>Gathering and sharing data on state of circular economy</i> |
| D) | <i>Developing business tools, education and financial support</i> |



Circular Procurement

Accelerate the circular economy through sustainable procurement policies and practices.

One of the key tools available to governments is to use their buying power to stimulate circular supply chains and promote new business models based on innovative, resource efficient solutions. Developing policy and guidance for the evaluation of the lifecycle cost of goods and services purchased (including the environmental, economic and social impact) will lead to investments that support the Region's broader vision for our communities.

Action Items

- | | |
|----|---------------------------------------------------------------------|
| A) | <i>Developing/updating sustainable procurement policy and tools</i> |
| B) | <i>Engaging and training staff and vendors on circular economy</i> |



Asset Management and Built Environment

Increase the lifespan of assets, infrastructure and built environment through innovative design, reuse, repair and donation.

York Region is committed to maintaining equipment, infrastructure, components and their materials at their most useful purpose for as long as possible to maximize return-on-investment and reduce waste. This can be supported by sharing expertise and lessons learned from existing innovations. Facilitating collaborations, and updating policies and guidance to enable reuse, sharing, donation and recycling of assets will further our financial resilience and leadership towards sustainable growth.

Action Items

- | | |
|----|-----------------------------------------------------------------------|
| A) | <i>Researching emerging materials, practices and technologies</i> |
| B) | <i>Scaling up and tracking impacts of current circular practices</i> |
| C) | <i>Integrating circular principles into asset management policies</i> |
| D) | <i>Sharing circular success stories</i> |

IMPLEMENTATION

The circular economy requires a culture of continuous learning, where successful practices are celebrated, achievements and shortfalls are shared openly, and collaboration drives innovation.

The following guiding principles support implementation of a circular economy with the understanding that change will be ongoing, and actions will evolve over time as we learn, innovate, and build capacity.

1 Learn, Build Knowledge, Gather Data to Support Action

- Engage and develop tools and resources to increase understanding of the benefits of the circular economy with internal teams and the community
- Identify stakeholders and showcase existing circular projects that inspire others to think circular
- Gather baseline data on circularity, material flow, replacement and disposal processes and policies across the Region to help identify priority opportunities for circular economy implementation

2 Inspire, Collaborate and Innovate

- Identify Regional cross-departmental collaborations for pilot projects in areas such as asset management, reuse and donation
- Establish or leverage existing working groups to research, plan and implement projects and share outcomes
- Facilitate and encourage collaborations that problem-solve, create efficiencies, and ensure appropriate human and financial resources are available

3 Mobilize and Monitor

- Pilot circular programs and solutions. Implement, monitor, adapt and refine solutions to maximize impact



4 Evolve and Evaluate

- Evaluate impact of pilot projects, and opportunities for expansion
- Share case studies, results and lesson learned with stakeholders
- Identify successful practices that can be expanded and those which require improvements
- Evolve practices to meet changing social, economic and environmental conditions and growing knowledge and willingness for the circular economy

This roadmap will be guided by a three-year workplan which includes specific actions that have been identified including key departments and partners involved. The workplan will be updated annually to reflect departmental priorities, outcomes and new opportunities as they arise. Implementation of the circular economy is a collaborative initiative, with implementation lead by York Region departments and teams delivering relevant programs or services.

ACKNOWLEDGEMENTS

The project team would like to acknowledge and send our sincere gratitude to the Circular Cities and Regions Initiative (CCRI) pilot team in supporting the learnings and development that helped form this Roadmap.

[CCRI Team](#)

[National Zero Waste Council](#)

[Federation of Canadian Municipalities](#)

[Recycling Council of Alberta](#)

[Recyc-Quebec](#)

[Advisory Group](#)





Allan Thompson
Mayor

May 27, 2022

Sent via E-Mail: Chrystia.freeland@fin.gc.ca

The Honourable Chrystia Freeland
Minister of Finance
90 Elgin Street
Ottawa ON K1A 0G5

Dear Minister Freeland,

RE: SUPPORT FOR LAKE SIMCOE CLEANUP FUND

I am writing to advise that at a Town Council meeting held on May 24, 2022, Council supported a resolution from the Township of King regarding their request for support for federal funding for a Lake Simcoe Restoration Fund.

The resolution reads as follows:

That the Town of Caledon endorse and support the resolution from the Township of King with respect to supporting a Federal Lake Simcoe Cleanup (Restoration) Fund.

For more information regarding this request, please contact the undersigned by email to mayor@caledon.ca or by phone at 905.584.2272 ext. 4155.

Thank you for your attention to this matter.

Sincerely,

Allan Thompson
Mayor

Cc: Kathryn Moyle, Director of Corporate Services, Township Clerk, Township of King, kmoyle@king.ca
Honourable Steven Guilbeault, Minister of the Environment & Climate Change, Steven.Guilbeault@parl.gc.ca
Honourable Mona Fortier, President of the Treasury Board, Mona.fortier@parl.gc.ca
Scot Davidson, MP, York-Simcoe, Scot.Davidson@parl.gc.ca
Tony Van Bynen, MP, Newmarket – Aurora, Tony.VanBynen@parl.gc.ca

THE CORPORATION OF THE TOWN OF CALEDON

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John Brassard, MP, Barrie-Innisfil, John.brassard@parl.gc.ca
Adam Chambers, MP, Simcoe North, Adam.chambers@parl.gc.ca
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Hon. Erin O'Toole, MP, Durham, Erin.otoole@parl.gc.ca
Lake Simcoe Region Conservation Authority (LSRCA), Lakesimcoe@ontario.ca
Lake Simcoe Region Municipalities:
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City of Kawartha Lakes, clerks@kawarthalakes.ca
Township of Scugog, mail@scugog.ca
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Community Services

Legislative Services

May 31, 2022

File #120203

Sent via email: ann-marie.norio@niagararegion.ca

Ann-Marie Norio, Regional Clerk
Niagara Region
1815 Sir Isaac Brock Way, P. O. Box 1042
Thorold, ON L2V 4T7

Dear Ms. Norio:

Re: Niagara Region's Motion – Voluntary Russian Sanction Request

Please be advised the Municipal Council of the Town of Fort Erie at its meeting of May 30, 2022 received and supported the Region's correspondence dated May 19, 2022 regarding the following:

- Denouncing Russia's unjustifiable invasion of the sovereign nation of Ukraine,
- Supporting sanctions that the Federal Government of Canada has thus far imposed on Russia,
- Advising any Regional Councillor who wishes to be may voluntarily sanctioned indicate their support
- Regional Chair to send correspondence to the Consulate General of the Russian Federation naming those Councillors who indicated their support, resulting in their "indefinite ban from entering Russia",
- Forwarding to all municipalities in Ontario requesting they consider enacting similar measures in order to present a united front and support the citizens of Ukraine.

A copy of your correspondence dated May 19, 2022, is attached.

Yours very truly,

Carol Schofield, Dipl.M.A.
Manager, Legislative Services/Clerk

cschofield@forterie.ca

CS:dlk

Attach

c.c. Jennifer Stevens, MPP - St. Catharines JStevens-CO@ndp.on.ca
 Jeff Burch, MPP - Niagara Centre JBurch-QP@ndp.on.ca
 Wayne Gates, MPP - Niagara Falls wgates-co@ndp.on.ca
 Sam Oosterhoff, MPP - Niagara West-Glanbrook sam.oosterhoff@pc.ola.org
 Dean Ellison, MP, Niagara West dean.allison@parl.gc.ca
 Chris Bittle, MP - St. Catharines Chris.Bittle@parl.gc.ca
 Vance Badaway, MP - Niagara Centre Vance.Badawey@parl.gc.ca
 Tony Baldinelli, MP, Niagara Falls tony.baldinelli@parl.gc.ca
 Association of Municipalities of Ontario AMO@amo.on.ca
 Federation of Canadian Municipalities resolutions@fcm.ca
 All Ontario Municipalities

Mailing Address:

The Corporation of the Town of Fort Erie
1 Municipal Centre Drive, Fort Erie ON L2A 2S6

Office Hours 8:30 a.m. to 4:30 p.m.

Phone: (905) 871-1600 FAX: (905) 871-4022

Web-site: www.forterie.ca

G

Administration

Office of the Regional Clerk

1815 Sir Isaac Brock Way, PO Box 1042, Thorold, ON L2V 4T7

Telephone: 905-980-6000 Toll-free: 1-800-263-7215 Fax: 905-687-4977

www.niagararegion.ca

G

May 25, 2022

CL 10-2022, May 19, 2022

DISTRIBUTION LIST***SENT ELECTRONICALLY*****Re: Motion - Voluntary Russian Sanction Request**

Whereas Russia's unprovoked and brazen invasion of the sovereign nation of Ukraine has been unequivocally condemned by the majority of the free world, including by those living and working in Niagara;

Whereas the death and destruction caused by Russia's senseless invasion will have a lasting impact on the innocent and independent citizens of Ukraine;

Whereas Russia has placed sanctions on many Canadian premiers, mayors, journalists, military officials as well as senior staff in the federal government, "indefinitely" banning these individuals from entering Russia;

Whereas those Russian sanctions include Toronto Mayor John Tory and Ottawa Mayor Jim Watson;

Whereas the residents and businesses of Niagara stand in solidarity with the people of Ukraine and the proud Ukrainian-Canadian community who call our region home;

Whereas Niagara Region continues to be a willing host to those Ukrainian citizens fleeing their homeland during this challenging time, providing support through the Region's Community Services Department as well as number of other local agencies;

Whereas silence may be interpreted as complicity; and

Whereas any sanctions placed on Niagara's elected officials be considered wholly ineffective and be received as a demonstration of Niagara's steadfast commitment to support Ukraine during this time.

NOW THEREFORE BE IT RESOLVED:

1. That Niagara Regional Council unequivocally **DENOUNCES** Russia's unjustifiable invasion of the sovereign nation of Ukraine;

RECEIVED

MAY 30 2022

BY COUNCIL

2. That Niagara Regional Council **SUPPORTS** all of the sanctions that the Federal Government of Canada has thus far imposed on Russia;
3. That any Regional Councillor who wishes to be voluntarily sanctioned **INDICATE** their support by advising the Regional Chair's Office by phone or email by no later than Friday, May 20 at 4:30 p.m.;
4. That the Regional Chair **BE DIRECTED** to send correspondence to the Consulate General of the Russian Federation with the names of the Regional Councillors who have indicated their support to be voluntarily sanctioned, resulting in their "indefinite" ban from entering Russia;
5. That the Regional Clerk **BE DIRECTED** to circulate this motion to Niagara's 12 local councils, local area MPs, MPPs, AMO, and FCM; and
6. That this motion **BE FORWARDED** to all other municipalities in Ontario, requesting they consider enacting similar measures in order to present a united front and support the citizens of Ukraine.

Yours truly,



Ann-Marie Norio
Regional Clerk
CLK-C 2022-079

Distribution List

Local Area Councils

Chris Bittle, Member of Parliament, St. Catharines

Vance Badawey, Member of Parliament, Niagara Centre

Tony Baldinelli, Member of Parliament, Niagara Falls

Dean Allison, Member of Parliament, Niagara West

Jennie Stevens, Member of Provincial Parliament, St. Catharines

Jeff Burch, Member of Provincial Parliament, Niagara Centre

Wayne Gates, Member of Provincial Parliament, Niagara Falls

Sam Oosterhoff, Member of Provincial Parliament, Niagara West

Association of Municipalities Ontario

Federation of Canadian Municipalities

All Ontario Municipalities



Community Services

Legislative Services

May 31, 2022

File #120203

Sent via email: Justin.trudeau@parl.gc.ca

The Right Honourable Justin Trudeau,
Prime Minister of Canada
House of Commons
Ottawa, ON K1A 0A6

Honourable and Dear Sir:

Re: Federal Government's Plans to Tax Vacant Foreign Owned Properties

Please be advised the Municipal Council of the Town of Fort Erie at its meeting of May 30, 2022 passed the following resolution:

Whereas the Federal Government proposed a tax on vacant non-resident foreign owned properties in the 2021 budget, and

Whereas the intent of this tax is to reduce speculation in the real estate market which is believed to contribute to housing unaffordability in Canada, and

Whereas Fort Erie and other vacation destinations across Ontario have a high number of non-resident American-owned vacation properties that are vacant during the tourism off-season during the winter months, and

Whereas the Federal Government signaled their intent to exempt non-resident foreign owned vacation properties in Canada so long as they meet certain requirements including being located in a Census Agglomeration with a population of less than 30,000 people, and

Whereas Fort Erie and numerous other seasonal vacation destinations across Southern Ontario are in Census Metropolitan Areas and Census Agglomerations with populations well in excess of 30,000 people despite the communities themselves being small and medium-sized municipalities, and

Whereas Fort Erie and other communities across Ontario have a long history of being a vacation destination for American visitors, many of which have owned the same property for generations, and would be taxed yearly on their assessed value of their vacation property based on this proposal, and

.../2

Mailing Address:

The Corporation of the Town of Fort Erie
1 Municipal Centre Drive, Fort Erie ON L2A 2S6

Office Hours 8:30 a.m. to 5:00 p.m. Phone: (905) 871-1600 FAX: (905) 871-4022

Web-site: www.forterrie.ca

Whereas vacant property taxes would be allocated to the general revenues of the federal government and not directly benefit the municipalities where these properties are located and serviced, and

Whereas vacation properties that are seasonally vacant do not contribute to the speculation that is believed to contribute to housing unaffordability in Canada,

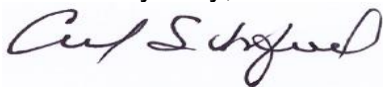
Now therefore be it resolved,

That: The Municipal Council of the Town of Fort Erie requests the Federal Government to review the proposed exemption framework for seasonal vacation properties to better reflect the reality of where these properties are located and how they are used, and further

That: This resolution be circulated to The Right Honourable Justin Trudeau, Prime Minister of Canada, The Honourable Chrystia Freeland, Deputy Prime Minister of Canada and Minister of Finance, the Honourable Diane Lebouthillier, Minister of National Revenue (Canada), Tony Baldinelli, Member of Parliament for Niagara Falls, the Association of Municipalities of Ontario, and all municipalities located in Ontario.

Thank you for your attention to this matter.

Yours very truly,



Carol Schofield, Dipl.M.A.
Manager, Legislative Services/Clerk

cschofield@forterie.ca

CS:dlk

c.c. The Honourable Chrystia Freeland, Deputy Prime Minister of Canada and Minister of Finance

chrystia.freeland@parl.gc.ca

The Honourable Diane Lebouthillier, Minister of National Revenue (Canada) diane.lebouthillier@parl.gc.ca

Tony Baldinelli, MP, Niagara Falls tony.baldinelli@parl.gc.ca

Association of Municipalities of Ontario AMO@amo.on.ca

All Ontario Municipalities



Community Services

Legislative Services

May 31, 2022
File #120203

The Right Honourable Justin Trudeau
Prime Minister
House of Commons
Ottawa, ON K1A 0A6
Justin.trudeau@parl.gc.ca

The Honourable Doug Ford
Premier of Ontario
Legislative Building, Queen's Park
Toronto, ON M7A 1A1
premier@ontario.ca

Honourable and Dear Sirs:

Re: Bidding Wars on Apartment Rentals

The Municipal Council of the Town of Fort Erie at its meeting of May 30, 2022 passed the following resolution:

Whereas Canada's housing market has not only made it difficult for many Canadians to afford to purchase a home but also to rent apartments, and

Whereas there is a disconnect between affordability of housing and apartment rentals versus wages that have not kept pace with them nor has it kept pace with inflation, cost of living expenses, the rising costs of goods & services including – food, gas and utility, and

Whereas Ontario has now become the least affordable jurisdiction suffering the worst erosion in the last 50 years, and

Whereas many Canadians continue to be locked out of the housing & rental market for many reasons including the affordability of a down payment, rising inflation rates, and the escalation of bidding wars, and

Whereas bidding wars do not stop at home purchases but have now transitioned to apartment rentals as a ripple effect of the real estate market, and

Whereas there is a profound psychological effect to those individuals who continue to be shut out of the housing and rental market as a direct result, and

Whereas both blind bids and open bids are bad for the housing and apartment market which can lead to a housing bubble, and while blind bids offer no transparency, both types create unrealistic values that helps the seller and the rental owner but hurts the purchaser and renter, and

...2

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The Corporation of the Town of Fort Erie
1 Municipal Centre Drive, Fort Erie ON L2A 2S6

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Web-site: www.forterrie.ca

Whereas there are multiple sites that encourage and teach how to win at bidding wars, and

Whereas there is no comprehensive data or statistics that currently tracks prices for rentals, and

Whereas the Government of Ontario will be introducing new legislation with respect to blind bidding only which does not prohibit the seller from entering into a bidding war but, rather, would give sellers the option to "opt for an open offer process", and

Whereas the changes to the *Trust in Real Estate Services Act* provides an advantage to the seller(s) and largely weakens opportunities of the buyer and renter further adding to the disparity between the two;

Now therefore, be it resolved,

That: Both the Federal & Provincial Governments enact legislation that prevents both open and closed bidding on both rental units and residential sales, and further

That: Both the Federal & Provincial Government prohibit sales beyond the list price, and further

That: A copy of this resolution be circulated to The Right Honourable Justin Trudeau, The Honourable Doug Ford, Premier of Ontario, All Members of Parliament, All Members of Provincial Parliament, and all Municipalities for their support.

References:

<https://www.truenorthmortgage.ca/blog/how-the-blind-offer-is-hurting-the-canadian-housing-market>

<https://www.cbc.ca/news/bidding-wars-to-rent-a-house-in-ontario-tenants-and-agents-say-it-s-a-new-reality-1.6094412>

<https://nationalpost.com/news/canada/extremely-stressful-bidding-wars-no-longer-limited-to-purchase-of-houses-now-its-rentals-too>

<https://www.blogto.com/real-estate-toronto/2022/04/ontario-new-regulations-bidding-wars-homes/>

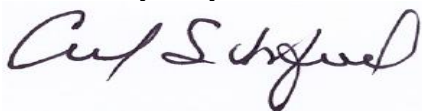
<https://www.cp24.com/news/ontario-to-allow-new-home-sales-tactic-that-would-change-the-bidding-process-1.5867054?cache=yes&clipid104062%2F7.493183>

<https://www.ontario.ca/laws/statute/s20001>

https://www.gensqueeze.ca/housing_affordability_analysis

Thank you for your attention to this matter.

Yours very truly,



Carol Schofield, Dipl.M.A.
 Manager, Legislative Services/Clerk

cschofield@forterie.ca

CS:dlk

c.c. All Members of Parliament
 All Members of Provincial Parliament
 All Ontario Municipalities

2022 WATER AND WASTEWATER MASTER PLAN UPDATE NOTICE OF COMPLETION AND COMMENT PERIOD

731



The Regional Municipality of York's Water and Wastewater Master Plan update identifies strategies and supporting infrastructure needed to provide clean, safe and reliable water and wastewater services to our growing communities to 2051.

Review the Master Plan update at york.ca/waterplan

PROVIDE COMMENTS BY
JULY 3, 2022

Submit comments to:

Laura Alpi, Project Liaison
The Regional Municipality of York
17250 Yonge Street, Newmarket

P: 1-877-464-9675 ext. 73029
water@york.ca

York Region completed updating its Water and Wastewater Master Plan through the Municipal Class Environmental Assessment master planning process. An accessible version of materials and printed copies are available upon request.

Personal information submitted (e.g., name, address and phone number) is collected, maintained and disclosed under the authority of the *Environmental Assessment Act* and the *Municipal Freedom of Information and Protection of Privacy Act* for the purpose of creating a public record and for consultation purposes. Personal information you submit will become part of a public record that is available to the general public, unless you request that your personal information remain confidential.




York Region

May 31, 2022

Sent via email*See Distribution List on pages 6-12***Re: Better Utilization of the Existing Highway 407 ETR**

The following recommendation of the Committee of Council Meeting of April 27, 2022 was approved by Council on May 4, 2022:

CW209-2022

WHEREAS the Province of Ontario the proposed Highway 413 even if approved would not provide any congestion relief for at least another ten years if not longer; and,

WHEREAS the Province of Ontario initiated an Environment Assessment process in 2007 for the planning and construction of the GTA-West Corridor:

“The Purpose of this study is to examine long-term transportation problems and opportunities and consider alternatives solutions to provide better linkages between urban Growth Centres in the GTA West Corridor Preliminary Study Area.”

"The Focus will be on developing an integrated, multi-modal transportation system that offers choices for the efficient movement of people and goods."; and

WHEREAS the final recommendation of the Stage 1 Provincial Environmental Assessment (2012) was to first put in place the transportation system management components, rapid transit, freight rail improvements and expansion of existing highways prior to construction of a new expressway; and

WHEREAS the Stage 2 Environmental Assessment (design and route of Highway 413) undertaken by the previous provincial government was shelved because of strong objections by an Expert Advisory Panel in the fields of rural development, renewable cities, agriculture, environment, and efficient transportation who sounded alarms over predicted irreversible ecological harm caused by the uncontrolled, low density urban sprawl enabled by Highway 413 and identified several other solutions that should be reviewed; and

WHEREAS the current Provincial government revived the Highway 413 proposal in 2018, saying it could relieve congestion issues in the fast-growing Toronto suburbs and boost Ontario's economy in the absence of addressing any of the concerns set out in the Expert Advisory Panel Report; and

WHEREAS the Federal Government designated the GTA West Corridor/Highway 413 as a project that has the potential to have adverse negative impacts on critical endangered species habits under federal jurisdiction on May 3, 2021 and is still awaiting for the initial project description from the Province of Ontario's Ministry of Transportation; and

WHEREAS even if built Highway 413 will not provide any congestion relief for at least ten years and Highway 407 offers a solution to immediately provide congestion relief; and

WHEREAS the current toll rates provide a disincentive to increase usage of the Highway 407 ETR and this results in increased usage and congestion on surrounding local and regional roads; and,

WHEREAS the 407ETR was created as a truck by-pass in order to relieve congestion on Highway 401, but the 407ETR was tolled, thereby limiting the amount of relief provided by the 407ETR; and

WHEREAS several reasonable road improvement alternatives to Highway 413 exist and were recommended by the Expert Panel, including congestion pricing on other highways, shifting truck traffic to the under-utilized 407ETR including the reduction or elimination of tariffs, and transportation system management on other highways (ramp metering, speed harmonization. (freight, rail improvements, underpasses); and

WHEREAS on February 22, 2022 the provincial government announced removing tolls on highway 412 and 418; and

WHEREAS maximizing use of existing infrastructure, transit investments and good land use planning decisions are vital to creating complete communities which are economically vibrant, where people and goods are moved effortlessly, and where multiple modes of transportation support the community including a focus on active transportation; and

WHEREAS the City of Brampton spends approximately \$1,000,000 a year on 407 toll charges to support Brampton Transit routes; and

WHEREAS analysis has shown (<https://ontario.transportation.ca>) that investment in various unfunded rapid transit projects, including GO Transit and LRT/BRT projects, can move 4 times the number of people as Highway 413, for the same invested dollars; and

WHEREAS 407 International Inc. was granted relief by the Province from traffic volume penalties in 2020 and could be amenable to negotiation to provide tariff relief on its highway in lieu of penalties for 2021; and

WHEREAS the Canadian Pension Plan Investment Board (CPPIB) is a 50.01% shareholder of 407 International Inc.; and

WHEREAS CPPIB believes it is their responsibility to take Climate Change into account to ensure sound investments as we transition to a low carbon economy; and

WHEREAS CPPIB seeks to work with high emitting investors to and discuss strategies to help manage and improve GHG emissions; and

WHEREAS supporting increased usage of Highway 407 ETR would be consistent with CPPIB approach to Climate Change and assist all levels of government achieving progress on GHG emission reductions and provide immediate congestion relief; and,

NOW THEREFORE, BE IT RESOLVED:

THAT the Council of the City of Brampton strongly supports initiatives that will promote better utilization of the existing Highway 407 ETR; and

THAT the City of Brampton advocate to have the provincial government pay for the toll charges associated with transport trucks and Brampton Transit routes; and

THAT the Council of the City of Brampton continues to support an integrated GTHA rail transit network which includes new GO Train service to Bolton (Caledon); and

THAT the Council of the City of Brampton fully supports a complete Federal Environmental Impact Study pursuant to s.9(1) of the Impact Assessment Act (I.A.A.), prior to any advancement of Highway 413; and

THAT the Council of the City of Brampton requests that the Government of Canada, the Province of Ontario work with the CPPIB and 407 International Inc., and the CPPIB to discuss strategies to increase Highway 407 ETR usage to provide immediate congestion relief on surrounding roads consistent with the recommendations of the Expert Advisory Panel Report; and

THAT if Highway 413 does not proceed, that capital costs of funding the proposed GTA West Corridor should be redirected to provide for rapid transit for the Regions of York, Peel and Halton such as investment in improved GO service on the Kitchener and Milton lines, a new GO transit line to Bolton, 407 Transitway and BRT on Queen Street; and

THAT the Council of the City of Brampton recommends that the province undertake a comprehensive economic benefits analysis of the potential for transit orientated communities along the GO Rail Transit Network and any new LRT/BRT lines for the Greater Golden Horseshoe as well the GTA regional transportation plan / sustainable communities strategy to provide holistic comprehensive policies for achieving affordable housing near transit-oriented communities stations; and

THAT a copy of this resolution be provided to the Region of York, Peel and Halton, the cities of Richmond Hill, Vaughan, Markham, Mississauga, Toronto and the Towns of Milton, Orangeville and Halton Hills; and

AND further that this Resolution be forwarded to:

1. Doug Ford, Premier of Ontario;
2. Peter Bethlenfalvy, Minister of Finance;
3. Caroline Mulroney, Minister of Transportation;
4. Kinga Surma, Minister of Infrastructure and Transit-Oriented Communities;
5. David Piccini, Minister of Environment and Climate Change;
6. Stan Cho, Associate Minister of Transportation (GTA);
7. Steve Clark, Minister of Municipal Affairs and Housing;
8. Lisa Thompson, Minister of Agriculture, Food and Rural Affairs;
9. Victor Fedeli, Minister of Economic Development, Job Creation and Trade;
10. Andrea Horwath, Leader of The Official Opposition and Ontario NDP Party;
11. Steven Del Duca, Leader of The Ontario Liberal Party;
12. All Members of Federal Parliament in The Regional Municipality of York, Peel and Halton;
13. All Members of Provincial Parliament in The Regional Municipality of York, Peel and Halton;
14. All Members of Regional Council in The Regional Municipality of York, Peel and Halton;
15. All City Clerks in the Regional Municipalities of York, Peel and Halton;
16. Rt Hon. Justin Trudeau, Prime Minister of Canada;
17. Chrystia Freeland, Federal Minister of Finance;
18. Hon Omar Alghabra, Federal Minister of Transport;
19. Hon Marie Claude Bibeau, Minister of Agriculture and Agr-Food;
20. Melanie Joly, Federal Minister of Economic Development;

21. Dominic Leblanc, Federal Minister of Infrastructure and Communities;
22. Jonathan Wilkinson, Federal Minister of Natural Resources;
23. Steven Guilbeault, Federal Minister of Environment and Climate Change;
24. Nando Iannicca, Chairman, Peel Region;
25. John Mackenzie, CEO, Toronto and Region Conservation Authority;
26. Phil Verster, President and CEO, Metrolinx;
27. David Mcfadden, Chairman, 407ETR;
28. Javier Tamargo, President and CEO 407ETR;
29. Nando Iannicca, Chairman, Peel Region.

Yours truly,

Sonya Pacheco

Sonya Pacheco
Legislative Coordinator
City Clerk's Office
Tel: 905-874-2178 / Fax: 905-874-2119
sonya.pacheco@brampton.ca

(CW – 11.3.1)

Distribution List:**Federal Government**

The Right Honourable Justin Trudeau
Prime Minister of Canada
justin.trudeau@parl.gc.ca

The Honourable Chrystia Freeland
Minister of Finance
chrystia.freeland@parl.gc.ca

The Honourable Omar Alghabra
Minister of Transport
omar.alghabra@parl.gc.ca

The Honourable Marie-Claude Bibeau
Minister of Agriculture and Agr-Food
Marie-Claude.Bibeau@parl.gc.ca

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The Honourable Steven Guilbeault
Minister of Environment and Climate Change
Steven.Guilbeault@parl.gc.ca

Provincial Government

The Honourable Doug Ford
Premier of Ontario
premier@ontario.ca

Ministry of Finance
Minister.fin@ontario.ca

Ministry of Infrastructure
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Ministry of Environment Conservation and Parks
minister.mecp@ontario.ca

Ministry of Transportation
minister.mto@ontario.ca

Ministry of Municipal Affairs and Housing
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Ministry of Agriculture, Food and Rural Affairs
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Ministry of Economic Development, Job Creation and Trade
MEDJCT.Minister@ontario.ca

Andrea Horwath
Leader of Ontario NDP Party
ahorwath-qp@ndp.on.ca

Steven Del Duca
Leader of The Ontario Liberal Party
info.leader@ontarioliberal.ca

Members of Parliament

Regional Municipality of Peel:

Shafqat Ali, MP – Brampton Centre
Shafqat.Ali@parl.gc.ca

Kamal Khera, MP – Brampton West
Kamal.Khera@parl.gc.ca

Ruby Sahota, MP – Brampton North
Ruby.Sahota@parl.gc.ca

Maninder Sidhu, MP – Brampton East
Maninder.Sidhu@parl.gc.ca

Sonia Sidhu, MP – Brampton South
Sonia.Sidhu@parl.gc.ca

Omar Alghabra, MP – Mississauga Centre
Omar.Alghabra@parl.gc.ca

Iqwinder Gaheer, MP – Mississauga-Malton
Iqwinder.Gaheer@parl.gc.ca

Peter Fonseca, MP - Mississauga East – Cooksville
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Iqra Khalid, MP - Mississauga – Erin Mills
Iqra.Khalid@parl.gc.ca

Rechie Valdez, MP - Mississauga – Streetsville
Rechie.Valdez@parl.gc.ca

Sven Spengemann, MP - Mississauga – Lakeshore
Sven.Spengemann@parl.gc.ca

Kyle Seeback, MP - Dufferin – Caledon
Kyle.Seeback@parl.gc.ca

Regional Municipality of York:

Scot Davidson, MP – York-Simcoe
Scot.Davidson@parl.gc.ca

The Honourable Ahmed Hussen, MP - York South—Weston
ahmed.hussen@parl.gc.ca

Ya'ara Saks, MP – York Centre
yaara.saks@parl.gc.ca

Leah Taylor Roy, MP – Aurora-Oak Ridges-Richmond Hill
leah.taylorroy@parl.gc.ca

Anna Roberts, MP – King-Vaughan
anna.roberts@parl.gc.ca

The Honourable Helena Jaczek, MP – Markham-Stouffville
Helena.Jaczek@parl.gc.ca

The Honourable Mary Ng, MP – Markham-Thornhill
mary.ng@parl.gc.ca

Paul Chiang, MP – Markham-Unionville
paul.chiang@parl.gc.ca

Tony Van Bynen, MP – Newmarket-Aurora
Tony.VanBynen@parl.gc.ca

Majid Jowhari, MP - Richmond Hill
majid.jowhari@parl.gc.ca

Francesco Sorbara, MP – Vaughan-Woodbridge
francesco.sorbara@parl.gc.ca

Regional Municipality of Halton:

The Honourable Michael D. Chong, MP - Wellington—Halton Hills
michael.chong@parl.gc.ca

The Honourable Anita Anand, MP - Oakville
anita.anand@parl.gc.ca

Pam Damoff, MP - Oakville-North Burlington
pam.damoff@parl.gc.ca

The Honourable Karina Gould, MP – Burlington
karina.gould@parl.gc.ca

Adam van Koeverden, MP - Milton
Adam.vanKoeverden@parl.gc.ca

Members of Provincial Parliament for the Regional Municipalities of Peel, York and Halton

Note: Correspondence will be sent to the MPPs for the above-noted regions following the 2022 Provincial Election.

Municipalities of Peel Region:

Aretha Adams, Regional Clerk
Regional Municipality of Peel
aretha.adams@peelregion.ca

Diana Rusnov, Director, Legislative Services and City Clerk
City of Mississauga
diana.rusnov@mississauga.ca

Laura Hall, Director, Corporate Services, and Town Clerk
Town of Caledon
laura.hall@caledon.ca

Peter Fay, City Clerk
City of Brampton
peter.fay@brampton.ca

Municipalities of Halton Region:

Graham Milne, Regional Clerk
Regional Municipality of Halton
RegionalClerk@halton.ca

Kevin Arjoon, City Clerk
City of Burlington
clerks@burlington.ca

Vicki Tytaneck, Town Clerk
Town of Oakville
townclerk@oakville.ca

Meaghen Reid
Town of Milton
townclerk@milton.ca

Valerie Petryniak, Town Clerk & Director of Legislative Services
Town of Halton Hills
valeriep@haltonhills.ca

Municipalities of York Region:

Michael de Rond, Town Clerk
Town of Aurora
clerks@aurora.ca

Tara Lajevardi, Municipal Clerk/Director of Legislative Services
Town of East Gwillimbury
tlajevardi@eastgwillimbury.ca

Rachel Dillabough, Town Clerk
Town of Georgina
rdillabough@georgina.ca

Kathryn Moyle, Director, Corporate Services and Township Clerk
King Township
kmoyle@king.ca

Kimberley Kitteringham, City Clerk
City of Markham
kkitteringham@markham.ca

Lisa Lyons, Director of Legislative Services/Town Clerk
Town of Newmarket
clerks@newmarket.ca

Stephen Huycke, Director, Legislative Services/Town Clerk
City of Richmond Hill
stephen.huycke@richmondhill.ca

Todd Coles, City Clerk
City of Vaughan
clerks@vaughan.ca

Gillian Angus-Traill, Clerk
Town of Whitchurch-Stouffville
gillian.angus-traill@townofws.ca

John Elvidge, City Clerk
City of Toronto
clerk@toronto.ca

Karen Landry, Town Clerk
Town of Orangeville
klandry@orangeville.ca

John Mackenzie
CEO, Toronto and Region Conservation Authority
John.MacKenzie@trca.ca

Phil Verster
President and CEO, Metrolinx
CEO@metrolinx.com

David McFadden
Chairman, 407ETR
Information@407etr.com

Javier Tamargo
President and CEO, 407ETR
Information@407etr.com

City of Brampton:

Mayor and Members of Council

Paul Morrison, Interim CAO
Paul.morrison@brampton.ca

Alex Milojevic, General Manager, Transit
Alex.milojevic@brampton.ca

Jason Schmidt-Shoukri, Commissioner, Planning, Building and Economic Development
Jason.schmidtshoukri@brampton.ca

Mike Parks, Acting Commissioner, Public Works and Engineering
Mike.parks@brampton.ca



Legislative Services
 Michael de Rond
 905-726-4771
 clerks@aurora.ca

Town of Aurora
 100 John West Way, Box 1000
 Aurora, ON L4G 6J1

May 31, 2022

Delivered by email
justin.trudeau@parl.gc.ca
karina.gould@parl.gc.ca

The Right Honourable Justin Trudeau, P.C., M.P.
 Prime Minister of Canada
 80 Wellington Street
 Ottawa, ON K1A 0A2

The Honourable Karina Gould, P.C., M.P.
 Minister of Families, Children and Social Development
 House of Commons
 Ottawa, ON K1A 0A6

Dear Prime Minister Trudeau and Minister Gould:

Re: Town of Aurora Council Resolution of May 24, 2022
Motion 10.1 - Councillor Humfryes; Re: Private Member's Bill C-233 "Keira's Law"

Please be advised that this matter was considered by Council at its meeting held on May 24, 2022, and in this regard, Council adopted the following resolution:

Whereas violence against women is a Canadian public health crisis that demands urgent action; and

Whereas one in four women experience domestic violence in their lifetime. One woman or girl is killed every other day, on average, somewhere in our country; and

Whereas the most dangerous time for a victim of abuse is when she separates from her partner. According to research from the U.S. Centre for Disease Control and Prevention, when there is a history of coercive control, violence and a recent separation, a woman's risk of domestic homicide goes up 900 times; and

Whereas the current Canadian court system is not equipped to protect women. According to the National Judicial Institute, there is no mandatory education for Judges on domestic violence. Judges need education on what constitutes domestic violence or coercive control. A formal education program would ensure

another line of defense for victims, as well as preventing violence and abuse before it happens; and

Whereas the COVID-19 pandemic has only exacerbated the domestic violence crisis. Women's shelters and crisis centres have reported a marked increase in requests for services this year. The concerns for children are significant. According to recent research from The Children's Hospital of Eastern Ontario, doctors have seen more than double the number of babies with serious injuries as this time last year. These include head injuries, broken bones or in some cases death. Institutions across the country are reporting a similar trend; and

Whereas, according to Article 19 of the UN Convention on the Rights of the Child, children must be protected from "all forms of physical or mental violence, injury or abuse, neglect or negligent treatment, maltreatment or exploitation, including sexual abuse, while in the care of parent(s), legal guardian(s) or any other person who has care of the child." Our current family justice system often fails our children in this regard; and

Whereas, in worst case scenarios, children are killed by a violent parent. As reported by the Canadian Domestic Homicide Prevention Initiative, recent separation and domestic violence are the two biggest risk factors for domestic violence related child homicides; and

Whereas custody disputes are an additional risk factor. Each year in Canada, about 30 children are killed by a parent. Mothers are responsible about 40 per cent of the time, often due to postpartum depression or mental illness. In the 60 per cent of cases where fathers are the murderers, anger, jealousy or post-separation retaliatory revenge are the usual motivations; and

Whereas Keira's Law is named after four-year-old Keira Kagan, who was killed while in the custody of her father, in 2020; and

Whereas many cases of domestic violence are inappropriately labelled as "high conflict" in the family court system. According to research by Rachel Birnbaum, a Social Work Professor at the University of Western Ontario who specializes in child custody, approximately one third of cases called "high conflict" by the court had substantiated evidence of valid concerns about domestic violence. These cases must be recognized and treated differently by judges; and

Whereas voting in favour of "Keira's Law", contained in Private Member's Bill C-233, will not only protect victims of violence and children, it will save lives by

Town of Aurora Council Resolution of May 24, 2022
 Private Member's Bill C-233 "Keira's Law"
 May 31, 2022

3 of 3

amending the *Judges Act* to establish seminars for judges on intimate partner violence and coercive control;

- 1. Now Therefore Be It Hereby Resolved That Aurora Town Council calls upon the House of Commons to support Member of Parliament Anju Dhillon's Private Member's Bill C-233, that will raise the level of education on domestic violence and coercive control for federally appointed Judges; and**
- 2. Be It Further Resolved That a copy of this resolution be sent to: The Right Honourable Justin Trudeau, Prime Minister of Canada; The Honourable Karina Gould, MP, Minister of Families, Children and Social Development; The Honourable Candice Bergen, Interim Leader of the Conservative Party of Canada; Yves-Francois Blanchet, MP, Leader of the Bloc Quebecois; Jagmeet Singh, MP, Leader of the New Democratic Party; MP Tony Van Bynen; and MP Leah Taylor Roy; and**
- 3. Be It Further Resolved That a copy of this resolution be circulated to all Ontario municipalities and the Federation of Canadian Municipalities (FCM).**

The above is for your consideration and any attention deemed necessary.

Yours sincerely,



Michael de Rond
 Town Clerk
 The Corporation of the Town of Aurora

MdR/lb

Copy: Hon. Candice Bergen, M.P., Interim Leader of the Conservative Party of Canada
 Yves-François Blanchet, M.P., Leader of the Bloc Québécois
 Jagmeet Singh, M.P., Leader of the New Democratic Party of Canada
 Tony Van Bynen, M.P. Newmarket—Aurora
 Leah Taylor Roy, M.P. Aurora—Oak Ridges—Richmond Hill
 Federation of Canadian Municipalities (FCM)
 All Ontario municipalities



Legislative Services
 Michael de Rond
 905-726-4771
 clerks@aurora.ca

Town of Aurora
 100 John West Way, Box 1000
 Aurora, ON L4G 6J1

May 31, 2022

Delivered by email
justin.trudeau@parl.gc.ca
karina.gould@parl.gc.ca

The Right Honourable Justin Trudeau, P.C., M.P.
 Prime Minister of Canada
 80 Wellington Street
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The Honourable Karina Gould, P.C., M.P.
 Minister of Families, Children and Social Development
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another line of defense for victims, as well as preventing violence and abuse before it happens; and

Whereas the COVID-19 pandemic has only exacerbated the domestic violence crisis. Women's shelters and crisis centres have reported a marked increase in requests for services this year. The concerns for children are significant. According to recent research from The Children's Hospital of Eastern Ontario, doctors have seen more than double the number of babies with serious injuries as this time last year. These include head injuries, broken bones or in some cases death. Institutions across the country are reporting a similar trend; and

Whereas, according to Article 19 of the UN Convention on the Rights of the Child, children must be protected from "all forms of physical or mental violence, injury or abuse, neglect or negligent treatment, maltreatment or exploitation, including sexual abuse, while in the care of parent(s), legal guardian(s) or any other person who has care of the child." Our current family justice system often fails our children in this regard; and

Whereas, in worst case scenarios, children are killed by a violent parent. As reported by the Canadian Domestic Homicide Prevention Initiative, recent separation and domestic violence are the two biggest risk factors for domestic violence related child homicides; and

Whereas custody disputes are an additional risk factor. Each year in Canada, about 30 children are killed by a parent. Mothers are responsible about 40 per cent of the time, often due to postpartum depression or mental illness. In the 60 per cent of cases where fathers are the murderers, anger, jealousy or post-separation retaliatory revenge are the usual motivations; and

Whereas Keira's Law is named after four-year-old Keira Kagan, who was killed while in the custody of her father, in 2020; and

Whereas many cases of domestic violence are inappropriately labelled as "high conflict" in the family court system. According to research by Rachel Birnbaum, a Social Work Professor at the University of Western Ontario who specializes in child custody, approximately one third of cases called "high conflict" by the court had substantiated evidence of valid concerns about domestic violence. These cases must be recognized and treated differently by judges; and

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- 3. Be It Further Resolved That a copy of this resolution be circulated to all Ontario municipalities and the Federation of Canadian Municipalities (FCM).**

The above is for your consideration and any attention deemed necessary.

Yours sincerely,



Michael de Rond
 Town Clerk
 The Corporation of the Town of Aurora

MdR/lb

Copy: Hon. Candice Bergen, M.P., Interim Leader of the Conservative Party of Canada
 Yves-François Blanchet, M.P., Leader of the Bloc Québécois
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 Tony Van Bynen, M.P. Newmarket—Aurora
 Leah Taylor Roy, M.P. Aurora—Oak Ridges—Richmond Hill
 Federation of Canadian Municipalities (FCM)
 All Ontario municipalities

**The Corporation of the City of Cambridge
Corporate Services Department
Clerk's Division
The City of Cambridge
50 Dickson Street, P.O. Box 669
Cambridge ON N1R 5W8
Tel: (519) 740-4680 ext. 4585
mantond@cambridge.ca**

June 1, 2022

Re: Motion from Councillor Liggett – Ontario Must Build it Right the First Time

At the Special Council Meeting of May 31, 2022, the Council of the Corporation of the City of Cambridge passed the following Motion:

WHEREAS the Province of Ontario adopted greenhouse gas reduction targets of 30% by 2030, and emissions from buildings represented 22% of the province's 2017 emissions,

WHEREAS all Waterloo Region municipalities, including the City of Cambridge, adopted greenhouse gas reduction targets of 80% below 2012 levels by 2050 and endorsed in principle a 50% reduction by 2030 interim target with the support of bold and immediate provincial and federal actions,

WHEREAS greenhouse gas emissions from buildings represent 45% of all emissions in Waterloo Region, and an important strategy in the TransformWR community climate action strategy, adopted by all Councils in Waterloo Region, targets new buildings to be net-zero carbon or able to transition to net-zero carbon using region-wide building standards and building capacity and expertise of building operators, property managers, and in the design and construction sector,

WHEREAS the draft National Model Building Code proposes energy performance tiers for new buildings and a pathway to requiring net zero ready construction in new buildings, allowing the building industry, skilled trades, and suppliers to adapt on a predictable and reasonable timeline while encouraging innovation;

WHEREAS the Ministry of Municipal Affairs and Housing consulted on changes for the next edition of the Ontario Building Code (ERO #: 019-4974) that generally aligns with the draft National Model Building Code except it does not propose adopting energy performance tiers, it does not propose timelines for increasing minimum energy performance standards step-by-

step to the highest energy performance tier, and, according to Efficiency Canada and The Atmospheric Fund, it proposes adopting minimum energy performance standards that do not materially improve on the requirements in the current Ontario Building code;

WHEREAS energy efficient buildings provide owners and occupants with lower energy bills, improved building comfort, and resilience from power disruptions that are expected to be more common in a changing climate, tackling both inequality and energy poverty;

WHEREAS the City of Cambridge in partnership with area municipalities and utility companies in the Region of Waterloo are actively exploring developing Green Building Standards;

WHEREAS while expensive retrofits of the current building stock to achieve future net zero requirements could be aligned with end-of-life replacement cycles to be more cost-efficient, new buildings that are not constructed to be net zero ready will require substantial retrofits before end-of-life replacement cycles at significantly more cost, making it more cost-efficient to build it right the first time.

THEREFORE BE IT RESOLVED THAT Council request the Province of Ontario to include in the next edition of the Ontario Building Code tiered energy efficiency standards and a timeframe for when higher tiers would become the minimum energy efficiency requirements in the Code, consistent with the draft Tiered National Model Building Code;

THAT Council request the Province of Ontario to adopt a more ambitious tier of the draft Tiered National Model Building Code as a minimum energy efficiency requirement than the tiers currently proposed for the next edition of the Ontario Building Code;

THAT Council request the Province of Ontario provide authority to municipalities to require increased performance in energy efficiency through the implementation of tiered Green Development Standards;

THAT Council request the Province of Ontario to facilitate capacity, education and training in the implementation of the Tiered National Model Building Code for municipal planning and building inspection staff, developers, and homebuilders to help build capacity; and

AND FURTHER THAT this resolution be provided to the Minister of Municipal Affairs and Housing, to area MPPs, and to all Ontario Municipalities.

Should you have any questions related to the approved resolution, please contact me.

Yours Truly,



Danielle Manton
City Clerk

Cc: (via email)
Hon. Premier Ford
Ontario Minister of Health, Christine Elliot
Association of Municipalities of Ontario
City of Cambridge Council

**The Corporation of the City of Cambridge
Corporate Services Department
Clerk's Division
The City of Cambridge
50 Dickson Street, P.O. Box 669
Cambridge ON N1R 5W8
Tel: (519) 740-4680 ext. 4585
mantond@cambridge.ca**

June 1, 2022

Re: Motion from Councillor Liggett – Request to the Province of Ontario for a Plan of Action to Address Joint and Several Liability

At the Special Council Meeting of May 31, 2022, the Council of the Corporation of the City of Cambridge passed the following Motion:

WHEREAS the cost of municipal insurance in the Province of Ontario has continued to increase with especially large increases going into 2022; and

WHEREAS Joint and Several Liability continues to ask property tax payers to carry the lion's share of a damage award when a municipality is found at minimum fault; and

WHEREAS these increases are unsustainable and unfair and eat at critical municipal services; and

WHEREAS the Association of Municipalities of Ontario outlined seven recommendations to address insurance issues including:

1. That the Provincial Government adopt a model of full proportionate liability to replace joint and several liability.
2. Implement enhancements to the existing limitations period including the continued applicability of the existing 10-day rule on slip and fall cases given recent judicial interpretations and whether a 1-year limitation period may be beneficial.
3. Implement a cap for economic loss awards.
4. Increase the catastrophic impairment default benefit limit to \$2 million and increase the third-party liability coverage to \$2 million in government regulated automobile insurance plans.

5. Assess and implement additional measures which would support lower premiums or alternatives to the provision of insurance services by other entities such as non-profit insurance reciprocals.
6. Compel the insurance industry to supply all necessary financial evidence including premiums, claims and deductible limit changes which support its own and municipal arguments as to the fiscal impact of joint and several liability.
7. Establish a provincial and municipal working group to consider the above and put forward recommendations to the Attorney General.

NOW THEREFORE BE IT RESOLVED that the Council for the Corporation of the City of Cambridge call on the Province of Ontario to immediately review these recommendations despite COVID-19 delays, as insurance premiums will soon be out of reach for many communities and

BE IT FURTHER RESOLVED that this motion be provided to the Premier of Ontario, the Minister of Finance, the Attorney General, the Council of the Region of Waterloo, all Ontario municipalities.

Should you have any questions related to the approved resolution, please contact me.

Yours Truly,



Danielle Manton
City Clerk

Cc: (via email)
Hon. Premier Ford
Ontario Minister of Health, Christine Elliot
Association of Municipalities of Ontario
City of Cambridge Council



Office of the District Chair

SENT VIA EMAIL (premier@ontario.ca)

June 1, 2022

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

Dear Premier Ford,

RE: Annual Emergency Exercise Exemption

On behalf of The District Municipality of Muskoka, I am writing to express key concerns regarding the requirement for Ontario municipalities to conduct an annual practice exercise for a simulated emergency incident as prescribed by Regulation 380/04. The simulations aim to validate response plans and procedures, train staff and identify areas of improvement to ensure emergency response is delivered at optimal levels. Exemptions are not currently permitted under this legislation. While the District of Muskoka acknowledges and supports the need for emergency exercises, Muskoka District Council strongly encourages the amendment of Regulation 380/04 to permit exemptions for municipalities who have responded to an actual emergency during the respective calendar year. A copy of the District's Health Services Committee resolution, as adopted by Muskoka District Council, is attached as Appendix I.

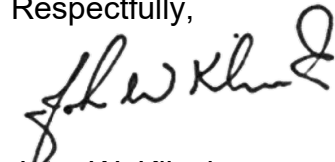
In 2021, The District's Emergency Control Group (ECG) convened twenty-four (24) times amounting to approximately 435 hours spent on emergency related activities. One of these incidents involved a watermain break in the Town of Bracebridge. Murray Advisory Services performed a critical analysis of the event and confirmed that the goals of an emergency exercise were achieved. The firm's final report included twelve (12) recommendations that helped improve the outcomes of a second water disruption event in the Town of Gravenhurst a few weeks later.

Despite the volume of actual emergencies managed by the ECG, the District of Muskoka must still conduct an annual exercise to remain compliant with the Regulation. This is not an efficient use of municipal resources and does not serve as a useful training mechanism for staff who have been over-extended by the emergency situations they have managed over the past year.

The Solicitor General granted a one-time exemption to municipalities in 2020 recognizing that municipalities were actively engaged in and managing various COVID-19 related initiatives. If pandemic management warrants an exemption to the annual simulation, surely there must be grounds to grant an exemption for the management of other emergency situations.

On behalf of Muskoka District Council, your consideration of this matter is appreciated.

Respectfully,

A handwritten signature in black ink, appearing to read "John W. Klinck". The signature is written in a cursive, flowing style.

John W. Klinck
District Chair

THE DISTRICT MUNICIPALITY OF MUSKOKA

Cc: Honourable Steve Clark, Minister of Municipal Affairs and Housing
Honourable Sylvia Jones, Solicitor General
Norm Miller, MPP Parry Sound-Muskoka
All Municipalities in Ontario

Appendix I

R10/2022-HS

The District Municipality of Muskoka

Health Services Committee
February 24, 2022

Moved By: J. Klinck

Seconded By: R. Nishikawa

WHEREAS Ontario Regulation 380/04: Standards under the Emergency Management and Civil Protection Act sets the municipal standards for emergency management programs in Ontario and requires municipalities to conduct an annual exercise with their Emergency Control Group in order to evaluate the municipality's emergency response plan and procedures, O. Reg. 380/04, s. 12 (6);

AND WHEREAS Emergency Management Ontario previously granted municipalities exemption for the annual exercise requirement when the municipality experienced an actual emergency with documented proof of the municipality actively engaging their emergency management procedures and plan in response to the emergency;

AND WHEREAS on August 5, 2021 the Chief, Emergency Management Ontario (EMO) issued a memo to Community Emergency Management Coordinators stating that effective immediately, the Chief, EMO would no longer be issuing exemptions to the O. Reg. 380/04 requirement to conduct an annual exercise;

AND WHEREAS municipalities experience significant costs and burden to staff resources when faced with the response to an actual emergency and activation of their Emergency Control Group and/or Emergency Operations Centre;

AND WHEREAS a municipality's response to an actual emergency is more effective than an exercise in evaluating its emergency response plan and procedures as mandated by O. Reg. 380/04;

Appendix I

The District Municipality of Muskoka

AND WHEREAS planning, conducting and evaluating an emergency exercise requires significant time and effort for the Community Emergency Management Coordinator and Municipal Emergency Control Group that is duplicated when the municipality experiences a real emergency;

NOW THEREFORE, BE IT RESOLVED THAT Muskoka District Council hereby **requests** the Province of Ontario to amend Ontario Regulation 380/04 under the Emergency Management and Civil Protection Act to provide an exemption to the annual exercise requirement for municipalities that have activated their Emergency Control Group and/or Emergency Response Plan in response to an actual emergency that year in recognition of the significant resources used to respond to the emergency and the effectiveness of such response in evaluating the municipality's emergency response plan and procedures;

AND THAT a copy of this resolution **be forwarded** to the Honourable Doug Ford, Premier of Ontario; the Honourable Norm Miller, MPP for Parry Sound-Muskoka; the Honourable Steve Clark, Minister of Municipal Affairs and Housing; the Honourable Sylvia Jones, Solicitor General; and all other municipalities of Ontario.

Carried

✓

Defeated

Charlene H. S.

Deputy Clerk

The Honourable Doug Ford,
premier@ontario.ca

Re: Retirement Home Funding

Please be advised the Council of the Municipality of Chatham-Kent, at its regular meeting passed the following resolution:

“Whereas there are 700 retirement homes in Ontario regulated by the Retirement Homes Regulatory Authority in accordance with the Retirement Homes Act; this includes the Residential Tenancies Act, the Occupational Health and Safety Act, the Ontario Fire Protection Act, the Personal Health Information Protection Act and College of Nurses standards;

And Whereas Retirement Homes are privately owned, renting private accommodation to seniors without access to public funding by the government the same way home care services and long term care homes do;

And Whereas currently 60% of these Ontario Retirement Homes, that are small facilities under 70 beds, are failing financially and/or are facing imminent closure risking loss of supportive, safe and secure environments for 60,000 retirement home residents in Ontario, as per Ontario Retirement Communities Association (ORCA);

And Whereas the cost of living in a retirement home is \$1500 - \$6000 a month which is significantly more expensive versus the cost of homecare services and/or long term care homes, as most assisted living/retirement homes do not provide personal care as a part of the basic fee; instead requiring residents to pay full cost of accommodation and any care services they require;

And Whereas home care services may be provided at no cost to resident “only if” appropriate level(s) of community service provider staffing is available;

And Whereas many Retirement Home residents or individuals in the community, who do not require long term care levels of service, are forced into long term beds due to extinguishing funds and/or lack of adequate financial means to pay for Retirement Home and/or required extra personal care services, inappropriately burdening limited long term care bed or acute hospital bed capacity;

And Whereas many seniors living in Retirement Homes and who experience worsening medical conditions, increased number of falls and overall increased frailty, often do “not” move onto long term care due to lack of long term bed availability and/or family preference, placing significant stress on Retirement Home staffing complements and financial resources;

And Whereas Retirement Homes have not been afforded recent government Nursing and/or PSW staff subsidies as provided to home care service providers and long term care homes;

And Whereas Retirement Homes have not been included in recent reduction of resident activity restrictions.

Therefore Be It Resolved that the Municipality of Chatham-Kent request that the Ontario Government:

1. Enable individuals in the community opportunity to apply for financial assistance from the Ministry of Seniors and Accessibility to help cover accommodation costs and/or required personal care service costs at Retirement Home level, similar to available funding assistance for home care services and long term care homes.
2. Recognize Retirement Homes as an essential community health care partner and implement an equitable service funding program that facilitates/enables Retirement Homes to safely care for residents who require significant personal care assistance while awaiting a long term care bed.
3. Afford equitable Nursing and PSW staffing subsidies retroactively across all divisions of the community health care provision sector, including Retirement Homes.
4. Allow for equitable resident activity levels across all divisions of the community health care provision sector, including Retirement Homes.

And further that this resolution be forwarded to the Premier of Ontario, the Ministry of Seniors and Accessibility and all Ontario municipalities.

If you have any questions or comments, please contact Judy Smith at ckclerk@chatham-kent.ca

Sincerely,

A handwritten signature in black ink that reads "Judy Smith". The signature is written in a cursive style with a large, stylized "S" at the end.

Judy Smith, CMO
Director Municipal Governance
Clerk /Freedom of Information Coordinator

C

Ministry of Seniors and Accessibility
Ontario Municipalities



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

June 3, 2022

Sent to: tamara@biayr.org

Dear Tamara Little:

RE: Proclamation Request – June - Brain Injury Awareness Month

I am writing to advise that your proclamation request has been approved in accordance with the Council-approved [Proclamation, Lighting Request and Community Flag Raising Policy](#), and the Town of Newmarket will proclaim June as Brain Injury Awareness Month. Your proclamation 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

June 3, 2022

Sent to: communication@sicklecellanemia.ca

Dear Ika Washington:

RE: Proclamation Request – June 19, 2022 – World Sickle Cell Day

I am writing to advise that your proclamation request has been approved in accordance with the Council-approved [Proclamation, Lighting Request and Community Flag Raising Policy](#), and the Town of Newmarket will proclaim June 19, 2022 as World Sickle Cell Day. Your proclamation request will be communicated on the Town's Twitter account, and on the Town's website on the Proclamation and Lighting Request page.

In addition, the Riverwalk Commons and Fred A. Lundy Bridge located on Water Street will be illuminated in red on June 20, 2022 to recognize World Sickle Cell Day. Please note that the lighting will occur from sunset until 11:00 PM.

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



June 3, 2022

Sent to communication@sicklecellanemia.ca

Dear Ika Washington:

RE: Proclamation Request – June 19, 2022 – World Sickle Cell Day

On behalf of the Town of Newmarket Council I am pleased to recognize June 19, 2022 as World Sickle Cell Day.

In addition, the Riverwalk Commons and Fred A. Lundy Bridge located on Water Street will be illuminated in red on June 20, 2022 from sunset until 11:00 PM.

Thank you for submitting your request and for your contributions to the community.

Yours sincerely,

John Taylor
Mayor



SCAGO

Sickle Cell Awareness Group of Ontario

May 17, 2022

Dear City Clerk's Office:

I would like to take this opportunity to introduce myself as the Communications and Marketing Manager for the Sickle Cell Awareness Group of Ontario (SCAGO).

Sickle Cell Awareness Group of Ontario also known as SCAGO is a member organization under the national umbrella of the Sickle Cell Disease Association of Canada.

It was established in 2005 to:

- Improve treatment and care received by patients living with SCD by providing better education about the disease to the medical and allied health professionals.
- Educate the community on SCD and sickle cell trait with the expected outcome of reducing the number of children born with the disease.
- Support those living with the disease by providing access to peer support group meetings, scholarships, learning for life seminars and advocating on their behalves with the Ontario Ministry of Health.

Sickle Cell Disease (SCD) or Sickle Cell Anaemia is a hereditary genetic disease characterized by the presence of abnormal crescent-shaped red blood cells. It affects Canadians of Asian, African, Mediterranean, Middle Eastern and Caribbean heritage. In 2005, it was estimated that over 2000 Ontarians are living with sickle cell disease and up to one in four from some specific cultural background carries the sickle cell trait. Most recent reports show that the incidence of SCD in Ontario is 1 in 2800 births (2015).

World Sickle Cell Day is observed on June 19 and has been recognized by the United Nation since 2008. On November 22, 2017, the Canadian government passed Bill S-211, enacting June 19th every year as "National Sickle Cell Awareness Day". World Sickle Cell Day was created to encourage global awareness and action to bring awareness through information, activities and concern. Globally, SCD has been recognized as a huge public health problem and "one of the world's foremost genetic diseases" (World Health Organization). According, to WHO there are nearly 100 million people throughout the world affected by SCD and 300 million people who carry the SCD trait.

Globally, SCD has been recognized as a huge public health problem and "one of the world's foremost genetic diseases" (World Health Organization). According, to WHO there are nearly 100 million people throughout the world affected by SCD and 300 million people who carry the SCD trait.

We are requesting the City of Newmarket to declare a Proclamation and approve lighting request to recognize World Sickle Cell Day on June 19, 2022. Our missions below are aligned with the aim of a proclamation:

- Increase public awareness of sickle cell disease
- The great importance of education on SCD and the importance of genetic testing. This *may* reduce the # of new births.
- Improved awareness will assist in patients realizing there is a community across Ontario
- To give hope, inspiration and empowerment to the individuals living with sickle cell disease.

We were very fortunate since 2017 to partner with the CN Tower, Exhibition Princess Gates, Niagara Falls, the City of Toronto, the City of Markham, City of Newmarket, City of Brampton, City of Mississauga, City of London, and many others to illuminate their landmarks. We found that there was a lot of people talking on social media platforms about the disease and requesting more information to help. We were also astounded by the amount of SCD patients who reached out to tell us the ways this initiative made them feel empowered and able to share their experiences with friends and co-workers. As we continue to find new ways to raise awareness and to dispel the stereotypes surrounding SCD, we push to recognize SCD patients who continue to live with the disease, as well as those who have lost their lives.

We would like to request that on June 19, 2022, the City of Newmarket declare a proclamation and lighting request to recognize World Sickle Day.

Thank you for taking the time to read this proclamation request. If you have any further questions, please don't hesitate to message me. I look forward to hearing from you.

Best Regards,

Ika Washington, MSc.
Communications and Marketing, Manager
Ph: [REDACTED] | E: communication@sicklecellanemia.ca

Organization's Information

Website Address: www.sicklecellanemia.ca

PH: [REDACTED]

Charitable Registration #: 83332 0872 RR0001



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

June 3, 2022

Sent to: fxcanadaevents@gmail.com

Dear Theresa Newland:

RE: Proclamation Request – July 22, 2022 - Raising Awareness for Fragile X Syndrome

I am writing to advise that your proclamation request has been approved in accordance with the Council-approved [Proclamation, Lighting Request and Community Flag Raising Policy](#), and the Town of Newmarket will proclaim July 22, 2022 as Raising Awareness for Fragile X Syndrome. Your proclamation request will be communicated on the Town's Twitter account, and on the Town's website on the Proclamation and Lighting Request page.

In addition, the Riverwalk Commons and Fred A. Lundy Bridge located on Water Street will be illuminated in teal on July 22, 2022 to recognize Raising Awareness for Fragile X Syndrome. Please note that the lighting will occur from sunset until 11:00 PM.

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



June 3, 2022

Sent to: fxcanadaevents@gmail.com

Dear Theresa Newland:

RE: Proclamation Request – July 22, 2022 - Raising Awareness for Fragile X Syndrome

On behalf of the Town of Newmarket Council I am pleased to recognize July 22, 2022 as Raising Awareness for Fragile X Syndrome.

In addition, the Riverwalk Commons and Fred A. Lundy Bridge located on Water Street will be illuminated in teal on July 22, 2022 from sunset until 11:00 PM.

Thank you for submitting your request and for your contributions to the community.

Yours sincerely,

John Taylor
Mayor

Hi,

I am a volunteer with **Fragile X Research Foundation of Canada** and am reaching out to you on behalf of families, like my own, who love someone with Fragile X syndrome. We are working with Fragile X organizations around the globe on a worldwide project to illuminate buildings, landmarks, and bridges in the colour teal for **World Fragile X Day** on **July 22**.

We are reaching out to invite you to participate in this important day by lighting up your location **teal** (colour code #00aeef) in support of Fragile X Awareness!

Fragile X syndrome is the most common known cause of inherited intellectual disability and the leading known single-gene cause of autism. Fragile X occurs when a single gene shuts down -- a gene vital to normal brain function. Raising awareness for Fragile X is crucial as it helps to accelerate progress toward effective treatments and ultimately a cure.

Each illumination is added to the World Fragile X Day map on the website: worldfragilexday.com after it is confirmed so we can recognize those who are playing this important role in helping us to raise awareness.

300 locations around the world lit up in 2021 to recognize Fragile X syndrome for our first World Fragile X Day! This energy took raising awareness for this syndrome that impacts so many to a new level. We are working hard to make an even bigger impact this year.

We would love to have you join us for this great opportunity to shine a bright light on Fragile X syndrome on behalf of families everywhere. Please feel free to reach out to me for more information or to confirm details of the event.

Thank you so much for your time!

Theresa Newland
fxcanadaevents@gmail.com





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

June 3, 2022

Sent to: [REDACTED]

Dear Matthew Hendry:

RE: Proclamation Request – September 7, 2022 - World Duchenne Awareness Day

I am writing to advise that your proclamation request has been approved in accordance with the Council-approved [Proclamation, Lighting Request and Community Flag Raising Policy](#), and the Town of Newmarket will proclaim September 7, 2022 as World Duchenne Awareness Day. Your proclamation request will be communicated on the Town's Twitter account, and on the Town's website on the Proclamation and Lighting Request page.

In addition, the Riverwalk Commons and Fred A. Lundy Bridge located on Water Street will be illuminated in red on September 7, 2022 to recognize World Duchenne Awareness Day. Please note that the lighting will occur from sunset until 11:00 PM.

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



June 3, 2022

Sent to: [REDACTED]

Dear Matthew Hendry:

RE: Proclamation Request – September 7, 2022 - World Duchenne Awareness Day

On behalf of the Town of Newmarket Council I am pleased to recognize September 7, 2022 as World Duchenne Awareness Day.

In addition, the Riverwalk Commons and Fred A. Lundy Bridge located on Water Street will be illuminated in red on September 7, 2022 from sunset until 11:00 PM.

Thank you for submitting your request and for your contributions to the community.

Yours sincerely,

John Taylor
Mayor

To Whom it may concern,

I'm writing to you on behalf of Defeat Duchenne Canada, the country's only national charity dedicated to ending Duchenne muscular dystrophy.

Every year, Duchenne patient organizations worldwide illuminate landmarks in red to commemorate World Duchenne Awareness Day on September 7. From the Colosseum in Italy to the Sagrada Família in Spain and the Niagara Falls here in Canada. Our goal is to light up as many monuments as possible, raising awareness of this life-shortening disease and showing solidarity with the international Duchenne community.

We ask that you illuminate Riverwalk Commons & Fred A. Lundy Bridge (Newmarket) in red on Wednesday, September 7, 2022, and help raise awareness through your digital platforms (website, social media, e-newsletters, etc.). In turn, we would be proud to list your organization as a partner on our digital platforms and share your support internationally through the World Duchenne Organization.

Please click [here](#) to learn more about World Duchenne Awareness Day and [here](#) to learn more about Duchenne muscular dystrophy and Defeat Duchenne Canada.

We hope to have your support and can provide imagery/copy as needed for your promotions.

Thank you,

Rochelle ten Haaf

National Director, Marketing & Stakeholder Engagement