



The Regional Municipality of Durham

Committee of the Whole Agenda

Wednesday, June 12, 2024, 9:30 a.m.

Regional Council Chambers

Regional Headquarters Building

605 Rossland Road East, Whitby

If this information is required in an accessible format, please contact 1-800-372-1102 ext. 2097.

Note: This meeting will be held in a hybrid meeting format with electronic and in-person participation. Committee meetings may be [viewed via live streaming](#).

Pages

1. **Roll Call**

2. **Declarations of Pecuniary Interest**

3. **Statutory Public Meetings**

There are no statutory public meetings

4. **Presentations**

4.1 Mohamed Shuriye, Director, Community and Wellbeing Section, City of Toronto

Re: Community Mental Health Crisis Response

4.2 Gary Muller, Director, Affordable Housing Development and Renewal

Re: Redevelopment Feasibility Analysis for - Durham Regional Local Housing Corporation (DRLHC) Sites at Malaga Road and Christine Crescent (2024-COW-25) [Item 7.6]

4.3 Gary Muller, Director, Affordable Housing Development and Renewal

Re: Approaching Housing Delivery at 300 Ritson Road South (2024-COW-26) [Item 7.7]

4.4 Barb Goodwin, Commissioner of Corporate Services, Chi-Cheng Chu, Director and Chief Information Officer, Information Technology Division and Mike Huk, Corporate Advisor, Business Continuity

Re: Confidential Presentation - Information Security Updates - CS-IT (security of the property of the municipality)

Under Separate Cover

5

5. Delegations

There are no delegations

6. Correspondence

6.1 Confidential Correspondence received from Anthony Ambra, Commissioner, Economic and Development Services Department, City of Oshawa and Chris Darling, Chief Administrative Officer, Central Lake Ontario Conservation Authority, dated May 24, 2024

Re: Information Explicitly Supplied in Confidence to the Municipality or Local Board by Canada, a Province or Territory or a Crown Agency of any of them, as it relates to the City of Oshawa and the Central Lake Ontario Conservation Authority (CLOCA) Proposal for Sharing of Costs Related to Increasing the Span of Metrolinx's Proposed Bridge Crossing Over the Oshawa Creek

Recommendation: Refer to consideration of Confidential Report #2024-COW-34

Under Separate Cover

7. Reports

7.1	Report #2024-COW-20 Municipal Infrastructure Agreement with Metrolinx for the Extension of the Rail Service to Bowmanville	20
7.2	Report #2024-COW-21 Durham Region 2020-2024 Strategic Plan: 2023 Year-End Update	65
7.3	Report #2024-COW-22 Durham Meadoway Visioning Study - Project Outcome and Next Steps, File# D21-50-50	78
7.4	Report #2024-COW-23 Durham Region's 2025 Strategic Plan Community Engagement Summary	88
7.5	Report #2024-COW-24 Moving Towards a Sustainable Approach for Asylum-Seekers and Refugees in Durham	173
7.6	Report #2024-COW-25 Redevelopment Feasibility Analysis for Durham Region Local Housing Corporation (DRLHC) Site at Malaga Road and Christine Crescent	179
7.7	Report #2024-COW-26 Approaching Housing Delivery at 300 Ritson Road South	353
7.8	Report #2024-COW-29 2024 Asset Management Plan	486
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- 7.9 Report #2024-COW-30
Region of Durham's 2024 to 2029 Energy Conservation and Demand Management Plan
- 7.10 Report #2024-COW-31 720
Request for Funding from the Central Lake Ontario Conservation Authority for the Acquisition of Land located adjacent to the Long Sault Conservation Area in the Municipality of Clarington (Pin # 267430090)
- 7.11 Report #2024-COW-32 727
Request for Regional Financial Assistance under the Regional Revitalization Program by Medallion Developments Ltd. operating as Bruce Street Developments Ltd. ("Medallion") for the Development of two Purpose-Built Rental Apartment Buildings (Phase 1) on Vacant Lands located at 135 Bruce Street in the City of Oshawa
- 7.12 Report #2024-COW-33 738
Project Update and Approval of Additional Capital Financing for the Construction of the Seaton Region of Durham Paramedic Services Response Station and Training Centre in the City of Pickering

8. Confidential Matters

- 8.1 Report #2024-COW-27
Confidential Report of the Commissioner of Works and Social Services - Proposed or Pending Acquisition or Disposition of Land for Regional Corporation Purposes as it relates to a Property in the City of Oshawa

Under Separate Cover
- 8.2 Report #2024-COW-28
Confidential Report of the Commissioner of Works and Social Services - Proposed or Pending Acquisition of Land for Regional Corporation Purposes as it relates to the Acquisition of Christine Crescent Road Allowance for the Revitalization of Durham Regional Local Housing Corporation (DRLHC) Properties in the City of Oshawa

Under Separate Cover
- 8.3 Report #2024-COW-34
Confidential Report of the Commissioners of Works and Planning & Economic Development – Information Explicitly Supplied in Confidence to the Municipality or Local Board by Canada, a Province or Territory or a Crown Agency of any of them, with respect to Staffs Response to the City of Oshawa and the Central Lake Ontario Conservation Authority (CLOCA) Proposal for Sharing of Costs Related to Increasing the Span of Metrolinx's Proposed Bridge Crossing Over the Oshawa Creek

To be provided at a later date

9. **Adjournment**

Notice regarding collection, use and disclosure of personal information:

Written information (either paper or electronic) that you send to Durham Regional Council or Committees, including home address, phone numbers and email addresses, will become part of the public record. This also includes oral submissions at meetings. If you have any questions about the collection of information, please contact the Regional Clerk/Director of Legislative Services.



Toronto Community Crisis Service

**The Regional Municipality of Durham
Committee of the Whole**

June 12, 2024



I don't know what else to say, I really don't, other than, you know, that [TCCS staff] were the best things that ever walked into my life when they did. If they hadn't when they did, I don't know what I would have done, I really don't, with all of the mess that my apartment was in, with the way I was feeling. I don't know, I would have given up and maybe gone and just left everything behind instead of sticking it out and putting my life back together and getting the help that I needed here.



A Made-in-Toronto Approach

- In **June 2020**, City Council adopted a set of 36 recommendations for policing reform in Toronto. These reforms touch on several areas including policing, public safety, and crisis response.
- In **February 2021**, Council approved four community crisis support service pilots to test a non-police led response to mental health calls, known as the Toronto Community Crisis Service (TCCS).
- In **November 2023** - after a successful pilot year - Council approved city-wide expansion of TCCS by the end of 2024.
- The service is one of the key priority actions under **SafeTO** – Toronto’s 10 Year community safety and wellbeing plan.



**Toronto
Community
Crisis Service**

What is the TCCS?



24/7 service



voluntary and consent-based



serves clients 16+



trauma-informed care and harm-reduction



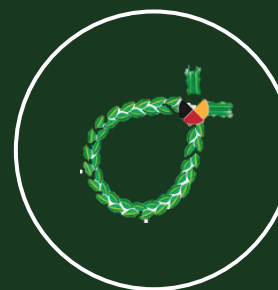
no-wrong-door approach that leverages multiple intake channels



mobile crisis teams

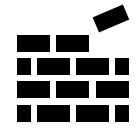


post-crisis follow-up, case management and service navigation



culturally relevant services and referral network

How the service works



City's Role

Serves as service system manager, program funder, intergovernmental advocacy lead, develops public education campaigns, and identifies areas for increased community investments to strengthen the model.



Governance

Community Advisory Table shapes and guides the service.



Evaluation

A third party leads monitoring, evaluation and knowledge mobilization, including developing a community of practice around crisis support.



Anchor Agencies

Anchored in a health service provider (e.g. Community Health Centre), anchor partners are funded to hire and manage the mobile crisis teams, as well as provide wrap-around supports and case management.



Crisis Teams

Multi-disciplinary, community-based crisis response teams comprise, at minimum, two crisis workers that respond to calls together to ensure mutual safety.

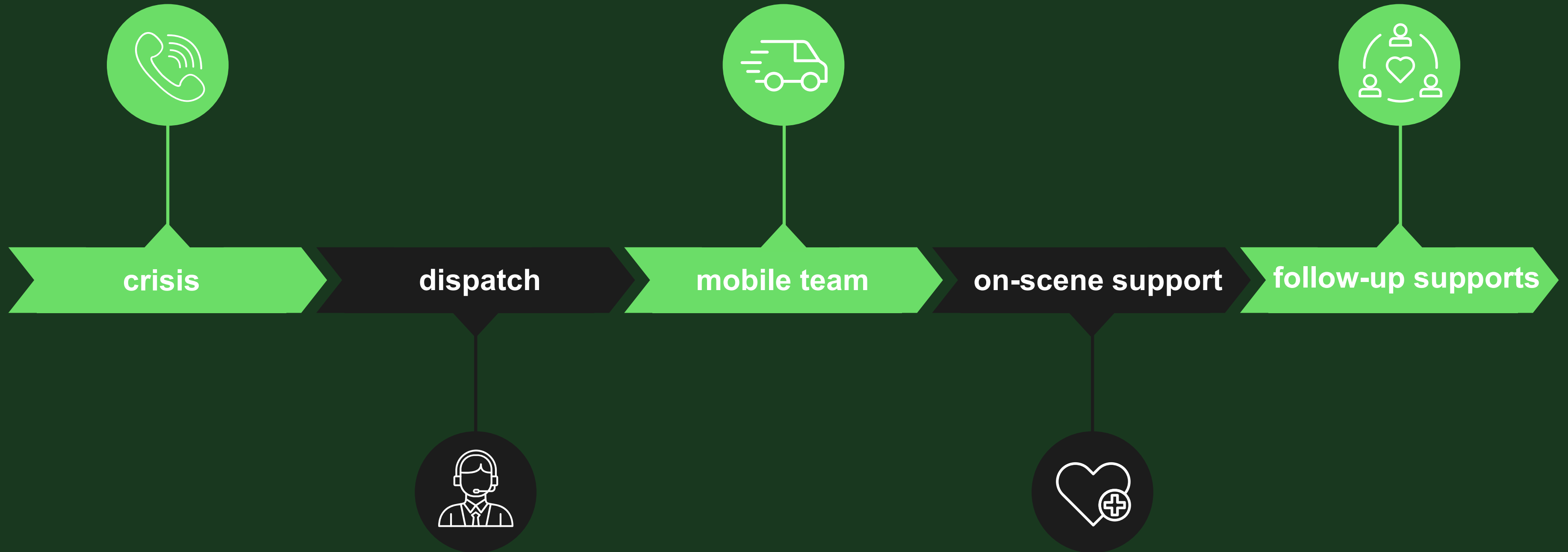


Access & Intake

FindHelp 211 dispatches calls to the appropriate team.



High-level service map

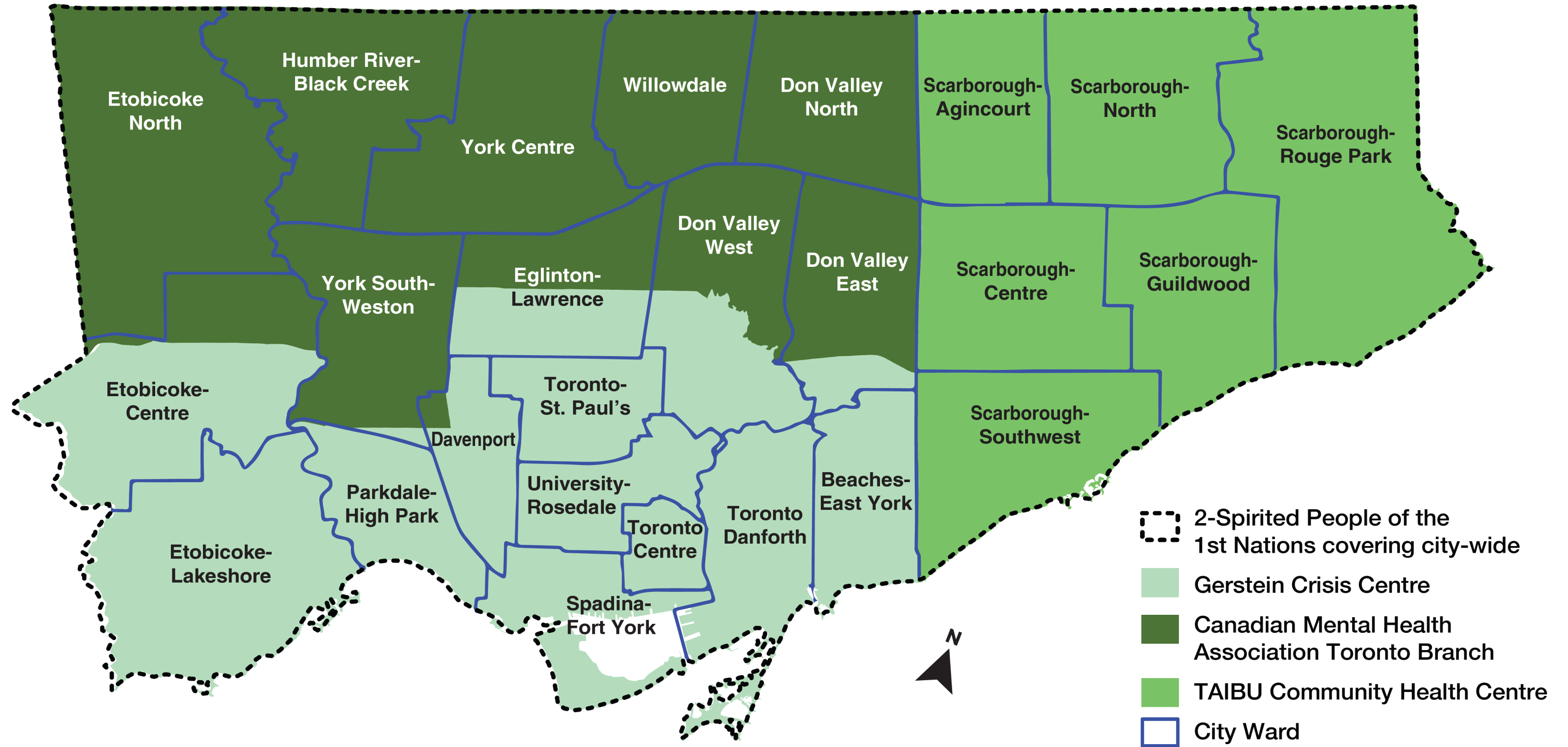


Becoming the fourth emergency service

Alongside Toronto Fire Services, Toronto Police Services and Toronto Paramedic Services, the Toronto Community Crisis Service is being expanded to become **fourth municipal emergency service** in Toronto.



Toronto Community Crisis Service City-Wide Expansion



Outcomes

Service uptake from multiple doors



6,827

total calls received for service



5,868

number of times mobile teams were dispatched



55%

completed calls received from 911

46%

by 211 or community sources

Diverting crisis calls to TCCS



78%

of calls transferred from 911 handled by TCCS with no police involvement



8%

of total calls resulted in a visit to a hospital emergency department



4%

of calls attended resulted in a request for emergency services

Outcomes continued

Connecting people to appropriate supports



2,407

referrals made onsite and during follow up visits



1,160

service users accepted a follow up within 48 hours



56%

of service users who agreed to follow-up enrolled in post-crisis case management and support

Culturally relevant supports

300

culturally relevant supports provided to service users

50%

Indigenous-specific (such as access to ceremony, traditional medicine, family and kinship care)

20%

Afrocentric and West Indian / Caribbean-centric supports (such as access to culturally appropriate foods, referrals to Black physicians and access to cultural programming)

Positively impacting the lives of Torontonians

PROVIDING A POSITIVE SERVICE USER EXPERIENCE:

95% of service users reported being **very satisfied** or **satisfied** with the TCCS service they received

INCREASING FEELINGS OF SAFETY AND WELLBEING:

90% of service users indicated the TCCS **very positively** or **positively** impacts their perception of community safety and well-being

CONNECTING PEOPLE TO THE SUPPORTS THEY WANT:

95% of service users indicated they **agree** or **strongly agree** that they decided what types of supports they wanted and felt emotionally safe receiving those supports

“

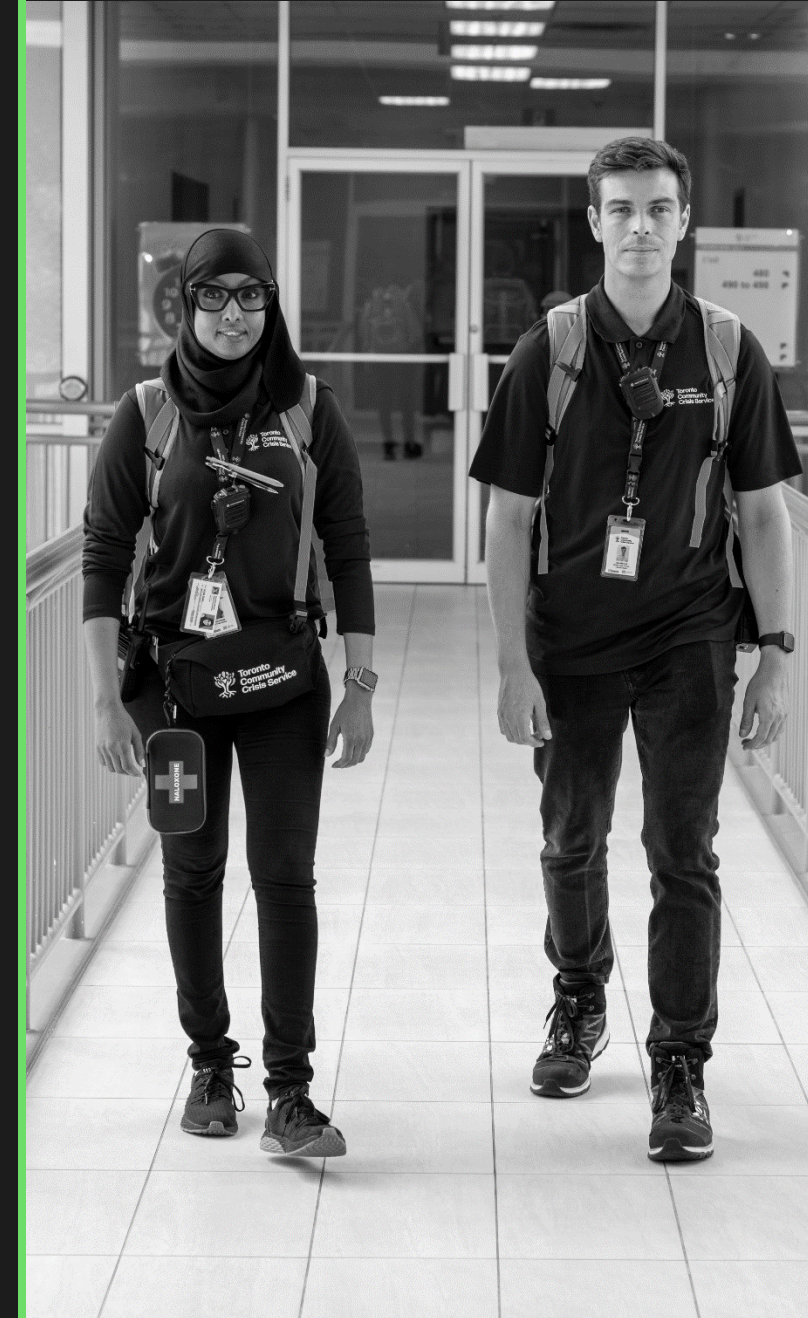
They helped me understand that I'm worthy and they wanted to see me go forward. They uplifted me and made me feel like I'm worthy.

“

It's just such a feeling of comfort, and with that the element of safety is present, knowing that the service is there and it is safe.

“

[TCCS] talked to me and they talked to my son and they talked to us all and I'm still used to people saying 'We're gonna do X Y and Z' and then nothing really happens, but oh my gosh, they went above and beyond.





Additional Resources



1 - Year Outcomes Evaluation Report

City Council consideration on February 2, 2021

EX20.1	ACTION	Amended		Ward: All
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Community Crisis Support Service Pilot

City Council Decision
City Council on February 2, 3 and 5, 2021, adopted the following:

1. City Council endorse the 2022 implementation of four community crisis support service pilots as outlined in Attachment 1, Framework to Pilot the Community Crisis Support Service and Attachment 2, Map of the Proposed Community Crisis Support Service, to the report (January 13, 2021) from the City Manager.
2. City Council direct that a guiding principle of the Community Crisis Support Service is that the Service will be the primary first responder to mental health crisis calls received during the pilot program and subsequent to full implementation.
3. City Council request the Federal and Provincial Governments to provide matching funds for the expansion of the Community Crisis Support Service Pilots.
4. City Council request that the Province commit to providing permanent and sustainable funding for:
 - a. supportive housing for those experiencing mental health or substance use issues; and
 - b. mental health services generally, including funding for community mental health service providers to support crisis response and wrap-around services, as well as funding to address the mental health impacts of the COVID-19 pandemic.
5. City Council request the Province of Ontario to financially support the implementation and

Staff Reports and Council Decisions

Questions?

Denise Andrea Campbell

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[Toronto.ca/CrisisService](https://toronto.ca/CrisisService)

TORONTO



this information is required in an accessible format, please contact 1-800-372-1102 ext. 2564.



The Regional Municipality of Durham Report

To: Committee of the Whole
From: Commissioners of Planning and Economic Development, Finance, and Works
Report: #2024-COW-20
Date: June 12, 2024

Subject:

Municipal Infrastructure Agreement with Metrolinx for the Extension of the Rail Service to Bowmanville

Recommendations:

That the Committee of the Whole recommends to Regional Council:

A) That Council approve a Municipal Infrastructure Agreement with Metrolinx for the construction of a new 600-millimetre watermain crossing of the Canadian Pacific Kansas City rail line at Albert Street to replace the existing 300-millimetre watermain crossing at Simcoe Street (Regional Road 2) in the City of Oshawa, in the general form and content as provided in Attachment #1;

B) That financing be provided from the following sources:

Metrolinx Share	<u>\$5,100,000</u>
Total Metrolinx Share	<u>\$5,100,000</u>

Region Share

2024 Water Supply System Capital Budget

Item #29 Replacement of watermains in conjunction with the Metrolinx Toronto East Rail Corridor Expansion to Bowmanville (Project ID: D2222)

User Rate	\$445,300
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Total Regional Share	<u>445,300</u>
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Total Project Financing	<u>\$5,545,300</u>
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- C) That the standard requirement for a letter of credit as security for the Municipal Infrastructure Agreement for 100 per cent of the cost of the Regional Municipality of Durham works be waived; and
- D) That the Regional Chair and Clerk be authorized to execute any necessary documents or agreements required.
-

Report:

1. Purpose

- 1.1 The purpose of this report is to seek Regional Council approval to enter into a Municipal Infrastructure Agreement (MIA) with Metrolinx, including cost sharing, for the early works associated with the Bowmanville GO East Rail Extension, specifically the replacement of the existing 300 millimetre (mm) watermain crossing under the Canadian Pacific Kansas City (CPKC) rail line at Simcoe Street (Regional Road 2) with a 600 mm watermain crossing at Albert Street in the City of Oshawa.

2. Background

- 2.1 On December 7, 2017, Metrolinx awarded a contract to Stantec to provide technical advisory, design, and construction support services for the Lakeshore GO East Extension to Bowmanville. The Technical Advisor designed the rail extension to approximately 50 per cent, in anticipation of awarding a Construction Manager at Risk contract to refine and bring the rail extension to 100 per cent design and price for construction.
- 2.2 On June 15, 2023, Metrolinx awarded the rail extension Construction Manager at Risk (CMAR) contract to Bowmanville Construction Partners, which is a general partnership between Ledcor CMI Ltd. and Dragados Canada Inc. This consortium will advance the rail extension to 100 per cent design for Metrolinx and will be the preferred contractor to build the rail extension. The CMAR has designed the rail corridor extension to 70 per cent design, which continues to advance quickly.
- 2.3 As part of the CMAR contract, Metrolinx is commencing the work required to extend rail service to Bowmanville. Many Regional roads, storm sewers, sanitary sewers, and watermains cross the rail line and will be impacted by the proposed construction required to facilitate this expanded rail service.

- 2.4 At many of these crossings, Metrolinx will be required to install, relocate, remove, reinstate, protect, restore, build or rebuild infrastructure and assets owned by the Region.
- 2.5 The Regional Municipality of Durham's (Region) standard procedure for facilitating construction of Regional services by a third party such as Metrolinx is to enter into a servicing agreement with the owner of the benefiting lands. In this case, Metrolinx recommends a similar approach using a Municipal Infrastructure Agreement (MIA).
- 2.6 Staff have been negotiating the terms of this agreement over the past few months. The recommended general form of the agreement can be found in Attachment #1. The intent is to use this format for all works required by Metrolinx. However, the only design sufficiently advanced to recommend to Council is the watermain early work proposed at Simcoe Street (Regional Road 2) and Albert Street in the City of Oshawa. Construction is intended to commence in August of 2024.
- 2.7 A future report(s) will be provided to Council to address the remainder of the works required to be completed by Metrolinx, once the design has advanced sufficiently to provide reliable cost estimates.
- 2.8 The other works for which Regional cost sharing is anticipated but are not included in the MIA are the Region-requested rehabilitations of five (5) overhead bridges that Metrolinx will modify as part of their project. These bridges are located on Stevenson Road (Regional Road 53), Park Road (Regional Road 54), Ritson Road (Regional Road 16), and Harmony Road (Regional Road 33) in the City of Oshawa, and Courtice Road (Regional Road 34) in the Municipality of Clarington.

3. Works Included in the Municipal Infrastructure Agreement

- 3.1 Part of the early works required by Metrolinx is to replace the Simcoe Street (Regional Road 2) bridge over the CPKC rail line. A 300 mm watermain exists within this structure and must be decommissioned before the removal of the existing bridge. The preferred location to replace the function of this watermain is Albert Street, one block east of Simcoe Street.
- 3.2 Due to the design and construction methodology being used at the Albert Street crossing, the use of concrete pressure pipe (CPP) is required. The smallest available size of CPP is a 400 mm diameter, which will be considered equivalent to the existing 300 mm watermain being replaced.

- 3.3 The existing watermain was constructed in 1905 and is a candidate for rehabilitation works in the near future. Regional staff estimated the rehabilitation work to cost \$445,300, including HST. Staff consider it reasonable to cost-share on the replacement watermain for this amount. This amount is a fixed contribution and will not vary based on the actual costs of the project.
- 3.4 Metrolinx is also willing to upsize this watermain from 400 mm diameter to 600 mm diameter at their cost. Doing so allows them the flexibility of abandoning an existing 450 mm diameter watermain crossing at Front Street, located one street east of Albert Street, which is operationally feasible for the Region of Durham and has the potential for overall cost savings for Metrolinx.

4. Terms of the Municipal Infrastructure Agreement

- 4.1 The draft MIA is included in Attachment 1. The Region's Legal Department and Metrolinx's Legal Representatives are drafting the final details of the MIA; however, no substantive changes will be made to the attached draft agreement.
- 4.2 All projects to be constructed through this format of agreement will either be Regional Infrastructure Works, designed, constructed, and funded by Metrolinx, or Shared Infrastructure Works, designed and constructed by Metrolinx and funded by both parties in the proportions provided in Schedule B of the agreement.
- 4.3 The draft MIA includes mechanisms for both the Region and Metrolinx to add works to the project, should the need arise. Additional works requested by the Region, which Metrolinx does not require, would need to be funded by the Region. No such additional works are anticipated for the subject works addressed by this report.
- 4.4 Engineering design drawings, submittals, and schedules for work on Regional infrastructure will be provided to the Region for approval, and such approval shall not be unreasonably withheld. The Region agrees to expedite its review of such engineering drawings, submittals, and schedules upon request by Metrolinx, acting reasonably.
- 4.5 Metrolinx agrees to acquire any lands required for Regional infrastructure resulting from their work and transfer the lands to the Region at no cost for regional infrastructure works and in keeping with the cost-sharing terms contained in Appendix B of the MIA for shared infrastructure works. Regional contributions toward land costs is not anticipated for the subject works addressed by this report.

- 4.6 Metrolinx will provide the Region access to all construction sites to allow necessary inspections and, if required, to perform emergency repairs.
- 4.7 Metrolinx will carry appropriate insurance and include the Region as an additional insured party. Indemnification of the Region will be provided through Metrolinx’s contractor.
- 4.8 The agreement also contains a dispute resolution process should disputes arise between the Region and Metrolinx.
- 4.9 If this construction of Regional services followed a standard process through a servicing agreement, the Region would require a letter of credit equal to 100 per cent of the cost of the Regional works. As Metrolinx is a provincial agency, they cannot and will not provide a letter of credit against non-performance of the works.

5. Financing of the Works in the First MIA

- 5.1 Financing be provided from the following sources:

<u>Metrolinx Share</u>	\$5,100,000
Total Metrolinx Share	<u>\$5,100,000</u>

Region Share

2024 Water Supply System Capital Budget

Item No. 29 Replacement of watermains in conjunction with the Metrolinx Toronto East Rail Corridor expansion to Bowmanville (Project ID: D2222)

User Rate	<u>\$445,300</u>
Total Regional Share	\$445,300
Total Project Financing	<u>\$5,545,300</u>

6. Previous Reports and Decisions

- 6.1 On June 12, 2019, Committee of the Whole considered [Report #2019-COW-19](#), “GO East Extension Update and Transit Oriented Development (TOD) Evaluation”, which included information on the Metrolinx Market Driven Strategy. Under the strategy, the province advised that it would no longer fund new GO stations and instead would rely on third-party funding for GO stations. The strategy highlighted the importance of planning for transit-oriented communities by ensuring land use

planning, economic development and revitalization opportunities offered by the stations were fundamental considerations when evaluating rail alignment options.

- 6.2 On November 13, 2019, Committee of the Whole considered [Report #2019-COW-26](#), “Advancing Rapid Transit Implementation and Transit Oriented Development in Durham Region”, which not only reaffirmed the Region’s commitment to the extension but further elevated its importance by accelerating the Municipal Comprehensive Review to support station implementation and establish a TOD office to support implementation efforts. On November 27, 2019, Council resolved:
- a) “That Metrolinx be advised that Durham Region supports the extension of all-day GO train service along the Lakeshore East line, including new stations at Thornton’s Corners, Central Oshawa, Courtice and Central Bowmanville.
 - b) That Regional Planning staff be directed to accelerate the review and development of policies, including delineations and density targets for Major Transit Station Areas under “Envision Durham.”
 - c) That a Rapid Transit Implementation/Transit Oriented Development Office (RT-TOD Office) be established for Durham Region.”
- 6.3 On December 14, 2022, Committee of the Whole considered [Report #2022-COW-30](#), “Update on the Approval of the Lakeshore East GO Extension to Bowmanville.” This report included details on the provincial budget approval in August 2022, including the extension to Bowmanville, the preliminary design business case details, Metrolinx RFP, and the scope of work.

7. Relationship to Strategic Plan

- 7.1 This report aligns with/addresses the following strategic goals and priorities in the Durham Region Strategic Plan:
- a) Goal 1: Environmental Sustainability: Objective 1.5: Expand sustainable and active transportation.
 - b) Goal 3 Economic Prosperity: Objective 3.3: Enhance communication and transportation networks to better connect people and move goods more effectively.

8. Conclusion

- 8.1 Metrolinx is commencing construction of the GO East Rail Extension to Bowmanville. In lieu of a typical servicing agreement with the Regional Municipality of Durham, Metrolinx is suggesting a Municipal Infrastructure Agreement be executed between the Regional Municipality of Durham and Metrolinx to allow them to install, relocate, remove, reinstate, protect, restore, build, or rebuild infrastructure and assets owned by the Region as required by their construction project.
- 8.2 Staff have been negotiating the terms of this agreement over the past few months. The recommended general form of the agreement can be found in Attachment #1. The Regional Municipality of Durham's Legal Department and Metrolinx Legal Representatives are drafting the final details of the Municipal Infrastructure Agreement; however, no substantive changes will be made to the draft agreement.
- 8.3 The only design sufficiently advanced to recommend to Council is the early watermain work proposed at Simcoe Street (Regional Road 2) and Albert Street in the City of Oshawa. This work is intended to commence in August of 2024. It is recommended that the Regional Municipality of Durham enter into the Municipal Infrastructure Agreement for these early works only.
- 8.4 Future works required to be completed by Metrolinx will be the subject of future reports and future MIAs, using the same agreement format.
- 8.5 This report has been reviewed by Legal Services – Office of the CAO.
- 8.6 For additional information, please contact Heather Finlay, Acting Manager, Transit Oriented Development at 905-668-7711, extension 2561.

9. Attachment

Attachment #1 Draft Municipal Infrastructure Agreement

Respectfully submitted,

Original signed by:

Brian Bridgeman, MCIP, RPP, PLE
Commissioner of Planning and
Economic Development

Original signed by:

Nancy Taylor, CPA, CA
Commissioner of Finance/Treasurer

Original signed by:

Ramesh Jagannathan, M.B.A., M.Eng., P.Eng., P.T.O.E.
Commissioner of Works

Recommended for Presentation to Committee

Original signed by:

Elaine Baxter-Trahair
Chief Administrative Officer

MUNICIPAL INFRASTRUCTURE AGREEMENT

Dated this _____ day of _____, 2024

Between

THE REGIONAL MUNICIPALITY OF DURHAM
(the "Region")

and

METROLINX
("Metrolinx")

(together the "Parties")

RECITALS

WHEREAS:

- A. Metrolinx has or will retain a **design consultant and the construction manager** (collectively "**Project Co**") to **design and construct the Bowmanville Extension** project (the "**Project**") pursuant to the project agreement for the Project (as amended from time to time, the "**Project Agreement**");
- B. In constructing the Project, Metrolinx is required to relocate, reconstruct, and/or otherwise impact existing Regional infrastructure, which is only required because of the Project;
- C. The Region may request Metrolinx to build Region Infrastructure Work, Shared Infrastructure Work and Additional Infrastructure Work in the course of constructing the Project, and the costs in connection therewith, including Incremental Costs or Variation Price, as applicable, will be paid by Metrolinx and the Region in accordance with the cost allocations set out in Schedule "B" to this Agreement; and
- D. The Region and Metrolinx have agreed to execute this Agreement with respect to the construction of Infrastructure Work.

Commented [CP1]: Metrolinx to review terminology. May be subject to change.

NOW THEREFORE, in consideration of the mutual covenants and agreements of the Parties hereinafter contained and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties hereby covenant and agree as follows:

1. Definitions

- (a) Throughout this Agreement, unless inconsistent with the subject matter or context:

- (i) **“Acceptance”** means acceptance by the Region of Infrastructure Work, or such component thereof, as the case may be, for all purposes including, without limitation, transfer of ownership of entirely new Infrastructure Work, and all operational and maintenance responsibility over such Infrastructure Work, or component thereof, following Commissioning in accordance with Section 18 below, and **“Accept”** shall have a corresponding meaning.
- (ii) **“Additional Infrastructure Work”** means either or both of the following: (i) upgrades and changes to Region Infrastructure Work or Shared Infrastructure Work including from Basic Standard to the Region Standard, unless previously agreed to by both Parties, and (ii) construction of new infrastructure that is not Region Infrastructure Work or Shared Infrastructure Work, in each case requested by and constructed for the Region, at the Region’s expense and paid for in accordance with Schedule ‘B’ to this Agreement, and to be owned by the Region, and in each case any changes or modifications thereto that are requested by the Region, from time to time.
- (iii) **“Agreement”** means this Municipal Infrastructure Agreement and the schedules to this Agreement, together with all executed Scopes of Work, all executed Change Orders, and any other written amendment to this Agreement.
- (iv) **“Ancillary Costs”** means, (a) in respect of a Variation Enquiry: (i) in the case of Metrolinx, Metrolinx’s external consultant and technical advisor costs, and the costs payable for any independent third party review requested by the Region whether by a surveyor or other expert, all with a view to determine whether or not Metrolinx, in its sole discretion, will proceed with such Variation Enquiry, but for clarity does not include Metrolinx’s internal administration costs, and (ii) in the case of Project Co, the costs to determine the Variation Price; or (b) in respect of a Change requested by Metrolinx pursuant to Section 4 of this Agreement: Regional external consultant and technical advisor costs, and the costs payable for any independent third party review requested by Metrolinx whether by a surveyor or other expert, but for clarity does not include the Region’s internal administration costs.
- (v) **“Basic Standard”** means (i) the standards and guidelines pertaining to the design and construction (including rehabilitation and protection) of the Infrastructure Work which are available upon request to engineers and architects licensed to practice in the Province of Ontario and which will be applied on a “like for like” basis with respect to function, size, capacity and location, and (ii) municipal laws and those federal and provincial laws, rules and regulations applicable to and enforceable against the Region including the Design and Construction Specifications for Regional Services.
- (vi) **“Business Day”** means a day other than a Saturday, Sunday or statutory or designated holiday that is observed in the Region of Durham.
- (vii) **“Change”** means a variation, addition, reduction, substitution, omission, modification, deletion, removal or other change to the whole or any part of the Infrastructure Work.
- (viii) **“Change Order”** means a written amendment executed by the Region and Metrolinx to any Infrastructure Work described in Schedule “B” to this Agreement that is substantially in the form attached as Schedule “C”, and that sets out a description of the Change, the method of adjustment or the amount of the adjustment in the Estimated Cost as applicable, and the resulting change to the works schedule for the

Infrastructure Work, including completion time.

- (ix) **“Commissioning”** means the process of achieving and verifying the functional and operational criteria of Infrastructure Work and of systematically bringing Infrastructure Work into an operational mode as required to be fully operational, and **“Commissioned”** has a corresponding meaning.
- “Critical Non-Conformance”** means any defect or deficiency in construction, in each case pertaining to Infrastructure Work that (i) if not immediately corrected, will reasonably be expected to lead to Project Co being unable to satisfy the requirements for Acceptance, or (ii) by its continued existence or through the process of rectification, will reasonably be expected to create a serious threat to the health, safety or security of persons or the public or to an essential service.
- (x) **“Estimated Cost”** has the meaning given in Section 3.1 of Schedule “B” to this Agreement.
- (xi) **“Incremental Costs”** means (i) the cost of Additional Infrastructure Work undertaken by Metrolinx as part of a Project that is in excess of the cost otherwise payable by Metrolinx for work on the Project.
- (xii) **“Infrastructure Work”** means all work required for Region Infrastructure Work, Shared Infrastructure Work and Additional Infrastructure Work that is agreed to pursuant to this Agreement.
- (xiii) **“Milestone Payment Date”** and **“Milestone Payment Dates”** has the meaning set out in Section 1.7 of Schedule “A” of this Agreement.
- (xiv) **“Non-Conformance”** means any deficiency or defect in construction, in each case pertaining to Infrastructure Work that does not conform to the specifications set out in Schedule “B”.
- (xv) **“Region Infrastructure Work”** means the work to be undertaken and built by and at the expense of Metrolinx unless specifically stated herein to the contrary, which work is comprised of the installation, relocation, removal, reinstatement, protection, restoration, building or rebuilding of infrastructure and assets owned by the Region that will be impacted by the Project in order to accommodate and facilitate the Project and more specifically detailed in Schedule “B” to this Agreement.
- (xvi) **“Region Property”** means Region owned real property required to be acquired by Metrolinx in fee simple, by way of easement or by way of license, or otherwise whether permanent or temporary, in order to construct the Infrastructure Work.
- (xvii) **“Region Standard”** means the Basic Standard unless the Parties have agreed to a different standard, in which case it means the standard agreed to by the Region and Metrolinx which standard shall in all cases include all municipal laws and those federal and provincial laws applicable to and enforceable against the Region.
- (xviii) **“Scheduled Substantial Completion Date”** means [X] [NTD: To be inserted based on applicable Project], as such date may be amended from time to time in accordance with the Project Agreement.
- (xix) **“Scope of Work”** means a scope of work in the form attached as Schedule “B” to this Agreement for the completion of the Region Infrastructure Work, the Shared Infrastructure Work and the Additional Infrastructure Work that is agreed to and executed by the Parties in accordance with this Agreement, as amended by any

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applicable Change Order.

- (xx) **“Substantial Completion”** means the point at which all infrastructure that Project Co is required to construct under the Project Agreement has been completed in accordance with the Project Agreement and all Critical Non-Conformance has been rectified a certificate of substantial completion of the works is published pursuant to Section 32(1) of the Construction Act; and all commissioning requirements under the Project Agreement, other than in respect of minor deficiencies, have been satisfied in respect of the new infrastructure Project Co is constructing under the Project Agreement as a whole, as such definition may be amended from time to time in accordance with the Project Agreement.
- (xxi) **“Shared Infrastructure Work”** means the work to be undertaken and built by Metrolinx which work is comprised of the installation, relocation, removal, reinstatement, protection, restoration, building or rebuilding of infrastructure and assets owned by the Region that will be impacted by the Project in order to accommodate and facilitate the Project and more specifically detailed in Schedule “B” to this Agreement, which work shall be undertaken at the expense of both Metrolinx and the Region in the proportions set out in Schedule “B” to this Agreement.
- (xxii) **“Variation Enquiry”** means a written notice by the Region to Metrolinx requesting a Change which specifies the following:
 - (a) the particulars of such request for a Change in sufficient detail, and
 - (b) any contractual obligations binding on the Region that the Region requires Metrolinx to assume if it undertakes the Change,in each case to enable Metrolinx to assess the impact of the requested Change
- (xxiii) **“Variation Price”** means the cost payable by the Region to implement and include a Change requested by the Region in a Variation Enquiry as part of a Project as set out in Section 3 below. For clarity, Variation Price does not include costs that are otherwise payable by Metrolinx as part of a Project had the Change not been performed.
- (xxiv) **“Warranty Period”** means two years, or such other period of time as agreed to by the Parties, commencing on the date upon which the Region has Accepted the Infrastructure Work.

2. Infrastructure Work

- (a) This Agreement is not a covenant by Metrolinx to the Region to undertake or complete the Project, or any parts thereof. The decision to undertake, continue with, amend, expand, de-scope and/or complete the Project, or any parts thereof is and remains in the sole discretion of Metrolinx having regard to, among other things and without limitation, budget constraints. Metrolinx covenants that it will complete any Infrastructure Work commenced by it prior to handing such Infrastructure Work over to the Region in accordance with this Agreement.
- (b) Subject to Section 2 (a) above, the Parties agree that Metrolinx will cause Project Co to complete the (i) Region Infrastructure Work, the (ii) Shared Infrastructure Work and (iii) the Additional Infrastructure Work set out in Schedule “B” to this Agreement in accordance with the terms and conditions of this Agreement.

- (c) Metrolinx shall be responsible for the preparation of all plans and specifications with respect to the Infrastructure Work (collectively the "Plans"). Metrolinx shall provide on a timely basis copies of the Plans for the Infrastructure Work to the Region for review and comment, and shall cooperate fully with the Region to make reasonable changes to the Plans requested by the Region and shall adjust the scope of Infrastructure Work accordingly, to the extent such changes are commercially and technically practicable and do not have any negative impacts on the Project.
- (d) The Parties acknowledge that, as of the date of this Agreement, the Scope of Work set out in Schedule B is subject to further review and refining before it is fully settled upon by the Parties. The Parties agree that the Scope of Work in Schedule B may be revised by the Parties from time to time. Adjustments to the Scope of Work shall be evidenced through revisions to Schedule B signed by the representatives of each Party.

3. Requests for Changes by the Region

- (a) The Region may request a Change by delivering to Metrolinx a Variation Enquiry.
- (b) Upon receipt of a Variation Enquiry, Metrolinx may, in its sole discretion, either (a) agree to invoke the variation procedure set out in this Section 3 with a view to ascertaining the Variation Price, or (b) reject the Variation Enquiry. In making its determination, Metrolinx may have regard to, among other things, the following: (i) the impact of the Change on overall costs to Metrolinx, (ii) whether the Change will have any other adverse impacts on Metrolinx, (iii) whether or not Metrolinx is prepared to comply with the Region's contractual changes as set out in the Variation Enquiry, (iv) the impact of the Change on scheduling and on-time completion of the Project, (v) the disruption that may occur if Metrolinx does not implement the Change noted in the Variation Enquiry and the Region has to undertake such work on its own at a later date after completion of the relevant Project, and (vi) any rights Project Co has to refuse a variation in accordance the provisions of the applicable Project Agreement.
- (c) If Metrolinx rejects the Variation Enquiry, Metrolinx has no obligation to effect or endeavor to effect or implement the Changes requested by the Region in the Variation Enquiry and the Region has no right to require or request them.
- (d) Upon receipt of a Variation Enquiry from the Region, as a first step and prior to making a determination under Section 3(e) below, Metrolinx will undertake such due diligence as it deems necessary to make a determination as to whether it is prepared to proceed with the Variation Enquiry. In undertaking such due diligence, Metrolinx will incur Ancillary Costs. Metrolinx's Ancillary Costs will be payable by the Region regardless of whether Metrolinx determines it will proceed with the Variation Enquiry.
- (e) Upon receipt by the Region of Metrolinx's determination to proceed with the Variation Enquiry, the Region will have the number of days specified by Metrolinx, acting reasonably, to notify Metrolinx, in writing, either that (a) the Region does not wish to proceed further with the Variation Enquiry, or (b) it authorizes Metrolinx to obtain Project Co's Ancillary Costs and the Variation Price. In either case, the Region is responsible for the payment of Metrolinx's incurred Ancillary Costs.
- (f) Upon receipt of the Region's notification of authorization pursuant to Section 3(e) above, Metrolinx will ask Project Co to provide it with Project Co's Ancillary Costs and the Variation Price, and will promptly provide both Project Co's Ancillary Costs and the Variation Price to

the Region upon receipt. The Region will be responsible for payment of Project Co's Ancillary Costs regardless of whether or not (i) the amount of such costs have been provided to or approved by the Region, and (ii) the Region proceeds with the Change.

- (g) If the Region elects to proceed with the Change, the parties will execute a Change Order reflecting the terms of the Change, and the Region will pay the Variation Price and the Ancillary Costs in accordance with this Agreement. If the Region fails to deliver written notice within the time provided by Metrolinx acting reasonably or opts to not proceed with the Change, the Region will have no further rights with respect to such Variation Enquiry. The Region acknowledges and agrees that Metrolinx is under no obligation to commence any design or construction work in respect of any Change unless and until a Change Order in respect of such Change is executed by the Parties.
- (h) The Parties acknowledge and agree that there may be circumstances in which, pursuant to a Project Agreement, a Project Co is entitled to refuse to deliver its Ancillary Costs, a Variation Price or carry out a variation, in which case Metrolinx will not carry out the Region's request for a Change and will provide written notice thereof to the Region, and Metrolinx will not be liable to the Region in any way with respect to any such determination.
- (i) If the Region has provided written notice to Metrolinx that the Region elects to proceed with the Change, then, subject to Metrolinx's right to refuse to proceed with such Change,
 - (i) the Parties shall execute a Change Order describing the Change that Metrolinx shall ensure is consistent with the variation documentation agreed to by the parties under the Project Agreement, and such Change Order shall include a commitment for the Region to pay to Metrolinx the Ancillary Costs; and
 - (ii) following the step described in the immediate preceding subsection, Metrolinx shall cause Project Co to implement the Change as described in the Change Order, as applicable, and Metrolinx shall ensure that the Change is performed and completed by Project Co in accordance with the Project Agreement.
- (j) Subject to the provisions of this Agreement, unless and until,
 - (i) Metrolinx agrees to require Project Co to implement a Change; and
 - (ii) the Parties finalize and execute a Change Order,
 - (iii) Metrolinx shall have no obligation to undertake or to request Project Co to implement the requested Change as applicable.

4. Requests for Changes by Metrolinx

- (a) Metrolinx shall obtain the Region's prior written consent for any Changes that Metrolinx may require from time to time (and prior to Metrolinx causing Project Co to proceed with such Changes pursuant to the Project Agreement) to Additional Infrastructure Work in accordance with the following:
 - (i) Metrolinx shall provide to the Region a written request for the Change,

including a detailed description of and the reasons for the Change;

- (ii) The Region shall, no later than 10 Business Days, or on such other date as may be agreed by the Parties, following the written request for the Change described in Section [4\(a\)\(i\) above](#), provide written notice to Metrolinx indicating whether the Region disagrees with the proposed Change, or whether the Region agrees with the proposed Change and requires an estimate with respect to the proposed Change. In the event that the Region disagrees with the proposed Change within the prescribed timeline, the Parties agree to immediately refer the matter to the dispute resolution protocol (Schedule D attached). Metrolinx, acting reasonably, shall duly consider the Region's response, however Metrolinx reserves the right to proceed with the Change in which case the cost of the Change shall be borne by Metrolinx;
- (iii) if the Region requires an estimate with respect to the proposed Change, then Metrolinx shall provide such estimate at Metrolinx's sole cost and expense no later than 10 Business Days, or on such other date as may be agreed by the Parties, following receipt of an estimate from Project Co;
- (iv) at the Region's request, Metrolinx shall provide to the Region a copy of any updated estimates at Metrolinx's sole cost and expense, and a copy of any proposed, draft variation documentation (including any technical details of the proposed Change) that the Region requires to make an informed decision on the proposed Change and to the extent that such estimates or documentation have been prepared pursuant to the Project Agreement; and

no later than the number of days specified by Metrolinx, acting reasonably, following the receipt of the estimate or the updated estimate (whichever is later), the Region shall provide notice to Metrolinx with respect to whether or not the Region approves of the proposed Change. If the Region approves the proposed Change, then the Parties shall sign a Change Order that Metrolinx shall ensure is consistent with the variation documentation agreed to by the parties under the Project Agreement describing the Change.

5. General Provisions for Infrastructure Work

- (a) The following provisions shall apply to Infrastructure Work that has been agreed to by the Parties pursuant to this Agreement:
 - (i) with respect to Infrastructure Work, Schedule "B" attached hereto shall set out the scope of work, the deliverables, the standards applicable to the Infrastructure Work, each Party's contact, and the cost for the Infrastructure Work, including the Ancillary Costs;
 - (ii) The Region will provide its comments on the design and submittals pertaining to Infrastructure Work and connections for purposes of ascertaining conformance with: (a) Region Standards, (b) the Infrastructure Work specifications set out in Schedule "B" attached hereto, as amended or varied in accordance with this Agreement, and (c) all required permits including amendments to existing Regional crossing agreements with Canadian Pacific Kansas City Rail

- (iii) Metrolinx shall be responsible for causing Project Co to complete the Infrastructure Work,
 - (a) in a careful, professional, and worker-like manner, according to the industry standards of practice, care, skill and diligence to be expected of professionals and contractors in the performance of services similar to those called for in this Agreement;
 - (b) in accordance with this Agreement, and
 - (c) as more particularly detailed in the Scope of Work;
- (iv) unless stated expressly otherwise, Metrolinx shall ensure that all material used by Project Co in the Infrastructure Work, and parts thereof, are new and of high-grade quality throughout and shall be entirely suitable for the function and purpose intended and conditions of use described or known to Metrolinx;
- (v) without limiting the generality of any provision of this Agreement, the Parties confirm and agree that Metrolinx shall submit all designs and submittals that it receives from Project Co from time to time that pertain to Infrastructure Work for review and comment by the Region within 15 Business Days of receipt thereof, or on other such time limit as may be agreed by the Parties. The Region's comments shall be regarding whether or not the submittals are in compliance with the Scope of Work and Region Standard and in accordance with Section 5 (g) of this Agreement;
- (b) The person designated by Metrolinx as the individual to whom notice is to be provided (the "**Metrolinx Contact**") shall be responsible for keeping the person designated by the Region as the individual to whom notice is to be provided (the "**Region Contact**") regularly informed of the progress of the Infrastructure Work required under Schedule "B" attached hereto, as applicable, and shall provide immediate notice of all emergencies related to the Infrastructure Work and all significant developments. Progress updates should be reported on a quarterly basis, or as otherwise required by this Agreement, and reviewed by both Parties to confirm the accuracy of the content contained therein and to confirm that the Infrastructure Work is being completed and remains on budget and on schedule.
- (c) The Metrolinx Contact shall respond promptly to all reasonable requests by the Region for information and documentation relating to the Infrastructure Work completed pursuant to this Agreement.
- (d) All Infrastructure Work (unless otherwise agreed to in writing by the Parties) will be designed and constructed on property owned by the Region or in which the Region has or will have a sufficient right to use, operate and maintain the infrastructure and assets completed.
- (e) The Metrolinx Contracts shall provide a minimum of 10 Business Days advanced notice for final commissioning and testing of water supply infrastructure by Regional forces. Water supply infrastructure cannot be put into service and/or connected to existing water supply systems without commissioning and testing completed by Regional forces.
- (f) Metrolinx will provide or cause Project Co to provide or obtain a minimum 2-year standard warranty with respect to all Infrastructure Work, unless otherwise agreed to in writing by the Parties. The warranty period for the Infrastructure Work, or component thereof, shall

commence and terminate in accordance with the terms set out in Section 18 below.

- (g) Metrolinx shall obtain or shall cause Project Co to obtain all necessary permits required under Applicable Law from the relevant governmental authorities in order to construct the Infrastructure Work, including, but not limited to, approval of all engineering drawings, submittals, and schedules by the Region where applicable, which approval shall not be unreasonably withheld. The Region agrees to expedite its review of such engineering drawings upon request by Metrolinx acting reasonably.
- (h) Notwithstanding anything to the contrary in this Agreement, if at any time Metrolinx or Project Co applies for a permit, license or approval but does not meet all of the legal, statutory or regulatory requirements applicable to issuance of that permit, license or approval, then the Region is under no obligation to issue or provide that permit, license or approval to Metrolinx or Project Co, in which case (a) the Region acknowledges that Metrolinx may, in its discretion, proceed without such permit, license or approval, and (b) Metrolinx accepts and acknowledges (and agrees to similarly accept and acknowledge vis-à-vis third party claimants) that the Region has no responsibility and bears no liability for the work that Metrolinx has chosen to undertake without such permit, license or approval. Notwithstanding the above, Metrolinx acknowledges the need for approvals under the Safe Drinking Water Act and the Ontario Water Resources Act when required, because the Region cannot operate the Infrastructure Works without those approvals in place.

6. Changes in Circumstances – General

- (a) If a change in circumstances occurs that Metrolinx could not have reasonably anticipated and Metrolinx determines, in its sole discretion, acting reasonably, that such change in circumstances may cause the further implementation of any Infrastructure Work to have a material adverse impact on the Project, including Project scheduling, completion dates and completion costs, then Metrolinx may, in its sole discretion, acting reasonably, elect to remove such Infrastructure Work from the requirements of “Substantial Completion” for the Project, and require Project Co to complete the applicable Infrastructure Work following “Substantial Completion” of the Project. For the purposes of this Section 6, “material adverse impact on the Project” shall include any delay to Project Co in achieving the Scheduled Substantial Completion Date under the Project Agreement. The Parties will cooperate to develop a plan for completion of the applicable Infrastructure Work, with Metrolinx making reasonable efforts to minimize operational impacts to the Region.

7. Unknown Site Conditions

- (a) If the Region provides Metrolinx with any information, materials and/or documents in its possession pertaining to the conditions of any Region Property (collectively, the “**Information**”) relating to, without limitation, contamination, geological, archaeological, heritage, species-at-risk or unknown utilities (collectively, the “**Site Conditions**”) and confirms to Metrolinx that Metrolinx and the applicable proponents may rely on such Information, then Metrolinx is entitled to a Change Order arising out of any discrepancy between the Information provided by the Region to Metrolinx and the actual Site Conditions to the extent Metrolinx is responsible for costs associated with such discrepancy under the Project Agreement; and if Project Co discovers any Site Conditions which have not been disclosed or made available to Metrolinx, the applicable proponents or Project Co, and Metrolinx is responsible for costs associated with such Site Conditions, Metrolinx is entitled to a Change Order arising therefrom.

8. Payment and Liens

- (a) Subject to compliance with the *Construction Act* (Ontario), to the extent applicable, the Region shall pay Metrolinx for the Infrastructure Work in accordance with Schedule "A" to this Agreement.
- (b) Any lien or written notice of lien under the *Construction Act* (Ontario) received by the Region referable to Infrastructure Work performed by Project Co pursuant to this Agreement shall be the obligation of Metrolinx.

9. Work Schedules and Scheduled Substantial Completion Date

- (a) All Infrastructure Work shall proceed in accordance with a works schedule developed and updated by Project Co as set out in Schedule "B" attached hereto. And in keeping with Section 5 (g) of this Agreement.
- (b) Metrolinx shall promptly advise the Region of any changes to the Scheduled Substantial Completion Date under the Project Agreement or as set out in the attached Schedule "B".

10. Claims

- (a) Metrolinx shall give notice to the Region of any situation which, to its knowledge, may lead to a claim for additional payment (beyond the amount previously agreed to by the Parties) by the Region for any Infrastructure Work as soon as possible upon becoming aware of the situation but failure to do so shall not prejudice or waive Metrolinx's entitlement for reimbursement by the Region as provided for in this Agreement.
- (b) Metrolinx shall make reasonable efforts to submit detailed written particulars of any such claim within 10 working days of when Metrolinx following the date when Metrolinx has received such detailed particulars of the claim from Project Co. Metrolinx shall provide the written particulars no later than 60 days after completion of work set out in the attached Schedule "B" giving rise to such claim for additional payment by the Region. The particulars shall:
 - (i) identify the item or items in respect of which the claim for additional payment arises;
 - (ii) state the grounds, contractual or otherwise, upon which the claim for additional payment is made; and
 - (iii) include the records maintained by Metrolinx or Project Co supporting such claim for additional payment.
- (c) No later than 10 Business Days following receipt of Metrolinx's detailed written particulars for additional payment (or such other date as may be agreed by the Parties), the Region, acting reasonably, may request Metrolinx to submit any further and other particulars as the Region considers necessary to assess the claim. Metrolinx shall submit the requested information, if available, within 10 Business Days of receipt of such request or as soon as possible thereafter.

- (d) No later than 20 Business Days of receipt of the detailed written particulars, the Region or someone acting on its behalf shall advise Metrolinx, in writing, of the Region's opinion with regard to the validity of the claim. Metrolinx and the Region shall endeavour to resolve any dispute in accordance with the dispute resolution provisions under Section 18 of this Agreement, failing which each of the Region and Metrolinx shall have all rights otherwise available to it, contractually or at law.
- (e) The parties shall not be liable to one another for delay in completion of Infrastructure Work, provided that the parties have complied with the timing obligations set out in this Agreement. .
- (f) In the event an adjudication under the *Construction Act* (Ontario) between Metrolinx and the Region is properly commenced, nothing in this Section 10 shall amend or modify the adjudication provisions set out in Schedule "A" to this Agreement.

11. Lands

- (a) Subject to any applicable Scope of Work or Change Order, the Parties acknowledge and agree that utility locates or other site investigations that may be solely required to complete the Additional Infrastructure Work, other than those utility locates and site investigations that have already been conducted by Metrolinx or by the Region and provided to Metrolinx, as of the date of this Agreement, shall be conducted by Metrolinx at the Region's sole cost and expense. Upon the same terms, the cost and expenses for utility locates on Shared Infrastructure Work shall be apportioned between the Region and Metrolinx pro rata.
- (b) Metrolinx shall acquire any and all property, leasehold or right of way rights over all property required for the Infrastructure Work, and if the property is transferred to the Region prior to or during the course of the Infrastructure Work, the Region shall grant Metrolinx all access rights that Metrolinx may require to conduct or complete the Infrastructure Work. In such case the Region shall provide such access rights at no cost and on terms reasonably satisfactory to Metrolinx no less than 30 calendar days in advance of the estimated start of the Infrastructure Work or such other time as may be agreed upon by the Parties. If the Infrastructure Work is completed prior to the transfer to the Region, then the transfer shall take place at a time and in a manner agreed to in writing by both Parties.
- (c) As a result of the Project, Region infrastructure, utilities and/or other assets will be constructed and/or relocated by Metrolinx, and on or prior to the completion of the Project, Metrolinx will transfer to the Region all lands required for such Region infrastructure and assets (collectively, the "**Acquisition(s)**"), at no cost to the Region, subject to the provisions set out below:
 - (i) there must be Acceptance by the Region of each Acquisition;
 - (ii) Metrolinx will provide draft reference plan(s) identifying the land to be transferred to the Region for approval, will register the final reference plan(s) and will provide as-built drawings of the infrastructure; and

12. Connections and Utilities

- (a) To the extent that the Region is able to do so without resorting to litigation and to the extent that such agreements extend to utility relocations necessitated by reason of the Infrastructure Work, at Metrolinx's request, the Region will endeavor to exercise its rights under and to enforce any cost sharing or similar agreements that it has with third party utility companies requiring such utility companies to relocate or share the cost of relocation of utilities if required to do so by the Region to facilitate construction by or for the benefit of the Infrastructure Work.
- (b) Notwithstanding anything contained in this Agreement to the contrary, the Region will contribute to Metrolinx's costs of designing and building utility assets that replace Region utilities (sewers, water mains and related utility works, but does not include roadway assets, streetscape or other non-utility works) which must be relocated and replaced to facilitate construction of the Shared Infrastructure Work and the Additional Infrastructure Work in accordance with Schedule B. The cost attributable to the construction of such relocation and replacement works will be determined jointly by Metrolinx and the Region using expertise available to Metrolinx.
- (c) Prior to connecting or re-connecting sanitary sewers and watermains being installed under the terms of this Agreement to the existing Regional sanitary sewer and water supply systems, Metrolinx shall or shall cause Project Co to obtain approvals to connect from the Region. The Region shall not issue a approval to connect until the relevant Infrastructure Work is inspected by the Region and the Region confirms that the relevant Infrastructure Work has been constructed in accordance with this Agreement

13. Construction

- (a) Metrolinx shall ensure that Project Co is responsible for construction means, methods, techniques, sequences and procedures and for coordinating the various parts of the Infrastructure Work. Metrolinx shall ensure that Project Co provides or arranges to provide adequate labour, required professionals, equipment, and material to ensure the completion of the Infrastructure Work in accordance with this Agreement.
- (b) Metrolinx shall be responsible for ensuring that all portions of the Infrastructure Work are kept well, properly and efficiently drained during construction and until the Infrastructure Work is completed.
- (c) Metrolinx shall ensure that Project Co coordinates with the appropriate utility authorities to obtain the locates of all underground utility and service connections that are necessary to carry out the Infrastructure Work.
- (d) If any interruptions in the supply of utility services are required by reason of the Infrastructure Work, Metrolinx shall immediately inform the Region Contact, shall negotiate the terms of these interruptions with the respective utility owners and shall arrange such interruptions so as to create a minimum of interference to those affected. The incremental increase in cost of any interruptions, beyond what Metrolinx is responsible for paying to facilitate the construction of the Project, shall be included in the cost of the Infrastructure Work as set out in the attached Schedule "B".
- (e) Metrolinx shall be responsible for the clean-up and repair of all Regional and local roads, including boulevards, which become dirty or damaged as a result of the Infrastructure Work. Within 48 hours of written notification to Metrolinx by the Region, or within a time otherwise agreed to by the Parties, Metrolinx shall undertake or cause Project Co to

undertake such works as are necessary to clean-up or repair such roads. Metrolinx shall ensure that Project Co shall coordinate inspections of all Infrastructure Work with Regional staff including providing access for inspections.

14. Emergency Repairs

- (a) The Region may enter upon the project site at any time for the purpose of making emergency repairs to any assets owned by the Region. In such situations the Region shall not be deemed to have accepted any of the Infrastructure Work or assumed any liability in connection with the Infrastructure Work, save and except for liability resulting from the Region's actions and omissions in the performance of such emergency repairs. Access by the Region, its employees, or contractors to the project site shall be subject to compliance with Metrolinx and Project Co's access and safety policies, including without limitation any advance notice and flagging requirements.
- (b) The Region shall notify Metrolinx as soon as possible of any emergency repairs and no later than 24 hours of the Region becoming aware of such emergency.

15. Intellectual Property

- (a) To the extent that any data, documents, drawings, reports, plans, software, formulae, calculations or designs or any other materials are developed by Metrolinx, Project Co or any of its subcontractors, or the Region to the exclusion of any other party in relation to the Infrastructure Work, the Region shall be the sole and exclusive owner of all right, title and interest in such materials, any intellectual property associated therewith (including moral rights) and any and all modifications thereto, without the payment of any additional compensation by the Region. Metrolinx shall itself, or shall cause Project Co to, at the request of the Region, execute such further agreements and cause Project Co's subcontractors to execute any and all assignments, waivers of moral rights and other documents as may be reasonably required to fulfill the intent of this provision.
- (b) Upon expiry or earlier termination of the Project Agreement, Metrolinx shall deliver, or cause Project Co to deliver, any and all of the materials described in Sections 15(a) and (b) above that are in the custody or possession of Metrolinx or Project Co, as applicable, to the Region.

16. Insurance

Before undertaking or permitting any construction activity (a) on the Project on Region Property, (b) pertaining to Infrastructure Work, or (c) which will impact Region assets and infrastructure, Metrolinx will ensure that either Metrolinx or Project Co obtain and maintain throughout the term of construction, at a minimum, and may extend to completion of nonconformities, including those covered by warranty, the following policies: (i) all-risks course of construction property insurance written in the joint names of the Contractor, Owner, Sub-contractors, and underwritten by an insurer licensed to conduct business in the Province of Ontario; (ii) wrap-up or commercial general liability for a limit of not less than \$10 million, including coverage for XCU (explosions, collapse, and underground), a product and completed-operations period of not less than 24 months and non-owned automobile liability insurance ; (iii) pollution liability insurance for a limit of not less than \$5 million. Coverage shall include bodily injury, property damage, clean-up and remediation costs.(iv) automobile liability insurance having an inclusive limit of \$5 million per occurrence for Third Party Liability, in respect of the use or operation of a vehicle owned or operated

by Metrolinx/and or its Contractor; and (v) WSIB and such other insurance as Metrolinx in its discretion or the law may deem necessary or appropriate from time to time. Notwithstanding the foregoing, Metrolinx will have the right to self-insure certain risks it considers appropriate instead of obtaining commercial insurance and any self-insured retentions or deductibles shall be the responsibility of Metrolinx. Any additional Coverage and terms of insurance will be determined by Metrolinx and will be consistent with the level of coverage and the terms applicable to policies generally obtained in accordance with good industry practice for comparable Projects. The Region will be provided with evidence of insurance coverage, will be noted as an additional insured on the Commercial General Liability or Wrap Up policy, and will be provided notice of policy cancellation.

17. Responsibility, Breach and Termination

- (a) Without limiting any other right or remedy the Region may have under applicable law, if,
 - (i) subject to Metrolinx exercising its rights as set out in this Agreement, Metrolinx has not completed the Infrastructure Work on or before the Scheduled Substantial Completion Date or such other scheduled date as may be expressly agreed to by the Parties and set out in the attached Schedule "B", subject to any changes to that date in accordance with this Agreement; or
 - (ii) Metrolinx commits a material breach of the requirements of this Agreement,

then the Region may notify Metrolinx of such breach, with a copy to the Metrolinx Contact, and shall set out the breach(es) to be remedied. Upon receipt of the notice, Metrolinx and the Region, each acting reasonably, shall confer to mutually agree upon the time within which the breach(es) will be remedied, the required course of action (including corrective, protective or maintenance works that may be required), and the schedule for same, having regard to concerns Metrolinx may identify in completing the Project on time and also having regard to the potential impact to Region services and operations and related works. For clarity, failure by Metrolinx to complete the Infrastructure Work on or before any deadline specified in this Agreement shall not constitute a "material breach of the requirements of this Agreement" pursuant to Section [17\(a\)\(ii\)](#) unless otherwise provided for in Schedule "B" attached hereto.

- (b) If Metrolinx does not commence the required course of action determined pursuant to Section [17\(a\)](#) within 30 Business Days following the date of the Region's notice of Metrolinx breach, or if Metrolinx does not cure the breach in an expeditious manner within a reasonable timeframe, given the nature of the breach, then the Region may, acting reasonably and without prejudice to any other right or remedy Metrolinx or the Region may have,

- (i) terminate Metrolinx's right to continue with all or any part of the Infrastructure Work, as applicable; or

- ~~(ii) complete the Infrastructure Work related to the breach; or address the situation as an Emergency Repair per section 14~~

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- (ii) terminate this Agreement,

in each case, by providing written notice to Metrolinx. Notwithstanding the foregoing, prior to the Region exercising any of its ~~termination~~ rights set out in this Section 17(b), the Parties shall submit the matter, including any claim for excess costs, to the dispute resolution process set out in Schedule D of this Agreement.

~~If the Region exercises any of its rights set out in Section 167(b), then Metrolinx shall pay the Region for (i) costs incurred by the Region with respect to any Infrastructure Work, or portions thereof, that has been completed by the Region up to the date of the termination, including costs of time by Regional staff reviewing documents and assisting with the Infrastructure Work, and (ii) excess costs beyond the original price incurred by the Region completing or correcting any partially completed Infrastructure Work on the Project. The Region's entitlement under this Section 1716(c) to payment for work performed is without prejudice to any other rights or remedies to which the Region may be entitled in law as a result of Metrolinx's breach.~~

- (c) Without limiting any other right or remedy that Metrolinx may have under applicable law, if:

- (i) the Region fails to pay Metrolinx for Infrastructure Work in accordance with this Agreement; or
- (ii) the Region commits a material breach of the requirements of this Agreement, then Metrolinx may notify the Region of such breach, with a copy to the Region Contact, and shall set out the breach(es) to be remedied. Upon receipt of the notice, Metrolinx and the Region, each acting reasonably, shall confer to mutually agree upon the time within which the breach(es) will be remedied and the schedule for same having regard to concerns Metrolinx may identify in completing the Project, the consequences identified by Metrolinx of the breach and the potential impact to Region services and operations and related works.

- (d) If the Region does not commence the required course of action determined pursuant to Section 17(d) within 30 ~~Business~~ Days following the date of Metrolinx's notice of the Region's breach, or if the Region does not cure the breach in an expeditious manner within a reasonable timeframe, given the nature of the breach, then Metrolinx may, in its sole discretion and without prejudice to any other right or remedy Metrolinx or the Region may have,

- (i) stop the applicable Infrastructure Work; or
- (ii) terminate the Agreement,

in each case, by providing written notice to the Region. Notwithstanding the foregoing, prior to Metrolinx exercising any of its termination rights set out in this Section 17(e), the Parties shall submit the matter, including any claim for integration costs, to the dispute resolution process set out in Section 20 of this Agreement.

- (e) If Metrolinx exercises any of its rights set out in Section 17(e), then the Region shall pay Metrolinx for: (i) costs incurred by Metrolinx with respect to any [Additional Infrastructure Work](#), or portions thereof, that has been completed by Metrolinx or Project Co up to the date of the termination, and (ii) costs incurred by Metrolinx and Project Co related to integrating any partially completed [Additional Infrastructure Work](#) into the Project. Metrolinx's entitlement under this Section 17(f) to payment for work performed for the Region is without prejudice to any other rights or remedies to which Metrolinx may be entitled in law as a result of the Region's breach.

18. Commissioning and Acceptance

- (a) Metrolinx shall ensure that the Infrastructure Work is Commissioned and handed over to the Region by Project Co in accordance with the Commissioning and acceptance process set out in the Project Agreement and that process shall include a final inspection by Regional staff and Metrolinx addressing any outstanding Non-Conformances which are not Critical Non-Conformances, both parties acting reasonably.
 - (i) Acceptance shall occur at Substantial Completion. The Warranty Period shall commence at Substantial Completion. Prior to the end of the Warranty Period shall include a final inspection by Regional staff and rectify all remaining Non-Conformances, both parties acting reasonably;
 - (ii) Metrolinx shall cause Project Co to correct any Non Conformances (other than those Non Conformances attributable to the Region's improper use) which appear during the Warranty Period and which are attributable to work on the Project.
 - (iii) Prior to completion of the Warranty Period, Metrolinx shall submit or cause Project Co to submit to the Region, completed in accordance with Regional standards, "as recorded" drawings to the satisfaction of the Region for the Infrastructure Work.

19. Application of the *Construction Act*

- (a) The Parties acknowledge and agree that the provisions set out in Schedule "A" to this Agreement pertaining to matters under the *Construction Act* (Ontario), including those relating to statutory prompt payment and adjudication, shall apply to the Parties in respect of the Infrastructure Work.

20. Dispute Resolution

- (a) Any and all disputes under this Agreement shall be resolved in accordance with the Dispute Resolution Protocol attached as Schedule "D" to this Agreement.

21. Indemnification

- (a) Metrolinx shall ensure that the Region is named as an indemnified party Project Agreement or relevant purchase order with Project Co in the same manner that Metrolinx is indemnified by Project Co.

22. General

- (a) In the event of any conflict or inconsistency between or among any provisions of this Agreement which cannot be reasonably reconciled, the order of precedence shall be, in descending order of priority:
- (i) Change Orders;
 - (ii) Schedule "B" attached hereto;
 - (iii) the main body of this Agreement; and
 - (iv) the remaining Schedules to this Agreement.
- (b) Any notice or demand to be given pursuant to this Agreement shall be duly and properly made and delivered to the Party for whom it is intended at the address as set out below, either personally, or by means of prepaid registered mail, and e-mail addressed to such Party as follows:
- (i) in the case of the Region, the Region contact identified in the applicable Scope of Work with a copy to:
The Regional Municipality of Durham
**605 Rossland Road East,
Whitby, Ontario
L1N 6A3**
Attention: Commissioner of Works
Email: Ramesh.Jagannathan@Durham.ca
 - (ii) in the case of Metrolinx, the Metrolinx contact identified in the applicable Scope of Work, as applicable, with a copy to:
Metrolinx
20 Bay Street, Suite 600
Toronto, ON, M5J 2W3

Attention:
Tina D'Ettorre
Manager Rail Corridor Extensions
437-427-0673

Email: tina.d'ettorre2@metrolinx.com

or such other addresses as one Party may from time to time notify the other Party in writing, and any demand or notice so made or given shall be deemed to have been duly and properly given and received on the next day on which it was personally delivered, or if mailed, then in the absence of any interruption in postal service in the Region of Durham affecting the delivery or handling thereof, on the day following three full Business Days following the date of mailing. A notice delivered by email which is transmitted prior to 5:00

p.m. on a Business Day shall be deemed to have been received by the recipient on that day or on the next Business Day if delivered after 5:00 p.m. or on a calendar day that is not a Business Day, provided in all cases that during or after the transmission of any notice by email no indication of failure of receipt is communicated to the sender.

- (c) Neither Party shall assign this Agreement without the prior written consent of the other Party.
- (d) Provided that Metrolinx has the right to prior notice in the Project Agreement, Metrolinx shall not substitute Project Co, its contractors, sub-contractors or suppliers for the Infrastructure Work without prior written notice to the Region. Nothing in this Agreement shall create a contractual relationship between Project Co and the Region.
- (e) The failure of either Party at any time to require, or a Party's decision not to require, performance by the other Party of any obligation under this Agreement shall not constitute a waiver by such Party to require full and complete performance of such obligation, or any other obligation under this Agreement and shall in no way affect such Party's rights thereafter to enforce such obligation.
- (f) No remedy herein conferred upon or reserved to a Party shall exclude any other remedy, but each remedy shall be cumulative and in addition to every other remedy given hereunder or hereafter existing at law or in equity or by statute.
- (g) This Agreement may be changed only by a written amendment signed by authorized representatives of both Parties.
- (h) If any provision of this Agreement or the application thereof to any person or circumstance is found to be invalid, unenforceable or void by any court or tribunal of competent jurisdiction, such provision shall be deemed to be severable and all other provisions of this Agreement shall be deemed to be separate and independent therefrom and continue in full force and effect unless and until similarly found invalid, void or unenforceable.
- (i) This Agreement may be executed in counterpart and may be executed by electronic signature that is received by the Parties in a file format acceptable to the Parties. Such electronic signature shall be deemed to be an original signature for the purpose of this Agreement with the same legal effect as an original signature. If this Agreement is executed in counterparts, such counterparts shall together constitute a single agreement.
- (j) The Parties acknowledge and agree that this Agreement does not confer any benefit to any third party and no third party shall have any right of action against the Parties arising in any way solely as a result of this Agreement.

IN WITNESS WHEREOF, the Parties have executed this Agreement through their duly authorized officers.

THE REGIONAL MUNICIPALITY OF DURHAM

By: _____
Name:
Title: [POSITION]

I have authority to bind the corporation

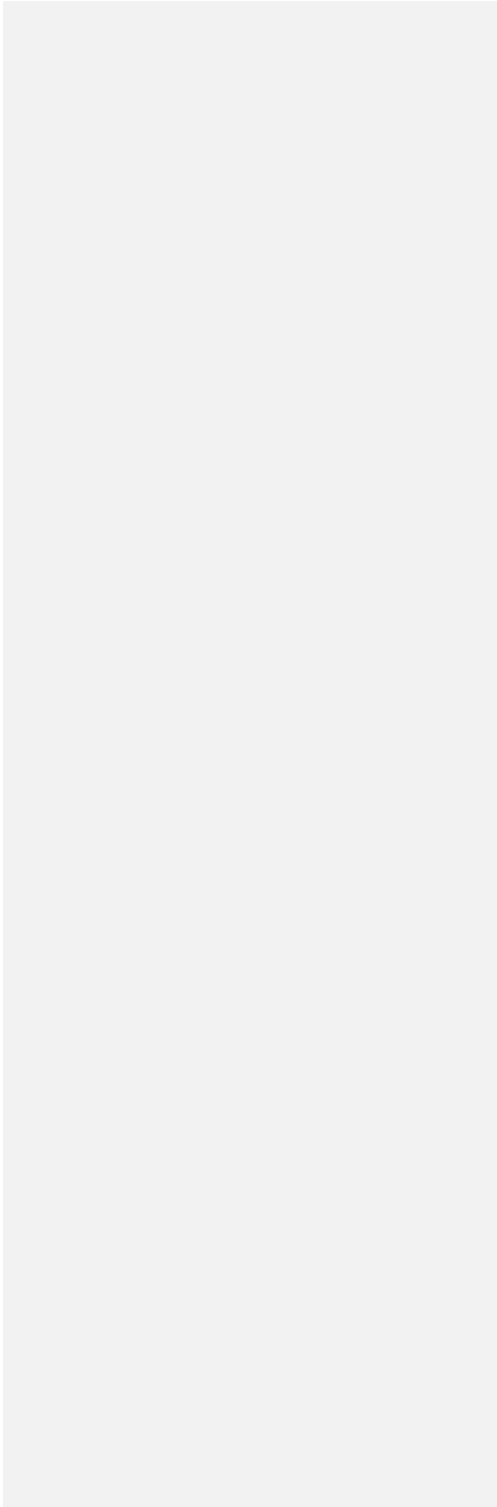
METROLINX

By: _____
Name:
Title:

By: _____
Name:
Title:

I/We have authority to bind the corporation

DRAFT



Schedule "A"

to a Municipal Infrastructure Agreement between the Region and Metrolinx
dated _____, 20

1. PAYMENT

- 1.1 For the Infrastructure Work, the Region shall pay Metrolinx the actual costs incurred by Metrolinx as reasonably evidenced with supporting documentation in accordance with the applicable Milestone Payment Dates set out in Schedule B. Schedule "B" provides estimates of the costs of work as of the date of this Agreement.
- 1.2 Payments for all Infrastructure Work shall include full compensation as set out in the Project Agreement for all overhead, non-recoverable tax incurred by Metrolinx, labour, services, equipment and material required in its performance, including, but not limited to, hand tools, supplies and other incidentals.
- 1.3 Payment for all Infrastructure Work not specifically detailed as part of any one item and without specified details of payment shall be deemed to be included in the items with which it is associated.
- 1.4 For payment of costs and expenses associated with Ancillary Costs, Metrolinx shall submit to the Region invoices certified by Metrolinx.
- 1.5 Without limiting the generality of any other obligation in this Agreement, Metrolinx agrees it shall comply with all applicable requirements in the Construction Act (Ontario).
- 1.6 For payments in accordance with this Agreement for the Infrastructure Work, Metrolinx and the Region shall comply with the following procedures:
 - (a) Using the form attached as Appendix 1 to this Schedule "A", Metrolinx shall submit an invoice containing the following information, with all reasonable supporting documentation attached to the satisfaction of the Region, acting reasonably (each, a "**Proper Invoice**"):
 - (1) the name, telephone number, mailing address, and other contact information of the Metrolinx Contact;
 - (2) remittance payment information;
 - (3) Proper Invoice number;
 - (4) the date of the Proper Invoice and the Proper Invoice period during which the work was performed;

- (5) Region purchase order number, if made available to Metrolinx by the Region;
- (6) Region Contact's contact information for the Project;
- (7) a general description of the work;
- (8) the amount of the total cost of the work previously paid as of the Milestone Payment Date for the Project;
- (9) where the work is being performed on a unit-price or time-and-materials basis:
 - (i) a description of the work performed during the Proper Invoice period and a specific itemization with quantities, including Project Co's estimate of units and Metrolinx's estimate of units, where Project Co has been paid or will be paid by Metrolinx on the basis of Metrolinx's estimate of units;
 - (ii) the amount payable for the work performed during the Proper Invoice period with reasonable details and with costs reasonably broken down in accordance with the attached Schedule "B" for Agreed Infrastructure Work; and
 - (iii) Project Co's applicable subcontractors' daily work records (only to the extent made available to Metrolinx by Project Co in the ordinary course of payment administration on the Project);
- (10) where the work is being performed on a lump sum basis:
 - (i) percentage of work completed to date with reasonable details as to the various components included in the Proper Invoice, with costs reasonably broken down in accordance with the attached Schedule "B" for Infrastructure Work;
 - (ii) the total cost of the work, as agreed to by the Parties in accordance with this Agreement;
 - (iii) the amount payable for the work and changes in the work (as agreed to by the Parties in accordance with the Agreement) performed during the Proper Invoice period; and
 - (iv) the schedule of values (to the extent applicable);
- (11) evidence of Project Co's compliance with worker's compensation legislation including a WSIB clearance certificate;

- (12) a statutory declaration using the latest form of CCDC 9A - 2018 Statutory Declaration of Progress Payment Distribution by the Construction Contractor, confirming that all accounts of each subcontractor of the "Construction Contractor" have been paid in full by the Construction Contractor up to and including the latest progress payment received from Metrolinx. For the purposes of this section, "Construction Contractor" is the contractor(s) directly retained by Metrolinx for the work included in the Proper Invoice but if Metrolinx is using a P3 model of procurement then "Construction Contractor" is defined as a contractor (as that term is defined in the Construction Act (Ontario)) that Project Co has a direct agreement with for any work that is subject of the Proper Invoice;
- (13) list the basic statutory and other statutory holdbacks, and any holdbacks retained in accordance with Section [1.10](#) of this Schedule "A", each as a separate line item; and
- (14) Metrolinx's registration number for HST and list the total amount of HST separate from the total amount claimed in the Proper Invoice.

1.7 Metrolinx will submit a draft Proper Invoice to the Region on the specified milestones and/or dates set out in Schedule "B" (each, a "**Milestone Payment Date**" and, collectively, the "**Milestone Payment Dates**"). The draft Proper Invoice shall be submitted in the same format and with the same content as the Proper Invoice. The Region will review and provide Metrolinx with comments on the draft Proper Invoice within 15 calendar days of receipt of the draft Proper Invoice for the purpose of the Parties resolving any outstanding issues, where reasonably possible. Subject to Section [1.9 of this Schedule "A" below](#), Metrolinx will submit a Proper Invoice in respect of such draft Proper Invoice any time 30 calendar days after submission of the draft Proper Invoice.

1.8 In respect of any disputes that arise out of or in connection with the draft Proper Invoice submitted by Metrolinx pursuant to Section 1.7 above, if the Parties are unable to resolve outstanding issues within 30 days of submission of the draft Proper Invoice by Metrolinx, the following provisions apply:

- (a) resolution of the amounts in dispute will be referred to the dispute resolution process set out in attached Schedule "D" [Dispute Resolution Protocol] notwithstanding that there may be concurrent adjudication;
- (b) the Region shall confirm in writing within 15 calendar days after receipt of a draft Proper Invoice all amounts claimed under the draft Proper Invoice which are accepted by the Region, and such amounts may be claimed by Metrolinx by submission of a Proper Invoice in accordance with this Schedule "A"; and
- (c) when the terms of the draft Proper Invoice or a portion thereof have been disputed by the Region and subsequently settled, either by agreement of the Parties, confirmed in writing, or by dispute resolution, Metrolinx will submit a Proper Invoice at any time after the 30th calendar day following such agreement or conclusion of such dispute resolution.

1.9 The Region shall pay the amount set out in the Proper Invoice within 30 calendar days following receipt of the Proper Invoice submitted in accordance with this Schedule "A". Without limiting

any other of the Region's rights or remedies in this Agreement, at law or equity, the Region shall have the right to holdback from payment of such Proper Invoice, the following amounts:

- (a) amounts equal to all outstanding written notices of lien and outstanding claims for lien plus security for costs as prescribed under the Construction Act (Ontario), and
- (b) any amounts subject to a dispute pursuant to Section [1.8](#) of this Schedule "A".

1.10 After the date on which all liens that may have been claimed against the lien holdback retained under the Project Agreement have expired or been satisfied, discharged or otherwise provided for under the Construction Act (Ontario) as applicable, and provided Metrolinx has provided reasonable evidence that the Project work under the Project Agreement has been totally completed or substantially performed, as applicable, Metrolinx shall submit to the Region a Proper Invoice for lien holdback amounts retained by the Region under this Agreement in order to ensure that the lien holdback is paid or a notice of non-payment of holdback is published in accordance with the Construction Act (Ontario). No draft Proper Invoice is required to be submitted for any Proper Invoice or portion of a Proper Invoice requesting only payment of a statutory holdback, nor is such Proper Invoice subject to the timing provisions applicable to the submission of Proper Invoices.

1.11 The Region shall provide a timely response in relation to the payment or withholding of amounts invoiced by Metrolinx in relation to a statutory holdback in order to ensure that the holdback can be paid or a notice of non-payment of holdback can be published by Metrolinx in relation to amounts claimed by its contractors or ProjectCo in accordance with the Construction Act (Ontario).

2. WITHHOLDING OF PAYMENT FOR LIENS

2.1 Metrolinx shall advise the Region in writing of any liens and written notices of lien, as it becomes aware of them, pertaining to the Project that includes work for which Metrolinx will invoice the Region in accordance with this Agreement.

- 2.2 Upon the receipt of a written notice of lien, claim for lien or a certificate of action under the Construction Act (Ontario) arising from the performance of the work for the Project associated with the Infrastructure Work:
- (a) Metrolinx, at its sole cost, shall itself, or arrange for Project Co, to take whatever steps are necessary to discharge, release or vacate such claim for lien or certificate of action, or withdraw the written notice of a lien within 10 Business Days of it coming to the notice of Metrolinx. If the claim for lien or certificate of action is merely vacated, Metrolinx shall, if requested, undertake the Region's defense of any subsequent lawsuit commenced in respect of the claim for lien or certificate of action at no cost to the Region;
 - (b) in relation to which the Region is an "owner" within the meaning of the Construction Act (Ontario), the Region may retain an amount sufficient to satisfy such claim for lien, certificate of action or written notice of a lien, including an amount sufficient to cover potential costs; and
 - (c) Metrolinx acknowledges that all claims for lien shall be given to the Clerk of the Region through its email at constructionliens@durham.ca.
- 2.3 Without limiting any other of the Region's rights or remedies in this Agreement, at law or equity, if Metrolinx fails or refuses to vacate or discharge the claim for lien or certificate of action, or cause the withdrawal of the written notice of a lien in accordance with Section [2.2\(a\)](#) of this Schedule "A", the Region shall at its option, be entitled (but not obliged) to take whatever steps are necessary to vacate and/or discharge the claim for lien or certificate of action, or cause the withdrawal of the written notice of a lien, and all costs incurred by the Region in doing so (including for security for costs) may be set-off by the Region.
- 2.4 The Region shall indemnify Metrolinx for all costs incurred (including legal costs) to discharge, release, vacate or otherwise arrange for the withdrawal of a lien or written notice of lien or in relation to the defense of any subsequent lawsuit commenced in respect of the claim for lien or certificate of action where such lien or lawsuit arises as a result of an improvement undertaken by the Region and not Metrolinx, to the extent of the Region's responsibility. Metrolinx shall provide the Region with notice with available particulars, of any claim or proceeding, whether actual or threatened, in respect of which an indemnity may be sought under this Section, when any such claim or proceeding become known to Metrolinx.
- 3. PROMPT PAYMENT AND ADJUDICATION**
- 3.1 The Parties will take all reasonable measures to avoid Adjudication by resolving disputes using the dispute resolution procedure set out in Schedule D of this Agreement. However, while the Region and Metrolinx each reserve the right to argue that all or any particular issues may not be adjudicated, if Adjudication is commenced by Metrolinx or the Region and does not involve any other party, the following provisions apply to such disputes under this Agreement:
- (a) The Parties acknowledge and agree that for the purposes of paragraph 7 of s. 13.5(1) of the Construction Act (Ontario):
 - (1) neither the Agreement nor any Schedule sets out "any other matter" that the

Parties agree may be referred to an Adjudication; and

- (2) the Parties may agree after the commencement of the Agreement to “any other matter” that may be referred to an Adjudication provided such agreement is in writing and explicitly identifies and refers to the other matter to refer to an Adjudication.
- (b) All Adjudications shall proceed in accordance with the provisions of the Construction Act (Ontario) and the additional provisions set out in Section 3 of this Schedule “A”, subject to the exercise of the powers provided to the Adjudicator under section 13.12 of the Construction Act (Ontario).
 - (c) If the Party issuing the Notice of Adjudication is:
 - (1) Metrolinx, then the Notice of Adjudication shall be given by email with a copy of the Notice of Adjudication, and any additional documentation, delivered to the mailing address as follows:

The Regional
Municipality of
Durham

Commissioner of
Works

605 Rossland Rd E,
Whitby, ON L1N 0B7

Emairamesh.jagannathan@durham.ca

- (2) the Region, then the Notice of Adjudication shall be given by email with a copy of the Notice of Adjudication, and any additional documentation, delivered to the mailing address as follows:

Metrolinx
277 Front Street West
Toronto, Ontario M5V
2X4

Email: Constructionliens@metrolinx.com

3.2 The seat of the Adjudication shall be in Toronto, Ontario.

3.3 The Adjudicator nominated by the Party issuing the Notice of Adjudication shall:

- (a) have relevant qualifications and experience with respect to the Project or projects of a similar nature and magnitude, to the Project;
- (b) be independent of and at arm’s length to Metrolinx, the Region and any other

person having an interest in the Project or any of the documents comprising the Agreement; and

- (c) have no conflict of interest relating to the parties or the Adjudicable Dispute.

3.4 Any documents delivered to the Adjudicator by any Party shall be delivered to the other Party at the same time. In addition to the requirements of section 13.11 of the Construction Act (Ontario), the copy of the Agreement and any other documents delivered to the Party that received the Notice of Adjudication pursuant to section 13.11 of the Construction Act (Ontario) shall:

- (a) be delivered to such Party by the other Party in the manner as required by the Adjudicator;
- (b) if the contract and such documents have an aggregate file size in excess of twenty (20) MB, be delivered to such Party by the other Party on a USB flash drive or using a secure electronic document exchange service in a searchable format; and
- (c) include an index of documents with identifying information (for example, date, document description, author/recipient).

3.5 Metrolinx and the Region hereby acknowledge and agree that:

- (a) they shall, immediately after the appointment of the Adjudicator, either through the agreement of the parties or by the Authorized Nominating Authority ("ANA"), deliver a written agreement requesting that the Adjudicator provide the Party that received the Notice of Adjudication no less than fourteen (14) days from the date of receipt of the documents pursuant to section 13.11 of the Construction Act (Ontario) to respond;
- (b) if the documents delivered pursuant to section 13.11 of the Construction Act (Ontario):
 - (1) exceed 100 documents or 1000 pages in the aggregate, excluding the Agreement and all Schedules; or
 - (2) seek monetary relief in excess of one million dollars (\$1,000,000) exclusive of Value Added Taxes, they shall, immediately after the receipt of such documents, deliver to the Adjudicator a written agreement requesting that the Adjudicator provide the Party that received the Notice of Adjudication no less than sixty (60) days from the date of receipt of such documents to respond and extend the deadline for the Adjudicator to make its determination to no less than thirty (30) days after the deadline for the delivery of the response by such Party; and
- (c) if the documents delivered pursuant to section 13.11 of the Construction Act (Ontario) are delivered at any time between the Friday prior to December 25th in a given year and the first Monday of January of the following year, they shall, immediately after the receipt of such documents, deliver to the Adjudicator a written agreement requesting that the Adjudicator exclude the period between the date of

delivery of such documents and that first Monday of January from the counting of days for the purposes of the Adjudication and, as necessary to give effect to such exclusion, extend the deadline for the party that received the Notice of Adjudication to respond and the deadline for the Adjudicator to make its determination.

- 3.6 The Adjudicator shall be entitled to grant any remedy or relief which is consistent with the intentions of the Parties expressed under the Agreement but shall not be entitled to exercise the power of prerogative writs.
- 3.7 Other than in accordance with the Construction Act (Ontario), any determination and reasons of an Adjudicator on the work pertaining to the Project Agreement shall not be relied upon by either Party in relation to work on any other Project Agreements for the Program. The determination and reasons of any adjudicators on any other Projects shall not be relied upon by the Parties in any Adjudication on the Project Agreement under which the subject dispute is being Adjudicated.
- 3.8 If an Adjudicable Dispute is referred to Adjudication and such Adjudicable Dispute is already the subject of mediation, arbitration or a court proceeding, which has not been finally determined, the Party responding to the Notice of Adjudication shall be entitled, in its sole and absolute discretion, to choose to:
- (a) terminate, suspend or proceed with such mediation or arbitration, as applicable, and if the responding Party elects to terminate such mediation or arbitration, as applicable, the Party referring the Adjudicable Dispute to Adjudication shall be responsible for all costs of the mediator or arbitrator, as applicable, up to the date of receipt of the Notice of Adjudication; or
 - (b) stay or proceed with such court proceeding, and if the responding Party elects to stay such court proceeding, the Party referring the Adjudicable Dispute to Adjudication shall execute all further documents and do all other lawful things necessary to give full effect to such stay, and after the Adjudicator makes its determination, either Party may move to lift such stay, which the other Party shall consent to.
- 3.9 Metrolinx shall, in respect of any dispute impacting Additional Infrastructure Work, between:
- (a) Metrolinx and Project Co;
 - (b) Project Co and a subcontractor or supplier;
 - (c) a sub-subcontractor and a subcontractor or supplier; or
 - (d) a sub-subcontractor and another sub-subcontractor,

endeavour to provide to the Region, no later than five Business Days, a copy of a Notice of Adjudication, or other relevant documentation indicating the commencement of an Adjudication, after the receipt by Metrolinx of such documents. Notices delivered to the Region under this section shall be in accordance with Section [3.1\(c\) above](#).

3.10 The Region will advise Metrolinx within three Business Days whether it wishes to participate in an Adjudication for which a Notice of Adjudication has been forwarded. If the Region wishes to participate, Metrolinx will make a request to the Adjudicator that the Region be permitted to participate in the Adjudication, including in relation to procedural discussions. If the Region participates as a party or has rights equivalent to a party in the Adjudication, the Region agrees to be bound by a determination of an Adjudicator in respect of Additional Infrastructure subject to any further court decision including any legal proceeding related to the matter.

3.11 In this Schedule "A":

- (a) "**Adjudicable Dispute**" means a dispute respecting an Adjudicable Matter.
- (b) "**Adjudicable Matter**" means any matter
 - (1) referred to in s. 13.5(1) of the Construction Act (Ontario), other than in paragraph 7;
 - (2) that is prescribed under the Construction Act (Ontario) as referable to adjudication; or
 - (3) agreed to by the Parties as provided herein.
- (c) "**Adjudication**" means a construction dispute interim adjudication under Part II.1 of the Construction Act (Ontario).
- (d) "**Adjudicator**" means an individual who is qualified by the ANA as an adjudicator.

4. MISCELLANEOUS

4.1 Metrolinx acknowledges and agrees that the reimbursement made by the Region does not constitute an Acceptance of the Infrastructure Work pursuant to Commissioning and Acceptance as described in Section 18.

4.2 Where a change in Canadian federal or Ontario provincial taxes occurs after the date of this Agreement, and this change could not have been anticipated at the date of this Agreement, the Region shall adjust payments under this Agreement to account for the exact amount of the tax change involved, to the extent that it can be determined.

4.3 Claims for compensation for additional tax cost shall be submitted by Metrolinx to the Region in a form satisfactory to the Region. Such claims for additional tax costs shall be submitted not later than 20 Business Days after the date of Acceptance of the Infrastructure Work by the Region.

5 PAYMENT FOR CHANGES

5.1 The Region shall reimburse Metrolinx for the cost of any Changes set out in a Change Order

that has been executed by the Parties in keeping with the terms of this agreement.

- 5.2 It is understood and agreed that if Changes are required which would cause an increase in the Estimated Cost of the Infrastructure Work, identified in a Change Order or in Schedule "C" to this Agreement, as applicable, additional approvals, including Region Council approval, may be required, but Metrolinx is not required to do any work unless the Region has obtained all requisite approvals.
- 5.3 If any Change results in an increase in the Estimated Cost of the Additional Infrastructure Work, identified in the applicable Change Order or in Schedule "C" to this Agreement, as applicable, that is greater than what the Region, in its sole discretion, believes is reasonable for this work, the Region shall not agree to such Change and Metrolinx shall not undertake any work in respect thereof, it being the intention as provided for in this Agreement that no work in respect of a Change shall be undertaken or commenced until a Change Order has been signed by the Parties in accordance with this Agreement.

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Appendix 1

Form of Proper Invoice
dated _____, 20__

(see attached)

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Schedule "B"

to a Municipal Infrastructure Agreement between the Region and Metrolinx
dated _____, 20__

INFRASTRUCTURE WORK

1. The following is Infrastructure Work that Metrolinx shall cause Project Co to provide, in accordance with the Agreement, except as may be otherwise specified herein:
 - 1.1 Metrolinx shall cause ProjectCo to provide the following Infrastructure Work, in accordance with the Agreement, except as may be otherwise specific herein:
 - a) Region Infrastructure Work
(intentionally left blank)
 - b) Shared Infrastructure Work
 - c) As set out in Section 3.2 to this Schedule B. Additional Infrastructure Work
(intentionally left blank)
 - 1.2 Metrolinx shall ensure that the design and construction of the Infrastructure Work by Project Co:
 - a) Complies with the Region Standard or agreed upon standards determined by both Parties;
 - b) Does not encroach onto or interfere with existing easements, services and infrastructure; and
 - c) Are in accordance with the corresponding drawings reviewed by the Region.
2. Contact
 - 2.1 For the Infrastructure Work to be completed pursuant to this Schedule "B":
 - a) The Region's contact shall be:

Road Related Design / Technical:

Doug Robertson, P.Eng.
Senior Project Manager
Works Department, Transportation Infrastructure Division
905-261-3345
doug.robertson@durham.ca

Watermain Related Design / Technical:

Alex Doran, P.Eng.
Project Engineer
Works Department, Environmental Services Branch, Design Contracts

Division
289-830-7689
alex.doran@durham.ca

Construction Related Issues:

Jeff MacDonald, C.E.T.
Project Manager
Works Department, Transportation and Field Services Branch, Construction
Services Division
905-261-7480
jeff.macdonald@durham.ca

b) Metrolinx's contact shall be:

Tina D'Ettorre
Manager Rail Corridor Extensions
437-427-0673
tina.d'ettorre2@metrolinx.com

3. Cost Allocation

- 3.1 The Parties have agreed that Metrolinx shall bear the cost of the Region Infrastructure Work.
- 3.2 The Parties have agreed that the cost of Shared Infrastructure Work shall be allocated between the Region and Metrolinx as shown in the following table :

Location Description	Existing Pipe Size and Material	Scope of Work	Cost Estimate (direct/indirect)	Region Cost	Metrolinx Cost
Simcoe St at CPR Bridge	300mm CI WM	The existing 300mm diameter watermain located on the existing Simcoe Street CPR bridge will be relocated crossing at Albert Street, between Fisher Street and Albany Street, and upsized to a 600mm diameter concrete pressure pipe. This work is being done to facilitate the demolition of the Simcoe Street CPR bridge at a later date.	\$5.5M	\$387,228.60	\$5.1M

- 3.3 The Parties have agreed that the Region shall bear the full cost of the Additional Infrastructure Work.

4. Costs payable by the Region

The Region’s aggregate cost (including overhead, fees, disbursements, allowances, profit and HST) for the Shared Infrastructure Work identified has an fixed cost of \$387,228.60(the “**Total Cost**”).

Table 1 – SHARED INFRASTRUCTURE COSTS PAYABLE BY THE REGION

Services & Deliverables	Amount
A. Simcoe St. Watermain	\$387,228.60
Total Cost	\$387,228.60

Table 2 – ADDITIONAL INFRASTRUCTURE COSTS PAYABLE BY THE REGION

(intentionally left blank)

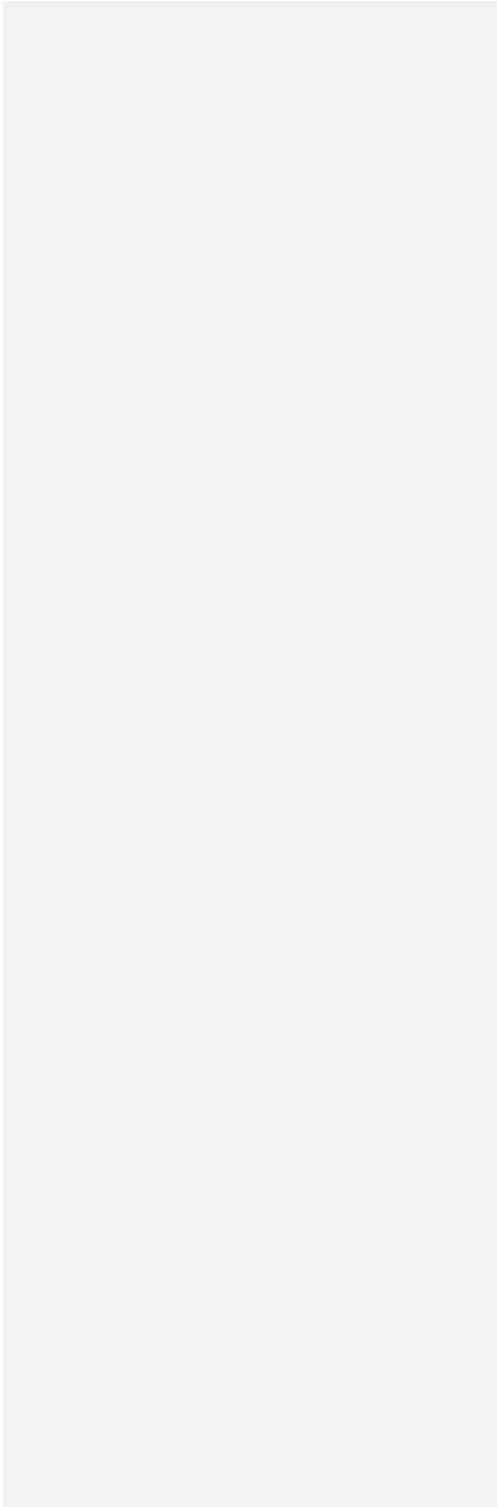
5. The Region shall pay the cost set out in Section 4 immediately above (including HST) in accordance with the following milestones:

The Region shall pay the Total Cost set out in Section 4 of this Schedule B at Acceptance in one milestone payment.

Appendix 1

(Drawings)

DRAFT



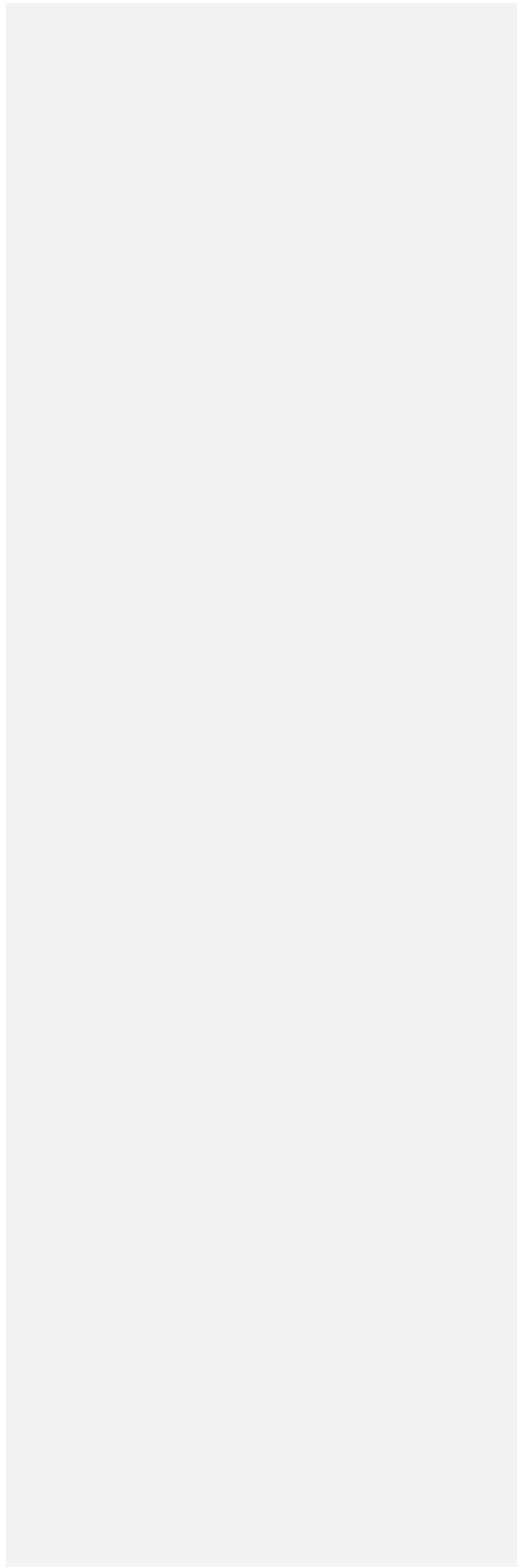
Schedule "C"

to a Municipal Infrastructure Agreement between the
Region and Metrolinx dated __, 20__

Form of Change Order

(see attached)

DRAFT



Schedule "D"

to a Municipal Infrastructure Agreement between the
Region and Metrolinx dated __, 20__

DISPUTE RESOLUTION PROTOCOL

1. All disputes, controversies or claims arising out of or relating to any provision of this Agreement, or the alleged wrongful exercise or failure to exercise by a Party of any discretion or power or right given to that Party, or the interpretation, enforceability, performance, breach, termination or validity of this Agreement (collectively "**Dispute**") shall be resolved or determined in accordance with this Schedule "D".
2. The Parties shall be free to utilize the adjudication provisions of the Construction Act (Ontario) as they may apply to any Dispute, if either Party so wishes, in accordance with the terms outlined in Schedule "A" of this Agreement.
3. The Parties shall diligently carry out their respective obligations under this Agreement during the pendency of any Disputes, including adjudication proceedings, mediation proceedings, arbitration proceedings or litigation proceedings.
4. Otherwise, the Parties shall attempt in good faith to resolve any Dispute promptly by negotiations, as follows.
5. Either Party may give the other written notice of any Dispute not resolved in the normal course of business. The Parties shall appoint representatives to meet within ten (10) business days after the delivery of such notice, and thereafter as often as they reasonably deem necessary, to exchange relevant information and attempt to resolve the Dispute.
6. If the Dispute has not been resolved by the representatives within twenty (20) business days of the disputing Party's notice, or if the representatives have not met in connection with the Dispute within fifteen (15) business days of the disputing party's notice, then the Dispute shall be referred to the senior management of the Region and Metrolinx, who shall exchange any outstanding relevant information and attempt to resolve the Dispute.
7. If the Dispute has not been resolved within ten (10) business days of referral to senior management then the Parties shall be able to submit the Dispute to mediation through the ADR Institute of Canada and its mediation rules (or such other successor or equivalent alternative resolution agency and its mediation rules).
8. If the Dispute is not resolved at mediation, or if the Parties did not agree to submit the Dispute to mediation, then such Dispute shall be referred to a single arbitrator agreed upon by the Parties, or if they are unable to so agree, a single arbitrator appointed by the court in accordance with the *Arbitration Act*, 1991 (Ontario) or any successor or replacement arbitration legislation in force in the Province of Ontario from time to time. Scheduling and other procedures relating to the arbitration shall be determined by the Arbitrator in accordance with the *Arbitration Act*, 1991 (Ontario) based on the complexity and nature of the Dispute in question and in a manner which permits the Parties

a full and fair hearing. The award of the Arbitrator shall be final and binding as between the Parties and shall not be subject to appeal.

9. Notwithstanding any provisions in this Schedule, no Party shall be precluded from initiating a proceeding in a court of competent jurisdiction for the purposes of obtaining any emergency or provisional remedy to protect its rights that may be necessary and that is not otherwise available under the Agreement, including temporary and preliminary injunctive relief and restraining order.

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If this information is required in an accessible format, please contact 1-800-372-1102 ext. 2071



The Regional Municipality of Durham Report

To: Committee of the Whole
From: Chief Administrative Officer
Report: #2024-COW-21
Date: June 12, 2024

Subject:

Durham Region 2020-2024 Strategic Plan: 2023 Year-End Update

Recommendation:

That the Committee of the Whole recommends:

That this report be received for information.

Report:

1. Purpose

1.1 The purpose of this report is to share the 2023 year-end update regarding Durham Region's 2020-2024 Strategic Plan, as reported via the [community dashboard](#).

2. Background

2.1 Regional Council endorsed Durham Region's 2020-2024 Strategic Plan on March 25, 2020. The plan has 5 goal areas and 23 priority areas.

2.2 The key performance indicators for the Strategic Plan demonstrate the results of the Region's efforts towards the goals of the plan. Definitions of the indicators, along with additional context on how the value is calculated, have been included in the [public-facing community dashboard](#).

2.3 The dashboard ensures the community is informed of our progress, the results being achieved, and the impact of these efforts.

3. Previous Reports and Decisions

- 3.1 Regional Council adopted the 2020-2024 Durham Region Strategic Plan in March 2020 ([Report #2020-COW-4](#)).
- 3.2 In 2021, an update was provided to share highlights, provide stories of implementation efforts, and outline COVID-19 recovery efforts ([Report #2021-INFO-55](#)).
- 3.3 On February 15, 2023, Regional Council approved [Report #2023-COW-9](#) regarding Durham Region's 2020-2024 Strategic Plan community dashboard release, which included the 2022 year-end performance update.
- 3.4 Progress on initiatives supporting the 2020-2024 Durham Region Strategic Plan is also reported in annual Region of Durham Year in Review publications:
 - a. [2020 Year in Review](#)
 - b. [2021 Year in Review](#)
 - c. [2022 Year in Review](#)
 - d. [2023 Year in Review](#)

4. 2023 Year-End Performance Update

- 4.1 The [community dashboard](#) has been updated to include the 2023 year-end results on the key performance indicators for each goal area of the 2020-2024 Durham Region Strategic Plan.
- 4.2 At year-end 2023:
 - a. 47 of 78 indicators (60%) meet their target or are improving;
 - b. 17 of 78 indicators (22%) are stable;
 - c. 5 of 78 indicators (6%) are below target or not improving; and
 - d. 9 of 78 indicators (12%) have no trend available at this time.

5. Relationship to Strategic Plan

- 5.1 This report outlines the 2023 year-end update for Durham Region's 2020-2024 Strategic Plan for each of the five strategic goals areas:
 - a. Goal 1: Environmental Sustainability.
Objective: To protect the environment for the future by demonstrating leadership in sustainability and addressing climate change.

- b. Goal 2: Community Vitality
Objective: To foster an exceptional quality of life with services that contribute to strong neighbourhoods, vibrant and diverse communities, and influence our safety and well-being.
- c. Goal 3: Economic Prosperity
Objective: To build a strong and resilient economy that maximizes opportunities for business and employment growth, innovation, and partnership.
- d. Goal 4: Social Investment
Objective: To ensure a range of programs, services and supports are available and accessible to those in need, so that no individual is left behind.
- e. Goal 5: Service Excellence
Objective: To provide exceptional value to Durham taxpayers through responsive, effective, and fiscally sustainable service delivery.

6. Conclusion

- 6.1 Regional staff will continue to report on the progress of the Strategic Plan through updates to the key performance indicators, initiatives, and definitions included in the community dashboard with a final 2024 update to Regional Council in Spring 2025 to close-out the implementation of the Durham Region 2020-2024 Strategic Plan.

7. Attachments

Attachment #1: 2023 Year-End Key Performance Indicator Summary

Prepared by: Andrea Smith, Policy Advisor, Corporate Initiatives and Lesley-Ann Foulds, Manager, Corporate Initiatives

Approved by: Sandra Austin, Executive Director of Strategic Initiatives

Recommended for Presentation to Committee

Original signed by

Elaine C. Baxter-Trahair
Chief Administrative Officer

Attachment 1 for Report #2024-COW-21

Key Performance Indicator Summary

The Key Performance Indicators (KPIs) for the strategic plan demonstrate the results of efforts by the Regional Municipality of Durham towards the goals of the plan. There are a total of 78 key performance indicators (see Table 1).

Of the 78 indicators, there are four KPIs that have remained in development and will be considered when developing Durham Region's 2025 Strategic Plan. They are as follows:

Goal 1 – Priority 1.3

Climate Adaptation – this indicator is in development and will measure the implementation of climate adaptation programs in Durham.

Goal 2 – Priority 2.4

Alternative Patient Care Models for Paramedic Services – This indicator is in development and will measure the implementation of the provincial expansion of patient Treat & Refer, Treat & Release, and Alternative Transport Destinations models for 9-1-1 paramedic responses by Paramedic Services.

Goal 4 – Priority 4.2

Community Social Investment – this indicator is in development and will measure the implementation of the Community Social Investment Framework when launched.

Goal 5 – Priority 5.3

Data Analytics – this indicator is in development and will measure the impact of data analytics initiatives at Durham Region.

Key Performance Indicator Rating

The KPIs are tracked annually and given a trend rating to show whether the results are trending in the desired direction. The following definitions are provided for the rating system:

- Meets Target/Improving (Green): significant change towards target or desired direction
- Stable (White): minimal change from previous update
- Below Target/Not Improving (Red): significant change away from target or desired direction
- Trend Not Available (Grey): insufficient data for trending or no data currently available

For key performance indicators where a target is not available, the desired direction is used to determine the trend rating. All indicator values, definitions, and trend ratings can be viewed online at [2020-2024 Durham Region Strategic Plan](#).

Table 1. Key Performance Indicator Listing

Goal Area	Priority	Key Performance Indicator	2023 Trend Rating
Goal 1: Environmental Sustainability	1.1 Accelerate the adoption of green technologies and clean energy solutions through strategic partnerships and investment	Increase the number of residential home energy retrofits completed (installed and evaluated, cumulative over the plan).	Improving
		Increase the number of EV charging stations installed through Zero Emission Vehicle Infrastructure Program (ZEVIP) program, cumulative over the plan.	Improving
		Increase the installed photovoltaic renewable energy capacity at Regional facilities	Improving
		Decrease the carbon footprint of the Durham Region community	Not Improving
	1.2 Increase waste diversion and resource recovery	Decrease residential garbage generation rate (kg per capita)	Improving
		Increase the percentage of locally generated waste recycled (used) in road rehabilitation	Improving
	1.3 Protect, preserve, and restore the natural environment, including	Increase the total number of trees planted in private properties (cumulative over the plan)	Improving
		Increase the intensification rate in built-up areas of Durham	Improving

Goal Area	Priority	Key Performance Indicator	2023 Trend Rating
	greenspaces, waterways, parks, trails, and farmlands	<i>Climate Adaptation – this indicator is in development and will measure the implementation of climate adaptation programs in Durham.</i>	Not Available
	1.4 Demonstrate leadership in sustainability and addressing climate change	Decrease Regional Corporate GHG emissions	Stable
		Increase the percentage of zero emission vehicles in the Regional light duty fleet (including battery electric, plug-in hybrid electric, and hydrogen fuel cell vehicles).	Improving
		Increase the total number of Regional facilities that have undergone a feasibility study for deep energy retrofits (cumulative over the plan)	Improving
	1.5 Expand sustainable and active transportation	Increase the total number of new kilometres added to the regional cycling network (cumulative over the plan)	Improving
Increase the annual number of Durham Region Transit (DRT) service revenue hours delivered (scheduled service)		Stable	
Goal 2: Community Vitality	2.1 Revitalize existing neighbourhoods and build complete communities that are walkable,	Increase the total percentage of bus stops throughout the network that are constructed or retrofitted to support active transportation and integration with other modes of transportation.	Stable

Goal Area	Priority	Key Performance Indicator	2023 Trend Rating
	well-connected, and have a mix of attainable housing	Approval of Major Transit Station Area policies by Ministry of Municipal Affairs and Housing (MMAH)	Stable
		Increase the total number of units approved through the affordable housing incentive program (cumulative over the plan)	Meets Target
		Increase the annual percentage of children and youth that walk or cycle to school	Not Available
	2.2 Enhance community safety and well-being	Approval of the Community Safety and Well-being Plan	Meets Target
		Improve the annual percentage of Canadian Triage and Acuity Scale 1 (CTAS 1) Response Times within Target	Not Improving
		Decrease the annual number of collisions on Durham roads resulting in injuries or fatalities	Meets Target
		Decrease the annual Durham Region Transit (DRT) preventable collision rate	Improving
	2.3 Influence the social determinants of health to improve outcomes for vulnerable populations	Increase the number of hours of EarlyON programming delivered	Improving
		Increase the number of clients served through Community Outreach and Hubs	Improving
		Decrease the percentage of households reporting food insecurity	Stable

Goal Area	Priority	Key Performance Indicator	2023 Trend Rating
	2.4 Support a high quality of life for all through human services delivery	Increase the average hours of direct nursing care per resident in Long-Term Care	Improving
		Increase Long-Term Care Resident satisfaction	Stable
		Maintain above average mental health symptom improvement during counselling	Meets Target
		Increase the number of licensed Child Care spaces in Durham	Improving
		Increase the percentage of eligible low-income seniors seen in dental clinic	Improving
		Increase the total number of COVID-19 vaccination doses administered (cumulative over the plan)	Stable
		<i>Alternative Patient Care Models for Paramedic Services – This indicator is in development and will measure the implementation of the provincial expansion of patient Treat & Refer, Treat & Release, and Alternative Transport Destinations models for 9-1-1 paramedic responses by Paramedic Services.</i>	Not Available
	2.5 Build a healthy, inclusive, age-friendly	Increase the annual percentage of adults who rate their sense of belonging to the local community as strong or very strong	Stable

Goal Area	Priority	Key Performance Indicator	2023 Trend Rating
	community where everyone feels a sense of belonging	Increase the percentage of Durham Region employees reporting a positive sense of inclusion	Not Available
		Increase the total percentage of scheduled service bus stops that meet AODA accessibility requirements	Improving
		Increase the total percentage of Regional traffic control signals with countdown pedestrian signals	Stable
Goal 3: Economic Prosperity	3.1 Position Durham Region as the location of choice for business	Increase the annual number and percentage of new businesses in Durham	Stable
	3.2 Leverage Durham’s prime geography, social infrastructure, and strong partnerships to foster economic growth	Increase the total number of business/business organizations included on local directories	Stable
		Increase the annual Regional Economic Development social media growth	Meets Target
		Increase the total amount of new commercial and industrial investment in Durham Region (cumulative over the plan).	Improving
	3.3 Enhance communication and transportation networks to	Increase the total kilometres of Durham–Scarborough Bus Rapid Transit (DSBRT) infrastructure constructed (cumulative over the plan)	Not Available

Goal Area	Priority	Key Performance Indicator	2023 Trend Rating
	better connect people and move goods more effectively	Increase the total kilometres of Regional Broadband Network fibre backbone infrastructure constructed (cumulative over the plan)	Improving
		Increase the total kilometers upgraded to 'full load' on the Region's Strategic Goods Movement Network (cumulative over the plan)	Stable
	3.4 Capitalize on Durham's strengths in key economic sectors to attract high-quality jobs	Increase the total number of Environment, Engineering, and Energy (EN3) companies interacted with for business development	Improving
		Increase the annual number of business investment inquiries	Improving
		Increase the annual employment growth in Durham	Improving
	3.5 Provide a supportive environment for agriculture and agri-food industries	Increase the percentage of wastewater solids re-use on agricultural lands	Meets Target
		Increase the total number of facilities that can process food or meat	Improving
		Maintain the total acres of available Durham farmland	Not Improving
		Increase annual gross farm revenue	Improving
	Goal 4: Social Investment	4.1 Revitalize community housing and improve housing choice,	Increase the annual number of supported households that remained housed after six months
Increase the total number of newly initiated affordable rental housing supply units for low and moderate-			Improving

Goal Area	Priority	Key Performance Indicator	2023 Trend Rating
	affordability, and sustainability	income households (cumulative over the plan)	
		Increase the total funding committed by the Region to new affordable rental housing supply units for low- and moderate-income households (cumulative over the plan)	Improving
	4.2 Build awareness and community capacity to address poverty	Increase the annual number of Getting Ahead program sessions and reach	Below Target
		<i>Community Social Investment Framework – this indicator is in development and will measure the implementation of the Community Social Investment Framework when launched.</i>	Not Available
	4.3 Demonstrate leadership in poverty prevention	Decrease the annual number of people actively experiencing chronic homelessness	Not Improving
		Increase the total percentage of priority neighbourhoods dwellings within 800m of transit service	Meets Target
		Decrease the annual average fare paid by social assistance clients using the Transit Assistance Program (TAP)	Meets Target
	4.4 Expand access to existing life stabilization programs	Increase the number of client interactions for the Primary Care Outreach Program (PCOP)	Improving
		Increase the percentage of people receiving social assistance who report their lives are more stable as a result of having access to	Meets Target

Goal Area	Priority	Key Performance Indicator	2023 Trend Rating
		counselling and mental health services	
		Increase the number of individuals connected to developmental services & supports	Meets Target
Goal 5: Service Excellence	5.1 Optimize resources and partnerships to deliver exceptional quality services and value	Increase number of Durham Transit revenue rides	Meets Target
		Increase the number of applied research partnerships with academic institutions.	Stable
		Increase the value provided to partners under Regional Legal retainer agreements	Improving
		Approval of the Intelligent Communities Framework	Meets Target
		Increase the percentage of Durham Local Immigration Partnership (DLIP) participants who have improved their ability to co-ordinate and refer services as a result of participating in the DLIP	Improving
		Increase the percentage of respondents satisfied with program development and planning tools developed and shared by the Durham Local Immigration Partnership (DLIP)	Stable
	5.2 Collaborate for a seamless service experience	Increase the total number of call centers consolidated	Improving
		Increase the annual percentage of first contact resolution	Not Available

Goal Area	Priority	Key Performance Indicator	2023 Trend Rating
		Increase the percentage of DRT customers crossing Durham-Toronto border	Stable
	5.3 Demonstrate commitment to continuous quality improvement and communicating results	Increase the annual number of opportunities for public engagement with budget process	Stable
		Maintain 100% compliance with provincial regulation on asset management plans	Meets Target
		<i>Data Analytics Program – this indicator is in development and will measure the impact of data analytics initiatives at Durham Region.</i>	Not Available
	5.4 Drive organizational success through innovation, a skilled workforce, and modernized services	Increase the percentage of electronic supplier payments	Improving
		Increase the number of services for which e-commerce is supported though 311	Stable
		Increase the number of customers enrolled in myDurham Water	Improving
		Increase the percentage of applications submitted electronically via the PLAN-it portal	Not Available
		Increase the total number of business units migrated to electronic records in SharePoint (cumulative over the plan)	Improving

If this information is required in an accessible format, please contact 1-800-372-1102 ext. 2564.



The Regional Municipality of Durham

Report

To: Committee of the Whole
From: Commissioner of Planning and Economic Development, Commissioner of Finance and Commissioner of Works
Report: #2024-COW-22
Date: June 12, 2024

Subject:

Durham Meadowway Visioning Study – Project Outcome and Next Steps, File# D21-50-50

Recommendation:

That the Committee of the Whole recommends to Regional Council:

- A) That Regional Council endorse the Durham Meadowway Visioning Study as the framework and strategy to implement the active transportation corridor and linear park, forming Stage 1 of the project;
- B) That Regional Council authorize the Commissioner of Planning and Economic Development to negotiate and execute a Memorandum of Understanding between the Region and the City of Pickering, Town of Ajax, Town of Whitby and City of Oshawa, outlining a framework for the Region to cost-share 20 per cent (estimated at \$240,000) and the affected area municipalities cost-sharing 80 per cent of the Preliminary Design study for the Durham Meadowway trail, based on their respective uncompleted portion of the Durham Meadowway, subject to the approval of the Commissioner of Finance and Regional funding through the Region's 2025 Business Planning and Budgets process; and

- C) That a copy of this report and Council resolution be sent to the City of Pickering, Town of Ajax, Town of Whitby, City of Oshawa, Durham OneNet Inc., Toronto and Region Conservation Authority, Central Lake Ontario Conservation Authority, Parks Canada, the City of Toronto, Infrastructure Ontario and Hydro One Networks Inc.
-

Report:

1. Purpose

- 1.1 On March 20, [Report #2024-COW-11](#) was presented to Committee of the Whole, which included the following recommendations to Regional Council:
- a. That Regional Council endorse the Durham Meadoway Visioning Study as the framework and strategy to implement the active transportation corridor and linear park, forming Stage 1 of the project; and
 - b. That Regional Council authorize the Commissioner of Planning and Economic Development to negotiate and execute a Memorandum of Understanding between the Region and the City of Pickering, Town of Ajax, Town of Whitby and City of Oshawa, outlining a framework for the Region to cost-share 20 per cent (estimated at \$240,000) and the affected area municipalities cost-sharing 80 per cent of the Municipal Class Environmental Assessment study for the Durham Meadoway trail, subject to the approval of the Commissioner of Finance and Regional funding through the Region's 2025 Business Planning and Budgets process.
- 1.2 On March 27 at Regional Council, the matter was referred back to staff. Through its deliberations, Regional Council was generally in support of the Visioning Study, but requested a follow-up report before the summer recess to review cost-sharing and project management approaches for the design work needed to implement the Durham Meadoway. In particular, it was noted that portions of the trail have already been built in some areas and some wanted assurance the recommended approach is fair and equitable.
- 1.3 The purpose of this report is to address Regional Council's request and provide additional information on potential cost-sharing and project management approaches for the Durham Meadoway.

2. Durham Meadoway Visioning Study – Stage 1

- 2.1 [Report #2024-COW-11](#) provided background information and an overall summary of the Durham Meadoway Visioning Study, including a link to the Visioning Study report.
- 2.2 The completion of the Study as Stage 1 of the project forms an important milestone for the Durham Meadoway. It showcases the potential for the Durham Meadoway and creates a cohesive vision for what can be a legacy project in Durham. Accordingly, it is recommended that the Durham Meadoway Visioning Study be endorsed as the framework and strategy to implement the active transportation corridor and linear park, and that Stage 2 advance as one project to maximize efficiencies.

3. Preliminary Design for the Durham Meadoway – Stage 2

- 3.1 Stage 2 involves undertaking a Municipal Class Environmental Assessment (EA) study for the Durham Meadoway project to advance the design for the multi-use path and identify the locations for gateways, amenities and other features along the route including proposed secondary uses on Hydro One transmission corridor lands.
- 3.2 Since the March Committee of the Whole report was prepared, the province has proposed revoking the Municipal Class EA process and creating a streamlined Municipal Project Assessment Process (MPAP). Of note, no municipal transportation projects are included as part of the MPAP, meaning that the Durham Meadoway would not be subject to an EA process if the proposal to revoke the Municipal Class EA process is approved. In the likelihood that the Municipal Class EA process is revoked by 2025, the Stage 2 work would be transformed into a Preliminary Design¹ study rather than a Municipal Class EA Study, and is referred to as such in Recommendation B.
- 3.3 Although potentially no longer subject to an EA process, the Durham Meadoway Preliminary Design would require the same environmental and technical studies, not only to meet Hydro One design reviews but also to provide important background information towards obtaining the necessary environmental permits and approvals from various agencies. Additional public and Indigenous consultation and project

¹ A Preliminary Design takes a project to a 30 per cent level of design, which is consistent with the Municipal Class EA process for Schedule C projects (e.g., road widenings, new arterial road alignments or extensions and new off-road trails of a certain cost threshold). Environmental background studies and a review of alternative alignments are typically completed at this stage.

documentation, while no longer mandatory, would be highly recommended for the project as the design work advances. Notwithstanding the above, there may be opportunities to streamline the Preliminary Design study from an overall project management perspective without having to follow the Municipal Class EA process.

3.4 The environmental and technical studies required to support the Preliminary Design work, as noted in the Visioning Study, include the following:

- Stage 1 Archaeological Assessment
- Terrestrial and Aquatic Biologic Inventory
- Fluvial Geomorphological Assessment
- Hydrologic and Hydraulic Analysis
- Structural Engineering and Crossing Design of Watercourses
- Road Crossing Assessment
- Topographic Survey (where needed to supplement existing data)
- Provincial Secondary Land Use Program (PSLUP) Requirements (for land uses on transmission corridor lands)

3.5 Additional studies beyond the Preliminary Design work would be addressed during the detailed design and project tendering stage, which could include the following for specific sections of the trail and adjacent lands:

- Stage 2 Archaeological Assessment
- Additional hydrology, hydraulics and fluvial geomorphology assessments (to refine bridge placement and design)
- Wetland evaluation
- Geotechnical work
- Confirmation of utilities
- PSLUP requirements in terms of licencing of secondary land uses on transmission corridor lands from Infrastructure Ontario and Hydro One

3.6 As a follow-up to Regional Council deliberations, Regional staff have analysed three project management and cost-sharing options for the Stage 2 work in part to illustrate that the staff recommendation being put forward is the most fair and equitable for all:

- a. Option 1 – The Region of Durham lead the project management for the Preliminary Design study, based on length of unbuilt trail facilities for the Preferred Route with the Interim Routes in each area municipality. The Region would contribute 20% of the study cost with the Region’s share estimated at

\$240,000. Area municipal contributions are based on the percentage of the future total length of multi-use path that needs to be constructed, using the length of the Preferred Route with the Interim Routes for each of the four benefitting area municipalities. This is the same cost-sharing arrangement to what was presented in March COW report. Area municipalities would be co-proponents with the Region for the project.

- b. Option 2 – Each area municipality would lead the project management for the Preliminary Design work within their own boundaries, also based on length of unbuilt trail facilities for the Preferred Route with the Interim Routes in each area municipality, with the Region contributing an estimated \$240,000 of that cost. The Region would be a co-proponent for each of the four area municipal studies and would provide a coordinating role in terms of achieving the overall vision for the project.
- c. Option 3 – Each area municipality leads the project management for the Preliminary Design work within their boundaries, also based on length of unbuilt trail facilities for the Preferred Route with the Interim Routes in each area municipality, with the Region not contributing to any of the Preliminary Design cost. The Region would provide a supporting role and work with the area municipalities in terms of achieving the overall vision for the project through the four area municipal studies.

3.7 Table 1 provides Regional and area municipal cost estimates for each of the project management and cost-sharing options, assuming the \$1.2 million cost estimate for the Preliminary Design study.

3.8 For Options 1 and 2, a Memorandum of Understanding (MOU) is proposed to outline Regional and area municipal roles/responsibilities for the execution of the Preliminary Design work and Regional funding contributions. An MOU should also be created under Option 3 between the Region and each area municipality, but only in terms of a supporting and review role.

3.9 Under Option 2, a 10 per cent increase in the costs for each area municipality was assumed with the Region's contribution estimate at up to \$240,000. This increase is to account for additional overall costs for the Preliminary Design as a result of having four individual projects to manage (as opposed to one project under Option 1), not only in terms of conducting the technical and environmental studies, but also project management and public consultation costs. As such, the Region's \$240,000

combined contribution to the area municipalities overall amounts to 18.5 per cent rather than 20 per cent of the overall Preliminary Design cost.

3.10 Under Option 3, the same cost overall as for Option 2 was applied per area municipality, without any Regional contributions.

Table 1: Cost Sharing for Preliminary Design Study

Item	Pickering	Ajax	Whitby	Oshawa	Total
Existing MUP Length (km)	2.68	3.78	1.33	0.00	7.79
Future Unbuilt MUP Length (km)	8.77	3.37	8.61	6.37	27.12
Per cent of Future Unbuilt MUP Length	32.3	12.4	31.7	23.5	100.0

Option 1: One Co-ordinated Phase 2 Project

20 per cent Regional Cost Share Contribution (\$)	77,611	29,823	76,195	56,372	\$240,000
80 per cent AM Cost Share Contribution (based on unbuilt MUP) (\$)	310,442	119,292	304,779	225,487	\$960,000
Option 1 Total Cost (\$)	388,053	149,115	380,973	281,858	\$1,200,000

Option2: 4 Individual AM Phase 2 Projects (with Region in coordination role)

Regional Cost Share Contribution (up to \$240,000) (\$)	77,611	29,823	76,195	56,372	\$240,000
Individual AM Cost Share Contribution (based on unbuilt MUP) (\$)*	341,487	131,221	335,257	248,035	\$1,056,000
Option 2 Total Cost (\$)	419,097	161,044	411,451	304,407	\$1,296,000

Option 3: 4 Independently Led AM Phase 2 Projects (with Region in support role)

AM Preliminary Design Cost (\$)*	419,097	161,044	411,451	304,407	\$1,296,000
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Notes:

AM = Area Municipality; MUP = Multi-Use Path

Numbers may not add up due to rounding.

*10 per cent added to the Option 1 AM cost share to account for increased project management, scoping and consultation costs.

3.11 Under Options 2 and 3, an area municipality could include detailed design work as part of the project (refer to Sections 3.4 and 3.5), but the Region has only included cost-sharing of the Preliminary Design components in the budget forecast for 2025.

4. Advantages for Region Leading/Coordinating the Project

4.1 As demonstrated in Section 3 above, Option 1 (with the Region leading the Preliminary Design study for the Durham Meadoway) offers several advantages over Options 2 and 3:

- a. Economies of scale for engineering and technical studies – Having one consultant team undertake the work to support Preliminary Design, in theory, would be cheaper than having separate project teams for each of the four area municipalities. Not only would there be potential savings in terms of scoping the environmental fieldwork, but also for project management and consultation costs.
- b. Hydro One and Infrastructure Ontario technical review – Having one submission of the Durham Meadoway trail alignment for the preliminary design, rather than as four separate studies that potentially could be at different levels of detail, would make the review process easier for these agencies and clearer for the Region and area municipalities from a project management perspective.
- c. Design consistency for the project – Creating consistency in terms of the design of the multi-use path, gateways, user amenities such as benches and the identification of secondary uses such as parks on the transmission corridor lands would be easier to achieve as one project than as four separate projects. Achieving a Preliminary Design level of detail for the entire corridor would also be easier as one project, as physical and budget realities may cause the work to be undertaken in different timeframes if split between the area municipalities.
- d. Coordinated public and Indigenous consultation – An approach to gathering public and Indigenous input on the design for the multi-use path as well as related amenities would be much easier to achieve as one project. Having four separate projects for consultation may be confusing and counterproductive to garner constructive feedback and meaningful engagement.

- 4.2 Given the above observations, it is recommended that Option 1 be pursued to procure, project manage and cost-share the Preliminary Design work components for the Durham Meadoway.
- 4.3 Accordingly, under Option 1, it is recommended that a MOU between the Region and the City of Pickering, Town of Ajax, Town of Whitby and City of Oshawa, outlining a framework for the Region to cost-share 20 per cent (estimated at \$240,000) and the affected area municipalities cost-sharing 80 per cent of the Preliminary Design study for the Durham Meadoway trail, subject to the approval of the Commissioner of Finance and Regional funding through the Region's 2025 Business Planning and Budgets process.
- 5. Review of Region-Wide Development Charge Background Study for Active Transportation Infrastructure**
- 5.1 Through Committee and Council deliberations, Regional staff were requested to review how active transportation infrastructure is currently included in the 2023 Region-Wide Development Charge (DC) Background Study, and how the Durham Meadoway could be considered in a future DC Study.
- 5.2 Currently, cycling facilities on the Regional road components of the Primary Cycling Network (PCN), as identified in the Regional Cycling Plan (RCP), 2021, are funded in two ways:
- a. For cycling facilities that are part of a road widening or reconstruction project, Development Charge (DC) contributions are based on the growth-related share of the road project.
 - b. For cycling facilities that are standalone or infill projects (not tied to a road widening or reconstruction project), the Benefit to Existing (BTE) share is 77 per cent in the 2023 DC Study to reflect that these new facilities will benefit existing as well as future residents of Durham. Therefore, a significant portion of these cycling facilities are required to be funded through property taxes.
- 5.3 The Region funds the costs of the platform for multi-use paths within the Regional Road right-of-way (land acquisition, consulting design fees, utility relocation, grading and customized bridge structures) and the area municipality funds the costs of granular, asphalt, signage, markings and future operating and maintenance costs. For infill projects, the design fees are shared between the area municipality and Region through a funding formula based on the Region's share of construction cost

for the particular project. The Region is not responsible to fund multi-use paths located outside of the Regional Road right-of-way.

- 5.4 Area municipalities are responsible for recreational trails and thus these facilities are not included in Regional DCs.

6. Relationship to Strategic Plan

- 6.1 This report aligns with/addresses the following strategic goals and priorities in the Durham Region Strategic Plan:

- a. Goal 1, Environmental Sustainability: Objective 1.1: Protect, preserve and restore the natural environment, including greenspaces, waterways, parks, trails, and farmlands.
- b. Goal 1, Environmental Sustainability: Objective 1.5: Expand sustainable and active transportation.
- c. Goal 2, Community Vitality: Objective 2.1: Revitalize existing neighbourhoods and build complete communities that are walkable, well-connected, and have a mix of attainable housing.
- d. Goal 3, Economic Prosperity: Objective 3.3: Enhance communications and transportation networks to better connect people and move goods efficiently.
- e. Goal 4, Social Investment: Objective 5.1: Optimize resources and partnerships to deliver exceptional quality services and value.

7. Conclusion and Next Steps

- 7.1 The Durham Meadoway project has captured the imagination of many Durham residents as a significant recreational and tourism asset for the Region. It is recommended that the necessary actions be taken so that this momentum can continue, in particular the preparation of a Preliminary Design study to advance the Durham Meadoway beyond the Visioning Study (Stage 1) to Stage 2.
- 7.2 Pending approval of the recommendations in this report by Regional Council, Regional staff will work on preparing a MOU between the Region and City of Pickering, Town of Ajax, Town of Whitby and City of Oshawa for the Preliminary Design study and will report back to Regional Council with any concerns raised and any updated recommendations stemming from the MOU discussions.

- 7.3 Following execution of the MOU, Regional staff will commence work on the terms of reference for the Preliminary Design study in collaboration with staff from the area municipalities and the conservation authorities (TRCA and CLOCA). The projected procurement timeline to prepare a Request for Proposal (RFP) and award the project is Q2 of 2025. The Preliminary Design study is proposed to take about 18-months to two years to complete.
- 7.4 The proposed funds for the Preliminary Design study from the Region (approximately \$240,000) will be considered as part of the annual budget process for 2025 and in consideration of other Regional budget priorities.

8. Attachments

Attachment 1: [Report #2024-COW-11](#)

Respectfully submitted,

Original signed by

Brian Bridgeman, MCIP, RPP, PLE
Commissioner of Planning and
Economic Development

Original signed by

Nancy Taylor, BBA, CPA, CA
Commissioner of Finance

Original signed by

Ramesh Jagannathan, MBA, M.Eng.,
P.Eng., PTOE
Commissioner of Works

Recommended for Presentation to Committee

Original signed by

Elaine C. Baxter-Trahair
Chief Administrative Officer

If this information is required in an accessible format, please contact 1-800-372-1102 ext. 2071



The Regional Municipality of Durham Report

To: Committee of the Whole
From: Chief Administrative Officer
Report: #2024-COW-23
Date: June 12, 2024

Subject:

Durham Region's 2025 Strategic Plan Community Engagement Summary

Recommendations:

That the Committee of the Whole recommends to Regional Council:

- A) That a copy of report #2024-COW-23 be received for information; and
- B) That the recommended next steps in section 7 be endorsed; and
- C) That a copy of this report be forwarded to the local area municipalities within the Region of Durham.

Report:

1. Purpose

- 1. The purpose of this report is to share a summary of the engagement phase activities and the preliminary themes identified that will support the development of Durham Region's 2025 Strategic Plan.

2. Background

- 2.1 Durham Region's Strategic Plan is the guiding document that outlines how we deliver a sustainable future through leadership, collaboration, innovation and environmental stewardship.
- 2.2 The current Durham Region Strategic Plan is approaching its end in December 2024. Work is underway to develop Durham Region's 2025 Strategic Plan.

- 2.3 The Strategic Plan will guide the direction of our work over the next few years. It will outline how we will continue to deliver a sustainable future and act as a compass to advance our work to achieve the futures we want to create.
- 2.4 On September 27, 2023, Regional Council endorsed the process to develop Durham Region's 2025 Strategic Plan and governance structure, as detailed in the Committee of the Whole report [#2023-COW-32](#).
- 2.5 Durham Region's 2025 Strategic Plan is being developed in five phases:
 - a. Phase 1: Knowledge Gathering (February – May 2023) – Complete
 - b. Phase 2: Planning (June – December 2023) – Complete
 - c. Phase 3: Engagement (January – June 2024) – Complete
 - d. Phase 4: Writing and Approvals (July – December 2024)
 - e. Phase 5: Implementation (January 2025 – Onward)
- 2.6 In January 2024, staff launched the engagement phase of the project. The first engagement activity was a full-day planning session with Regional Council on January 25, 2024.

3. Previous Reports and Decisions

- 3.1 Committee of the Whole [#2023-COW-32](#)
- 3.2 [Regional Council September 27, 2023](#)
- 3.3 [Special Regional Council Meeting January 25, 2024](#)

4. Phase 3: Engagement – What We Did

- 4.1 As part of the process to develop Durham Region's 2025 Strategic Plan, the project team developed an engagement plan outlining key partner, level of engagement, strategies and timelines. The objectives for the project's engagement phase were:
 - a. To increase community awareness of the process to develop Durham Region's 2025 Strategic Plan.
 - b. To ensure residents had the opportunity to have their say in the future of Durham Region.
 - c. To obtain input from the community on what they would like to see reflected in Durham Region's 2025 Strategic Plan.

- 4.2 The public engagement portion of the Strategic Planning process was launched on March 1, 2024, with the goal of reaching and receiving feedback from as many residents across the region as possible.
- 4.3 Durham Region's online engagement platform, [Your Voice Durham](#) was the primary engagement tool and featured project materials, an events calendar, the online survey and youth art contest.
- 4.4 Throughout the month of March, the team executed a variety of communications tactics to encourage the community to visit the website. A total of 25 posts were shared to the Region's three social media accounts (Facebook, X, and LinkedIn). There were 8,400 website visits in the month of March.
- 4.5 A total of 24 pop-up events were scheduled throughout the Region to support face-to-face engagement with residents, providing Regional staff with an opportunity to speak with residents from each of the eight local area municipalities. Approximately 900 face-to-face interactions were generated through events. Comments gathered through these interactions were included in the qualitative data analysis.
- 4.6 A total of 13 presentations were delivered, reaching over 100 people. Delegations to all eight local area municipalities were completed between February 20 and March 25, 2024. Staff also presented to four Committees of Council and to the Durham Economic Development Task Force to reach representatives from the business community.
- 4.7 A total of 700 flyers and 1,000 post-cards were distributed/posted in libraries, seniors centres, welcome centres, community, and recreation centres and handed out to residents.
- 4.8 Elementary and secondary school students were encouraged to share their future vision for Durham Region by submitting their original visual or digital artwork through the website. The theme of the contest was "Designing Our Future."
- 4.9 In addition, an internal engagement strategy was implemented to gather input from approximately 400 staff, including department heads, directors, managers and front-line staff. Feedback was obtained from planning workshops with staff.
- 4.10 Engagement efforts resulted in approximately 1,400 in-person interactions; a total of 2,149 survey responses received and a total of 20 youth art contest submissions received.
- 4.11 The feedback received from the online survey and discussion with residents informed four additional community conversations throughout the month of May with community partners, business representatives and youth. A total of 84 people attended the community conversations representing 47 organizations/groups. These community conversations were used to generate ideas to inform the Regional Strategic Plan.

5. Preliminary Engagement Results – What We Heard

5.1 The following section contains a summary of the preliminary themes identified from community consultation data. They include data obtained from recent Regional public consultation efforts, the Strategic Plan community survey, in-person interactions at community pop-up events, the youth art contest, internal engagement, and community conversations with partners, business leaders, and youth.

5.2 Based on a preliminary analysis of community consultation data, the following defining characteristics of life in Durham Region were identified:

- Access to nature, including parks, trails, waterfronts and greenspace;
- Mix of rural and urban spaces;
- Sense of safety;
- Diverse and inclusive community; and
- Unique local industries, including agriculture, energy, and small businesses.

5.3 Based on a preliminary analysis of community consultation data, the data was clustered and grouped into the key issues for Durham Region. They are listed as follows:

- **Cost of Living:** Challenges were identified for the rise in cost of living, with a significant focus on housing and rental costs. Concerns were expressed about inadequate support for an increasing number of residents experiencing homelessness. Food insecurity was also identified as a growing issue. Affordability challenges for childcare, young people, and seniors were commonly highlighted. Property taxes and the average living wage were identified as contributors to affordability challenges in the region.
- **Rapid Growth:** A sense that Durham Region is growing at a rapid rate and that corresponding improvements in urban planning, infrastructure, and services have not been able to keep up with the pace of change. Infrastructure, affordable housing, and service delivery including transit, have been challenged to meet growing needs. Concerns were raised around land use planning decisions that do not protect agricultural lands, natural habitats for wildlife and natural surroundings. Overall, a perceived inadequate response to rapid growth is recognized as the primary issue affecting Durham Region.
- **Infrastructure:** Road maintenance and capacity was identified as lagging behind demand in the region. Traffic and road congestion was identified as an issue, with specific references to urban planning for housing developments and density challenging the current transportation infrastructure. There was a sense that housing is being built without thoughtful planning of services or

access to green space, upgrading of infrastructure, or other amenities beyond homes, such as trails, bike lanes, and side walks. Access to high-speed internet services were identified as critical.

- **Community Well-being:** An observed increase in people experiencing homelessness and those living with mental health and addictions challenges in the community. In some cases, increased homelessness visible within community spaces caused uneasiness and concern.
- **Safety:** Concerns about safety for pedestrians in areas without sidewalks, general road safety, crime, and police services were expressed.
- **Service Delivery:** A sense that existing community services and resources, including housing and health services are under strain associated with a growing and changing population. A growing need for health services to support an aging population was identified, including emergency response. Concerns were identified around value for money and responsible budgeting of tax dollars for corresponding improvements in core services. The need for partnerships and collaboration was highlighted to support the coordination of service delivery. Perceived inequitable service delivery to northern parts of Durham was also identified as a challenge.
- **Transit:** Input focused on the need for reliable and affordable transit options to address sustainability, cost of living, and mobility for students and seniors. Issues of service delivery to northern Durham were shared.
- **Health Services:** A need for more health services in the region was identified, including primary care providers, hospitals, and paramedic/emergency services. Also identified was an increased need for services to support people living with mental health and addiction challenges, as well as a growing demographic of seniors.
- **Leadership:** Comments related to the lack of shared vision for the region. Concerns were raised around responsible budgeting and decision-making to ensure investments align with community needs. The need for improved collaboration with all levels of government was highlighted. Lack of trust in government was identified as a theme.
- **Community Connection:** Lack of social cohesion and common identity, changing demographics, the need for representation, lack of public spaces to gather and build community were all cited as challenges. The loss of local media was also identified as a contributor to the lack of social cohesion. Social isolation and the lack of community engagement were also identified as themes.
- **Climate Change Impacts:** Adverse impacts due to climate change and severe weather were identified for many areas of living in the region, including

contributions to issues surrounding affordability, food security, and health. There was a sense that current development planning does not address climate challenges. Loss of agricultural land and climate impacts on agriculture were also identified as concerns.

- **Technology:** Concerns regarding job loss due to automation and the shift in labour markets was expressed as a key concern. The need for cyber security due to increasing threats was raised. Social media was noted as an enabler to the creation of bias, mistrust, and misinformation. It was noted that access to technology for civic engagement may not be possible for all segments of the population.

5.4 Based on a preliminary analysis of community consultation data, the data was clustered and grouped into the key aspirations for Durham Region. They are as follows:

- **Adapting to Growth:** Desire to have a clear vision and proactive plans in place for careful growth, including infrastructure and waste management to support growth. Density was identified as a precursor to sustainable and effective service delivery, particularly for transit system improvements however, maintaining greenspace in built-up environments was also identified as important to well-being. The need to adapt to meet the needs of the growing and changing population was also identified as a key theme, specifically regarding the delivery of the Region's programs and services.
- **Service Delivery:** Desire for increased transparency and accountability, responsible budgeting, taking a proactive and preventative approach, working with all levels of government and partners in the community, effective core service delivery, and service innovation.
- **Supports for Vulnerable Populations:** Access to services for an aging population, children and youth, newcomers, refugees and asylum seekers, those who are experiencing homelessness, low-income residents, and those who are living with mental health and addiction issues.
- **Environmental Protection and Sustainability:** Improved access to nature, preservation of green spaces in neighbourhoods, preservation of agricultural lands, safeguarding of wildlife. Increased urban density to allow for efficient transit and service delivery. Thoughtful development, expanded transit services, and clean energy are expected to support environmentally sustainable growth.
- **Mobility Options:** Desire for improved public transit to reduce car dependency, active transportation, and walkable neighbourhoods with access to nature and amenities.

- **Business and Employment:** Attraction and retention of businesses and employers who offer a variety of employment opportunities, especially for youth. Increase in skilled workers, supports for local businesses tourism, and newcomers are needed. Strengthening of current industry and diversification and development of new industries was identified. Post-secondary institutions were identified as opportunities for skills training for the future.
- **Civic Engagement:** Desire for more opportunities for the public to be heard by leaders, to access information, and contribute to regional decision-making. A desire for improved Indigenous relations and was also identified.
- **Public Space:** Welcoming and accessible public spaces to build community and share in community arts, culture, and entertainment events locally that are free of charge. Waterfront development to create beautiful natural public spaces and thriving business spaces was identified.
- **Recreation and Leisure:** Local recreation opportunities, arts and cultural events, community gatherings, and entertainment. In particular, the aspiration for youth and senior recreation opportunities was identified. Also, the awareness and communication of these opportunities was noted.
- **Technology and Innovation:** Opportunity to use new technologies and methods to modernize regional practices, deliver efficient programs and services, and enable community engagement.

5.5 For additional information, please refer to Attachment 1.

6. Relationship to Strategic Plan

6.1 This report supports the development of Durham Region's 2025 Strategic Plan.

7. Next Steps

7.1 If approved, Regional staff, in collaboration with the Strategic Plan Advisory Group and the consultant, will complete further analysis to explore the data within the above mentioned themes and draft Durham Region's 2025 Strategic Plan.

7.2 The draft plan will be presented back to the community for additional input in the Fall 2024 and then presented to Regional Council for final review and endorsement in December 2024.

7.3 If endorsed, it is recommended that a copy of #2024-COW-23 be forwarded to the local area municipalities within the Region of Durham.

7.4 For additional information, contact: Andrea Smith, Policy Advisor, Corporate Initiatives or Lesley-Ann Foulds, Manager, Corporate Initiatives.

8. Conclusion

- 8.1 The Strategic Initiatives team would like to thank Regional Council, staff, partners, and residents who participated in the engagement activities. The feedback received will be used to draft Durham Region's 2025 Strategic Plan.

9. Attachments

Attachment #1: Community Survey Results (enclosed)

Attachment #2: Community Survey (enclosed)

Attachment #3: Presentation

Prepared by: Andrea Smith, Policy Advisor, Corporate Initiatives, and Lesley-Ann Foulds, Manager, Corporate Initiatives.

Approved by: Sandra Austin, Executive Director, Strategic Initiatives.

Respectfully submitted,

Original Signed By

Elaine C. Baxter-Trahair
Chief Administrative Officer

Attachment #1 Community Survey Results

Part 1: Where are we now?

Question 1

Respondents were asked to rate statements below on a scale from 1 to 5, where 1 is strongly disagree and 5 is strongly agree. The following table shows the percentage of respondents who agreed or strongly agreed with the statement.

Table 1. Ratings summary.

Statement	Percentage of Respondents who Agree or Strongly Agree
I plan to live in Durham Region over the next 5-10 years.	73%
I feel welcome wherever I go in Durham Region.	58%
Durham Region delivers services well.	52%
Durham Region supports those in need.	50%
The future feels positive and bright for Durham Region.	47%
Durham Region is a safe place.	41%
There is a sense of prosperity in Durham Region.	40%
Durham Region has strong leadership.	39%
Durham Region is ready for the future.	37%
Infrastructure in Durham Region is in excellent shape.	33%
Current public transit serves the public well.	32%
Durham Region is a leader in environmental sustainability.	32%

Question 2

Respondents were asked to share any other statements they would use to describe Durham Region. From the written responses received (approximate total of 955), the following overarching themes emerged:

- Growth and Infrastructure
- Leadership
- Affordability
- Safety
- Transit

Examples of qualitative feedback received from respondents include:

- “Fast growing but missing infrastructure to support the needs. This includes affordable housing, child care, addiction and mental health services... There needs to be an effort made from all levels to help.”
- “Rapidly changing and growing, prompting a need to foster community cohesion amidst an increasingly diversifying population.”
- “I am a 28-year-old adult that has lived in Durham all my life and want to continue to live here. Housing is very unaffordable in Durham Region and it makes me question if I can live here in the future. The only way I can live here now is by living with family. Please do more to address this and pressure the levels of government to do the same.”
- “Continues to have the charm of rural and the amenities and opportunities of urban. Hoping this rural/urban balance will be maintained and respected by limiting urban sprawl as much as possible.”
- “Increased population size will require more infrastructure for roads and affordable housing. My desire for Durham Region is that there is affordable housing for all yet conservation and expansion of Durham Region's beautiful nature (parks, greenspace).”
- “I have lived in Durham Region since 1968 and have seen positive things happen. Please continue to make adjustments in public transit so that I can continue to age with dignity.”

Question 3

Respondents were asked to select up to five statements that best reflected how they feel about Durham Region. The table below shows the top responses.

Table 2. Summary of how respondents feel about Durham Region.

Statement	Percentage of respondents selected this statement
I am connected to nature in Durham Region.	48%
I feel safe in Durham Region.	40%
I am free to live the way I want in Durham Region.	36%
I am treated fairly in Durham Region.	34%
I can afford to live in Durham Region.	28%
Multi-generational living is possible in Durham Region.	26%
I live in a beautiful built environment.	25%
I have deep connections to my community in Durham Region.	19%
None of these statements reflect how I feel about Durham Region.	17%
My community has a lively, vibrant, and creative buzz.	11%
This place has tremendous entrepreneurial spirit and opportunity.	11%
My hard work and accomplishments are valued here.	11%
Other	3%

Question 4

From the written responses received (approximate total of 860), the following overarching themes emerged:

- Affordability

- Access to Nature
- Community
- Leadership
- Safety

Examples of qualitative feedback received from respondents include:

- “I am deeply saddened by the number of homeless residents that I see and the seemingly lack of services and safe spaces for them.”
- “I’ve lived in Durham for 25+ years ...I am very well connected to the community. Nature is reserved fairly well in Durham, lots of park areas, waterfront and conservation areas. I think there’s much for everyone in Durham.”
- “I feel my basic needs are met, but think this region has the opportunity to do things differently and not really taking advantage of that opportunity.”
- “As a working professional, I’m starting to feel like I can’t afford to live and work in Durham Region and have real concerns about where I will be in the next 5 years.”
- “As a senior and a renter, I have been priced out of Durham region and I worry about my future here. This is also a huge issue for new Canadians and refugees in this region.”
- “I generally feel safe except maybe when a lot of homeless people are gathered together on the trails. House prices have skyrocketed so my adult children have little chance of affording a home. There are many warehouses being put up and hopefully that brings jobs to the region, but it would be nice if some of the abandoned warehouses were re-developed.”
- “There are few events during the year that let us come together as a community. Or they are not well advertised in way that the general public can find, i.e. outside of community newspapers.”

Part 2: Share your thoughts and ideas

Question 5

Respondents were asked to select up to five areas of opportunity they thought were the most exciting for Durham Region over the next 10 years. The table below shows the top responses.

Table 3. Summary of areas of opportunity.

Opportunity	Percentage of respondents selected this opportunity
Public health services.	33%
Community safety.	32%
Affordable housing.	32%
New infrastructure.	29%
Quality of public space.	28%
Greener neighbourhoods.	27%
Public transit and mobility solutions.	27%
Responsible budgeting.	23%
Environmental sustainability and climate resilience.	21%
Clean energy production	20%
Businesses and investment.	19%
Post-secondary education.	18%
Income and housing supports.	17%
New technology.	17%
Social services.	16%
Skilled workers.	15%
Agriculture and agri-tourism.	14%
Public participation in governance and policy changes.	12%
Partnerships between public and private organizations.	8%
Other	4%

Question 6

From the written responses received (approximate total of 710), the following overarching themes emerged:

- Access to Nature
- Sustainability and Environment
- Growth
- Affordability
- Leadership
- Safety

Examples of qualitative feedback received from respondents include:

- “Healthy and green are critical. Neighbourhood should promote active transportation, walkability, and social connection for good mental health. Mental health services should be way more accessible - particularly for kids where early intervention can prevent more serious issues. It’s ridiculous that we all have to drive everywhere all the time. Plan neighborhoods within walking distance of where we need to go. These are a complex problem, new technology (ai) can help us get there.”
- “I think that the more the public gets involved in how we work and live, the better. I think civic engagement is the cornerstone of any thriving, connected community. We have the opportunity to expand our meaning of public health and community wellbeing and look at our collective health from a population and community perspective. We can be a leader in clean energy production and model green communities for other municipalities.”
- “Social and physical infrastructure are among the most important services the region can provide.”
- “I believe the Region needs a better response to issues that are becoming increasingly evident: homelessness, mental health/addictions, opioid crisis. This response cannot be to ignore or swept under the carpet. There are agencies in the Region doing work in these areas. Work with and support them. The answers don't have to lie exclusively on the Region.”
- “We need to place more value on agricultural lands and reduce urban sprawl into prime farmlands in the north. We should be increasing medium and high-density housing in urban areas where there is existing infrastructure and public transit.”

- “Durham Region is the last part of the GTA that still has the majority of its green space and farmland undeveloped. It has a unique opportunity to build communities while still protecting access to wildlife and nature in an unprecedented way for urban Ontario.”
- “As the region is poised to grow there is a tremendous opportunity to make bold decisions that make this region liveable for all by investing in infrastructure, transit and community spaces. We need places where people can gather in person, not behind screens, and the ability for people to make a life here, not just commute somewhere else to work.”
- “I think Durham could be a better place to live, even a desirable place, but there needs to be a lot of work done to fight car dependency, and to have real public spaces where people feel like gathering and spending time. Housing is also a concern here, but I think that since there's a push to densify in Durham there's opportunities to consider how to do that density in a more distributed model to make good third spaces in existing and new neighbourhoods.”

Part 3: The longer-term future

Question 7

Respondents were asked to imagine their life in Durham Region in 2035 and to select up to five areas that will have the biggest impact on them and their community. The table below shows the top responses.

Table 4. Summary of impact areas.

Areas	Percentage of respondents selected this answer
Affordability.	50%
Community safety.	33%
Aging population.	33%
Public health issues.	32%
Aging infrastructure.	30%
Urbanization and density.	27%
Trust in government.	26%

Mental health support needs.	26%
Severe climate change.	22%
Food insecurity.	20%
Immigration and newcomers.	20%
Safe and sustainable energy solutions.	16%
Waste management.	13%
Refugees and asylum seekers.	13%
Diversity and inclusion.	13%
Artificial intelligence.	12%
Loss of local media.	11%
Economic competitiveness.	11%
Sense of unity, versus polarization.	11%
Global unrest.	11%
Sense of belonging.	10%
Global pandemics.	6%
Other	1%

Question 8

From the written responses received (approximate total of 620), the following overarching themes emerged:

- Affordability
- Newcomers
- Growth
- Leadership

- Health Services

Examples of qualitative feedback received from respondents include:

- “Life in Durham in 2035 is marked by diversity, inclusivity, improved public health, a strong sense of belonging, and enhanced trust in government. These positive developments contribute to a thriving and cohesive community, where residents are empowered to contribute to and benefit from the shared prosperity and well-being of the region.”
- “In my community we are seeing a lot of newcomers which is contributing to diversity. There are opportunities to learn from other cultures which we rarely had before.”
- “Many more services are needed for our aging population and infrastructure. More Long-Term Care Homes and Senior Residences are desperately needed.”
- “There is already an aging population and aging infrastructure. i.e., roads, some building water main, lack of schools in appropriate places. So these need to be addressed. Affordability will be important as million-dollar homes are definitely not in the budget for most people. Working towards better waste management - recycling better, less reliance on single use products and more sustainable energy sources.”
- “Durham Region is completely unaffordable, rent-wise, and I don't think the average salary for people who actually work in the region covers the cost of living here. We have a large aging population which are not leaving their homes because the quality of retirement housing is low and the style is not desirable, and so we have a lot of underutilized housing. I also don't see partnerships with local First Nations, Inuit, Metis and urban Indigenous communities on this list but committing to all forms of Reconciliation, especially economic, has great opportunity to bring vibrancy, authenticity and justice to the Region.”
- “Durham seems to be changing rapidly with respect to the composition of the population and the challenges we face (i.e. cost of living, litter, economic development, etc.). I welcome change and especially the diverse population. But I am concerned that with diversity comes prejudice and polarization. I think the biggest thing will be to foster a community that cares for each other and is empathetic to each other, regardless of our personal journeys. I also want to ensure the region is championing Reconciliation with Indigenous Peoples, and helping the community live harmoniously with the Indigenous people of this land.”

Question 9

Respondents were asked which regional government services and programs they thought would be most important to them and their community over the next 10 years. The table below shows the top responses.

Table 5. Summary of services and programs.

Service or Program	Percentage of respondents selected this answer
Roads and infrastructure programs.	37%
Public health programs.	36%
Long-term care and senior's services.	36%
Police services.	30%
Housing and homelessness services.	30%
Transit services.	26%
Community safety and well-being programs.	25%
Regional planning for growth.	22%
Paramedic services.	22%
Waste management services.	18%
Climate change programs.	18%
Children's services.	16%
Regional budget planning.	16%
Income support services.	15%
Family services.	14%
Agriculture and rural economic development.	13%
Traffic safety programs.	11%
Access to information.	10%
Cycling infrastructure.	9%
Diversity, equity, and inclusion programs.	9%

Community engagement opportunities.	9%
Business services.	8%
Local arts and culture opportunities.	8%
Newcomer and immigrant support services.	7%
Tourism services.	5%
Other	1%

Question 10

From the written responses received (approximate total of 550), the following overarching themes emerged:

- Aging Population
- Growth
- Health Services
- Transit
- Safety

Examples of qualitative feedback received from respondents include:

- “Most importantly, we need to boost services for our aging population. We do not have enough long-term care and old age homes to support the next generation. We need more supports available to them to combat issues such as loneliness and depression, along side a wide range of physical ailments.”
- “A dramatically improved transit system is essential for quality of life/equity, offering mobility/affordable option to single vehicles, needed for economic prosperity of Region and reducing GHGs and air pollution.”
- “Durham health department provides consistently excellent service. So, for influenza clinics, every Durham resident should be able to get immunized through the health department. For example, your COVID clinics were A+.”
- “Let's focus on keeping our population healthy so that we can ease the burden on the health care system.”

- “Safe and accessible transportation is essential for any growing region or municipality, so these are quite important. Our communities are also heavily dependent on whether our most vulnerable are looked after, namely the homeless and low-income families.”
- “When planning for growth and inclusion community engagement is important. Need to include a diverse representation of views including from Indigenous Peoples, racialized people, aging population and people with disabilities. When developing new spaces ensure current spaces are maintained and available for all to feel included. Need to actively include views from the lived experiences of people in marginalized groups who interact and live in the Region.”

Question 11

Respondents were asked to provide any additional comments about their vision for the future of Durham Region. From the written responses received (approximate total of 695), the following overarching themes emerged:

- Leadership
- Growth
- Affordability
- Community
- Safety

Examples of qualitative feedback received from respondents include:

- “We need safe neighborhoods and open spaces where we can be active without fear of harm.”
- “Durham must protect its waterways, its forests, and its green space as much as possible. The outdoor opportunities available in Durham are unique and must remain a vital part of Durham’s expansion and development plans. Durham must also greatly improve its transit and infrastructure if it really plans to welcome more residents. Otherwise it will only welcome more traffic, more gridlock, and consequently more pollution and accidents.”
- “Align with the municipalities and get the job done.”
- “I think the future for Durham will be made or broken by how housing development and population growth is managed. Community focused development will be healthy, housing sprawl will not.”

- “I think Durham has a good future IF it invests into mobility and better urban planning. Safe, walkable, accessible neighbourhoods are the backbone of community and inclusion. Keeping people from being displaced due to hardship and affordability issues, keeps populations invested in their own neighbourhoods. I'd like to see better transit from neighbourhood to neighbourhood, better bike infrastructure, more ability to walk to places for your daily needs. More local activities and better parks.”

Part 4 – Tell us about yourself

All questions in Part 4 were voluntary. The demographic questions were designed in collaboration with the Diversity, Equity, and Inclusion division of the Region of Durham. Participants were asked to provide demographic information. The following tables provide an overview of the survey respondent demographics.

Table 6. Demographics – Connection with Durham Region.

Connection with Durham Region	Percentage of respondents selected this response *
I live in Durham Region.	85%
I work in Durham Region.	34%
I am a local business owner in Durham Region.	10%
I am a member of a community association and/or volunteer in Durham Region.	16%
I am employed by the Regional Municipality of Durham.	8%
I am employed by a local municipality.	2%
I prefer not to answer	3%
Other	3%

* Note: respondents were able to select more than one response to indicate their connection to Durham Region.

Table 7. Demographics – Municipality.

Municipality	Percentage of respondents
Town of Ajax	15%
Township of Brock	3%
Municipality of Clarington	17%
City of Oshawa	26%
City of Pickering	12%
Township of Scugog	4%
Township of Uxbridge	3%
Town of Whitby	4%
Skipped	16%

Table 8. Demographics – Age Group.

Age Group	Percentage of respondents
18 and under	1%
19 to 24	2%
25 to 34	18%
35 to 44	19%
45 to 54	14%
55 to 64	15%
65+	16%
I prefer not to answer	3%
Skipped	12%

Table 9. Demographics – Preferred language.

Preferred language	Percentage of respondents
English	83.9%
French	0.7%
Both English and French	2.2%
Neither English nor French	0.2%
I prefer not to answer	1.0%
Skipped	12.0%

Table 10. Demographics – Immigration.

Born in Canada	Percentage of respondents
Yes	64%
No	21%
I prefer not to answer	3%
Skipped	12%

Table 11. Demographics – Years in Canada.

Years lived in Canada	Percentage of respondents
0-5 years	1.9%
6 to 10 years	2.6%
More than 10 years	15.7%
I prefer not to answer	0.2%

Years lived in Canada	Percentage of respondents
Skipped	79.6%

Table 12. Demographics – Indigenous identity.

Identify as an Indigenous person	Percentage of respondents
Yes	4%
No	79%
I prefer not to answer	5%
Skipped	12%

Table 13. Demographics – Racial / ethnic identity.

Racial / Ethnic Identity	Percentage of respondents
Asian - East	2.1%
Asian - South / East Indian / Indo-Caribbean	8.6%
Asian - Southeast	2.0%
Black / African	4.2%
North American Indigenous	0.9%
Non-White Latino or Hispanic	0.6%
Non-White Middle Eastern, West Asian, or North African	0.8%
Pacific Islander	0.2%
White - Caucasian	54.5%
Prefer to self-identify	0.9%

Racial / Ethnic Identity	Percentage of respondents
Mixed racial origin (i.e., with parents in multiple groups above, regardless of place of birth)	2.3%
I prefer not to answer	10.9 %
Skipped	11.8 %

Table 14. Demographics – Gender and gender identity.

Gender / Gender Identity	Percentage of respondents
Man	42.3%
Non-binary	0.4%
Two-Spirit	0.2%
Trans	0.3%
Woman	39.6%
Prefer to self-identify	0.3%
I prefer not to answer	6.0%
Skipped	10.9%

Table 15. Demographics – Identifying as a person with a disability.

Identify as a person with a disability	Percentage of respondents
Yes	9%
No	74%
I prefer not to answer	5%

Identify as a person with a disability	Percentage of respondents
Skipped	12%

Table 16. Demographics – Education.

Completed Education	Percentage of respondents
Less than High School diploma	1.0%
High School diploma	7.0%
Some College or University but no degree	14.1%
College Diploma	21.5%
Bachelor's Degree	23.2%
Master's Degree	11.8%
Professional Degree	4.4%
Doctorate	1.2%
I prefer not to answer	5.1%
Skipped	10.7%

Table 17. Demographics – Income.

Yearly Household Income	Percentage of respondents
Less than \$9,999	1.2%
\$10,000 to \$39,999	5.6%
\$40,000 to \$69,999	12.9%
\$70,000 to \$99,999	14.8%

Yearly Household Income	Percentage of respondents
\$100,000 to \$149,999	17.1%
\$150,000 or more	22.6%
I prefer not to answer	24.2%
Skipped	1.6%

Attachment #2: Community Survey

Developing Durham Region's 2025 Strategic Plan

Survey Purpose

To help identify and prioritize the focus areas for the long-term vision and strategy for Durham Region.

Introduction

The current Durham Region Strategic Plan is approaching its end in December 2024. Work is underway to develop Durham Region's 2025 Strategic Plan which will guide the direction of the Regional Municipality of Durham's work over the next few years. The Strategic Plan will outline how we will continue to deliver programs and services and advance our work to achieve the future we want to create.

We are excited to invite you to share your thoughts and ideas. Your voice matters and the thoughts you share will be considered when creating the 2025 Strategic Plan.

The survey is designed to take approximately 5 to 10 minutes to complete. Your responses are anonymous.

For more information, please visit durham.ca/StratPlan2025 or email strategic.planning@durham.ca

Notice of Collection

Any personal information collected on this survey will be used to help develop the Region of Durham's 2025 Strategic Plan. It is collected under the authority of the Municipal Act, 2001, and will be used in accordance with the Municipal Freedom of Information and Protection of Privacy Act (MFIPPA). Reports prepared by the Region on this survey will not contain any personal information and will be subject to MFIPPA. For more information on the collection and use of your personal information, please contact the Corporate Privacy Officer at privacy@durham.ca or 905-668-7711 extension 2204.

Setting the Stage

The Region of Durham must work with all levels of government (federal, provincial, and local) to achieve our goals. This table: "Who does what?" shows a broad overview of government areas of services and responsibilities. When developing Durham Region's 2025 Strategic Plan, we must consider where we can take action and where we need to collaborate.

Who does what? A guide to government services
For a full list of services and responsibilities, visit durham.ca/Durham101

Level of Government	Services and Responsibilities
Federal Government of Canada provides services relating to the whole country.	Citizenship and immigration, Criminal law, Employment insurance, Airports, Income tax, Postal service
Provincial Government of Ontario delivers provincial services.	Drivers' licenses, Schools and post-secondary education, Provincial highways, Hospitals and health care, Property and civil rights, Social assistance
Regional The Region of Durham provides upper-tier municipal services.	Police services, Emergency management, Affordable housing and homelessness, Paramedics and public health, Regional roads, water and sewer infrastructure, Durham Transit
Local area municipalities In Durham Region, these are Ajax, Brock, Clarington, Oshawa, Pickering, Scugog, Uxbridge, and Whitby.	By-law enforcement, Local planning and zoning, Local roads and sidewalks, Fire services, Parks and recreation, Animal control

Part 1: Where are we now?

When developing a strategic plan, it is important to understand where we are now as a community before planning for the future.

Question 1

On a scale from 1 to 5, where 1 is strongly disagree and 5 is strongly agree, how would you rate the following statements?

Choose 1 if you strongly disagree and 5 if you strongly agree.

Durham Region has strong leadership.	Disagree	1	2	3	4	5	Agree
Durham Region delivers services well.	Disagree	1	2	3	4	5	Agree
I feel welcome wherever I go in Durham Region.	Disagree	1	2	3	4	5	Agree
Infrastructure in Durham Region is in excellent shape.	Disagree	1	2	3	4	5	Agree
There is a sense of prosperity in Durham Region.	Disagree	1	2	3	4	5	Agree
Current public transit serves the public well.	Disagree	1	2	3	4	5	Agree
Durham Region is a safe place.	Disagree	1	2	3	4	5	Agree
Durham Region is a leader in environmental sustainability.	Disagree	1	2	3	4	5	Agree
Durham Region supports those in need.	Disagree	1	2	3	4	5	Agree

I plan to live in Durham Region over the next 5-10 years.	Disagree	1	2	3	4	5	Agree
The future feels positive and bright for Durham Region	Disagree	1	2	3	4	5	Agree
Durham Region is ready for the future.	Disagree	1	2	3	4	5	Agree

Question 2

Please share any other statements you would use to describe Durham Region:

Question 3

**Which five of these statements best reflect how you feel about Durham Region?
Please select up to five statements.**

- I feel safe in Durham Region.
- My hard work and accomplishments are valued here.
- I am treated fairly in Durham Region.
- I am connected to nature in Durham Region.
- I live in a beautiful built environment.
- I have deep connections to my community in Durham Region.
- Multi-generational living is possible in Durham Region.
- This place has tremendous entrepreneurial spirit and opportunity.
- My community has a lively, vibrant, and creative buzz.
- I am free to live the way I want in Durham Region.
- I can afford to live in Durham Region.
- None of these statements reflect how I feel about Durham Region.
- Other. Please specify:

Question 4

Please share why you feel this way:

Part 2: Share your thoughts and ideas**Question 5**

What opportunities do you think are the most exciting for Durham Region over the next 10 years? Please select up to five areas of opportunity.

- | | | |
|---|---|---|
| <input type="checkbox"/> New technology. | <input type="checkbox"/> Skilled workers. | <input type="checkbox"/> Environmental sustainability and climate resilience. |
| <input type="checkbox"/> Businesses and investment. | <input type="checkbox"/> Quality of public space. | <input type="checkbox"/> Public participation in governance and policy changes. |
| <input type="checkbox"/> Post-secondary education. | <input type="checkbox"/> Public transit and mobility solutions. | <input type="checkbox"/> Clean energy production. |
| <input type="checkbox"/> Responsible budgeting. | <input type="checkbox"/> Affordable housing. | <input type="checkbox"/> Greener neighbourhoods. |
| <input type="checkbox"/> Public health services. | <input type="checkbox"/> New infrastructure. | <input type="checkbox"/> Income and housing supports. |
| <input type="checkbox"/> Social services. | <input type="checkbox"/> Agriculture and agri-tourism. | <input type="checkbox"/> Community safety. |
| | <input type="checkbox"/> Partnerships between public and private organizations. | |
| <input type="checkbox"/> Other. Please specify: | | |

Question 6

Please share why you feel this way:

Part 3: The longer-term future**Question 7**

We live in a time of significant change. Imagine your life in Durham Region in 2035. Which of the following do you think will have the biggest impact on you and your community? Please select up to five answers.

- | | | |
|---|---|---|
| <input type="checkbox"/> Severe climate change. | <input type="checkbox"/> Community safety. | <input type="checkbox"/> Sense of belonging. |
| <input type="checkbox"/> Affordability. | <input type="checkbox"/> Food insecurity. | <input type="checkbox"/> Mental health support needs. |
| <input type="checkbox"/> Aging population. | <input type="checkbox"/> Loss of local media. | <input type="checkbox"/> Aging infrastructure. |
| <input type="checkbox"/> Artificial intelligence. | <input type="checkbox"/> Global unrest. | <input type="checkbox"/> Immigration and newcomers. |
| <input type="checkbox"/> Refugees and asylum seekers. | <input type="checkbox"/> Safe and sustainable energy solutions. | <input type="checkbox"/> Waste management. |
| <input type="checkbox"/> Urbanization and density. | <input type="checkbox"/> Global pandemics. | <input type="checkbox"/> Public health issues. |
| <input type="checkbox"/> Sense of unity, versus polarization. | <input type="checkbox"/> Economic competitiveness. | <input type="checkbox"/> Diversity and inclusion. |
| <input type="checkbox"/> Trust in government. | <input type="checkbox"/> Other (please specify): | |

Question 8

Please share why you feel this way:

Question 9

Which regional government services and programs do you think will be most important to you and your community over the next 10 years? Please select up to 5 answers.

- | | | |
|--|---|--|
| <input type="checkbox"/> Business services. | <input type="checkbox"/> Tourism services. | <input type="checkbox"/> Agriculture and rural economic development. |
| <input type="checkbox"/> Local arts and culture opportunities. | <input type="checkbox"/> Cycling infrastructure. | <input type="checkbox"/> Regional planning for growth. |
| <input type="checkbox"/> Community safety and well-being programs. | <input type="checkbox"/> Diversity, equity, and inclusion programs. | <input type="checkbox"/> Paramedic services. |
| <input type="checkbox"/> Public health programs. | <input type="checkbox"/> Regional budget planning. | <input type="checkbox"/> Children's services. |
| <input type="checkbox"/> Family services. | <input type="checkbox"/> Housing and homelessness services. | <input type="checkbox"/> Income support services. |
| <input type="checkbox"/> Long-term care and senior's services. | <input type="checkbox"/> Transit services. | <input type="checkbox"/> Access to information. |
| <input type="checkbox"/> Police services. | <input type="checkbox"/> Newcomer and immigrant support services. | <input type="checkbox"/> Roads and infrastructure programs. |
| <input type="checkbox"/> Traffic safety programs. | <input type="checkbox"/> Waste management services. | <input type="checkbox"/> Community engagement opportunities. |
| <input type="checkbox"/> Other (please specify): | | |

Question 10

Please share why you feel this way:

Question 11

Is there anything else you would like to share about your vision for the future of Durham Region?

Part 4 – Tell us about yourself

The information you provide in the following questions helps us to understand the make-up of the region which ensures the programs and services provided meet the needs of our changing population. Thank you in advance for providing this voluntary information.

Please tell us about your connection with Durham Region.

Select all that apply:

- I live in Durham Region.
- Town of Ajax
- Township of Brock
- Municipality of Clarington
- City of Oshawa
- City of Pickering
- Township of Scugog
- Township of Uxbridge
- Town of Whitby
- I work in Durham Region.
- I am a local business owner in Durham Region.
- I am a member of a community association and/or volunteer in Durham Region.
- I am employed by the Regional Municipality of Durham.
- I am employed by a local municipality.
- I prefer not to answer.
- Other (please specify)

What age group do you belong to?

- 18 and under
- 19 to 24
- 25 to 34
- 35 to 44
- 45 to 54
- 55 to 64
- 65+
- I prefer not to answer.

Language

What language are you most comfortable communicating in?

- English
- French
- Both English and French
- Neither English nor French. Please specify: _____
- I prefer not to answer.

Immigration

Were you born in Canada?

- Yes
- No
- I prefer not to answer.

Immigration

If you were not born in Canada, how long have you lived in Canada?

- 0-5 years
- 6 to 10 years
- More than 10 years
- I prefer not to answer.
- Not applicable.

Indigenous identity

Do you identify as an Indigenous person (First Nation, Inuit or Métis)?

- Yes
- No
- I prefer not to answer.

Racial/Ethnic identity

Which of the following categories best describes your racial identity, regardless of your ethnicity and place of birth? Please choose one.

- Asian - East
- Asian - South / East Indian / Indo-Caribbean
- Asian - Southeast
- Black / African
- North American Indigenous
- Non-White Latino or Hispanic

- Non-White Middle Eastern, West Asian, or North African
- Pacific Islander
- White
- Prefer to self-identify.
- I prefer not to answer.
- Mixed racial origin (i.e., with parents in multiple groups above, regardless of place of birth). Please specify:

Gender/ Gender identity

Gender identity is a person's internal and individual experience of gender. This may or may not correspond to one's sex assigned at birth. What is your gender identity? Please chose all that apply.

- Man
- Non-binary
- Two-Spirit
- Trans
- Woman
- Prefer to self-identify:
- I prefer not to answer.

Disabilities

Do you identify as a person with a disability?

- Yes
- No
- I prefer not to answer.

Education

What level of education have you completed?

- Less than High School diploma
- High School diploma
- Some College or University but no degree
- College diploma
- Bachelor's degree
- Master's degree
- Professional degree
- Doctorate
- I prefer not to answer

Socio-economic

What is your estimated household yearly income before taxes and deductions?

- Less than \$9,999
- \$10,000 to \$39,999
- \$40,000 to \$69,999
- \$70,000 to \$99,999
- \$100,000 to \$149,999
- \$150,000 or more
- I prefer not to answer.

Completion of survey

Thank you for taking the time to complete the survey! Your feedback will be taken into consideration to develop Durham Region's 2025 Strategic Plan.

Additional engagement opportunities will continue until June using the feedback gathered from this survey. Please continue to check durham.ca/StratPlan2025 for updates.



Durham Region's 2025 Strategic Plan

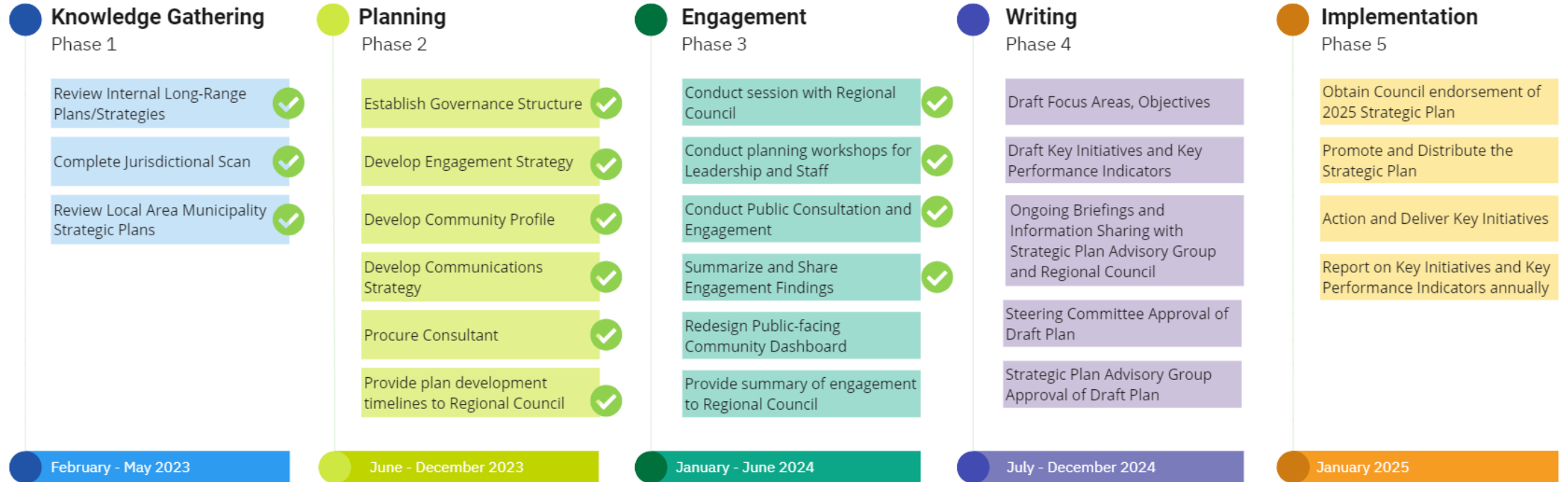
Phase 3 – Engagement Summary Report

June 12, 2024





Durham Region's 2025 Strategic Plan Timeline





Community Engagement Efforts

Indigenous Governance and Organizations

- In October 2023, written letters providing notice for consultation were delivered to the Williams Treaty First Nations.
 - 1 follow-up engagement completed with the Mississaugas of Scugog First Nation
- Regional staff continue to collaborate with Indigenous Governance and organizations.
- Engagement through existing events and gatherings. Example, staff attended the Ontario Health East - Central East Métis, Inuit, Indigenous Peoples' Health Advisory Circle Meeting on March 22, 2024, to share information. A total of 37 meaningful face-to-face interactions occurred.

Council Planning Day

- Explored emerging issues
- Shared their vision of the future
- Provided key input into the development of the plan
- Results were used to inform community survey and key trends



Council Chambers – January 25, 2024

Local Area Municipality Delegations

Select highlights from delegations:

- Enthusiasm and positive feedback on engagement approach
- Desire for additional public pop-up events and community engagement opportunities, specifically evening sessions
- Commitment to promote the survey



City of Pickering's Council Chambers - March 4, 2024

Public Engagement Activities

Community online survey	Online survey for Regional Councillors	Website	Social Media
Face-to-Face Interactions	Community Events	Your Durham	Newsletters/Flyers/ Postcards
Local Chamber of Commerce / Board of Trade Engagements	Delegations to Local Area Municipalities	Presentation materials to Committees of Council	Youth Engagement/ Art Contest
Planning Workshops	Focus Groups	Digital Media Ads	Attendance at Regional programs and services events
Internal Department Head Meetings	Internal Senior Leadership Team Meetings	Internal Department Meetings	Internal Staff Communication Channels

Pop-Up Events

- 24 pop-up events across the region
- Approximately 900 face-to-face interactions with residents



Oshawa – March 13, 2024



Durham College – April 5, 2024



Pickering – March 22, 2024

Print Materials Distributed

- Flyers (N=700) and Post-cards (N=1,000) posted/distributed in:
 - Libraries
 - Seniors Centres
 - Welcome Centres
 - Recreation / Community Centres





Your Durham March 2024

- 8,400 website visits
- Over 2,100 survey responses received

Your Voice
Your Durham

Durham Region's 2025 Strategic Plan

Connect. Grow. Succeed.

Home / Durham Region's 2025 Strategic Plan

Durham Region's 2025 Strategic Plan

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The current Durham Region Strategic Plan is approaching its end in December 2024. Work is underway to develop Durham Region's 2025 Strategic Plan, which will guide the direction of the Regional Municipality of Durham's work over the next few years. The Strategic Plan will outline how we will continue to deliver programs and services and advance our work to achieve the futures we want to create.

Thank you for sharing your thoughts and ideas for Durham Region's 2025 Strategic Plan. The online survey is now closed. The feedback received through the survey and discussions with residents will inform future planning sessions.

The information provided will be summarized and presented to Regional Council in June 2024. Please continue to check the website for project updates.

TAKE SURVEY OR ENTER ART CONTEST

CLOSED: This survey has concluded.

Durham Region's 2025 Strategic Plan Community Survey

Art Contest – Designing Our Future

- Young artists encouraged to share their vision for Durham Region
- 20 submissions received



Art Contest Submissions



~ Iyal - Age 5



~ Jeremie - Age 8



~ Christa - Age 10

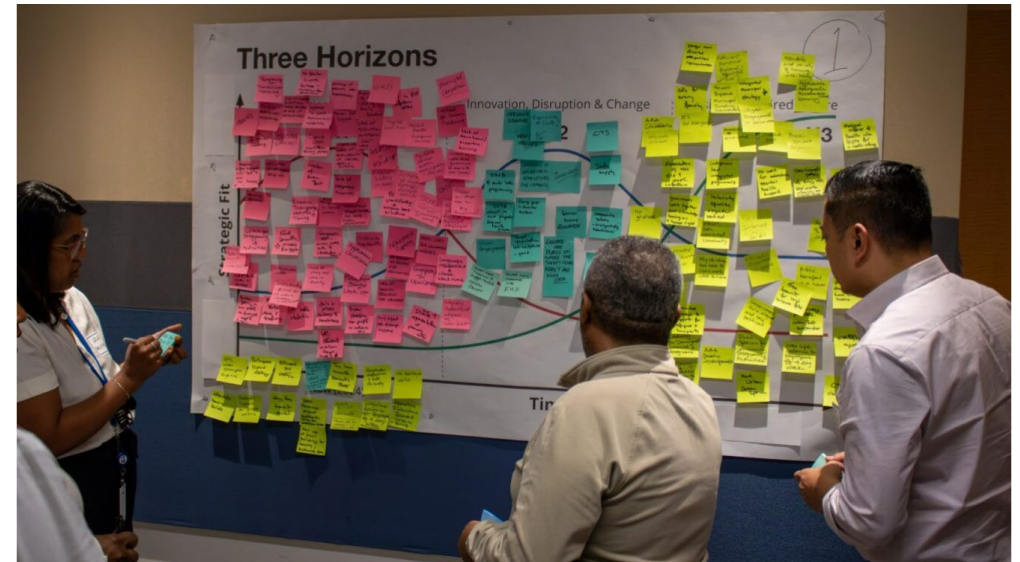
Art Contest Responses

- “Durham's future is full of parks and trees that kids can visit and make memories for a lifetime.”
- “Everyone recycling and no garbage on the ground. Lots of nature and farmland. More electric cars.”
- “My future Durham region is pollution free with trees and clean lakes instead of deforestation and factories that produce toxic gas.”
- “My future for Durham Region is a place where people from all ages and backgrounds can come together to form a community. It is a place where there are opportunities for everyone to enjoy the outdoors because we have done a good job of preserving nature and the environment around us. My version of Durham is colourful and clean because people respect and take care of our public spaces. We have many public buildings that serve a variety of purposes, like community centres, libraries, schools, places of worship, hospitals and more. There are lots of parks where kids can play and feel safe. Durham in ten years is a place where people want to live, work, play, learn and grow!”
- “Durham is a great place to live. My picture shows a park close to houses for kids to play and for there to be peace.”

Community Conversations

- May 2nd, 3rd, 6th and 14th
- 3 hour in-person sessions focused on future scenario exploration
- A total of 84 of participants attended, representing 47 organizations/groups in Durham Region
- Sessions were designed for community partners, business leaders, and youth leaders

Community Conversations





What We Heard from Community



Respondent Demographics – Area Municipality

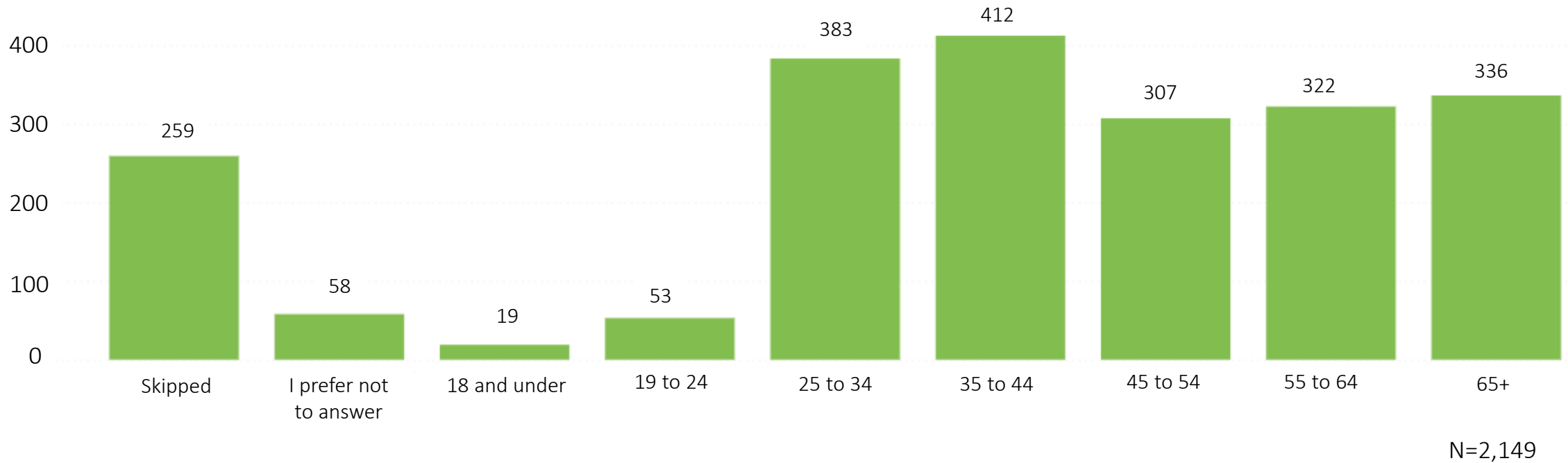
Q: Please tell us about your connection with Durham Region.



N=2,149

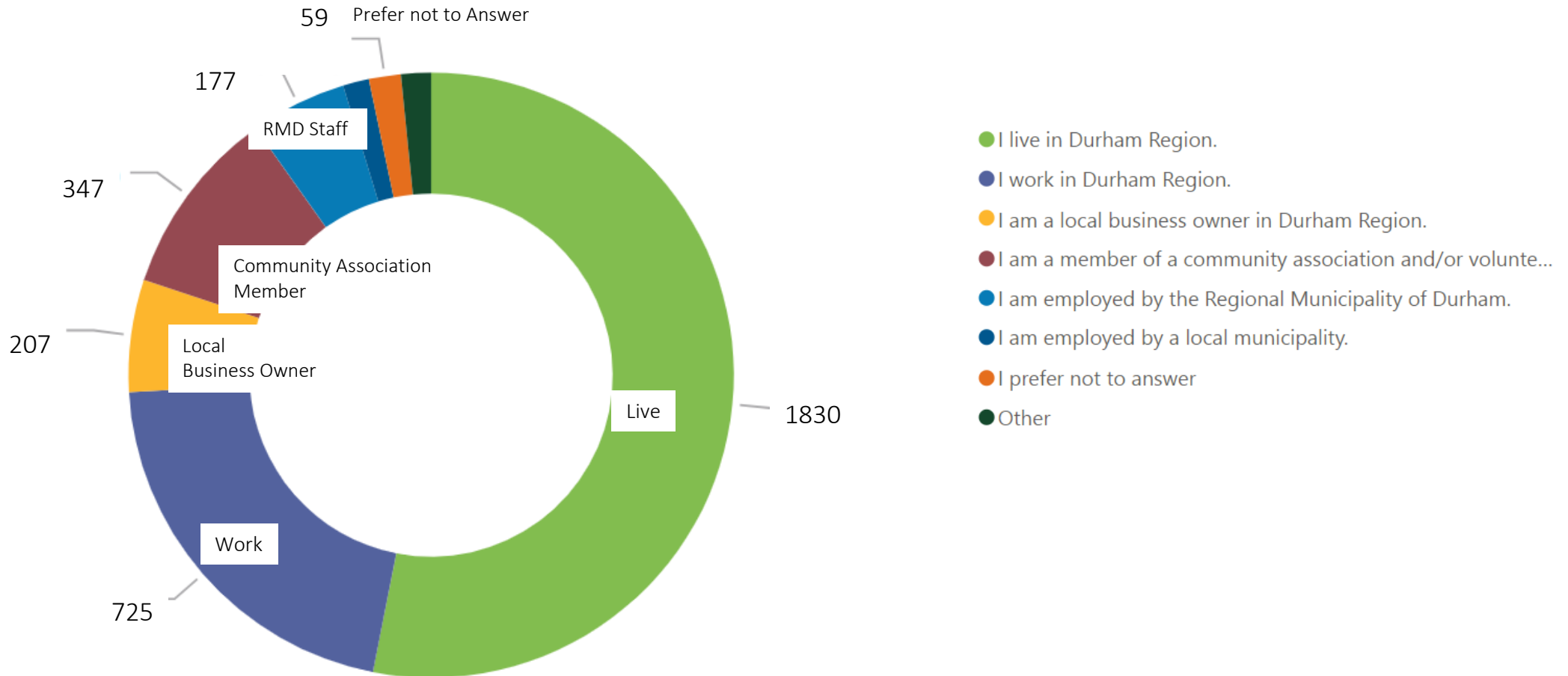
Respondent Demographics – Age Group

Q: What age group do you belong to?



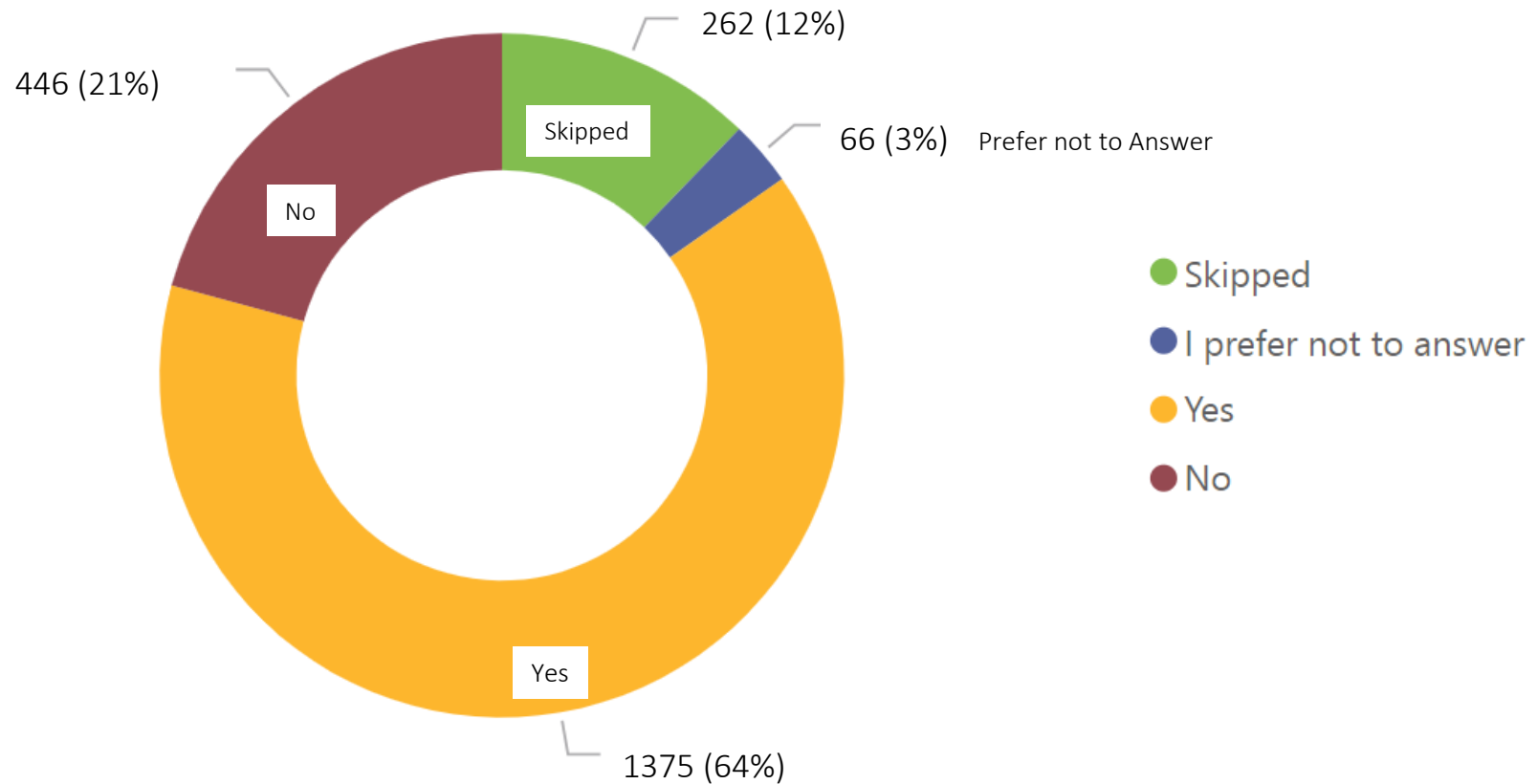
Demographics from Community Survey

Q: Please tell us about your connection with Durham Region.



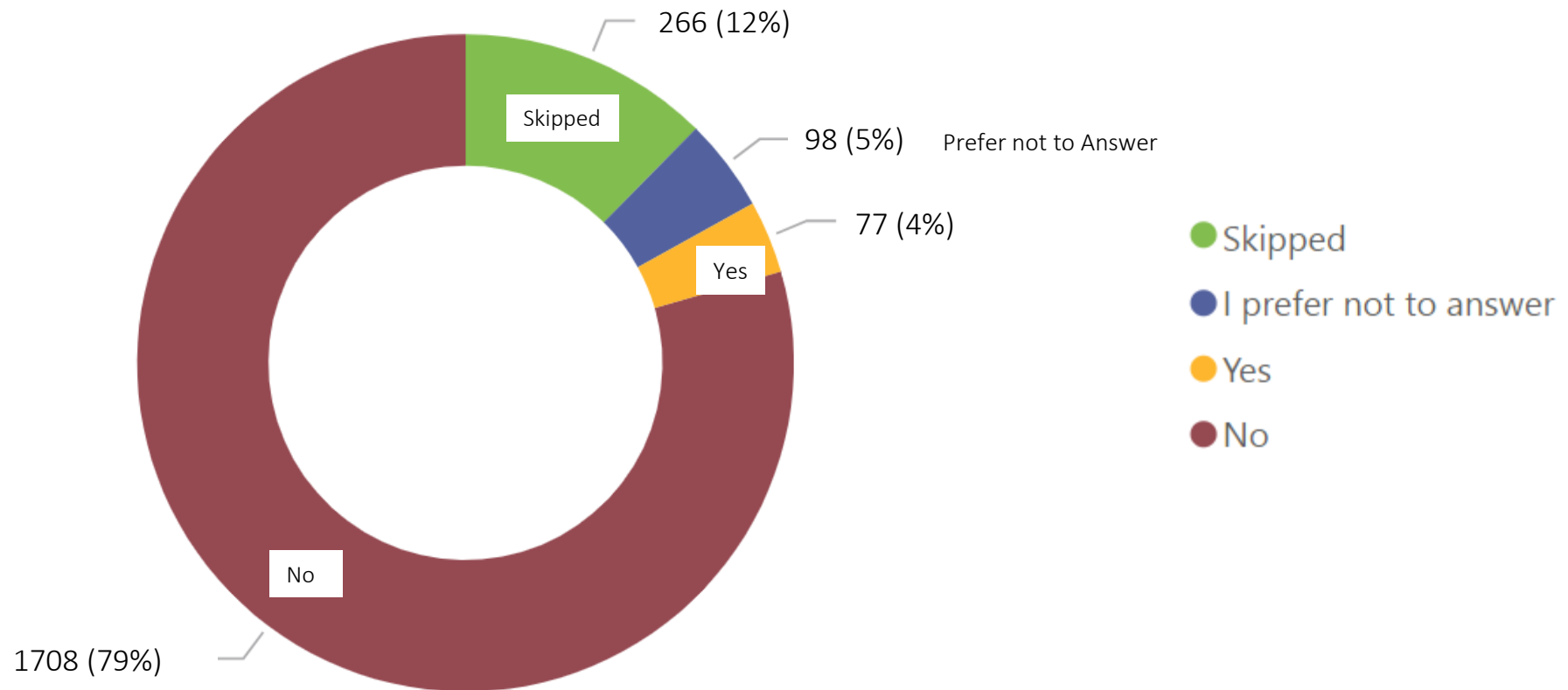
Respondent Demographics – Immigration

Q: Were you born in Canada?



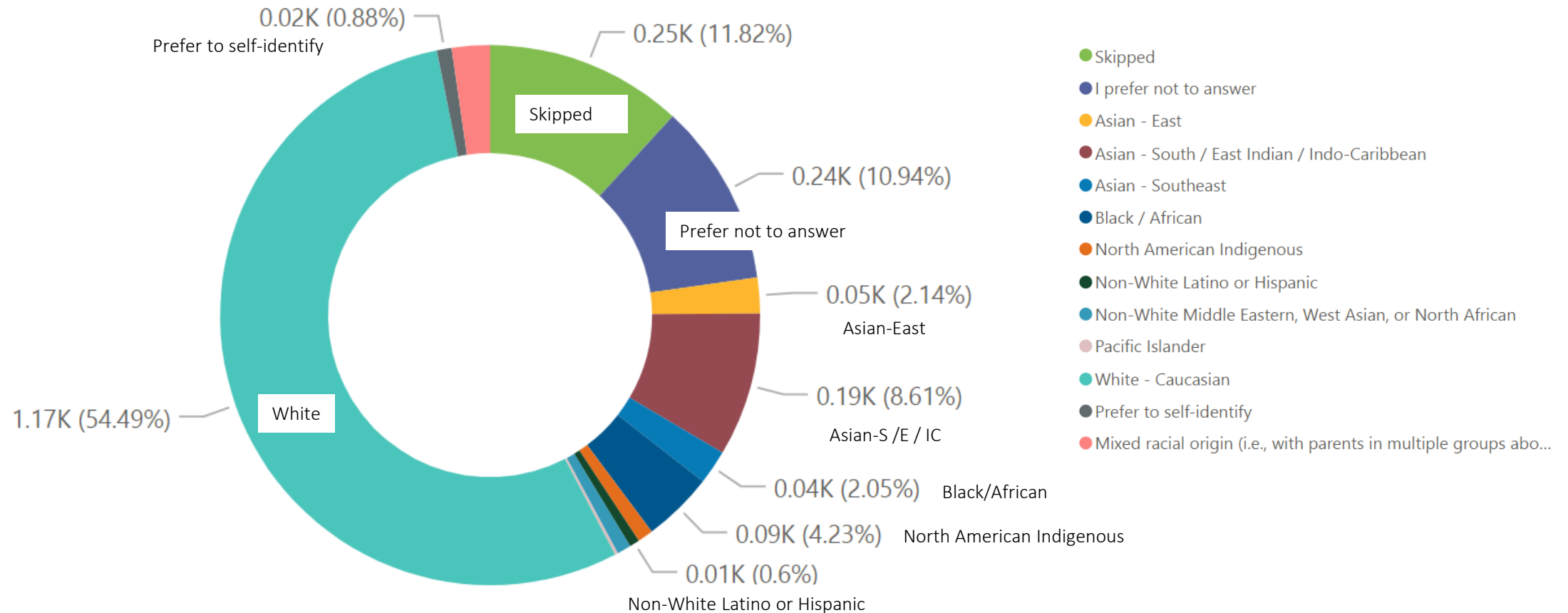
Respondent Demographics – Indigenous Identity

Q: Do you identify as an Indigenous person (First Nation, Inuit or Métis)?



Respondent Demographics – Racial/Ethnic Identity

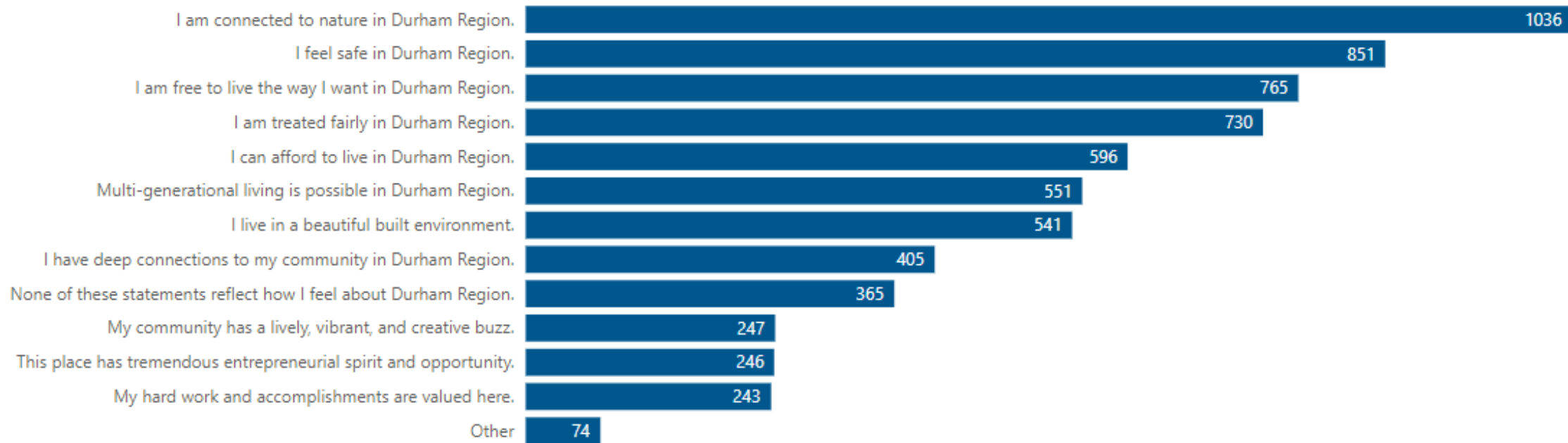
Q: Which of the following categories best describes your racial identity, regardless of your ethnicity and place of birth?





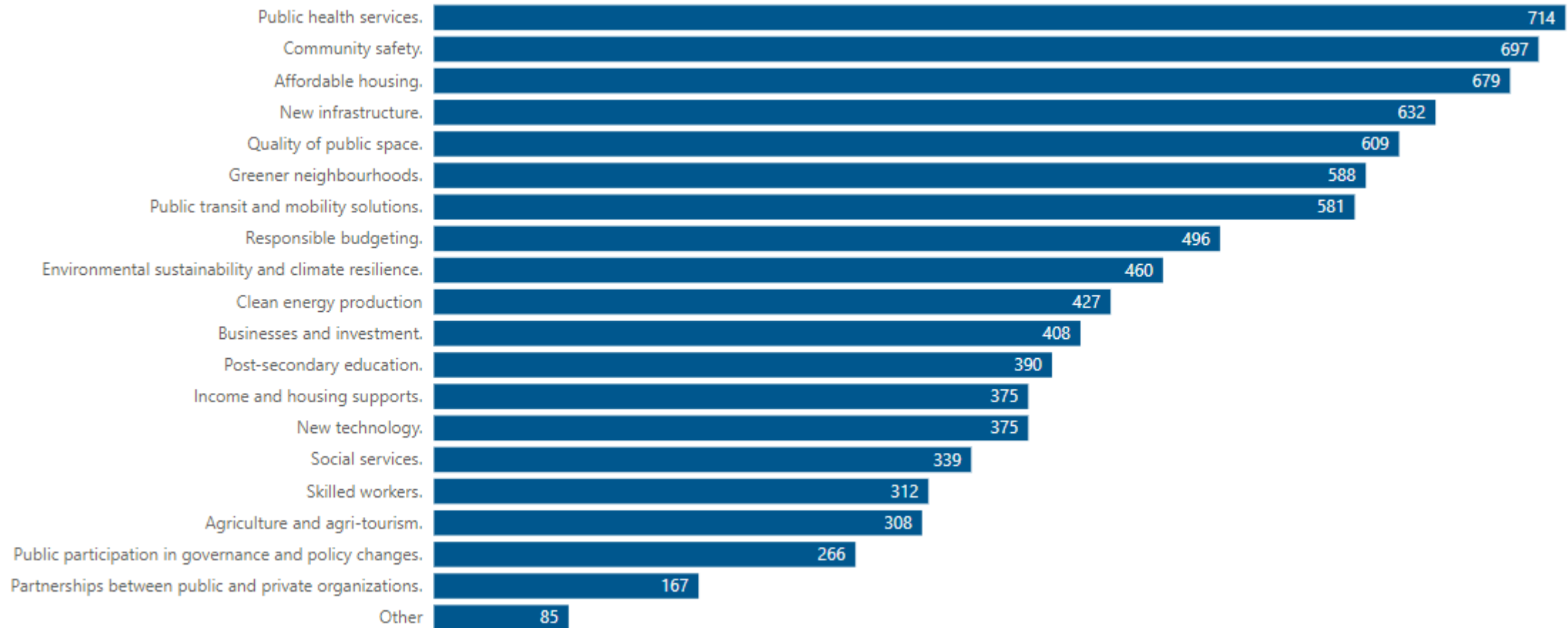
Which five of these statements best reflect how you feel about Durham Region?

Please select up to five:



What opportunities do you think are the most exciting for Durham Region over the next 10 years?

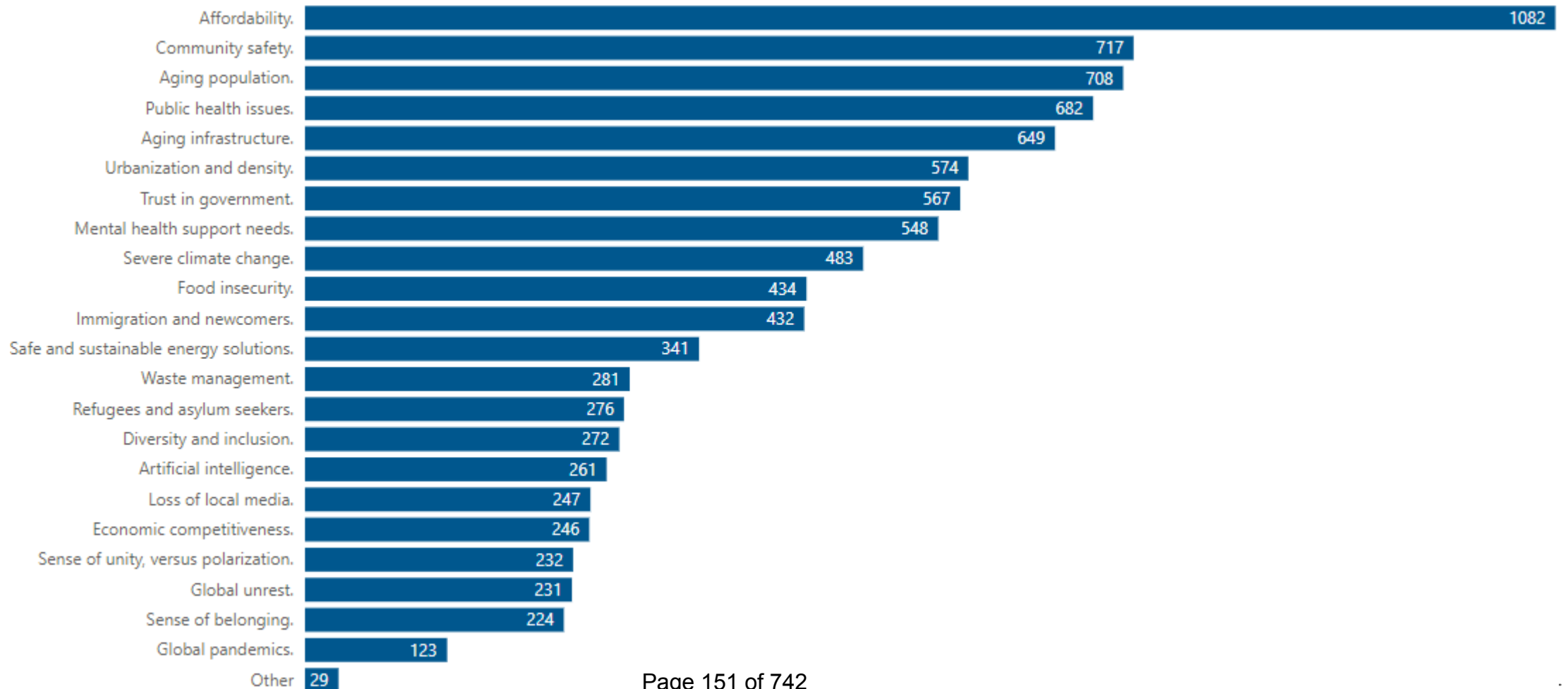
Please select up to five areas of opportunity:





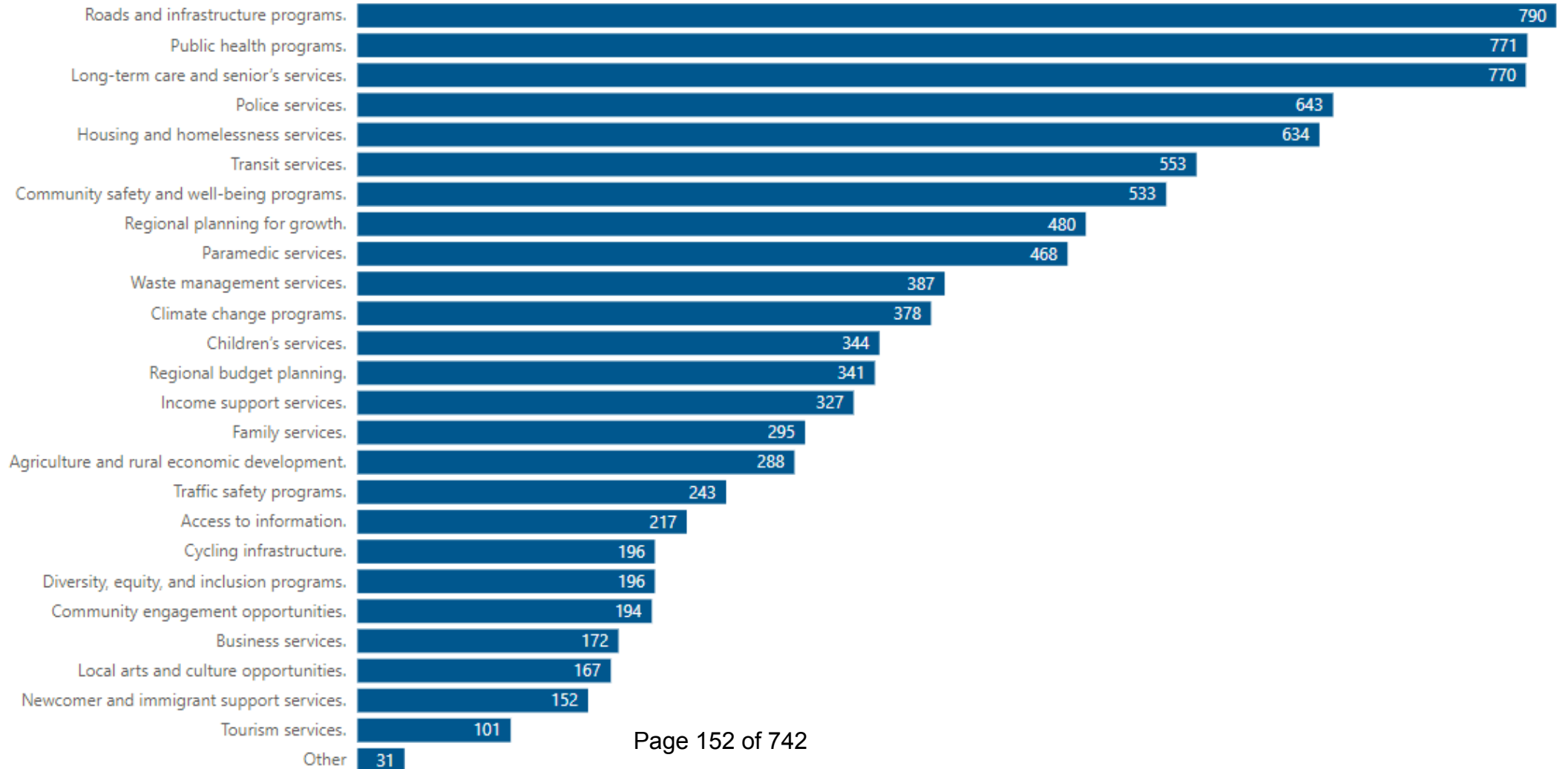
Which of the following do you think will have the biggest impact on you and your community?

Please select up to five answers:



Which regional government services and programs do you think will be most important to you and your community over the next 10 years?

Please select up to five answers:



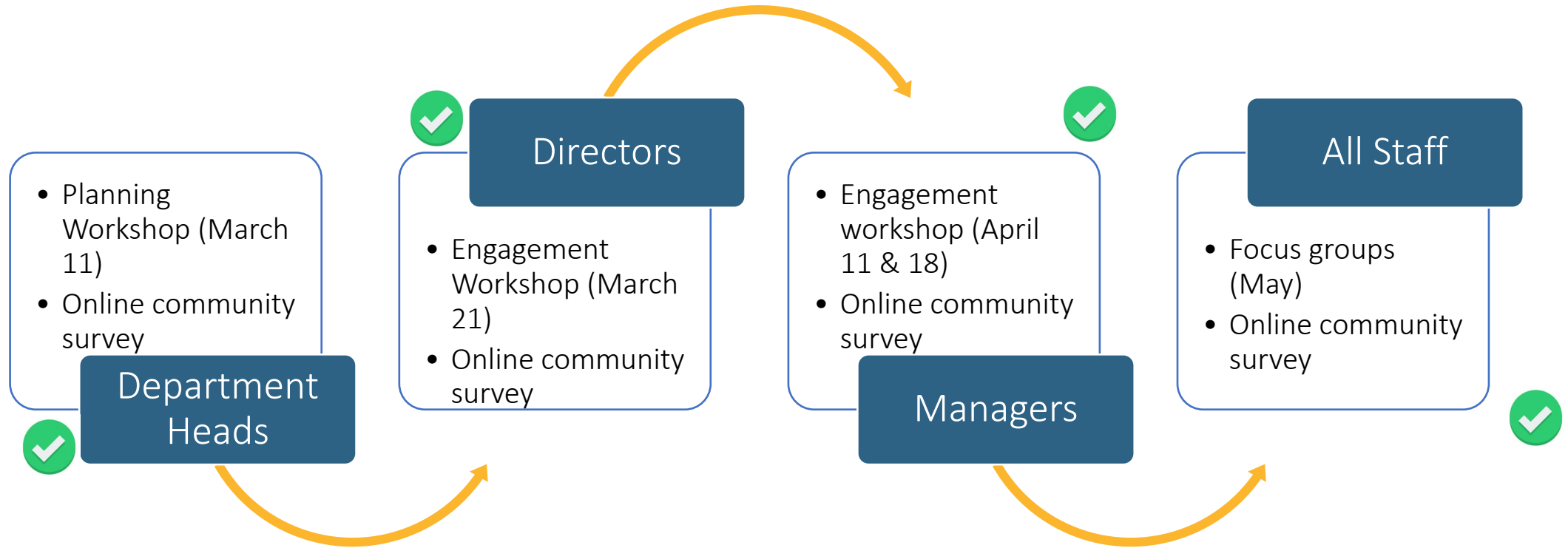
Qualitative Results from Community Survey

Question	Question Prompt	# Qualitative Responses
Q2	Please share any other statements you would use to describe Durham Region.	~ 950
Q4	Which five of these statements best reflect how you feel about Durham Region? Please share why you feel this way.	~ 800
Q6	What opportunities do you think are the most exciting for Durham Region over the next 10 years? Please share why you feel this way.	~ 700
Q8	We live in a time of significant change. Imagine your life in Durham Region in 2035. Which of the following do you think will have the biggest impact on you and your community? Please share why you feel this way.	~ 600
Q10	Which regional government services and programs do you think will be most important to you and your community over the next 10 years? Please share why you feel this way.	~ 550
Q11	Is there anything else you would like to share about your vision for the future of Durham Region?	~ 700



Internal Engagement Efforts

Internal Engagement Activities



Department Head Planning Workshop



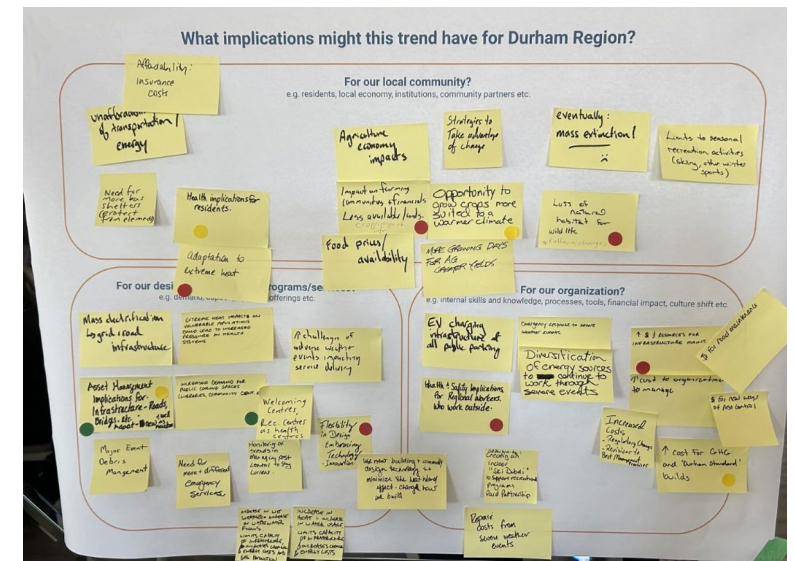
March 11, 2024
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Key Trends Affecting Durham Region

- 1 – Technology Advances
- 2 – Population Changes
- 3 – Severe Climate Change
- 4 – Health and Well-Being
- 5 – Electrification & Energy Transition
- 6 – Affordability
- 7 – Civic Engagement

Director Planning Session

- March 21, 2024; 90-minute workshop
- Senior Leaders (Commissioners and Directors)
- Identified implications of key trends affecting Durham Region



Manager Planning Session

- April 11 & 18, 2024; 90-minute workshops for managers
- Generated ideas to inform the Regional Strategic Plan



Staff Conversations

- May 24-30, 2024: 90-minute in-person sessions
- 5 workshops completed to gather insights on organizational values and mission





What We Heard from Staff

What We Heard From Staff

Department Heads

- Provided key principles for the design and scope of the plan
- Provided input on plan implementation

Senior Leadership Team

- Provided possible implications of major trends affecting our community, our organization, and our programs and service delivery

What We Heard From Staff

Managers

- Provided key themes, ideas, and strategies to respond to major trends impacting the region

Staff

- Provided ideas to inform recommendations on Mission and Values (how we work)



Preliminary Findings – Summary of What We Heard

Summary of Defining Characteristics

- Access to nature, including parks, trails, waterfronts and greenspace;
- Mix of rural and urban spaces;
- Sense of safety;
- Diverse and inclusive community; and
- Unique local industries, including agriculture, energy, and small businesses.



Summary of What We Heard – Issues

Cost of Living

Rise in cost of living, with focus on housing and rental costs. Increasing number of residents experiencing homelessness. Food insecurity growing. Challenges for childcare, young people, and seniors.

Rapid Growth

Urban planning, infrastructure, and services to match pace of growth. In particular, transportation infrastructure, affordable housing, and service delivery including transit. Protection of agricultural lands and natural surroundings.

Infrastructure

Traffic and road maintenance. Density challenging the current transportation infrastructure. Planning of services or access to green space, upgrading of infrastructure, or other amenities. Access to high-speed internet services.

Community Well-being

Observed increase in people experiencing homelessness and those living with mental health and addictions challenges in the community. In some cases, increased homelessness visible within community spaces caused uneasiness and concern.

Safety

Concerns about safety for pedestrians in areas without sidewalks, general road safety, crime, and police services.

Service Delivery

Services and resources, including housing and health services under strain associated with a growing and changing population. Services to support an aging population. Value for money and coordination of service delivery. Service delivery to north Durham.



Summary of What We Heard – Issues cont'd

Transit

Reliable and affordable transit options to address sustainability, cost of living, and mobility for students and seniors. Service delivery challenges to northern Durham.

Health Services

Health services including primary care providers, hospitals, and paramedic / emergency services. Increased need for services to support people living with mental health and addiction challenges, as well as a growing demographic of seniors.

Leadership

Lack of shared vision for the region. Responsible budgeting and decision-making to ensure investments align with community needs. Collaboration with all levels of government. Lack of trust in government.

Community Connection

Lack of social cohesion and common identity, changing demographics, representation, lack of public spaces to gather and build community. The loss of local media as contributors to a lack of social cohesion. Social isolation and the lack of community engagement.

Climate Change Impacts

Adverse impacts due to climate change and severe weather including contributions to issues such as affordability, food security, and health. Development planning to account for climate challenges. Loss of agricultural land and climate impacts on agriculture.

Technology

Labour market impacts due to automation. Cyber security challenges due to increasing threats. Social media as an enabler to the creation of bias, mistrust, and misinformation. Inequitable access to technology.

Summary of What We Heard – Aspirations

Adapting to Growth

Clear vision and proactive plans in place for careful growth and delivery of services to meet needs of growing and changing population. Density as a precursor to sustainable and effective service delivery. Greenspace identified as important to well-being.

Environmental Protection and Sustainability

Access to nature, preservation of green spaces in neighbourhoods, preservation of agricultural lands, safeguarding of wildlife. Thoughtful development, expanded transit services, and clean energy to support environmentally sustainable growth.

Service Delivery

Increased transparency and accountability, responsible budgeting, taking a proactive and preventative approach, working with all levels of government and partners in the community, effective core service delivery, and service innovation.

Mobility Options

Improved public transit to reduce car dependency, active transportation, and walkable neighbourhoods with access to nature and amenities.

Supports for Vulnerable Populations

Access to services for an aging population, children and youth, newcomers, refugees and asylum seekers, those who are experiencing homelessness, low-income residents, and those who are living with mental health and addiction issues.

Business and Employment

Attraction and retention of businesses and employers, especially for youth. Increase in skilled workers, supports for local businesses tourism, and newcomers. Strengthening of current industry and diversification and development of new industries. Post-secondary institution contributions.

Summary of What We Heard – Aspirations cont'd

Civic Engagement

More opportunities for the public to be heard by leaders, to access information, and contribute to regional decision-making. Improved Indigenous relations.

Public Space

Welcoming and accessible public spaces to build community and share in community arts, culture, and entertainment events locally that are free of charge. Waterfront development to create beautiful natural public spaces and thriving businesses.

Recreation and Leisure

Local recreation opportunities, arts and cultural events, community gatherings, and entertainment, with emphasis on youth and senior recreation opportunities. Awareness and communication of community gatherings.

Technology and Innovation

Opportunity to use new technologies and methods to modernize regional practices, deliver efficient programs and services, and enable community engagement.

Next Steps

- If approved, Regional staff, in collaboration with the Strategic Plan Advisory Group and the consultant, will complete further analysis to explore the data within the above mentioned themes and draft Durham Region's 2025 Strategic Plan
- The draft will be shared with Council and the community for additional input in Fall 2024
- Final Council review and approval in December 2024



Durham Region's 2025 Strategic Plan Timeline





Thank you!

Strategic Initiatives Division

Office of the CAO

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durham.ca

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If this information is required in an accessible format, please contact 1-800-372-1102 ext. 2305.



The Regional Municipality of Durham Report

To: Committee of the Whole
From: Commissioner of Finance, Commissioner of Social Services and Chief Administrative Officer
Report: #2024-COW-24
Date: June 12, 2024

Subject:

Moving Toward a Sustainable Approach for Asylum-Seekers and Refugees in Durham

Recommendation:

That the Committee of the Whole recommends to Regional Council:

- A) That Regional staff be delegated authority, for purposes of the Region's Humanitarian response to asylum-seekers and refugees, to extend the Region's agreement with Community Development Council Durham until the end of 2024, execute any transfer payment agreements, expend funds up to a maximum of \$9.9 million in accordance with the program guidelines, make any modifications to the program(s) to ensure desired outcomes are achieved, receive any federal and/or provincial funds for this response, and waive the Region's Purchasing By-law and Budget Management Policy as required for this response;
- B) That any costs associated with the extension of this agreement not reimbursed under the federal Interim Housing Assistance Program, or any other upper-level government investments be funded at the discretion of the Commissioner of Finance;
- C) That Council endorse the development and implementation of a more sustainable, intentional, distributive GTHA-wide asylum claimant response appropriate to the current and anticipated volume of asylum claimants arriving in Canada;
- D) That this response incorporates an all-of-government approach to ensure proper coordination and resourcing to accommodate asylum claimants arriving in Canada;
- E) That funding from programs like Reaching Home, Homelessness Prevention Program (HPP), and base Canada-Ontario Housing Benefit remain dedicated to addressing the needs of local homeless residents, rather than redirected toward newcomer asylum claimants;

- F) That staff be directed to seek additional incremental funding from the Province through the Canada Ontario Housing Benefit program to support Durham in providing urgent assistance to a rapidly growing number of asylum claimants and other at-risk populations, similar to the funding provided in Fall 2023;
 - G) That staff be directed to seek annual funding per asylum claimant from federal and provincial governments to support an asylum claimant with temporary and permanent housing, health, and other social and settlement services to fully integrate into the communities upon exit from the proposed Peel Regional Reception Centre;
 - H) That staff be directed to coordinate with municipal and association partners to implement an advocacy strategy that supports funding and implementation of this new and sustainable model;
 - I) That staff be directed to wind down operations of the Durham response, effective December 31, 2024, unless a commitment is received from the federal government for future planned allocations along with reimbursement of costs prior to that date; and
 - J) That a copy of report #2024-COW-24 be sent to the Greater Toronto and Hamilton Area municipal partners, and all local Durham MPs and MPPs.
-

Report:

1. Purpose

- 1.1 The purpose of the report is to seek approval to extend the current agreement with Community Development Council Durham (CDCD), for purposes of the Regional Municipality of Durham's (Region) Humanitarian response to asylum-seekers and refugees, for an additional six months from July 1, 2024, to December 31, 2024. Any costs not reimbursed under the federal Interim Housing Assistance Program (IHAP) or other upper-level government investments are recommended to be funded at the discretion of the Commissioner of Finance.

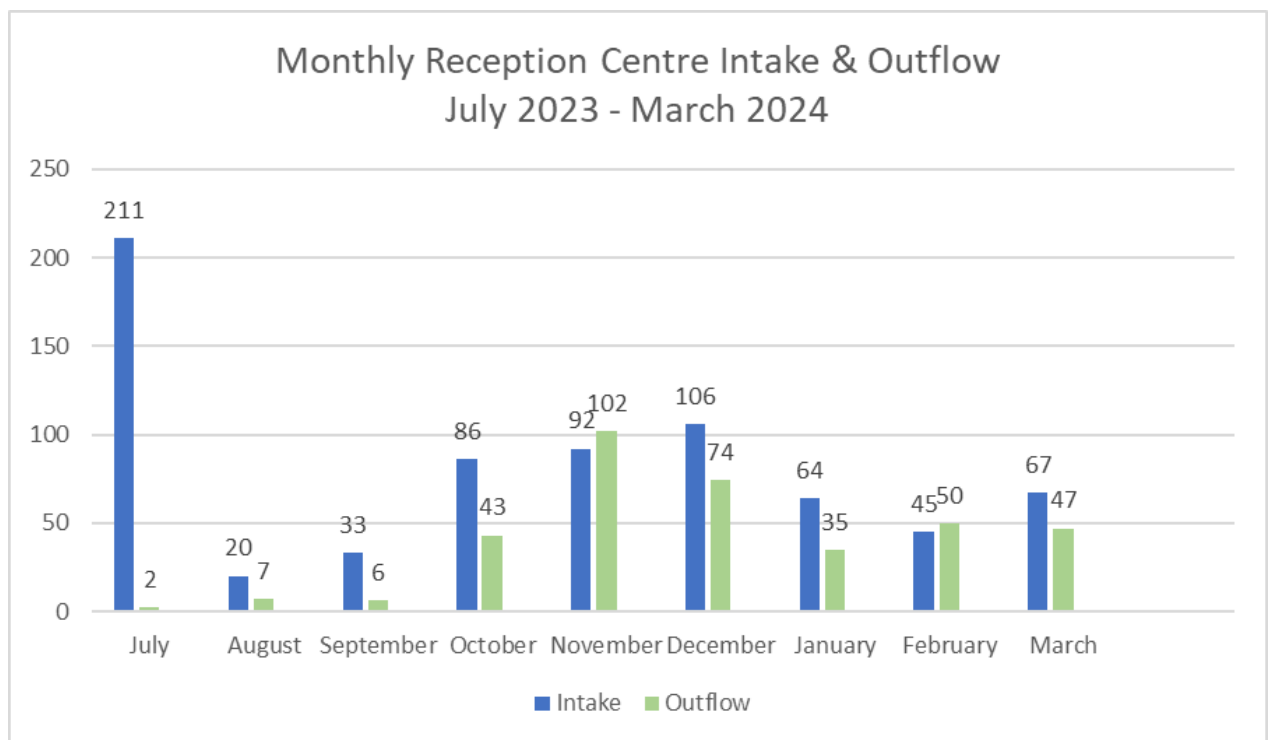
2. Previous Reports and Decisions

- 2.1 [Finance and Administration Report #2024-F-3](#), dated March 19, 2024, which sought Council approval for an extension of the agreement with Community Development Council Durham for settlement services for asylum-seekers and refugees through June 30, 2024.
- 2.2 [Finance and Administration Report #2023-F-27](#), dated November 14, 2023, which sought Council approval for an extension of the agreement with Community Development Council Durham for settlement services for asylum-seekers and refugees through March 31, 2024.

- 2.3 [Council Information Report #2023-INFO-81](#), dated September 28, 2023, provides a comprehensive update on the Region of Durham’s humanitarian response for asylum-seekers and refugees.
- 2.4 [Council Report #2022-A-22](#), dated June 28, 2022, which sought Council approval on an agreement with Community Development Council Durham for settlement supports related to individuals arriving in Durham via the Canada-Ukraine Authorization for Emergency Travel.

3. Update on Durham’s Humanitarian Response for Asylum-Seekers and Refugees

- 3.1 Since June 2023, the Region has coordinated support for asylum-seekers in conjunction with CDCD and other community partners through existing programs.
- 3.2 CDCD has a proven history of successfully delivering a Resettlement Assistance Program (RAP) in Durham and continues to lead the efforts of settlement and integration within our communities. CDCD is the host organization of the Ajax Welcome Centre, one of Durham’s primary and longstanding settlement service providers. Since August 2022, the Region has been in a partnership agreement with CDCD to deliver resettlement programming to Ukrainians. Responding to the influx of asylum-seekers, the program further expanded to accommodate all refugees. To date, the Region and CDCD have successfully assisted 596 households (991 individuals), relocating 413 families to affordable long-term housing.



- 3.3 The above chart illustrates the intake and outflow of asylum seekers since July 2023 across all three hotel sites in Durham. A significant influx of individuals arrived in Ajax at the end of June 2023 and were quickly provided with shelter at hotels in Ajax and Pickering. Rooms at a third hotel site were secured by September 2023. The increases of outflow in November and December 2023 can be attributed to Canada-Ontario Housing Benefit where the Region received 70 benefits to assist asylum seekers transition to longer term housing.
- 3.4 The unexpected influx of new refugee claimants and asylum-seekers in Durham has created a strain on services throughout the Region, leaving refugees entering Durham to face hardship and difficulties in obtaining housing, employment and other important resettlement supports. As of May 21, 2024, three hotel sites are sheltering 408 individuals.
- 3.5 CDCD is seeking an extension of their existing partnership agreement with the Region including additional funding of up to \$9.9 million to further support the influx of refugees entering Durham from July 1, 2024, to December 31, 2024. This 6-month extension will allow CDCD to make longer term plans with respect to operations and staffing for the response. The funding will be used to provide temporary sheltering for approximately 400 asylum-seekers and refugees along with staffing required to provide wraparound supports, resettlement and housing outreach assistance.

4. Moving to a Sustainable Person-Centred Approach

- 4.1 The Region's initial response to sheltering and other support needs of the unanticipated influx of asylum seekers was necessary at the time, but this approach is no longer sustainable or cost effective. Staff have been in conversations with our Greater Toronto and Hamilton Area (GTHA) municipal partners around a longer-term approach for supporting the settlement of asylum-seekers.
- 4.2 On April 23, 2024, Nando Iannicca (Regional Chair and CEO of Peel Region) sent a letter to the federal Minister Marc Miller (Minister of Immigration, Refugees and Citizenship) and Provincial Minister David Piccini (Minister of Labour, Immigration, Training and Skills Development) to propose a new sustainable model for the Asylum Claimant Response. The proposal was built around two main components: the establishment of a Regional Reception Centre, with coordinated exits to other municipalities, and the creation of dedicated shelter facilities specifically for asylum claimants.
- 4.3 As noted in the Peel proposal, the Centre would serve as a hub for consolidating resources and in-land and port-of-entry asylum support expertise in one location, including temporary housing and an allocation-based funding benefit attached to each in-land and port-of-entry asylum claimant. Such an approach will enable the effective communication and coordination among different communities, service providers, stakeholders, governments, and claimants, thereby mitigating the risks that are present with the existing ad hoc, decentralized, uncoordinated approach.

Specifically, a dedicated approach to in-land and port-of-entry asylum claimants is critical to supporting their settlement and integration journey and allowing better allocation of resources towards local residents.

- 4.4 Central to the success of the Peel proposal, is the coordination of supports across municipalities within the GTHA. The Region's current response has been mainly centred around the utilization of hotel/motel rooms located in three municipalities across Durham (Ajax, Pickering, Whitby). The inflow of asylum seekers vs outflow to transitional and permanent housing will be dependent on sustainable, predictable and portable funding attached to each claimant, so receiving municipalities are not incurring additional fiscal pressures to support the response.
- 4.5 To date Peel has not received a decision to move forward with their proposal from the upper levels of government. Peel is bringing together interested municipalities to discuss next steps for advocacy on their proposal, which has included Durham staff.

5. Financial Implications

- 5.1 The estimated cost to the Region of extending this agreement with CDCD from July 1, 2024, to December 31, 2024, is \$9.9 million.
- 5.2 To date, regional staff have applied for \$7.0 million in federal funding under IHAP for reimbursement of costs incurred to date and those projected to be incurred up to and including March 31, 2024.
- 5.3 On March 13, 2024, the Regional Chair received confirmation from the Honourable Marc Miller, P.C., M.P. that the Region would be reimbursed for \$4.6 million related to expenses claimed under IHAP for the 2023-2024 fiscal year, for the period up to December 31, 2023.
- 5.4 On April 16th, 2024, the Federal Budget announced a plan to provide \$1.1 billion over three years, starting in 2024-25, to Immigration, Refugees and Citizenship Canada (IRCC) to extend IHAP. Funding in 2026-27 will be conditional on provincial and municipal investments in permanent transitional housing solutions for asylum claimants. IRCC staff have been in contact with Regional staff, noting that further details will be provided around the expectations for provincial and municipal contributions for future years.
- 5.5 Funding from programs like Reaching Home, Homelessness Prevention Program (HPP), and Canada Ontario Housing Benefit must remain dedicated to addressing the increasing needs of local homeless residents, rather than redirected toward newcomer asylum claimants.
- 5.6 It is recommended that any costs associated with the extension of this agreement not reimbursed under the federal Interim Housing Assistance Program or any other upper-level government investments be funded at the discretion of the Commissioner of Finance.

6. Relationship to Strategic Plan

6.1 This report aligns with/addresses the following strategic goals and priorities in the Durham Region Strategic Plan:

- Goal 2 Community Vitality – to foster an exceptional quality of life with services that contribute to strong neighbourhoods, vibrant and diverse communities, and influence our safety and well-being.
- Goal 4 Social Investment – to ensure a range of programs, services and supports are available and accessible to those in need, so that no individual is left behind.
- Goal 5 Service Excellence – to provide exceptional value to Durham taxpayers through responsive, effective and financially sustainable service delivery.

7. Conclusion

7.1 With the recent and ongoing influx of asylum-seekers and refugees, the Region is looking to extend its existing partnership agreement with CDCD for settlement services from July 1, 2024, to December 31, 2024, at an estimated cost of \$9.9 million. The Region has applied for funding under the federal government's Interim Housing Assistance Program to cover these costs. Any costs associated with the extension of the agreement not reimbursed under the federal Interim Housing Assistance Program or any other upper-level government investments would be funded at the discretion of the Commissioner of Finance.

Respectfully submitted,

Original signed by

Stella Danos-Papaconstantinou
Commissioner of Social Services

Original signed by

Nancy Taylor, BBA, CPA, CA
Commissioner of Finance

Recommended for Presentation to Committee

Original signed by

Elaine C. Baxter-Trahair
Chief Administrative Officer

If this information is required in an accessible format, please contact 1-800-372-1102 ext. 2463.



The Regional Municipality of Durham Report

To: The Committee of the Whole
From: Commissioner of Social Services and Commissioner of Finance
Report: #2024-COW-25
Date: June 12, 2024

Subject:

Redevelopment Feasibility Analysis for Durham Regional Local Housing Corporation (DRLHC) Sites at Malaga Road and Christine Crescent

Recommendation:

That the Committee of the Whole recommends to Regional Council:

- A) That the redevelopment feasibility analysis prepared by Infrastructure Ontario (IO) dated May 15, 2024, for the redevelopment of the Christine Crescent and Malaga Road sites, in the City of Oshawa (City), be endorsed in principle;
- B) That the redevelopment of the Christine Crescent site be approved in principle, which would replace 12 existing semi detached units at their end of life with a midrise apartment building and stacked townhouses totalling approximately 160 units, including rent-geared-to-income, affordable and market rental housing through a direct delivery option, subject to final Council approval of the project after municipal development approvals, refined development costs and grant opportunities are obtained;
- C) That staff be authorized to undertake the following in support of development approvals for the Christine Crescent and Malaga Road redevelopments at an estimated cost of \$1,800,000 to be funded from the approved 2024 budget provision for social housing redevelopment:
 - i. Preparation, submission and support of the necessary official plan amendment and zoning by-law amendment applications;
 - ii. Retaining consulting expertise for the required technical studies identified through the preconsultation process with the City; and
 - iii. Additional public consultation as may be required by the City.
- D) That staff be authorized to prepare a comprehensive strategy to increase affordable housing supply, while improving the mix, design, integration and sustainability of

housing within the DRLHC inventory including the following elements, with the consultant to be retained through a Request for Proposals and at an estimated cost of \$150,000 with funding to be provided from the 2024 budget provision for social housing redevelopment, including:

- iv. Identifying opportunities and best practices for reducing isolation and marginalization of existing DRLHC sites by transforming them into mixed income communities;
- v. Identifying opportunities for partnerships with private and not-for-profit housing providers to include additional Rent-Geared-to-Income (RGI) supply within project buildings;
- vi. Aligning revitalization efforts with other Regional strategic priorities on poverty prevention, reducing homelessness, supporting transit-oriented development initiatives and environmental sustainability measures;
- vii. Implementing a program of community housing improvement and redevelopment projects; and
- viii. Developing a long-term portfolio of shovel ready projects.

Report:

1. Purpose

- 1.1 The Region is embarking on an initiative to revitalize and redevelop the DRLHC's community housing sites. The purpose of this report is to present staff's recommendations regarding the transformation of two sites owned by the DRLHC for the development of mixed income housing, including RGI replacement and new affordable and market rental housing. The two sites that are the subject of this report, at Christine Crescent and Malaga Road in the City of Oshawa, represent investments in improving affordable housing supply that will optimize the use of these sites.

2. Introduction

- 2.1 In 2019 Regional Council approved the retention of consulting services to facilitate the development of a long-term, asset management and a financial strategy to sustain and support the DRLHC (#2019-COW-4). Based on the analysis, four sites were identified for regeneration and intensification:

- Nevis/Normandy/Christine/Lomond
- Linden Poplar
- Lakeview
- Malaga

- 2.2 Upon review of various site regeneration options and Building Condition Assessments, the magnitude of regeneration, tenant logistics and site servicing, the Malaga Road and Christine Crescent sites were identified as first candidates.
- 2.3 In November 2019, Regional Council approved the Five-Year Review of At Home in Durham, the Durham Housing Plan 2014-2024 (#2019-COW-25). At Home in Durham sets out four goals and primary actions that aim to improve affordability and access to housing, protect the existing affordable housing supply, encourage housing diversity, and build capacity in the housing system. These goals are:
- End Homelessness in Durham
 - Affordable Rent for Everyone
 - Greater Housing Choice
 - Strong and Vibrant Neighbourhoods.
- 2.4 For the following five years of the Plan, the Region committed to taking steps on the following fronts:
- Reducing chronic homelessness to zero.
 - Increasing the supply of affordable rental housing by 1,000 units.
 - Increasing the supply of medium to high density housing.
 - Significant progress in the regeneration of community housing.
- 2.5 In November 2020, Regional Council approved a Master Housing Strategy ([#2020-COW-27](#)) that would include a comprehensive review of the current housing system to ensure the optimal utilization of Regional resources, aligned with local housing, including:
- Revitalization of the Regionally owned DRLHC portfolio, including the development of an evidence-based strategy for managing the DRLHC portfolio that addresses maintenance, revitalization, regeneration (redevelopment) and disposal;
 - A review of public surplus lands and the potential social and community benefits that these properties can provide;
 - The provision of affordable, community, supportive and transitional housing, as well as emergency shelters and other Regional housing programs, all of which provide essential services to residents living with low-income; and
 - Other opportunities to support the delivery of affordable housing.
- 2.6 Regional Council's endorsement of the Master Housing Strategy included identifying development opportunities, incentives and partnerships to increase the supply of affordable, community, supportive and transitional housing and a commitment to review public lands and their potential social and community benefits. The Strategy aims to improve affordability and access to housing with and without supports, protect the existing affordable housing supply, encourage

housing diversity, and build capacity in the housing system. Expected outcomes from the Strategy includes:

- The initiation of 1,000 new affordable housing units by 2024;
- Improved readiness for provincial and federal funding announcements;
- Establishing a shovel-ready portfolio of potential projects aligned with the affordable housing needs of our communities;
- Sustainable investment strategies to support new affordable rental development and the preservation and growth of community housing; and
- Improved coordination with all housing partners including area municipalities, private developers and non-profit providers to address Regional needs.

- 2.7 Following the transfer of the ownership and operation of community housing from the provincial government in 2000, the DRLHC provides and maintains rent-geared-to-income (RGI) housing units within the Region.
- 2.8 Redevelopment and investment in the subject sites will increase affordable housing supply, improve built conditions, modernize buildings to current standards, grow capacity within the housing system and improve housing mix. Therefore, continuation of the status quo is not a preferred option. Similarly, while disposition of some DRLHC sites (including relocation of tenants at said sites to other DRLHC units in the portfolio) could help generate proceeds that could be used towards reinvestment into existing DRLHC buildings, this would not maximize opportunities for building affordable housing capacity and is not a preferred option for these sites.
- 2.9 The Christine Crescent and Malaga Road sites represent positive opportunities to improve built conditions, provide meaningful contributions to the Region's affordable housing supply and act as catalysts for community improvement. Redevelopment of the Christine Crescent site provides an earlier opportunity for capacity building within the DRLHC portfolio.

3. Background

- 3.1 In 2023 the Region engaged IO to examine the feasibility of redeveloping the DRLHC sites at Malaga Road and Christine Crescent into modernized, mixed-income rental communities. IO's affordable housing development expertise has enabled information sharing while internal capacity is being built within the Affordable Housing Development and Renewal Division.
- 3.2 In 2023 the Region also engaged Bousfields to lead the development and implementation of an engagement, consultation, and communications strategy for the two sites. The outcome of that work is highlighted within the Phase 1 and Phase 2 engagement reports (see Attachment #1).

3.3 The scope of work for IO's engagement included project coordination of planning, technical, financial and market analyses to assess the feasibility of delivering Regional housing priorities on these two sites. The outcome of that work is a Redevelopment Feasibility Analysis Final Report (see Attachment #2).

4. Redevelopment Feasibility Analysis Final Report

4.1 A wide array of inputs and considerations go into the evaluation of overall development feasibility. IO, with support from Bousfields and Altus, has assessed the planning, technical, financial and market feasibility for potential redevelopment of both DRLHC sites.

4.2 The final report represents a comprehensive feasibility analysis, compiling the technical, planning, (including regulatory policy), financial (including external funding) and timing considerations and provides recommendations regarding a way forward (see Attachment #2). The following information and analysis are included in the final report for both sites:

- i. Summary of existing site conditions and surrounding context;
- ii. Land use planning policy context;
- iii. Summary of current zoning;
- iv. Applicable regulatory requirements of external agencies (i.e. Central Lake Ontario Conservation Authority (CLOCA));
- v. Description of the redevelopment conceptual site plan and development statistics including unit supply and parking requirements based on current standards;
- vi. Identifying potential options for analysis;
- vii. Planning feasibility and required development approvals;
- viii. Potential risks and mitigation opportunities in the development approvals process, including potential approaches to mitigate approval timelines;
- ix. Summary of completed technical due diligence including high level transportation servicing and natural heritage work to form the basis of additional technical studies required to support development;
- x. A list of outstanding technical due diligence/reports required to inform future development applications;
- xi. Other factors that could affect development timing or phasing, including tenant relocation, construction staging and funding;
- xii. Potential risks that may be uncovered through further technical due diligence including soil conditions, natural heritage requirements or external infrastructure improvements;
- xiii. A financial feasibility analysis accounting for:
 - Estimated development costs including demolition, overall construction estimates, construction management, landscaping, utility connections, insurance, fees and charges, and contingencies;

- the split between market and affordable rental unit supply, average forecasted rents by unit type and accounting for RGI replacement units;
 - potential senior-level government funding sources including Canada Mortgage and Housing Corporation (CMHC) funding programs, the provincial Ontario Priorities Housing Initiatives (OPHI) program, the Green Municipal Fund administered by the Federation of Canadian Municipalities (FCM), including a brief summary of each;
 - potential operating incomes from market and affordable units; and
 - a summary of financial risks and potential mitigation measures.
- xiv. A summary of Phase 1 and 2 community engagement;
- xv. A summary of potential delivery models, ranging from direct delivery (including both traditional procurement and P3s), to development partnerships (including land lease, partial/full disposition) and a high-level description of the benefits and risks associated with each delivery model, including a more detailed analysis and shortlisting of applicable direct delivery models to the two sites; and
- xvi. A summary of implementation benefits, success factors and a preliminary implementation timeline.

Redevelopment Objectives

- 4.3 Redevelopment objectives were established, informed by Phase 1 of the community engagement process:
- i. Replace existing units and optimize the provision of housing on the sites at an appropriate height/density;
 - ii. Contribute to a vibrant public realm;
 - iii. Achieve site permeability and connectivity to local services, parks and public open spaces; and
 - iv. Support the Region's sustainability and inclusivity goals.

Christine Crescent

- 4.4 The Christine Crescent site is part of a larger neighbourhood encompassing housing units along Normandy Street, Nevis Avenue and Lomond Street owned and operated by the DRLHC in the City. The site currently includes 12 two-storey semi-detached dwellings (see Figure 1) and a public road allowance recently declared surplus by the City. All 12 units are owned and operated by the DRLHC as RGI units. Six of the units are currently vacant.

4.5

Figure 1: Christine Crescent Site



- 4.6 The site is approximately 0.6 hectares (1.5 acres) in size and is located within Oshawa’s central neighbourhood. Surrounding uses include other semi-detached units under the ownership of the DRLHC, low rise apartments, a new townhouse development and Chopin Park (a neighbourhood park).
- 4.7 A preferred development concept for the site has been prepared which would replace the existing 12 semi-detached dwellings with 164 new housing units in the form of a 6-storey apartment building and stacked back-to-back townhouses along Nevis Avenue. Parking would be accommodated both underground, along with some surface level visitor and pick-up-drop-off parking.
- 4.8 The Christine Crescent Redevelopment Concept Plan is shown in Figure 2.

Figure 2: Christine Crescent Redevelopment Concept



4.9 The affordability split for the development has been modelled at 50% non-market (including affordable and RGI units) and 50% market units. A breakdown of units is provided in Table 1.

Table 1: Unit Breakdown – Christine Crescent Redevelopment

Unit Type	Market Units	Affordable Units	RGI Units	Total Units
Bachelor apartment	4	3	0	7
1 Bedroom apartment	25	22	0	47
2 Bedroom apartment	34	26	0	60
3 Bedroom apartment	7	10	6	23
4 Bedroom apartment	0	3	0	3
Stacked back-to-back townhouses (2 Bedroom)	12	6	6	24
Total	82	70	12	164

4.10 The development concept incorporates the conveyance of the Christine Crescent road allowance from the City to the Region.

- 4.11 Development approvals that will be required to permit the proposed density/height include an Official Plan Amendment (OPA) and Zoning By-Law Amendment (ZBA). Following those approvals, a Site Plan approval will be required. A Stage 1 Pre-Application Consultation (PAC) was held with the City to identify the studies, plans and information that will be required for the various development application submissions. Once the required studies are completed and applications filed, the development approvals process is estimated to take 18-24 months. In comparison to the Malaga site, the list of required technical studies is less extensive since there is no Environmental Impact Study requirement due to a nearby watercourse. It is recommended that the detailed design process for the Christine Crescent project can proceed sooner.
- 4.12 Sanitary sewerage and watermain improvements are required along Nevis Avenue, Normandy Street and Lomond Avenue to enable redevelopment. A preliminary cost estimate is being refined. The detailed design will form early works for the Christine Crescent redevelopment project.
- 4.13 Improvements to the easterly underutilized portion of Chopin Park, adjacent the Christine Crescent site will improve accessibility, visibility and usability for local residents. Detailed design creation for a new paved pedestrian path, grading, landscaping and related improvements will also be undertaken as early works.
- 4.14 IO has provided an estimate of the capital costs for the proposed redevelopment (see Table 2).

Table 2: Estimated Capital Costs – Christine Crescent Redevelopment

Expenses	Total	Per unit
Property Taxes, Development Approval and Management/Administration	1,784,618	10,882
Construction (includes design, pricing, construction and escalation contingency)	86,506,703	527,480
Design and Consultants	2,300,000	14,024
Financing	1,967,518	11,997
Development Contingency	750,000	4,573
TOTAL	\$93,308,839	\$568,956

Source: Malaga and Christine Redevelopment Feasibility Analysis (Page 44)

- 4.15 Senior level partnerships will be sought to support redevelopment. Envisioned funding includes a combination of CMHC forgivable and construction loans through the Affordable Housing Fund (AHF) and Regional capital funding.
- 4.16 The Regional investment required for Christine Crescent is estimated at approximately \$35 Million. Opportunities for additional funding streams that staff will pursue including the Green Municipal Fund administered by FCM and the

Ontario Priorities Housing Initiative, to reduce the regional capital funding investment required and improve financial sustainability of the projects (see Table 3).

Table 3: Breakdown of Potential Funding Sources: Christine Crescent Redevelopment

Sources of Funding	Total	Per unit
Regional Capital Funding	35,188,165	214,563
CMHC Forgivable Loan	8,200,000	50,000
CMHC Construction Loan	49,920,224	304,393
TOTAL	\$93,308,839	\$568,956

Source: Malaga and Christine Redevelopment Feasibility Analysis (Page 46)

- 4.17 Since the proposed development would include a mix of market rental, affordable rental and RGI units, IO provided an analysis of the expected Net Operating Income (NOI) for the proposed redevelopment to demonstrate the viability of the development to repay the required construction financing (see Table 4).

Table 4: Estimate of Forecasted Income: Christine Crescent Redevelopment

Net Operating Income Summary	Annual Gross
Market Units (82 Units)	2,547,150
Affordable Units (70 Units)	1,096,730
RGI Replacement Units (12 Units)	223,811
Potential Gross Income (PGI)	\$3,867,691
Ancillary Income (Parking and Locker)	252,600
Less: Vacancy and Credit Loss (2.7% of PGI)	(110,403)
Effective Gross Income	\$4,009,888
Less: Operating Expense	(1,370,981)
Net Operating Income (NOI)	\$2,638,907
Mortgage Payment	(2,115,820)
Cashflow after Financing	\$523,087

Source: Malaga and Christine Redevelopment Feasibility Analysis (Page 48)

- 4.18 The above tables provide high level estimates of costs that will be further refined through the course of the development approvals process and subsequent detailed design work. Similarly, operating income estimates will continue to be refined as the project approaches occupancy.
- 4.19 As an early priority, the Christine Crescent redevelopment provides needed capacity, including future decanting units that can enable future redevelopment of nearby DRLHC properties as they come forward for redevelopment.

Malaga Road

4.20 The second site is a 1.94 hectare (4.8 acre) property at the northeast corner of Malaga Road and Oxford Street in the City (see Figure 3). The site currently includes 65 three-storey townhouse units, all of which are owned and operated by the DRLHC as RGI units. Approximately 40% (25 of the units) are currently vacant. The surrounding area includes a mix of mid-rise apartments, townhouses, detached dwellings, a neighbourhood park (Cordova Park) and Oshawa Creek.

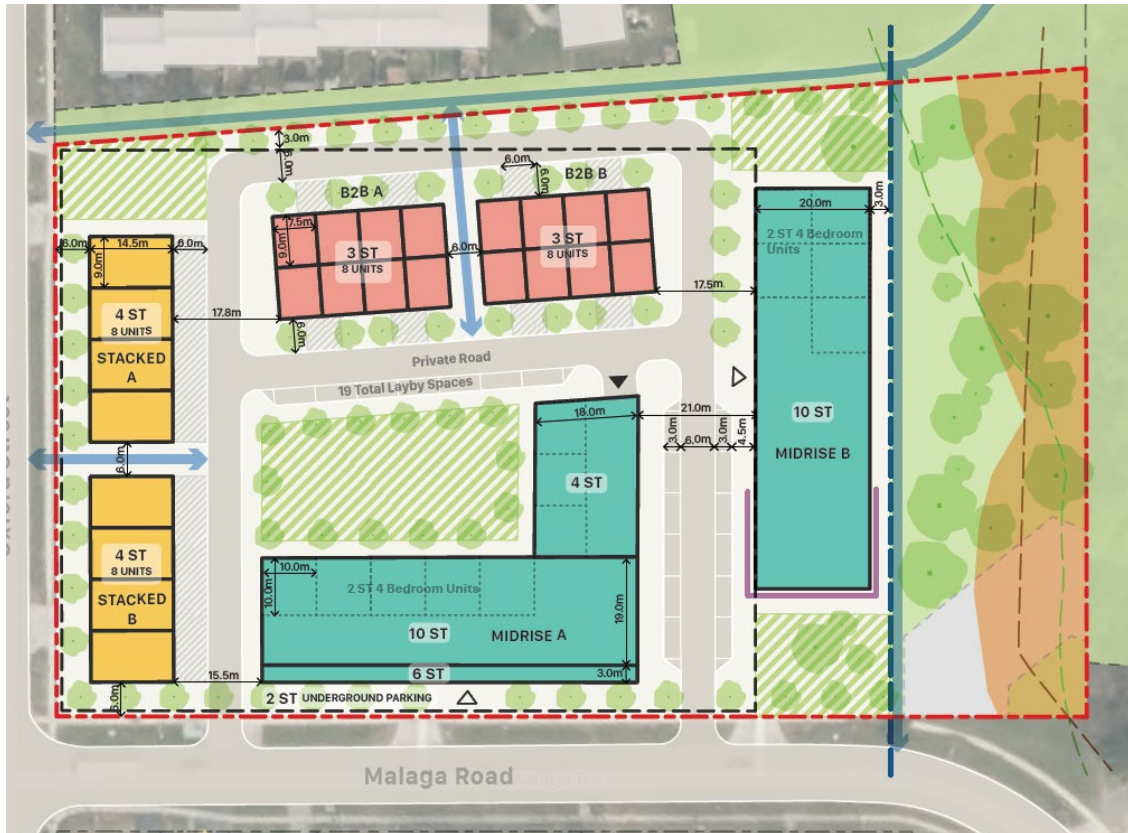
Figure 3: Malaga Road Site



4.21 The preferred development concept for the Malaga site proposes to replace the current 65 townhouse units with 439 new housing units through a mix of apartments, stacked townhomes and back-to-back townhomes. The development concept provides for two 10-storey apartment buildings, one of which would front onto Malaga Road and the second building along the east side of the site. A mix of stacked and back-to-back townhomes are proposed along Oxford Street and along the trail connection to the north of the Malaga site, where low rise homes predominate. Non-residential uses are proposed on the ground floor of the easterly mid-rise building. The concept provides for on-site community open space, trail connections to the existing parks and open space areas, and lay-by parking areas. Residential and additional visitor parking is proposed underground.

4.22 The Concept Plan for the Malaga Road redevelopment is shown in Figure 4.

Figure 4: Malaga Road Redevelopment Concept Plan



4.23 Similar to the Christine Crescent site, the affordability split for the development is modeled at 50% non-market (including affordable and RGI units) and 50% market units (see Table 5).

Table 5: Unit Breakdown: Malaga Road Redevelopment

Unit Type	Market Units	Affordable Units	RGI Units	Total Units
Bachelor apartment	10	8	0	18
1 Bedroom apartment	81	53	0	134
2 Bedroom apartment	92	59	0	151
3 Bedroom apartment	20	23	45	88
4 Bedroom apartment	0	8	8	16
Back-to-back townhouse (3 Bedroom)	8	0	8	16
Stacked townhouse (2 Bedroom)	4	4	0	8

Stacked townhouse (4 Bedroom)	4	0	4	8
TOTAL	219	155	65	439

- 4.24 Development approvals that are required to permit the proposed density/height include an OPA and ZBA Application. Following those approvals, a Site Plan Control Application will be required. A separate permit will be required from CLOCA.
- 4.25 A Stage 1 PAC was held with the City which identified the studies, plans and information that will be required for the various development application submissions. An Environmental Impact Study is required, which will include natural heritage, geotechnical and hydrogeological work to examine subsurface soil conditions, slope stability, and development limits to ensure the feasibility of proposed building locations and underground parking. A detailed servicing analysis is necessary to inform scope of costing for required sanitary sewer upgrades to support development. Other studies include a traffic impact study, stormwater management assessment, archaeological assessment, Phase 1 and 2 Environmental Site Assessment and RSC and a Planning Rationale Report.
- 4.26 Upon completion of the requisite studies, the development approvals process is estimated to take 18-24 months.
- 4.27 The estimated costs of the proposed Malaga Road development is summarized in Table 6.

Table 6: Estimated Capital Costs – Malaga Road Redevelopment

Expenses	Total	Per unit
Property Taxes, Development Approval and Management/Administration	4,575,909	10,423
Construction (includes design, pricing, construction and escalation contingency)	236,600,430	538,953
Design and Consultants	7,200,000	16,401
Financing	9,899,033	22,549
Development Contingency	1,000,000	2,278
TOTAL	\$259,275,372	\$590,604

Source: Malaga and Christine Redevelopment Feasibility Analysis (Page 22)

- 4.28 Funding needed to support redevelopment will require a combination of CMHC forgivable and construction loans through the AHF and Regional capital funding. The Regional investment has been estimated at approximately \$95 Million (see Table 7). Senior level funding such as the Green Municipal Fund administered by FCM and the Ontario Priorities Housing Initiative will also be sought.

Table 7: Breakdown of Potential Funding Sources: Malaga Road Redevelopment

Sources of Funding	Total	Per unit
Regional Capital Funding	94,983,184	216,362
CMHC Forgivable Loan	21,950,000	50,000
CMHC Construction Loan	142,342,188	324,242
TOTAL	\$259,275,372	\$590,604

Source: Malaga and Christine Redevelopment Feasibility Analysis (Page 26)

- 4.29 A detailed analysis is included below of the expected NOI for the proposed redevelopment of the Malaga site, to demonstrate the viability of the project to repay the required construction financing (see Table 8).

Table 8: Estimate of Forecasted Income: Malaga Road Redevelopment

Net Annual Operating Income Summary	Annual Gross
Market Units (219 Units)	6,647,783
Affordable Units (155 Units)	2,366,593
RGI Replacement Units (65 Units)	1,186,960
Potential Gross Income (PGI)	\$10,201,336
Ancillary Income (Parking and Locker)	553,800
Less: Vacancy and Credit Loss (2.7% of PGI)	(287,119)
Effective Gross Income	\$10,468,017
Less: Operating Expense	(3,579,015)
Net Operating Income (NOI)	\$6,889,002
Mortgage Payment	(6,033,035)
Cashflow after Financing	\$855,967

Source: Malaga and Christine Redevelopment Feasibility Analysis (Page 28)

- 4.30 The above tables provide high level estimates of costs that will be further refined through the course of the development approvals process and subsequent detailed design work. The opportunity to develop the Malaga site in phases is being explored.
- 4.31 Operating income estimates will continue to be refined as each component of the project approaches occupancy.

5. Community Engagement

- 5.1 Bousfields led the Region through two phases of extensive community engagement for the redevelopment of both sites:
- i. Phase One took place from August to December 2023 and was focused on seeking input about the overall vision and principles of the redevelopment.

- This phase included meet and greets, neighbourhood walks, an online survey, as well as in-person tenant and community open houses.
- ii. Phase Two took place from January-March 2024 and focused on soliciting feedback about the proposed design concepts for both redevelopment sites. This phase included door-knocking, an online community meeting, and a second feedback survey.
- 5.2 Throughout these phases of engagement there has been ongoing and regular touchpoints with the community through the project webpage and project-specific email addresses. While the in-person participation was modest, the online engagement has provided general support for the need for redevelopment and provided staff with opportunities to incorporate community feedback into the refinement of the proposed development concept.
- 5.3 The key themes that emerged from community engagement which were considered in the creation of the preferred development concept for both sites include:
- i. Prioritization of accessibility and safety in the design;
 - ii. Provision of family-sized units;
 - iii. New and enhanced connections to surrounding amenities;
 - iv. Provision of onsite functional, recreational and communal amenities;
 - v. Preference for the inclusion of townhouse and medium density built-forms;
 - vi. Balance of modern design and cost-effective maintenance;
 - vii. Ensuring local infrastructure can support the proposed density; and
 - viii. Ensuring appropriate and timely communication of project timelines and updates.
- 5.4 Future community engagement will continue through the required OPA/ZBA processes on both sites.

6. Project Delivery and IO's Conclusion

- 6.1 After developing scenarios for each site, IO led the Region through a preliminary procurement options analysis workshop to refine the list of appropriate project delivery models for redevelopment based on the redevelopment objectives and constraints identified by IO together with Regional staff, which included a preference by the Region for a direct delivery model that allows the Region to maintain ownership and control over the land and buildings on the two sites. Following an extensive review of feasible direct delivery models, IO, together with Regional staff, determined that the two direct delivery models that should be considered for both sites are Construction Management at Risk and Design-Build. IO is recommending further analysis of these two models, and a possible market sounding be undertaken once the procurement scope details have been created.
- 6.2 While the IO feasibility analysis for redevelopment outlines risks and questions to address for both sites, IO concludes that both sites offer good opportunities for

intensification and revitalization into modernized mixed-income rental communities.

7. Approaching a Comprehensive Strategy

7.1 The planned redevelopment of the Malaga and Christine sites represents the first steps in a revitalization approach that is needed across the DRLHC portfolio. Common issues and the growing challenges being faced include:

- i. Community housing stock that is geographically concentrated and consisting of entirely RGI units.
- ii. Supply limitations and a growing need for modern affordable housing.
- iii. The age of older community housing stock with lower building and living conditions in certain locations.
- iv. The need for substantial capital investments in certain locations, for units to remain fit for occupancy and some units that may no longer be fit for occupancy.
- v. Accessibility issues with the current housing stock, which will become more pronounced as the Region's population continues to age.

7.2 While predevelopment work proceeds for the subject sites, a fulsome Community Housing Development and Renewal Strategy is necessary to guide positive change and undertake a strategic approach to development, asset management and land across the DRLHC portfolio. Staff are recommending that an overall Strategy be developed to guide Regional action. Funded through the 2024 budget, the Strategy would incorporate the following elements:

- i. An examination of the DRLHC portfolio in the context the Region's legislated responsibility as Service Manager.
- ii. Update the inventory of existing DRLHC housing units and compare existing housing with forecasted needs.
- iii. Identify best practices for reducing isolation and marginalization through transforming of community housing sites into mixed income communities.
- iv. Identifying opportunities where partnerships with private and not-for-profit housing providers, including approaches where additional affordable and RGI supply, could be provided within their project buildings.
- v. Highlighting opportunities for aligning development and renewal efforts with other Regional strategic priorities on poverty prevention, reducing homelessness, supporting transit-oriented development initiatives and environmental sustainability measures.
- vi. Establishing a program of community housing improvement and redevelopment projects for implementation.
- vii. Forecasting potential expenditures and funding sources in support of project delivery.

8. Next Steps

- 8.1 Upon endorsement of the redevelopment feasibility analysis, staff will undertake due diligence studies required for development approval and proceed to the next phase of pre-consultation. Once completed, staff will prepare and submit the required OPA/ZBA development applications for both sites to secure the first phase of development approvals.
- 8.2 Phase 3 of community engagement for both sites will occur as part of the mandatory public consultation process for the future OPA and ZBA applications.
- 8.3 Redevelopment of Christine Crescent site has the greatest opportunity for early capacity building. Steps have been recommended to advance approvals needed to proceed with a direct delivery redevelopment by the Region.
- 8.4 Staff will continue to identify senior-level government funding opportunities as the redevelopment feasibility analysis work progresses. Regional staff will continue to pursue those funding opportunities as appropriate within the current stage of the development process.
- 8.5 Staff will employ government relations strategies as appropriate to highlight senior-level government investment opportunities at the two sites.

9. Previous Reports and Decisions

- 9.1 On May 22, 2014, Regional Council approved At Home in Durham, the Durham Housing Plan 2014-2024 (Report #2014-J-16) setting out the Region's vision for housing over the ten-year period in accordance with the *Housing Services Act*.
- 9.2 On November 20, 2019, Regional Council approved At Home in Durham, the Durham Housing Plan 2014-2024 – Five-year Review ([#2019-COW-25](#)), authorizing the preparation of a Master Housing Strategy including a review of the current housing system and revitalization of the DRLHC Portfolio.
- 9.3 On November 19, 2020, Regional Council approved the Master Housing Strategy, ([#2020-COW-27](#)).
- 9.4 On March 29, 2023, Regional Council approved Approval to Retain IO for Project Management Services for the First Phase of the Revitalization of Durham Regional Local Housing Corporation Properties ([#2023-COW-12](#)).
- 9.5 On June 28, 2023, Regional Council approved At Home in Durham, the Durham Housing Plan 2014-2024 Annual Report (Report [#2023-COW-26](#)-COW-26).

10. Relationship to Strategic Plan

10.1 This report aligns with and addresses the following strategic goals and priorities in the Durham Region Strategic Plan:

- i. Goal 2.1 – Revitalize existing neighbourhoods and build complete communities that are walkable, well-connected, and have a mix of attainable housing.
- ii. Goal 4.1 – Revitalize community housing and improve housing choice, affordability and sustainability.
- iii. Goal 5.1 – Optimize resources and partnerships to deliver exceptional quality services and value.

11. Conclusion

11.1 The work undertaken by IO and Bousfields on behalf of the Region provided valuable assistance in advancing development due diligence for both sites. There is a pressing need to deliver affordable housing on both sites. The recommendations in this report will advance needed pre-development work and development applications while a broader long-term strategy is developed.

12. Attachments

Attachment #1: Phase 1 Feedback Summary and Phase 2 Feedback Summary
(Prepared by Bousfields)

Attachment #2: Malaga and Christine Redevelopment Feasibility Analysis Final Report
(Prepared by Infrastructure Ontario)

Respectfully submitted,

Original signed by

Stella Danos-Papaconstantinou
Commissioner of Social Services

Original signed by

Nancy Taylor BBA, CPA, CA
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Recommended for Presentation to Committee

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Phase 1 Feedback Summary

Durham Regional Local Housing
Corporation (DRLHC) Sites

Malaga Road
Christine Crescent

Executive Summary

As part of Durham Region's first phase of their revitalization strategy, two Durham Regional Local Housing Corporation (DRLHC) properties were selected. These properties are:

- 416, 424, 432, 440 and 448 Malaga Road (Malaga Road Redevelopment); and
- 419, 421, 425, 427, 431, 433, 437, 439, 443, 445, 449 and 451 Christine Crescent (Christine Crescent Redevelopment)

The feedback detailed in this report, represents all of the community engagement that was conducted during Phase 1 of the community engagement process, and includes feedback and comments from the Initial Communication Phase. Separately, Regional Staff have begun outreach with First Nations communities. The information summarized in this report includes feedback received at the following in-person and online events:

August 2023 - Meet and Greets

The Meet and Greets were an informal opportunity for existing tenants to meet the project team and learn more about the redevelopment project, as well as community engagement opportunities.

October 30 and November 2, 2023 - Neighbourhood Walks

A series of resident-guided walks were held, to learn more about the community while collecting ideas, questions, and comments through informal conversations.

November 13 to December 8, 2023 - Survey #1

An online survey was launched, providing tenants, neighbours, and other interested community members the opportunity to provide input to shape the vision and principles of the redevelopment.

December 4 and 6, 2023 - Tenant and Community Open House(s)

Over the course of several hours, existing tenants and community members were invited to drop by an Open House to share their thoughts regarding potential ideas for Housing Types, Open and Green Spaces, Community Spaces and Amenities, as well as Streets and Connections.

Overall, the project team heard the following key themes throughout Phase 1 of the engagement process. These themes will be important for the project team to keep in mind to inform the Design Concept Options as we advance through Phase 2 of the engagement process. These key themes are:

- Thoughtful design, accessibility, and community safety
- Long-term upkeep and maintenance
- Housing type, design, and privacy
- Greenspaces, community amenities and programming

About the Redevelopment

The Region of Durham is seeking to redevelop two Durham Regional Local Housing Corporation (DRLHC) sites. Two sites were selected to be part of the first phase of Durham Region's revitalization strategy to initiate a minimum of 1,000 new rental affordable housing units in Durham by 2024. These properties are:

- 416, 424, 432, 440 and 448 Malaga Road; and
- 419, 421, 425, 427, 431, 433, 437, 439, 443, 445, 449 and 451 Christine Crescent

In order to gather public input and help shape the future buildings on the properties, The Region of Durham has engaged Bousfields Inc. to lead their community engagement with both the tenants living on the properties as well as the surrounding community and interested parties.

To-date, we have completed both our Initial Communications Phase as well as Phase 1 of the engagement process. Our Initial Communications Phase kicked off the communications and engagement process and provided First Nations communities, tenants, and nearby neighbours with the channels to learn more about the project. Phase 1 of the engagement approach focused on seeking input from tenants, stakeholders/community groups, and the broader community, about the overall vision and principles of the redevelopment.

About this Summary

This report summarizes both in-person, online, and survey feedback and responses received in both the Initial Communications Phase as well as Phase 1 of the community engagement process for DRLHC's revitalization of Malaga Road and Christine Crescent. The Feedback Summary is divided into four sections:

Section 1: Neighbourhood Walks

A summary of all comments, questions, and ideas collected through informal conversations with tenants during resident-guided walks around the community.

Section 2: Webpage/Email Feedback

A summary of questions and comments received through both the Project Webpage and Malaga Road and Christine Crescent Project Emails.

Section 3: Open House Feedback

A summary of key themes and examples of various features and amenities the community may wish to see incorporated into the redevelopments. This section includes some of the precedent images that were commonly spoken about by community members.

Section 4: Survey Feedback

A summary of the survey results which was launched at the start of Phase 1. The survey results were used to build and inform the vision for the revitalization of both sites.

Section 1: Neighbourhood Walks Feedback



Streets and connections

Providing new and enhanced connections and streetscape that take into consideration accessibility and maintenance.

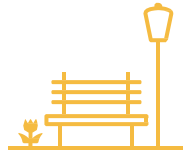
“Pathway to Chopin Park is a high priority to our community. Outside of the winter, it is a connection to No Frills and [other public amenities].”

“I like the look of the Habitat for Humanity homes, but I’m concerned about the privacy and accessibility of the townhouse-style dwellings.”



Housing type

There was an overall indication for a preference for modern housing with a desire to maintain some of the privacy of the existing units.



Community spaces and amenities

Creating recreation and play spaces that are available during all seasons. Consider implementing public art installations, safe places for children to play, as well as ensuring there is greenery, garden spaces, and beautification of the properties.

“Community gardens would be a great opportunity for wellness and fostering good mental health.”



Other considerations

There is general excitement expressed about both revitalization projects, and a desire to take into consideration the natural heritage of the area.

Section 2: Email Feedback

Key feedback areas



Housing considerations

- Increasing the housing stock for the area
- Centering affordability in the new housing
- Ensuring units have privacy
- Creating spaces for outdoor recreation

“When building we need to ensure that we maintain some space and privacy between units.”



Environmental considerations

- Environmental considerations with regard to local flora and fauna



Community considerations

- Creating spaces that become a source of pride for the community
- Creating complete communities with thoughtful and aesthetic designs

“We need to ensure that we are building pride and a sense of community.”



Timing and community input

- Project timing and phasing plan
- Ensuring the community remains informed as the project advances
- Comments in support of the project

Additional community questions

Throughout the engagement process, we received a variety of questions from members of the public. The list below represents a summary of some of the key questions:

- Will the redevelopment include high rise buildings (apartments)?
- When will a conceptual site plan be available for both properties?
- Will this be affordable to families?
- How much would rent be for a family of four?
- How do you qualify for one of the new affordable units?
- What will the development be?
- What changes will occur?
- Will this bring greater volume of housing to the community?
- Along with the changes to the residences, what services or employment spaces will be introduced in the immediate community?

Section 3: Open House Feedback



Streets and connections

Key feedback areas

- Accessibility of infrastructure and connections
- Greenery and aesthetics
- Traffic and pedestrian safety (especially for kids)
- Broader community connections

Examples



Comments

- "I would like to see wider sidewalks for easier pedestrian movement, especially during winter."
- "I liked the photo featuring the dog walking and bike lanes. I particularly appreciate the designated bike lanes."
- "Can we ensure the streets are safe for the kids to play in."
- "We need to create connections to Chopin Park with safe and paved pathways." (Christine Crescent)
- "It's really important having access onto the ravine. We need to have easy and safe entry points." (Malaga Road)



Open and green space

Key feedback areas

- Recreation and play spaces for a mix of uses, ages, and seasons
- Greenery, garden spaces, and consider aesthetics
- Community concerns surrounding safety
- Parent- and family-friendly features
- Consideration for people with diverse abilities
- Long-term maintenance of spaces
- Designs reflective of residents' safety
- Pet-friendly designs

Examples



Comments

- "Can we have open spaces that are designed for a variety of sports and activities that kids, teenagers and adults can use."
- "For the open spaces, I like the idea of a mix of courtyard seating with tables and play areas that can be easily seen."
- "I like the idea of a green rooftop with views to the lake."
- "The outdoor spaces need to accommodate people with special needs."
- "I really like the idea of a community garden and rooftop gardens."



Housing type

Key feedback areas

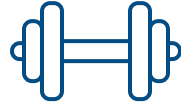
- Prefer townhomes and some medium density-built forms
- Aesthetic material choices and modern architectural design
- Complementary environmental and green design
- Ensure easy maintainability of the units
- Incorporate balconies into higher densities
- Privacy and security of the new units
- Parking facilities for tenants and include electric vehicle charging
- Unit sizes friendly for families and pets
- Clearly define the tenure of the new housing
- Thoughtful layout for the units

Examples



Comments

- "I like the modern-looking buildings, but can we make sure that we are using nicer materials."
- "I really would like for the new units to have central air and a coat room for storage."
- "We really need proper waste disposal and easy maintenance."
- "I like the idea of big windows for increased visibility."

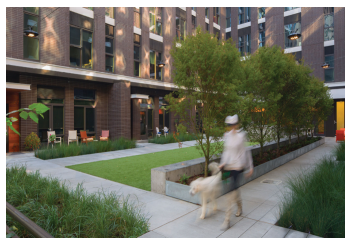
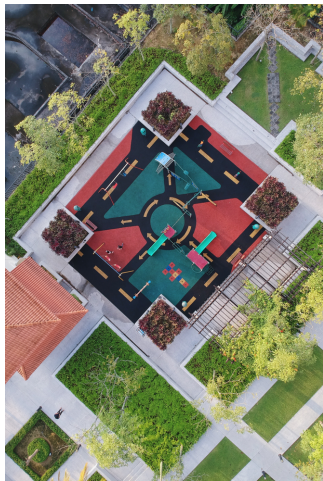


Community spaces and amenities

Key feedback areas

- Themed play spaces
- Kid-friendly public spaces and art
- Sensory-calming amenity areas and space for indoor/outdoor exercise areas
- Indoor space for community gatherings and activities
- Outdoor BBQ spaces for communal cooking
- In-unit washer and dryers
- Dog-friendly features

Examples



Comments

- "I really like the idea of [public/community] art. I just hope it remains undamaged."
- "Having some rooftop amenities could make for a unique and enjoyable experience."
- "I really would like to have more dog parks and dog-friendly amenities." (Christine Crescent)
- "I think having public art would be great for kids, especially sensory-oriented."



Other

Key themes

- Security and safety of the area
- Access to a mix of transit modes
- Explore opportunities for other housing programs and ownership models.
- Prioritize preferences for online communication



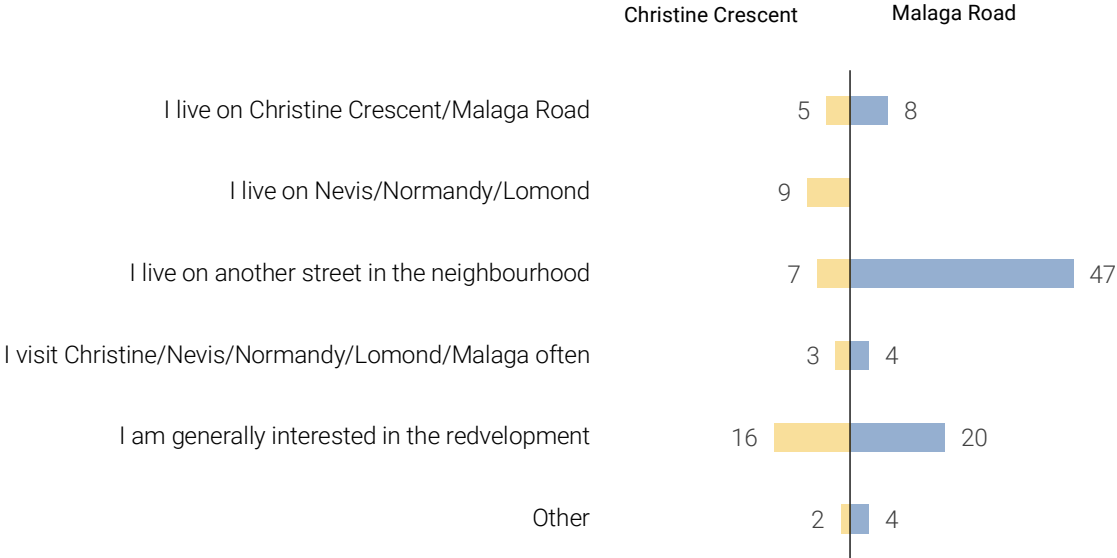
Comments

- "There are social issues in the neighbourhood such as noise and garbage problems."
- "We need to ensure that bus service continues during construction." (Christine Crescent)
- "It would be great if there was a rent-to-own programme."

Section 4: Survey Feedback

Survey results are categorized by feedback received from either the Malaga Road Redevelopment or Christine Crescent Redevelopment surveys. Survey #1 was open from November 13 to December 8, 2023, and was distributed through geo-targeted social media ads as well as on various print communications directing respondents to fill out the survey on the project webpage. A total of 123 respondents completed the surveys, with 83 responses for the Malaga Road Redevelopment Survey and 40 responses for the Christine Crescent Redevelopment Survey.

Q1: What best describes your relationship to the neighbourhood?



Note: responses reported are response counts per category per survey.

Q1 Total Responses: 123

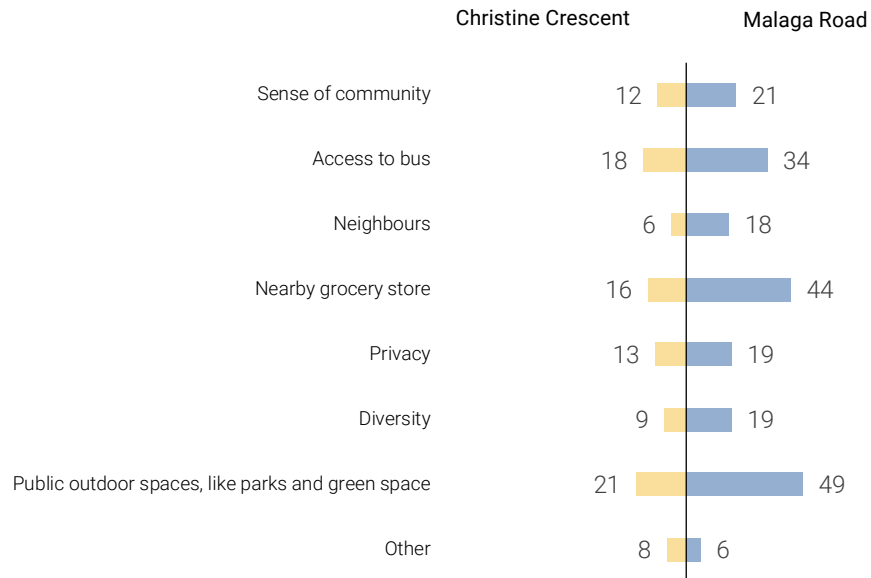
Q1 Christine Crescent Survey Total Responses: 40

Q1 Malaga Road Survey Total Responses: 83

Summary

- 44% of total respondents **lived on another street in the neighbourhood.**
- 29% of total respondents were **generally interested in the redevelopment.**
- 10% of the Malaga Road Survey respondents live on Malaga Road, while 13% of the Christine Crescent Survey respondents live on Christine Crescent.

Q2: What do you love most about your neighbourhood?



Note: responses reported are response counts per category per survey.

Q2 Total Responses: 123

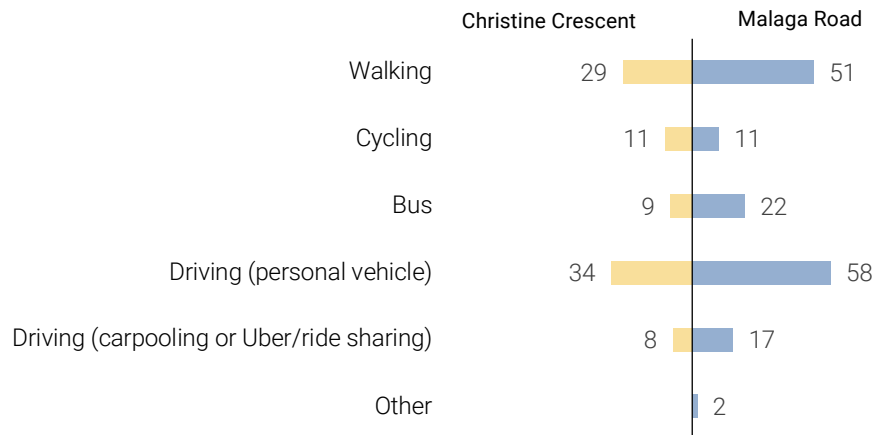
Q2 Christine Crescent Survey Total Responses: 40

Q2 Malaga Road Survey Total Responses: 83

Summary

- 57% of the total respondents **loved the public outdoor spaces, like parks and green spaces in their neighbourhood.**
- 49% of the total respondents loved having **a grocery store nearby.**
- 42% of the total respondents loved having **access to a bus in their neighbourhood.**
- 25% of Malaga Road respondents and 30% of Christine Crescent respondents **loved the sense of community in their neighbourhood.**

Q3: How do you travel around your neighbourhood?



Note: responses reported are response counts per category per survey.

Q3 Total Responses: 123

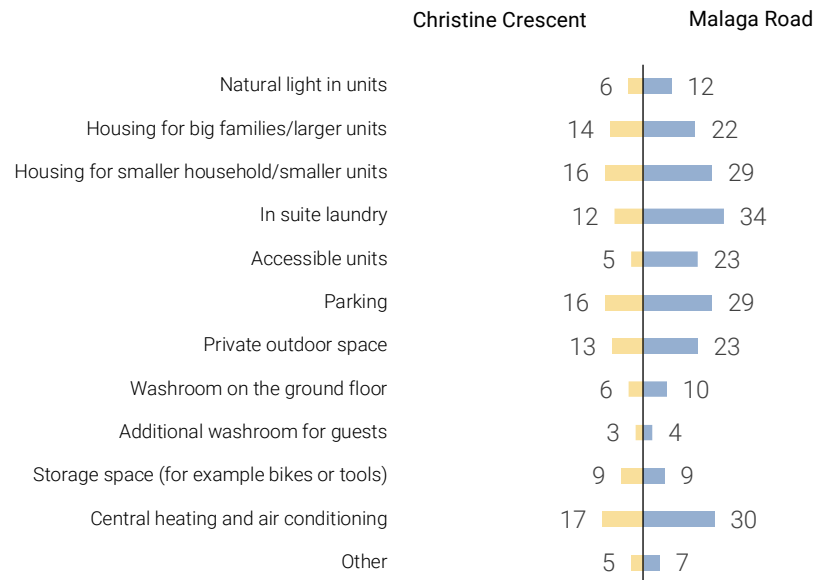
Q3 Christine Crescent Survey Total Responses: 40

Q3 Malaga Road Survey Total Responses: 83

Summary

- 75% of the total respondents said that one of the ways **they travel around the neighbourhood is by driving a personal vehicle.**
- 65% of the total respondents said that one of the ways **they travel around the neighbourhood is by walking.**
- 23% of the Christine Crescent Survey respondents said that one of the ways **they travel around the neighbourhood is by using the bus.**
- 28% of the Christine Crescent Survey respondents and 13% of the Malaga Road Survey respondents said that one of the ways **they travel around the neighbourhood is by cycling.**

Q4: When thinking about designing new homes, I care most about:



Note: responses reported are response counts per category per survey.

Q4 Total Responses: 123

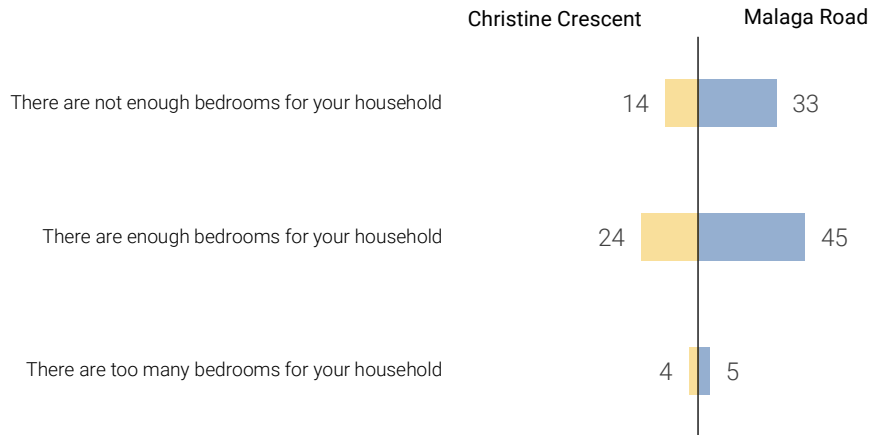
Q4 Christine Crescent Survey Total Responses: 40

Q4 Malaga Road Survey Total Responses: 83

Summary

- 38% of the total respondents said that **they care about having central heating and air conditioning when thinking about the new building design.**
- 37% of the total respondents said that **they care about in-suite laundry for the new building.**
- 37% of the total respondents said that **they care about having parking in the new building.**
- 37% of the total respondents said that **they care about having smaller units that are suitable for smaller households in the new building.**

Q5: When thinking about your current home, do you feel that:



Note: responses reported are response counts per category per survey.

Q5 Total Responses: 123

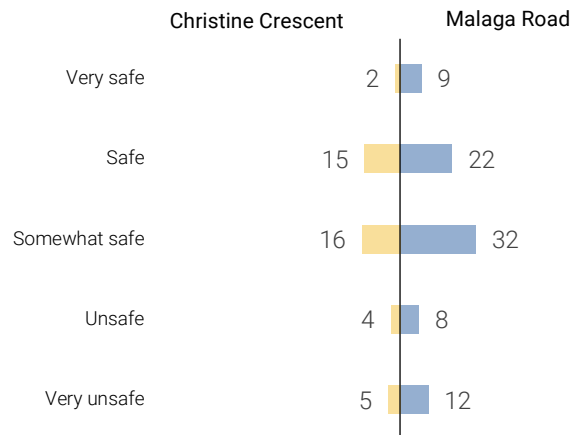
Q5 Christine Crescent Survey Total Responses: 40

Q5 Malaga Road Survey Total Responses: 83

Summary

- 38% of the total respondents said that **there are not enough bedrooms for their current household size.**
- 56% of the total respondents said that **there are enough bedrooms for their current household size.**
- 7% of the total respondents said that **there are too many bedrooms for their current household size.**

Q6: How safe do you feel in your community?



Note: responses reported are response counts per category per survey.

Q6 Total Responses: 123

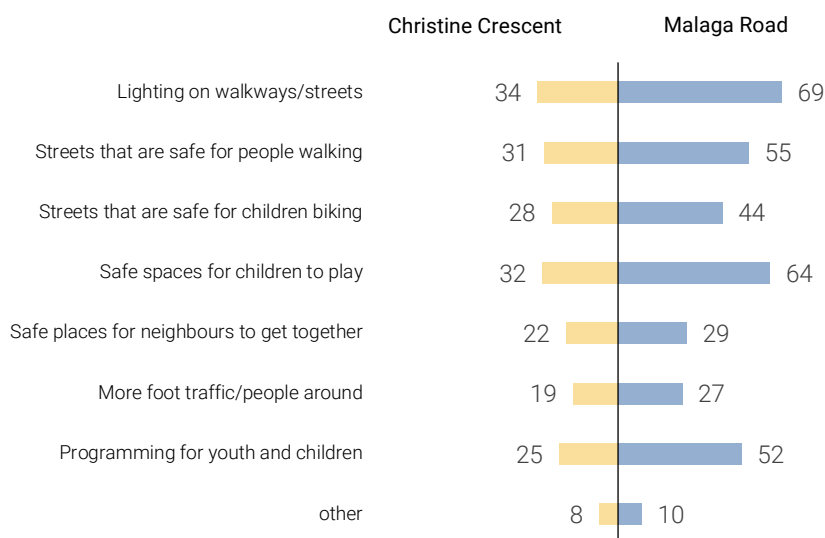
Q6 Christine Crescent Survey Total Responses: 40

Q6 Malaga Road Survey Total Responses: 83

Summary

- 39% of the total respondents said that they **feel somewhat safe in their community.**
- 30% of the total respondents said that they **feel safe in their community.**
- 14% of the Malaga Road Survey respondents **feel very unsafe in their community.**

Q7: What could ensure the revitalization of Christine Crescent/Malaga Road is safe and welcoming for everyone?



Note: responses reported are response counts per category per survey.

Q7 Total Responses: 123

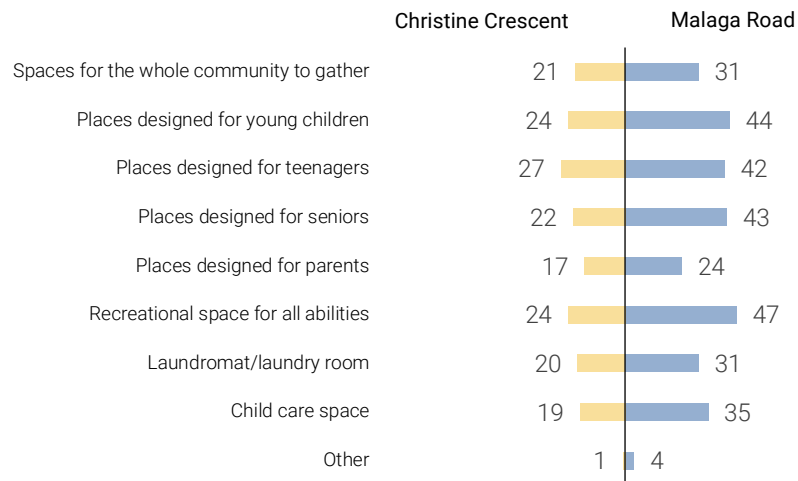
Q7 Christine Crescent Survey Total Responses: 40

Q7 Malaga Road Survey Total Responses: 83

Summary

- 84% of the total respondents said that **lighting on the walkways and streets would help make the revitalization safe and welcoming.**
- 78% of the total respondents said that **creating safe spaces for children to play would help make the revitalization safe and welcoming.**
- 70% of the total respondents said that **creating streets that are safe for people walking would help make the revitalization safe and welcoming.**

Q8: What indoor amenities would you like to see in your community?



Note: responses reported are response counts per category per survey.

Q8 Total Responses: 123

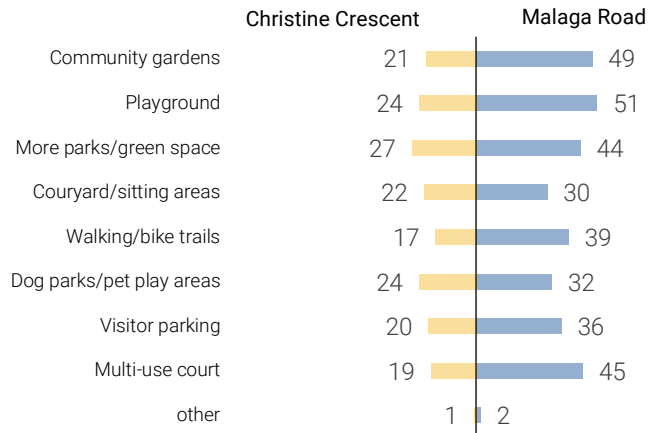
Q8 Christine Crescent Survey Total Responses: 40

Q8 Malaga Road Survey Total Responses: 83

Summary

- 58% of the total respondents said that they **would like to see indoor recreational spaces for all abilities.**
- 56% of the total respondents said that they **would like to see indoor spaces designed for teenagers.**
- 55% of the total respondents said that they **would like to see indoor spaces designed for young children.**

Q9: What outdoor amenities would you like to see in your community?



Note: responses reported are response counts per category per survey.

Q9 Total Responses: 123

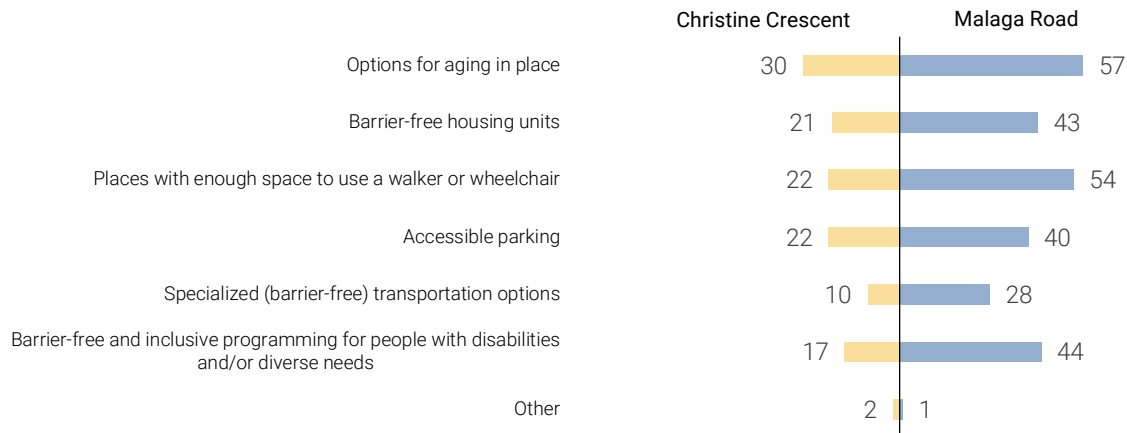
Q9 Christine Crescent Survey Total Responses: 40

Q9 Malaga Road Survey Total Responses: 83

Summary

- 61% of the total respondents said that they **would like to see a playground in the community.**
- 58% of the total respondents said that they **would like to see more parks or green spaces in the community.**
- 57% of the total respondents said that they **would like to see a community garden in the revitalization.**

Q10: When thinking about designing for accessibility, I care most about:



Note: responses reported are response counts per category per survey.

Q10 Total Responses: 118

Q10 Christine Crescent Survey Total Responses: 39

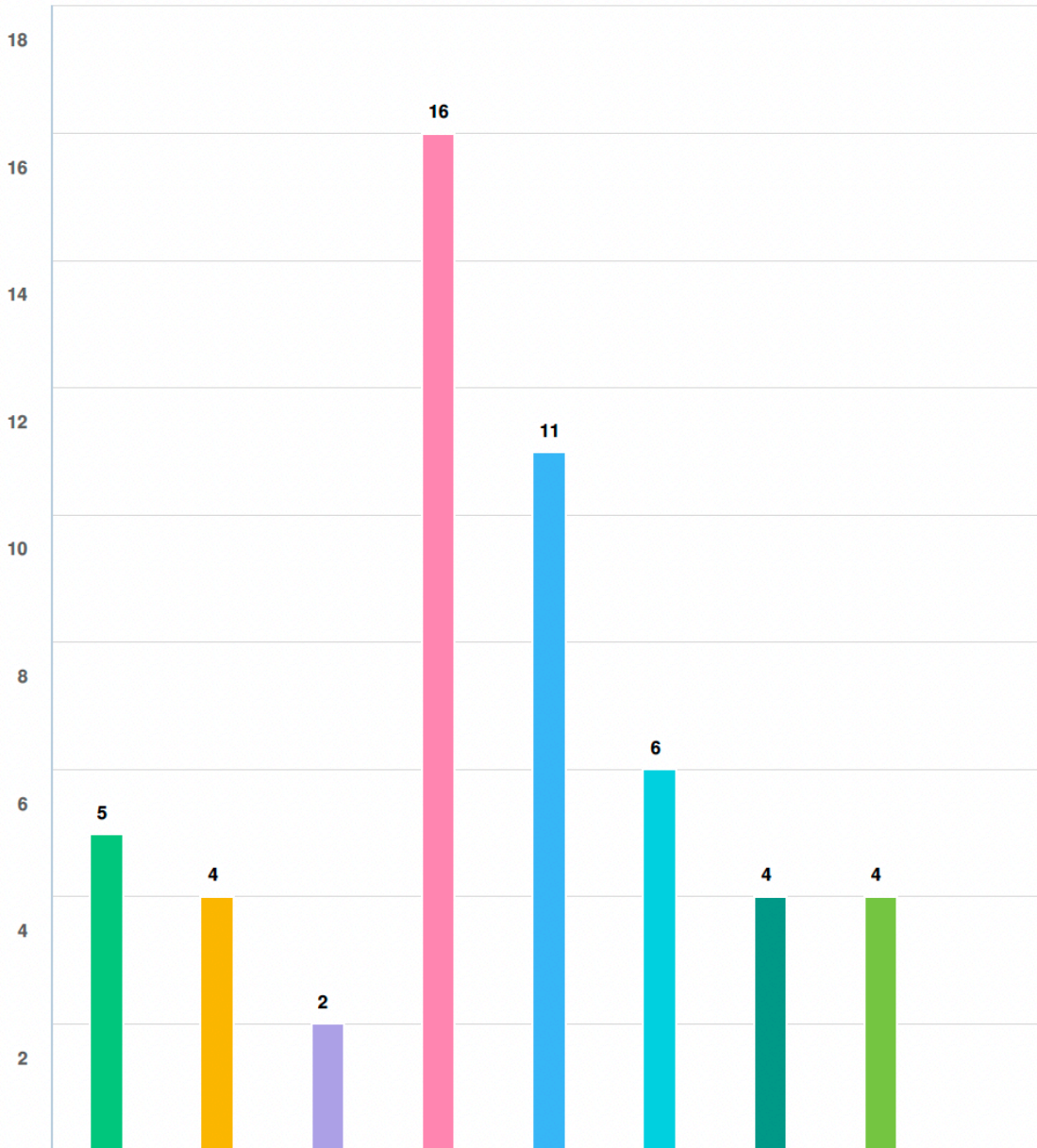
Q10 Malaga Road Survey Total Responses: 79

Summary

- 74% of the total respondents care most about options for aging in place when thinking about designing for accessibility.
- 64% of the total respondents care most about places with enough space to use a walker or wheelchair when thinking about designing for accessibility.
- 54% of the total respondents care most about barrier-free housing units when thinking about designing for accessibility.

Demographic Results (Christine Crescent)

Q11: What is your age? If you are responding on behalf of your household, please select all that apply.

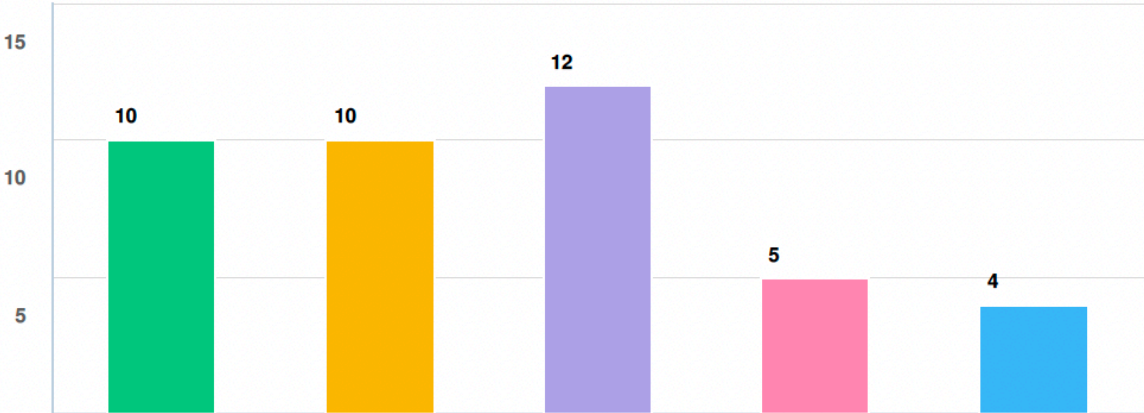


Question options

- 5 to 12 years old
- 13 to 18 years old
- 19 to 29 years old
- 30 to 39 years old
- 40 to 55 years old
- 56 to 64 years old
- 65 to 74 years old
- 75 years old or above
- Prefer not to answer

Optional question (39 response(s), 1 skipped)
Question type: Checkbox Question

Q12: How many people live in your home including you?

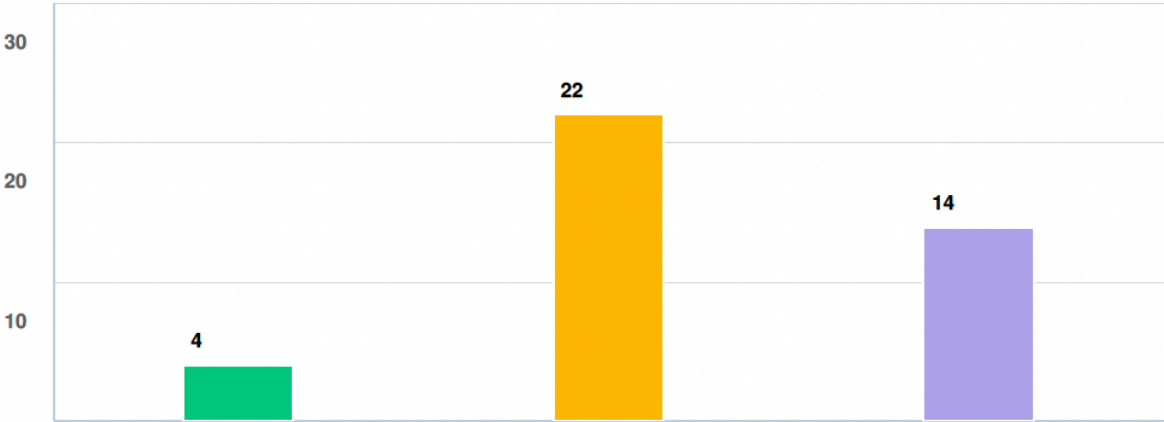


Question options

- One person
- Two people
- Three people
- Four people
- Five or more people

*Optional question (39 response(s), 1 skipped)
Question type: Checkbox Question*

Q13: Do you or your household use a private vehicle?

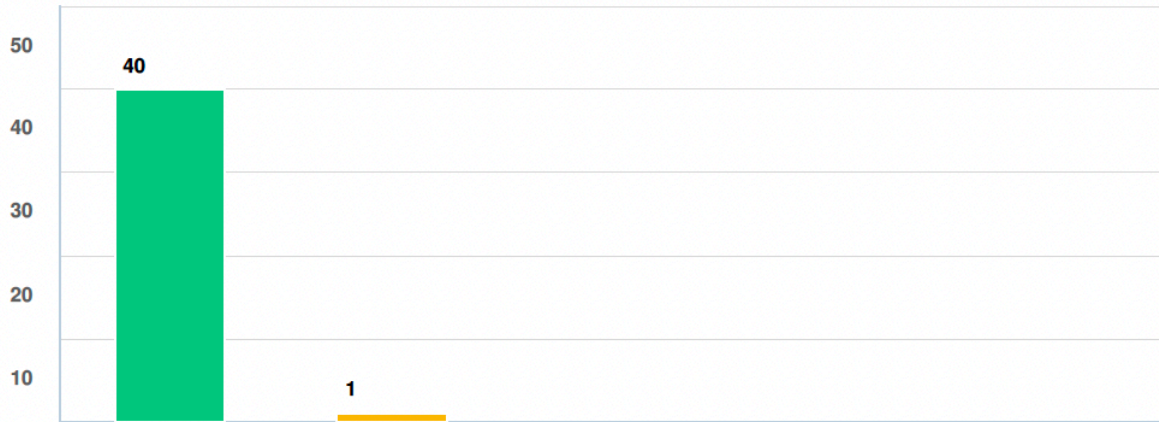


Question options

- No
- Yes, we use one vehicle
- Yes, we use more than one vehicle

*Optional question (38 response(s), 2 skipped)
Question type: Checkbox Question*

Q14: What language are you most comfortable communicating in?

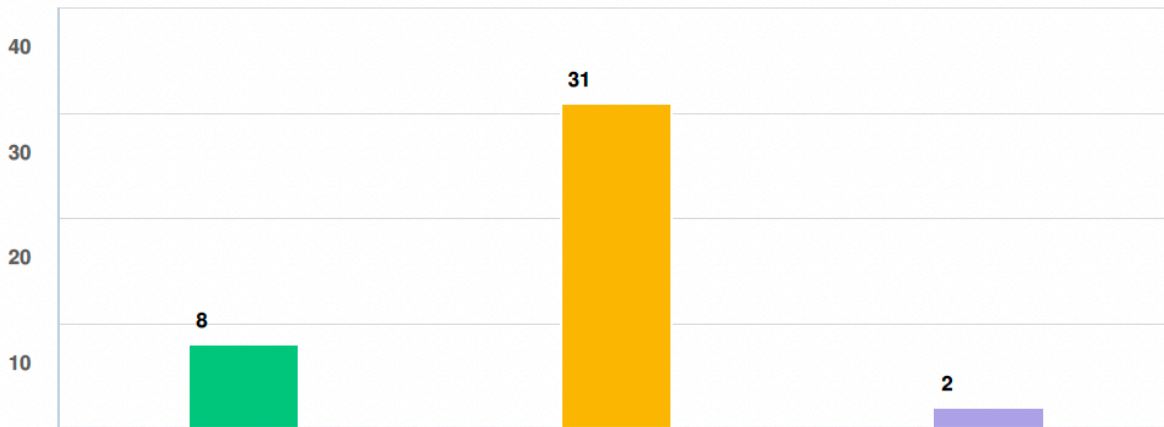


Question options

- English
- French
- Spanish
- Prefer not to answer
- Other (please specify)

Optional question (39 response(s), 1 skipped)
Question type: Checkbox Question

Q15: Do you identify as an Indigenous person (First Nation, Métis or Inuit)?

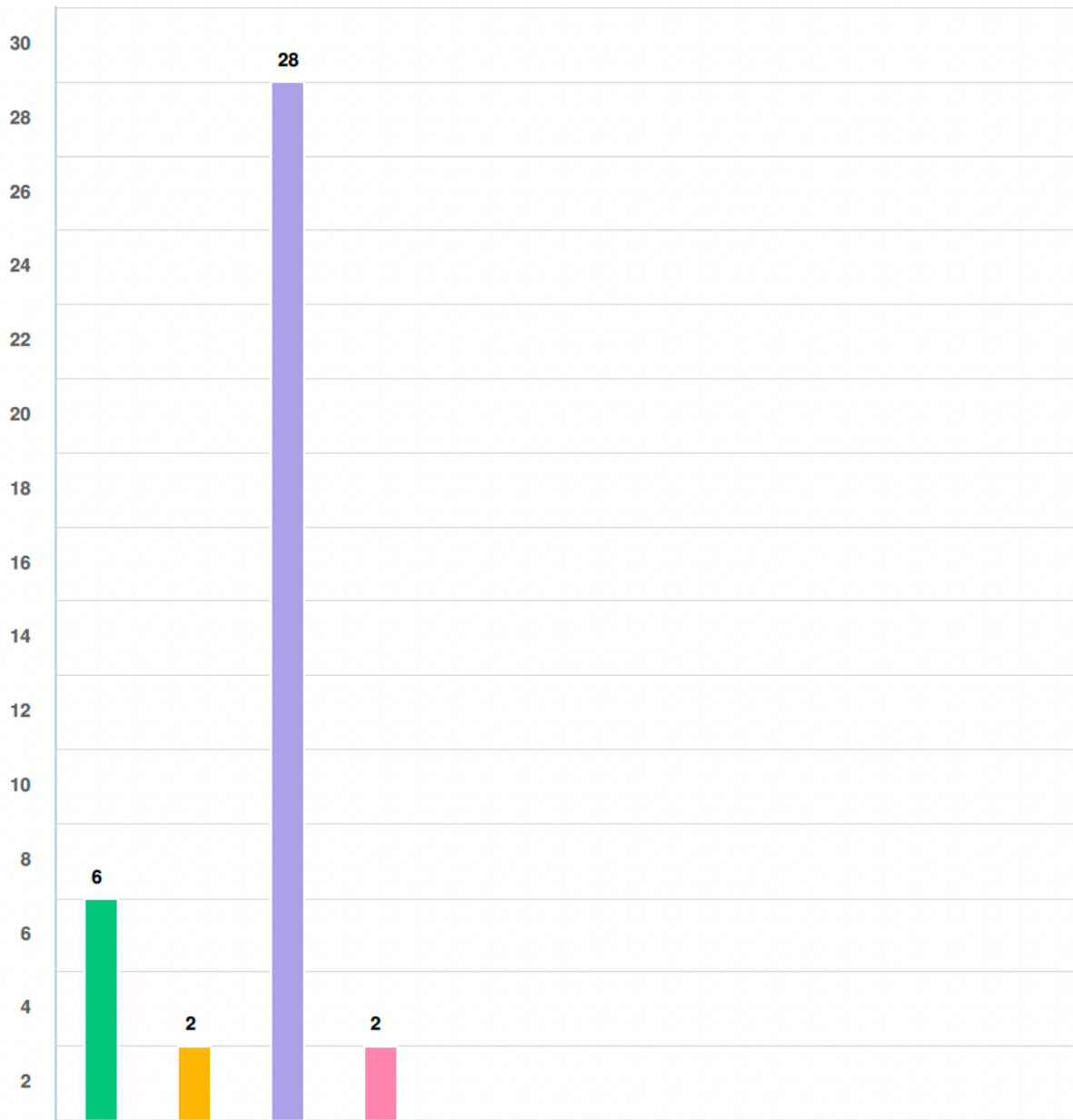


Question options

- Yes
- No
- Prefer not to answer

Optional question (39 response(s), 1 skipped)
Question type: Checkbox Question

Q16: Do you identify as the following?



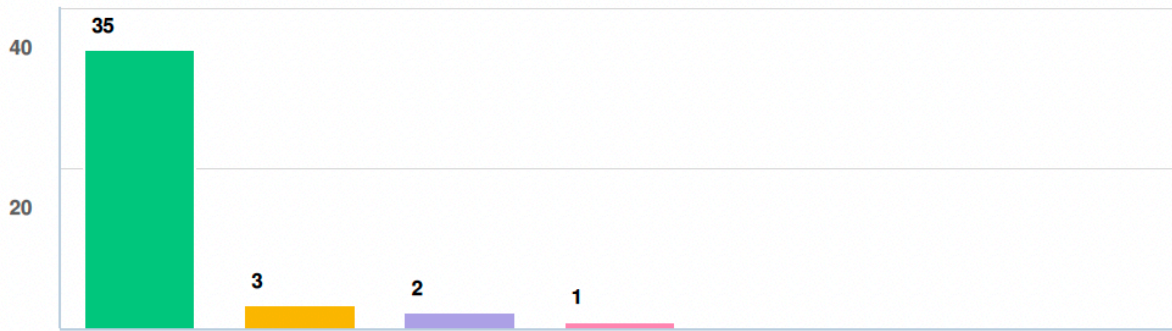
Question options

- Black/African
- North American Indigenous
- White
- Prefer not to answer
- Asian - East
- Asian - South/East Indian/Indo-Caribbean
- Asian - Southeast
- Non-White Latino or Hispanic
- Non-White Middle Eastern, West Asian or North African
- Pacific Islander
- Please write your racial identity below if you do not see yourself reflected above:

Optional question (37 response(s), 3 skipped)

Question type: Checkbox Question

Q17: Do you identify as the following?

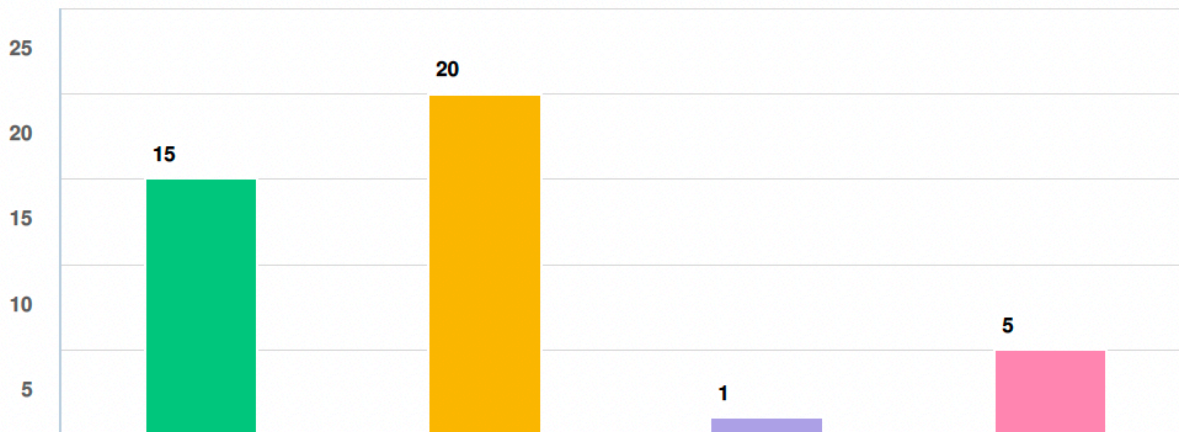


Question options

- I was born in Canada.
- I have been in Canada for 10 years or more and less than 20 years.
- I have been in Canada for 20 years or more.
- Prefer not to answer.
- I have been in Canada for less than a year.
- I have been in Canada for one year or more and less than five years.
- I have been in Canada for five years or more and less than 10 years.

Optional question (39 response(s), 1 skipped)
Question type: Checkbox Question

Q18: Do you identify as a person with a disability?



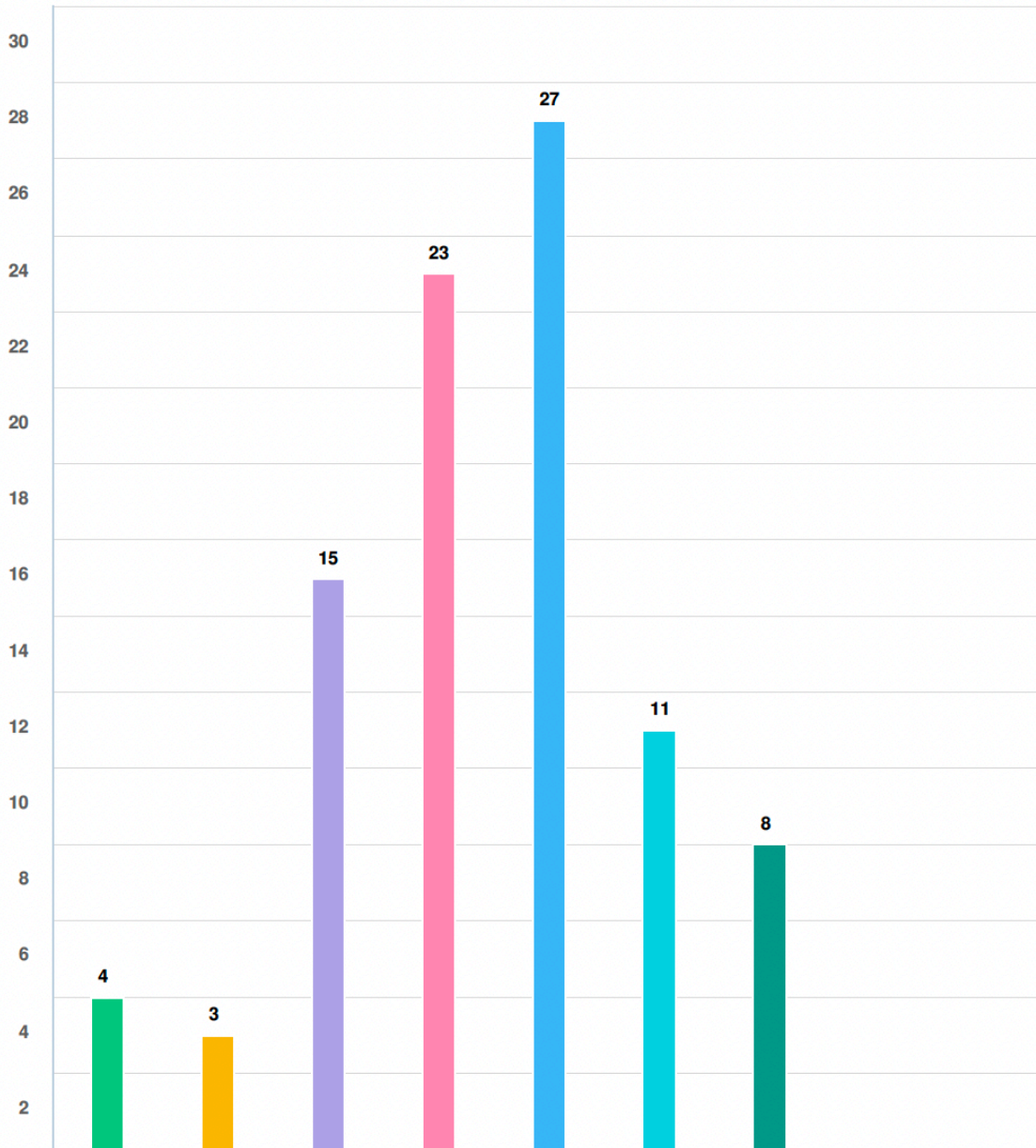
Question options

- Yes
- No
- Don't know
- Prefer not to answer

Optional question (39 response(s), 1 skipped)
Question type: Checkbox Question

Demographic Survey (Malaga Road)

Q11: What is your age? If you are responding on behalf of your household, please select all that apply.



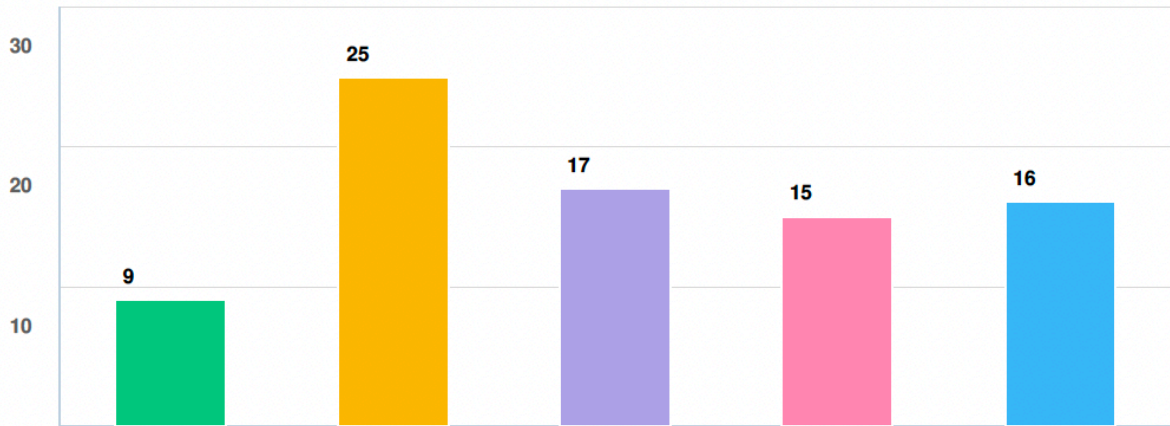
Question options

- 5 to 12 years old
- 13 to 18 years old
- 19 to 29 years old
- 30 to 39 years old
- 40 to 55 years old
- 56 to 64 years old
- 65 to 74 years old
- 75 years old or above
- Prefer not to answer

Optional question (82 response(s), 1 skipped)

Question type: Checkbox Question

Q12: How many people live in your home including you?

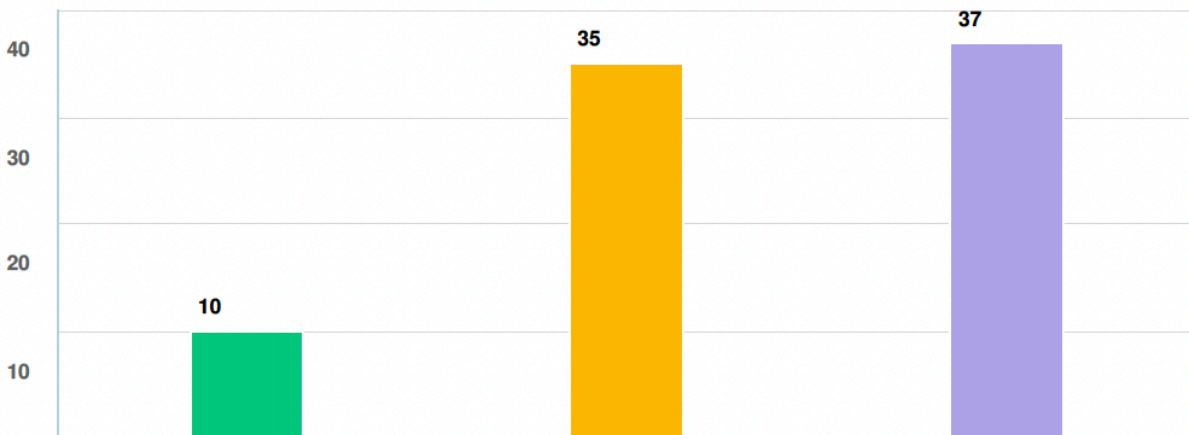


Question options

- One person
- Two people
- Three people
- Four people
- Five or more people

Optional question (82 response(s), 1 skipped)
Question type: Checkbox Question

Q13: Do you or your household use a private vehicle?

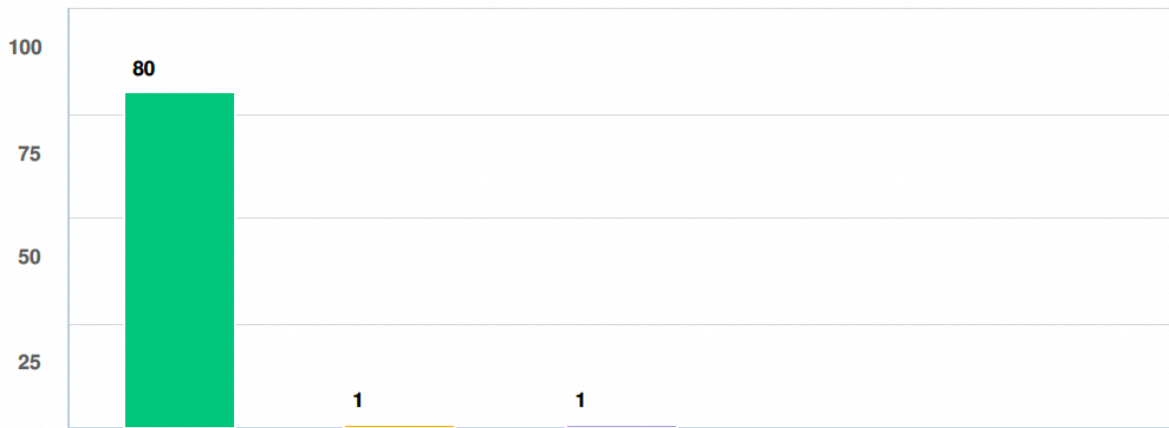


Question options

- No
- Yes, we use one vehicle
- Yes, we use more than one vehicle

Optional question (82 response(s), 1 skipped)
Question type: Checkbox Question

Q14: What language are you most comfortable communicating in?

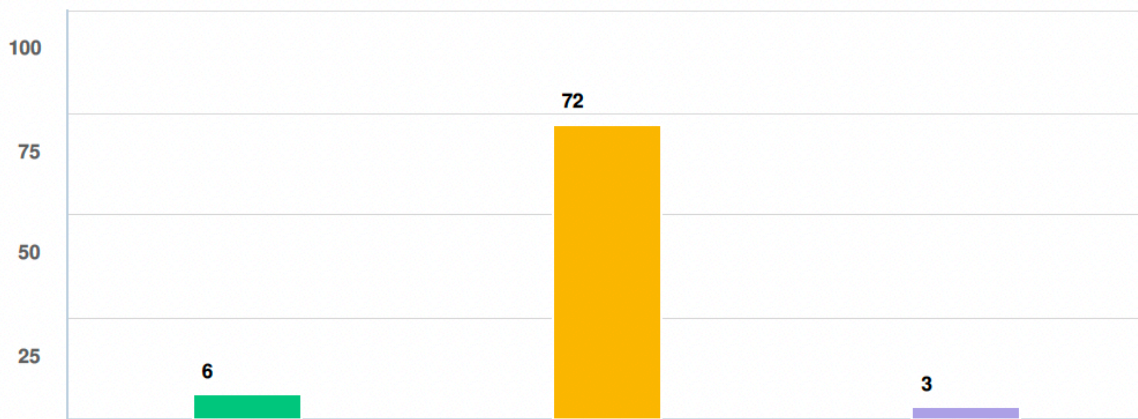


Question options

English French Spanish Prefer not to answer Other (please specify)

Optional question (82 response(s), 1 skipped)
Question type: Checkbox Question

Q15: Do you identify as an Indigenous person (First Nation, Métis or Inuit)

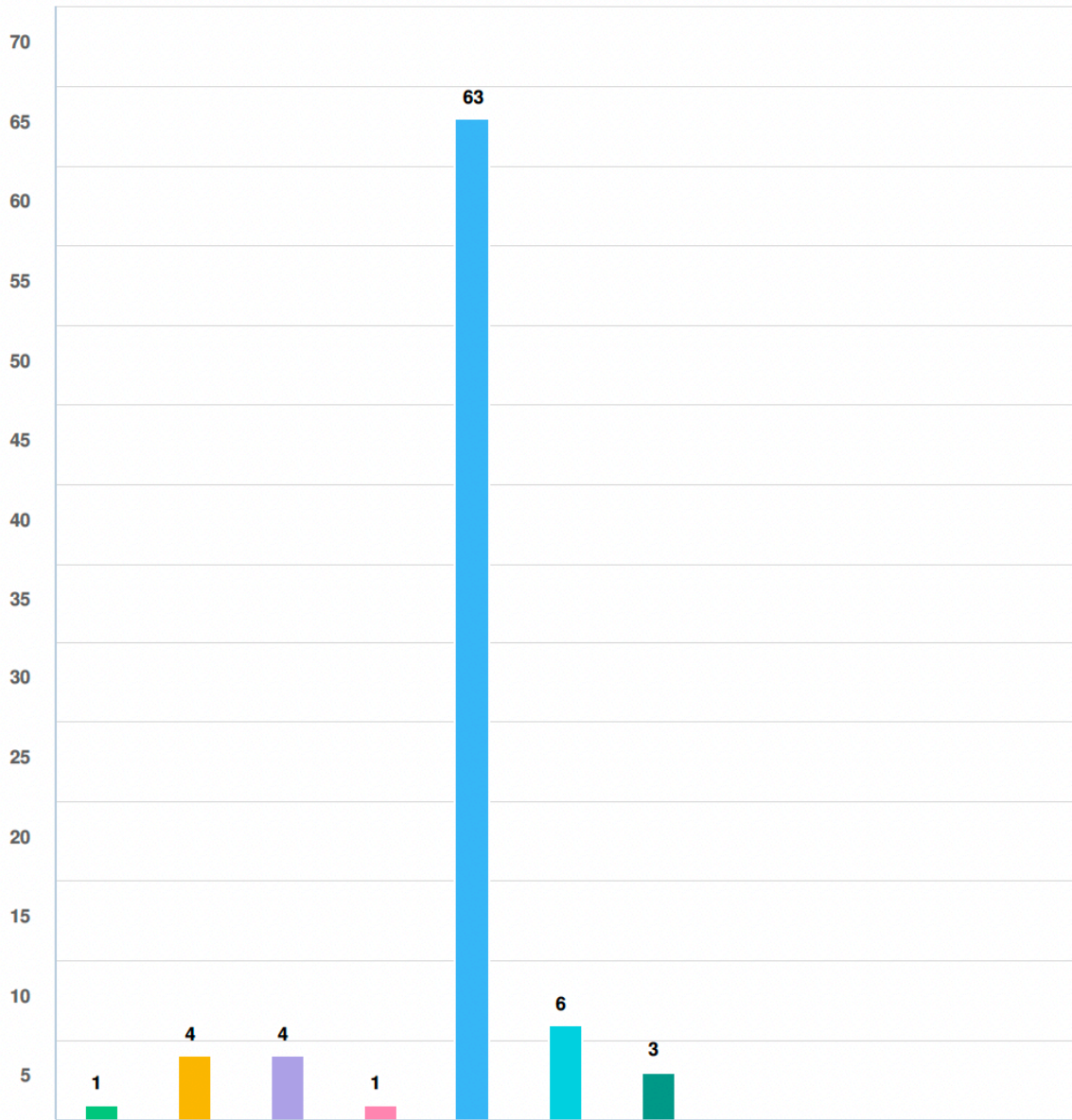


Question options

Yes No Prefer not to answer

Optional question (81 response(s), 2 skipped)
Question type: Checkbox Question

Q16: Do you identify as the following?

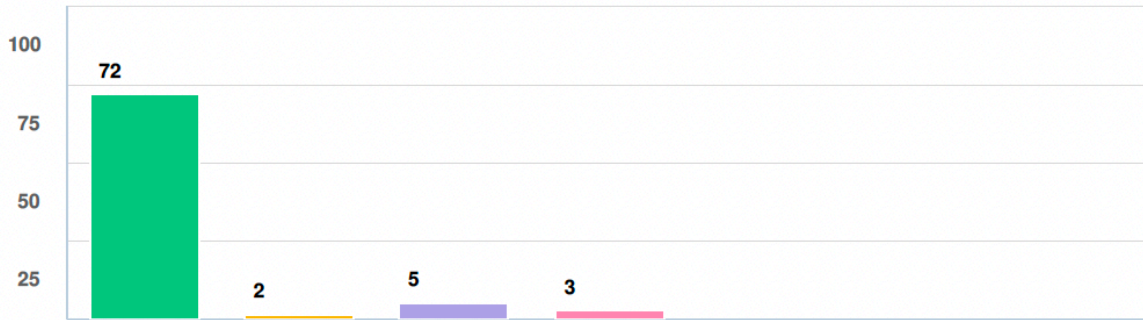


Question options

- Asian - Southeast
- Black/African
- North American Indigenous
- Non-White Latino or Hispanic
- White
- Prefer not to answer
- Please write your racial identity below if you do not see yourself reflected above (please specify)
- Asian - East
- Asian - South/East-Indian/Indo-Caribbean
- Non-White Middle Eastern, West Asian, or North African
- Pacific Islander

Optional question (82 response(s), 1 skipped)
Question type: Checkbox Question

Q17: Do you identify as the following?

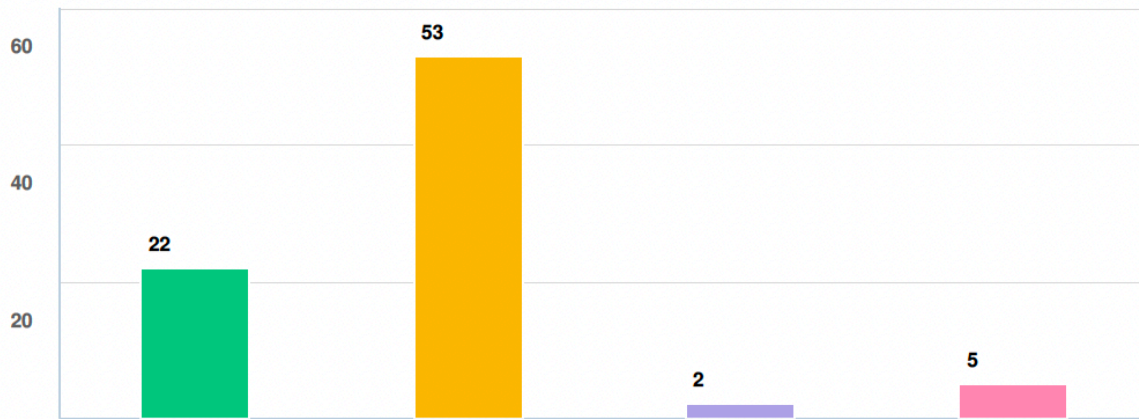


Question options

- I was born in Canada. ● I have been in Canada for 10 years or more, and less than 20 years.
- I have been in Canada for 20 years or more. ● Prefer not to answer. ● I have been in Canada for less than a year.
- I have been in Canada for one year or more, and less than five years.
- I have been in Canada for five years or more, and less than 10 years.

Optional question (82 response(s), 1 skipped)
Question type: Checkbox Question

Q18: Do you identify as a person with a disability?



Question options

- Yes ● No ● Don't know ● Prefer not to answer

Optional question (82 response(s), 1 skipped)
Question type: Checkbox Question



**The Regional
Municipality
of Durham**

Social Services
Department

Housing Services
Division

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PO Box 623
Whitby, ON L1N 6A3
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required in an
accessible format,
please contact:

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1-800-372-1102
Fax: 905-668-2051
durham.ca

Phase 2 Feedback Summary

Durham Regional Local Housing
Corporation (DRLHC) Sites

Malaga Road
Christine Crescent

Executive Summary

As part of Durham Region's first phase of their revitalization strategy, two Durham Regional Local Housing Corporation (DRLHC) properties were selected. These properties are:

- 416, 424, 432, 440 and 448 Malaga Road (Malaga Road Redevelopment); and
- 419, 421, 425, 427, 431, 433, 437, 439, 443, 445, 449 and 451 Christine Crescent (Christine Crescent Redevelopment)

The feedback detailed in this report represents the community engagement that was conducted during Phase 2 of the community engagement process, from January 2024 to March 2024. The information summarized in this report includes feedback received as part of the following in-person and online activities:

February 27, 2024 – Door-Knocking

Members of the project team went door-to-door at both properties to share the design concepts with existing tenants, hear feedback and questions, and advertise the Online Community Meeting and Survey #2.

February 28, 2024 – Online Community Meeting

Members of the broader public were invited to an online community meeting on Zoom to see a presentation from the project team on the proposed design concepts, learn about next steps in the process, as well as ask questions and provide feedback during a Question & Answer period.

February 27 to March 15, 2024 – Survey #2

An online survey was launched, providing tenants, neighbours, and other interested community members the opportunity to provide feedback on the design concepts for each redevelopment.

Ongoing – Project Webpage & Email

The existing project webpage (durham.ca/CommunityHousingProject) was updated to:

- Reflect the latest status of the project
- Include the Phase 1 Feedback Summary
- Solicit responses to Survey #2
- Display images of the design concepts and video clips from the Online Community Meeting

The project emails (MalagaHousing@Durham.ca and ChristineHousing@Durham.ca) also remained active during this time period, and were included on engagement materials.

Overall, the project team heard the following key themes throughout Phase 2 of the engagement process. This feedback helps to inform Phase 3 of the engagement process, the final design concepts, as well as the next step in the process: the formal planning application submissions. The key themes and areas of feedback are:

- Building types, and site layout
- Percentage of affordable versus market housing
- Sizes of new units including the addition of basements and yards
- Relocation plan for existing tenants
- Public safety
- Greenspaces, and programming for youth

About the Redevelopment

The Region of Durham is seeking to redevelop two Durham Regional Local Housing Corporation (DRLHC) sites. Two sites were selected to be part of the first phase of Durham Region's revitalization strategy to initiate a minimum of 1,000 new rental affordable housing units in Durham by 2024. These properties are:

- 416, 424, 432, 440 and 448 Malaga Road; and
- 419, 421, 425, 427, 431, 433, 437, 439, 443, 445, 449 and 451 Christine Crescent

In order to gather public input and help shape the future buildings on the properties, The Region of Durham has engaged Bousfields Inc. to lead their community engagement with both the tenants living on the properties as well as the surrounding community and interested parties.

To-date, we have completed both our Initial Communications Phase, as well as Phases 1 and 2 of the engagement process.

- Our Initial Communications Phase kicked off the communications and engagement process and provided First Nations communities, tenants, and nearby neighbours with the channels to learn more about the project.
- Phase 1 focused on seeking input from tenants, stakeholders/community groups, and the broader community, about the overall vision and principles of the redevelopment.
- Phase 2 focused on seeking input from tenants, stakeholders/community groups, and the broader community, about the proposed design concepts for both redevelopments.

About this Summary

This report summarizes in-person, online, and survey feedback received in Phase 2 of the community engagement process for DRLHC's revitalization of Malaga Road and Christine Crescent, and specifically on the following design concepts for each redevelopment:

Malaga Road Design Concept

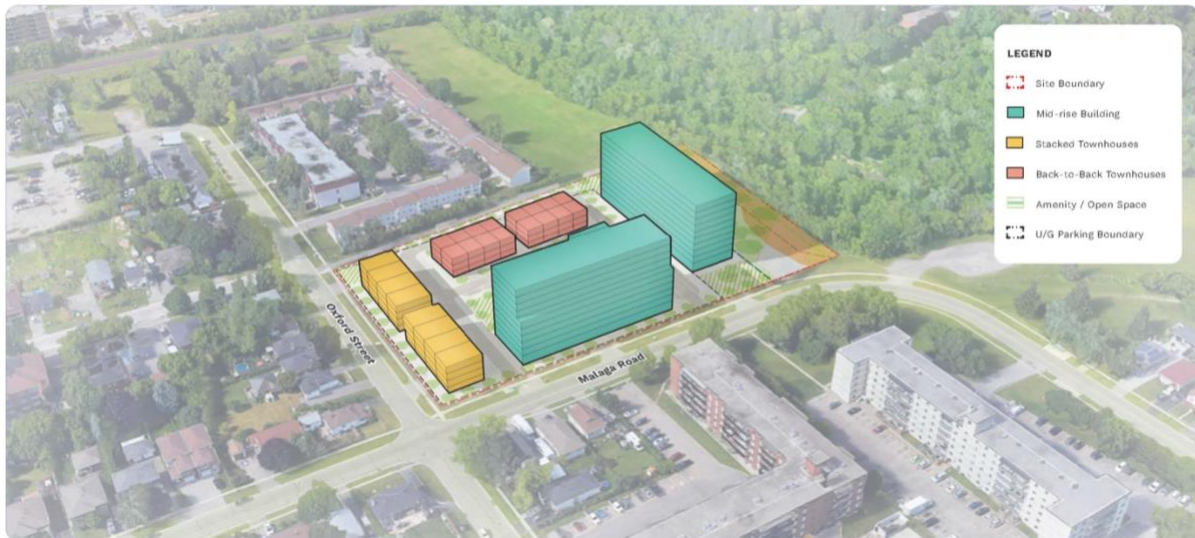


Figure 1. Aerial facing north, Malaga Road redevelopment design concept

Christine Crescent Design Concept



Figure 2. Aerial facing north, Christine Crescent redevelopment design concept

The Feedback Summary is divided into four sections:

Section 1: Door-Knocking

A summary of the comments and questions collected through informal conversations with tenants as part of the project team's door-knocking efforts.

Section 2: Online Community Meeting

A summary of the comments and questions about the proposed design concepts, and overall process.

Section 3: Survey #2 Feedback

A summary of the results from the survey, seeking input on the proposed design concepts, which was launched in tandem with the door-knocking and online community meeting.

Section 4: Webpage/Email Feedback

A summary of any additional questions and comments received through both the Project Webpage and Malaga Road and Christine Crescent Project Emails over the course of Phase 2 engagement.



Section 1

Door-Knocking



Door-Knocking

On February 27, 2024, members of the project team went door-to-door at both properties to share the design concepts with existing tenants, hear feedback and questions, and advertise the Online Community Meeting and Survey #2. The project team visited the Malaga Road property from 1:00 – 3:00p.m. and the Christine Crescent property from 3:00 – 5:00p.m. in the afternoon.

Out of the 87 units that were visited, members of the project team spoke with approximately 46 tenants.

The key questions and feedback that was received included:

Design Concept for Malaga Road

- Built form of new buildings (apartments or townhouses)
- New unit size
- Open space programming and safety

Design Concept for Christine Crescent

- Built form of new buildings (inclusion of yards and basements)
- Safety considerations with increased density
- Open space programming

Other

- Timing of project (engagement, design, relocation, and start of construction)
- Relocation plan (location and size of temporary units)
- Open space management



Section 2

Online Community Meeting



Online Community Meeting

Summary & Purpose

An online community meeting was held on Wednesday, February 28, 2024, from 6:30-8pm on Zoom Webinar, to present the design concepts for the Malaga Road Redevelopment and Christine Crescent Redevelopment to the broader community, and to hear feedback and answer questions.

Attendees

12 members of the community attended the meeting, as well as Councillor Brian Nicholson, the local Councillor for Ward 5 in Oshawa, and Region of Durham.

Representatives from the project team, including Durham Region / Durham Regional Local Housing Corporation (DRLHC), Infrastructure Ontario (IO), and Bousfields, were in attendance to facilitate the meeting, present the design concepts, listen to feedback and respond to questions.

Notification

Print Notification

- Over 3,330 invitations to the online community meeting were printed and delivered via Canada Post to residents and businesses surrounding both properties.

Online Notification

- A geo-targeted social media advertisement was created using the Region of Durham's Facebook and Instagram accounts to promote the online community meeting. The ad ran for one week prior to the online community meeting.



Questions and Comments

The following list categorizes and summarizes into themes the 30 questions and comments that were shared during the Virtual Community Meeting:

Built Form and Design

- Height and size of proposed buildings
- Accessibility of proposed buildings

Planning Considerations and Site Layout

- Site layout
- Population density

Parking and Traffic

- Providing driveways for the townhouse units
- Parking access in new buildings

Units, Tenure and Affordable Housing

- Tenure of the units
- Affordable housing ratio
- Types of units

Infrastructure (Hard and Soft)

- School capacity
- Common spaces for the youth

Public Realm

- Pedestrian experience and connections
- Landscaping

Note: for the full list of questions/comments from the Online Community Meeting, please see the Appendix A.



Section 3

Survey #2 Feedback



Summary & Purpose

Survey #2 was live from February 27 to March 15, 2024, and its main purpose was to seek feedback on the proposed design concepts for the Malaga Road Redevelopment and the Christine Crescent Redevelopment. As such, the survey results included in this summary are categorized by the feedback received as part of either the Malaga Road Redevelopment or Christine Crescent Redevelopment surveys.

Notification

A geo-targeted social media advertisement was created using the Region of Durham's Facebook and Instagram accounts to promote Survey #2. The advertisements ran for the duration that the survey was live.

Number of Respondents

A total of 243 respondents completed the surveys, with 183 responses for the Malaga Road Redevelopment Survey and 60 responses for the Christine Crescent Redevelopment Survey.

Most of the Malaga Road survey respondents live on another street in the neighbourhood (43%) or were generally interested in the redevelopment (31%). For the Christine Crescent survey, the majority of the survey respondents were generally interested in the redevelopment (57%), with the next largest group of respondents either living on Nevis Street, Normandy Street, Lomond Street, or another street in the neighbourhood (33%).

Survey Results and Key Feedback - Affordable Housing

The majority of respondents supported the idea of increasing the amount of affordable housing in a mix of townhomes and apartment buildings at both Malaga Road (66%) and Christine Crescent (62%).



Design Concept Survey Results and Key Feedback - Malaga Road

Housing

The highest percentage of respondents liked:

- That the entrances to the townhomes along Oxford are located off Oxford Street, and the parking garages are facing the other buildings on the property (56%).
- Where the lobbies for the apartment buildings are located (50%).
- That there will be some four-bedroom units in the apartment buildings and in the townhomes, and they will be street-level units (70%).

Open Space

The majority of respondents liked the idea of:

- Multiple open spaces for a range of activities (such as playing, growing food, and relaxing) (80%).
- A flexible, central open space and having additional open spaces at the corners of the property (70%).
- Improving the pedestrian pathway connecting Oxford Street to Cordova Park (77%).

Streets & Connections

The majority of respondents liked the idea of:

- Having new pedestrian connections to make the property more walkable and pedestrian-friendly (78%).
- Providing integral garages and driveways for the townhouses (69%).
- Providing some visitor parking along the new internal roads (74%).

Community Spaces/Amenities and Community Safety

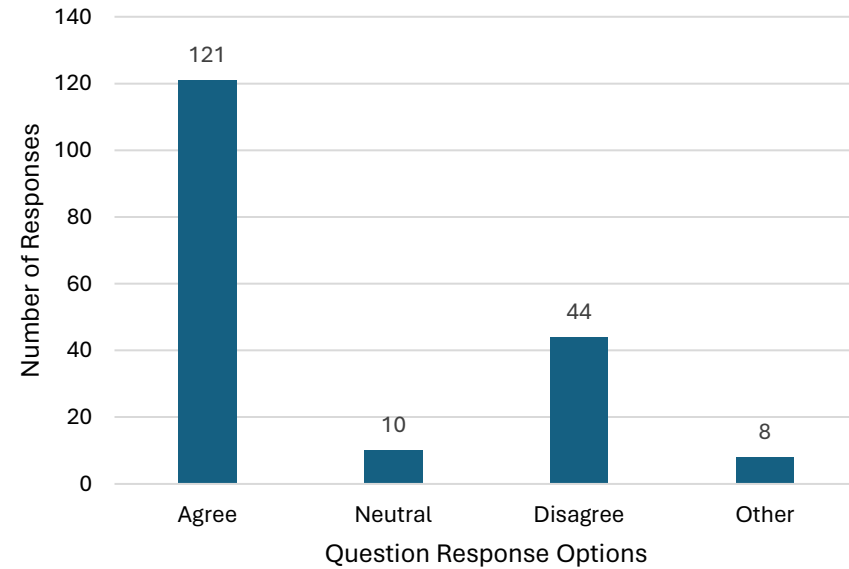
The majority of respondents liked the idea of:

- A community use/amenity/retail space on the ground floor of one of the apartment buildings (64%).
- Making sure that the ground floors of the buildings have active uses (like lobbies, community space, retail space, etc.) and provide greater visibility onto streets and open spaces (64%).

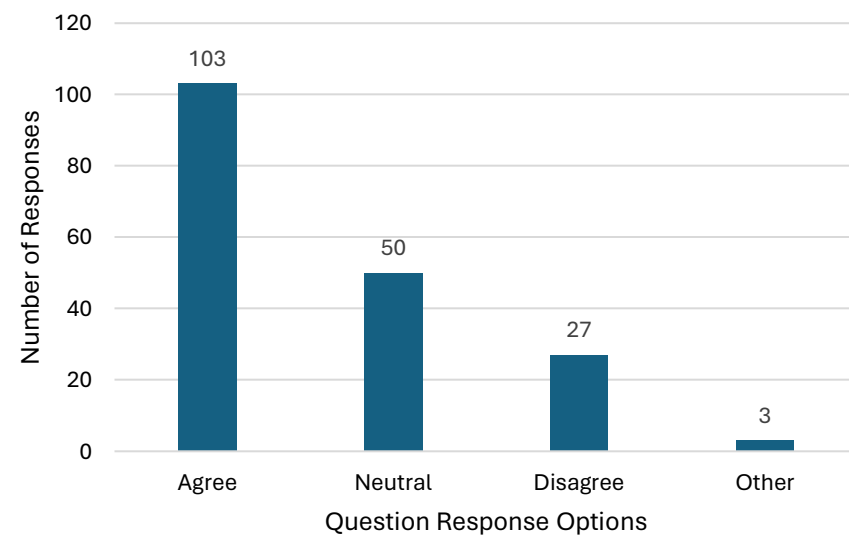


Malaga Road Survey Results: Housing

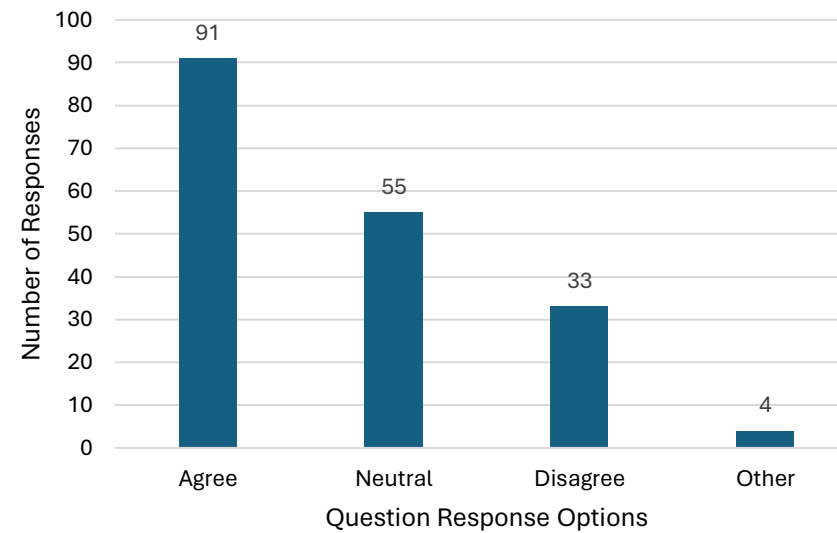
Q1. I support the idea of increasing the amount of affordable housing in the neighbourhood in a mix of townhomes and apartment buildings



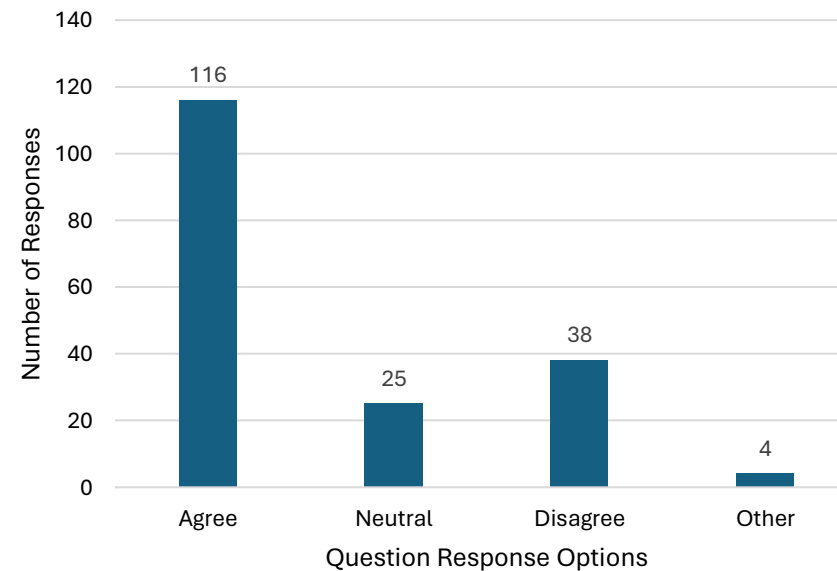
Q2. I like that the entrances to the townhomes along Oxford Street are located off Oxford Street, and the parking garages are facing the other buildings on the property



Q3. I like where the lobbies for the apartment buildings are located, with one lobby located off Malaga Road and the other lobby located off the internal road



Q4. I like that there will be some four-bedroom units in the apartment buildings and in the townhomes, and they will be street-level units



Q1 Summary

- 66% of respondents support the idea of increasing the amount of affordable housing in the neighbourhood
- 24% of respondents do not support the idea of increasing the amount of affordable housing in the neighbourhood

Q2 Summary

- 56% of respondents like that the entrances to the townhomes along Oxford Street are located off Oxford Street, and the parking garages are facing the other buildings on the property
- 15% of respondents do not like that the entrances to the townhomes along Oxford Street are located off Oxford Street, and the parking garages are facing the other buildings on the property

Q3 Summary

- 50% of respondents like where the lobbies for the apartment buildings are located, with one lobby located off Malaga Road and the other lobby located off the internal road
- 18% of respondents do not like where the lobbies for the apartment buildings are located, with one lobby located off Malaga Road and the other lobby located off the internal road

Q4 Summary

- 63% of respondents like that there will be some four-bedroom units in the apartment buildings and in the townhomes, and they will be street-level units
- 21% of respondents do not like that there will be some four-bedroom units in the apartment buildings and in the townhomes, and they will be street-level units

Note: responses reported are response counts per survey.

Q1 Malaga Road Survey Total Responses: 183

Q2 Malaga Road Survey Total Responses: 183

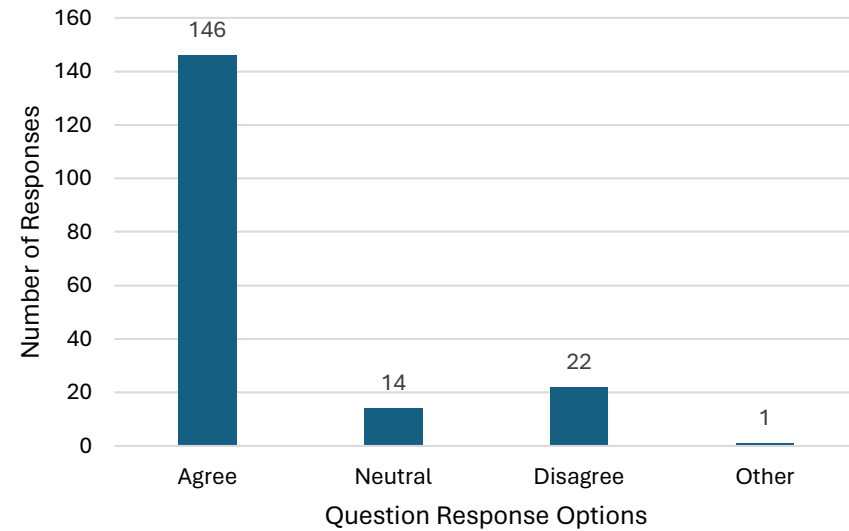
Q3 Malaga Road Survey Total Responses: 183

Q4 Malaga Road Survey Total Responses: 183

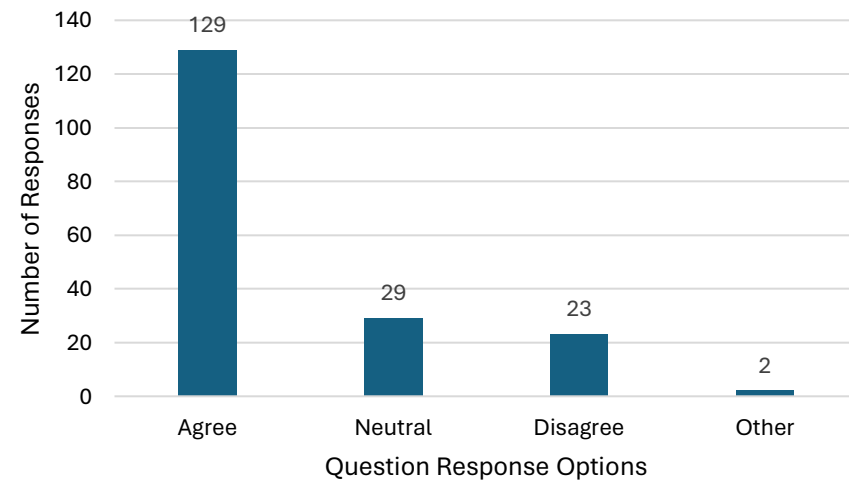


Malaga Road Survey Results: Open and Green Spaces

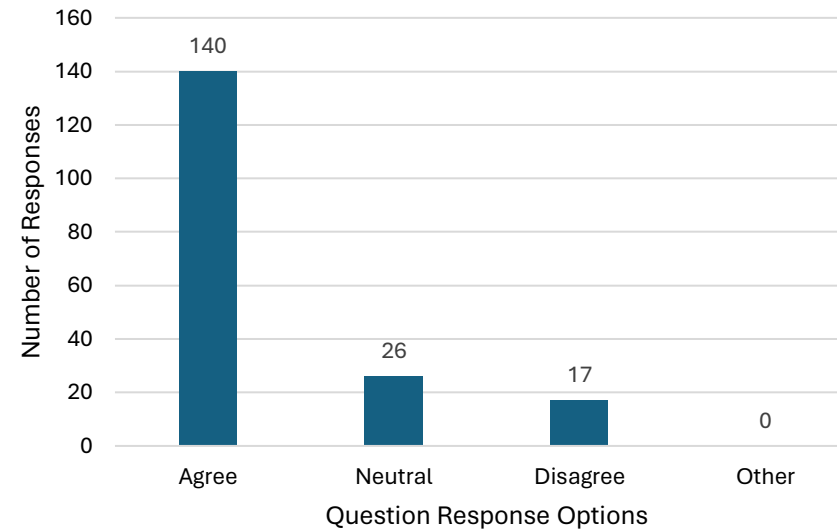
Q5. I like the idea of multiple open spaces for a range of activities (such as playing, growing food, and relaxing)



Q6. I like the idea of a flexible, central open space and having additional open spaces at the corners of the property



Q7. I like the idea of improving the pedestrian pathway connecting Oxford Street to Cordova Park



Q5 Summary

- 80% of respondents like the idea of multiple open spaces for a range of activities
- 12% of respondents do not like the idea of multiple open spaces for a range of activities

Q6 Summary

- 71% of respondents like the idea of a flexible, central open space and having additional open spaces at the corners of the property
- 13% of respondents do not like the idea of a flexible, central open space and having additional open spaces at the corners of the property

Q7 Summary

- 77% of respondents like the idea of improving the pedestrian pathway connecting Oxford Street to Cordova Park
- 9% of respondents did not like the idea of improving the pedestrian pathway connecting Oxford Street to Cordova Park

Note: responses reported are response counts per survey.

Q5 Malaga Road Survey Total Responses: 183

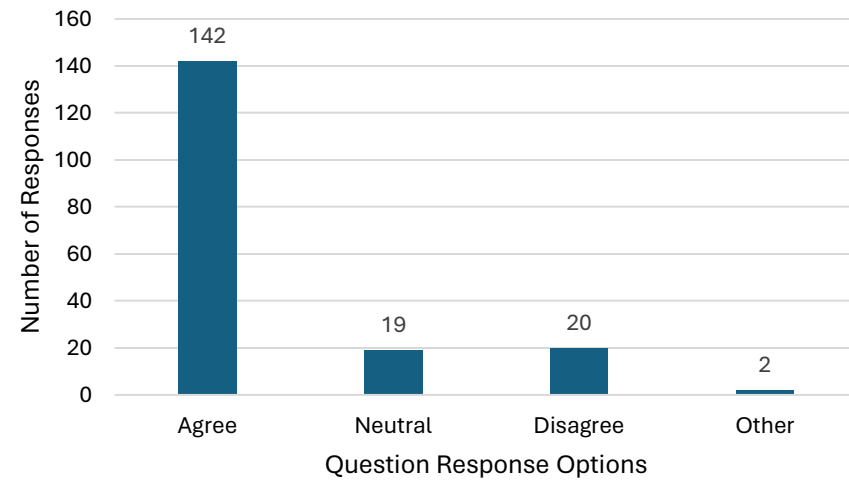
Q6 Malaga Road Survey Total Responses: 183

Q7 Malaga Road Survey Total Responses: 183

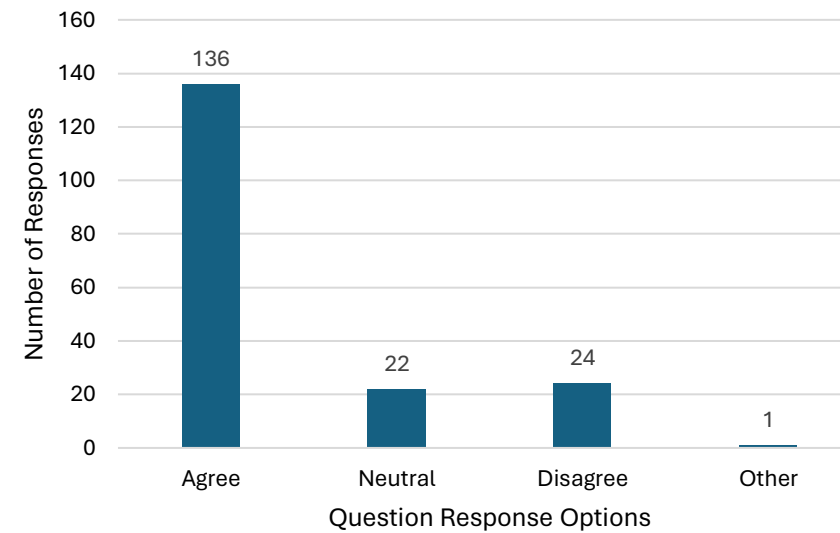


Malaga Road Survey Results: Streets and Connections

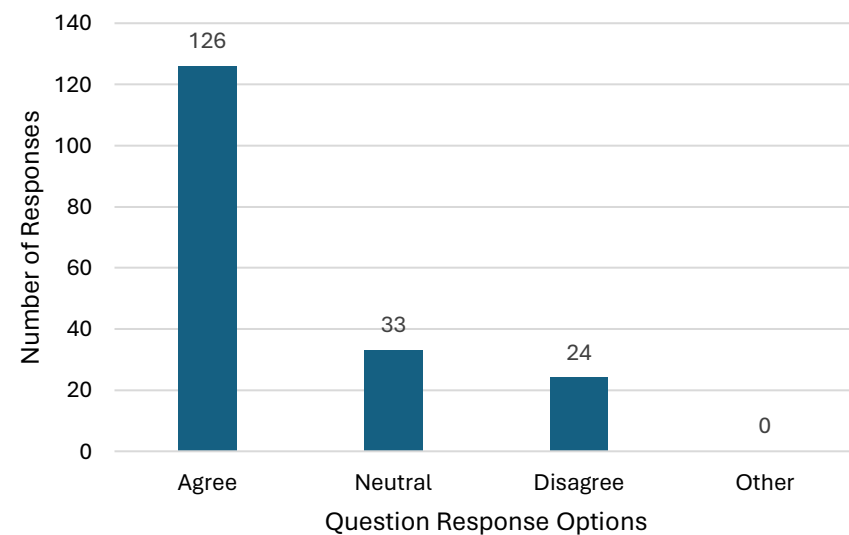
Q8. I like the idea of having new pedestrian connections to make the property more walkable and pedestrian-friendly



Q10. I like the idea of providing some visitor parking along the new internal roads



Q9. I like the idea of providing integral garages and driveways for the townhouses



Q8 Summary

- 78% of respondents like the idea of having new pedestrian connections to make the property more walkable and pedestrian-friendly
- 11% of respondents do not like the idea of having new pedestrian connections to make the property more walkable and pedestrian-friendly

Q9 Summary

- 69% of respondents like the idea of providing integral garages and driveways for the townhouses
- 13% of respondents do not like the idea of providing integral garages and driveways for the townhouses

Q10 Summary

- 74% of respondents like the idea of providing some visitor parking along the new internal roads
- 13% of respondents like the idea of providing some visitor parking along the new internal roads

Note: responses reported are response counts per survey.

Q8 Malaga Road Survey Total Responses: 183

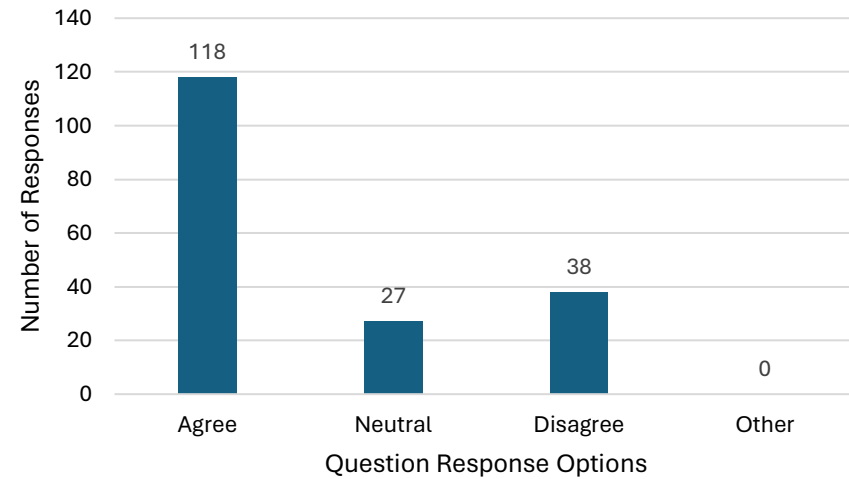
Q9 Malaga Road Survey Total Responses: 183

Q10 Malaga Road Survey Total Responses: 183

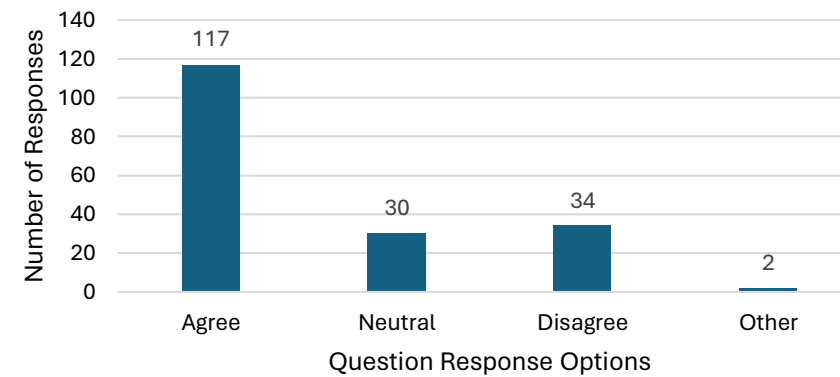


Malaga Road Survey Results: Community Spaces/Amenities and Community Safety

Q11. I like the idea of a community use/amenity/retail space on the ground floor of one of the apartment buildings



Q12. I like the idea of making sure that the ground floors of the buildings have active uses (like lobbies, community space, retail space, etc.) and provide greater visibility onto streets and open spaces



Q11 Summary

- 64% of respondents like the idea of a community use/amenity/retail space on the ground floor of one of the apartment buildings
- 21% of respondents do not like the idea of a community use/amenity/retail space on the ground floor of one of the apartment buildings

Q12 Summary

- 64% of respondents like the idea of making sure that the ground floors of the buildings have active uses (like lobbies, community space, retail space, etc.) and provide greater visibility onto streets and open spaces
- 19% of respondents do not like the idea of making sure that the ground floors of the buildings have active uses (like lobbies, community space, retail space, etc.) and provide greater visibility onto streets and open spaces

*Note: responses reported are response counts per survey.
Q11 Malaga Road Survey Total Responses: 183
Q12 Malaga Road Survey Total Responses: 183*



Additional comments and suggestions included:

In total, we received 93 free response answers. From these answers we were able to synthesize a total of 124 unique comments, suggestions, or feedback, which we have summarized and organized into the following themes. A comprehensive summary can be found in Appendix B.

Built Form

- Building Type, Height, and Density
- Accessibility
- Mix of Uses
- Construction Material

Unit Typology

- Affordable Housing
- Unit Size
- Senior Units
- Rental Replacement Plan

Community Safety

- Safety Concerns
- Community Programs
- Policing

Parking, Transit and Traffic

- Traffic and Access
- Pedestrian and Bicycle Infrastructure
- Public Transit
- Parking

Amenities, Public Realm, and Programming

- Outdoor Amenities
- Environmental Considerations

Public Amenities

- School Capacity
- Grocery and Retail Access



Design Concept Survey Results and Key Feedback – Christine Crescent

Housing

The majority of respondents liked that:

- The entrances to the townhomes are located off Nevis Street and the central open space (58%).
- The lobby for the apartment building faces onto the central open space area (67%).
- There will be some four-bedroom units in the apartment building, and they will be ground-level units (62%).

Open Space

The majority of respondents liked the idea of:

- A flexible, central open space (62%).
- Improving the landscaping and condition along the pedestrian pathway connecting Nevis Avenue to Chopin Park (80%).

Streets & Connections

The majority of respondents liked the idea of:

- Providing vehicular access into the site off Lomond Street / Nevis Avenue (65%).
- Having new pedestrian connections into the central open space from Nevis Ave and from Chopin Park (72%).

Community Spaces/Amenities and Community Safety

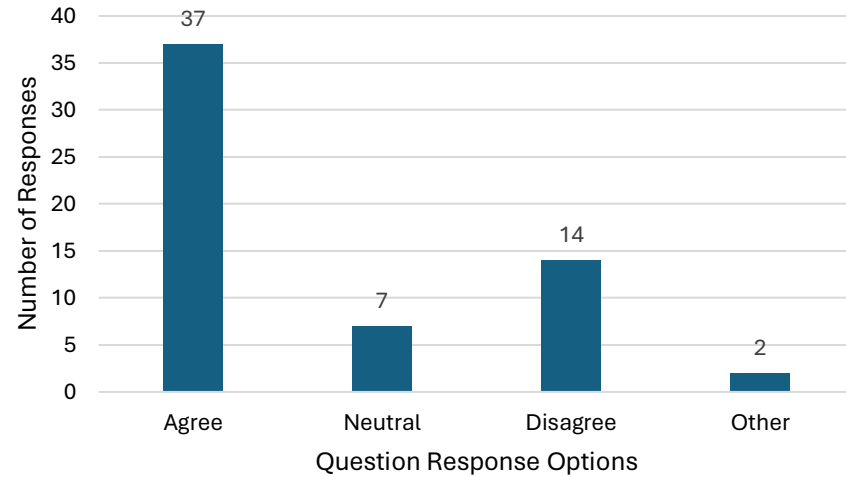
The highest percentage of respondents liked the idea of:

- Having the lobby and ground-level units fronting onto the central open space, for the apartment building, to provide greater visibility onto the open space (67%).
- A rooftop amenity space in the apartment building (63%).
- The indoor amenity space being located on the 5th floor of the apartment building (42%).

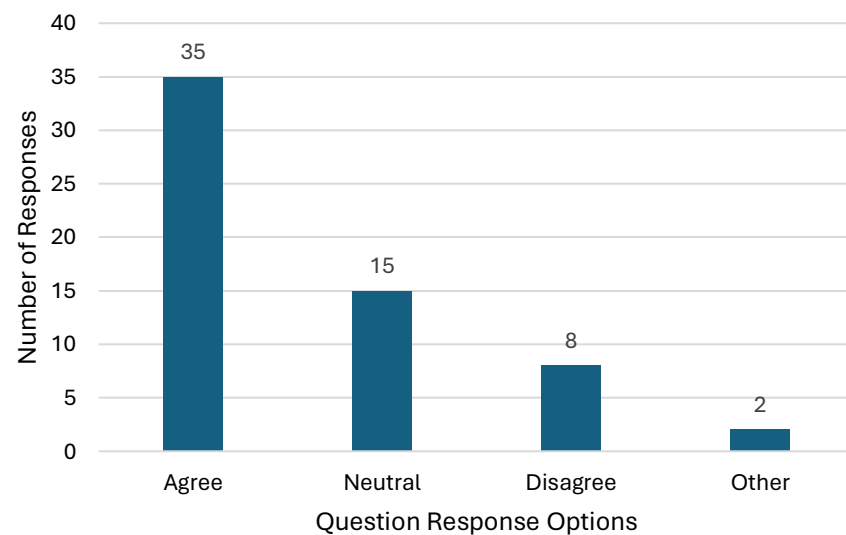


Christine Crescent Survey Results: Housing

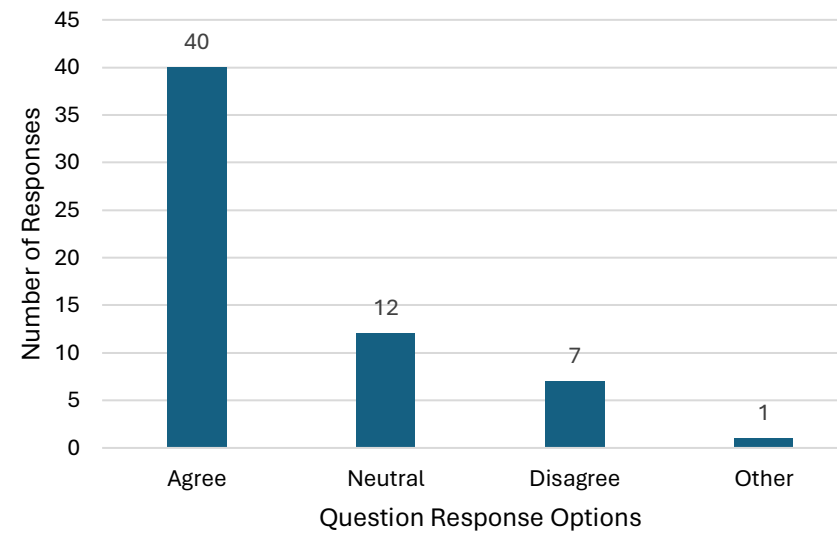
Q1. I support the idea of increasing the amount of affordable housing in the neighbourhood in a mix of townhomes and apartment buildings



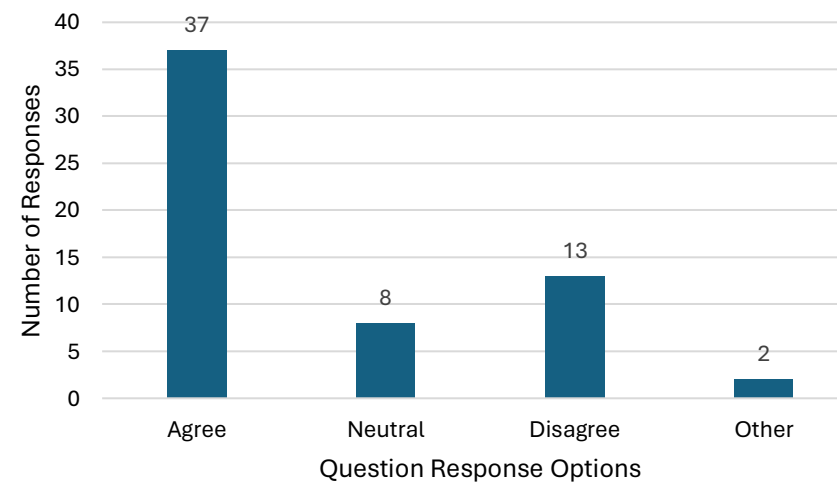
Q2. I like that the entrances to the townhomes are located off Nevis Street and the central open space



Q3. I like that the lobby for the apartment building faces onto the central open space area



Q4. I like that there will be some four-bedroom units in the apartment building and they will be ground-level units



Q1 Summary

- 62% of respondents support the idea of increasing the amount of affordable housing in the neighbourhood in a mix of townhomes and apartment buildings
- 23% of respondents do not support the idea of increasing the amount of affordable housing in the neighbourhood in a mix of townhomes and apartment buildings

Q2 Summary

- 58% of respondents like that the entrances to the townhomes are located off Nevis Street and the central open space
- 13% of respondents do not like that the entrances to the townhomes are located off Nevis Street and the central open space

Q3 Summary

- 66% of respondents like that the lobby for the apartment building faces onto the central open space area
- 12% of respondents do not like that the lobby for the apartment building faces onto the central open space area

Q4 Summary

- 62% of respondents like that there will be some four-bedroom units in the apartment building and they will be ground-level units
- 22% of respondents do not like that there will be some four-bedroom units in the apartment building and they will be ground-level units

Note: responses reported are response counts per survey.

Q1 Christine Crescent Survey Total Responses: 60

Q2 Christine Crescent Survey Total Responses: 60

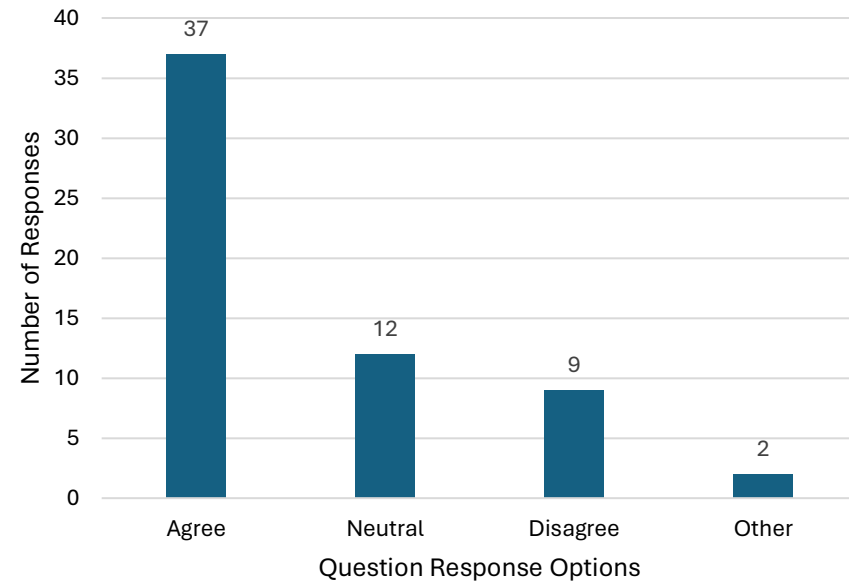
Q3 Christine Crescent Survey Total Responses: 60

Q4 Christine Crescent Survey Total Responses: 60

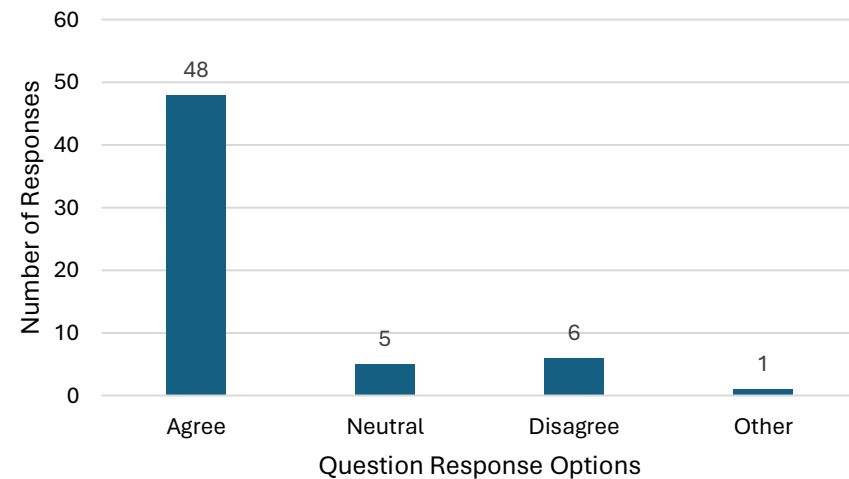


Christine Crescent Survey Results: Open and Green Spaces

Q5. I like the idea of a flexible, central open space

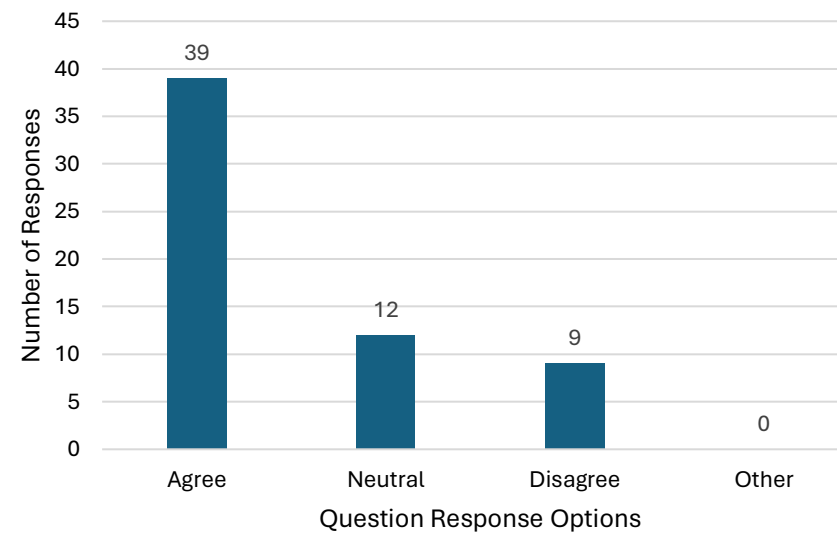


Q6. I like the idea of improving the landscaping and condition along the pedestrian pathway connecting Nevis Avenue to Chopin Park

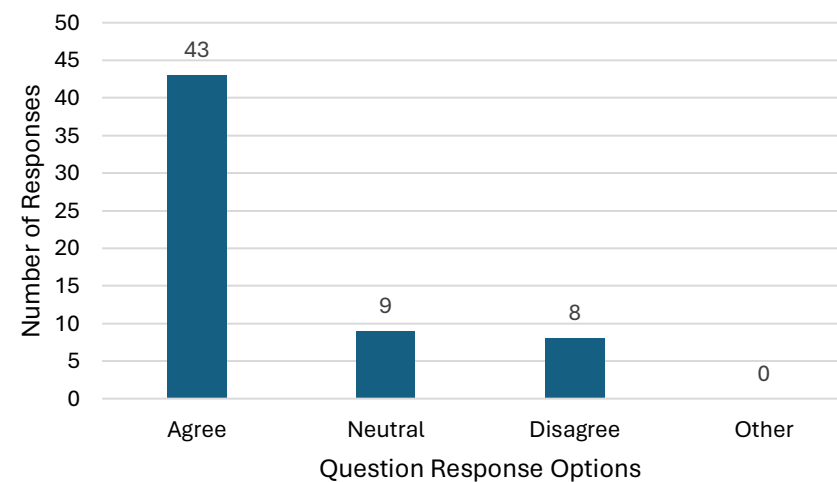


Christine Crescent Survey Results – Streets and Connections

Q7. I like the idea of providing vehicular access into the site off Lomond Street / Nevis Avenue



Q8. I like the idea of having new pedestrian connections into the central open space from Nevis Ave and from Chopin Park



Q5 Summary

- 62% of respondents like the idea of a flexible, central open space
- 15% of respondents do not like the idea of a flexible, central open space

Q6 Summary

- 80% of respondents like the idea of improving the landscaping and condition along the pedestrian pathway connecting Nevis Avenue to Chopin Park
- 10% of respondents do not like the idea of improving the landscaping and condition along the pedestrian pathway connecting Nevis Avenue to Chopin Park

Q7 Summary

- 65% of respondents like the idea of providing vehicular access into the site off Lomond Street / Nevis Avenue
- 15% of respondents do not like the idea of providing vehicular access into the site off Lomond Street / Nevis Avenue

Q8 Summary

- 72% of respondents like the idea of having new pedestrian connections into the central open space from Nevis Ave and from Chopin Park
- 13% of respondents do not like the idea of having new pedestrian connections into the central open space from Nevis Ave and from Chopin Park

Note: responses reported are response counts per survey.

Q5 Christine Crescent Survey Total Responses: 60

Q6 Christine Crescent Survey Total Responses: 60

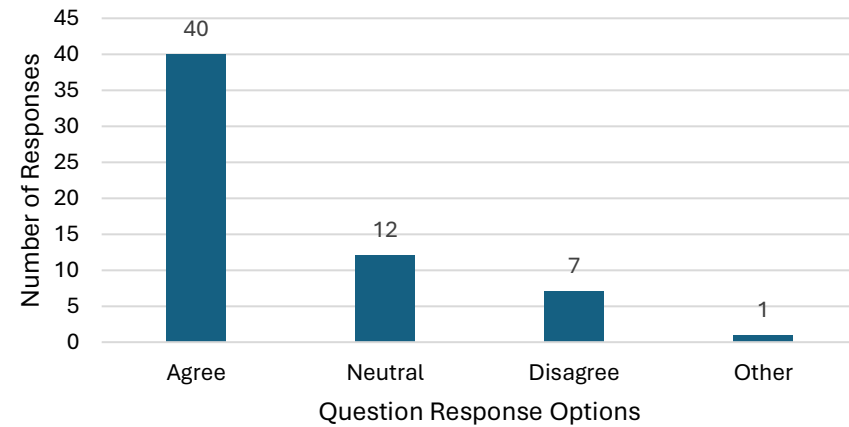
Q7 Christine Crescent Survey Total Responses: 60

Q8 Christine Crescent Survey Total Responses: 60

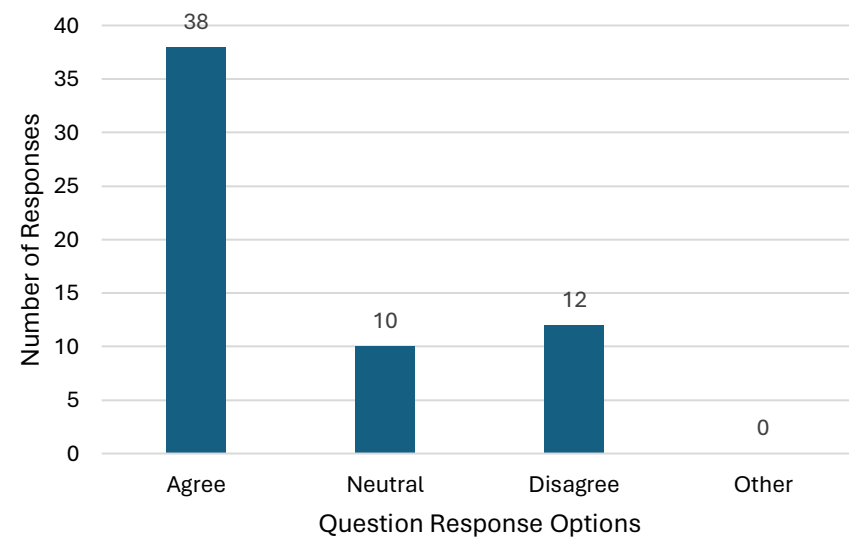


Christine Crescent Survey Results: Community Spaces/Amenities and Community Safety

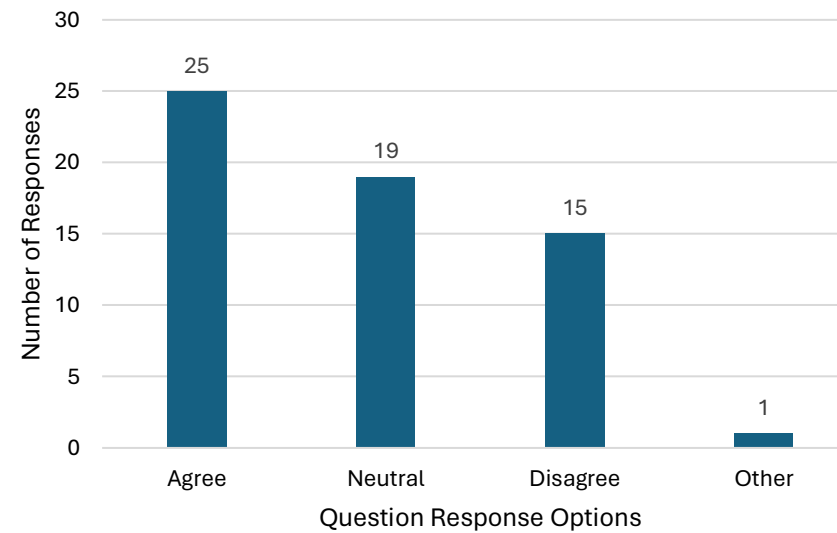
Q9. For the apartment building, I like the idea of having the lobby and ground-level units fronting onto the central open space to provide greater visibility onto the open space



Q10. I like the idea of a rooftop amenity space in the apartment building



Q11. I like the idea of the indoor amenity space being located on the 5th floor of the apartment building



Q9 Summary

- 67% of respondents, for the apartment building, like the idea of having the lobby and ground-level units fronting onto the central open space to provide greater visibility onto the open space
- 12% of respondents, for the apartment building, do not like the idea of having the lobby and ground-level units fronting onto the central open space to provide greater visibility onto the open space

Q10 Summary

- 63% of respondents like the idea of a rooftop amenity space in the apartment building
- 20% of respondents do not like the idea of a rooftop amenity space in the apartment building

Q11 Summary

- 42% of respondents like the idea of the indoor amenity space being located on the 5th floor of the apartment building
- 25% of respondents do not like the idea of the indoor amenity space being located on the 5th floor of the apartment building

Note: responses reported are response counts per survey.

Q9 Christine Crescent Survey Total Responses: 60

Q10 Christine Crescent Survey Total Responses: 60

Q11 Christine Crescent Survey Total Responses: 60



Additional comments and suggestions included:

In total, we received 22 free response answers. From these answers we were able to synthesize a total of 31 unique comments, suggestions, or feedback, which we have summarized and organized into themes. The key themes can be found below. A comprehensive summary can be found in Appendix C.

Built Form

- Height, and Density
- Design
- Accessibility
- Mix of Uses

Amenities, and Environmental Considerations

- Outdoor Amenities
- Environmental Considerations
- Indoor Amenities

Unit Typology

- Affordable Housing
- Unit Size
- Rental Replacement Place

Community Safety

- Safety Concerns

Parking, and Traffic

- Parking
- Traffic and Access
- Pedestrian Infrastructure

Public Amenities

- School Capacity



Section 4

Webpage/Email Feedback



Webpage/Email Feedback

Throughout Phase 2 of the engagement process (January to March 2024), we received an additional 5 email communications from members of the community. These emails are in addition to 10 emails we received throughout Phase 1 of the engagement process. Their comments and questions were regarding:

- Interest in living in one of the proposed redevelopments and/or building something similar
- Concern regarding increased crime in the Malaga Road neighbourhood/area, but understanding that there is a need for more housing
- Whether there would be housing for seniors provided

Appendix A: Virtual Community Meeting Post Meeting Summary

Location: Zoom Webinar

Date: Wednesday, February 28, 2024

Scheduled Time: 6:30 - 8:00 p.m.

An online community meeting was held to present the design concepts for the Malaga Road Redevelopment and Christine Crescent Redevelopment to the broader community, and to hear feedback and answer questions.

The format of the meeting included an introduction and presentation of the proposal by the project team and finished with a facilitated Q&A period. A total of 12 members of the public, as well as Councillor Brian Nicholson, the local Councillor for Ward 5 in Oshawa and Region of Durham attended the meeting.

The following table categorizes and summarizes into themes the 30 questions and comments that were shared during the Virtual Community Meeting:

Theme	Questions and comments
Built Form and Design	7 questions and comments regarding the height, size, and accessibility of proposed buildings: <ol style="list-style-type: none"> 1. Height of mid-rise building (2) 2. Will the units include a backyard, basement, or den? (3) 3. Are the townhomes accessible? (2)
Planning Considerations and Site Layout	5 questions and comments regarding site layout and high population density: <ol style="list-style-type: none"> 1. Location of mid-rise buildings (3) 2. Increase in residents on both properties (2)
Parking and Traffic	5 questions and comments regarding driveways and parking access in the buildings: <ol style="list-style-type: none"> 1. Will the new units have parking spaces? (3) 2. How will residents access their parking space? Will it be accessible? (2)
Units, Tenure and Affordable Housing	6 questions and comments regarding the tenure, inclusion of affordable housing, and unit types: <ol style="list-style-type: none"> 1. What is the mix between RGI units and market units? (2) 2. What size units will be available? Are there any larger family size units and where will they be located? (4)

Infrastructure (Hard and Soft) 3 questions and comments regarding schools and common spaces for the youth:

1. Where would future kids go to school? (Malaga)
2. Will there be amenities for youth? (2)

Public Realm 4 questions and comments regarding connections and landscaping:

1. Enhancing pedestrian connection between Christine Crescent and Chopin Park (3)
2. Maintaining the existing open space uses adjacent to Chopin Park (Christine Crescent)

Other 1 question regarding land procurement and site location:

1. Are they able to buy a new piece of land and add the new development there instead of redeveloping current homes?

Appendix B: Survey Free Response Summary - Malaga Road

Built Form (33)

Theme	Number of Responses	Summary
Building Type, Height, and Density	20	<p>7 respondents were not in support of the proposed height and density of the property</p> <p>1 respondent was not in support of having any buildings on the property</p> <p>4 respondents were in support of increasing the height and density of the proposal</p> <p>3 respondents were in support of the current proposed use or increasing the use of apartment buildings</p> <p>5 respondents were not in support of the proposed building types and wanted an increase or only including low-rise or semi-detached housing</p>
Accessibility	4	<p>2 respondents wanted the proposal to use inclusive design principles for those with disabilities</p> <p>2 respondents wanted the proposal to include accessible ground floor units</p>
Mix of Uses	4	<p>1 respondent was not in support of retail uses</p> <p>1 respondent was in support of a mix of uses if it included community space</p> <p>2 respondents were in support of alternative uses such as retail</p>
Materiality	1	<p>1 respondent proposed including windows that are soundproof</p>
Other	4	<p>1 respondent wishes there were other drawings or diagrams to better visually demonstrate how the buildings and layout will look in the future</p> <p>3 respondents would prefer DRLHC explore other properties to develop instead of redeveloping the Malaga Road property</p>

Unit Typology (29)

Theme	Number of Responses	Summary
Affordable Housing	19	16 Respondents are in support of including more affordable housing 3 respondent is not in support of including any affordable housing
Unit Size	3	1 respondent would like a mix of unit sizes including smaller 1- and 2-bedroom units for youth/young families 2 respondents would like to see larger family size units such as 3- and 4-bedroom units for families
Senior Units	2	2 respondents would like for some units to be dedicated to senior living
Rental Replacement Plan	2	2 respondents want to know what the plan is for tenants that will be displaced during construction
Other	3	1 respondent would like to ensure that some units have yard space 1 respondent wants to understand why the property is being redeveloped 2 respondent is concerned that bedrooms will be rented out for a profit

Community Safety (21)

Theme	Number of Responses	Summary
Safety Concerns	16	16 respondents are concerned about the overall safety of the area with the increase of residents
Community Programs	3	2 respondents suggested funding more programs directed towards youth 1 respondent wanted more programs that tackled issues related to the social determinants of health
Policing	2	2 respondents want the area to have a higher police presence

Parking, Transit and Traffic (17)

Theme	Number of Responses	Summary
Traffic and Access	6	<p>4 respondents are concerned about the traffic caused by increase in human activity and residents moving onto the property</p> <p>1 respondent would like for all access to the buildings to be internalized on the inside of the property</p> <p>1 respondent would like to ensure that there is enough space for courier and delivery vehicles to access the property</p>
Pedestrian and Bicycle Infrastructure	4	<p>2 respondents would like for more pedestrian and bicycle infrastructure to be included that connects with the broader community</p> <p>1 respondent would like for more bicycle parking spaces to be included</p> <p>1 respondent wants pedestrian and bicycle safety to be a top priority in designing the streetscape</p>
Public Transit	4	<p>4 respondents would like to ensure that new and accessible infrastructure is established to encourage more people to use public transit</p>
Parking	3	<p>2 respondents iterating the importance of including more than 1:1 parking spaces to units in the buildings</p> <p>1 respondent believes that the buildings should not include any parking</p>

Amenities, Public Realm, and Programming (14)

Theme	Number of Responses	Summary
Outdoor Amenities	12	4 respondents like the idea of a community garden and green roofs 2 respondents would like more youth-gearred programming for public spaces 1 respondent wants to ensure that the public spaces are well lit 1 respondent would like the proposal to have more decorative landscaping 4 respondents like the idea of green spaces that are well maintained
Environmental Considerations	2	2 respondents were concerned about the buildings encroaching onto the creek area

Public Amenities (10)

Theme	Number of Responses	Summary
School Capacity	5	5 respondents are concerned about local school capacity
Grocery and Retail Access	5	3 respondents are concerned that there are not enough grocery store uses in close proximity to the property 2 respondents are curious if there are enough retail options to match the amount of future residents the area will have

Appendix C: Survey Free Response Summary – Christine Crescent

Built Form (9)

Theme	Number of Responses	Summary
Height, and Density	4	<ul style="list-style-type: none"> - 1 respondent was not in support of the proposed height and density of the property - 3 respondents were in support of the proposed height and density or increasing it
Design	1	<ul style="list-style-type: none"> - 1 respondent would like the buildings to blend in appearance with the surrounding buildings
Accessibility	1	<ul style="list-style-type: none"> - 1 respondent wanted the proposal to use inclusive design principles for those with disabilities - 1 respondent would like the proposal to include accessible ground floor units
Mix of Uses	1	<ul style="list-style-type: none"> - 1 respondent was in support of a mix of uses such as grocery, commercial, or retail
Other	2	<ul style="list-style-type: none"> - 2 respondents would prefer DRLHC explore other properties to develop instead of redeveloping the Christine Crescent property

Amenities, Public Realm, and Programming (7)

Theme	Number of Responses	Summary
Outdoor Amenities	4	<ul style="list-style-type: none"> - 1 respondent is concerned about noise pollution caused by new public spaces - 1 respondent would like the proposal to include a community garden - 1 respondent is happy to see the inclusion of a greenspace in the proposal - 1 respondent would like all outdoor amenities to be contained within the rooftop of the buildings for safety
Environmental Considerations	2	<ul style="list-style-type: none"> - 1 respondent is concerned about pollution from the highway nearby - 1 respondent is concerned about local wildlife being displaced during the redevelopment
Indoor Amenities	1	<ul style="list-style-type: none"> - 1 respondent would prefer all indoor amenities to be contained to the first floor to prevent burglary of houses

Unit Typology (6)

Theme	Number of Responses	Summary
Affordable Housing	4	<ul style="list-style-type: none"> - 3 respondents are in support of including more affordable housing - 1 respondent is not in support of including any affordable housing
Unit Size	1	<ul style="list-style-type: none"> - 1 respondent is concerned about losing their existing square footage once they move into one of the new units
Rental Replacement Plan	1	<ul style="list-style-type: none"> - 1 respondent wants to know if existing tenants will have first priority to a new unit

Community Safety (4)

Theme	Number of Responses	Summary
Safety Concerns	4	<ul style="list-style-type: none">- 4 respondents are concerned about the overall safety of the area with the increase of residents

Parking, Transit and Traffic (4)

Theme	Number of Responses	Summary
Parking	2	<ul style="list-style-type: none">- 1 respondent is concerned about spillover into side street parking- 1 respondent is concerned that there is not enough proposed parking
Traffic and Access	1	<ul style="list-style-type: none">- 1 respondent is concerned about the traffic caused by the increase in residents
Pedestrian Infrastructure	1	<ul style="list-style-type: none">- 1 respondent is concerned about the safety of pedestrians with the increase in traffic- 1 respondent would like to see more pedestrian connections between the property and the surrounding neighbourhood

Public Amenities (1)

Theme	Number of Responses	Summary
School Capacity	1	<ul style="list-style-type: none">- 1 respondent is concerned about local school capacity

MALAGA & CHRISTINE REDEVELOPMENT FEASIBILITY ANALYSIS

May 15th, 2024

FINAL REPORT

Infrastructure
Ontario

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➤ SECTION 1: EXECUTIVE SUMMARY

416-448 Malaga Road (“Malaga”) and 419-451 Christine Crescent (“Christine”) are Region of Durham (“Region”) owned Rent-Geared-to-Income (“RGI”) housing sites (together referred to as the “Sites”). The Sites, built in the 1960s and 1970s, have reached the end of their expected useful life, requiring the operator, Durham Regional Local Housing Corporation (“DRLHC”), to vacate and board up some units. Significant re-investment would be required to make the units suitable for new tenants and the Sites present an opportunity to optimize re-investment through a revitalization that creates new, sustainable housing supply for the Region.

The Region engaged Infrastructure Ontario (“IO”) to examine the feasibility of redeveloping the Sites into modernized, mixed-income rental communities, leveraging IO’s expertise as the province’s real estate and infrastructure delivery agency to support capacity building and adoption of best practices within the Region’s newly-formed Affordable Housing Development & Renewal team. For this work IO is acting as a non-crown agent and therefore the Province of Ontario shall not be liable for any liability or obligation of IO with respect to the recommendations provided herein. IO’s assessment, with support from Bousfields and Altus, included the planning, technical, financial, and market feasibility for potential redevelopment.

The revitalization concepts have been developed to optimize site redevelopment and include replacement RGI units along with new affordable and market rental units to create mixed-income housing options on the sites, which will remain owned and operated by DRLHC.

The preferred development concept for Malaga proposes two 10-storey apartment buildings, one fronting Malaga Rd and a second oriented towards the Oshawa Creek, and a mix of stacked and back-to-back townhouses along Oxford St. and the trail connection to the north of Malaga. The proposed concept yields 439 housing units, including 65 RGI replacement units and 374 net new units, mixed between affordable and market rental. The concept also proposes some non-residential use on the ground floor of one of the mid-rises and one and a half levels of underground parking containing 544 parking spots, along with some visitor parking and private townhouse driveways at grade. From a planning perspective, the current policy context at Malaga permits residential uses of only up to 18 meters in height (approximately 6 storeys), coupled with natural heritage development restrictions on the eastern part of the site. Initial feedback from the City of Oshawa (“City”) indicated that the current policy may be amended via an Official Plan Amendment (“OPA”) and a Zoning-By-law Amendment (“ZBA”), to permit up to 10 storeys in height, subject to appropriate height transitions and natural heritage setbacks.

The preferred development concept for Christine proposes a single 6-storey apartment building along the southern portion of the site and stacked back-to-back townhouses along Nevis Ave. The

proposed concept yields 164 housing units, including 12 RGI replacement units and 152 net new units, mixed between affordable and market rental. The concept also proposes one level of underground parking containing 190 parking spots and some surface visitor parking along the eastern portion of the site. The current planning policy context only permits single and semi-detached residential uses, however, initial feedback from the City indicated that the current policy may be amended via an OPA and a ZBA, to permit an apartment building of up to 6 storeys in height, subject to appropriate height transitions.

From a technical perspective, while the City, through a stage 1 Pre-Application Consultation (“PAC”), has provided an exhaustive list of technical studies required as part of OPA and ZBA submissions, the key technical areas flagged at this stage of due diligence are natural heritage, geotechnical and possibly sanitary sewer servicing for Malaga and water servicing and sanitary sewer for Christine. For Malaga, further geotechnical work will be required to assess potential water-table risks that may impact the proposed underground parking structure and to determine the long-term stable top of slope that will determine the site’s development limit. Further servicing analysis will also be required to confirm the scope of sanitary sewer upgrades required to support development, along with more detailed costing. Further natural heritage work will also be required at Malaga to ensure that the proposed development does not impact the adjacent natural heritage system and its features. At Christine, further servicing analysis will be required to confirm the scope of watermain and sanitary sewer upgrades required to support development, along with more detailed costing.

From a financial perspective, the development budget is estimated at ~\$260M for Malaga and ~\$93M for Christine. These include both hard and soft construction costs but assume full exemption from municipal charges, which was confirmed by City staff at the stage 1 PAC meeting. CMHC’s Affordable Housing Fund (“AHF”) is the most appropriate funding program for both Malaga and Christine and includes both repayable and forgivable loans – preliminary financial modelling suggests that Malaga could be eligible for total funding (repayable + forgivable loans) of ~63% of development costs and that Christine could be eligible for total funding of ~62% of development costs. Other smaller affordable housing funding programs may help fund a portion but not the entirety of the remaining development costs. Direct capital funding by the Region would be critical for both Malaga and Christine to be fully funded; while the Region generally has fiscal capacity to source capital funding at scale through debentures, the timing and extent of such capital funding is to be determined by the Region’s strategic capital planning process.

With regards to community engagement, given Bousfields was directly procured by the Region to undertake this work, a separate report will outline the community engagement process and the detailed feedback provided. Key themes from community engagement are highlighted in this

report, including prioritization of accessibility and safety in the design, provision of family-sized units, provision of new and enhanced connections to surrounding amenities, provision of onsite functional, recreational and communal amenities that serve a wide range of users, a preference for townhouse and medium density built-forms, balancing modern design with cost-effective maintenance, ensuring local infrastructure can support proposed density and ensuring that project timelines and updates (including relocation plan) are appropriately communicated to residents.

With regards to delivery models, the Region provided direction early in the business case work that its desire is to pursue a direct delivery model for Malaga and Christine, with potential to consider a land lease and/or land disposition model for subsequent DRLHC redevelopments, where there is higher potential to monetize land value. This business case report outlines some of the potential direct delivery models that could be used for Malaga and Christine as well as a summary of a workshop held with Regional staff to identify Design-Build and Construction Management at Risk as the most suitable delivery models for the Sites based on the preliminary concepts and project budgets.

Overall, while there are some risks and questions to address for both Malaga and Christine, namely with respect to the funding strategy, the Sites offer good opportunities for intensification and revitalization into modernized mixed-income rental communities, particularly considering conditions of the current buildings on site.

As for next steps, Regional staff will present the business case findings to the Committee of the Whole (“CoW”) on June 12th, 2024, and shortly thereafter seek approval from Regional Council to proceed with pre-construction activities, namely planning approvals and further site technical due diligence. Given IO’s scope was limited to business case development, any future involvement and support from IO in the project would require further discussions and execution of additional Statement(s) of Work between the Region and IO; otherwise, the implementation steps outlined above are to be executed solely by the Region.

➤ SECTION 2: PROJECT OVERVIEW

IO has been engaged by the Region to advise on realty and development services and develop a business case for the Region's first phase of DRLHC site redevelopments at Malaga and Christine.

IO engaged Bousfields to undertake planning due diligence and concept development, and Altus to undertake market analysis and financial model development. In addition, the Region had directly procured Bousfields to design and lead community engagement for the Sites, which IO supported.

This report is a culmination of all the work completed to date by IO, with support from external consultants, in developing business cases for the Sites.

➤ SECTION 3: MALAGA REDEVELOPMENT FEASIBILITY

3.1. Preferred Concepts and Development Yields

3.1.1 Site and Surrounding Context

Malaga is a corner lot, located on the east side of Oxford Street and the north side of Malaga Road in the City of Oshawa (see **Figure 1** below)



Figure 1: Site map.

The Malaga site has an area of approximately 19,400 square metres (1.94 hectares, or 4.79 acres) and currently includes 65 three-storey townhouse units clustered within eight townhouse blocks. It has two access driveways on Oxford Street and two access driveways on Malaga Road which connect to an internal private road to the site, and parking is provided in private garages and driveways for each unit. The Malaga site itself is situated in a predominately low-rise residential

neighbourhood that contains clusters of apartment buildings and commercial retail plazas along arterial roads. The site itself abuts the Oshawa Creek Natural Heritage System, and the eastern portion of the site is currently used as parkland/open space.

3.1.2 Land Use Planning Policy Context

A detailed planning due diligence report has been prepared by Bousfields. **Table 1** below summarizes the most pertinent land use planning policies that govern land use on the site. For more detailed information on the full scope of planning policies applicable to Malaga, please refer to Bousfields’ Malaga Planning Due Diligence report.

Table 1: Planning policy framework applicable to the Malaga site

Policy Document	Details		
<p>The City of Oshawa Official Plan</p>	<p>The Malaga site is designated ‘Residential’ and ‘Open Space and Recreation’ within the Oshawa Official Plan (“OP”). The eastern portion is also identified as ‘Natural Heritage System’ and ‘Hazard Lands’.</p>		
	<p><i>Section 2.3.4 of the City’s OP identifies permitted densities in Residential Areas</i></p>		
	<p>There is only one residential designation category in the OP; however, the OP provides direction on different built form types within the residential designation through a residential density classification system.</p>		
	<p>The table below outlines the subset of residential density types that were considered for Malaga’s concept development, based on consideration of factors such as proximity to low rise neighbourhoods and open space, abutting public roads and connections to the broader street network. It should be noted that the location criteria for the highest residential density categories tend to apply to sites along arterial roads.</p>		
	<p>Density Type</p>	<p>Net Residential Density</p>	<p>General Representative Housing Type/Form</p>
<p>Medium Density I Residential</p>	<p>30 – 60 units per hectare</p>	<p>Single Detached, Semi Detached, Duplex, Townhouses</p>	
<p>Medium Density II Residential</p>	<p>60 – 85 units per hectare</p>	<p>Townhouses, Low Rise Apartments and Medium Rise Apartments</p>	
<p>High Density I Residential</p>	<p>85 – 150 units per hectare</p>	<p>Low Rise and Medium Rise Apartments</p>	
<p>High Density II Residential</p>	<p>150 – 300 units per hectare (outside</p>	<p>High Rise and High Rise Apartments</p>	

		Downtown Oshawa Urban Growth Centre)	<p>An Official Plan Amendment is required to permit a broader range of residential dwelling types and densities in Malaga.</p> <p><i>Section 2.6 of the City’s OP identifies the policies for lands designated ‘Open Space and Recreation’</i></p> <p>Policy 2.6.1.3 of the City’s OP states that areas designated as Open Space and Recreation generally include components of the Natural Heritage System, valley lands, conservation areas and other natural environments, and recreational resources including Regional and City level parks. Policy 2.6.1.4 states that areas designated as Open Space and Recreation shall be predominantly used for recreation, conservation, reforestation, cemeteries, allotment gardens, and community gardens. These uses shall be subject to the provisions of Natural Heritage System policies and shall have regard for the natural environment and be compatible with their surroundings.</p> <p><i>Schedule D-1 – Environmental Management of the City’s OP identifies the eastern part of the parcel as ‘Natural Heritage System’ and ‘Hazard Lands’</i></p> <p>A 30 metre (98 ft.) wide buffer applies on either side of watercourses to delineate riparian corridors. A reduction in the buffer may be considered to a minimum width of 15 metres (49 ft.) within those parts of the Natural Heritage System pursuant to the submission of an appropriate study. A reduction in the width of a riparian buffer demonstrated through an appropriate study will not require an amendment to the OP. Hazard Lands shall be used primarily for the preservation and conservation of land and/or the environment and shall be managed in such a manner as to complement adjacent land uses and protect such uses from any physical hazards or their effects.</p> <p><i>Schedule C (Sub-area H) of the City’s OP identifies the Malaga site as being within a Community Improvement Area</i></p> <p>Sub-area H is identified as a medium-high density lower income residential area generally bounded by the Oshawa Creek, Park Road, the Canadian National Railway mainline and Wentworth Street</p> <p>The Community Improvement Area requires improvements to upgrade housing units, deficient neighbourhood parks and recreational facilities, deficient streets and sidewalks, deficient sewer and water services, and to alleviate land use conflicts. At this time, a Community Improvement Plan has not been prepared for Malaga.</p>
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Policy Document	Details
City of Oshawa Zoning By-law 60-94	The Malaga site is compound zoned R4-A which only permits Block Townhouses, and R6-B which permits the following uses: Apartment, LTC, Nursing home and Retirement home uses. The compound zoning applies to the entire site. Where two or more zoning symbols apply to a lot, that lot may be used for any permitted use in those zones. If a combination of uses from the two zones are proposed to be developed on a lot, it must comply with zone provisions applicable to each use. A Zoning Bylaw Amendment is required to permit a broader range of residential dwelling types and densities on Malaga.
Central Lake Ontario Conservation Authority O.Reg 42/06	A portion of the Malaga site is within a regulated area of the Central Lake Ontario Conservation Authority (“CLOCA”) centered on the Oshawa Creek System. Section 3(1) of Ontario Regulation 42/06 identifies that the Conservation Authority may grant permission for development in a regulated area if, in its opinion, the control of flooding, erosion, dynamic beaches, pollution or the conservation of land will not be affected by the development.

3.1.3 Conceptual Site Plan

To inform concept development, a visioning workshop was held in December with Regional staff from Affordable Housing Development & Renewal, Planning, Works and Housing Services, City planning staff, IO and Bousfields to align on a set of redevelopment objectives and develop framework diagrams for each site that would begin to identify the location and type of built-form, location of public and/or private open spaces, circulation routes and uses. The following redevelopment objectives were proposed and agreed upon at the workshop, based on the Region’s affordable housing strategy and policy, phase #1 community engagement and Bousfields’ planning due diligence report:

- Replace existing units and optimize the provision of housing on the Sites at an appropriate height/density
- Contribute to a vibrant public realm
- Achieve site permeability and connectivity to local services, parks and public open spaces
- Support sustainability and inclusivity goals

Following the workshop, Bousfields reviewed the framework diagrams and drafted development concepts for each of the Sites. The preferred option for Malaga is shown below, followed by the second option. The preferred option has the parking below grade and the eastern development limit straightened out to maximize development and layout efficiency, based on an adjustment to the natural heritage setback area that results in no net area lost, which allows the site to accommodate a mix of built form and unit types. The second option is a slightly smaller-scale development with the mid-rises going up to only 8 storeys and the below-grade parking garage

carrying a smaller footprint. The selection of the preferred option was an iterative process informed by good planning principles, market conditions and feedback from various stakeholders. Ultimately the first option was selected as the preferred option because it better met the above redevelopment objectives.



Malaga Redevelopment	
Preferred Option	
Prepared by Bousfields Inc. (April 2024)	
	Total
Gross Site Area (ha)	1.927
Net Redevelopment Area (ha)*	1.549
Total Gross Floor Area (sq.m)	36,214
Total Indoor Amenity GFA (sq.m)	878
Net Floor Space Index (FSI)	2.34
Net Units per Hectare (UPH)	283
Unit Yield**	439
Parking	627
P1 U/G Parking	340
P2 U/G Parking	204
Parking for Towns (2 spaces/unit)	64
Visitor and Pick-Up/Drop-Off Layby Parking Spaces	19
Area of Private Roads/Driveways (ha)	0.262
Natural Heritage Setback and Open Space (ha)	0.852
Natural Heritage System Buffer (ha)	0.378
Private and Publicly Accessible Open Spaces (ha)	0.474

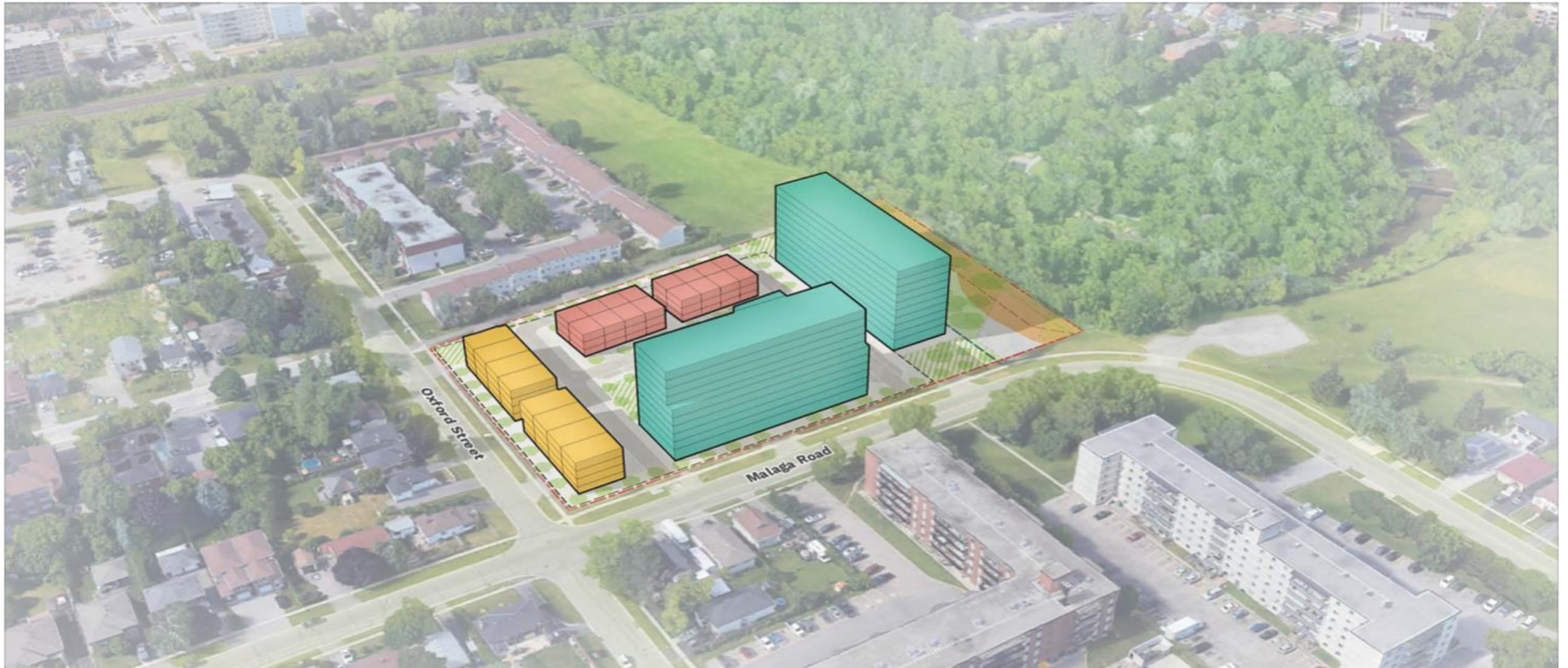
* Net developable area excludes components of the Natural Heritage System identified in Policy 5.4.4 of the City's OP (Policy 2.3.2.2)

** Total unit yield. Detailed net new unit yields below in Section 3.1.6

LEGEND

- Site Boundary
- CLOCA Regulated Area
- Sewage Easement
- Development Limit (Approx.)
- 30m Riparian Corridor Setback
- 10m Wooded Area Setback
- Open Space at Grade
- Rooftop Amenity
- Stacked Townhouses
- Back-to-Back Townhouses
- Mid-rise Building
- Parking Extent
- Lobby Entrance
- Parking Entrance
- Non-Residential Frontage
- Pedestrian Connection

3.1.4 Conceptual Massing (preferred option)



LEGEND  Site Boundary  Mid-rise Building  Stacked Townhouses  Back-to-Back Townhouses  Amenity / Open Space

3.1.5 Development yields (preferred option)

The following tables detail the unit yields and Gross Floor Area¹ per typology for the preferred option at Malaga prepared by Bousfields.

Table 2 detailed development statistics of the Malaga site by typology

Malaga Redevelopment Preferred Option Detailed Development Statistics by Typology ²					
Total Residential GFA (m2)	35,854				
Total Non-Residential GFA (m2)	360				
Total GFA (m2)	36,214				
Unit Statistics	Avg Unit Size (m2)	No. Market Units	No. Affordable Units	No. Replacement RGI Units	Total No. Units
Apartment Bachelor	42	10	8	0	18
Apartment 1 Bed	59	81	53	0	134
Apartment 2 Bed	72	92	60	0	152
Apartment 3 Bedroom	80.8	20	23	45	88
Apartment 4 Bedroom	92.9	0	8	8	16
B-to-B Townhouse 3 Bed	168.75	8	0	8	16
Stacked Townhouse 2 Bed	76	4	4	0	8
Stacked Townhouse 4 Bed	152.38	4	0	4	8
Total	-	220	155	65	439

Further to the development yields, the provided parking for the proposed development is 627 spaces (detailed parking statistics can be found in section 3.1.3). This number meets the minimum number of parking spaces required by Zoning By-law 60-94. **Table 3** below compares the provisioned parking against the minimum required parking.

¹ Gross Floor Area (GFA) is an estimate. The final GFA number will depend on the architectural building design. In the case of this study, the proposed midrise building's GFA is calculated as 94% of the GCA, where the 6% deduction assumed accounts for typical building feature exclusions such as non-enclosed spaces, air shafts, floor area dedicated to the loading, parking, and circulation of cars, etc.

² Unit counts may not add up to 100% due to rounding.

Table 3 Parking provision for Malaga

Malaga Preferred Option ³ Parking Spaces				
Parking Provision	No. Of Units	Min. No. of Parking Spaces Required	No. of Parking Spaces Provided	Location of Parking Spaces Provided
Residential Parking Spaces – Apartment Buildings (1.0 + 0.33 Visitor Parking Space / Dwelling Unit)	407	541	541	1.6 levels of underground parking + 12 at-grade visitor parking spots
Residential Parking Spaces – Stacked Townhouses (1.0 + 0.33 Visitor Parking Space / Dwelling Unit)	16	21	32	Private driveways and integral garages
Residential Parking Spaces – Back-to-Back Townhouses (1.25 + 0.35 Visitor Parking Space / Dwelling Unit)	16	26	32	
Pick-Up-Drop-Off	439	N.A.	7	Along proposed private road
Non-Residential Parking Spaces (1.0 Parking Space / 24 m ²)	360 m ²	15	15	1.6 levels of underground parking

3

The minimum number of parking spaces required is based on the requirements in Zoning By-law 60-94 which includes the parking ratio of 1.33 for apartments and stacked townhomes (1 space/dwelling unit + 0.33 space/dwelling unit for visitors), 1.60 for the back-to-back townhouses (1.25 space/dwelling unit + 0.35 space/dwelling unit for visitors), and 1 parking space/24m² for non-residential uses.

3.2. Planning Feasibility

3.2.1 Planning rationale

The preferred concept option for Malaga considers applicable planning policies from the provincial level down to the local level as documented in Bousfields’ Malaga Planning Due Diligence Report. The proposed residential form is consistent with and meets the intent of the applicable planning policy framework including: The Provincial Policy Statement, the Growth Plan for the Greater Golden Horseshoe, the Region of Durham’s Official Plan, and the City of Oshawa’s Official Plan.

3.2.2 Required planning approvals

Table 4 below outlines the development application approvals required to permit the proposed redevelopment for Malaga. This is a preliminary list based on the stage 1 PAC meeting held with City staff and a Planning Rationale Report or Planning Justification Report will be required to support a formal development application.

Table 4: An overview of identified approvals required for redevelopment of Malaga.

Required Approval	Description	Approach to Obtain
<p align="center">Official Plan Amendment Application</p>	<p>Initial consultation with City of Oshawa staff suggests that the current Official Plan designation does permit the proposed residential use. However, an OPA would be required to permit the proposed density/height.</p>	<p>The City of Oshawa has a multi-stage pre-consultation process as part of its Pre-Consultation By-law before the submission of an OPA. An OPA can be submitted concurrently with a Zoning Bylaw Amendment (ZBA). The municipality has 120 days to review a concurrent OPA and ZBA application upon submission.</p>
<p align="center">Zoning By-Law Amendment Application</p>	<p>Although the in-force zoning permits the proposed typologies, a rezoning would be required to permit the additional height and density proposed in the preferred concept.</p>	<p>The City of Oshawa has a multi-stage pre-consultation process as part of its Pre-Consultation By-law before the submission of a Zoning By-law Amendment. Once the application is deemed complete, the total review process is 90 days, or 120 days if an OPA is submitted concurrently with a ZBA. The expected duration based on an accelerated timeline provided for affordable housing projects is approximately 12 months.</p>

Required Approval	Description	Approach to Obtain
Site Plan Control	A Site Plan Control Application is required to permit the proposed development. Site Plan Control applies to all residential development within the City of Oshawa.	A Site Plan Control Application will not be accepted until rezoning is approved by Council. The expected duration of the Site Plan Application under an accelerated timeline is approximately 8-12 months.
Central Lake Ontario Conservation Authority Permit Applications	CLOCA will be circulated on all development planning applications and provide comments throughout the process.	

3.2.3 Planning approvals risks & mitigation measures

Table 5: Risks and mitigations for development approvals

	Risk	Mitigation Measure
Approval Timeline	Approval of planning applications may be prolonged due to scope of supporting studies requested by City staff, resulting in potential time delays (e.g. seasonal constraints) and additional costs for the Region to prepare the planning applications and potential time delays for the City to review the applications.	As part of the Pre-Application Consultation (“PAC”), identify potential opportunities for prioritization and acceleration of review & approval of project’s planning applications, given the project’s significant affordable housing component.
Political Buy-in	Potential political opposition by the local councillor(s) and/or by broader city or regional council inhibits planning approvals for the project.	Ongoing collaboration and engagement with political stakeholders can help secure political buy-in.

	Risk	Mitigation Measure
Public Buy-in	Even with staff and political approval of a planning application, an application may still be appealed to the Ontario Land Tribunal by any person or public body who made verbal presentations at a public meeting or written submissions prior to adoption of an OPA or ZBA by a municipality, which may delay approval timelines by up to 18 months.	Region, with support from Bousfields, has been undertaking an extensive public engagement process that is beyond the statutory engagement process required as part of an OPA and/or a ZBA. The public engagement process has spanned various channels (both in-person and virtual) and has targeted both onsite and offsite residents. Engagement feedback has been documented and considered, to the extent feasible, in the conceptual design, to ensure that local residents and stakeholders that would be impacted by the redevelopment are feeling heard and supported. Public engagement will continue as part of the OPA and ZBA process, with clear and consistent messaging on the potential public and resident benefits from the Malaga redevelopment. It is important to note that approval of the Site Plan Control application is not appealable.

3.3.1 Summary of completed technical due diligence

As part of its planning due diligence scope, Bousfields engaged subconsultants to undertake technical due diligence in the following areas: transportation, site servicing and natural heritage. The table below summarizes their findings:

Table 6: Highlights and next steps for technical due diligence for the Malaga site.



	Highlights	Next Steps
Transportation	<p>Existing local and area street network and mobility context will improve over time, particularly with the arrival of the Central Oshawa GO Station located just over 2 km northeast of Malaga.</p> <p>Parking standards generally range between 1.0 to 2.0 spaces per unit for residents and 0.25 to 0.30 spaces per unit for visitor parking, depending on building typology. There are increased efforts by the City of Oshawa to respond to changing transportation needs and change travel behaviour, e.g. through area parking reductions, depending on the density and location of development.</p> <p>Bicycle parking is not required by the in-force zoning but is recommended based on a 2021 City of Oshawa Parking Study, to support the shift to active transportation and support the potential to provide a reduced number of parking spaces.</p> <p>A preliminary traffic assessment indicated good levels of operation on the area street network, suggesting that traffic generated by the redevelopment of Malaga should not pose a constraint.</p>	<p>A traffic impact study, a truck maneuvering/swept path analysis plan and a parking study (if reduced parking is to be proposed) will be required to support an Official Plan Amendment/Zoning-By-law Amendment application.</p>



	Highlights	Next Steps
Site Servicing	<p>Given Malaga’s location adjacent to the existing feeder main on Malaga and Oxford, water supply is not anticipated to be a constraint.</p> <p>The preliminary analysis of the existing municipal sanitary service network suggests that sufficient capacity exists in the 675 mm trunk located east of the site. Some replacement of the existing 250mm diameter downstream sewer between the site and the trunk sewer may be required to gain some sewer capacity and depth to provide service to any proposed development. This will need to be confirmed as the details related to this proposal are available. A new public sewer will be required to connect to the existing municipal system to capture and convey storm water from any new private roads.</p> <p>Individual development blocks will be connected to the municipal water supply and sanitary systems.</p>	<p>A functional servicing report (including grading plan and servicing plan), a stormwater management study and a calcium carbonate assessment will be required to support an Official Plan Amendment/Zoning-By-law Amendment application.</p>
Natural Heritage	<p>Eastern edge of the Site falls within the CLOCA regulated area associated with Oshawa Creek and requires a 30 metre setback from the Valleylands associated with the Oshawa Creek.</p> <p>CLOCA has agreed in-principle to a proposed straightened development limit that results in no net loss to the natural heritage setback area.</p>	<p>A slope stability assessment will be required to confirm the limit of the long-term stable top of slope associated with Oshawa Creek.</p> <p>An Environmental Impact Statement will need to be completed to ensure no harm or negative impacts to the natural heritage system and associated key natural heritage/hydrologic features or their functions. A tree preservation study/inventory will also be required to support an Official Plan Amendment/Zoning-By-law Amendment application.</p>

3.3.2 Outstanding technical due diligence

In addition to the additional technical due diligence outlined in the above table under Next Steps, City staff have provided a checklist at the first Pre-Application Consultation (“PAC”), outlining all the studies, plans, and information required for a complete development application:

OPA and ZBA:

- High-Level Architectural Drawings including site plan, floor plans, and elevations
- Topographic Survey (already completed by the Region)
- Planning Justification Report
- Public Consultation Strategy
- Draft Official Plan Amendment and Draft Zoning By-law Amendment
- Soils Study (Geotechnical)
- Hydrogeological Report
- Fluvial Geomorphology Assessment
- Archaeological Assessment and Ministry Clearance of Archaeological Assessments
- Noise Study
- Environmental Site Assessment (Phase 1 and 2)
- Record of Site Condition
- Oshawa Ontario Building Code Design Information Sheet (one for each proposed building)

Site Plan Control (in addition to above):

- Landscape Plan
- Landscape and Civil Engineering Cost Estimates
- Erosion and Sediment Control Plans
- Reliance Letter for Soils Study (Geotechnical)
- Lighting/Photometric Plan
- Draft 40R Plan
- Waste Management Plan

3.3.3 Considerations for phasing and tenant relocation

Social Housing Operations Regional staff have indicated that passive tenant relocation has already commenced in the last 12-18 months, as turned-over units at Malaga are left vacant rather than filled with new tenants. At the time of writing of this report, Malaga is ~40% vacant. Given planning approvals are expected to take at least another two years, during which staff will continue to vacate units as they turn over while also commencing a more proactive approach of incentivizing and supporting tenants in relocating to other RGI units, it is expected that there will not be any tenant-driven needs for undertaking a phased approach to demolition and construction.

Other factors that may impact construction phasing include construction staging, unit absorption and funding:

- **Construction staging:** the builder may require designated areas onsite for material storage, equipment staging and temporary facilities (e.g. construction trailers and portable toilets), which may warrant phasing construction of the various buildings, particularly if different construction methods are used (e.g. wood construction for the townhomes and concrete for the mid-rises).
- **Unit absorption:** particularly for the market rental units, it is important that there be sufficient local demand in the market to support timely lease-up of said units. This will help ensure that units are occupied, rents are being earned and loan repayments associated with the construction financing can be supported. Market analysis from Altus indicates that the volume of market units generated by the development at Malaga is unlikely to create any significant absorption risks, driven by projections of strong rental demand in Oshawa and a variety of built-form typologies that can target a larger pool of potential renters. More detail on Altus's market analysis is included in section 8.3 of the Appendix. As for the affordable rental units, given the long waiting lists typical in the GTHA, it is unlikely that these units would face any absorption issues.
- **Funding:** given the size of development at Malaga, should the Region face any funding constraints, a phased approach to construction may help with distributing the project's funding requirements over a longer time horizon.

3.3.4 Risks & mitigation measures

Table 7: Risks and mitigation measures for technical due diligence studies.

	Risk	Mitigation Measure
Underground Parking	Soil conditions and proximity to Oshawa Creek may not be conducive for constructing 1.5 levels of underground parking, resulting in increased costs, a redesign of the site's parking provision or a combination of the two	A geotechnical soils study will be critical for assessing site soil conditions and determining whether any cost premiums (beyond what is currently budgeted for) would be incurred in constructing underground parking per current conceptual design
Natural Heritage	Setbacks and buffers from the natural heritage feature may be greater than expected	Preliminary meetings have been held with CLOCA to inform the development limit proposed in Malaga's conceptual design, reflecting policy setback requirements and the opportunity for land swaps with CLOCA to allow for a straightened development limit. A slope stability assessment will be required here for confirming the long-term stable top of slope associated with Oshawa Creek, which impacts the development limit.
Sanitary Upgrades	Potential need for upsizing of the segment of the 250mm sanitary sewer through Cordova Park to the 675 mm trunk located east of the site may add significant time and costs to the project.	A preliminary discussion with Counterpoint Engineering suggested that sanitary upgrades may not be required, and more detailed modelling is to be completed as part of the Functional Servicing Report to validate this assessment. Should the sanitary upgrade be required, the greenfield/less invasive setting at Cordova Park is expected to incur lower costs than otherwise would be incurred along a road. In terms of timing, given planning approvals are expected to take at least another two years, any required sanitary upgrades can be planned to be completed during that time, to ensure that servicing does not pose a constraint to the construction timeline.

3.4. Financial Feasibility

Note: all calculations in sections 3.4.1 to 3.4.3 are based on a base case scenario of 50% affordable, split between <80% MMR (30% of all units) and 100% MMR (20% of all units). This scenario was selected as the base case scenario because it allows the Region to drive towards an ambitious affordable housing target while supporting financial feasibility (through higher affordable rents on a portion of affordable units), all while maintaining eligibility for CMHC financing.

3.4.1 Estimated development costs

Redevelopment of Malaga is estimated to cost ~\$259M (~\$591K per unit or ~\$689 per buildable square foot). ~91% of the development budget is comprised of construction costs, which encompasses demolition, below-grade parking construction, building construction, construction management fee, landscaping and streetscaping, utility connections, insurance and construction contingencies. Other cost categories that typically comprise a larger proportion of a development budget, namely land and municipal charges, are significantly lower for this site because the land is already owned by the Region and municipal charges, including development charges, community benefits charges, cash-in-lieu of parkland and school board fees are assumed to be exempt for this site, per S. 2.5(b) of the City of Oshawa’s DC by-law and per S. 2.3(a) of the Region of Durham’s DC by-law. This interpretation of a full exemption from both lower-tier and upper-tier municipal charges was confirmed by City staff at the stage 1 PAC meeting.

Table 8: Malaga development budget

EXECUTIVE SUMMARY	Budget	% of Total Budget Assumptions & Comments	Cost per Unit	Cost per Buildable SF
LAND & ASSOCIATED COSTS	\$2,021,106	0.8% Property taxes throughout development and construction. \$0 land costs.	\$4,604	\$5
DEVELOPMENT APPROVAL AND MUNICIPAL COSTS	\$1,013,000	0.4% Fees for planning applications, building permit and miscellaneous permits (e.g. lane closures). Full exemption assumed for DCs, CBCs, CIL of Parkland and school board fees.	\$2,308	\$3
CONSTRUCTION	\$236,600,430	91.3% Demolition, below-grade parking, buildings, construction management fee, landscaping & streetscaping, utility connections, insurance and construction contingencies.	\$538,953	\$628
DESIGN & CONSULTANTS	\$7,200,000	2.8% Consultants to support planning approvals and detailed design development.	\$16,401	\$19
GENERAL & ADMINISTRATIVE (G&A)	\$320,000	0.1% Legal, accounting and miscellaneous admin services. \$0 development management costs (Regional staff salaries are excluded).	\$729	\$1
FURNITURE, FIXTURES & EQUIPMENT (FF&E)	\$300,000	0.1%	\$683	\$1
MARKETING, ADVERTISING & LEASING	\$921,803	0.4% Market rental units only - includes a presentation centre and leasing commissions.	\$2,100	\$2
FINANCE	\$9,899,033	3.8% Construction loan interest and other financing fees.	\$22,549	\$26
GOVERNMENT TAXES	\$0	0.0% HST exempt.	\$0	\$0
DEVELOPMENT CONTINGENCY	\$1,000,000	0.4% Contingency for soft cost and schedule overruns. Contingency for hard costs is captured separately under the Construction budget item.	\$2,278	\$3
GROSS PROJECT BUDGET	\$259,275,373	100%	\$590,604	\$689

Given the construction cost category makes up such a large proportion of the development budget, additional detail is provided below with respect to the assumptions used to estimate each of the construction sub-categories:

Table 9: Malaga construction budget

CONSTRUCTION COSTS			
	Applicable Area	\$/SF	Subtotal
Construction Cost - Below Grade	252,876	250	63,219,076
Construction Cost - Midrise A/B - 10 Storeys	349,676	335	117,141,479
Construction Cost - Lowrise B2B	34,875	215	7,498,133
Construction Cost - Lowrise Stacked	44,950	235	10,563,261
Construction Cost - Site Development	207,420	25	5,185,509
	Amount	%	Subtotal
Construction - Design & Pricing Contingency	203,607,457	5.0%	10,180,373
Construction - Construction Contingency	203,607,457	5.0%	10,180,373
Construction - Escalation Contingency	203,607,457	0.0%	-
Construction Management Fee	223,968,202	3.0%	6,719,046
	Units	\$/unit	
Utilities Connections (Hydro/Gas/Water/Storm/	439	1,500	658,500
Demolition, Site Remediation & Abatement			600,000
Premium for Accessibility Standards	88	2,500	220,000
Premium for Green Energy Requirement	439	5,000	2,195,000
Off-site works / Streetscape			-
Insurance	223,968,202	0.01	2,239,682
Total			\$236,600,430

3.4.2 Proposed funding sources

IO undertook a review of potential funding options for Malaga, which included the following:

- [CMHC funding programs](#): the federal government’s National Housing Strategy offers complementary funding and financing initiatives addressing challenges across the housing continuum and the spectrum of housing needs
- [Ontario Priorities Housing Initiative \(“OPHI”\) program](#): OPHI provides municipalities with flexible funding to address local housing priorities and improve access to affordable housing options
- [Federation of Canadian Municipalities \(“FCM”\) Green Municipal Fund](#): a federally-funded program providing municipalities with grants, loans, innovative financing, leveraged investments, capacity building and strategic support for transformation to resilient, net-zero communities
- [HPC Housing Investment Corporation’s affordable housing bonds](#): a provider of long-term, fixed financing to housing non-profits and cooperatives to build more affordable housing and regenerate Canadian community housing portfolios

Based on program eligibility guidelines, project funding amounts and Malaga’s development budget, the most applicable funding program for Malaga would be CMHC’s Affordable Housing Fund (previously known as the National Housing Co-Investment Fund). While the National Housing Co-Investment Fund only had funding commitments until fiscal ‘25/’26, on November 21st, 2023, as part of the Fall Economic Statement, the federal government committed additional funding of \$1 billion over 3 years, starting in fiscal ‘25/’26, to build more affordable housing via the rebranded Affordable Housing Fund (“AHF”). The AHF provides low-interest loans and forgivable loans to

partnered organizations (i.e. organizations that have secured funding from another level of government) to build and/or renovate affordable and community housing. The AHF focuses on developing energy-efficient, accessible and socially inclusive housing that is mixed-income, mixed-tenure and mixed-use. For municipalities, provinces, territories and private sector, the AHF can lend at up to 75% of eligible project costs for an amortization of up to 50 years and at an underwritten interest rate of 4.50% (as of April 8th, 2024). Projects must also generate sufficient Net Operating Income (i.e. rental income less operating expenses) to cover off loan payments at a ratio of 1.0x (i.e. no additional income buffer required beyond the loan payment amount). Based on Malaga’s current project economics and the financing terms described above, Malaga’s development budget of \$259M would be eligible for a repayable loan of ~\$142M (55% of the development budget), based on the base case scenario of 50% affordable units.

In addition to repayable loans, forgivable loans may also be available in the following circumstances:

- Base funding of \$25K per unit for meeting the mandatory minimum program requirements of: i) 30% of units offered at less than 80% Median Market Rent (“MMR”) for a minimum of 20 years; ii) project must demonstrate that it will either achieve a 25% decrease in energy consumption and Greenhouse Gas emissions relative to the 2015 National Energy Code for Buildings or the 2015 National Building Code OR a 15% decrease relative to the 2017 National Energy Code for Buildings; and iii) 20% of units must meet or exceed accessibility standards and its common areas must be barrier-free OR have full universal design applied. Current costing reflects the following cost premiums for meeting the above energy efficiency and accessibility requirements:
 - Energy efficiency requirement: \$5,000/unit for full electric/no gas heating
 - Accessibility requirement: \$2,500/unit for door openers, accessible showers etc.
- Additional funding of up to \$50K per unit for higher performing projects to offset higher costs of meeting or exceeding minimum requirements on affordability (40% of units offered at less than 70% MMR for a minimum of 20 years) and energy efficiency (project must demonstrate that it will achieve a 35% decrease in energy consumption and Greenhouse Gas emissions relative to the 2015 National Energy Code for Buildings or the 2015 National Building Code). No additional cost premium beyond the energy efficiency premium of \$5,000/unit indicated above would be required in order to achieve the higher energy efficiency performance required for the additional grant funding. That said, the higher affordability performance would reduce the project’s rental income and is reflected in the higher performance scenario modelled in this report.
- Where cash flow is insufficient and a forgivable loan is needed to attain break-even cash flow

Forgivable loans are capped at the lower of: i) \$75K per unit; and ii) 30% of eligible project costs. Given there are 439 units proposed at Malaga, \$75K per unit equates to \$32.9M. Given project costs are ~\$259M, 30% equates to \$77.7M, therefore the lower of the two is \$32.9M. Based on the base case scenario of 50% affordable units, the Malaga redevelopment would be eligible for a forgivable loan amount of \$21.95M. This would result in an outstanding amount of ~\$95M that would still require funding by the Region to advance the project. Other potential funding sources may include the following:

- OPHI: OPHI's Rental Housing stream offers forgivable loans for the construction of new affordable rental units. Feedback from Regional staff indicated that the Region's annual OPHI budget for new affordable rental construction is ~\$3M.

- FCM: FCM's Green Municipal Fund offers a combination of loans and grants for the construction of new affordable rental units that are designed to achieve net-zero-ready building energy performance. The Green Municipal Fund guidelines indicate that the maximum funding per project is \$10M.

- Region of Durham: the Region offers rent supplements to some affordable housing projects (e.g. Durham Region Non-Profit Housing Corporation). While rent supplements are not a direct form of capital funding, they support project economics by increasing the amount of financing that a project can support, thereby reducing the equity/non-debt funding requirement. The Region's Housing Services team indicated that rent supplements and/or operating subsidies would be used for the RGI units, to subsidize potential gaps between paid RGI rents and RGI "market rents," which would be set at 80% of MMR, in alignment with CMHC's AHF affordability requirements and slightly above current RGI "market rents" (RGI "market rents" are escalated annually).

Given the scale of Malaga's proposed redevelopment, most of the above programs would still be insufficient for the outstanding funding required (beyond CMHC financing) for the project. The Region's Finance team indicated that the Region has capacity to source capital funding at scale through debentures (and corresponding increases to Regional property taxes in the year that the debentures are introduced) but any capital funding needs for the Malaga redevelopment will need to be balanced and appropriately timed against the Region's other capital planning priorities. This will be further informed by the Region's strategic capital planning process.

It is important to note that while a public-private partnership ("P3") delivery approach, akin to some of the direct delivery models adopted by the Province for the construction of hospitals, correctional facilities etc., could help defer the timing of the Region's funding to construction substantial completion (albeit at a cost premium, reflecting higher transaction costs and higher completion payments to the constructor to compensate for additional financing costs and risk), it

would not absolve the Region from needing to arrange funding to pay for the project's development costs.

Below is a summary of the estimated sources of funds for the Malaga redevelopment:

Table 10: Malaga sources of funds

Source of Funds			
Region Capital Funding		94,983,184	37%
CMHC Forgivable Loan	\$50,000 /unit	21,950,000	8%
CMHC Construction Loan		142,342,188	55%
Total		259,275,373	100%

3.4.3 Market, affordable and RGI weighted average unit rent

Below is a summary table of the unit mix across market rental, affordable rental and RGI units, both in absolute and relative terms, assuming the base case scenario 50% affordable. Unit yields were computed as follows:

- Overall unit yield was informed by the conceptual site plan developed by Bousfields
- Market unit mix was informed by a market analysis undertaken by Altus. It is important to note that Altus's market analysis indicated that greater variety in the apartment unit mix, specifically introducing 1BR + den and 2BR + den units, will be important for maximizing success of market absorption of units and minimizing the lease-up period.
- Affordable unit mix was informed by a combination of the current purpose-built rental inventory in Oshawa and community engagement feedback
- RGI unit mix was informed by the existing unit mix on site

Table 11: Malaga unit mix

Unit Type	Market	Affordable	RGI Rental Replacement	Subtotal	Market Units as % of Total	Aff. Units as % of Total	RGI Rental Replacement Units as % of Total	% of Grand Total
Bachelor	10	8	0	18	57%	43%	0%	4%
1B	81	53	0	134	61%	39%	0%	31%
1B+D	0	0	0	0	0%	0%	0%	0%
2B	92	60	0	152	60%	40%	0%	35%
3B	20	23	45	88	23%	26%	51%	20%
4B	0	8	8	16	0%	48%	52%	4%
B2B TH (3B)	8	0	8	16	50%	0%	50%	4%
B2B TH (4B)	0	0	0	0	0%	0%	0%	0%
Stacked (2B)	4	4	0	8	50%	50%	0%	2%
Stacked (4B)	4	0	4	8	50%	0%	50%	2%
Total	220	155	65	439	50%	35%	15%	100%
Avg. Size per Market Type	771	737	1,050	801				

Below is a summary table of the expected monthly rental rates across the various unit types. Rental rates were computed as follows:

- Market rental rates were informed by a market analysis undertaken by Altus of asking market rents for new rental product in Oshawa

- Affordable rental rates are tied to CMHC’s MMR for each unit type in South Oshawa. The base case scenario sets 30% of units at 79% MMR and an additional 20% of units at 100% AMR – this ensures that the project maintains eligibility for CMHC’s AHF (at least 30% of units rented at less than 80% MMR) while generating additional rental income on the remaining affordable units to support financial feasibility
- While rental rates on replacement RGI units will be geared to household income at 30%, these rents will be supplemented by operating subsidies and/or rent supplements, bringing the earned rents in line with the affordable rental rates. The 50% affordable rate under the base case scenario includes replacement RGI units.

The Affordable Rent as % of Market column illustrates the discount provided on affordable rental units compared to the market rental units.

Table 12: Malaga unit rental rates

Avg. Unit Rent	Market	Affordable	RGI Rental Replacement	Affordable + RGI Rental Replacement	Affordable Rent as % of Market	RGI Rental Replacement as % of Market	Affordable + RGI Rental Replacement as % of Market
Bachelor	\$1,800	\$860	n.a	\$860	48%	0%	48%
1B	\$2,275	\$1,158	n.a	\$1,158	51%	0%	51%
1B+D	\$2,275	n.a	n.a	n.a	0%	0%	0%
2B	\$2,625	\$1,309	n.a	\$1,309	50%	0%	50%
3B	\$2,850	\$1,470	\$1,495	\$1,487	52%	52%	52%
4B	n.a	\$1,639	\$1,495	\$1,565	0%	0%	0%
B2B TH (3B)	\$3,500	n.a	\$1,639	\$0	0%	47%	0%
B2B TH (4B)	n.a	n.a	n.a	n.a	0%	0%	0%
Stacked (2B)	\$2,675	\$1,355	n.a	\$1,355	51%	0%	51%
Stacked (4B)	\$3,350	n.a	\$1,639	\$1,639	0%	49%	49%
Weighted Avg.	\$2,524	\$1,276	\$1,522	\$1,349	51%	60%	53%

Below is a summary of the expected per square foot rents based on proposed unit sizes and expected rental rates. This metric is an illustration of the profitability of each unit type. The % of Market represents the foregone profitability on affordable rental units compared to the market rental units.

Table 13: Malaga per square foot rental rates

\$/sqft	Market	Affordable	RGI Rental Replacement
Bachelor	\$3.98	\$1.90	n.a
1B	\$3.58	\$1.82	n.a
1B+D	\$3.58	\$1.82	n.a
2B	\$3.39	\$1.69	n.a
3B	\$3.28	\$1.69	n.a
4B	n.a	\$1.64	\$1.68
B2B TH (3B)	\$1.93	\$0.90	\$0.90
B2B TH (4B)	n.a	n.a	n.a
Stacked (2B)	\$3.27	\$1.66	n.a
Stacked (4B)	\$2.04	\$1.00	\$1.00
Avg Rent/Sqft	\$3.27	\$1.73	\$1.45

Below is a summary of the operating financials of the project, including rental income, operating costs and debt service payments.

Table 14: Malaga operating financials

Net Operating Income Summary					
	Units	\$/Unit	\$/sqft mon.	Monthly Gross	Annual Gross
Market Units	220	\$2,524	3.27	553,982	6,647,783
Affordable Units	155	\$1,276	1.73	197,216	2,366,593
RGI Rental Replacement Units	65	\$1,522	1.45	98,913	1,186,960
Potential Gross Income - Residential	439	\$1,936	2.42	850,111	10,201,336
Ancillary Income - Parking					488,400
Ancillary Income - Locker					65,400
Less: Vacancy & Credit Loss				2.7% of PGI	(287,119)
Effective Gross Income - Residential					10,468,017
Less: Operating Expense				34.19%	(3,579,015)
Net Operating Income - Residential					6,889,002
			\$/sqft ann.		
Non-Residential - Community / Not-for-Profit			0.00		-
Total Untrended NOI					6,889,002
Mortgage Payment					(6,033,035)
Cashflow after Financing (Free CF) - Untrended					855,967

3.4.4 Sensitivity analysis:

Below is a sensitivity analysis of the capital funding required by the Region, both in terms of absolute dollars and percentage of total funding, based on changes in the repayable loan interest rate and changes to construction costs. Highlighted cells illustrate the current interest rate and construction cost increase assumed in the pro-forma.

Table 15: Malaga sensitivity analysis for base case redevelopment scenario

		CMHC Repayable Loan Interest Rate (Stress Test)					
		3.75%	4.00%	4.25%	4.50%	4.75%	
Construction	-2.5%	\$69,123,903	\$76,803,551	\$83,241,202	\$89,659,369	\$96,053,856	
	0.0%	\$75,018,013	\$81,613,583	\$88,194,508	\$94,983,184	\$101,286,859	
Costs	2.5%	\$81,136,510	\$87,876,502	\$94,597,882	\$101,296,547	\$106,702,638	
Increase	5.0%	\$86,112,539	\$94,305,648	\$101,168,913	\$106,705,380	\$113,521,420	
(Decrease)	7.5%	\$92,542,275	\$99,570,477	\$106,577,091	\$112,232,877	\$119,186,361	
	10.0%	\$99,138,363	\$104,951,498	\$112,097,231	\$119,219,962	\$124,959,440	
Capital Funding Required by the Region (%)							
		CMHC Repayable Loan Interest Rate (Stress Test)					
		3.75%	4.00%	4.25%	4.50%	4.75%	
Construction	-2.5%	27.3%	30.3%	32.8%	35.3%	37.9%	
	0.0%	29.0%	31.5%	34.0%	36.6%	39.0%	
Costs	2.5%	30.7%	33.2%	35.7%	38.2%	40.2%	
Increase	5.0%	31.9%	34.9%	37.4%	39.4%	41.9%	
(Decrease)	7.5%	33.5%	36.1%	38.6%	40.6%	43.1%	
	10.0%	35.2%	37.2%	39.7%	42.2%	44.2%	

3.4.5 Risks & mitigation measures

Table 16 Financial risks and mitigation measures for the Malaga site



	Risk	Mitigation Measure
Funding	Region may be unable to fund the non-CMHC portion of the development budget.	Further conversations were held with the Region's Finance department to confirm the Region's capacity to fund the non-CMHC portion of the development budget. Further conversations were also held with CMHC to validate the findings of the draft project pro-forma and determine how CMHC funding can be maximized.
Construction Cost Escalation	Construction costs may escalate beyond what is currently budgeted for in the project pro-forma.	Project pro-forma reflects what market developers are currently budgeting in for construction contingencies/overruns. Model functionality is also available in the pro-forma to assess the impact of construction cost escalation but is not part of the outputs shown in this report given CMHC indicated that its loan underwriting would be based on non-escalated rents and costs during the construction period. Also, some delivery models can help transfer cost escalation risk to the constructor by incorporating a guaranteed maximum price for the Region.

	Risk	Mitigation Measure
Financing Cost Escalation	Interest rate may further increase, leading to higher financing costs.	CMHC's financing is based on a 10-year fixed rate from the first loan advance. Ongoing collaboration with CMHC in advance of the first loan advance will be helpful for staying up to date on CMHC's financing rate and validating whether it is still in line with the pro-forma's current underwriting assumption of 4.50%.
Approved GFA	The planning approval process may bring down the final GFA, negatively impacting the project's expected rental income and the project's capacity to support construction financing.	City of Oshawa staff were involved in the early visioning of the Malaga redevelopment and provided preliminary indication of approvable massing and height limits at Malaga. Ongoing collaboration through the Pre-Application Consultation process will be critical for securing City staff buy-in on the proposed GFA.
Delays in CMHC Funding Application	CMHC's application review and approval process may add significant time delays and potential costs to the project.	Ongoing collaboration with CMHC will be critical for ensuring that the application submission includes all the requisite documentation and positions CMHC to review and approve the application in a timely manner.
Cross-Subsidization for RGI Units	RGI units may require significant cross-subsidization from non-RGI units in the projects, reducing the project's capacity to support construction financing.	A conversation was held with Housing Services Regional staff to confirm that RGI rents would be supplemented with operating subsidies and/or RGI rent supplements, to minimize cross-subsidization needs and protect the project's debt-carrying capacity.
Absorption of Market Units	Absorption of market rental units may be impacted by negative perception of living next to RGI tenants.	Housing Services Regional staff indicated that support services could be provided to high-need RGI tenants that may be disruptive to neighbouring residents.

➤ SECTION 4: CHRISTINE REDEVELOPMENT FEASIBILITY

4.1. Preferred Concepts and Development Yields

4.1.1 Site and Surrounding Context

The Christine Crescent site (“Christine”) forms part of a larger site encompassing 514-560 Normandy Street, 420-436 Nevis Avenue and 518-555 Lomond Street (the “Hill”). With respect to the Hill, the Region has directed IO to maintain a primary focus of the business case on the smaller Christine site, while considering Christine’s redevelopment in the context of the broader future redevelopment of the Hill. (see **Figure 2** below).



Figure 2: Site map of the Christine site in Oshawa.

Christine has an area of approximately 6,075 square metres (0.6 hectares, or 1.48 acres) and currently includes 12 two-storey semi-detached dwellings. The site is currently accessed via Christine Crescent which is a ‘U’ shaped public road, in which there is a grassed open space area owned by the City of Oshawa within the right of way. The entire crescent including the open space is included within this scope. The Christine site is located within Oshawa’s Central neighbourhood, which includes diverse land uses including heritage, mixed-use, and commercial buildings. This neighbourhood includes a mix of low-rise residential (including up to four-storey apartment buildings), and commercial retail plazas along major arterials.

4.1.2 Land Use Planning Policy Context

A detailed planning due diligence report has been prepared by Bousfields. **Table 17** below summarizes the most pertinent planning policies that govern land use on the site. For more detailed information on the full scope of planning policies applicable to Christine, please refer to Bousfields' Christine Planning Due Diligence report.

Table 17: Planning policy framework applicable to the Christine site

Policy Document	Details															
The City of Oshawa Official Plan	<p>The Christine site is designated 'Residential' within the Oshawa Official Plan.</p> <p><i>Section 2.3.2 of the City's OP identifies permitted densities in Residential Areas</i></p> <p>There is only one residential designation category in the Official Plan; however, the Official Plan provides direction on different built form types within the residential designation through a residential density classification system.</p> <p>The potential to accommodate the following density types on Christine has been explored during the concept development phase through consideration of factors such as proximity to low rise neighbourhoods and open space, abutting public roads and connections to the broader street network. It should be noted that the location criteria for the highest residential density categories tend to apply to Sites along arterial roads.</p> <table border="1"> <thead> <tr> <th>Density Type</th> <th>Net Residential Density</th> <th>General Representative Housing Type/Form</th> </tr> </thead> <tbody> <tr> <td>Medium Density I Residential</td> <td>30 – 60 units per hectare</td> <td>Single Detached, Semi Detached, Duplex, Townhouses</td> </tr> <tr> <td>Medium Density II Residential</td> <td>60 – 85 units per hectare</td> <td>Townhouses, Low Rise Apartments and Medium Rise Apartments</td> </tr> <tr> <td>High Density I Residential</td> <td>85 – 150 units per hectare</td> <td>Low Rise and Medium Rise Apartments</td> </tr> <tr> <td>High Density II Residential</td> <td>150 – 300 units per hectare (outside Downtown Oshawa Urban Growth Centre)</td> <td>High Rise and High Rise Apartments</td> </tr> </tbody> </table>	Density Type	Net Residential Density	General Representative Housing Type/Form	Medium Density I Residential	30 – 60 units per hectare	Single Detached, Semi Detached, Duplex, Townhouses	Medium Density II Residential	60 – 85 units per hectare	Townhouses, Low Rise Apartments and Medium Rise Apartments	High Density I Residential	85 – 150 units per hectare	Low Rise and Medium Rise Apartments	High Density II Residential	150 – 300 units per hectare (outside Downtown Oshawa Urban Growth Centre)	High Rise and High Rise Apartments
Density Type	Net Residential Density	General Representative Housing Type/Form														
Medium Density I Residential	30 – 60 units per hectare	Single Detached, Semi Detached, Duplex, Townhouses														
Medium Density II Residential	60 – 85 units per hectare	Townhouses, Low Rise Apartments and Medium Rise Apartments														
High Density I Residential	85 – 150 units per hectare	Low Rise and Medium Rise Apartments														
High Density II Residential	150 – 300 units per hectare (outside Downtown Oshawa Urban Growth Centre)	High Rise and High Rise Apartments														

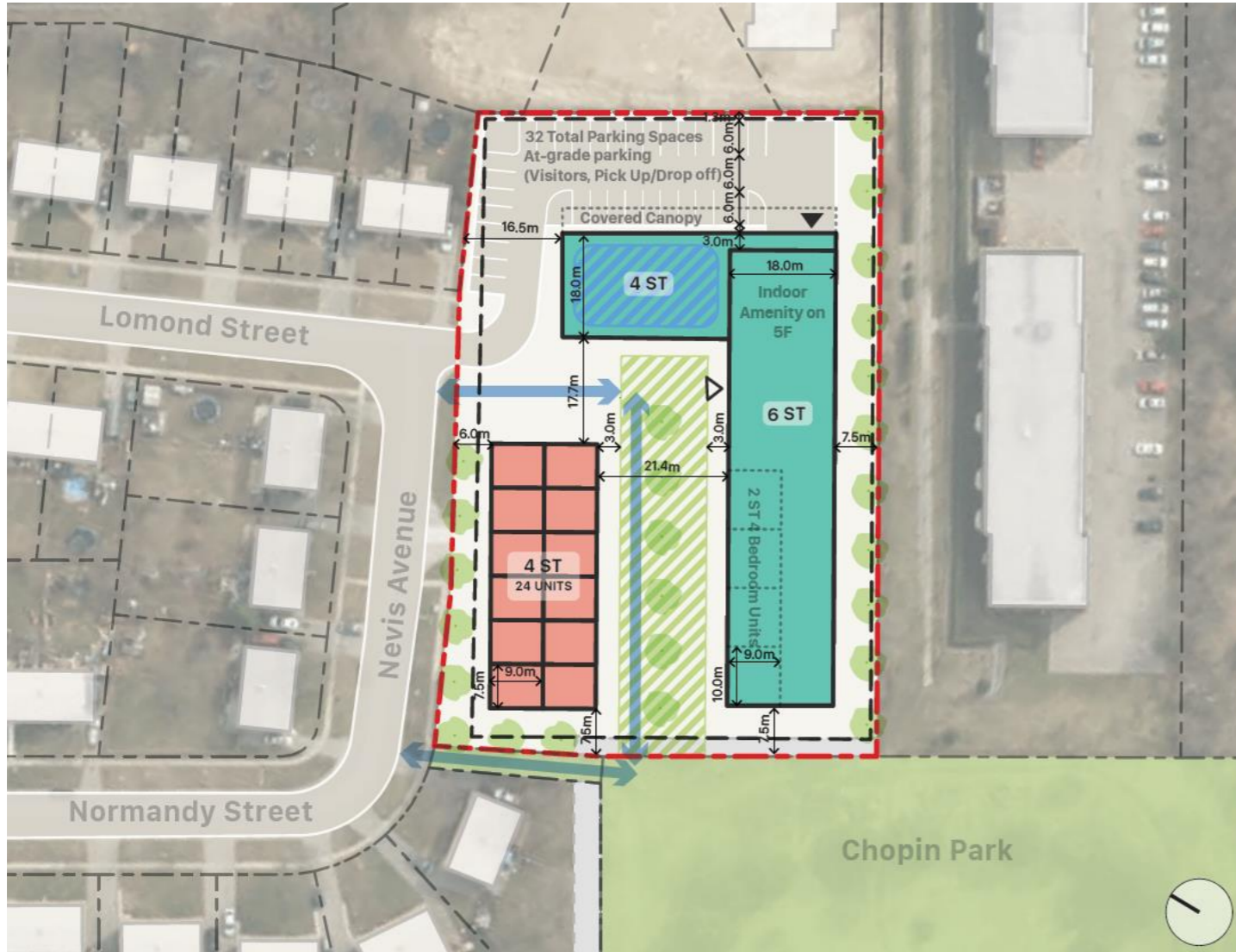
	An Official Plan Amendment is required to permit a broader range of residential dwelling types and densities on Christine.
City of Oshawa Zoning By-law 60-94	The Christine site is zoned R2 which permits Single Detached, Semi-Detached, and Duplex. A Zoning Bylaw Amendment is required to permit a broader range of residential dwelling types and densities on Christine.

4.1.3 Conceptual Site Plan

To inform concept development, a visioning workshop was held in December with Regional staff from Affordable Housing Development & Renewal, Planning, Works and Housing Services, City planning staff, IO and Bousfields to align on a set of redevelopment objectives and develop framework diagrams for each site that would begin to identify the location and type of built-form, location of public and/or private open spaces, circulation routes and uses. The following redevelopment objectives were proposed and agreed upon at the workshop, based on the Region’s affordable housing strategy and policy, phase #1 community engagement and Bousfields’ planning due diligence report:

- Replace existing units and optimize the provision of housing on the Sites at an appropriate height/density
- Contribute to a vibrant public realm
- Achieve site permeability and connectivity to local services, parks and public open spaces
- Support sustainability and inclusivity goals


Following the workshop, Bousfields reviewed the framework diagrams and drafted development concepts for each of the Sites. The preferred option for Christine is shown below, followed by two additional options. The preferred option has the parking largely below grade (1 storey below grade, with some surface visitor parking) and the City’s Right-of-Way (“ROW”) over Christine Crescent and the adjacent open space closed and conveyed to the Region to maximize development and layout efficiency, which allows the site to accommodate a mix of built form and unit types, as well as a centrally located Privately-Owned Public Accessible Space (“POPS”). The second option has the entire parking below grade (2 storeys), with the City’s Right-of-Way (“ROW”) over Christine Crescent and the adjacent open space remaining as is, limiting the development to a mid-rise only with non-contiguous open spaces. The third option has the parking above-grade, with the mid-rise building wrapping the parking structure. The selection of the preferred option was an iterative process informed by good planning principles, market conditions and feedback from various stakeholders. Ultimately the first option was selected as the preferred option because it better met the above redevelopment objective



Christine Redevelopment Preferred Option Prepared by Bousfields Inc. (April 2024)	
	Total
Gross Site Area (ha)	0.785
Net Redevelopment Area (ha)	0.785
Total Gross Floor Area (sq.m)	13,220
Total Indoor Amenity GFA (sq.m)	328
Net Floor Space Index (FSI)	1.68
Net Units per Hectare (UPH)	209
Unit Yield**	164
Parking	222
P1 U/G Parking	190
Surface Visitor Parking Spaces	32
Area of Private Roads/Driveways (ha)	0.135
Parkland and Open Space (ha)	0.098
Private and Publicly Accessible Open Spaces (ha)	0.098

** Total unit yield. Detailed net new unit yields below in Section 4.1.6

LEGEND

-  Site Boundary
-  Easement Access
-  Mid-rise Building
-  Stacked Back-to-Back Townhouses
-  Open Space at Grade
-  Rooftop Amenity
-  Pedestrian Connection
-  Parking Extent
-  Lobby Entrance
-  Parking Entrance

4.1.4 Conceptual Massing (preferred option)



4.1.5 Development yields

The following tables detail the unit yields and Gross Floor Area per typology for the preferred option at Christine prepared by Bousfields.

Table 18: detailed development statistics of the Christine site by typology

Christine Redevelopment Preferred Option Detailed Development Statistics by Typology ⁴					
Total Residential GFA (m2)	13,220				
Total Non-Residential GFA (m2)	-				
Total GFA (m2)	13,220				
Unit Statistics	Avg Unit Size (m2)	No. Market Units	No. Affordable Units	No. Replacement RGI Units	Total No. Units
Apartment Bachelor	42	4	3	0	7
Apartment 1 Bed	59	25	22	0	47
Apartment 2 Bed	72	35	26	0	61
Apartment 3 Bedroom	80.8	7	10	6	23
Apartment 4 Bedroom	92.9	0	3	0	3
B-to-B Townhouse 2 Bed	135	12	6	6	24
Total	-	82	70	12	164

Further to the development yields, the provided parking for the proposed development is 222 spaces (detailed parking statistics can be found in section 4.1.3). This number meets the minimum number of parking spaces required by Zoning By-law 60-94. **Table 19** below compares the provisioned parking against the minimum required parking. It is important to note that the transportation context at Christine is less supportive of public transit use, as the nearest bus stops are a walking distance to Dean Ave. and there are no direct bus routes to key transportation nodes like Oshawa GO or Oshawa Centre Terminal. Therefore seeking any parking reductions may be less practical at Christine.

⁴ Unit counts may not add up to 100% due to rounding.

Table 19: Parking provision for Christine

Christine Redevelopment ⁵				
Parking Spaces				
Parking Provision	No. of Units	Min. No. of Parking Spaces Required	No. of Parking Spaces Provided	Location of Parking Spaces Provided
Residential Parking Spaces – Apartment Buildings and Stacked Back-to-Back Townhouses (1.0 + 0.33 Visitor Parking Space / Dwelling Unit)	164	218	218	1 level of underground parking + surface parking at northeastern corner of site
Pick-Up-Drop-Off	164	N.A.	4	Surface parking at northeastern corner of site

4.2. Planning Feasibility

4.2.1 Planning rationale

The preferred concept option for Christine considers applicable planning policies from the provincial level down to the local level as documented in Bousfields' Christine Planning Due Diligence Report. The proposed residential form is consistent with and meets the intent of the applicable planning policy framework including: The Provincial Policy Statement, the Growth Plan for the Greater Golden Horseshoe, the Region of Durham's Official Plan, and the City of Oshawa's Official Plan.

4.2.2 Required planning approvals

Table 20 below outlines the development application approvals required to permit the proposed redevelopment for Christine. This is a preliminary list based on the stage 1 PAC meeting held with City staff and a Planning Rationale Report or Planning Justification Report will be required to support a formal development application.

⁵ The minimum number of parking spaces required is based on the requirements in Zoning By-law 60-94 which includes the parking ratio of 1.33 for apartments and stacked townhomes (1 space/dwelling unit + 0.33 space/dwelling unit for visitors).

Table 20: An overview of identified approvals required for redevelopment of the Christine site.

Required Approval	Description	Approach to Obtain
Official Plan Amendment Application	Initial consultation with City of Oshawa staff suggests that the current Official Plan designation does permit the proposed residential use. However, an OPA would be required to permit the proposed density/height.	The City of Oshawa has a multi-stage pre-consultation process as part of its Pre-Consultation By-law before the submission of an OPA. An OPA can be submitted concurrently with a Zoning Bylaw Amendment (ZBA). The municipality has 120 days to review a concurrent OPA and ZBA application upon submission.
Zoning By-Law Amendment Application	The in-force zoning does not currently permit the proposed typologies (stacked townhouses and apartments) and densities. A Zoning By-law Amendment is required.	The City of Oshawa has a multi-stage pre-consultation as part of its Pre-Consultation By-law before the submission of a Zoning By-law amendment. Once the application is deemed complete, the total review process is 90 days or 120 days if an OPA is submitted concurrently with a ZBA. The expected duration based on an accelerated timeline due to the affordable housing component is 12 months.
Site Plan	A Site Plan Control Application is required to permit the proposed development. Site Plan Control applies to all residential development in the City of Oshawa.	A Site Plan Control Application will not be accepted until rezoning is approved by Council. The expected duration of the Site Plan Application under an accelerated timeline is 8-12 months.

4.2.3 Risks & mitigation measures

Table 21: Risks and mitigations for development approvals

	Risk	Mitigation Measure
Approval Timeline	Approval of planning applications may be prolonged, due to scope of supporting studies requested by City staff, resulting in potential time delays (e.g. seasonal constraints) and additional costs for the Region to prepare the planning applications and potential time delays for the City to review the applications.	As part of the PAC, identify potential opportunities for prioritization and acceleration of review & approval of project's planning applications, given the project's significant affordable housing component.

	Risk	Mitigation Measure
Political Buy-in	Potential political opposition by the local councilor(s) and/or by broader city or regional council inhibit planning approvals for the project.	Ongoing collaboration and engagement with political stakeholders can help secure political buy-in.
Public Buy-in	Even with staff and political approval of a planning application, an application may still be appealed to the Ontario Land Tribunal by any person or public body who made verbal presentations at a public meeting or written submissions prior to adoption of an OPA or ZBA by a municipality, which may delay approval timelines by up to 18 months.	Region, with support from Bousfields, has been undertaking an extensive public engagement process that is beyond the statutory engagement process required as part of an OPA and/or a ZBA. The public engagement process has spanned various channels (both in-person and virtual) and has targeted both onsite and offsite residents. Engagement feedback has been documented and considered, to the extent feasible, in the conceptual design, to ensure that local residents and stakeholders that would be impacted by the redevelopment are feeling heard and supported. Public engagement will continue as part of the OPA and ZBA process, with clear and consistent messaging on the potential public and resident benefits from the Christine redevelopment. It is important to note that approval of the Site Plan Control application is not appealable.

4.3. Technical Feasibility

4.3.1 Summary of completed technical due diligence

As part of its planning due diligence scope, Bousfields engaged subconsultants to undertake technical due diligence in the following areas: transportation, site servicing and natural heritage. The table below summarizes their findings:

Table 22: Highlights and next steps for technical due diligence for the Christine site.

	Highlights	Next Steps
Transportation	<p>Existing local and area street network and mobility context will improve over time, particularly with the arrival of the Central Oshawa GO Station</p> <p>Southeastern portion of Christine is within MTO's "controlled area." As such, MTO's approval would be required for several technical areas including signage, lighting, traffic impact and drainage.</p> <p>Parking standards generally range between 1.0 to 2.0 spaces per unit for residents and 0.25 to 0.30 spaces per unit for visitor parking, depending on building typology. There are increased efforts by the City of Oshawa to respond to changing transportation needs and change travel behaviour, e.g. through area parking reductions, depending on the density and location of development</p> <p>Bicycle parking is not required by the in-force zoning but is recommended based on a 2021 City of Oshawa Parking Study, to support the shift to active transportation and support the potential to provide a reduced number of parking spaces</p> <p>A preliminary traffic assessment was completed for the two nearby signalized intersections and identified that each intersection was satisfactory with respect to accommodating increased traffic volumes as a result of increased density at Christine.</p>	<p>A traffic impact study, a truck maneuvering/swept path analysis plan and a parking study (if reduced parking is to be proposed) will be required to support an Official Plan Amendment/Zoning By-law Amendment application</p>



	Highlights	Next Steps
<p>Site Servicing</p>	<p>Given the age and size of the existing piping in the vicinity and the anticipated demand, it is likely that the existing 150mm piping on Dean Avenue and Normandy Street will need to be upsized to provide sufficient flow to service the proposed redevelopment.</p> <p>Based on Christine’s close proximity to the 675mm diameter trunk sewer west of the site and the 525mm diameter trunk sewer on Wilson Avenue to the east, any significant population increase should plan on extending a new sanitary sewer from the existing 675mm dia. sanitary sewer to the west. Regional staff are less optimistic of getting more flow into the existing system to the east. Depending on the full redevelopment of the broader Hill, it is may be more cost effective in the long term to replace and upsize the existing sanitary sewer on Dean Avenue and Normandy Street than it would be to build a direct connection from Christine to the trunk sewer to the west through the adjacent park block which currently only services Christine Crescent.</p> <p>The grading for the site should endeavor to maintain the drainage area divide between the two sub-watersheds servicing the site (Oshawa Creek and Harmony Creek).</p> <p>Individual parcels of land will be connected to the municipal water supply and sanitary systems.</p>	<p>A functional servicing report (including grading plan and servicing plan,), a stormwater management study and a calcium carbonate assessment will be required to support an Official Plan Amendment/Zoning By-law Amendment application</p>

	Highlights	Next Steps
Natural Heritage	Christine does not contain any significant woodlands, Natural Heritage Systems (NHS), wetlands, Areas of Natural or Scientific Interest, Environmentally Significant Areas, High Volume Recharge Areas, Greenbelt Protected Countryside Areas, or Oak Ridges Moraine Areas within 120 metres of the site. Several planted ornamental trees, including street trees and private trees are located within the site.	As part of stage 1 PAC meeting, City staff confirmed that no natural heritage supporting studies, reports or plans would be required as part of a development application.

4.3.2 Outstanding technical due diligence

In addition to the additional technical due diligence outlined in the above table under Next Steps, City staff have similarly provided a checklist at the first PAC for Christine, outlining all the studies, plans, and information required for a complete development application. In addition to the list of studies already listed in 3.3.2, a right-of-way closure application, a survey and MTO review of the site plan control application will also be required.

4.3.3 Considerations for phasing and tenant relocation

Similarly for Christine, passive tenant relocation has already commenced in the last 12-18 months, as turned-over units at Christine are left vacant rather than filled with new tenants. At the time of writing of this report, Christine is ~50% vacant. Given Christine’s small size (only ~6 units left occupied), there should not be any tenant-driven needs for undertaking a phased approach to demolition and construction.

Other factors that may impact construction phasing include construction staging, construction method (i.e. wood vs. concrete), unit absorption and funding (although funding to a lesser extent given Christine’s significantly smaller size than Malaga). Please see section 3.3.3 for additional information on how construction staging, construction method, unit absorption and funding may impact construction phasing for Christine.

4.3.4 Risks & mitigation measures

Table 23: Risks and mitigation measures for technical due diligence studies.



	Risk	Mitigation Measure
Watermain Upgrades	Required upsizing of watermain(s) may add significant time and costs to the project.	Watermain upgrade costs are being estimated and incorporated into the development budget. A preliminary discussion with Counterpoint Engineering suggested that watermain upgrades are typically less invasive and costly than other servicing upgrades given they run along the curb vs. along the road. Watermain upgrades may also be phased to help distribute costs, first along Normandy St. and Dean Avenue (to service Christine redevelopment) and subsequently along Lomond St. (to service broader Hill redevelopment). In terms of timing, given planning approvals are expected to take at least another two years, watermain upgrades can be planned to be completed during that time, to ensure that servicing does not pose a constraint to the construction timeline.
Sanitary Upgrades	Potential need for upsizing of existing sanitary or stormwater sewers along Dean Avenue and Normandy Street to the existing 675mm trunk to the west may add significant time and costs to the project.	A preliminary discussion with Counterpoint Engineering suggested that sanitary upgrades may not be required given the site's steep grade change and access to two drainage outlets (one each on Lomond St. and Normandy St.). More detailed modelling is to be completed as part of the Functional Servicing Report to validate this assessment. In terms of timing, given planning approvals are expected to take at least another two years, any required sanitary or stormwater upgrades can be planned to be completed during that time, to ensure that servicing does not pose a constraint to the construction timeline.

4.4. Financial Feasibility

Note: all calculations in sections 4.4.1 to 4.4.3 are based on a base case scenario of 50% affordable, split between <80% MMR (30% of all units) and 100% MMR (20% of all units). This scenario was selected as the base case scenario because it allows the Region to drive towards an ambitious affordable housing target while supporting financial feasibility (through higher affordable rents on a portion of affordable units), all while maintaining eligibility for CMHC financing.

4.4.1 Estimated development costs

Redevelopment of Christine is estimated to cost ~\$93M (~\$569K per unit or ~\$672 per buildable square foot). 93% of the development budget is comprised of construction costs, which encompasses demolition, watermain upgrades, parkland improvements (Chopin Park), below-grade parking construction, building construction, construction management fee, landscaping & streetscaping, utility connections, insurance and construction contingencies. Other cost categories that typically comprise a larger proportion of a development budget, namely land and municipal charges, are significantly lower for this site because the land is already owned by the Region and municipal charges, including development charges, community benefits charges, cash-in-lieu of parkland and school board fees are assumed to be exempt for this site, per S. 2.5(b) of the City of Oshawa’s DC by-law and per S. 2.3(a) of the Region of Durham’s DC by-law. This interpretation of a full exemption from both lower-tier and upper-tier municipal charges was confirmed by City staff at the stage 1 PAC meeting.

Table 24: Christine development budget.

EXECUTIVE SUMMARY		Budget	% of Total Budget Assumptions & Comments	Cost per Unit	Cost per Buildable SF
01.00000	LAND & ASSOCIATED COSTS	\$567,487	0.6% Property taxes throughout development and construction. \$0 land costs.	\$3,460	\$4
02.00000	DEVELOPMENT APPROVAL AND MUNICIPAL COSTS	\$472,000	0.5% Fees for planning applications, building permit and miscellaneous permits (e.g. lane closures). Full exemption assumed for DCs, CBCs, OIL of Parkland and school board fees.	\$2,878	\$3
03.00000	CONSTRUCTION	\$86,506,703	92.7% Demolition, watermain upgrades, offsite parkland improvements, below-grade parking, buildings, construction management fee, landscaping & streetscaping, utility connections, insurance and construction contingencies.	\$527,480	\$623
04.00000	DESIGN & CONSULTANTS	\$2,300,000	2.5% Consultants to support planning approvals and detailed design development.	\$14,024	\$17
05.00000	GENERAL & ADMINISTRATIVE (G&A)	\$175,000	0.2% Legal, accounting and miscellaneous admin services. \$0 development management costs (Regional staff salaries are excluded).	\$1,067	\$1
06.00000	FURNITURE, FIXTURES & EQUIPMENT (FF&E)	\$100,000	0.1%	\$610	\$1
07.00000	MARKETING, ADVERTISING & LEASING	\$470,131	0.5% Market rental units only - includes a presentation centre and leasing commissions.	\$2,867	\$3
08.00000	FINANCE	\$1,967,518	2.1% Construction loan interest and other financing fees.	\$11,997	\$14
09.00000	GOVERNMENT TAXES	\$0	0.0% HST exempt.	\$0	\$0
10.00000	DEVELOPMENT CONTINGENCY	\$750,000	0.8% Contingency for soft cost and schedule overruns. Contingency for hard costs is captured separately under the Construction budget item.	\$4,573	\$5
GROSS PROJECT BUDGET		\$93,308,839	100%	\$568,956	\$672

Given the construction cost category makes up such a large proportion of the development budget, additional detail is provided below with respect to the assumptions used to estimate each of the construction sub-categories:

Table 25: Christine construction budget.

CONSTRUCTION COSTS			
	Applicable Area	\$/SF	Subtotal
Construction Cost - Below Grade	82,979	\$250	\$20,744,726
Construction Cost - Midrise - 6 Storeys	118,166	\$350	\$41,358,133
Construction Cost - Lowrise B2B	-	\$0	\$0
Construction Cost - Lowrise Stacked	34,875	\$235	\$8,195,633
Construction Cost - Site Development	84,466	\$25	\$2,111,650
	Amount	%	Subtotal
Construction - Design & Pricing Contingency	72,410,143	5.0%	\$3,620,507
Construction - Construction Contingency	72,410,143	5.0%	\$3,620,507
Construction - Escalation Contingency	72,410,143	0.0%	\$0
Construction Management Fee	79,651,157	3.0%	\$2,389,535
	Units	\$/unit	
Utilities Connections (Hydro/Gas/Water/Storm/)	164	\$1,500	\$246,000
Demolition, Site Remediation & Abatement			\$400,000
Premium for Accessibility Standards	33	\$2,500	\$82,500
Premium for Green Energy Requirement	164	\$5,000	\$820,000
Offsite Servicing Cost			\$1,730,000
Park Improvement Cost			\$391,000
Insurance	79,651,157	1.0%	\$796,512
Total			\$86,506,703

The Region has requested to estimate costs at Christine relating to servicing upgrades of the watermains and parkland improvements at Chopin Park, specifically landscaping (sodding, trees) and earthworks including rough and fine grading, and a paved pedestrian pathway, along with a few benches, to bring pedestrians down the slope to the rest of the park. These development costs are estimated at \$1.73M for the watermain upgrades and \$0.4M for the parkland improvements at Chopin, bringing the total costs to \$2.13M. These costs have been incorporated into the above development and construction budget tables (see Off-site works cost item in the construction budget).

4.4.2 Proposed funding sources

Similar potential funding sources as Malaga – see section 3.4.2 for more information on the potential funding sources for Christine.

Based on Christine’s current project economics and the financing terms described above, Christine’s development budget of ~\$93M would be eligible for a repayable loan of ~\$50M (53% of the development budget), based on the base case scenario of 50% affordable units.

In terms of CMHC forgivable loans, they are capped at the lower of: i) \$75K per unit; and ii) 30% of eligible project costs. Given there are 164 units proposed at Christine, \$75K per unit equates to \$12.3M. Given project costs are ~\$93M, 30% equates to ~\$28M, therefore the lower of the two is \$12.3M. Based on the base case scenario of 50% affordable units, the Christine redevelopment would be eligible for a forgivable loan amount of \$8.2M. This would result in an outstanding amount of ~\$35M that would still require funding by the Region to advance the project. See section 3.4.2 for more information on other potential funding sources for Christine.

Given the scale of Christine’s proposed redevelopment, most of the non-CMHC affordable housing funding programs would still be insufficient on their own for the outstanding funding required for the project. The Region’s Finance team indicated that the Region has capacity to source capital funding at scale through debentures (and corresponding increases to Regional property taxes in the year that the debentures are introduced) but any capital funding needs for the Christine redevelopment will need to be balanced and appropriately timed against the Region’s other capital planning priorities. This will be further informed by the Region’s strategic capital planning process.

It is important to note that while a P3 delivery approach, akin to some of the direct delivery models adopted by the Province for the construction of hospitals, correctional facilities etc., could help defer the timing of the Region’s funding to construction substantial completion (albeit at a cost premium, reflecting higher transaction costs and higher completion payments to the constructor to compensate for additional financing costs and risk), it would not absolve the Region from needing to arrange funding to pay for the project’s development costs.

Below is a summary of the estimated sources of funds for the Christine redevelopment.

Table 26: Christine sources of funds.

Source of Funds			
Region Capital Funding		35,188,614	38%
CMHC Forgivable Loan	\$50,000 /unit	8,200,000	9%
CMHC Construction Loan		49,920,224	53%
Total		93,308,839	100%

4.4.3 Market, affordable and RGI weighted average unit rent

Below is a summary table of the unit mix across market rental, affordable rental and RGI units, both in absolute and relative term, assuming the base case scenario of 50% affordable. See section 3.4.3 for more information on how unit yields were computed.

Table 27: Christine unit mix.

Unit Type								
	Market	Affordable	RGI Rental Replacement	Subtotal	Market Units as % of Total	Aff. Units as % of Total	RGI Rental Replacement Units as % of Total	% of Grand Total
Bachelor	4	3	0	7	52%	48%	0%	4%
1B	25	22	0	47	52%	48%	0%	29%
1B+D	0	0	0	0	0%	0%	0%	0%
2B	35	26	0	61	58%	42%	0%	37%
3B	7	10	6	23	31%	42%	27%	14%
4B	0	3	0	3	0%	100%	0%	2%
B2B TH (3B)	0	0	0	0	0%	0%	0%	0%
B2B TH (4B)	0	0	0	0	0%	0%	0%	0%
B2B Stacked (2B)	0	0	0	0	0%	0%	0%	0%
B2B Stacked (3B)	12	6	6	24	50%	25%	25%	15%
Total	82	70	12	164	50%	43%	7%	100%
Avg. Size per Market Type	827	797	1,162	838				

Below is a summary table of the expected monthly rental rates across the various unit types. See section 3.4.3 for more information on how rental rates were computed and what the Affordable Rent as % of Market column illustrates.

Table 28: Christine unit rental rates.

Avg. Unit Rent	Market	Affordable	RGI Rental Replacement	Affordable Rent as % of Market	RGI Rental Replacement Rent as % of Market
Bachelor	\$1,800	\$860	n.a	48%	0%
1B	\$2,275	\$1,158	n.a	51%	0%
1B+D	n.a	\$1,158	n.a	0%	0%
2B	\$2,625	\$1,309	n.a	50%	0%
3B	\$2,850	\$1,470	\$1,470	52%	52%
4B	n.a	\$1,639	n.a	0%	0%
B2B TH (3B)	n.a	\$1,639	n.a	0%	0%
B2B TH (4B)	n.a	\$1,639	n.a	0%	0%
B2B Stacked (2B)	n.a	\$1,355	n.a	0%	0%
B2B Stacked (3B)	\$3,200	\$1,639	\$1,639	51%	51%
Weighted Avg.	\$2,589	\$1,306	\$1,554	50%	60%

Below is a summary of the expected per square foot rents based on proposed unit sizes and expected rental rates. See section 3.4.3 for more information on what this metric and the % of Market illustrate, and why RGI rents have been excluded.

Table 29: Christine per square foot rental rates.

\$/sqft	Market	Affordable	RGI Rental Rep
Bachelor	\$3.98	\$1.90	n.a
1B	\$3.58	\$1.82	n.a
1B+D	n.a	\$1.82	n.a
2B	\$3.39	\$1.69	n.a
3B	\$3.28	\$1.69	\$1.69
4B	n.a	\$1.64	n.a
B2B TH (3B)	n.a	n.a	n.a
B2B TH (4B)	n.a	n.a	n.a
B2B Stacked (2B)	n.a	n.a	n.a
B2B Stacked (3B)	\$2.20	\$1.13	\$1.13
Avg Rent/Sqft	\$3.13	\$1.64	\$1.34

Below is a summary of the operating financials of the project, including rental income, operating costs and debt service payments.

Table 30: Christine operating financials.

Net Operating Income Summary					Stabilized
	Units	\$/Unit	\$/sqft	Monthly Gross	Annual Gross
Market Units	82	\$2,589	\$3.13	\$212,263	\$2,547,150
Affordable Units	70	\$1,306	\$1.64	\$91,394	\$1,096,730
RGI Rental Replacement Units	12	\$1,554	\$1.34	\$18,651	\$223,811
Potential Gross Income - Residential	164	\$1,965	\$2.34	\$322,308	\$3,867,691
Ancillary Income - Parking					\$228,000
Ancillary Income - Locker					\$24,600
Less: Vacancy & Credit Costs				2.7% of PGI	(\$110,403)
Effective Gross Income - Residential					\$4,009,888
Less: Operating Expense				34%	(\$1,370,981)
Total NOI					\$2,638,907
Mortgage Payment					(\$2,115,820)
Cashflow after Financing (Free CF) - Untrended					\$523,087

4.4.4 Sensitivity analysis:

Below is a sensitivity analysis of the capital funding required by the Region, both in terms of absolute dollars and percentage of total funding, based on changes in the repayable loan interest rate and changes to construction costs. Highlighted cells illustrate the current interest rate and construction cost increase assumed in the pro-forma.

Table 31: Christine sensitivity analysis for base case redevelopment scenario

Capital Funding Required by the Region (\$)						
		CMHC Repayable Loan Interest Rate (Stress Test)				
		3.75%	4.00%	4.25%	4.50%	4.75%
Construction	-2.5%	\$25,997,054	\$28,299,112	\$30,597,382	\$32,892,177	\$35,180,618
	0.0%	\$28,146,079	\$30,496,815	\$32,845,474	\$35,188,617	\$37,071,006
Costs	2.5%	\$29,905,553	\$32,308,904	\$34,708,853	\$37,102,593	\$39,026,886
Increase	5.0%	\$32,184,558	\$34,639,680	\$37,089,382	\$39,057,719	\$41,497,996
(Decrease)	7.5%	\$34,036,889	\$36,543,181	\$39,043,553	\$41,539,721	\$44,512,956
	10.0%	\$36,428,355	\$38,984,633	\$41,039,332	\$43,585,954	\$45,136,139
Capital Funding Required by the Region (%)						
		CMHC Repayable Loan Interest Rate (Stress Test)				
		3.75%	4.00%	4.25%	4.50%	4.75%
Construction	-2.5%	28.5%	31.0%	33.5%	36.0%	38.5%
	0.0%	30.2%	32.7%	35.2%	37.7%	39.7%
Costs	2.5%	31.4%	33.9%	36.4%	38.9%	40.9%
Increase	5.0%	33.1%	35.6%	38.1%	40.1%	42.6%
(Decrease)	7.5%	34.2%	36.8%	39.3%	41.8%	44.8%
	10.0%	35.9%	38.4%	40.4%	42.9%	44.4%

4.4.5 Risks & mitigation measures

Table 32 Financial risks and mitigation measures for the Christine site

	Risk	Mitigation Measure
Funding	Region may be unable to fund the non-CMHC portion of the development budget.	Further conversations were held with the Region's Finance department to confirm the Region's capacity to fund the non-CMHC portion of the development budget. Further conversations were also held with CMHC to validate the findings of the draft project pro-forma and determine how CMHC funding can be maximized.
Construction Cost Escalation	Construction costs may escalate beyond what is currently budgeted for in the project pro-forma.	Project pro-forma reflects what market developers are currently budgeting in for construction contingencies/overruns. Model functionality is also available in the pro-forma to assess the impact of construction cost escalation but is not part of the outputs shown in this report given CMHC indicated that its loan underwriting would be based on non-escalated rents and costs during the construction period. Also, some delivery models can help transfer cost escalation risk to the constructor by incorporating a guaranteed maximum price for the Region.
Financing Cost Escalation	Interest rate may increase further, leading to higher financing costs.	CMHC's financing is based on a 10-year fixed rate from the first loan advance. Ongoing collaboration with CMHC in advance of the first loan advance will be helpful for staying up to date on CMHC's financing rate and validating whether it is still in line with the pro-forma's current underwriting assumption of a stress-test rate of 4.50%.

	Risk	Mitigation Measure
Approved GFA	The planning approval process may bring down the final GFA, negatively impacting the project's expected rental income and the project's capacity to support construction financing.	City staff were involved in the early visioning of the Christine redevelopment and provided preliminary indication of approvable massing and height limits at Christine. Ongoing collaboration through the Pre-Application Consultation process will be critical for securing City staff buy-in on the proposed GFA.
Delays in CMHC Funding Application	CMHC's application review and approval process may add significant time delays and potential costs to the project.	Ongoing collaboration with CMHC will be critical for ensuring that the application submission includes all the requisite documentation and positions CMHC to review and approve the application in a timely manner.
Cross-Subsidization for RGI Units	RGI units may require significant cross-subsidization from non-RGI units in the projects, reducing the project's capacity to support construction financing.	A conversation was held with Housing Services Regional staff to confirm that RGI rents would be supplemented with operating subsidies and/or RGI rent supplements, to minimize cross-subsidization needs and protect the project's debt-carrying capacity.
Absorption of Market Units	Absorption of market rental units may be impacted by negative perception of living next to RGI tenants.	Housing Services Regional staff indicated that support services could be provided to high-need RGI tenants that may be disruptive to neighbouring residents.

➤ **SECTION 5: PUBLIC ENGAGEMENT**

5.1 Summary of community feedback

Bousfields was engaged directly by the Region to undertake community engagement for Malaga and detailed information on community feedback can be found in their engagement summary materials. Below is a summary of what IO discerned as the most pertinent community feedback:

Table 33: Summary of engagement



	Phase 1 Engagement	Phase 2 Engagement	Phase 3 Engagement
Purpose	Inform vision & principles for redevelopment	Provide feedback on draft conceptual design for redevelopment	Provide additional community engagement in conjunction with the statutory public consultation required for the OPA and ZBA process
Duration	August 2023-December 2023	January 2024-February 2024	TBD
Highlights	<p>New and enhanced connections and streetscape that take into consideration safety, accessibility and maintenance</p> <p>A preference for townhomes and medium density built-form that offer modern architectural & green design while ensuring easy maintainability and some privacy. A preference for family-sized units that include in-suite washer & dryer, balconies (within buildings) and EV parking.</p> <p>Recreation and play spaces that are safe and accessible for a mix of uses, ages, abilities and seasons.</p> <p>Communal spaces for gatherings and activities.</p>	<p>Concern about overall density, building heights and orientation, parking provision & traffic impacts, building accessibility, environmental impact and increased foot traffic through informal catwalks & its impact on community safety.</p> <p>Desire to enhance landscaping and accessibility of Chopin Park from Christine, particularly for families with young kids and for seniors.</p> <p>Desire for lifestyle factors of larger family households to be considered in the unit design, e.g. providing additional spaces for parents and/or kids to "decompress"; question posed about provision of private yards and basement.</p> <p>Concern about safety of the proposed underground parking garage.</p>	Yet to be undertaken















		<p>Desire for building amenities to serve diverse age cohorts.</p> <p>Concern about accessibility of the upper-level stacked townhouse units.</p> <p>Interest in programming, safety and maintenance of open spaces.</p> <p>Interest in project timelines for future public engagement, design, relocation and construction.</p> <p>Interest in relocation plan, specifically location and size of temporary units.</p> <p>Interest in unit tenure, unit types, market/affordable unit mix and inclusion of seniors housing.</p> <p>Concern about local school capacity to absorb more students.</p> <p>Interest in pedestrian & cycle infrastructure and access to retail services.</p> <p>Acknowledgement of need for additional housing.</p>	
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➤ SECTION 6: DELIVERY MODEL OPTIONS ANALYSIS

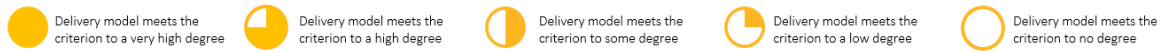
As part of the business case development work, IO presented to Regional staff three potential delivery approaches to affordable housing, including land disposition, land lease and direct delivery/procurement. The options analysis compared the three delivery models across several factors, including fiscal benefit, public ownership, operating responsibilities, project control, risk transfer and delivery of additional social outcomes beyond affordable housing.

Below is a summary of the options analysis:

Table 34: Summary of Key Affordable Housing Delivery Models

	Disposition (#1)		Land Lease (#2)	Procurement (#3)	Policy Direction Questions: Is the Region looking to...?
	Partial Disposition (#1a)	Full Disposition (#1b)			
Description	<ul style="list-style-type: none"> Land is severed with one parcel retained for affordable housing ("AH") and a second parcel sold to a developer for market housing A development partner is procured for one or more of the following services on the retained parcel: construction, design, maintenance/operation 	<ul style="list-style-type: none"> Land is sold to a development partner at a below-market price in exchange for AH outcomes Agreement of Purchase & Sale used to set out affordability and unit requirements 	<ul style="list-style-type: none"> Land is leased to a development partner at a below-market rate in exchange for AH outcomes Ground lease agreement is used to set out affordability and unit requirements 	<ul style="list-style-type: none"> A development partner is procured for one or more of the following services for AH outcomes: construction, design, maintenance/operation Potential eligibility for a P3 model TBC with IO SMEs 	<ul style="list-style-type: none"> N/A
Ex.	<ul style="list-style-type: none"> TCHC Regent Park 	<ul style="list-style-type: none"> IO PAHLP G2 + IO LTC & OAHP Waterfront TO 	<ul style="list-style-type: none"> IO PAHLP WDL CreateTO Housing Now 	<ul style="list-style-type: none"> Housing York 	<ul style="list-style-type: none"> N/A
Fiscal Benefit	<ul style="list-style-type: none"> Redevelopment capital costs financed by development partner for sold parcel Proceeds from sold parcel help finance redevelopment capital costs for retained parcel AH outcomes on retained parcel funded by the Region (e.g. operating funding) 	<ul style="list-style-type: none"> Redevelopment capital costs financed by development partner AH outcomes funded by "trading" of land value 	<ul style="list-style-type: none"> Redevelopment capital costs financed by development partner AH outcomes funded by "trading" of land value. Available land value to trade is reduced when tenure is limited to rental. 	<ul style="list-style-type: none"> Redevelopment capital costs financed by the Region AH outcomes funded by the Region (e.g. operating funding) 	<ul style="list-style-type: none"> Transfer financing of redevelopment capital costs to a development partner (vs. finance through Region's capital budget)? Transfer funding of AH outcomes to a development partner (vs. fund through Region's operating budget)?
Public Ownership	<ul style="list-style-type: none"> Public ownership over land and buildings remains for retained parcel 	<ul style="list-style-type: none"> No public ownership remaining 	<ul style="list-style-type: none"> Public ownership remains over land while building ownership transfers to development partner for a fixed term 	<ul style="list-style-type: none"> Full public ownership remains over entire land and buildings 	<ul style="list-style-type: none"> Maintain public ownership of land? Maintain public ownership of buildings?
Operating Obligations	<ul style="list-style-type: none"> O&M oversight remains with the Region for retained parcel and transfers to development partner for sold parcel 	<ul style="list-style-type: none"> O&M obligations transfer to development partner and/or homeowners (for any ownership units) 	<ul style="list-style-type: none"> O&M obligations transfer to development partner Ongoing lease administration required by the Region 	<ul style="list-style-type: none"> O&M oversight remains with the Region 	<ul style="list-style-type: none"> Maintain O&M oversight (including associated staffing requirements)?

Project Control	<ul style="list-style-type: none"> High degree of control over project execution for retained parcel and some degree of control over project execution for sold parcel 	<ul style="list-style-type: none"> Some degree of control over project execution due to purchaser development milestones & obligations 	<ul style="list-style-type: none"> Additional degree of control over project execution due to land lessor rights 	<ul style="list-style-type: none"> High degree of control over project execution 	<ul style="list-style-type: none"> Exercise a high degree of control over the project and development execution?
Risk Transfer	<ul style="list-style-type: none"> High degree of risk transfer to development partner for sold parcel and some risk transfer for retained parcel to procured service provider(s) 	<ul style="list-style-type: none"> High degree of risk transfer to development partner 	<ul style="list-style-type: none"> Medium degree of risk transfer to development partner 	<ul style="list-style-type: none"> Some risk transfer to procured service provider(s) 	<ul style="list-style-type: none"> Transfer project risk away from the Region?
Additional Social Outcomes	<ul style="list-style-type: none"> Conducive for delivery of additional social outcomes beyond AH on retained parcel 	<ul style="list-style-type: none"> Less conducive for delivery of additional social outcomes beyond AH 	<ul style="list-style-type: none"> Less conducive for delivery of additional social outcomes beyond AH 	<ul style="list-style-type: none"> Conducive for delivery of additional social outcomes beyond AH 	<ul style="list-style-type: none"> Deliver additional social outcomes beyond AH (e.g. daycare, seniors housing, recreational/community uses, healthcare, education)?



The Region expressed a preference for direct delivery and subsequently confirmed its direction to develop the business cases on the basis of a direct delivery model.

Following direction from the Region to focus on direct delivery models, IO assessed potential direct delivery models that may apply to the Malaga and Christine redevelopments based on the objective of delivering affordable housing while retaining ownership and operation of the assets.

Direct delivery models include both traditional and Public-Private Partnerships (“P3”) options.

Below is a high-level comparison of traditional and P3 option for delivery:

Table 35: Comparison of Traditional vs. P3 Delivery Models

	Traditional	P3
Description	<ul style="list-style-type: none"> - Financing responsibilities retained by project owner - Payments are made to the constructor as work is performed - Often used for less complex capital projects, and most typical for lower-value projects. 	<ul style="list-style-type: none"> - Financing responsibilities transferred to private sector partner - Payment to constructor at substantial completion of the asset - Best suited to higher-value, more complex capital projects

	Traditional	P3
Benefits	<ul style="list-style-type: none"> - Potential for lower costs as private sector partner does not need to arrange significant amounts of private financing - Potential for quick timelines due to a shorter procurement period - More flexibility for owner to make changes during design and/or construction 	<ul style="list-style-type: none"> - Greater opportunity to leverage private sector expertise across entire project lifecycle, including financing and operations & maintenance (where applicable/these services are in scope) - Models exist to integrate and transfer risk for full life-cycle of an asset, with opportunities for construction and maintenance/operational responsibilities to be transferred to the private sector if applicable - Schedule and cost-overrun risks transferred to the private sector - Innovation and value-for-money secured through a project agreement with payment based on performance guarantee
Risks	<ul style="list-style-type: none"> - Schedule risks typically borne by project owner - Cost-overruns may be borne by project owner - More limited opportunities for innovation and risk transfer 	<ul style="list-style-type: none"> - Higher costs associated with private sector financing - Additional time and costs required upfront for procurement - Less flexibility/lower ability for owner to make changes during design and construction

Prior to the delivery model workshop organized by IO, there was consideration on whether the procurement for Malaga and Christine would be packaged as a single procurement or two separate procurement contracts. Determining procurement packaging is a critical initial step as it informs the scope to be considered for the procurement. Below is a qualitative cost-benefit summary of the two potential approaches to contract packaging:

Table 36: Comparison of Packaging vs. Splitting Procurement Contracts

	Packaging Malaga and Christine Procurement Contracts	Splitting Malaga and Christine Procurement Contracts
Benefits	<ul style="list-style-type: none"> • Opportunity for construction cost savings by increasing project scale and providing opportunities for bulk vendor orders 	<ul style="list-style-type: none"> • If contracts are awarded simultaneously to two different bidders operating under similar construction schedules, there is an opportunity for construction schedule savings by creating competition between the two contractors • If contracts are awarded sequentially, there is an opportunity for the Region to leverage knowledge, experience and transferrable design elements developed as part of the first procurement to use for the second procurement. Phasing the two procurements also provides an opportunity to incentivize good performance by the contractor of the first procurement so that they could be better positioned to be selected for the second procurement. • There is generally a deeper market for smaller-scale projects so a split approach with a smaller contract size for each site could open up the pool to more bidders.
Risks	<ul style="list-style-type: none"> • Any substantial divergence in construction schedules between the two sites (e.g. >6 months) would incur costs (e.g. materials storage) that may offset any cost savings generated from a packaged, larger-scale contract • Concentration risk as both sites are tied with the same contractor and their vendors 	<ul style="list-style-type: none"> • If contracts are awarded sequentially, cost escalation risk for the second procurement • Potentially higher overall project costs given split approach does not allow for economies scale opportunities available from a packaged contract approach

On March 18th, IO held a preliminary Procurement Options Analysis workshop at the Region’s offices with Regional staff from Affordable Housing Development & Renewal, Works and Finance and IO staff from Development, Transaction Structuring, Procurement and Project Delivery. The workshop began with a discussion on procurement scope:

- Core scope components are to include the following: detailed design development based on master-plan conceptual designs developed during the business case stage, downstream entitlement of both sites (site plan and building permit), demolition of existing structures onsite (65 townhouse units at Malaga and 12 semi-detached units at Christine) and construction of below-grade parking garages and buildings
- Region also expressed interest in incorporating servicing and offsite works (e.g. parkland improvements at Chopin Park) into the procurement scope. IO indicated there are precedents for bidders that were able to deliver on said scope additions, although this may also impact the depth of bidders, limiting the bidding pool to more sophisticated bidders.

Next, there was a discussion of the feasible direct delivery models for Malaga and Christine. Ten possible delivery models were considered at the outset of the discussion:

1. Design-Bid-Build (“DBB”): This is a traditional procurement option in which the owner (government or other public-sector owner such as a hospital or transit agency, “Owner”) awards two distinct and sequential contracts for the design and construction work. The first contract is with a design firm to develop a full detailed design and to assist the Owner in putting the construction project out to tender. The second contract is with a general contractor to build in accordance with that design.
2. Construction Manager at Risk (“CMaR”): Under this model, the CMaR contractor is engaged by the Owner to provide consultancy service during the pre-construction stage (e.g., constructability and value engineering reviews, tender administration). They are later contracted to deliver the construction of the project under a cost-plus-fee arrangement that includes a Guaranteed Maximum Price (GMP). The CMaR contractor typically advises the design team, procures the construction and manages the delivery.
3. Design-Build (“DB”): The DB model awards the design and construction work under a single contract. Consortiums, joint ventures and/or subcontracting arrangements may be established between two or more companies to pool the resources and expertise necessary to deliver the project.
4. Design-Build-Finance (“DBF”): Similar to DB, a DBF approach awards the design and construction under a single contract. Consortiums, joint ventures or subcontract agreements may be established between two or more companies to pool the resources and expertise necessary to deliver a DBF project. The consortium (Project Co) must obtain short-term construction financing from third-party lenders or use its own equity resources. A lump-sum payment at substantial completion is intended to pay off the consortium’s design, construction and construction financing costs. Because the Owner withholds all or a significant portion of payment until project completion, this approach provides financial

motivation for the consortium to complete the project on time – any incremental interest costs and financial penalties associated with schedule delays are borne by the private-sector consortium.

5. Build-Finance (“BF”): similar to the DBF, a BF Project Co must obtain short-term construction financing, with a lump-sum payment at substantial completion intended to pay off the consortium’s construction and financing costs. In this model, the detailed design is completed prior to awarding the construction contract; design and construction are not integrated. This model is less commonly used.
6. Design-Build-Finance-Maintain (“DBFM”): The DBFM model involves the private sector consortium (Project Co) accepting responsibility for the design, construction, financing, regular maintenance and rehabilitation of the asset over the contract term to meet pre-defined performance specifications. The typical contract term for the maintenance work is 20 to 30 years. The public sector retains ownership of the assets. Project Co would not be fully paid for construction work following substantial completion but would be paid in instalments over the length of the maintenance term. Because the Project Co is responsible for the maintenance and performance of the facility for 20 to 30 years, there is additional incentive to use high-quality and durable materials that will ultimately benefit the Owner and public.
7. Design-Build-Finance-Operate-Maintain (“DBFOM”): The DBFOM model builds on the DBFM model. In addition to Project Co accepting responsibility for the design, construction, financing, regular maintenance and rehabilitation of the asset over the contract term, it also takes responsibility for operations under the same contract. This model is suited for projects where both the maintenance and operations have the potential to be transferred to the private sector.
8. IPD/Alliance: The IPD/Alliance contract is formed by the Owner, designer, construction contractor, suppliers and potentially stakeholders (e.g., local organization, community stakeholder, funding organization, etc.) to plan, design, construct and commission a capital project. Compensation under an IPD/Alliance model is directly tied to cost, schedule and profitability milestones of the overall project. The fundamental difference between an IPD/Alliance and traditional contracts is the underlying principle: a non-adversarial approach between the contracting parties. This is achieved through establishment of IPD/Alliance principles, good faith commitments, and adoption of no-dispute provisions. The Alliance contract and supporting structures promote a positive culture based on “no-fault, no-blame” and unanimous decision-making, and require all Participants to find the “best for project” solutions. The collaboration requires a greater time commitment on the Owner’s part, but efficiencies and win-win situations are maximized.

9. Revenue Concession: Revenue risk concession models involve the private partner designing, building and financing an asset, providing regular maintenance and rehabilitation services, and operating, managing and investing in the business of the asset, under a long-term agreement. The private-sector partner is compensated by revenue from user charges which in turn are used to finance its investment in the asset. The role of the public authority is primarily focused on regulatory compliance, monitoring, and customer protection through enforcing government regulations and the project agreement, as well as through policy decisions.
10. Regulated Asset Delivery: A Regulated Asset Delivery (RAD) model involves a company owning, investing in and operating an infrastructure asset under a legally binding licence from an economic regulator. The regulator grants the company the right to charge a regulated fee for use of the asset to fund a portion of its operations and recoup investment costs. The charge is set by an independent regulator who holds Project Co accountable to ensure any expenditure is in the interest of the ultimate user of the asset.

Most of the above models were deemed as infeasible for Malaga and Christine due to the following reasons:

- DBFM and DBFOM were not considered because maintenance and operations are out of scope for the procurement contract, as the Region has indicated that DRLHC would be the building operator once construction is complete.
- The IPD/Alliance option was also not carried forward as the scale and scope complexity do not align well to the delivery model's application and resourcing requirements.
- The Revenue Concession and Regulated Asset Delivery Models were eliminated due to them being inapplicable to these projects. Ownership and operations of the assets are not intended to be transferred to a private sector partner. BF was also not considered feasible as there would be considerable challenges in gathering market participation.
- DBF was determined to be infeasible because the anticipated timeline of the planning and/or procurement process associated with a DBF (~15-30+ months) would negatively impact the Region's ability to commence construction as soon as possible following the securing of planning approvals (anticipated to be around two years). In addition, the Region as the project sponsor may not have the adequate resources and experience to effectively deliver the project under a DBF.

The three remaining direct delivery models that were considered feasible for Malaga and Christine were DBB, CMaR and DB. Given DBB requires two sequential contracts, the timeline may be longer than it would otherwise be under a DB or a CMaR, posing a risk given the Region's objective of commencing construction as soon as possible. In addition, separating the design and construction

contracts can introduce constructability risks during the construction phase given there's no opportunity for the construction contractor and designer to collaborate and incorporate constructability considerations into the design. While still feasible, based on the current objectives and constraints, it was determined that the DBB aligns least with the desired outcomes. This leaves DB and CMaR as the two prospective delivery models for the Region to consider for Malaga and Christine.

At this stage, further work on site due diligence and site entitlement will need to be completed by the Region in order to refine the procurement scope and objectives, including clear design and construction requirements of the asset along with operational and life-cycle considerations. Once the procurement scope details are sufficiently advanced, the Region may consider reviewing its delivery model analysis to confirm the short-listed models. At that time, the Region may also consider undertaking a market sounding with prospective bidders to help assess the market's capacity to undertake the project as well as gauge overall interest under each of the two prospective delivery models.

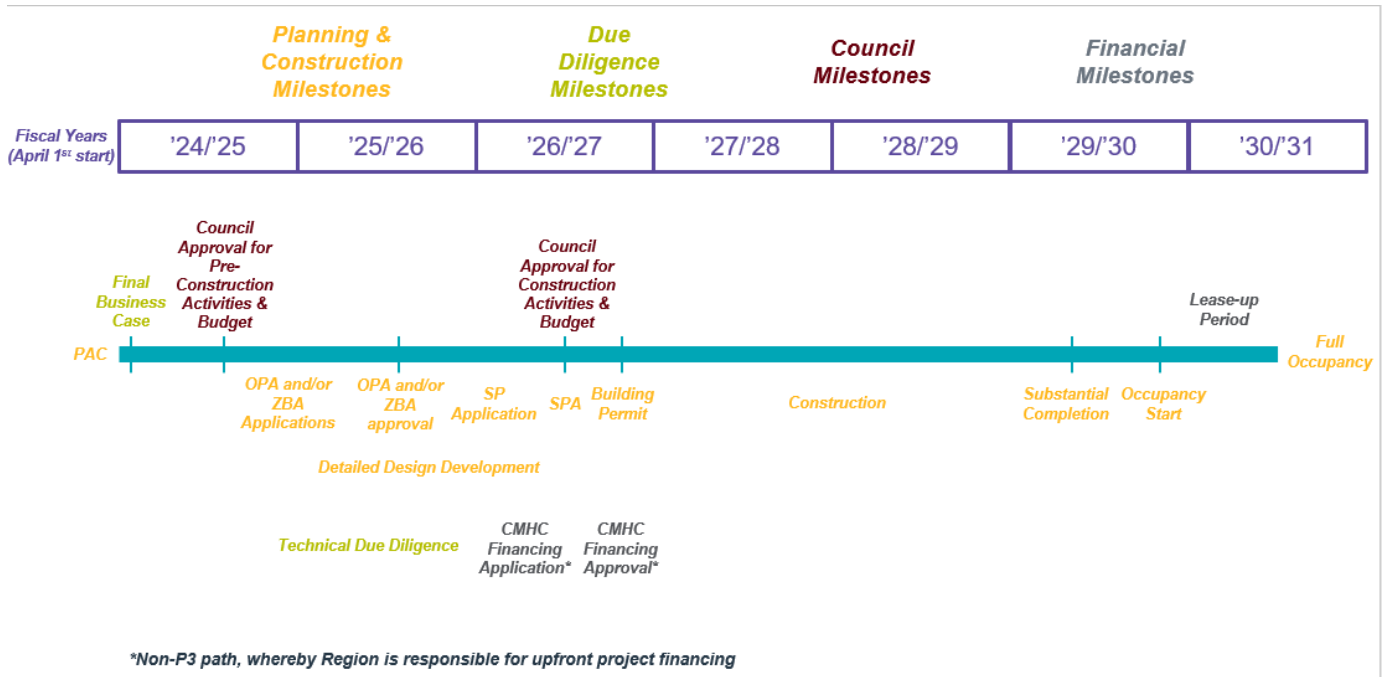
➤ SECTION 7: IMPLEMENTATION & NEXT STEPS

7.1 Implementation benefits and success factors

In addition to the various planning, technical and financial risks associated with redeveloping Malaga and Christine, which were outlined throughout this report, it is important to also highlight the benefits and success factors of proceeding with implementing the Malaga and Christine redevelopments:

- Improving living conditions for DRLHC residents by modernizing aged and partly derelict community housing units
- Promoting social and economic integration within DRLHC residents' broader communities
- Providing a mix of new housing options for Durham residents spanning various income levels, household types and household sizes
- Setting a positive example of sensitive redevelopment and intensification in areas that are well served by local amenities including transit, schools and parks
- Providing a catalyst to potential revitalization of surrounding neighbourhoods, supporting a sense of community & safety and pride of place
- Supporting the Region's broader goals of initiating development on a minimum of 1,000 new affordable rental units by 2024 and achieving Net Zero by 2045

7.2 Preliminary implementation timeline



7.3 Next steps

Following completion of the final business case, the anticipated next steps are as follows:

1. Council approval to commence pre-construction activities, namely:
 - a. Official Plan Amendment and Zoning By-law Amendment applications
 - b. Further site technical due diligence

➤ SECTION 8: APPENDIX

8.1. Detailed statistics for development concepts

Malaga

The following tables have been summarized in *Section 3.1.5* and have been directly extracted from Bousfield's Preferred Concept Report for the Malaga site.

MALAGA OPT 01: BELOW-GRADE PARKING; 10 ST MID-RISES						
SITE AREA CALCULATIONS						
Gross Site Area (ha)					1.927	
Area of Natural Heritage System buffer (ha)					0.378	
Net Site Area / Developable Area (ha)¹					1.549	
Area of Private Roads/Driveways (ha)					0.262	
Area of Rooftop Private Amenity Space (ha)					0.050	
Area of Publicly Accessible Open Space at Grade (ha) *not including environmental protection lands					0.474	
PROPOSED BUILDING AREAS						
	m2	%	ft2	%		
TOTAL GROSS CONSTRUCTION AREA (GCA)³	39,176	100%	421,687	100%		
TOTAL GROSS FLOOR AREA (GFA)⁴	36,214	100%	389,803	100%		
Total Non-Residential GFA	360	1%	3,875	1%		
Total Residential GFA for RGI Units ⁵	6,339	18%	68,232	18%		
Total Indoor Amenity GFA ⁷	878	2%	9,451	2%		
Total Residential GFA for Market Units (50% of Net New)	14,318.5	40%	154,122	40%		
Total Residential GFA for Affordable Units (50% of Net New)	14,318.5	40%	154,123	40%		
TOTAL No. OF UNITS						
UNIT TYPE	RGI REPLACEMENT	NET NEW			TOTAL	RATIO
		TOTAL NET NEW	MARKET RENTAL (50%)	AFFORDABLE RENTAL (50%)		
Bachelor		18	8	10	18	4%
1 BDRM		120	56	64	120	27%
2 BDRM		184	110	74	184	42%
3 BDRM	53	42	14	28	95	22%
4 BDRM	12	10	0	10	22	5%
SUBTOTAL	65	374	188	186	439	
TOTAL RESIDENTIAL UNITS					439	100%
DENSITY						
Gross Residential Density (units/gross site area (ha)) ^{8&10}					227.82	
Net Residential Density (units/net site area (ha))^{8&10}					283.41	
Gross Density - Floor Space Index (FSI)					1.88	
Net Density - Floor Space Index (FSI)					2.34	

DESIGN PARAMETERS									
NET NEW - APARTMENT (MIDRISE) - UNIT MIX							RGI - APARTMENT (MIDRISE) - UNIT MIX		
UNIT TYPE	AVG SALABLE UNIT SIZE (m2)	GROSS UP	AVG. UNIT SIZE	MARKET - RATIO ¹³	MARKET - AVG. UNIT SIZE (m2)	AFFORDABLE - RATIO ¹³	AFFORDABLE - AVG. UNIT SIZE (m2)	RGI - RATIO	RGI - AVG. UNIT SIZE (m2)
BACHELOR	42.00	115.00%	48.30	4.00%	77.64	5.00%	78.56	0.00%	95.01
1 BDRM	59.00	115.00%	67.85	30.00%		35.00%			
2 BDRM	72.00	115.00%	82.80	57.00%		38.00%			
3 BDRM	80.80	115.00%	92.92	5.00%		13.00%			
4 BDRM	92.90	115.00%	106.84	0.00%		3.00%			
NET NEW - BACK-TO-BACK (LOWRISE) - UNIT MIX							RGI - BACK-TO-BACK (LOWRISE) - UNIT MIX		
UNIT TYPE	AVG SALABLE UNIT SIZE (m2)	GROSS UP	AVG. UNIT SIZE	MARKET - RATIO ¹³	MARKET - AVG. UNIT SIZE (m2)	AFFORDABLE - RATIO ¹³	AFFORDABLE - AVG. UNIT SIZE (m2)	RGI - RATIO	RGI - AVG. UNIT SIZE (m2)
3 BDRM	168.75	100.00%	168.75	2.00%	168.75	2.00%	168.70	12.50%	168.70
NET NEW - STACKED (LOWRISE) - UNIT MIX							NET NEW - STACKED (LOWRISE) - UNIT MIX		
UNIT TYPE	AVG SALABLE UNIT SIZE (m2)	GROSS UP	AVG. UNIT SIZE	MARKET - RATIO ¹³	MARKET - AVG. UNIT SIZE (m2)	AFFORDABLE - RATIO ¹³	AFFORDABLE - AVG. UNIT SIZE (m2)	RGI - RATIO	RGI - AVG. UNIT SIZE (m2)
2 BDRM	76.00	100.00%	76.00	2.00%	76.00	2.00%	114.00	0.00%	0.00
4 BDRM	152.38	100.00%	152.38	0.00%		2.00%		6.00%	152.38
TOTAL				100.00%		100.00%		100.00%	

SITE STATISTICS - APARTMENT (MIDRISE)				
Total Net New Residential GFA (m2)	24,243			
Total RGI Residential GFA (m2)	4,379			
Total Non-Residential GFA (m2)	360			
Indoor Amenity GFA (m2)	878			
TOTAL GFA (m2)	29,860			
TOTAL GCA (m2)	31,760			
Required No. of Parking Spaces	555			
TOTAL No. of UNITS (NET NEW)	MARKET	AFFORDABLE	RGI	TOTAL
	185	179	53	417
No. of BACHELOR	8	10		18
No. of 1 BDRM	58	66		124
No. of 2 BDRM	109	72		181
No. of 3 BDRM	10	25	45	80
No. of 4 BDRM	0	6	8	14
Parking Ratio (Inc. Visitors)	1.33			
GCA to GFA Ratio	0.94			
MIDRISE A				
Floor	GCA (sq.m.)	GFA (sq.m.)		
1	2,067	1,943		
2	2,067	1,943		
3	2,067	1,943		
4	2,067	1,943		
5	1,455	1,368		
6	1,455	1,368		
7	1,253	1,178		
8	1,253	1,178		
9	1,253	1,178		
10	1,253	1,178		
TOTAL	16,190.0	15,220		
MIDRISE B				
Floor	GCA (sq.m.)	GFA (sq.m.)		
1	1,557	1,464		
2	1,557	1,464		
3	1,557	1,464		
4	1,557	1,464		
5	1,557	1,464		
6	1,557	1,464		
7	1,557	1,464		
8	1,557	1,464		
9	1,557	1,464		
10	1,557	1,464		
TOTAL	15,570	14,640		

SITE STATISTICS - B2B (LOWRISE)				
Total Net New Residential GFA (m2)	1,350			
Total RGI Residential GFA (m2)	1,350			
Total Non-Residential GFA (m2)				
TOTAL GFA (m2)	2,700			
TOTAL GCA (m2)	3,240			
Required No. of Parking Spaces	26			
TOTAL No. of UNITS (NET NEW)	MARKET	AFFORDABLE	RGI	TOTAL
	4	4	8	16
No. of 3 BDRM	4	4	8	8
Parking Ratio (inc. Visitors)	1.60			
GCA to GFA Ratio	1.00			
B2B A				
Floor	GCA (sq.m.)	GFA (sq.m.)		
1	540	270		
2	540	540		
3	540	540		
TOTAL	1,620	1,350		
B2B B				
Floor	GCA (sq.m.)	GFA (sq.m.)		
1	540	270		
2	540	540		
3	540	540		
TOTAL	1,620	1,350		

SITE STATISTICS - STACKED (LOWRISE)				
Total Net New Residential GFA (m2)	3,044			
Total RGI Residential GFA (m2)	610			
Total Non-Residential GFA (m2)				
TOTAL GFA (m2)	3,654			
TOTAL GCA (m2)	4,176			
Required No. of Parking Spaces	21			
TOTAL No. of UNITS (NET NEW)	MARKET	AFFORDABLE	RGI	TOTAL
	4	8	4	16
No. of 2 BDRM	4	4		8
No. of 4 BDRM	0	4	4	8
Parking Ratio (Inc. Visitors)	1.33			
GCA to GFA Ratio	1.00			
STACKED A				
Floor	GCA (sq.m.)	GFA (sq.m.)		
1	522	261		
2	522	522		
3	522	522		
4	522	522		
TOTAL	2,088	1,827		
STACKED B				
Floor	GCA (sq.m.)	GFA (sq.m.)		
1	522	261		
2	522	522		
3	522	522		
4	522	522		
TOTAL	2,088	1,827		

Accompanying Footnotes/Assumptions:

1. The Net Site Area/Developable Area excludes the components of the Natural Heritage System identified in Policy 5.4.4 of the Official Plan (Policy 2.3.2.2)
2. 10. The area excluded from the development area due to the natural heritage system could be used for on-site programming (i.e., trail, play space)
3. Gross Construction Area (GCA) is the sum of the total constructable area of a building above grade (i.e. the sum of the total area of each floor level, measured from the outside of the exterior wall of each floor level) excluding the rooftop mechanical penthouse.
4. Gross Floor Area (GFA) is an estimate. The final GFA number will depend on the architectural building design. In the case of this study, the proposed midrise building's GFA is calculated as 94% of the GCA, where the 6% deduction assumed accounts for typical building feature exclusions such as non-enclosed spaces, air shafts, floor area dedicated to the loading, parking, and circulation of cars, etc. For townhouses, the GFA is assumed to be the same as the GCA, with no takeouts.
5. Back-to-Back and Stacked townhouses are assumed to have 50% GFA on the Ground Floor (excludes Integral Garages).
6. The existing Gross Floor Area (GFA) / Net Floor Area (NFA) of RGI units is based on approximate current unit size data provided by the Region (3 BDRM ~ 80.8m², 4 BDRM ~ 92.9m²).
7. The Oshawa ZBL does not contain a provision for indoor or outdoor amenity. The target rate for indoor and outdoor amenity is 2m²/unit (each) based on a precedent from the City of Toronto.
6. Back-to-Back and Stacked townhouses are assumed to have 50% GFA on the Ground Floor (excludes Integral Garages).
7. Midrise ground floor heights will be 4.5m. Floor-to-floor heights for the townhouse units and the floors above grade in the midrise buildings are 3.0m
8. Density means the ratio between the number of dwelling units located on a lot and the lot area, expressed in units per hectare per Zoning By-law 60-94.
9. Because the proposed concept exceeds density permissions in Zoning By-law 60-94 (60 to 85 units/hectare), a Zoning By-law Amendment will be required. Furthermore, a Site-Specific Official Plan Amendment will also be required to permit the proposed density, but it is expected that an OPA could be dealt with at the same time as a ZBA in a concurrent application for both, that relies on shared background reports/analysis that are approved at the same time.
10. The area excluded from the development area due to the natural heritage system could be used for on-site programming (i.e., trail, play space)

10. The minimum number of parking spaces required is based on the requirements in Zoning By-law 60-94 which includes the parking ratio of 1.33 for apartments and stacked townhomes (1 space/dwelling unit + 0.33 space/dwelling unit for visitors), 1.60 for the back-to-back townhouses (1.25 space/dwelling unit + 0.35 space/dwelling unit for visitors), and 1 parking space/24m² for non-residential uses. 11. Based on best practices input from BA group, it is assumed that underground and aboveground parking width are designed in multiples of 18m, with a minimum width of 25-26m needed to accommodate an interfloor ramp for a multistorey parking structure

12. The market unit mix ratio is based on Altus's market analysis and the affordable unit mix ratio is based on the 2023 CMHC rental market survey and the Community Engagement Report Phase 1

Christine

The following tables have been summarized in *Section 4.1.5* and have been directly extracted from Bousfield's Preferred Concept Report for the Christine site.

THE HILL OPT 01: BELOW-GRADE PARKING; 6 ST MID-RISE; REMOVING CHRISTINE CRESCENT						
SITE AREA CALCULATIONS						
Gross Site Area (ha)	0.785					
Net Site Area / Developable Area (ha)	0.785					
Area of Easement (ha)	0.016					
Area of Private Roads/Driveways (ha)	0.135					
Area of Rooftop Private Amenity Space (ha)	0.051					
Area of Publicly Accessible Open Space at Grade (ha)	0.098					
PROPOSED BUILDING AREAS						
	m2	%	ft2	%		
TOTAL GROSS CONSTRUCTION AREA (GCA)¹	13,856	100%	149,145	100%		
TOTAL GROSS FLOOR AREA (GFA)²	13,220	100%	142,299	100%		
Total Non-Residential GFA	0	0%	0	0%		
Total Residential GFA for RGI Units ³	1,295	10%	13,939	10%		
Total Indoor Amenity GFA ⁴	328	2%	3,531	2%		
Total Residential GFA for Market Units (50% of Net New)	5,798.5	44%	62,414	44%		
Total Residential GFA for Affordable Units (50% of Net New)	5,798.5	44%	62,414	44%		
TOTAL No. OF UNITS						
UNIT TYPE	RGI REPLACEMENT	NET NEW			TOTAL	RATIO
		TOTAL NET NEW	MARKET RENTAL (50%)	AFFORDABLE RENTAL (50%)		
Bachelor		7	3	4	7	4%
1 BDRM		49	23	26	49	30%
2 BDRM		74	45	29	74	45%
3 BDRM	12	18	6	12	30	18%
4 BDRM	0	4	0	4	4	2%
SUBTOTAL	12	152	77	75	164	
TOTAL RESIDENTIAL UNITS					164	100%
DENSITY						
Gross Residential Density (units/gross site area (ha)) ^{5&7}	208.92					
Net Residential Density (units/net site area (ha)) ^{5&7}	208.92					
Gross Density - Floor Space Index (FSI)	1.68					
Net Density - Floor Space Index (FSI)	1.68					

DESIGN PARAMETERS									
NET NEW - APARTMENT (MIDRISE) - UNIT MIX						RGI - APARTMENT (MIDRISE) - UNIT MIX			
UNIT TYPE	AVG SALABLE UNIT SIZE (m2)	GROSS UP	AVG. UNIT SIZE	MARKET - RATIO ¹⁰	MARKET - AVG. UNIT SIZE (m2)	AFFORDABLE - RATIO ¹⁰	AFFORDABLE - AVG. UNIT SIZE (m2)	RGI - RATIO	RGI - AVG. UNIT SIZE (m2)
BACHELOR	42.00	115.00%	48.30	4.00%	77.64	5.00%	78.76	0.00%	92.90
1 BDRM	59.00	115.00%	67.85	30.00%		35.00%		0.00%	
2 BDRM	72.00	115.00%	82.80	59.00%		39.00%		0.00%	
3 BDRM	80.80	115.00%	92.92	0.00%		0.00%		50.00%	
4 BDRM	92.90	115.00%	106.84	0.00%		5.00%		0.00%	
NET NEW - BACK-TO-BACK/STACKED (LOWRISE) - UNIT MIX						RGI - BACK-TO-BACK/STACKED (LOWRISE) - UNIT MIX			
UNIT TYPE	AVG SALABLE UNIT SIZE (m2)	GROSS UP	AVG. UNIT SIZE	MARKET - RATIO ¹⁰	MARKET - AVG. UNIT SIZE (m2)	AFFORDABLE - RATIO ¹⁰	AFFORDABLE - AVG. UNIT SIZE (m2)	RGI - RATIO	RGI - AVG. UNIT SIZE (m2)
3 BDRM	135.00	100.00%	135.00	7.00%	135.00	16.00%	135.00	50.00%	135.00
TOTAL				100.00%		100.00%		100.00%	



SITE STATISTICS - APARTMENT (MIDRISE)				
Total Net New Residential GFA (m2)	9,167			
Total RGI Residential GFA (m2)	485			
Amenity GFA (m2)	328			
TOTAL GFA (m2)	9,980			
TOTAL GCA (m2)	10,616			
Required No. of Parking Spaces	186			
TOTAL No. of UNITS (NET NEW)	MARKET	AFFORDABLE	RGI	TOTAL
	71	63	6	140
No. of BACHELOR	3	4		7
No. of 1 BDRM	23	26		49
No. of 2 BDRM	45	29		74
No. of 3 BDRM	0	0	6	6
No. of 4 BDRM	0	4		4
Parking Ratio (Inc. Visitors)	1.33			
GCA to GFA Ratio	0.94			
MIDRISE A				
Floor	GCA (sq.m.)	GFA (sq.m.)		
1	1,957	1,840		
2	1,957	1,840		
3	1,957	1,840		
4	1,957	1,840		
5	1,394	1,310		
6	1,394	1,310		
TOTAL	10,616	9,980		

SITE STATISTICS - STACKED B2B (LOWRISE)				
Total Net New Residential GFA (m2)	2,430			
Total RGI Residential GFA (m2)	810			
Amenity GFA (m2)				
TOTAL GFA (m2)	3,240			
TOTAL GCA (m2)	3,240			
Required No. of Parking Spaces	32			
TOTAL No. of UNITS (NET NEW)	MARKET	AFFORDABLE	RGI	TOTAL
	6	12	6	24
No. of 3 BDRM	6	12	6	24
Parking Ratio (Inc. Visitors)	1.22	1.33		
GCA to GFA Ratio	1.00			
STACKED B2B A				
Floor	GCA (sq.m.)	GFA (sq.m.)		
1	810	810		
2	810	810		
3	810	810		
4	810	810		
TOTAL	3,240	3,240		

Accompanying Footnotes/Assumptions:

1. Gross Construction Area (GCA) is the sum of the total constructable area of a building above grade (i.e. the sum of the total area of each floor level, measured from the outside of the exterior wall of each floor level) excluding the rooftop mechanical penthouse.
2. Gross Floor Area (GFA) is an estimate. The final GFA number will depend on the architectural building design. In the case of this study, the proposed midrise building's GFA is calculated as 94% of the GCA, where the 6% deduction assumed accounts for typical building feature exclusions such as non-enclosed spaces, air shafts, floor area dedicated to the loading, parking, and circulation of cars, etc. For townhouses, the GFA is assumed to be the same as the GCA, with no takeouts.
3. The existing Gross Floor Area (GFA) / Net Floor Area (NFA) of RGI units is based on approximate current unit size data provided by the Region (3 BDRM ~ 80.8m²).
4. The Oshawa ZBL does not contain a provision for indoor or outdoor amenity. The target rate for indoor and outdoor amenity is 2m²/unit (each) based on a precedent from the City of Toronto.
5. Midrise ground floor heights will be 4.5m. Floor-to-floor heights for the townhouse units and the floors above grade in the midrise buildings are 3.0m
6. Density means the ratio between the number of dwelling units located on a lot and the lot area, expressed in units per hectare per Zoning By-law 60-94.
7. Because the proposed concept exceeds density permissions in Zoning By-law 60-94 (60 to 85 units/hectare), a Zoning By-law Amendment will be required. Furthermore, a Site-Specific Official Plan Amendment will also be required to permit the proposed density, but it is expected that an OPA could be dealt with at the same time as a ZBA in a concurrent application for both, that relies on shared background reports/analysis that are approved at the same time.
8. The minimum number of parking spaces required is based on the requirements in Zoning By-law 60-94 which includes the parking ratio of 1.33 for apartments and stacked townhomes (1 space/dwelling unit + 0.33 space/dwelling unit for visitors).
9. Based on best practices input from BA group: underground and aboveground parking width are designed in multiples of 18m, with a minimum width of 25-26m needed to accommodate an interfloor ramp for a multistorey parking structure.

8.2. Detailed statistics for pro-forma

Note: all calculations in below are based on a base case scenario of 50% affordable, split between <80% MMR (30% of all units) and 100% MMR (20% of all units).

Table 37: Summary of Malaga Detailed Operating Financials



Rent Escalation		4.0%		Begin Month 68		
UNIT TYPE (MARKET UNITS)	UNITS	AVG. SF	RENT/SF/MO	RENT/UNIT/MO	TOTAL RENT/YR	
Bachelor	10.18	452	3.98	1,800	219,780	
1B	81	635	3.58	2,275	2,222,220	
1B+D	0	635	3.58	2,275	-	
2B	92	775	3.39	2,625	2,884,613	
3B	20	870	3.28	2,850	695,970	
4B	0	1,000	-	-	-	
B2B TH (3B)	8	1,816	1.93	3,500	336,000	
B2B TH (4B)	0	0	-	-	-	
Stacked (2B)	4	818	3.27	2,675	128,400	
Stacked (4B)	4	1,641	2.04	3,350	160,800	
GROSS RENT MARKET	220	771	1.56	2,524	6,647,783	
Rent Escalation		2.0%		Begin Month 68		
UNIT TYPE (AFFORDABLE UNITS)	UNITS	AVG. SF	RENT/SF/MO	RENT/UNIT/MO	TOTAL RENT/YR	
Bachelor	8	452	1.90	860	77,628	
1B	53	635	1.82	1,158	732,003	
1B+D	0	635	1.82	1,158	-	
2B	60	775	1.69	1,309	945,804	
3B	23	870	1.69	1,470	398,153	
4B	8	1,000	1.64	1,639	147,979	
B2B TH (3B)	0	1,816	0.90	1,639	-	
B2B TH (4B)	0	0	-	1,639	-	
Stacked (2B)	4	818	1.66	1,355	65,026	
Stacked (4B)	0	1,641	1.00	1,639	-	
GROSS RENT AFFORDABLE	155	737	0.55	1,276	2,366,593	
Rent Escalation		2.0%		Begin Month 68		
UNIT TYPE (RENTAL REPLACEMENT)	UNITS	AVG. SF	RENT/SF/MO	RENT/UNIT/MO	TOTAL RENT/YR	
Midrise 3B/4B	53	890	1.68	1,495	950,980	
B2B 3B	8	1,816	0.90	1,639	157,320	
Stacked 4B	4	1,641	1.00	1,639	78,660	
GROSS RENT RENTAL REPLACEMENT	65	1,050	0.28	1,522	1,186,960	
Loss-to-Lease (Stabilization Income offset)						
TOTAL RES RENTAL INCOME	439	355,397	2.39	1,936	10,201,336	
OTHER INCOME						
Parking Income	4.0% annual growth		% OF TOTAL RENT	/SF/MO	UNIT/MO	AMOUNT/YR
Locker Income	4.0% annual growth		4.79%	0.11	93	488,400
TOTAL OTHER INCOME	4.0%		0.64%	0.02	12	65,400
TOTAL OTHER INCOME	4.0%		5.43%	0.13	105	553,800
NON-RES RETAIL INCOME						
		2.00%	-	/SF/YR	-	-
TOTAL POTENTIAL INCOME				2.52	2,042	10,755,136
- General Vacancy	Market, Parking&Locker	2.0%	(0.03)	(27)	(144,032)	
- General Vacancy	Affordable	1.0%	(0.01)	(4)	(23,666)	
- General Vacancy	RGI Rental Replacement	1.0%	(0.00)	(2)	(11,870)	
- General Vacancy	Non-Residential	2.0%	-	-	-	
- Credit Loss	Market, Parking&Locker	1.0%	(0.02)	(14)	(72,016)	
- Credit Loss	Affordable	1.0%	(0.01)	(4)	(23,666)	
- Credit Loss	RGI Rental Replacement	1.0%	(0.00)	(2)	(11,870)	
- Credit Loss	Non-Residential	1.0%	-	-	-	
EFFECTIVE GROSS REVENUE			2.46	1,994	10,468,017	
EXPENSES						
Annual Expense Growth Begin Month		Begin Month 68				
OPERATING EXPENSES	Expense Growth		% OF EGR	UNIT/YR	AMOUNT/YR	
Repairs and Maintenance	2.0%		8.10%	1,931	847,909	
Payroll	2.0%		5.80%	1,383	607,145	
General & Administrative	2.0%		1.00%	238	104,680	
Marketing	2.0%		1.07%	255	112,008	
Utilities	2.0%		3.42%	816	358,006	
Security	2.0%		0.68%	162	71,183	
Management Fee (assumed not applicable)	0.0%		0.00%	-	-	
Insurance	2.0%		1.58%	377	165,395	
Capital Expenditures	2.0%		4.00%	954	418,721	
Property Taxes	2.0%		8.54%	2,036	893,969	
TOTAL OPERATING EXPENSES			34.19%	8,153	3,579,015	
NET OPERATING INCOME						
					6,889,002	
CASH FLOW FROM OPERATIONS						
Debt Service (Term Loan)					6,889,002	
CASH FLOW AFTER FINANCING					6,033,035	
					855,967	

Table 38: Summary of Christine Detailed Operating Financials



Rent Escalation		4.0%	Begin Month 56			
UNIT TYPE (MARKET UNITS)	UNITS	AVG. SF	RENT/SF/MO	RENT/UNIT/MO	TOTAL RENT/YR	
Bachelor	4	452	3.98	1,800	75,600	
1B	25	635	3.58	2,275	668,850	
1B+D	0	635	-	-	-	
2B	35	775	3.39	2,625	1,102,500	
3B	7	870	3.28	2,850	239,400	
4B	0	1,000	-	-	-	
B2B TH (3B)	0	0	-	-	-	
B2B TH (4B)	0	0	-	-	-	
B2B Stacked (2B)	0	0	-	-	-	
B2B Stacked (3B)	12	1,453	2.20	3,200	460,800	
GROSS RENT MARKET	82	827	1.54	2,589	2,547,150	

Rent Escalation		2.0%				
UNIT TYPE (AFFORDABLE UNITS)	UNITS	AVG. SF	RENT/SF/MO	RENT/UNIT/MO	TOTAL RENT/YR	
Bachelor	3	452	1.90	860	33,011	
1B	22	635	1.82	1,158	311,284	
1B+D	0	635	1.82	1,158	-	
2B	26	775	1.69	1,309	402,202	
3B	10	870	1.69	1,470	169,314	
4B	3	1,000	1.64	1,639	62,928	
B2B TH (3B)	0	0	-	1,639	-	
B2B TH (4B)	0	0	-	1,639	-	
B2B Stacked (2B)	0	0	-	1,355	-	
B2B Stacked (3B)	6	1,453	1.13	1,639	117,990	
GROSS RENT AFFORDABLE	70	797	0.66	1,306	1,096,730	

Rent Escalation		2.0%				
UNIT TYPE (RGI Rental Replacement)	UNITS	AVG. SF	RENT/SF/MO	RENT/UNIT/MO	TOTAL RENT/YR	
Midrise 3B	6	870	1.69	1,470	105,821	
Stacked 3B	6	1,453	1.13	1,639	117,990	
GROSS RENT RGI Rental Replaceme	12	1,162	0.14	1,554	223,811	
Loss-to-Lease (Stabilizing Income offset)						
TOTAL RES RENTAL INCOME	164	137,510	2.34	1,965	3,867,691	

OTHER INCOME				% OF TOTAL RENT	/SF/MO	UNIT/MO	AMOUNT/YR
Parking Income	4.0% annual growth			5.89%	0.14	116	228,000
Locker Income	4.0% annual growth			0.64%	0.01	13	24,600
TOTAL OTHER INCOME	4.0%			6.53%	0.15	128	252,600
NON-RES RETAIL INCOME							
		0.00%	-	/SF/YR	-	-	-
TOTAL POTENTIAL INCOME					2.50	2,094	4,120,291
- General Vacancy	Market, Parking&Locker		2.0%		(0.03)	(28)	(55,995)
- General Vacancy	Affordable		1.0%		(0.01)	(6)	(10,967)
- General Vacancy	RGI Rental Replacement		1.0%		(0.00)	(1)	(2,238)
- General Vacancy	Non-Residential		0.0%		-	-	-
- Credit Loss	Market, Parking&Locker		1.0%		(0.02)	(14)	(27,998)
- Credit Loss	Affordable		1.0%		(0.01)	(6)	(10,967)
- Credit Loss	RGI Rental Replacement		1.0%		(0.00)	(1)	(2,238)
- Credit Loss	Non-Residential		0.0%		-	-	-
EFFECTIVE GROSS REVENUE					2.43	2,038	4,009,888

EXPENSES					
Annual Expense Growth Begin Month		Begin Month 56			
OPERATING EXPENSES	Expense Growth	% OF EGR	UNIT/YR	AMOUNT/YR	
Repairs and Maintenance	2.0%	8.10%	1,980	324,801	
Payroll	2.0%	5.80%	1,418	232,573	
General & Administrative	2.0%	1.00%	245	40,099	
Marketing	2.0%	1.07%	262	42,906	
Utilities	2.0%	3.42%	836	137,138	
Security	2.0%	0.68%	166	27,267	
Management Fee (assumed not applicable)	2.0%	0.00%	-	-	
Insurance	2.0%	1.58%	386	63,356	
Capital Expenditure	2.0%	4.00%	978	160,396	
Property Taxes	2.0%	8.54%	2,088	342,444	
TOTAL OPERATING EXPENSES		34.19%	8,360	1,370,981	
NET OPERATING INCOME				2,638,907	
CASH FLOW FROM OPERATIONS					2,638,907
Debt Service (Term Loan)					2,115,809
CASH FLOW AFTER FINANCING					523,098

Table 39: Summary of Malaga Development Timeline

Timeline Assumptions	Start	Finish	Duration (Months)
Official Plan Amendment / Rezoning Approval	Jun-24	Jun-25	12
SPA Approval	Jun-25	Jun-26	12
Construction Start - Below Grade	Jun-26	Jun-27	12
Construction Start - Above Grade	Jun-27	Jun-29	24
Lease-up / Stabilization	Jun-29	Jun-30	12
Project Completion Date	Jun-30		

Table 40: Summary of Christine Development Timeline

Timeline Summary	Start	Finish	Duration (Months)
Official Plan Amendment / Rezoning Approval	Jun-24	Jun-25	12
SPA Approval	Jun-25	Jun-26	12
Construction Start - Below Grade	Jun-26	Jun-27	12
Construction Start - Above Grade	Jun-27	Dec-28	18
Lease-up / Stabilization	Dec-28	Jun-29	6
Project Completion Date	Jun-29		

Table 41: Summary of Malaga Financing Assumptions

Financing Assumptions

Construction Loan

Loan Type	CMHC Co-Investment Fund	
Loan Amount	142,342,188	
Loan-to-Value	77%	
Loan-to-Cost	55%	
Loan Start	Feb-28	Month 45
Average Interest Rate	3.50%	
Construction Loan Interest	9,655,033	-

Take-out Financing / Term Loan

Loan Type	CMHC Co-Investment Fund	
Loan Amount	142,342,188	
Interest Rate	3.50%	
Interest Rate for Stress Test	4.50%	
Amortization	50	
Loan Start	Jan-31	Month 80
Mortgage Payment (Based on Stress Test Rate)	7,163,623	
Trended NOI (Month 80)	7,166,493	
Stabilized DSCR for Stress Test	1.00	Eligible
Required CMHC DSCR	1.00	
Actual DSCR Trended	1.19	

CMHC Co-Investment Eligibility

Rent as % of MMR	87%	
Confirms the number of units below 80% of MMR	132	
Total Number of Unit	439	
Overall Affordable Set-Aside Rate	30.0%	Eligible
Total Accessible Units	88	
Accessible Units %	20.0%	Eligible

Table 42: Summary of Christine Financing Assumptions

Financing Assumptions			
Construction Loan			
Loan Type	CMHC Co-Investment Fund		
Loan Amount	49,919,975		
Loan-to-Value	71%		
Loan-to-Cost	53%		
Loan Start	Dec-27		Month 43
Average Interest Rate	3.50%		
Construction Loan Interest	1,782,505		-
Take-out Financing / Term Loan			
Loan Type	CMHC Co-Investment Fund		
Loan Amount	49,919,975		
Interest Rate	3.50%		
Interest Rate for Stress Test	4.50%		
Amortization	50		
Loan Start	Aug-29		Month 63
Mortgage Payment (Based on Stress Test Rate)	2,512,311		
Trended NOI (Month 63)	2,539,111		
Stabilized DSCR	1.01		Eligible
Required CMHC DSCR	1.00		
Actual DSCR Trended	1.20		
CMHC Co-Investment Eligibility			
Rent as % of AMR	87%		
Confirm the number of units below 80% AMR	49		
Total Number of Units	164		
Affordable Set-Aside Rate	30.0%		Eligible

Table 43: Malaga Regional Annual Capital Funding Requirements

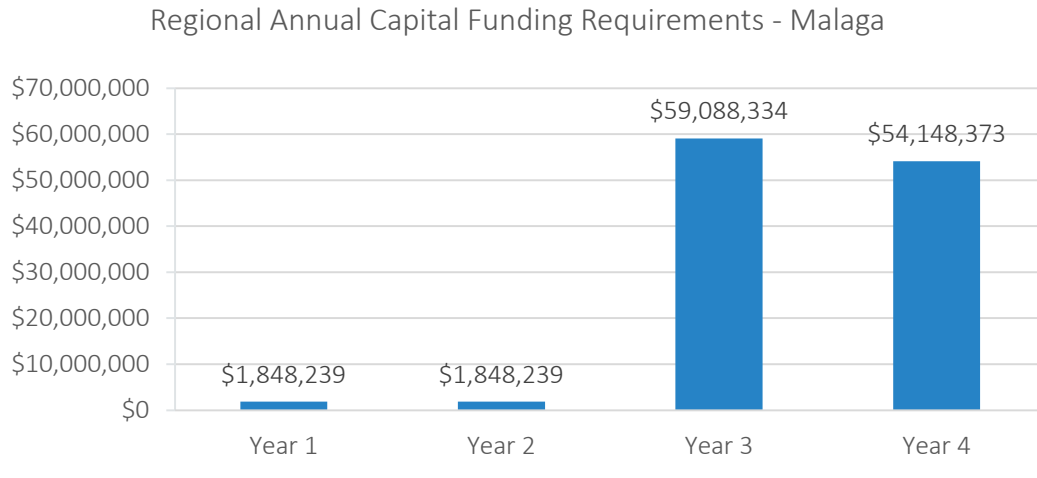
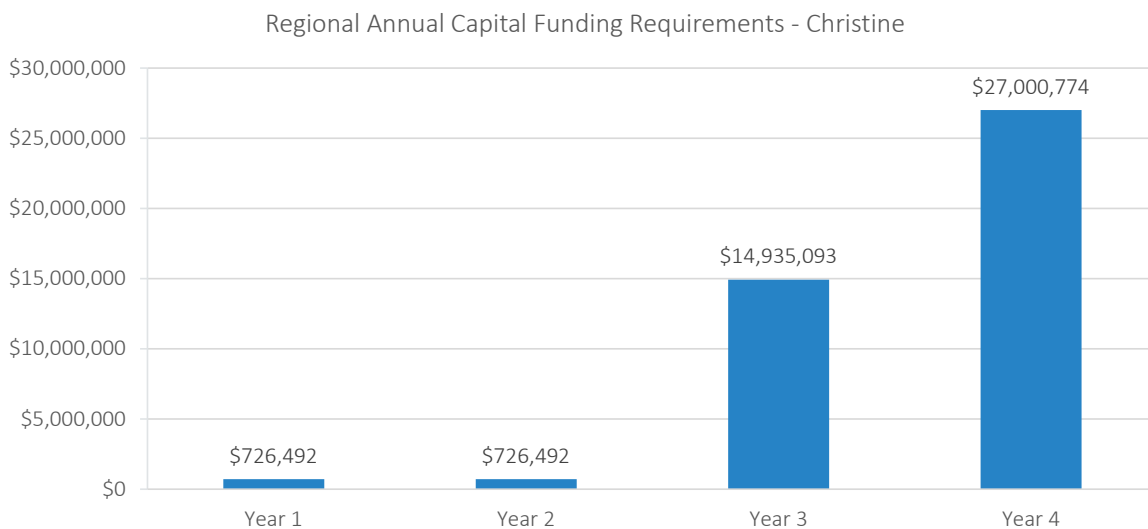


Table 44: Christine Regional Annual Capital Funding Requirements



8.3. Altus market analysis

8.3.1 Market opportunity and target renter groups

Strong population growth in Oshawa continues to drive residential demand in the City, increasing the need for all housing types and tenures. Notably, household growth in Oshawa has been largely driven by renter households over the last two census periods, with renters steadily increasing their share of the City's households.

Compared to the rest of the Region, Oshawa has a higher share of non-census family households (that mainly consist of one-person households) and a lower share of couples with children. The City

also has a slightly higher proportion of people aged 25 to 34 and 65 and over. The share of smaller households – one and two people – is also higher in the City of Oshawa compared to Durham Region. All these groups typically have a higher propensity to rent and are likely more present in Oshawa due to greater availability of rental housing.

Oshawa has the largest rental inventory in Durham Region characterized by low vacancy rates and strong rental rate growth. As of October 2023, the average vacancy rate in Oshawa was 1.5%. This indicates tight market conditions and an underlying supply-demand gap. With the majority of the existing rental inventory built before the 1970's, the need for new rental stock that responds to current market standards and consumer expectations is particularly strong.

Strong rental demand is also evident based on market absorption of new purpose-built units and leasing activity in the secondary market. 80 Bond, for example, had around half of its units leased before its official launch in August 2022. The volume of privately leased apartments and townhouses has been also increasing year over year as more supply has been entering the market. Affordability challenges in the ownership market further fuel rental demand across all GTA markets including Oshawa.

Although rental demand is typically concentrated in the apartment market, a lack of purpose-built rental townhouse inventory (which represents less than 10% of Oshawa's total rental stock) and increasing volumes of private leasing for this housing type suggest that there is also strong demand for rental townhouses in Oshawa. Households that traditionally expressed interest in ground-related housing and had higher ownership rates are now facing significant affordability challenges in the ownership market, increasingly turning to the rental market.

Based on Oshawa's demographic profile and renter households characteristics, as well as site context and nearby amenities, the following target renter groups have been identified for the Christine (Hill) Site:

- Couples with and without kids;
- Lone parents;
- Young professionals; and to a smaller extent
- Downsizers/young seniors;

The Malaga Site is expected to attract:

- Young professional singles and couples without kids;
- Couples with kids and lone parents; and
- Downsizers/young seniors;

The two sites are expected to have a similar overall tenant profile; however, each group is expected to have a varying degree of representation at each location as suggested by the order in which they are listed. Both sites might derive some demand from students, however, since all major educational institutions are predominantly located in North Oshawa with on- and off-campus student housing nearby, this group will likely represent a very small proportion of the renter mix.

Across the product types proposed for the two Sites, ground related housing (traditional townhouses and ground-level stacked townhouses) will be most attractive for families with kids (including lone parents), while upper-level stacked townhouses are likely to attract young couples without children. Downsizers, young professional singles and couples without kids will drive demand for smaller apartments (primarily one-bedrooms), while families with kids, lone parents and potentially some multi-generational households and people living with roommates will drive demand for larger apartment unit types (primarily two-bedrooms).

8.3.2 Unit Mix, Unit Size, Rental Rate and Absorption Recommendations

The following rental rate recommendations were developed for the market units based on the most recent development concepts provided by the Client on April 10th, 2024, for Malaga and Christine.

Table 45: Recommended Rental Rates, Malaga

Unit Type	Average Unit Size (Sq. Ft.)	Average Monthly Rent	Average Rent per Sq. Ft.
Mid-Rise Apartments			
Studio	452	\$1,800	\$3.98
1 Bed	635	\$2,275	\$3.58
2 Bed	775	\$2,625	\$3.39
3 Bed	870	\$2,850	\$3.28
Back-to-Back Townhouses			
3 Bed	1,816	\$3,500	\$1.93
Stacked Townhouses			
2 Bed	818	\$2,675	\$3.27

Table 46: Recommended Rental Rates, Christine

Unit Type	Average Unit Size (Sq. Ft.)	Average Monthly Rent	Average Rent per Sq. Ft.
Mid-Rise Apartments			
Studio	452	\$1,800	\$3.98
1 Bed	635	\$2,275	\$3.58
2 Bed	775	\$2,625	\$3.39
3 Bed	870	\$2,850	\$3.28
Back-to-Back Stacked Townhouses			
3 Bed	1,453	\$3,200	\$2.20

Note: Rents are listed in current dollars. Apartment rents include heat and water and exclude hydro. Townhouse rents include heat and parking.

Source: Altus Group Economic Consulting

With the Malaga Site being better positioned to attract smaller households, particularly single young professionals, the Site can support slightly smaller unit sizes for one-bedroom and one-bedroom-plus den units, which would translate into higher rent per sq. ft. compared to Christine despite the same overall rental rate range. Slightly larger unit sizes across smaller unit types at Christine will increase the attractiveness of these units to downsizers and young couples without kids. Considering that the two Sites could potentially enter the market around the same time and have overlapping lease-up periods, maintaining consistent rental rate ranges at both locations will facilitate balanced absorption. A higher proportion of larger unit types is recommended for Christine based on the Site's strong positioning to attract larger household types and particularly families with kids. Given the inclusion of townhouse sites at both locations, compact unit sizes are recommended for three-bedroom units to provide a more diverse range of options suitable for a variety of household structures.

Given a lack of existing rental townhouse inventory in Oshawa, coupled with an increasing volume of private leasing for this housing type with some units as big as 2,000 sq. ft., there is a strong market opportunity for providing three- and four-bedroom townhouse units in the range of 1,200 and 1,800 sq. ft. With a strong preference for ground-oriented housing among families with kids, larger unit types are strongly recommended to be incorporated within the back-to-back townhouse blocks as well as ground-level stacked townhouse units. With upper-floor stacked townhouse units being a closer alternative to apartments than traditional townhomes, these units will likely attract young couples and potentially some lone-parents.

The proposed townhouse rents are generally comparable to the rates observed in recently renovated projects and are slightly higher than the rates observed among privately leased units. A slight premium is generally observed for purpose-built units since they have a number of advantages over privately leased units including professional management and maintenance as well as greater security of tenure.

A monthly underground parking fee of around \$100 is recommended for both Sites (\$120 for EV charging). With larger unit types likely requiring multiple parking spots, an inclusion of tandem parking for around \$175 a month is also recommended. Recommended townhouse rents already include parking, however additional spots might be offered for rent if needed. A \$50 monthly fee is recommended for external apartment lockers.

Rental rate and unit size recommendations have been developed with an aim to increase the project's overall competitiveness within the primary and secondary rental market while facilitating healthy absorption rates. In smaller markets like Oshawa, pricing becomes one of the main

determinants of absorption. Priced significantly above comparable privately leased townhouse units, Cedar Valley has been struggling to achieve stabilized occupancy despite having a relatively small overall inventory. Similarly, 80 Bond had to adjust its incentive programs on lease-up and provide additional incentives for some of their larger unit types.

Since a portion of units at each of the Sites will be set aside for affordable housing (likely in the range of 30% to 50%), the volume of market units generated by the development will likely not create any significant absorption risks. Having a variety of built-form typologies also allows to target a larger pool of potential renters, providing a range of options suitable for a diverse range of households. Informed by absorption rates achieved at recently completed rental projects as well as the pace of leasing for privately leased units, the proposed projects are likely to achieve the following absorption rates assuming a 50% to 70% share of market-rate units:

- Around 15 to 25 apartment units a month for a total lease-up period of 3 to 6 months for Christine and 6 to 18 months for Malaga; and
- Around 5 to 10 townhouse units⁶ a month for a total absorption period of 1 to 2 months for Christine and 2 to 3 months for Malaga;

Based on an estimated annual market demand of between 590 and 730 rental apartment units in the 2026-2031 census period (medium- to high-growth scenario) the projects will likely face minimal absorption risks given a modest active under-construction rental apartment supply that could be reasonably expected to enter the market during the same census period. At the same time, with a projected moderating annual demand for rental townhouse units in the 2026-2031 census period (estimated at around 40 to 50 units) and a relatively large number of planned townhouse units in Oshawa (which also have shorter construction timelines compared to apartments), the two Sites will be likely facing stronger competition for this unit type. Despite a seemingly more challenging market landscape for rental townhouses during that census period, there is a high chance that the City of Oshawa will exceed its projected capture share of the GTA's renter household growth in townhouses. Oshawa's capture rates for rental townhouse demand have been negatively impacted by low supply availability in the past and have shown to be quite responsive to the recent uptake in townhouse construction. With shorter construction timelines compared to high-density housing and a growing development pipeline, the City's rental townhouse stock is well positioned to increase its capture rate beyond the high-growth scenario. Additionally, demand projections are prepared based on CMHC definitions, which classify stacked townhouses as apartment units, which reduces the number of townhouse units competing in the market.

⁶ Including stacked units.

To further minimize absorption risks, a pre-launch marketing campaign using a variety of channels is strongly encouraged. Launching registrations through a variety of web and social media platforms, 80 Bond was able to rent around half of its units before the building was officially opened. Additional incentives such as free parking, locker or internet are also common among newly built rental projects. Gift certificates or months of free rent are also typical throughout the lease-up period. These incentives can apply to select unit types and/or lease terms.

Given a relatively small scale of the market-rate portion of the proposed development, a marketing campaign and an early registration process launched around 3 months prior to project completion could help assess the need for additional incentives.

8.3.3 Recommended building amenities and suite features

Based on the potential target renter groups identified for the two sites, the scale of the proposed projects, as well as competitive product characteristics, the following amenities are recommended to be included within the mid-rise structures:

- Gym;
- Concierge;
- On-Site management office;
- Party room/lounge;
- Outdoor/rooftop terrace with BBQs;
- Outdoor children's playground;
- Bike storage;

Additional amenities such as co-working space/meeting rooms, courier lockers and a games room can be included if feasible.

Since back-to-back and stacked townhouse units have a limited ability to offer private outdoor space, shared park space is strongly encouraged withing the townhouse blocks. This includes children's playgrounds and BBQ areas. Maintenance services such as snow-removal, landscaping and curb-side waste collection are also strongly encouraged.

Recommended suite-finishes and features include stainless steel or integrated kitchen appliances, vinyl plank flooring throughout, porcelain or ceramic bathroom floor and wall tiles, stainless steel or chrome bathroom and kitchen fixtures, individual temperature control, natural stone (or equivalent) countertops, tile kitchen backsplash, energy efficient lighting and in-suite laundry. Balconies (Juliet, regular or terraced depending on unit type and size), 9-foot ceilings and floor-to-ceiling windows are encouraged if structurally supported.

8.3.4 Retail analysis and recommendations

Location is one of the most important aspects of retail development. The optimal location for most commercial retail and service uses are typically at the intersection of major arterial roads, which provide the highest degree of visibility and exposure to both vehicle and foot traffic from multiple directions.

Both Sites present certain limitations in terms of visibility and accessibility, especially for customers not residing within the immediate vicinity. The single bus line service for each site suggests a reliance on the local residential population for foot traffic. For commercial development, particularly retail, these sites would require a targeted approach that capitalizes on the local demographic.

Malaga displays a potential for commercial development, though on a conservative scale. The site is set to experience a population growth due to its own residential development and other upcoming projects in the vicinity. This growth is projected to create a demand for an additional convenience commercial space of nearly 5,000 sq. ft. by 2041. Nonetheless, given the site's proximity to an established commercial node, it is prudent to focus commercial development efforts on servicing the on-site residential community. A convenience store sized at about 1,000 sq. ft. would be appropriate for the Malaga's Site, aligning with market averages and the expected consumer base.

Upon a thorough evaluation of Christine, the recommendation is to abstain from pursuing commercial development. The forecasted commercial space requirement, coming solely from the anticipated population of the Christine development, does not justify the development of a convenience store. The specific location of the site does not lend itself to the advantages typically associated with successful retail operations, such as high visibility and accessibility. The dead-end location and the lack of significant through traffic severely constrain the site's ability to draw customers from beyond its immediate residential surroundings. Consequently, the potential commercial space need of approximately 660 sq. ft. for the development falls well below the minimum threshold of 1,000 sq. ft. required for a viable convenience commercial development that warrants staffing.

8.4. Stakeholder engagement – Habitat for Humanity

Site due diligence

- Question #1: how has topography impacted your development (e.g. developable area, additional costs for retaining walls, building design etc.)?
 - o Answer: Very challenging, lots 1/3 of the site has a retaining wall, difficulty in creating a replicable floor/unit plan. Lower units on end of the site are at grade and units on other end are full storey below grade at rear and at grade on the front of

the building. Expensive for retaining wall. Lots of earth work and various stepped foundations on block 2&3.

- Question #2: you mentioned on the call that this was challenging, can you elaborate on what site features made this challenging?
 - o Answer: See [link](#) for site plan and interior photos for context. We had to pour a concrete retaining wall that is approx. 3x15 meters, then block retaining wall along Lamond, deep window wells/ sunken concrete patios.
- Question #3: did you face any servicing constraints?
 - o Answer: **Not really.**
- Question #4: did you face any environmental or geotechnical issues?
 - o Answer: **No.**

Entitlement

- Question #5: How long did rezoning and site plan approvals take and were they done concurrently?
 - o Answer: **no rezoning; site plan was drawn out and painful. Partly our fault, partly due to the state of things. I believe IO/ DRLHC wouldn't have the same issues.**
- Question #6: You mentioned on the call that approvals went through the regular (vs. an accelerated) process – was there no appetite from the City to prioritize/accelerate your applications given the affordable housing nature?
 - o Answer: **It wasn't discussed at that time.**
- Question #7: You mentioned on the call 1 space per unit – was this inclusive or exclusive of visitor spaces? Was the bylaw requirement for your application 1.5 resident + 0.25 visitor (trying to get a sense of the deviation that you secured)? What was the justification you used?
 - o Answer: **1 per unit plus visitor parking. Justification for the parking was partly due to transportation context - this development is in close proximity to several public transit options and future cycle routes. Partly because of By-Law considerations - The City of Oshawa undertook a city-wide study to revise the minimum parking requirements. Partly because Habitat commissioned a parking study based on three of our developments that are similar to this development**
- Question #8: Did you seek and/or receive any other waivers (e.g. reduced parkland dedication/cash-in-lieu)?
 - o Answer: **Yes**

Design

- Question #9: What is the avg. square footage of your 3BR units?
 - o Answer: **1200 sq ft.**
- Question #10: Do the units include any private yards/terraces/balconies?
 - o Answer: **Private patios and balconies.**
- Question #11: Does the development include any common amenities?
 - o Answer: **No, other than bike parking and some benches on site.**
- Question #12: How much storage was provided per unit and any sense of what households were hoping for?
 - o Answer: **See floor plan, nothing above the standard. We didn't have that conversation.**

- Question #13: You mentioned on the call that neighbourhood safety was a concern for households – were there any design features that you were able to incorporate (e.g. lighting) to help mitigate/alleviate some of this concern?
 - o Answer: **Lighting and cameras would be helpful for any future development.**

Construction

- Question #14: What site features made staging challenging and whether there was anything you were able to do to address/resolve the issues?
 - o Answer: **Stockpiling/ Excavation and soil management/ site work.**

Economics

- Question #15: What was the total cost per door (excluding land costs)?
 - o Answer: **~\$450k per unit all in (Incl. Land soft cost, hard cost, financing, hst net of rebate. BUT NOT INCLUDING DC and Parkland. Note this is well below market due to Habitat for Humanity Gift-In-Kind.**
- Question #16: What was your financing structure/capital stack?
 - o Answer: **Habitat is an ownership provider, so our capital stack is different than rental. End purchasers obtain a mortgage from a credit union (\$200k - \$300k). We then have funding from CMHC (\$50k to \$100k per door) and the fee waivers from municipality. We also have our philanthropic program which provides funding and secures material at reduced cost. We also use construction financing during the build phase.**
- Question #17: Were you able to access any favourable financing and if so, under what terms (e.g. debt-service-coverage, loan-to-cost)?
 - o Answer: **No**
- Question #18: What is the avg condo fee per household?
 - o Answer: **Average condo fees: \$172 (estimate)**
- Question #19: What is the avg household income?
 - o Answer: **Average household income: \$101K**



If this information is required in an accessible format, please contact 1-800-372-1102 ext. 2564.

The Regional Municipality of Durham Report

To: Committee of the Whole
From: Commissioner of Social Services, Commissioner of Finance and
Commissioner of Planning and Economic Development
Report: #2024-COW-26
Date: June 12, 2024

Subject:

Approaching Housing Delivery at 300 Ritson Road South

Recommendation:

That the Committee of the Whole recommends to Regional Council:

- A) That the Ritson School Site Community Needs Assessment dated April 19, 2024 provided within Attachment #1 to this report be received for information;
- B) That Regional staff be authorized to advance predevelopment due diligence and a subsequent rezoning, together with community engagement and technical support, either as a standalone amendment or as a component of municipal planning processes already underway at the City of Oshawa;
- C) That staff's comments to the City of Oshawa staff dated May 17, 2024 within Attachment #3 to this report be endorsed;
- D) That the Development Principles provided below and detailed within Attachment #4 be endorsed and form the basis for future development on the site and the abutting Region-owned lands; and
- E) That staff be authorized to release a Request for Expression of Interest (REI) to gauge the level of business interest in the redevelopment of the first phase of the lands by the private and not-for-profit sectors for development and property management, either through a long-term land lease or traditional design-build-operate contract.

Report:**1. Purpose**

1.1 The purpose of this report is to:

- a. Summarize the findings of Phase One Community Needs Assessment Report undertaken on behalf of the Region dated April, 2024;
- b. Provide commentary on Oshawa's Central Oshawa Major Transit Station Areas Study insofar as it applies to the subject site;
- c. Present proposed Development Principles and a Demonstration Plan to guide next steps in the development and engagement process; and
- d. Recommend an open approach to obtain market intelligence regarding the development of the initial phase of housing development on the site.

2. Background

2.1 In November, 2020 Regional Council endorsed a Master Housing Strategy (the "Strategy"). One of the key components of the Strategy is to identify development opportunities, incentives and partnerships to increase the supply of affordable, community, supportive and transitional housing across the region. The Strategy includes a commitment to review public lands and their potential social and community benefits.

2.2 In line with At Home in Durham, the Strategy aims to improve affordability and access to housing with and without supports, protect the existing affordable housing supply, encourage housing diversity, and build capacity in the housing system. Expected outcomes from the Strategy includes:

- a. The initiation of 1,000 new affordable housing units by 2024;
- b. Improved readiness for provincial and federal funding announcements;
- c. Establishing a shovel-ready portfolio of potential projects aligned with the affordable housing needs of our communities;
- d. Sustainable investment strategies to support new affordable rental development and the preservation and growth of community housing;
- e. Improved coordination with all housing partners including area municipalities, private developers and non-profit providers to address Regional needs.

2.3 The Ritson School site, together with lands owned by the Durham Regional Local Housing Corporation (DRLHC) and other Region-owned lands form part of a portfolio of underutilized sites where affordable housing, revitalization and community building objectives can be realized. On the Ritson School site, many Regional objectives can be advanced through staged redevelopment:

- a. Providing new affordable housing;

- b. Providing improvements to the public realm through streetscape and open space improvements;
 - c. Providing opportunities for new community and public services;
 - d. Improving placemaking through adaptive reuse of a designated heritage building together with public realm improvements;
 - e. Providing new sustainable buildings.
- 2.4 Located in Central Oshawa, the Ritson School site is 2.1 hectares (5.2 acres) in size, and is within one of seven Health Neighbourhoods (Area O3 – Downtown Oshawa), identified by the Durham Region Health Department as an area requiring focus to build on health and well-being. The health indicators that warranted its inclusion as a Health Neighbourhood include:
- a. A greater incidence of female lone-parent families;
 - b. A greater percentage of seniors who live alone;
 - c. A higher percentage of dwellings in need of major repairs;
 - d. A higher percentage of the population spending more than 30% of their income on shelter costs;
 - e. A higher percentage of children in low income households;
 - f. A higher percentage of low income households;
 - g. Higher levels of unemployment.
- 2.5 The community has a high rate of core housing need. The Region purchased the site from the Durham District School Board at a cost of \$7,790,000 in 2022 as a strategic opportunity to provide sustainably built, mixed income, mixed-use housing with community services and supports.
- 2.6 The delivery of affordable housing by unlocking opportunities for additional housing supply is a priority for all levels of government:
- a. The Federal Government is calling on all levels of government, including private and non-profit sector, to unlock at least 3.87 million new homes across Canada by 2031. The 2024 Federal Budget contains a host of new programs, measures and incentives that target the delivery of new affordable housing including converting public lands to housing and building homes on public land, taxing vacant lands to incentivize construction, launching a new Apartment Construction Loan Program, topping-up the Housing Accelerator Fund, introducing a new Canada Housing Infrastructure Fund to accelerate the construction and upgrade of housing-enabling water, wastewater, stormwater, and solid waste infrastructure that will directly enable new housing supply and help improve densification, scaling up modular housing, allowing higher density housing near transit stations, accelerating work on Indigenous housing and numerous other measures.
 - b. The Province has prioritized housing delivery through various policies and legislative approaches. The province has stated the overall goal of

delivering 1.5 million homes by 2031, to be achieved by assigning municipal housing targets to 29 of Ontario's largest and fastest growing municipalities. Accordingly, on February 6, 2023, Oshawa Council pledged to facilitate the construction of 23,000 new homes by 2031 in order to meet the Provincial target.

In addition, the 2024 Ontario Budget includes measures that will increase housing supply, including the establishment of a new Municipal Housing Infrastructure Program to support core infrastructure projects that enable housing for communities, the introduction of a Housing-Enabling Water Systems Fund, returning surplus properties into productive use in support of government priorities such as attainable housing and other social infrastructure, and establishing a new provincial policy framework that sets out best practices for municipalities to implement a Vacant Home Tax.

Most recently, measures introduced through Bill 185, include a new Minister's Zoning Order framework, the elimination of minimum parking standards in Major Transit Station Areas, regulations for additional dwelling units and other matters.

- c. In May of 2023, Regional Council adopted a new Regional Official Plan ("Envision Durham"). The final approval of the new Regional Official Plan is pending Ministerial approval. A draft decision was issued by the Ministry of Municipal Affairs and Housing on May 6, 2024 presenting draft modifications. None of the proposed modifications would affect the Ritson School site or its location within a "Protected Major Transit Station Area" (PMTSA).

Envision Durham promotes an "intensification first" approach to development, infrastructure investment, and region-building by placing an emphasis on optimizing the use of existing land, infrastructure capacity and investment. Within the City of Oshawa, 50% of new growth (22,950 new housing units) is forecast to be developed through intensification by 2051. Envision Durham's policies pertaining to affordable housing:

- require that at least 35% of all new residential units created in Strategic Growth Areas to be affordable to low- and moderate-income households (policy 3.1.21);
- encourage affordable housing, including medium and high-density apartments in areas well served by local amenities including transit, schools and parks (policy 3.1.22); and
- encourage reduced parking standards to support the delivery of affordable housing, including purpose-built rental housing (policy 3.1.23).

Along with Regional Council's commitment to affordable housing delivery through the Master Housing Strategy, local residents and stakeholders

have identified housing affordability as a key issue through consultation on Durham Region's new Strategic Plan.

- d. In May, 2024 the City of Oshawa released a Discussion Paper as part of the launch of the City's Official Plan Review. The Discussion Paper acknowledges the housing crisis that has been declared in Ontario, and that housing costs have increased dramatically. The City's Official Plan Review will ensure that local planning policies encourage greater housing diversity and tenure, including addressing the missing middle, the promotion of more affordable housing options and directing land to be used more efficiently.

3. Previous Reports and Decisions

- 3.1 On November 27, 2020 Regional Council approved a Master Housing Strategy, to operationalize At Home in Durham, the Durham Housing Plan 2014-2024 ([2020-COW-27](#)).
- 3.2 On June 22, 2022 Regional Council approved financing for site investigation work for restoration and redevelopment at 300 Ritson Road South ([#2022-COW-18](#)).
- 3.3 On April 26, 2023 Regional Council endorsed the Durham Standard for all new building construction and applicable renovation projects delivered by or for the Regional Municipality of Durham. ([#2023-COW-18](#)).
- 3.4 On May 17, 2023 Regional Council declared the new Regional Official Plan "Envision Durham" forms Regional Council's long-term strategy for guiding and integrating growth management, development, land use, infrastructure and service planning and passed By-law 38-2023 adopting the new Regional Official Plan for Ministry approval ([#2023-P-15](#)).
- 3.5 On May 29, 2024 Regional Council endorsed the 2024 Durham Transit Oriented Development (TOD) Strategy as a toolbox of common reference points in planning and design TOD Places in Durham Region; and that the TOD Guidelines that have implications on designing and constructing Regional infrastructure be considered as part of the future annual business plans and budget process ([#2024-P-10](#)).

4. Community Needs Assessment

- 4.1 Following the Region's purchase of the Ritson School site in 2022, opportunities for new residential development, along with community programs and services was explored. Public consultation was undertaken to identify the nature and types of services and programs that could be offered while informing the delivery of new housing.
- 4.2 A Community Needs Assessment (CNA) was prepared by Smart Density and LURA, supported by a Market Assessment prepared by Parcel to identify current

and future needs of residents, and market conditions to inform future revitalization and renovation initiatives (See Attachment #1).

4.3 The CNA recommends the following:

- a. There is a need to address concerns with housing affordability and attainable housing. Single or 2-bedroom housing units in conjunction with support programs should be considered.
- b. There is a need to improve access to physical and mental healthcare. Providing a variety of physical and mental health supports is recommended. A hub model where multiple uses are consolidated in a single floor or building should be considered.
- c. There is a need to provide support services for youth and sole caregiver families. Program options that offer childcare or educational or recreational programs for youth should be considered.
- d. There is a need to assess and improve ongoing access to community programs and services. Educational, training, or recreational programs accessible to people of different skills, abilities, and backgrounds are recommended.
- e. There is a need to support services for seniors. Recreational or drop-in programs for seniors should be considered.
- f. There is a need to support continued reconciliation in partnership with Indigenous peoples. Regional staff have already begun discussing and coordinating with Indigenous groups to provide Indigenous-led programs on the site.
- g. There is a need to address the impacts of population growth due to the future Central Oshawa GO Station. The design of the site should consider flexible spaces that can be used for a variety of programs and uses that can best address the changing population and provide opportunities for placemaking without requiring extensive modification.
- h. There is a need to protect and provide parks and open space. A design that can maximize both floor space and open space on the site is desirable to provide outdoor programming and open space.
- i. A mixed-income, mixed-tenure model should be considered for housing to improve the financial feasibility of the subject site and reduce the potential for creating social barriers.
- j. A partnership with both a private-sector partner and one or multiple non-profit organizations for housing could be considered for development and affordable housing operations.
- k. A recreational facility, if feasible, could be considered to best meet recreational needs and broaden the range of programs and training that could be provided. This should be considered should it be eligible to receive funding from the Canadian Infrastructure Program.

4.4 A Market Assessment completed as part of the CNA highlights the need for new targeted affordable rental housing, in light of higher forecasted growth rates and higher forecasted population diversity. In order to preserve conditions for market

feasibility, it is necessary to ensure an appropriate balance of market housing with affordable and below market housing together with community servicing uses.

5. Policies Shaping Future Development

- 5.1 Envision Durham includes the site within a designated PMTSA. PMTSAs allow for a range of uses including medium and high-density residential uses, mixed-use development, commercial and retail uses, recreational and community amenities such as parks, urban squares and trail systems generally within walking distance (approx. 500 metres) from a Commuter Station (i.e. the future Central Oshawa GO Station).
- 5.2 On May 29, 2024, Regional Council endorsed the 2024 Durham Transit-Oriented Development (TOD) Strategy as a toolbox of common reference points in the process planning and designing TOD Places in Durham. The Oshawa PMTSA is one of the highest priority TOD Places. The document includes TOD Guidelines pertaining to mobility, public realm, land use, built form, parking management and design and station design.
- 5.3 The City of Oshawa Official Plan designates the site at 300 Ritson as Residential within its Downtown Main Central Area Boundary, allowing a range of medium to high density residential uses, supporting densities of between 30 to 300 units per hectare. The area is to develop generally at a smaller scale than the Downtown Oshawa Urban Growth Centre. Development is to support an overall long-term density target of at least 75 residential units per gross hectare (30.35 residential units/gross ac.) and a Floor Space Index of 2.5.
- 5.4 Within the Downtown Main Central Area, a wide variety of high-rise and mid-rise development is permitted. Some low-rise development (e.g., ground-related multiple attached dwellings) is to be generally intensive and compact and in transitional locations next to existing lower-density areas or where opportunities for intensification are present. Buildings at corner locations should generally be higher than buildings in mid-block locations.
- 5.5 The City's Zoning By-law 60-94 zones the site as R2/CIN (R2 Residential Zone and Community Institutional Zone). An amendment to the City's Zoning By-law is required to enable redevelopment envisioned for the site.

6. Central Oshawa Major Transit Station Area Study

- 6.1 Design work for the future GO East extension along the existing CP rail line to Bowmanville is underway. A new GO Rail Station is planned at 500 Howard Street, south of Cowan Park between Simcoe Street and Ritson Road. The new GO Station will be within 500 metres of the subject site, or about a 9 minute walk. The Ritson School site is within the Study Area and PMTSA boundary.
- 6.2 In September 2021, Oshawa City Council endorsed the Terms of Reference for an Integrated MTSA Study for the Central Oshawa Major Transit Station Area. As

noted above, MTSA's are areas where higher density, mixed use, walkable, transit-oriented development is planned.

- 6.3 The Study is developing a Land Use and Transportation Plan, and Environmental Study Report for the Central Oshawa MTSA, and assess transportation requirements within and in the vicinity of the Study Area.
- 6.4 Oshawa's consultant prepared three alternative land use scenarios for evaluation (see Attachment #2). The City's three Land Use Alternatives within the MTSA Study as they affect the subject site are described as follows:
- a. Land Use Alternative 1: provides for "Medium Density I Residential" of 150-300 people and jobs per hectare on the subject site, with "Medium Density II Residential" of 300-600 people and jobs per hectare along Olive Avenue to the south, and at the Olive/Ritson intersection;
 - b. Land Use Alternative 2 provides for "Medium Density II Residential" on the subject site as well as along Olive Avenue to the south and at the Olive/Ritson intersection;
 - c. Land Use Alternative 3 provides for "Medium Density I Residential" on the subject site, along Olive Avenue and at the Olive/Ritson intersection.
- 6.5 In September 2023 following the examination of three land use alternatives, Oshawa Council selected Alternative 3 for further evaluation which projected 25,000 total homes (with 51,000 residents and 8,500 jobs) within the Study Area. The City will use Alternative 3 as a base case for developing the preferred solution for a Land Use Plan.
- 6.6 The City's report indicates that redevelopment of the MTSA should be transformational, representing a change in built form and density covering the majority of the MTSA footprint.
- 6.7 The subject site is on the edge of the MTSA with frontage onto Regional arterial roads. Since the City's Official Plan notes that buildings at corner locations should generally be higher than buildings in mid-block locations, it is appropriate that portions of the site with arterial frontage be considered for higher densities, while still providing for compatible built form.
- 6.8 City staff are considering refinements to the Land Use Alternative before a recommended final alternative is presented to Oshawa Council for endorsement. Given the location within the PMTSA, proximity to the future GO Station, arterial frontage, and development potential, Regional staff are of the view that the southerly section of the site and the neighbouring Region-owned lands along Olive Avenue should be included within the Medium Density II Residential Mixed Use category. This will reflect the opportunity for non-residential and community uses within the ground floors of future buildings, while focusing higher density at the intersection.

- 6.9 The Draft Land Use Plan within the Central Oshawa MTSA Study illustrates a “Park Contribution Area” and “Active Non-vehicle Linkages” on the subject site. New development should provide meaningful and readily accessible public open space, while also improving pedestrian connectivity from adjacent neighbourhoods to Ritson Road.
- 6.10 The Central Oshawa MTSA Study includes a set of draft Urban Design Guidelines to encourage development within the MTSA. Although not prescriptive, the guidelines offer a comprehensive vision and a helpful guide for informing redevelopment, including the following elements:
- a. Built Form Guidelines: including approaches to massing, context, ground floor treatments, facades, and approaches to residential uses;
 - b. Site Planning and Landscape Guidelines: including guidelines for Large Site Developments (greater than 0.4 hectares);
 - c. Landscape Design Guidelines: including material selection and application of Crime Prevention Through Environmental Design (CPTED) principles;
 - d. Public Realm Guidelines: including design of shared spaces, local streets, and open spaces.
- 6.11 The Central Oshawa Integrated Major Transit Station Area Study will form the basis for the preparation of an official plan amendment to the City of Oshawa’s Official Plan to implement the recommendations of the Study. Currently, the Region is the approval authority for official plan amendments of this nature.
- 6.12 Comments on the Study as they apply to the Ritson School site were filed in advance of the City’s commenting deadline (see Attachment #3).

7. Durham Standard

- 7.1 In April 2023, Regional Council endorsed the Durham Standard as the Region’s standard for all new building construction and applicable renovation projects delivered by or for the Regional Municipality of Durham (Report #2023-COW-18). The Durham Standard (Standard) is a Region-specific standard that aligns construction to the goals and objectives of the Region’s Strategic Plan.
- 7.2 The Standard includes sustainability and resilience requirements include minimum standards for indoor air quality, using low emitting materials in construction of interiors, increasing daylight penetration, and increasing the amount of space with direct views to the outdoor environment. The Standard also requires building design to consider the impacts on ecological systems, the use of green/cool roof and paving alternatives, tree planning and biodiversity, bird friendly glazing, and dark sky friendly lighting.
- 7.3 The Standard also considers off-site implications to development, to improve connectivity in the community, encourage active transportation, and reduce community wide GHG emissions. These measures include considering multimodal infrastructure strategies and Transportation Demand Management

(TDM) measures to reduce single occupancy vehicle trips. Appendix C to the Durham Standard includes a Sustainability and Resilience Design Checklist, which highlights design features, targets and implementation options.

8. The Ritson School

- 8.1 The Ritson School building was named after John Ritson, an early settler and Oshawa's first schoolteacher, who owned the land upon which the school sits. The original building was constructed in 1923, and a six-room addition was constructed in 1928. Further additions were constructed in the 1940s and 1970s. The school was closed by the Durham District School Board in 2012.
- 8.2 In September 2019, the City of Oshawa passed By-law 100-2019 designating the Ritson Public School to be of cultural heritage value and interest under Part IV of the Ontario Heritage Act. The property's cultural heritage value results from its historical significance as a cultural heritage educational institution and as a landmark within the community. The 1923 and 1928 architectural styles merited the heritage designation.
- 8.3 As a landmark and signature feature, the preservation, sensitive restoration and adaptive reuse of the existing heritage school building is of paramount concern. The open space in front of the building can be framed by complementary buildings of compatible scale, offering tremendous placemaking potential.
- 8.4 A Property Condition Assessment has been undertaken to ascertain the feasibility of converting the former school into a mixed occupancy, net-zero residential and non-residential building. Due to its age, various repairs and improvements would be required to the existing building, including:
- Asbestos and lead abatement
 - Repair and restoration of face brick and roofs
 - Replacement of existing windows and new insulation
 - Repair and restoration of the main entrance and vestibule
 - Retrofit of building interior walls, floors and finishes while maintaining items of heritage concern
 - Structural repairs
 - Removal and replacement of washrooms in keeping with future occupancy
 - New domestic hot water plant, plumbing and drainage systems
 - New heating and cooling systems
 - New electrical, lighting, power and alarm systems
 - Achieving AODA compliance with a three-storey elevator
- 8.5 The school building is not currently suitable for re-use. Architectural, engineering, structural, heritage and other design work needs to be completed before detailed recommendations on future building programming, layout and reuse can be presented.

- 8.6 Interactive community engagement is recommended with a focus on public outdoor elements on the site, including the area in front of the school, publicly accessible outdoor elements behind the school, placemaking approaches and heritage conservation.

9. Development Principles

- 9.1 Using the policies of the Region's Strategic Plan, the Master Housing Strategy, the Durham Regional Official Plan, the results of the Community Needs Assessment, the Regional TOD Guidelines and the Urban Design Guidelines prepared in support of the Central Oshawa MTSA study, a series of development principles have been prepared to guide future development of the site (see Attachment #4).
- 9.2 The development approach for the site deals with distinct areas, shown on the attached Demonstration Plan (see Attachment #5):
- a. The location behind the school is shown as Block 1 which would be predominantly residential. Building heights would be between four and six stories in height illustrating a mix of townhouses and apartment units. On-site publicly accessible open space would be provided in combination with land to be included immediately west of the school building on Block 2.
 - b. A separate Block is envisioned for the school building which would include buildings at a scale complementary to the school building. The concept would create a more formal pedestrian oriented open space area in front of the school building, bracketed by new buildings facing the open space area. Non-residential uses would be provided on the ground floors of buildings that are directly accessible by pedestrians along Ritson Road.
 - c. The south end of the school site and neighbouring Region-owned lands forms a third block. One building is illustrated on the west side with frontage onto Olive Avenue. The opportunity for a ten-storey building containing approximately 150 units is also shown. A future development block is shown at the Ritson/Olive intersection. Land assembly is necessary to create a viable development parcel.
 - d. Each Block would proceed as a distinct phase.

Focus on Block 1

- 9.3 Phase 1 of development is a rectangular 0.6 ha (1.5 ac.) area west of (behind) the existing school building. This Block has 105 metres (345 ft.) of frontage onto Huron Street, a City of Oshawa local road, and is 57 metres (187 ft.) in depth.
- 9.4 Block 1 can accommodate approximately 160 housing units, including townhouses and low to mid-rise buildings ranging from four to six storeys. Buildings should have a mix of 1, 2 and 3 bedroom units while also accommodating some at-grade non-residential uses, and on-site publicly accessible open space. A single level of underground parking has been included

in this concept, as soil remediation/removal will be required for development to proceed. Other components include:

- a. A public sidewalk on the east side of Huron Street
- b. A new local road along the north side of the site connecting to Huron Street, Clarke Street and Ritson Road South
- c. Front facing architecture along all building faces
- d. Parking and servicing access that do not face neighbouring residents;
- e. Ensuring that all functional components of Phase 1 are wholly included in Phase 1 so that future phases can also achieve their potential (including parking and open space requirements).

10. Towards a Competitive Process

- 10.1 The Region has positive experience seeking and awarding proposals with private and non-profit housing providers that optimize the delivery of new affordable housing. For example, the Region's At Home Incentive Program requests applications through an open and transparent process with special focus on affordable rental housing. Based on applicant responses to clear and predetermined criteria, an interdepartmental staff committee evaluates submissions and recommends eligible projects for consideration by Regional Council.
- 10.2 Staff have reviewed similar examples from other jurisdictions where municipal land has been deployed to accelerate affordable housing, provide public realm improvements, and develop mixed-income, mixed-use transit-oriented communities (an example includes the City of Toronto's Housing Now initiative, implemented through CreateTO).

Approach to determine the Optimal Procurement Approach to Redevelopment

- 10.3 Upon Council's authorization, staff will release a Request for Expression of Interest to obtain insights and market information from builders/developers with interest in the site and program. This process will be related to Block 1 (west of the school building) only.
- 10.4 The REI will be publicly posted and known interested parties will be advised of the Region's interest in their non-binding participation in the confidential submission of information. The REI will focus on five key questions to seek advice on a potential long term land lease or a traditional design-build-operate business model:
 - a. Is there an interest in development within a long-term land lease arrangement within the Durham/Oshawa residential rental market?
 - b. Is there an interest in undertaking/completing the development approvals process on the basis of the Development Principles in Attachment 4?

- c. Is there sufficient interest from companies with development and operational/property management expertise to undertake the affordable and mixed market development model on the site?
- d. Is there sufficient expertise in the planning, development and construction of modular housing?
- e. What design features under the Durham Standard are the most cost effective in delivering GHG reductions while enabling affordable housing and long-term project feasibility under a mixed-income long term lease model? Are there design features that are prudent or appropriate that are not otherwise captured?

10.5 The REI will provide valuable insights regarding the interest in this development opportunity, including any market barriers and the willingness of interested parties to finalize the necessary work to achieve the appropriate zoning and development approvals. Using the insights, recommendations regarding the next steps to procure competitive proposals and secure needed funding will be presented to COW and Council in the fall of 2024.

11. Financial Implications

11.1 In order to advance predevelopment due diligence and municipal planning processes for the redevelopment of the Ritson school site, staff will be working within the project budget to initiate the commencement of required studies, such as traffic impact, heritage, functional servicing and geotechnical testing.

12. Relationship to Strategic Plan

- 12.1 This report aligns with/addresses the following strategic goals and priorities in the Durham Region Strategic Plan:
- a. Goal #1 – Environmental Sustainability
 - 1.1 - Accelerate the adoption of green technologies and clean energy solutions through strategic partnerships and investments.
 - b. Goal #2 – Community Vitality
 - 2.4 - Build a healthy, inclusive, age-friendly community where everyone feels a sense of belonging.
 - c. Goal #5 – Service Excellence
 - 5.1 – Optimize resources and partnerships to deliver exceptional quality services and value.

13. Conclusion

13.1 The Ritson School site is a unique opportunity for new affordable and mixed income housing, placemaking and transit-oriented development where built and cultural heritage can be complemented with new, sustainable buildings. The site

will evolve into a vibrant, complete community that is walkable, inclusive, well-connected, age-friendly and will have a mix of housing options.

- 13.2 Staff recommend initiating an open and competitive process to start needed affordable housing for Block 1 with a non-binding REI to gauge the interest in the redevelopment and property management opportunity, subject to the necessary zoning and site plan approvals. Community engagement for future development will form part of the required future development approvals process.
- 13.3 With development principles and Demonstration Plan now prepared, it is appropriate to undertake the early-stage development related studies and additional engagement with community and stakeholders.

14. Attachments

- Attachment #1 Ritson School Site Community Needs Assessment
- Attachment #2 Excerpt: Land Use Alternative from the Central Oshawa Major Transit Station Area Study
- Attachment #3: Letter to the City of Oshawa dated May 17, 2024
- Attachment #4: 300 Ritson Development Principles
- Attachment #5: 300 Ritson Demonstration Plan

Respectfully submitted,

Original signed by

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Recommended for Presentation to Committee

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Chief Administrative Officer



300 Ritson Road South, Oshawa
Region of Durham

Community Needs Assessment Report

April 19, 2024

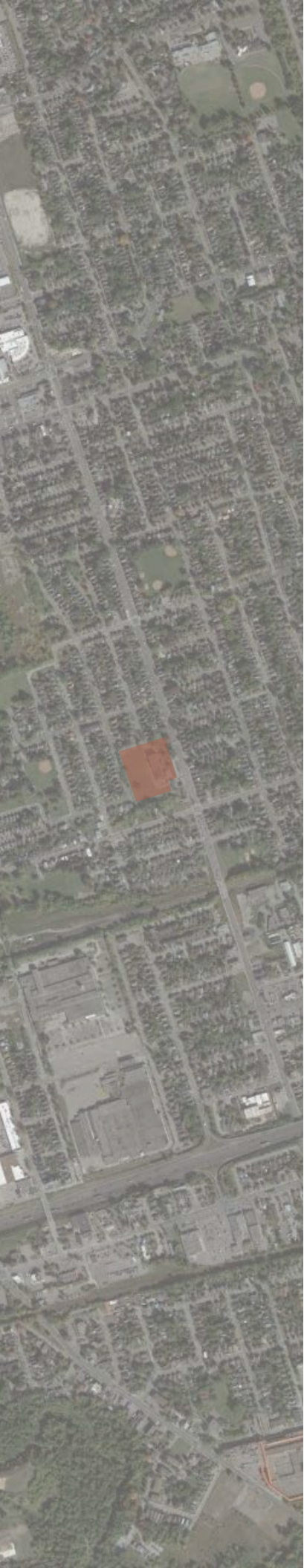


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1. Introduction

The 300 Ritson Community Needs Assessment sets out to identify the current and future needs of residents within Central Oshawa and its surrounding communities, in support of the 300 Ritson School Project.

The project entails the revitalization and renovation of the former elementary school building at 300 Ritson Road South, Oshawa (Subject Site) to serve as a hub for community programs and services designed to address the needs of the residents, agencies, City of Oshawa, and the Regional Municipality of Durham (Region). The project will also explore the potential for mixed-use, sustainably-built housing on the unused lands of the subject site and surrounding Region-owned lands.

This initiative aligns with the Region's commitment to expand access to affordable housing and community services across all eight local area municipalities. The project will also support the Master Housing Strategy approved by the Regional Council in 2020 which commits to the initiation of 1,000 new affordable rental or supportive housing units and to increase the supply of medium- to high-density housing across the Region of Durham.

In support of this endeavour, Smart Density, Parcel Economics, and LURA Consulting were engaged to complete a Community Needs Assessment which will solidify the objectives and outcomes of the 300 Ritson School Project and identify the paramount community needs that can be met on the subject site.

Acknowledging the considerable work completed in recent years to evaluate local issues, needs, and trends, this assessment analyzes existing information relevant to the local community. Its methodology encompasses statistical and data trend analysis, qualitative Community Engagement, and comprehensive geographical evaluation.

Approach and Methodology

The Community Needs Assessment approach and methodology uses a mixed method approach combining qualitative and quantitative analysis to help inform the planning of the restoration and redevelopment of Ritson School.

This will include a population and socio-demographic analysis, community asset mapping, public and stakeholder engagement, and research analysis of best practices.

Sources utilized in this report include:

- Primary data sets (e.g. Statistics Canada)
- Secondary data sets (e.g. Health Neighbourhoods Map Viewer, 211 Ontario Service Map Data)
- Research and evaluation reports (e.g. Preliminary Market Assessment Report, Parcel Economics)
- Community strategic and planning documents (e.g. Housing Strategy Reports)

Indigenous Acknowledgement

The Region of Durham exists on lands that the Michi Saagiig Anishinaabeg inhabited for thousands of years prior to European colonization. These lands are the traditional and treaty territories of the Nations covered under the Williams Treaties, including the Mississaugas of Scugog Island First Nation, Alderville First Nation, Hiawatha First Nation, Curve Lake First Nation, and the Chippewa Nations of Georgina Island, Beausoleil and Rama.

We honour, recognize, and respect Indigenous Peoples as rights holders and stewards of the lands and waters on which we have the privilege to live. In our efforts towards reconciliation, we continue to build and strengthen relationships with First Nations, as well as the large Métis communities and growing Inuit communities here in Durham. We commit to learning from Indigenous values and knowledge, building opportunities for collaboration, and recognizing that we are all connected.

1.1 Subject Site

300 Ritson Road South, Oshawa is located in Central Oshawa northwest of the Ritson Road South and Olive Avenue intersection. It is approximately 375 m from the future Central Oshawa GO Station or 11 minutes by foot.

The subject site currently contains the former Ritson School building, which was closed by the Durham District School Board in 2012. The site was subsequently purchased by the Region of Durham in 2022.

The subject site has a total area of 21,000 m² or 5.1 acres and a lot frontage of 126.5 m on Ritson Road South.



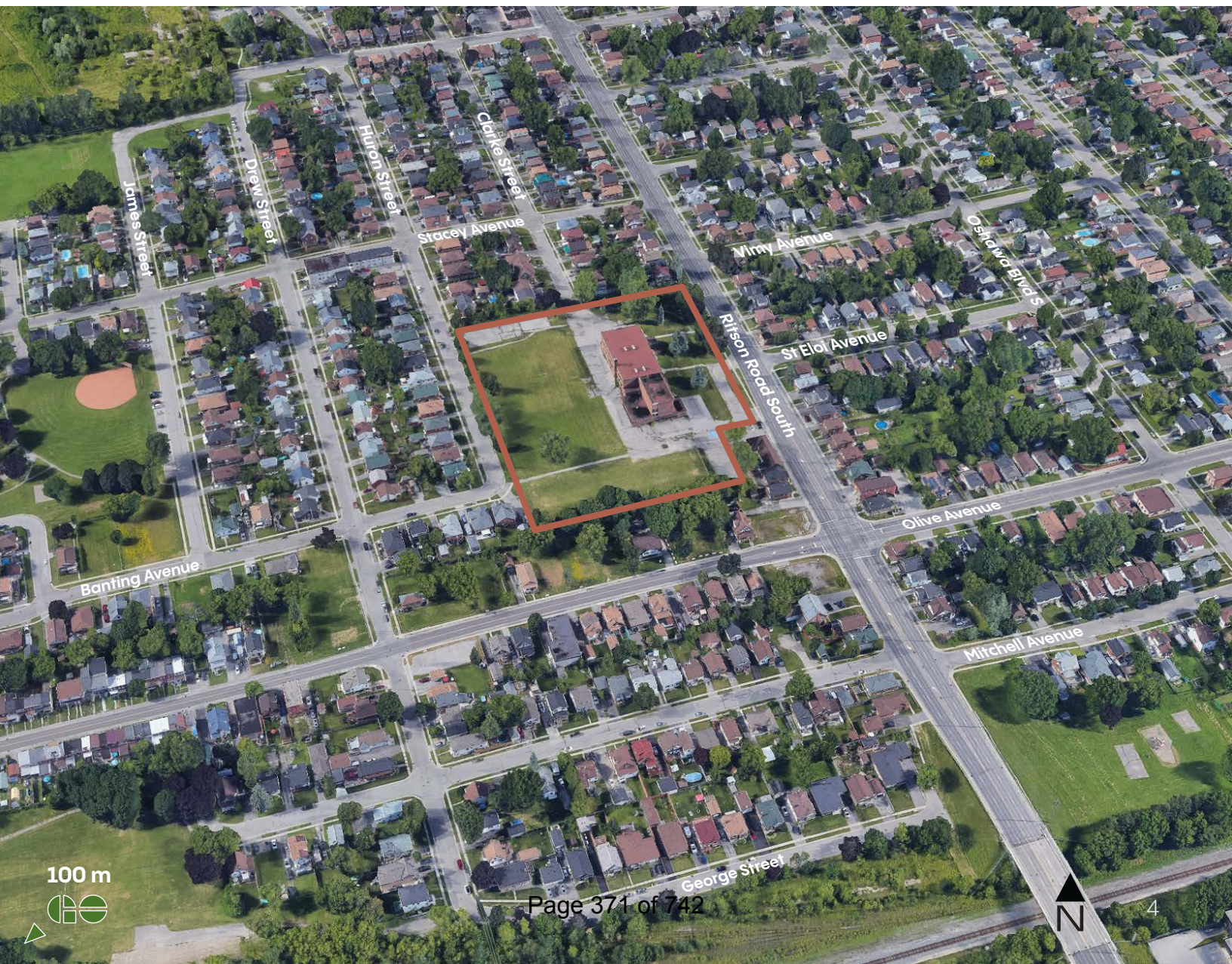
Legend



Subject Site



Future GO Station



1.2 Definitions

Capitation

A Healthcare Enrolment and physician compensation model.

Capitation is a payment provided based on a defined basket of primary care services provided to enrolled patients based on age and sex. Fee-for-service is paid for other services.

Examples of this model include family practice enrolment, otherwise known as enrolling with a Family Doctor in the form of a Family Health Network, Family Health Organization, or Family Health Team.

Core Housing Need

Core housing need refers to whether a private household's housing falls below at least one of the indicator thresholds for housing adequacy, affordability or suitability.

Per Statistics Canada, only private, non-farm, non-reserve and owner- or renter-households with incomes greater than 0 and shelter-cost-to-income ratios less than 100% were assessed for 'core housing need'. Non-family household with at least 1 maintainer aged 15 to 29 attending school were not considered to be in 'core housing need' regardless of their housing circumstances as attending school is considered a transitional phase and low incomes earned by student households are viewed as being a temporary condition.

Enhanced-Fee-For-Service

A Healthcare Enrolment and physician compensation model. Examples of this model include Walk-in Clinics or Independent Practices.

Family Health Team

A Healthcare practice model.

Family Health Teams are primary healthcare organizations that include a team of family physicians, nurse practitioners, registered nurses, social workers, and other professionals who work together to provide primary healthcare for their community. Family Health Teams may also provide primary care services to unique populations with specialized health needs.

Inadequate Housing

Reported by their residents as requiring any major repairs.

INSPIRE Primary Healthcare

A Ministry of Health-funded research project from Queen's University consisting of a network of primary care researchers, stakeholders, and knowledge users in Ontario.

Low Income Prevalence

The proportion or percentage of units whose income falls below a specified low-income line. Based on Low-income measure, after tax (LIM-AT). LIM-AT refers to a fixed percentage (50%) of median-adjusted after-tax income of private households.

Multigenerational Household

At least one person who is both the grandparent of a person in the household and the parent of another person in the same household or where there is at least one person who is both the child of a person in the household and the grandchild of another person in the same household.

No Primary Care

Not enrolled to a Patient Enrolment Model or had any primary care visits within or outside a Community Health Centre.

Not in a Primary Care Model

Not enrolled to a Patient Enrolment Model or actively registered as a Community Health Centre primary care client but had primary care visits within or outside a Community Health Centre.

Unaffordable Housing

Shelter costs more than 30% of total before-tax household income.

Unsuitable Housing

Not enough bedrooms for the size and composition of resident households according to the National Occupancy Standard (NOS), conceived by the Canada Mortgage and Housing Corporation and provincial and territorial representatives.

The NOS requires a maximum of 2 persons per bedroom, with the exception of a household of one individual living alone. The calculation is based on the composition of the household depending on marital or common-law status, age, and sex.

The NOS provides a common reference point and is not a rule, regulation, or guideline for determining if a given unit can be rented or occupied by a household.

2. Community Context

The subject site is located within the Central Oshawa neighbourhood which is generally bounded by King Street, Wilson Road South, Highway 401, and Oshawa Creek.

The neighbourhood encompasses some of Downtown Oshawa, providing for a mix of built forms in the northeast end of the community near King Street East. Central Oshawa will host the future Central Oshawa GO Station.

For the purposes of analyzing the community needs, Central Oshawa will be used to inform the study and analysis.

While the subject site will serve a broad community and population, understanding what community services and needs exist or are lacking in the immediate vicinity will provide a more detailed understanding of what services should be pursued on the subject site.

Central Oshawa borders the O'Neill, Donevan, Lakeview, and Vanier communities.

O'Neill: located in the middle of Oshawa, O'Neill encompasses a large portion of Downtown Oshawa with a mix of new and heritage buildings, as well as various recreation and commercial uses.

Donevan: a low-density neighbourhood close to the 401 with a green corridor running through its centre, providing park and recreation opportunities.

Lakeview: one of Oshawa's oldest neighbourhoods and located close to Lake Ontario. Lakeview Park provides recreation opportunities.

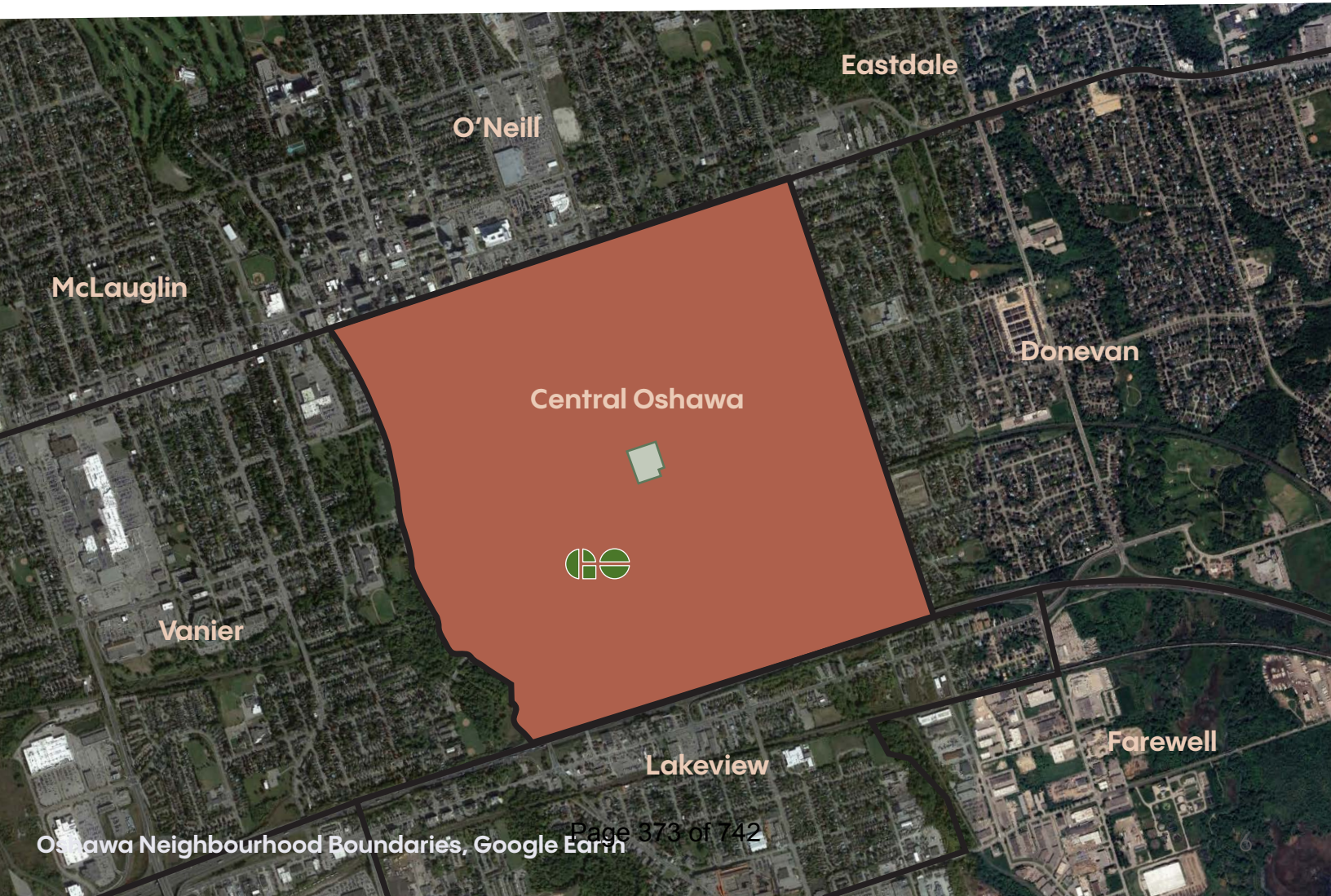
Vanier: home to the Oshawa Centre Shopping Mall, Vanier is a low-density neighbourhood with retail and recreation opportunities. Vanier will host the future Thornton Corners GO Station.

Legend

 Central Oshawa

 Subject Site

 Future GO Station






2.1 Population and Socio-Demographics

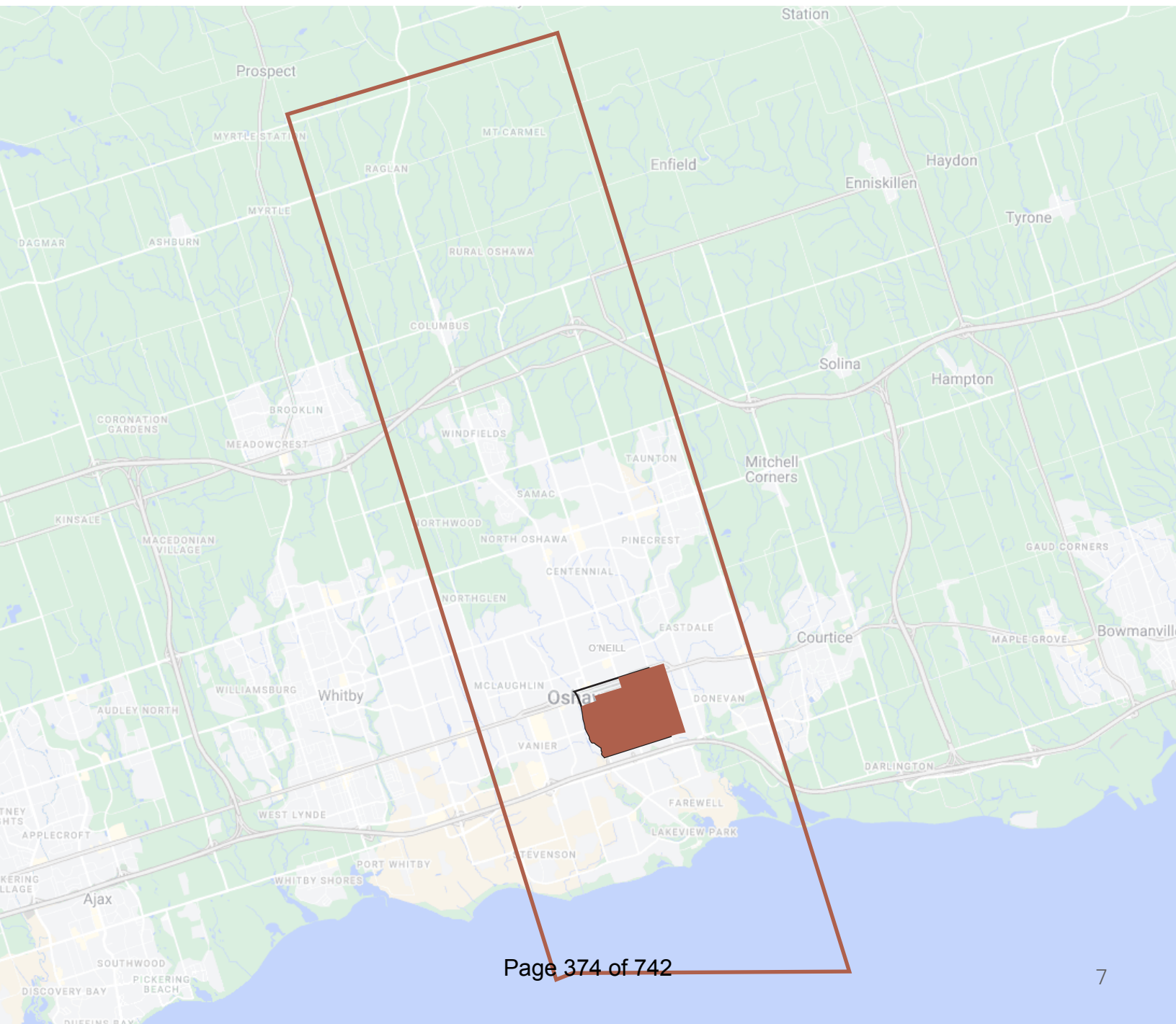
Data from the census tracts 5320005.00, 5320006.00, 5320007.00 for the Statistics Canada, 2021 Census of Population were used to analyze the population and socio-demographics of the community.


The boundaries of this census profile do not align with Central Oshawa's boundaries and do not represent its entirety. The census area is termed Area for the purposes of this report.


The census data for the Area is contrasted with the Oshawa Census Subdivision to identify how the Area compares to the broader City of Oshawa.


Legend


-  Area (Census Tracts 5320005.00, 5320006.00, 5320007.00)
-  Central Oshawa
-  Oshawa Census Subdivision



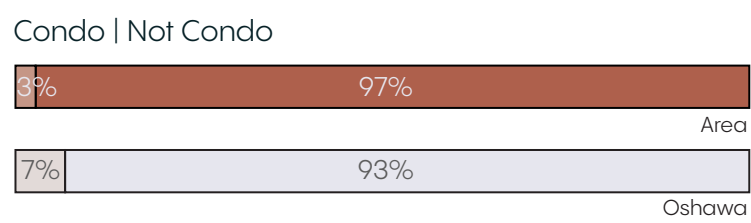
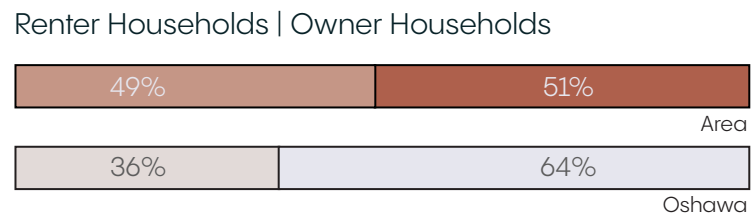
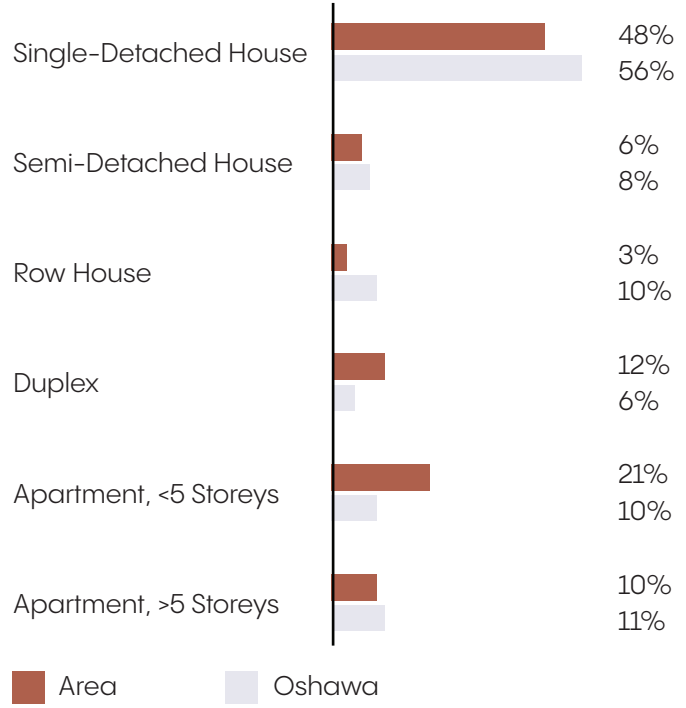
 Population	Area	Oshawa
Population	13,256	175,383
Population Change	+5.5%	+10%
Male	50%	49%
Female	50%	51%
Children and Youth (0-19)	20%	23%
Young Adults (20-39)	30%	28%
Adults (40-69)	39%	37%
Seniors (70+)	11%	12%


 Households	Area	Oshawa
Private Households	5,800	66,630
Household Size	2.3	2.6
Married or Common Law	43%	53%
Sole Caregiver Families	32%	24%
Multigenerational households	3.6%	4.9%

 Housing	Area	Oshawa
Renter Households	49%	36%
Core Housing Need	42%	36%
Unaffordable Housing	26%	24%
Unsuitable Housing	5%	4%
Inadequate Housing	6%	4%

 Income	Area	Oshawa
Average Income	\$41,413	\$48,960
Low Income Prevalence	18%	10%
0-17 Years	23%	13%
18-64 Years	15%	9%
65+ Years	25%	10%

Total Private Dwellings: 5,780



 Commuting	Area	Oshawa
Car, Truck, or Van	83%	88%
Public Transit to work	9%	6%
Walk to work	5%	3%
Bike to work	0.2%	0.2%
<30 minute commute	60%	57%
>1 hour commute	13%	15%

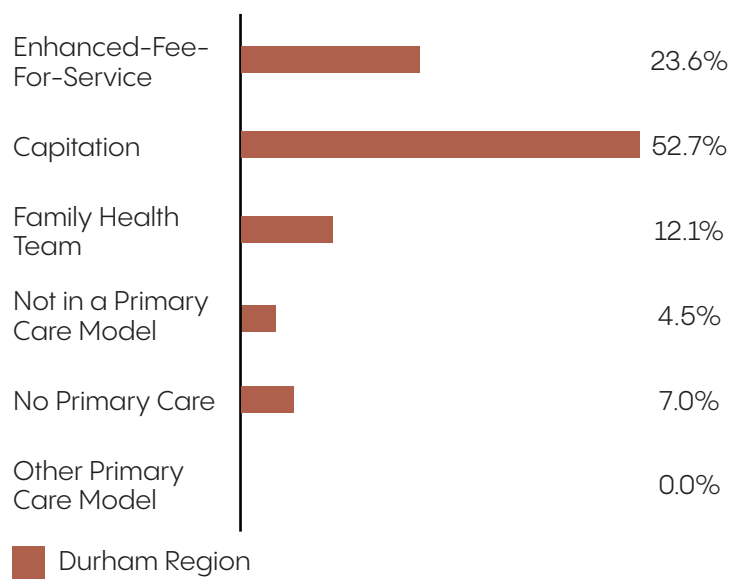
Mother Tongue	Area	Oshawa
English	85.4%	79.5%
French	1.7%	1.7%
Indigenous	0%	0%
Non-Indigenous	10.7%	15.4%
Highest Rate	Tagalog 1.3%	Urdu 1.5%
Second Highest Rate	Polish 1.2%	Tamil 1.2%
Third Highest Rate	Spanish 0.9%	Tagalog, Spanish 1%

Language Most Spoken at Home	Area	Oshawa
English	91.5%	87.8%
French	0.6%	0.7%
Indigenous	0%	0%
Non-Indigenous	5.6%	8.1%
Most Spoken	Polish 0.6%	Urdu 1%
Second Most Spoken	Spanish 0.5%	Tamil 0.9%
Third Most Spoken	Portuguese, Tamil 0.3%	Mandarin 0.6%

Ethnic or Cultural Origin	Area	Oshawa
Indigenous*	4.7%	3.5%
Non-Indigenous	95.3%	96.5%
Largest	English 25.8%	English 22.4%
Second Largest	Irish 21%	Irish 22.4%
Third Largest	Canadian 20.2%	Scottish 17.7%

* Combination of Statistics Canada Ethnic or Cultural Origin categories First Nations (North American Indian) and other Indigenous categories above 0.1%

Healthcare Enrolment Model



Additional Health Indicators available at:
<https://www.durham.ca/en/health-and-wellness/health-neighbourhoods.aspx>

Parks/Open Space	Ha
Open Space along creek	8.7
Chopin Park	3.5
Rotary Park (East of creek)	3
Eastview Park	2.6
Cowan Park	2.14
Michael Starr Trail	2.11
Bathe Park	1.5
Sunnyside Park	1.1
Memorial Park	1.08
Mitchell Park	0.6
Brick by Brick Park (East of creek)	0.58
Sunrise Senior	0.37
Centre Street Parkette	0.24
Huron Park	0.2
Howard Park	0.13
Elena Park	0.1
Tylor Park	0.1

Total Hectares 28.1

Parkland and Open Space % of Central Oshawa Surface Area 8%

Sources: Statistics Canada, 2021 Census of Population
 INSPIRE-PHC Primary Care Data Reports for Ontario Health Teams (OHTs), 2022
 mapOshawa

Key Findings of Existing Community

Key findings from the census data for the Area are summarized below. These existing conditions are paired with relevant trends anticipated due to the new GO Station coming to Central Oshawa.

Less Growth than Oshawa

The Area is currently home to some 13,255 residents, a 1.2% average annual increase since the 2016 Census. The latest average annual growth in the Area has been less than in the Main Central Area, the City, the Region, and Ontario.

More Young Adults than Oshawa

Overall, the population makeup of the Area is similar to the City of Oshawa. Despite this, there are fewer children and youth under 19 and more adults aged 20 to 69.

Smaller Households and Sole Caregiver Families More Common

The average household size in this Area is smaller than the City of Oshawa, with an average household size of 2.3. Of census families in private households, 32% are Sole Caregiver families which is significantly more than Oshawa.

Higher Low Income Prevalence among Youth and Seniors

The rates of low-income, after tax prevalence are particularly high among youth and seniors in the Area compared to the City of Oshawa. The average income for individuals aged 15 and over in the community is \$41,413 which is less than the Oshawa average.

Significantly More Renters

There is a significantly large portion of renters in the Area, with half of the households renting compared to 36% in Oshawa.

High Rates of Core Housing Need

Of all owner and tenant households in the Area, 42% are in core housing need living in either unaffordable, unsuitable, or inadequate housing, 6 percentage points more than the City of Oshawa.

Residents Work Nearby

The majority of the Area works within a 30-minute commute. About 14% of commuters take either public transportation, walk, or cycle to work.

Anticipated Trends

Per a Preliminary Market Assessment completed by Parcel Economics for the subject site (Appendix A), the following forecasts can be anticipated based on precedent GO Station Areas.

Higher Population Growth

GO Station Areas have experienced significantly higher population growth than their respective cities.

Increased Presence of Young Adults

The Area already has a smaller percentage of children and youth under 19 and more young adults in their 20s and 30s compared to Oshawa. This trend is expected to continue.

Reduced Household Size

GO Station Areas have a higher proportion of 1- and 2- person households and experience a heightened growth in apartment units. The average household size of the area may continue to be less than Oshawa.

Increased Income

The average income in GO Station Areas of precedent examples exceed the average income growth of the surrounding city.

Increased Rental

Those residing near a GO Station are more likely to rent. The share of renters in the Area is expected to increase.

2.2 Existing Social Services, Programs, Facilities

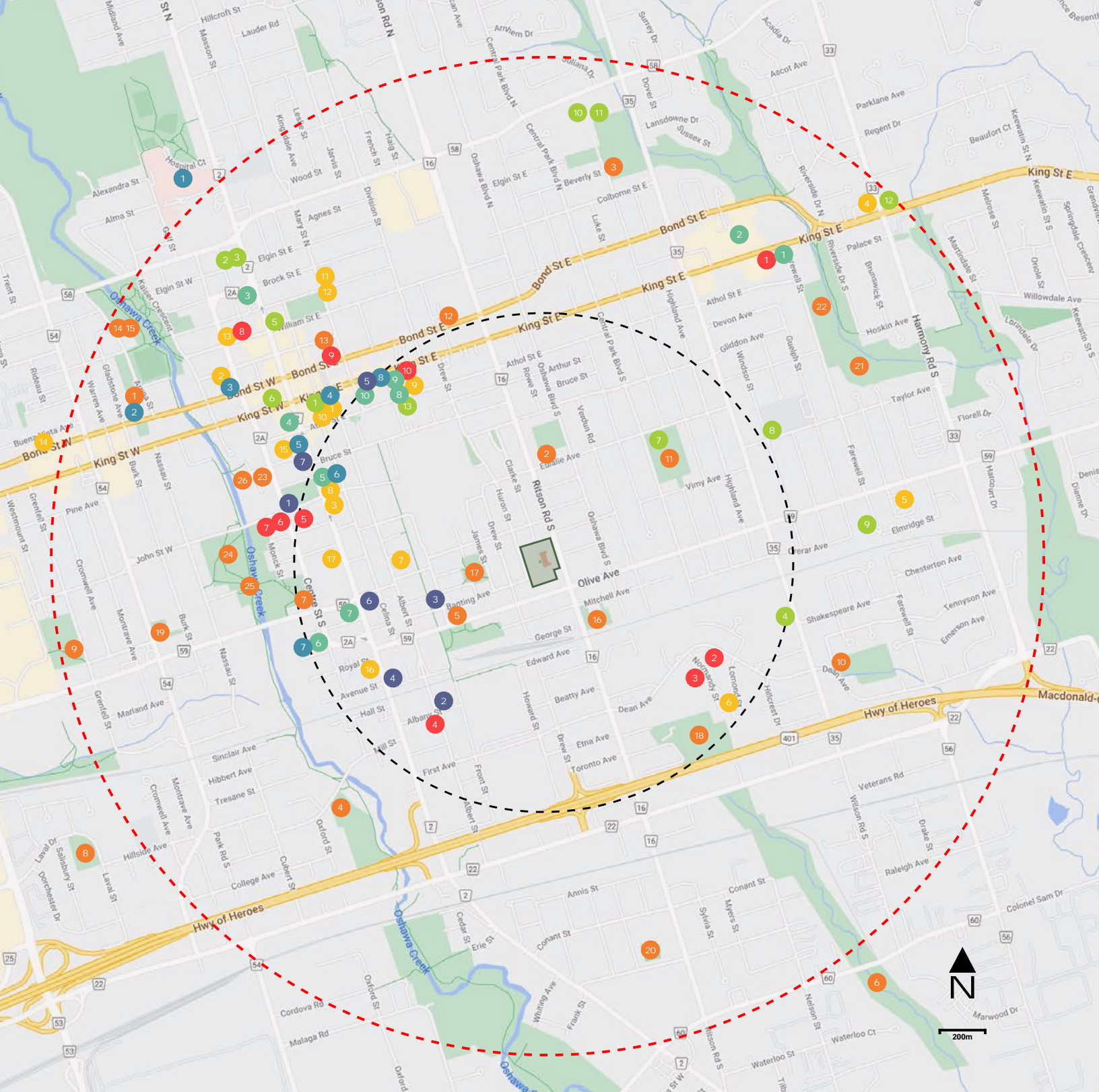
To gain a preliminary understanding of the current programs and services near the subject site, LURA Consulting mapped existing social services, programs, and facilities within an approximate 2 km radius of the subject site. Health Neighbourhoods' interactive map data and 211 Ontario Services Map data were used to identify currently known community assets.

This map was utilized for discussion purposes during Stakeholder Workshops and has been updated based on additional suggestions provided by community partners.

Community assets are categorized into the following 7 categories:

Asset Type	Central Oshawa	Within 2 km Radius
Seniors Residence Public, Non-profit, and privately operated Senior Residences	7	10
Recreation Parks and Community Centres, excluding parkettes	9	26
Community Programs Social Services that host programs such as food banks	7	7
Social Housing and Housing Support Community Housing, Social Services, and Supports	9	17
Child care and Education Child care Centres, Learning Centres, Preschools, and Schools	4	13
Healthcare Hospitals, Urgent Care, Public and Private Health Clinics and Services	7*	10
Mental Healthcare Counselling and Support Centres	4	8

*Excludes the Oshawa Clinic Group which is expected to move to relocate to Whitby in 2024.



Legend

- Subject Site
- 1 km Radius
- 2 km Radius
- Seniors Residence
- Recreation
- Community Programs
- Social Housing and Housing Support
- Children and Early Education
- Healthcare
- Mental Healthcare

Sources: Regional Municipality of Durham Health Neighbourhoods in Durham Region Map, Ontario 211, LURA Consulting

Asset Map List

Seniors Residence

1. Cedarcroft Place
2. Dean Heights
3. Normandy Hall
4. Legion Manner Branch 43
5. Parkview Place
6. Sunrise Place Co-op
7. Sunrise Seniors Place
8. Faith Place
9. The Carriage House Retirement Residence
10. King Charles Court

Recreation

1. Valleyview Community Centre
2. Bathe Park and Community Centre
3. Woodview Community Centre
4. Storie Community Centre and Park
5. Cowan Park
6. Conant Park Recreation Facility
7. Rotary Park Recreation Facility
8. Laval Park
9. Radio Park Recreation Facility
10. Kingside Community Centre
11. Eastview Park and BGC Durham
12. Oshawa Curling Club
13. Durham YMCA
14. Childrens Arena
15. Kinsmen Stadium
16. Mitchell Park
17. Sunnyside Park and Community Centre
18. Chopping Park
19. Rundle Park and Community Centre
20. Harman/Cordova Community Centre
21. Knights of Columbus Fields
22. Farewell Park
23. Brick by Brick Park
24. Joseph Kolodzie Oshawa Creek Bike Path
25. Robert McLaughlin Gallery
26. Oshawa Public Library McLaughlin

Community Programs

1. Oshawa Senior's Community Centre
2. Gate 3:16 Outreach Centre
3. The Refuse Youth Outreach Centre
4. Settlement House
5. Community Care Durham
6. Durham Outlook for the Needy
7. Oshawa and Durham Region Metis Council

Social Housing and Housing Support

1. Durham Region Non Profit Housing Corporation
2. John Howard Society
3. Cornerstone Community Association
4. Harmony-King Co-op
5. Linden Poplar
6. Nevis Normandy Christine
7. Oshawa Creek Co-op
8. Cornerstone Community Association Mens Housing
9. King Charles Court
10. CY Elsey Building
11. New Hope Dwellings
12. Faith Place
13. Gateway Chambers
14. John Howard Society
15. Back Door Mission
16. The Denise House
17. YWCA Durham

Child care and Education

1. Magic Pencils Learning Centre
2. CT Family Learning Centre and Montessori School
3. Durham Family YMCA Child Care Centre
4. SKD Bilingual Child Care
5. DMS Montessori Preschool and Day Care
6. EYES Canada Child care Centre Oshawa 22
7. Boys and Girls Club of Durham
8. Clara Hughes Early Learning and Child Care Centre
9. Evangel Day Care Centre
10. Coronation YMCA Before and After Care
11. Great Beginnings Montessori School
12. Edu Kids Child Care
13. Ontario Tech University

Healthcare

1. Oshawa East Urgent Care
2. King Street Medical Clinic
3. Kinder Clinic Childrens Urgent Care
4. First Step Oshawa
5. Lakeridge Health Base Hospital
6. Pinewood Centre Street
7. Glazier Medical Centre
8. Oshawa Clinic Physiotherapy
9. Oshawa Clinic Sleep Therapy
10. Oshawa Clinic Foot Care

Mental Healthcare

1. Lakeridge Health
2. Rose of Durham
3. CMHA Durham
4. Salvation Army Community and Family Services
5. Murray McKinnon Fondation
6. Catholic Family Services of Durham
7. Mental Health and Pinewood Centre
8. Oshawa Psychological and Counseling Services

2.3 Existing Commercial Uses

To gain a preliminary understanding of the current retail and commercial uses near the subject site, Smart Density mapped commercial zones per the Oshawa Zoning By-law utilizing City of Oshawa Open Data and ArcGIS Map Viewer.

The following zones were mapped:

CBD - Central Business District Zone

PCC - Planned Commercial Centre Zones

PSC - Planned Strip Commercial Zones

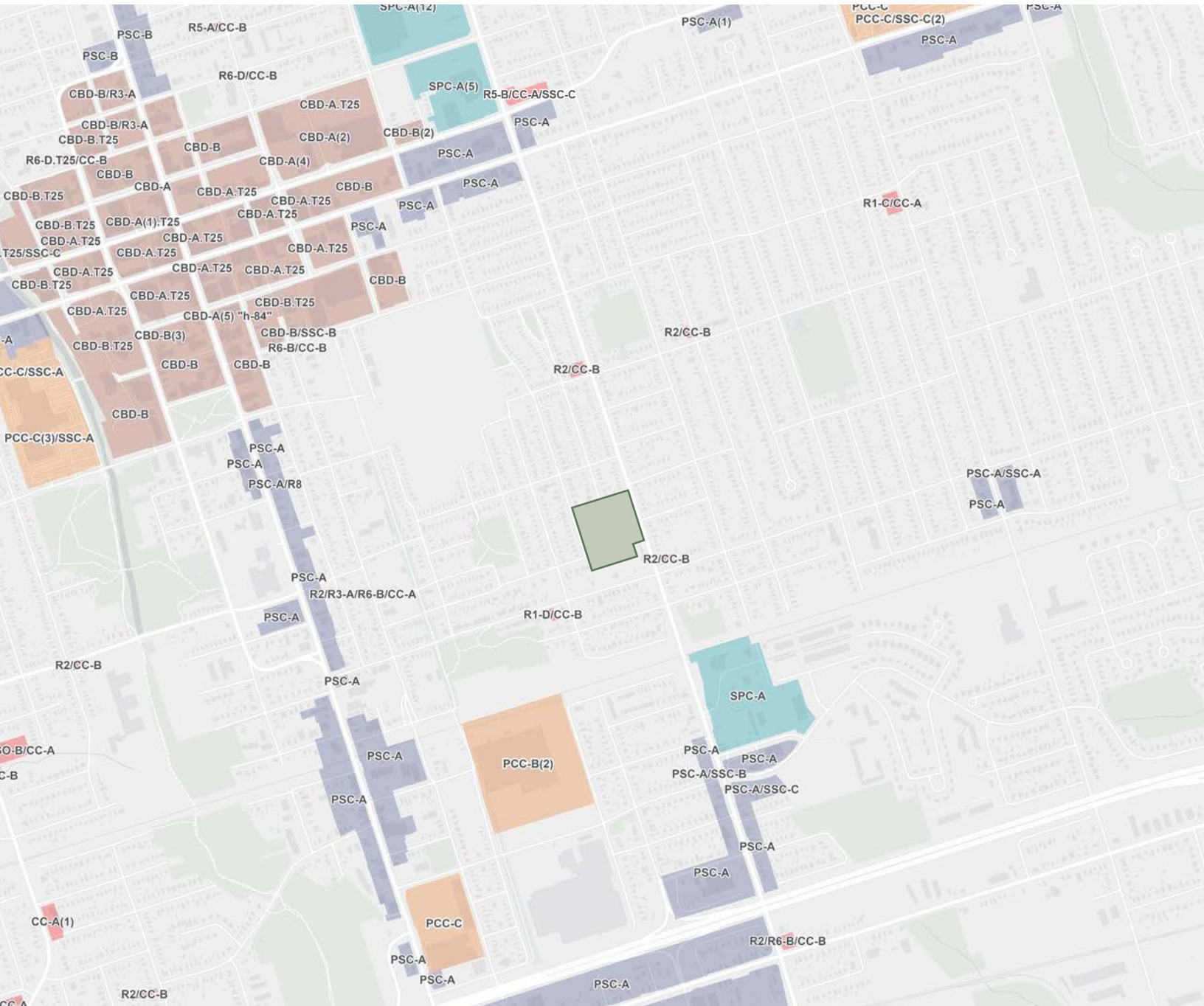
SPC - Special Purpose Commercial Zones

CC - Convenience Commercial Zones

MU - Mixed-Use Zones

Legend

 Commercial Zone  Subject Site



2.4 Existing and Planned Community and Seniors Housing

There are approximately 10 community housing properties funded and monitored by the Region of Durham within the community.

This is approximately 1/3 of all the community housing properties funded and monitored by the Region of Durham in Oshawa. In particular, 7 out of all 9 senior-only housing properties are located within the community.

Senior-exclusive housing is the most common in the area with 7 properties and 502 units. There are only 2 family-oriented community housing properties in the area, both operated by the Durham Regional Local Housing Corporation, with a total of 60 units.

Existing and Proposed Community and Senior Housing within Central Oshawa

Community and Senior Housing	Storeys	Units	Studio	1 Bed	2 Bed	3 Bed	4 bed
Existing Senior Housing	6.3	502	0	478	63	0	0
King Charles Court	10	165		164	1		
Dean Heights	3	50		49	1		
Normandy Hall	2	50		17	13		
Legion Manor	5	30		35	3		
Parkview Place	7	38		104	11		
Sunrise Place Co-Op	7	115		28	26		
Sunrise Seniors Place	10	54		81	8		
Existing Senior and Singles	7	55	0	44	11	0	0
Cy Elsey Building	7	55		44	11		
Existing Family Housing	2	60	0	0	0	54	6
Lomond - DRLHC	2	18				12	6
Nevis/Christine/Normandy - DRLHC	2	42				42	
Proposed Housing	2.5	76	26	0	0	50	0
485 Normandy St (Family)	3	50				50	
357 Simcoe St South (Youth)	2	26	26				
Total Existing	5.3	562	0	478	63	54	6
Total Existing and Planned	4.8	638	26	478	63	104	6

Source: Durham Region - Community Housing Properties

3. Community Engagement

To explore the potential uses for the subject site for community programming needs of residents in the surrounding neighbourhoods and Durham Region, LURA Consulting conducted community and stakeholder engagement. The engagement used for this Needs Assessment is Round 1.

Community Engagement was both a quantitative and qualitative process and results cannot be purely interpreted quantitatively, nor does Community Engagement represent a statistical analysis of the community's vision or needs. All themes and patterns resulting from Community Engagement are used to supplement statistical analysis or identify gaps in statistical analysis.

Engagement Activity	Number of Participants
 1 Public Community Conversation	50
 1 Community Survey	187
 3 Community Partner Workshops	43
 1 Regional Staff Workshop	14
 'Have Your Say' Portal Feedback	6
Total	300

Project information was also communicated through a project video, mailed postcards, social media posts, and the project webpage FAQs.

3.1 Public Sessions and Survey

The project team held a drop-in open house style public session on July 11, 2023, from 6 p.m. to 8 p.m. at the Oshawa Public Library McLaughlin Branch (65 Bagot Street, Oshawa ON). 37 participants signed in at the meeting, with approximately 50 people in attendance.

Before the public session, an online survey with the same questions used in the public session was made available to receive additional input from July 11 to August 15. During this time, 187 survey responses were received.

Additional details about the public session and survey can found in Appendix B and C.

Vision

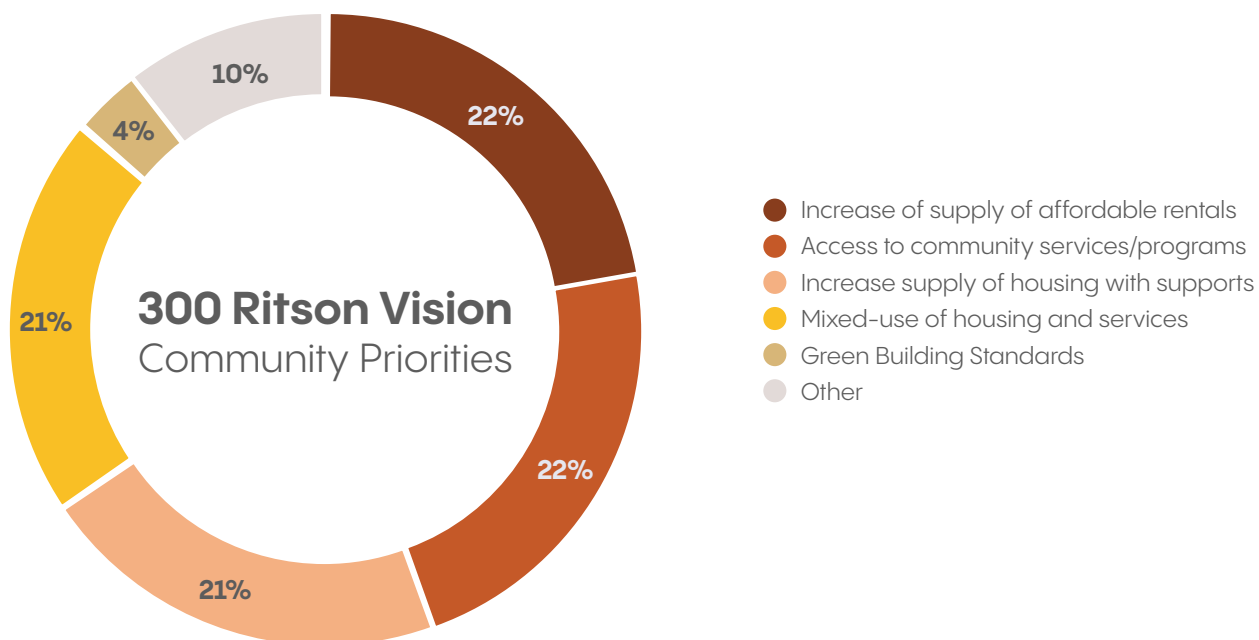
Participants were asked to identify their top priority for the 300 Ritson Vision among 4 options or 'Other'.

Participants were almost evenly divided among the 4 priorities provided. Increasing the supply of affordable rentals, providing access to community services and programs, increasing the supply of housing with supports, and providing a mix of housing and service uses each received 21-22% of responses.

Interest in Green Building Standards accounted for 30% of 'Other' responses.

Additional Comments Received

- Overall, participants identified a desire for the site to serve as a reflection of the community's needs.
- Some participants identified key groups in need of housing that could potentially be accommodated on the site such as seniors, youth, university students, and generally, individuals who would benefit from more affordable housing.
- Some participants supported the site's suitability for transitional or supportive housing and some expressed concerns about this housing recognizing that it would demand much space without providing opportunities for other community services and programs.



Programs and Services

Participants were asked to identify what services they see as being the most valuable to the community among 6 options and 'Other'.

Housing and Homelessness was indicated to be the most valuable to the community, followed by Physical and Mental Healthcare, then Education and Training.

Other responses varied across participants. Some common themes included a mixed-use approach with various uses and the need for supports and services to accompany housing.

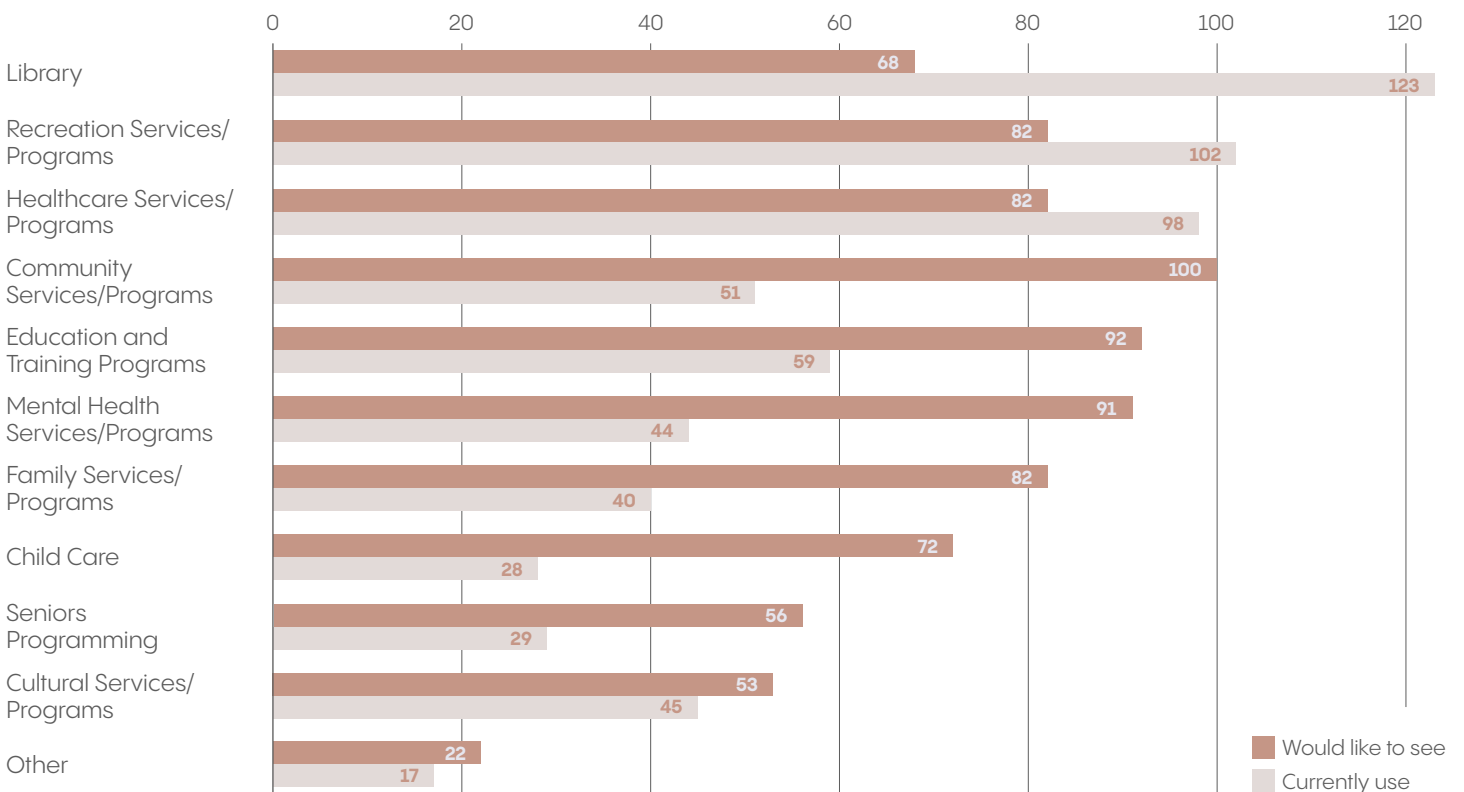
Current and Desired Uses

Participants were asked to identify the local community programs they would like to see, and currently use out of 10 options and 'Other'. The two results are compared to identify potential gaps in services that are greatly desired but lacking in the community.

Top services and programs currently used include the Library, Recreation Services and Programs, and Healthcare Services and Programs with about half of the respondents using these services.

300 Ritson Vision

Program and Services Currently Accessed and Desired by the Community



300 Ritson Vision Valued Services

1. Housing and Homelessness (42%)
2. Physical and Mental Healthcare (19%)
3. Education and Training (12%)
4. Employment and Income Support (9%)
5. Child Care and Early Years (8%)
6. Other (7%)
7. Food Security (3%)

The services and programs that participants expressed the most interest in were Community Services, Education and Training Programs, and Mental Health Services.

Other responses for currently used community services and programs included senior-specific healthcare and schools. Other responses for desired services and programs varied. More details for the other responses can be found in the Public Session and Survey Summary completed by LURA Consulting attached in Appendix C.

3.2 Stakeholder Session

The Project Team held 3 stakeholder sessions for businesses and service providers on July 13, 2023, at the Spark Centre (2 Simcoe Street South, Oshawa ON) from 8 to 9 a.m, 10 to noon, and 1 to 3 p.m. 43 people signed in at the meetings, which comprised 10 businesses and 34 service providers.

Additional details about the stakeholder sessions can be found in Appendix D.

Vision

Throughout the discussions at the stakeholder sessions, participants identified several items as the biggest opportunities for their communities and businesses. These could be categorized into the following 4 categories: Mixed Housing Options and Supports, a Health Hub, Social Services, and Community Building.

300 Ritson Stakeholder Workshop Biggest Opportunities

Housing

Develop mixed housing options with affordable and market-rate units, establish a housing initiative to address homelessness, and provide housing supports, such as language training.

Health Hub

Incorporate social determinants of health and partner with the Durham Ontario Health Team

Social Services

Facilitate the collaboration and integration of diverse services and partnerships

Community

Foster a more unified community identity and promote a stronger sense of community and belonging.

Commercial Space

Participants identified a few complementary commercial spaces that should be considered for inclusion on the site.

These spaces include health and essential services, food establishments not limited to fast foods and cafes, daycare facilities and programming for children, office and co-working spaces, artist studios, banking facilities, and spaces to enhance educational opportunities for community members.

However, participants cautioned that retail should not be a primary focus for the site as there are many offices and commercial spaces vacant in the community.

Instead, the focus should be on providing more facilities and opportunities for children and on maintaining the current employment opportunities in the area.

Service and Programming Needs

Participants were asked to identify services and program needs that they were interested in providing and uses that could be considered for the site.

Participants were interested in providing gathering space, housing supports and services, skills programming and programs, youth outreach and engagement, counselling, developmental services, Indigenous community programming, healthcare, low-cost or free recreational programs, community food programs, and pet-friendly spaces.

These services and programs will primarily serve seniors, youth, people with disabilities, young couples and families, and diverse communities.

Space Considerations

Participants identified the following spaces and associated uses. Spaces should be accessible with flexible scheduling and be able to support both on-site residents and the surrounding community.

More details about specific comments, concerns, or suggestions brought up in the stakeholder sessions can be found in Appendix D.

300 Ritson Stakeholder Workshop Potential Uses



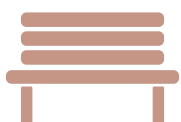
Community Kitchen

- Food Education
- Meal Preparation
- Cooking Classes



Community Health Centre

- Walk-in Clinics
- Medical Assessments and Labs
- Counselling Offices



Indoor and Outdoor Space

- Gathering space without time constraints



Office Space and Meeting Rooms

- Available to be booked as needed



Multi-Purpose Space

- Gym and Yoga Studio
- Recreational Space
- Program Space (drop-ins)



Storage Space

- Store Supplies and Equipment for Various Agencies



Venues

- Social Events
- Large Gatherings



Green Space

- Green Roof
- Community Garden
- Medicine Garden



Usable Space

- Preserve and Practice Indigenous Teachings, Traditions, and Ceremonies



Meditation and Prayer Rooms

- Available to be used as needed

3.3 Regional Divisions Session

The Project Team held an internal programming needs analysis workshop for the Region of Durham staff on June 20, 2023, from 4 p.m. to 6 p.m. at Regional Headquarters, 605 Rossland Road East to gather feedback about divisional perspectives for regional service and programming needs as well as proposed types of services that departments could provide on the site.

Additional details about the staff session can be found in Appendix E, Internal Programming Needs Analysis Workshop.

Regional Services and Programs

Participants were asked to identify Regional Services and Programs that could be considered for inclusion in the Ritson School Project. 11 categories were identified.

300 Ritson Staff Workshop Potential Uses

Children's Services <ul style="list-style-type: none">• Early Years Programs and Drop-ins• Children's Developmental and Behavioural Support	Seniors Programming <ul style="list-style-type: none">• Adult Day Programs and drop-ins• Social opportunities catered to seniors and services in one location	Housing <ul style="list-style-type: none">• Affordable housing for families/seniors• Mixed-income housing• Low-income support respite
Social Services <ul style="list-style-type: none">• Settlement and Newcomer Services• Human Services Intake• Employment Support	Service Hub <ul style="list-style-type: none">• Community Safety Advisor• A place where agencies come together• Independent access for agencies	Health <ul style="list-style-type: none">• Specialized Healthcare• Mental Health (Counselling and family support)• Infant Development• Sexual Health Clinic• Community Paramedicine Program• Urgent Care Clinic
Office Space <ul style="list-style-type: none">• Community Para-medicine Touchdown	Indigenous Programming <ul style="list-style-type: none">• Early Learning• Ceremony• Language• Healing Garden• Courtyard, Green Space, Playground, Gathering Space	Outdoor Amenities and Public Green Space <ul style="list-style-type: none">• Community Garden
Durham 311 Representative		
Ontario Works (IEHSD Supports)		

4. Needs Analysis

The following preliminary needs and issues have been identified following pertinent data and information reviewed in Sections 2 and 3.

Need to address concerns with housing affordability and attainable housing

The Central Oshawa community has a high rate of core housing need compared to the City of Oshawa. In particular, there is a high need for affordable housing that can be attained with 30% of one's income.

Community Engagement results indicate that participants greatly value housing and addressing homelessness.

Further, despite the concentration of senior housing in the Central Oshawa neighbourhood, there is a lack of singles, family, or youth housing. In particular, 2-bedroom family housing for young or one-parent families.

Existing affordable family housing is 3-bed or larger. This represents a gap in the current provision that precludes smaller households from effectively utilizing available affordable family housing. Considering the average household size number at 2.3 in the area, 2-bedroom affordable family housing units should be considered.

Need to support services for youth and sole caregiver families

Approximately 1/3 of all census households in the Area are sole caregiver households. This presents a need for supports ranging from affordable housing that recognizes the smaller household size, to child care and education supports or drop-in community programs.

A review of the existing social services, programs, and facilities shows that there are only 4 child care centres, learning centres, and preschools within the Central Oshawa Area of which one is the Ontario Tech University. While this number increases to 13 when the range increases to within 2 km of the subject site, many of these services would also serve their existing community.

Community Engagement results reflect the lack of existing child care services, with few participants indicating that they currently access child care services.

Need to support services for seniors

The Central Oshawa community is home to 7 of the 9 senior-only community housing properties funded and monitored by the Region of Durham in Oshawa.

While the senior population rate in the Area is similar to the City of Oshawa rates, the concentration of senior housing in the area represents a need for senior-related services.

This is echoed by Community Engagement results identifying senior programming in the form of recreation or drop-in programs as a potential use.

Need to address the impacts of population growth due to the GO Station

Central Oshawa and the broader Major Transit Station Area is expected to face higher growth in the form of young adults.

It will be important to understand the impacts of an increased population and its associated growing diversity. As young adults move into the community from diverse backgrounds it will be important to ensure cultural awareness and competency within programs and services.

Because this change is anticipated and is not reflected in the current population demographics, it will be important to build flexibility into built facilities and spaces. This would allow for placemaking and community building regardless of the socio-demographics of the community.

Need to access and improve ongoing access to community programs and services

There is a need to improve access to community programs and services. There are few community programs in Central Oshawa and many are directed to specific demographics.

This lack of provision and access is coupled with a strong desire from Community Engagement participants to see this type of use on the subject site. Participants particularly indicated education and training as well as recreational services and programs as types of community services and programs they would like to see.

Community Engagement results indicate a strong desire for community building. Flexible, multi-purpose spaces that allow for community-driven programs and activities can provide opportunities for community building and placemaking.

Need to protect and provide parks and open space

Parks enhance the quality of life, providing essential elements of health and well-being by connecting people to nature, building community, and opportunities for improving physical health. By providing meaningful and safe gathering spaces in visible and accessible locations, parks also present opportunities for place-making.

High-quality parks and open spaces should be prominent, accessible, and visible with an adequate street frontage. They should be designed to support a wide range of users and provide a range of passive and active programming and activity.

Central Oshawa has approximately 17 hectares of existing parkland, which accounts for 5% of Central Oshawa's surface area. Including the open space of the Michael Starr Trail and Joseph Kolodzie Oshawa Creek Bike Path, the amount of park and open space area in Central Oshawa is approximately 8% of the surface area.

Central Oshawa has 9 existing recreation services and programs, including parks and parkettes. This is reflected by a large percentage of Community Engagement participants indicating that they currently access recreational services and programs. However, many participants desire to see more recreation services and programs.

Considering the deficiency of outdoor parks and open spaces in the area and the anticipated increase in population, it is important to provide quality parks and open spaces where there are opportunities to.

Need to improve access to physical and mental healthcare

Per research from INSPIRE Primary Health Care, 53,000 Durham residents are either not in a Primary Healthcare Model or have no primary care.

Community Engagement results show that many participants are currently accessing Healthcare Services and Programs. Fewer participants are currently accessing Mental Health Services and Programs but more would like to see it on the site.

With healthcare shortage and pressures across the Region and Province, it is important to continue to improve access to physical and mental healthcare for the community. With this need, it is also important to embed health and well-being in the subject site's built environment.

Need to support continued reconciliation in partnership with Indigenous peoples

There is a large Indigenous population within the Area. It is important to continue to address historical injustices and to confront the racism that Indigenous people in Canada still face today.

There is a need to work together with Indigenous groups to create spaces that support and preserve Indigenous teachings, traditions, and ceremonies where possible.

5. Mixed Income Housing Best Practices and Precedents

To identify best practices related to the implementation of mixed income housing and identify successful concepts and processes that may be considered for the subject site, Smart Density researched the Housing Action Plans and related mixed-income and affordable housing strategies across the Greater Toronto Area with a focus on the City of Toronto and Regional Municipalities.

5.1 Precedent Models

City of Toronto

The City of Toronto HousingTO 2020–2030 Action Plan establishes a pipeline to support the creation of 40,000 affordable rental and supportive homes through a public/private/non-profit land banking strategy across 10 years.

Key direct actions related to the development of mixed-income and affordable housing include:

- 8 Support Toronto Community Housing and its Residents
- 9 Continue the Revitalization of Neighbourhoods, and
- 10 Create New Rental Housing Responsive to Residents' Needs

Action #8 Toronto Community Housing

Toronto Community Housing Corporation (TCHC) is the largest social housing provider in Canada. Wholly-owned by the City of Toronto and operated in a non-profit manner, TCHC develops and operates subsidized rental housing. Additionally, TCHC delivers and operates program-related services and commercial spaces that support its objective of clean, safe, secure homes.

TCHC provides homes to nearly 60,000 low and moderate-income households coming from diverse backgrounds.

One of the key challenges TCHC faces is a severely deteriorating state and capital repair backlogs in many of the corporation's properties. Recognizing this issue, TCHC is revitalizing neighbourhoods through funding received from the National Housing Strategy (NHS) to shift towards a more mixed-income mixed-use, inclusive community model.

Innovative Mixed-Housing Projects under these actions include:

- Regent Park
- Alexandra Park
- 250 Davenport Road

Action #9 Revitalization of Neighbourhoods

Toronto seeks the creation of new affordable housing and revitalization through the implementation of Secondary Plans and Site and Area Specific policies for areas expected to experience redevelopment. In these areas, the City implements affordable housing requirements through inclusionary zoning.

An innovative case example of this is the Toronto Port Lands, one of the largest underdeveloped pieces of downtown waterfront in North America.

Action #10 Affordable Rental Housing and the Housing Now Initiative

To develop new affordable rental housing, the City launched the Housing Now Initiative. The Housing Now Initiative leverages the value of city-owned land in close proximity to transit stations to build and operate new rental housing affordable to households.

Public land surplussed through CreateTO, up-zoned to make a 30% affordable, 30% market rental, and 30% ownership unit mix breakdown financially viable, then offered through long-term leases of 99 years at or below-market rate to development partners via RFPs. The buildings will be operated by the developer or by a developer in partnership with one or multiple non-profit housing organizations.

This initiative only addresses the subset of Affordable Rental, Market Rental, and Market Home-ownership and differs from Toronto Community Housing, Social, and Supportive or Transitional Housing.

Funding programs utilized by the City of Toronto

- NHS Co-Investment Fund – Repair and Renewal
- Rental Construction Financing Initiative
- Canada-National Housing Benefit
- Canada Ontario Community Housing Initiative

Region of York

The York Housing Inc.'s 2021 to 2024 Strategic Plan sets the goal of increasing the supply of affordable and rental housing.

To achieve this goal, the Region of York plans to expand Housing York Inc. (HYI)'s portfolio.

Housing York Inc. (HYI) is a community housing provider owned by the Region of York. HYI coordinates subsidized rental housing and market housing across the Region and maintains 36 housing properties. Approximately 80% of HYI units are subsidized and 20% are market units. The York Regional Council is responsible for approving housing development and capital funding for HYI's new buildings.

Noting the downward trend and uncertainty regarding federal and provincial capital funding as a threat, HYI aims to achieve self-sustaining operations and reduce the reliance on Regional subsidized through a subsidized market split of 70 to 30.

Despite federal and provincial funding, The Region notes that the majority of costs of delivering community housing have been carried by the Region.

Funding programs utilized by the Region of York

- Canada Infrastructure Program
- Canada-Ontario Housing Benefit
- Canada-Ontario Community Housing Initiative
- Ontario Priorities Housing Initiative
- Social Services Relief Funding (Covid-19)
- Homelessness Prevention Program

Region of Peel

The Peel Housing and Homelessness Plan 2018 to 2028 sets out 5 strategy pillars to solve Peel's affordable housing crisis. The Housing Master Plan and Housing and Homelessness Plan set out the goal to add more than 5,650 new affordable rental units, including 226 supportive and 60 emergency shelter beds by 2034.

Key direct pillars related to the development of mixed-income and affordable housing include:

- 2 Build more community housing
- 5 Increase supportive housing

The Peel Housing Development manages the affordable housing on Peel Region and Peel Housing Corporation sites from initial concept to building completion. The sites are later managed by Peel Housing Corporation.

Peel Housing Development builds emergency shelters, transitional housing, supportive housing, seniors' housing, and affordable rental through Request for Proposals and offers funding to successful applicants. Peel Housing Development also supports other affordable housing projects with third-party developers.

Ongoing and completed mixed-housing projects completed by Peel Housing Development include:

- 360 City Centre Drive
- Brampton Bramalea Christian Fellowship Residences
- Brightwater Residences

Funding programs utilized by the Region of Peel

- NHS Co-Investment Fund
- Home for Good
- CMHC Rapid Housing Initiative
- Investment in Affordable Housing Extension
- Social Infrastructure Fund
- Ontario Priority Housing Initiative
- Social Services Relief Fund

Region of Halton

The Halton Region Comprehensive Housing Strategy 2021-2024 differentiates affordable housing and assisted housing—of which the region assists in the creation of special needs and assisted housing.

The Halton Region provides support through direct government funding for special needs housing, and programs for assisted housing. This housing is primarily operated by non-profits and the cooperative sector.

Funding programs utilized by the Region of Halton

- NHS Co-Investment Fund
- Canada-Ontario Housing Benefit
- Canada-Ontario Community Housing Initiative
- Ontario Priorities Housing Initiative

5.2 Operational Models

There are several approaches that the Region of Durham could take to provide mixed income housing. This section explores 3 operational models that have been used within the Greater Toronto Area. These operational models include:

- Developing and operating community housing through a regionally owned Housing Corporation such as the Durham Regional Local Housing Corporation,
- Partnering with a private sector developer to secure affordable units within a mixed-market development, or
- Partnering with non-profit organizations to facilitate affordable housing.

Model 1: Housing Corporation

Many municipalities own, fund, or operate housing corporations across Ontario to support the municipalities' role in meeting the affordable housing needs of local residents. These housing corporations operate on a non-profit basis and operate affordable and supportive housing.

In the Region of Durham, the regional municipality operates the Durham Regional Local Housing Corporation (DRLHC) which is the largest social housing provider in the region. DRLHC manages approximately 1,276 housing units. In 2019 this accounted for 18% of Durham's community housing portfolio.

As part of the Durham Master Housing Strategy, the Region of Durham is committed to revitalizing the DRLHC portfolio and will undergo long term capital planning for the DRLHC portfolio to maximize assets, align with local priorities, support affordability, and promote balanced, mixed income communities. DRLHC currently operates 60 family housing units within Central Oshawa.

While all the municipally owned or operated housing corporations in the GTA operate housing, not all build their own housing and instead rely on the Region or partnerships to develop housing that the housing corporation later operates. An example of this would be the Housing York, the York Region's housing corporation.

While this model can secure affordable housing for residents, the Regional Municipalities and the City of Toronto have identified several funding challenges related to this model:

- 1** The capital funding to develop or fund the development of new buildings
- 2** The funding to maintain operations and repairs

These challenge are exacerbated by reduced, insufficient, or uncertain funding required to meet the needs of residents. In 2000, the Province downloaded funding and administration of all social housing, with the exception of supportive housing, to municipalities. As such Provincial or Federal funding for social housing may only be provided for capital works. Potential opportunities are described in Section 6.1.

As non-profit models, municipally owned or operated housing corporations rely on municipal reserves for development, repairs, or operations. Some municipalities also rely on Provincial and Federal funding for capital works.

Due to insufficient funding, some municipalities have turned to mixed-income models in order to generate additional revenue through market rental or parking spaces. For example, 20% of Housing York's units are market rental while 11% of Toronto Community Housing Corporation's tenants pay market rent instead of Rent-Geared-To-Income.

Should the Region choose to pursue a housing corporation model for the subject site, the two challenges of capital funding for development and funding for operations will need to be addressed.

Regent Park

A Community Housing Mixed-Income Neighbourhood Precedent

Regent Park is a 69-acre housing complex in the heart of Toronto's downtown east, initially built in 1940s and 50s. In response to gun violence, other crime, and tenants' demand for change, in 2002, Toronto Community Housing Corporation (TCHC) initiated planning of the Regent Park Revitalization in 5 phases over approximately 30 years.

In 2006, the Daniels Corporation was selected to execute the first three phases.

The 2005 plan aimed to replace 2,083 rent-geared-to-income (RGI) units and construct roughly 5,400 new units, all without additional cost to TCHC.

In 2014, zoning changes were agreed upon, increasing the total new unit count to 7,500, and this number may still grow. The population of Regent Park is anticipated to rise from about 7,500 residents pre-revitalization to over 17,000 upon the completion of all five phases.

As of 2017, the project budget estimates stood at \$1.585 billion, comprising approximately \$1.09 billion in transaction proceeds and \$494 million in contributions from the three orders of government.



Housing Type: Seniors, singles, families

Units: 3,246 (637 Affordable, 633 RGI)

Developers

- The Daniels Corporation
- Tridel Builder's Inc

Funding

- Municipal, Provincial, Federal - \$494 M
- Transaction Proceeds - \$1.09 B



By fall 2021, approximately 1,350 social housing units had been reconstructed, including 364 new affordable rental and 989 RGI rental replacement units. After the completion of phase 3, 3,571 condo units, 346 market rental apartments, 123 townhouses, and 332 market seniors' units, will have been developed, totalling 4,372 dwellings, with about a quarter of the new apartments offered at below-market rates, while 76% are market-rate housing. Approximately 1,170 TCHC residents have returned to rebuilt subsidized units.

In 2020, Tridel was awarded the contract to complete phases 4 and 5. The City of Toronto approved the Phases 4-5 rezoning application in July 2023, amending the 2014 Master Plan.

Model 2: Public-Private Partnerships

Public-private partnerships to deliver affordable housing has gained popularity in Canada in a variety of models. This model leverages properties or land in desirable locations such as city-owned land that can facilitate and benefit from transit-supportive development.

These developments occasionally provide ground-level commercial space where viable to generate additional revenue. This includes: renting out excess parking spaces, rooftop space, laundry facilities, office space, and daycare.

The benefits of a mixed-income public-private approach lie in improved financial feasibility. However, the mixed-income model is not typically designed for a fully self-sustaining portfolio and still requires some form of ongoing operating subsidy, grant, or capital injection.

The mixed-income model can remove barriers with surrounding neighbourhoods. Regardless, projects will require a strong social development plan to create a sense of belonging and social cohesion as residents still face exclusion and social pressures within the communities.

Challenges to the public-private partnership model would be securing an agreement with a private developer and negotiating agreements that would facilitate operations of affordable housing units in the long term.

360 City Centre Drive

A Public-Private Partnership Precedent



Housing Type: Seniors, singles, families

Units: 174

Developer: The Daniels Corporation

Funding

- Federal - \$25.6 M
- Provincial - \$4.5 M
- Peel Region - \$36.9 M

In 2016, the Region of Peel issued a request for expression of interest to identify parties interested in developing affordable housing projects. In 2017, the Regional Council approved Daniel Corporation's proposal, and executed a Conditional Agreement of Purchase and Sale.

This 19-storey and 174 unit mixed-income rental building has 70 affordable, 84 market, and 20 premium rental units.

To make this building possible, the project utilized a capital funding of \$67 million generated through multiple financial sources including federal and provincial grants and funds and regional reserves.

The Region and Daniels entered into a Shared Facilities Agreement in order to provide control over the use, operation, maintenance, repair and replacement of shared facilities, provide the allocation of the responsibility of the payment of costs relating to the shared facilities, and establish the terms of easements.

Model 3: Non-Profit Partnerships

Working together with non-profit organizations to empower residents and secure affordable housing is a potential model to meet the specific housing needs of respective regions.

Municipalities utilize various collaboration avenues with non-profits to address housing and community development. They can transfer affordable housing properties and involve them as operators, offer land at reduced costs and long-term leases, and provide financial support through grants and loans, utilizing programs like the Canada Mortgage and Housing Corporation's National Housing Strategy and the Affordable Housing Innovation Fund for expenses like land acquisition, infrastructure development, and capital repairs.

Municipalities may also support non-profit projects through policies and zoning changes that lower development costs and expedite project timelines, such as density bonuses and streamlined permitting processes. Additionally, municipalities may assist non-profits by making surplus public land available for non-profit initiatives and providing technical support for land acquisition and management.

The challenge to a non-profit partnership model is securing an agreement with a non-profit organization and financial feasibility.

Community Land Trusts

Community Land Trusts (CLTs) are examples of non-profit organizations. CLTs are an innovative approach to land and housing ownership that prioritizes affordability and community sustainability. CLTs work in partnership with local governments, non-profit organizations, and community organizations to meet the specific housing needs of their regions. They are typically governed by a board of directors using a tripartite governance model, which ensures maximum community involvement in decision-making.

In this model, a non-profit organization or trust acquires land, often through donations, purchases, or support from public and philanthropic entities. The CLT then facilitates the development of affordable housing on this land, which can take various forms, including single-family homes, multi-unit buildings, and mixed-use developments.

Rather than selling the land and housing units, the CLT leases the land to homeowners or tenants through long-term, renewable leases that can extend for decades or even indefinitely. These leases include affordability provisions, ensuring that housing units on CLT land are sold or rented at affordable prices, often tied to the local median income, making them accessible to low- and moderate-income households.

Additionally, CLTs may incorporate equity-sharing provisions, where a portion of the housing's appreciation is shared with the CLT when homeowners sell their homes, preserving affordability for future buyers. Some municipalities grant property tax exemptions for CLT-owned properties to maintain housing affordability.

Community governance is a fundamental aspect of CLTs, with structures that include community representatives, residents, and stakeholders. This structure empowers the community to participate in land and housing management decisions.

The Community Land Trust Model has proven successful in addressing housing affordability challenges in both urban and rural areas, offering a solution that maintains community control over land use and development.

Parkdale Neighbourhood Land Trust

A Non-Profit Partnership Precedent



Housing Type: Seniors, singles, families

Units:

- 81 single-family homes
- 36 units (Three 1-bedrooms and 33 bachelors)
- 15 rental units with supports

Funding

- Provincial and Federal
- Charities

Established in 2012, the Parkdale Neighbourhood Land Trust (PNLT) is one of Toronto's pioneering Community Land Trusts (CLTs). PNLNT operates as a community-controlled organization, acquiring and managing land for the benefit of the community. The Neighbourhood Land Trust (NLT) serves as the charitable branch of PNLNT, taking ownership of land allocated to charitable partners for affordable housing and community development.

In 2016, PNLNT played a key role in developing the Parkdale Neighbourhood Plan through a community-based initiative. A year later, they co-founded the Canadian Network of CLTs, extending their influence nationally.

In 2017, PNLNT acquired Milky Way Garden, securing a community-owned urban agriculture space. Since then, they have received funding from various organizations, including the City of Toronto, Metcalf Foundation, Vancity Community Foundation, Toronto Foundation, and Maytree.

A significant development occurred in 2022 when the City of Toronto and Toronto Community Housing Corporation (TCHC) transferred 81 single-family homes and small buildings to The Neighbourhood Land Trust. Collaborating with YWCA Toronto, NLT manages this social housing portfolio to ensure its long-term affordability.

NLT currently owns 84 properties, providing 204 affordable rental units. Their commitment to maintaining affordability is supported by foundations and the Canada Housing and Mortgage Corporation, securing \$22 million for capital repairs and improvements.

6. Considerations

The following considerations have been identified for the future of the subject site. These considerations may impact the design and form of the resulting vision.

6.1 Financial Feasibility

Financial feasibility is a key consideration for developments to ensure development, continued operations, and a state of good repair.

Per the Preliminary Market Assessment completed by Parcel Economics (Appendix A), current developments are faced with 5 key Feasibility Considerations.

- 1. Hard Building Cost Escalation.** Per square foot cost ratios have risen sharply since the beginning of the pandemic.
- 2. Interest Rate Increases.** The increased interest rates, in conjunction with the significant capital costs with development, can have significant impacts on financing.
- 3. Land Use Policy & Government Fees.** Higher one-time payments are being required for development and the rezoning and land use policy amendment
- 4. Highest & Best Use Inertia.** Market residential represents the highest and best use of most typical developments. Thus under-market housing or other services may squeeze the gap between total project costs and revenues.
- 5. Non-Residential Use Requirements.** Significant amounts of non-residential space, such as retail, where there is no demand may challenge or overburden a project. To preserve financial feasibility, the Preliminary Market Assessment indicates that no more than 10% of the total floor area should be dedicated to non-residential uses, or up to 20% inclusive of community uses.

The Preliminary Market Assessment considered a market-based model where development is expected to provide a positive return to maintain financial viability. Should the subject site be developed through Regional Funds or other funding available, financial feasibility may still be preserved even with higher percentages of floor area dedicated to non-revenue generating uses.

List of Potential Funding Opportunities

The following is a list of funding opportunities that Regional Municipalities and the City of Toronto have utilized to provide community needs and housing and could be potentially pursued to provide additional capital funding.

Canada Infrastructure Program

To address the challenges faced by communities as a result of COVID-19, over \$33 billion will be delivered through bilateral agreements with provinces and territories. The Community, Culture and Recreation Infrastructure Stream will provide funding to improve cultural infrastructure and support upgrades to recreational facilities and outdoor recreational spaces.

This program has been utilized in Ontario to construct the Buttonwood YMCA Centre of Community in Toronto, Ontario. The inclusion of a recreational facility would support the potential of applying for this program.

Programs funded through this stream would enter a cost sharing model of 40% of municipal and not-for-profit projects in the provinces, or 75% for projects with Indigenous partners.

Projects would be assessed via a climate lens and their ability to create employment opportunities or build more inclusive communities.

Canada Ontario Priorities Housing Initiative (OPHI)

To address local housing priorities and improve access to affordable housing options, under the National Housing Strategy OPHI funds projects that increase affordable housing supply, increase housing affordability, and improve the state of repair of the affordable housing stock. Housing construction or conversion projects are eligible.

This funding would need to be pursued with a Service Manager or Indigenous Program Administrator and would require the Region to enter into a partnership with a Non-profit and co-operative housing sector organization or private sector company to develop the new affordable housing.

CMHC Rapid Housing Initiative

The Rapid Housing Initiative provides capital to create new affordable and permanent affordable housing units. This program operates in rounds and is currently closed. 3 Rounds have been completed in the Rapid Housing Initiative.

As the Rapid Housing Initiative availability is variable, utilizing this funding opportunity will be subject to timing.

NHS Co-Investment Fund

The National Housing Strategy Co-Investment Fund provides low-interest loans, forgivable loans, or contributions to build new affordable housing. It prioritizes partnerships between governments, non-profits, the private sector, and other partners. Some funding must already be secured to qualify.

This fund focuses on developing energy-efficient, accessible, and socially inclusive housing that is mixed-income, mixed-tenure, and mixed-use that includes affordable housing.

Per the Federal Budget 2023 Boost Funding, projects could receive up to \$75,000 per unit for exceeding affordability and energy efficiency standards and up to \$25,000 per unit for meeting minimum social outcome requirements.

CMHC Rental Construction Financing Initiative

The CMHC Rental Construction Financing provides low-cost funding to eligible borrowers during the risky phases of developing rental apartments. This initiative focuses on standard rental apartment projects with general occupants and does not target retirement homes, single occupancy, and student housing.

The minimum loan is \$1,000,000 to a maximum of 100% of Loan to Cost for residential components.

Other Revenue Sources

Another revenue source identified in the precedents is the mixed income public-private partnership model.

As discussed in Section 5.2, a mixed-income public-private approach can improve the financial feasibility of development through market ownership and market rental housing, as well as generating revenue through other sources such as parking. However, this model is not fully self-sustaining and would still require financial support for operations.

6.2 Site Opportunities

The following considerations have been provided regarding opportunities on-site.

Placemaking and Community Building

A key component and opportunity for the site is placemaking and community building.

There is an opportunity to facilitate community building and capacity building by leveraging flexible and multi-purpose spaces to open up opportunities for community groups to host programs and services on-site.

Additionally, there is an opportunity for placemaking, that is, to reimagine the subject site to strengthen the connection between people and the site in both the visioning and design process and through the design of space for place, an opportunity to collaboratively capitalize on local community assets, inspiration, and potential to create quality public spaces on the site.

Incorporating public realm elements that support placemaking such as pedestrian amenities like benches and seating, public art, effective lighting, and on-site utilities should be considered. This will allow access and usage of the space by all to the greatest extent possible without need for modification.

The development should be led by human-centered and universal design principles and be formed with place-making principles. The design should incorporate Crime Prevention Through Environmental Design (CPTED) principles to contribute to the development of a vibrant and attractive space.

These amenities and spaces will need to be supported by pedestrian flow and movement through and within the subject site.

Supportive commercial and retail use that complement these programs and services should be considered to animate the space, facilitate an active and natural pedestrian flow, and create the opportunity for active uses on the site.

6.3 Phasing

A Phasing Plan allows the gradual building of a project based on demand and available resources, should be considered for the subject site depending on the resulting design.

Appropriate phasing plans will be considered and included with the design options for the subject site.

6.4 Strategic Partnerships

The following types of strategic partners should be considered for the site.

Housing and Accommodation Service Providers

This could include non-profit organizations or co-operatives. Service providers who serve youth, singles, and families should be considered.

Coupling non-profit partnerships or co-operatives with a private-sector partnership for development may also improve the financial feasibility of the project and support the provision of a mixed-income, mixed-tenure community.

Children and Youth Program and Service Providers

Non-profit organizations or community groups that offer child care or recreational and social development programs could be considered.

The purpose would be to address the gap in child care facilities in the area, support families, and provide youth with recreation and learning opportunities.

Community and Social Service Providers

Social service providers or community organizations who could provide services such as counselling, social or recreational programs, and support the general well-being of residents and community members should be considered.

In particular, programs that could be accessible and welcoming to the general public would be able to support the diverse future population expected to come to the area. Additionally, programs for seniors and services and programs that provide skill development opportunities should be considered.

Physical and Mental Healthcare Providers

Medical and health service providers should be considered for the site. In addition to restorative care, preventative care providers such as community groups that aim to support health and wellness should be considered.

Indigenous Community Groups

Local Indigenous Community groups who could provide support in coordinating Indigenous Programming and could lead Indigenous Programming should be considered for the site.

7. Conclusions and Recommendations

This Community Needs Assessment Report identified community needs that may be addressed and met through the subject site redevelopment and considerations related to the redevelopment.

As results were drawn from existing primary and secondary data sets, reports and planning documents, and a round of Community Engagement, it is important that the Region and its stakeholders recognize that statistical data may have gaps and cannot effectively capture the lived intersectional challenges that many, especially the underrepresented communities, face.

Community Engagement was used to supplement analysis and identify needs that research could not capture.

A flexible development design and community-driven partnerships for the subject site may address this gap to allow community partners to better serve the community.

This report has identified the following needs and provides the following associated recommendations.

1. Need to address concerns with housing affordability and attainable housing

- Consider single or 2-bedroom housing units in conjunction with support programs.

2. Need to improve access to physical and mental healthcare

- Providing a variety of physical and mental health supports is recommended. A hub model where multiple uses are consolidated in a single floor or building per precedents identified should be considered.

3. Need to support services for youth and sole caregiver families

- Consider program options that offer child care or educational or recreational programs for youth.

4. Need to access and improve ongoing access to community programs and services

- Educational, training, or recreational programs accessible to people of different skills, abilities, and backgrounds are recommended.

5. Need to support services for seniors

- Consider recreational or drop-in programs for seniors.

6. Need to support continued reconciliation in partnership with Indigenous peoples

- The Region of Durham has already begun discussing and coordinating with Indigenous groups to provide Indigenous-led programs on the site.

7. Need to address the impacts of population growth due to the GO Station

- The design of the site should consider flexible spaces that can be used for a variety of programs and uses that can best address the changing population and provide opportunities for placemaking without requiring extensive modification.

8. Need to protect and provide parks and open space

- A design that can maximize both floor space and open space on the site is desirable to provide outdoor programming and open space.

Additional Recommendations

This report identified several considerations and provides the following additional recommendations.

- A mixed-income, mixed-tenure model should be considered for housing to improve the financial feasibility of the subject site and reduce the potential for creating social barriers.
- A partnership with both a private-sector partner and one or multiple non-profit organizations for housing could be considered for development and affordable housing operations.
- A recreational facility, if feasible, could be considered to best meet recreational needs and broaden the range of programs and training that could be provided. This should be considered should it be eligible to receive funding from the Canadian Infrastructure Program.

Appendix A:

300 Ritson Rd S: Market Assessment

NOVEMBER 27, 2023

300 RITSON RDS: MARKET ASSESSMENT

Parcel

300 RITSON RD S: MARKET ASSESSMENT

Parcel

1

UNIQUE DEMOGRAPHICS

Local area is characterized by relatively high population growth rates + below-average incomes, lower employment, smaller households and more renters.

2

REFLECTED IN HOUSING STOCK

These conditions are reflected in the existing housing stock, which is generally older (pre-1980's) and with more of a focus on apartment typologies (new and old).

3

NEED FOR EXPANDED HOUSING

In addition to future population growth pressures across the MTSA, rents are increasing, new construction apartments are pricing higher and vacancy rates remain low.

4

RESIDENTIAL = PREDOMINANT USE

Residential development continues to represent the "highest and best use". It will undoubtedly represent the main area of focus @ 300 Ritson.

5

ACHIEVING A BALANCE

Notwithstanding the benefits of non-residential development (amenity to community, employment, animated public realm), it may be limited to preserve feasibility.

6

TARGET NON-RES RATIOS

- no more than **5-10%** of total development floor areas allocated to *market* non-residential uses (e.g., retail).
- Institutional uses (e.g., community facilities) are highly subject to funding, but generally not to exceed **~20%** in combination with other non-res uses

INTRODUCTION

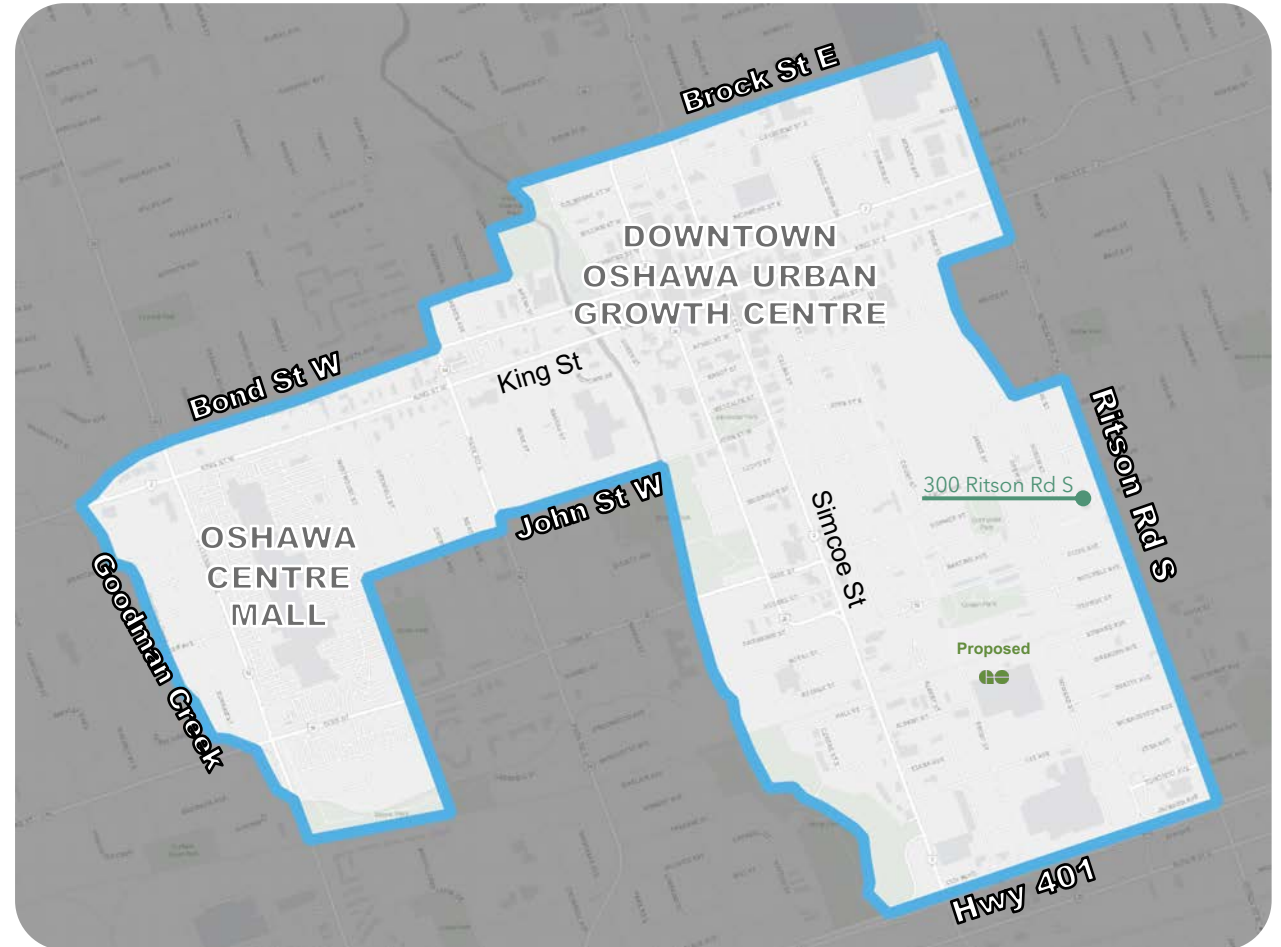
300 RITSON RDS: MARKET ASSESSMENT

300 RITSON RD S: MARKET ASSESSMENT

THE SITE IS LOCATED IN OSHAWA'S MAIN CENTRAL AREA

In addition to considering regional and city-wide population and market conditions, we have focused on Oshawa's Main Central Area (the "MCA") where 300 Ritson Rd S ("the site") is located.

The MCA is a major commercial concentration in the City, including the Downtown Oshawa Urban Growth Centre, a large Planned Commercial Centre (i.e., the Oshawa Centre super regional mall) and several planned commercial strips.



Source: MCA boundaries based on the City of Oshawa Official Plan. For illustration only.



POPULATION & DEMOGRAPHICS

(HISTORICAL)

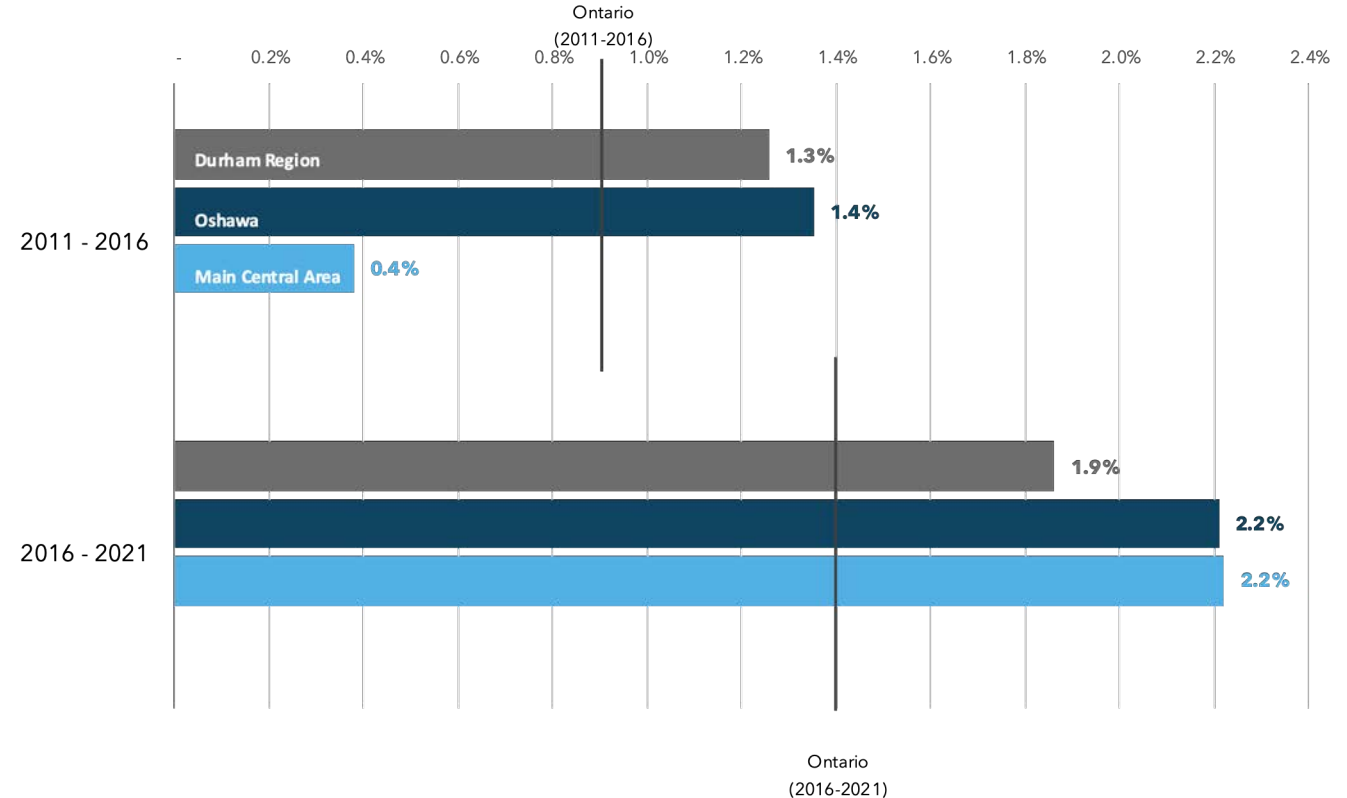
300 RITSON RDS: MARKET ASSESSMENT

300 RITSON RD S: MARKET ASSESSMENT

THE MCA HAS BEEN GROWING FASTER THAN THE CITY AND THE REGION

The MCA is currently home to some 14,230 residents (2021 Census), a 2.2% average annual increase since the 2016 Census.

Notwithstanding more limited growth in previous Census periods, the latest average annual growth in this area has been slightly above the City and higher than both the Region and the Province.



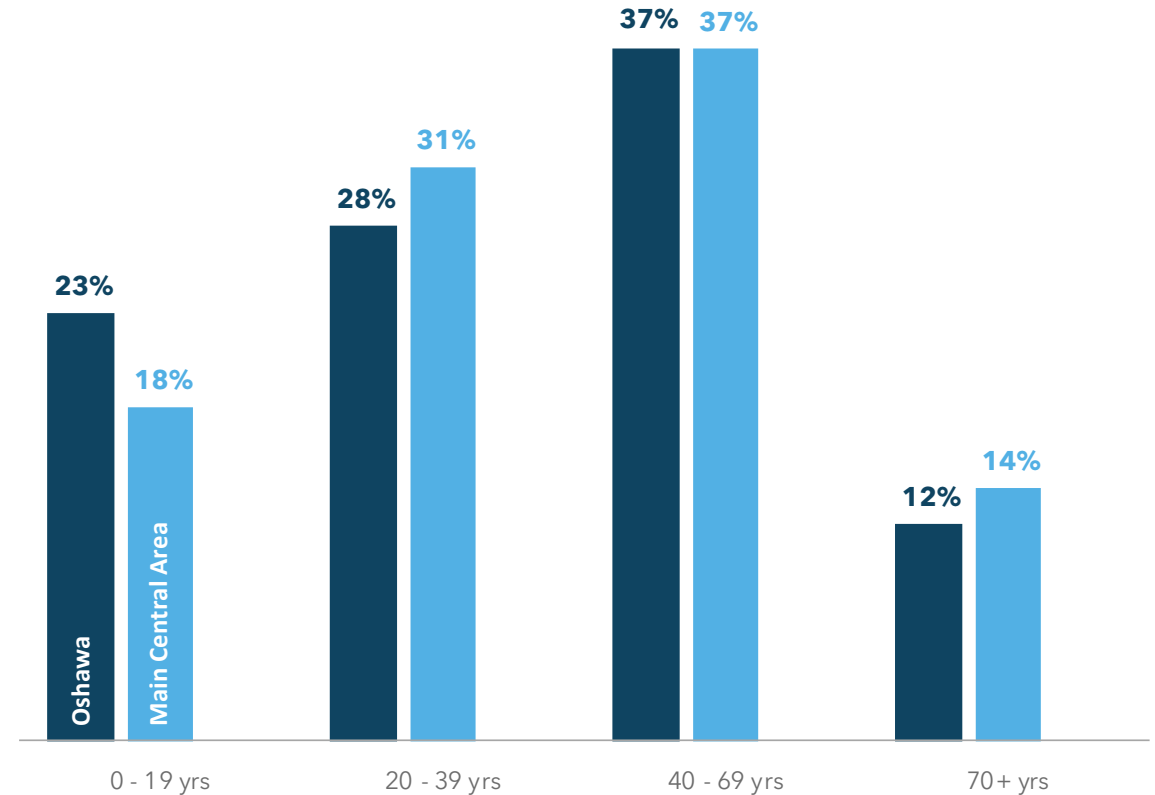
Source: Statistics Canada Census population, adjusted for net undercoverage.

300 RITSON RD S: MARKET ASSESSMENT

THE MCA POPULATION HAS MORE YOUNG ADULTS AND SENIORS THAN OSHAWA AVERAGES

The Main Central Area is proportionally home to:

- Fewer kids and youths under 19
- More young adults in their 20s and 30s
- More seniors over 70

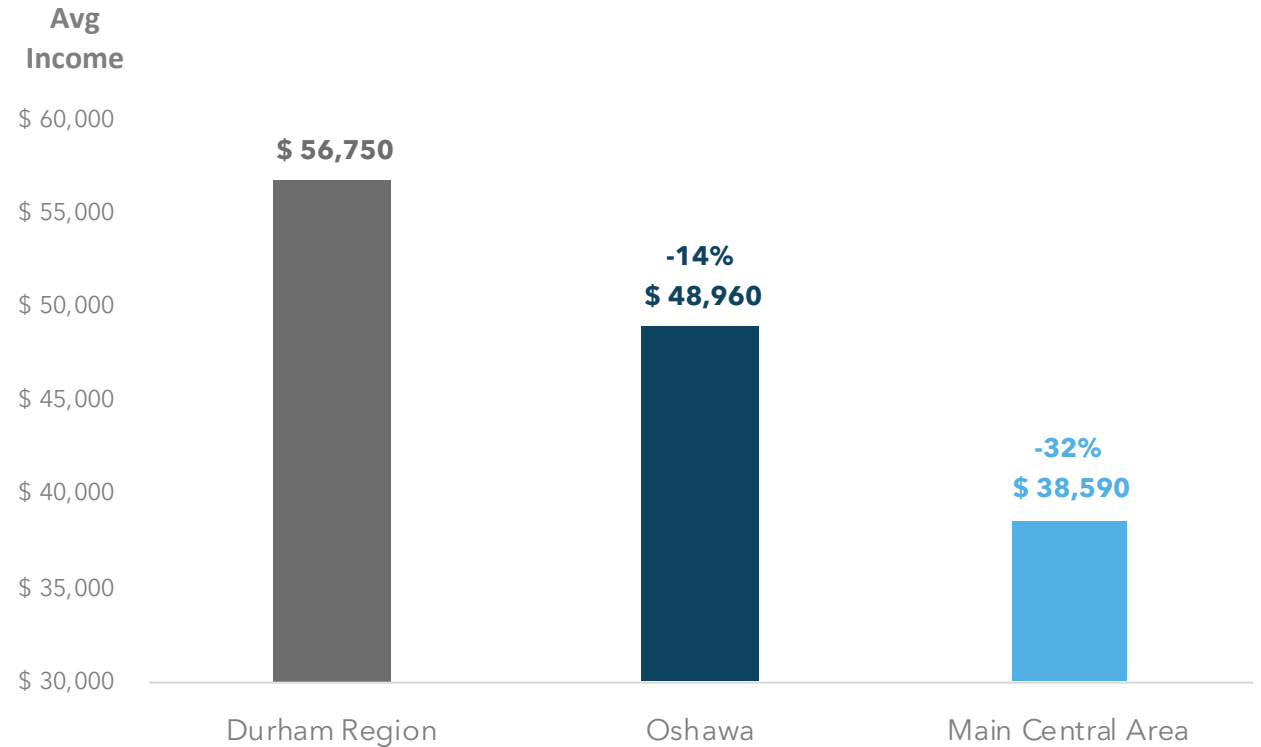


Source: Statistics Canada Census, population cohorts.

300 RITSON RD S: MARKET ASSESSMENT

MCA RESIDENTS HAVE HISTORICALLY LOWER INCOMES THAN THE CITY AND THE REGION

As of the 2021 Census, MCA residents made 14% less than the citywide average and 32% less than the regional average.



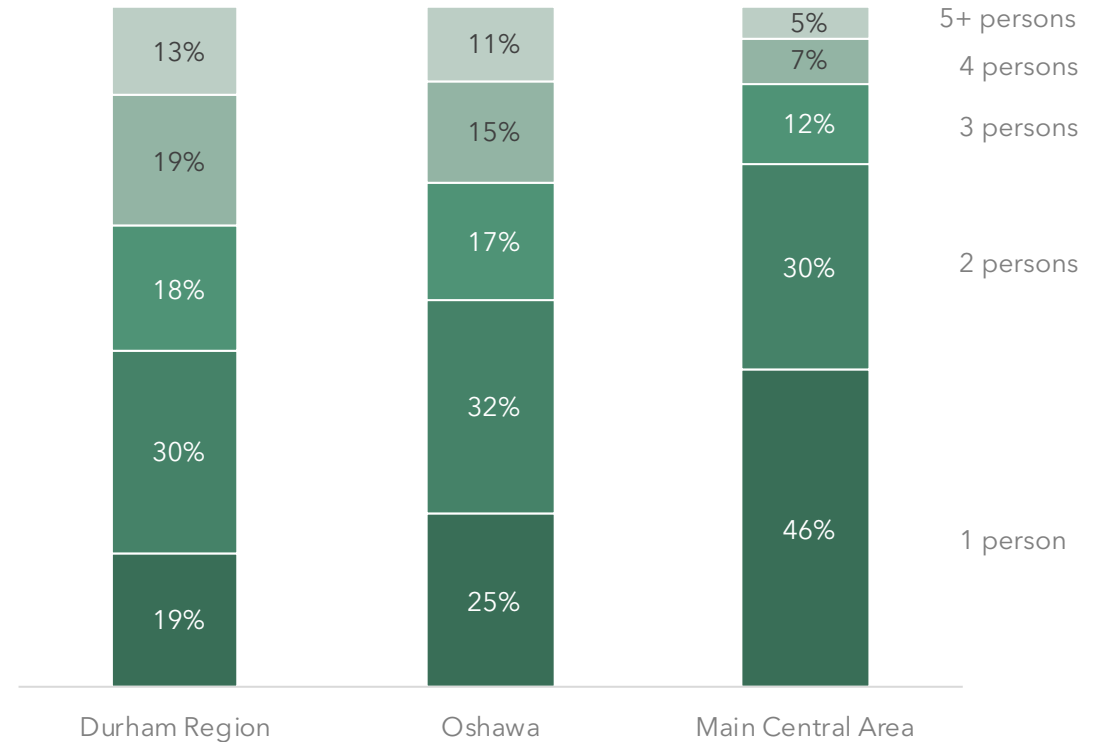
Source: Statistics Canada Census, average income of individuals.

300 RITSON RD S: MARKET ASSESSMENT

MORE THAN ¾ OF MCA HOUSEHOLDS ARE 1 OR 2 PERSONS

The Main Central Area has a much higher proportion of 1 and 2 person households than the City and the Region.

This is unsurprising given that more than 2/3rds of the MCA housing stock is apartments.



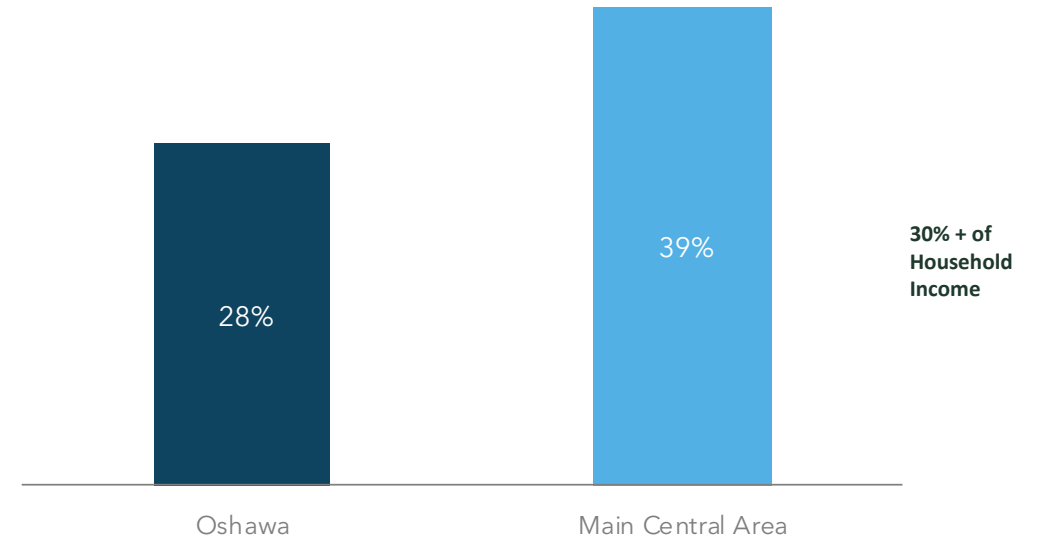
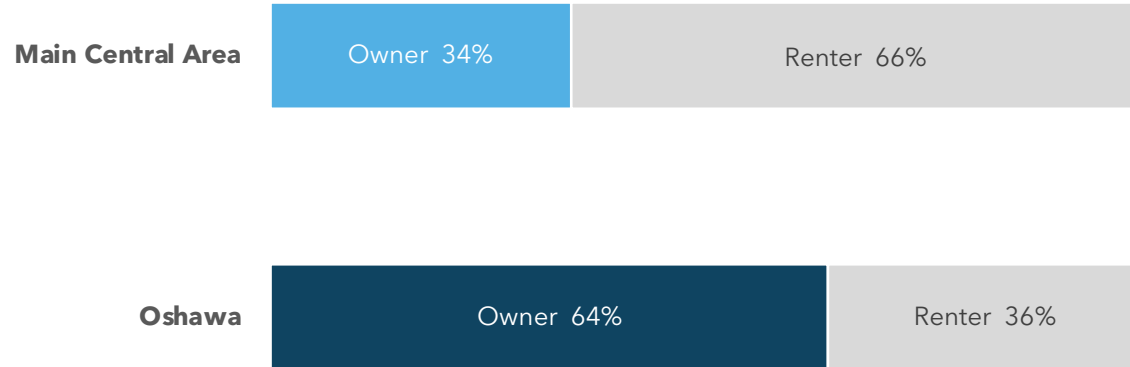
Source: Statistics Canada Census

300 RITSON RD S: MARKET ASSESSMENT

2/3rds OF MCA RESIDENCES ARE RENTALS, MORE THAN 1/3rd SPENDING OVER 30% OF INCOME

Nearly 2/3rds of Oshawa residences are owned, while the inverse is true in the MCA.

More than 1/3rd of MCA households are spending more than 30% of their household income on shelter.

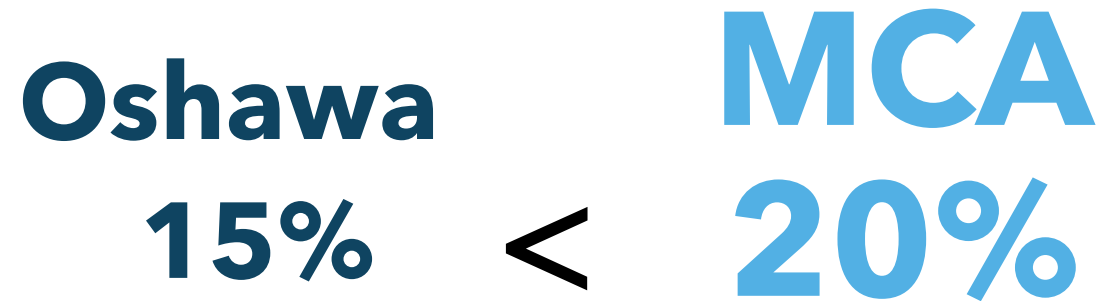


Source: Statistics Canada Census

300 RITSON RD S: MARKET ASSESSMENT

UNEMPLOYMENT IS HIGH IN THE MCA

20% of the MCA labour force (i.e., 49% of its population) is unemployed. This is higher than the City (15%) and the Province (8%).



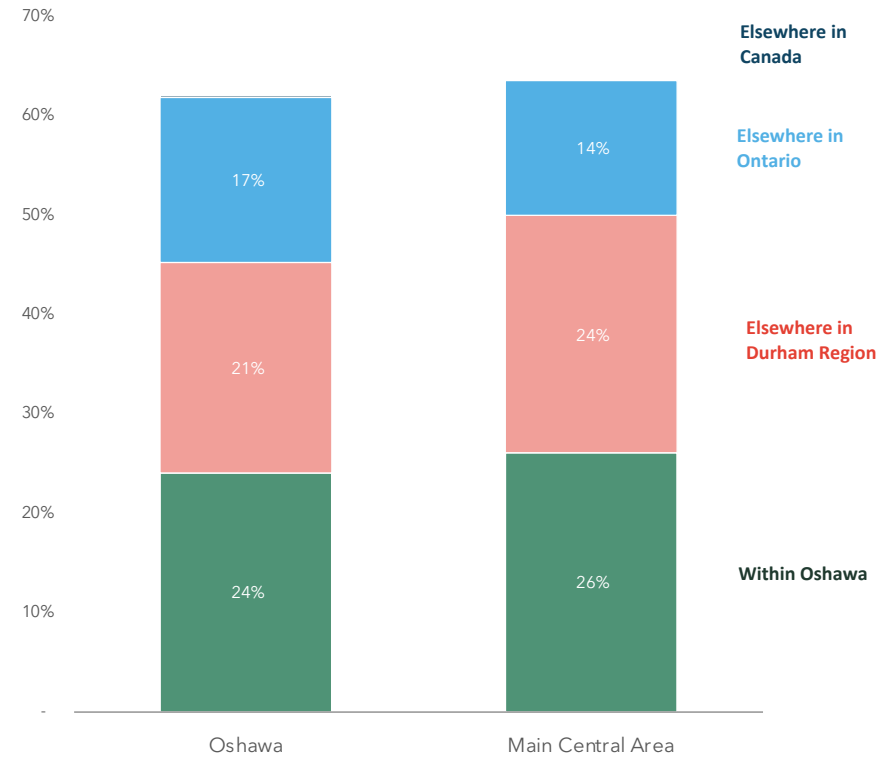
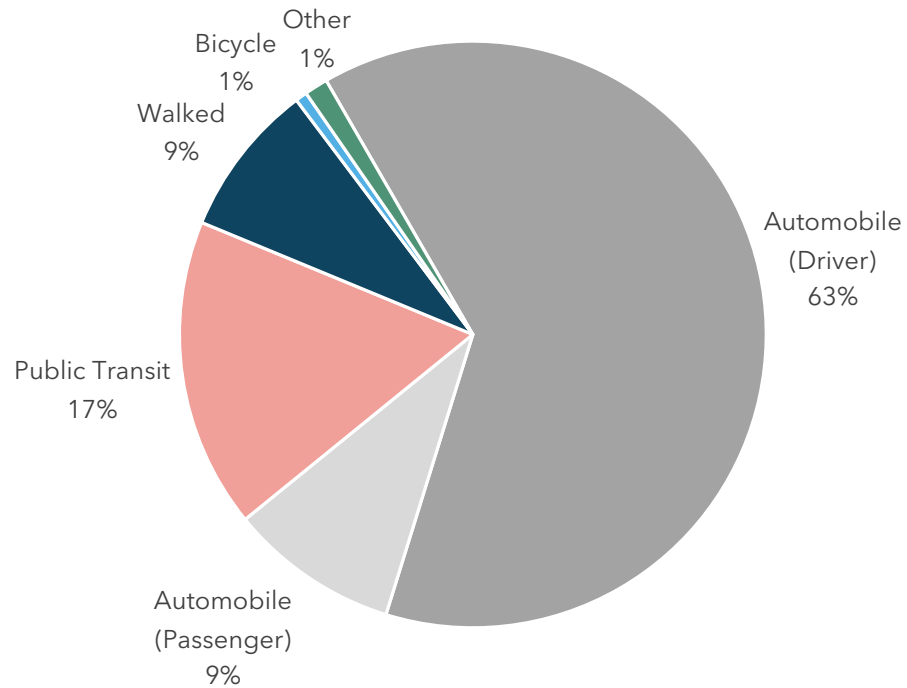
Source: Statistics Canada 2021 Census

300 RITSON RD S: MARKET ASSESSMENT

MORE THAN 2/3rds OF EMPLOYED MCA RESIDENTS TAKE A CAR TO WORK

MCA residents typically drive-or are passengers in-cars to get to work. Only 17% take transit.

This is in large part because some 3/4 work elsewhere in the Region or the Province, similar to everyone else in Oshawa's labour force.



POPULATION & DEMOGRAPHICS

(FORECAST)

300 RITSON RDS: MARKET ASSESSMENT

300 RITSON RD S: MARKET ASSESSMENT

DEMOGRAPHIC CONDITIONS WILL UNDOUBTEDLY EVOLVE WITH DEVELOPMENT & GROWTH

As the area continues to redevelop, Central Oshawa could be characterized by the following demographic shifts relative to community-wide averages:

- Disproportionately **high population growth**;
- Increased prevalence of **young adults**;
- Higher **income levels**, on average;
- Higher proportion of **smaller households** (one- to two-person households);
and,
- More **rental households**.

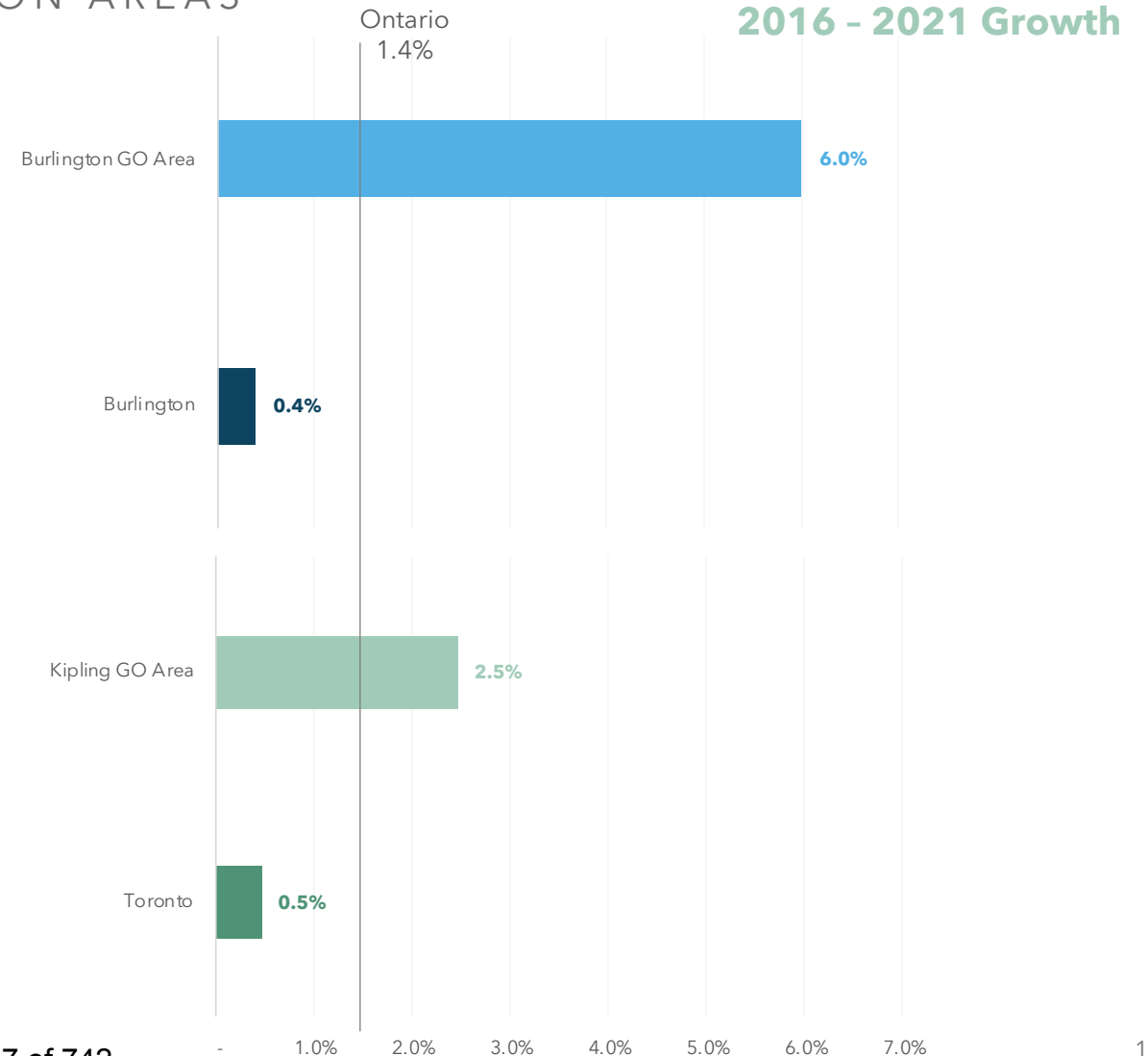
300 RITSON RD S: MARKET ASSESSMENT

EXPEDITED POPULATION GROWTH IN GO STATION AREAS

Go Station areas saw significant increases in population between 2016 and 2021

- Some 1,100 persons in the Burlington GO Area, or 6.0% average annual growth
- Some 1,900 person in the Kipling GO Area, or 2.5% average annual growth

GO Station Areas experienced significantly higher population growth than the City and Province.



300 RITSON RD S: MARKET ASSESSMENT

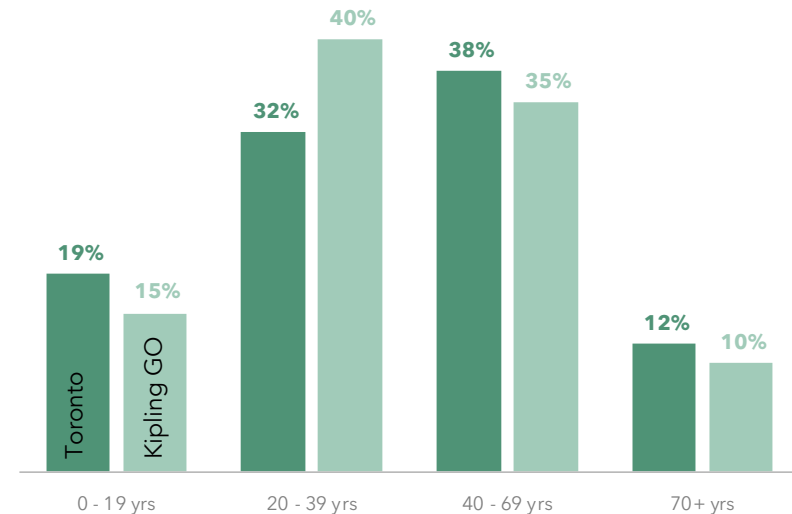
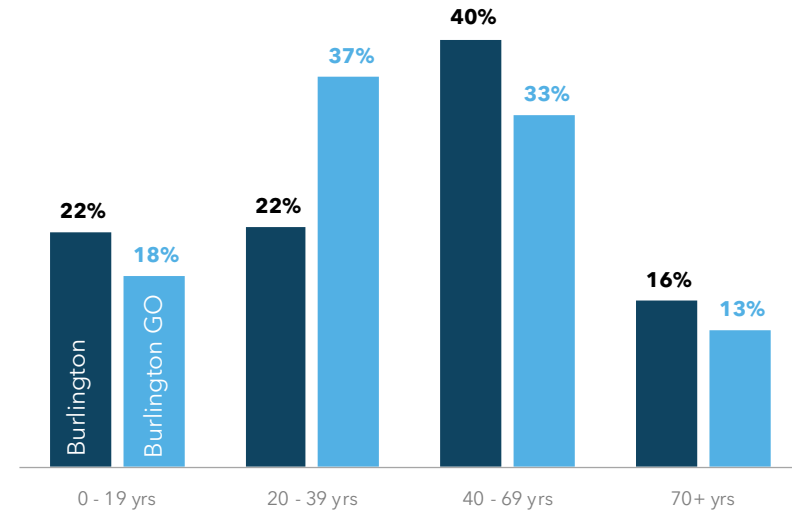
GO STATION AREAS HAVE AN INCREASED PRESENCE OF YOUNG ADULTS

The Burlington GO area saw... the share of people in their 20s and 30s increase 7% from 2016, while the percentage of those over the age of 40 dropped 6%.

Around the Kipling GO...the share of people in their 20s and 30s increased 1% from 2016, leading to a similar decline in those 40+

Relative to the city-averages, the areas surrounding GO Stations are generally home to:

- Fewer kids and youths under 19
- **More young adults** in their 20s and 30s
- A reduced share of older adults



300 RITSON RD S: MARKET ASSESSMENT

INCOMES IN THE GO STATION AREA INCREASED

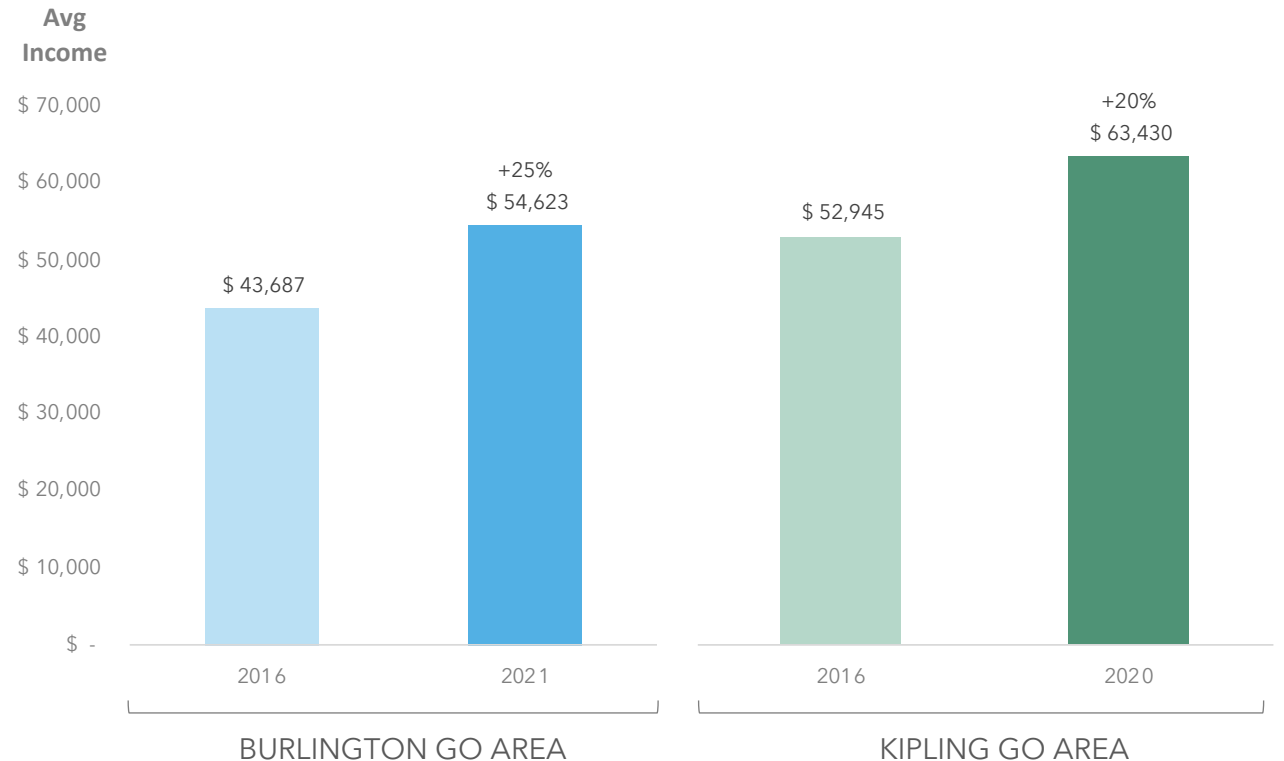
Average income in GO Station Areas increased

between 2016 and 2021

- The Burlington GO area saw a 25% increase while average income surrounding the Kipling GO increased 20%

Average growth in these areas over this period also exceeded the average income growth of the City.

- The average income of individuals around the Burlington GO was 39% less than the City in 2016. In 2021, it was 26% less than the City average.
- Previously in-line with the City, the average individual income surrounding the Kipling GO was 2% higher than the City average in 2021.



Source: Statistics Canada Census, average income of individuals.

300 RITSON RD S: MARKET ASSESSMENT

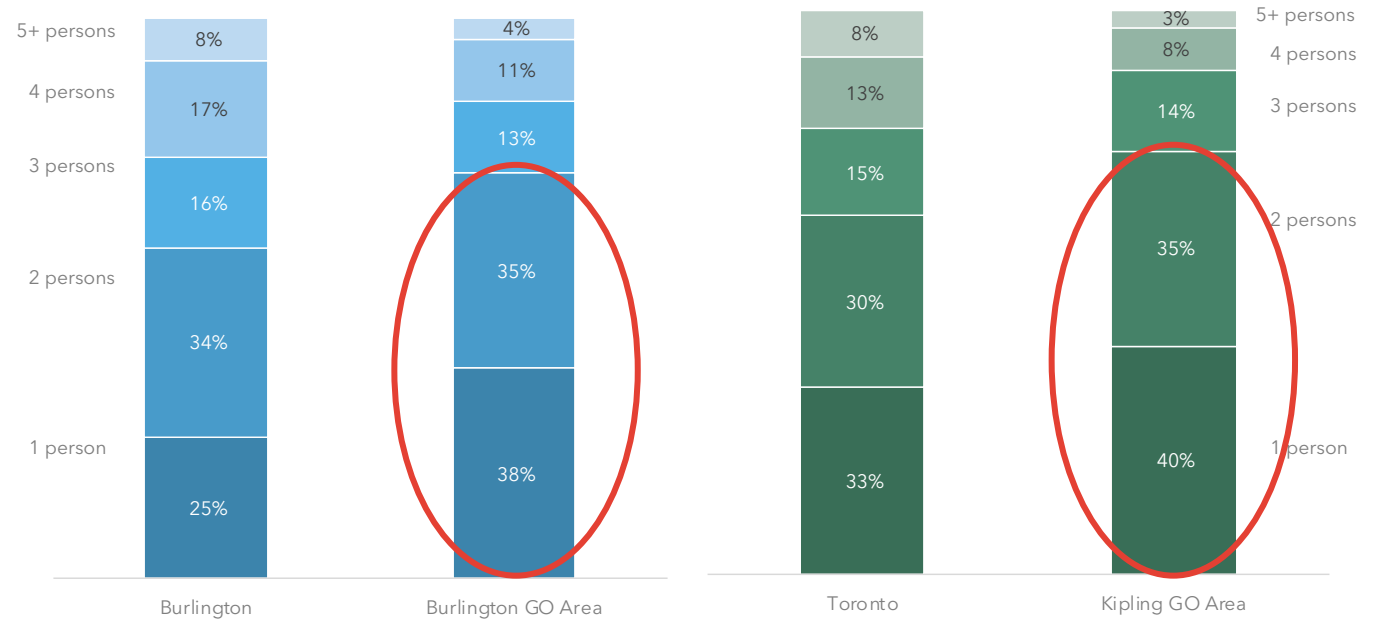
NEARLY ¾ OF HOUSEHOLDS NEAR GO STATIONS ARE 1 OR 2 PERSONS

GO Station Areas have a **higher proportion of 1- and 2-persons** households than the City.

This is unsurprising given the heightened presence of apartments.

GO Station Areas experience heightened growth in apartment units. Between 2016 and 2021 the share of apartments increased by:

- **3% per year** in the Kipling GO Area (*City averaged 1% per year over this period*).
- **13% per year** in the Burlington GO Area (*City averaged 2% per year over this period*).



Source: Statistics Canada Census

300 RITSON RD S: MARKET ASSESSMENT

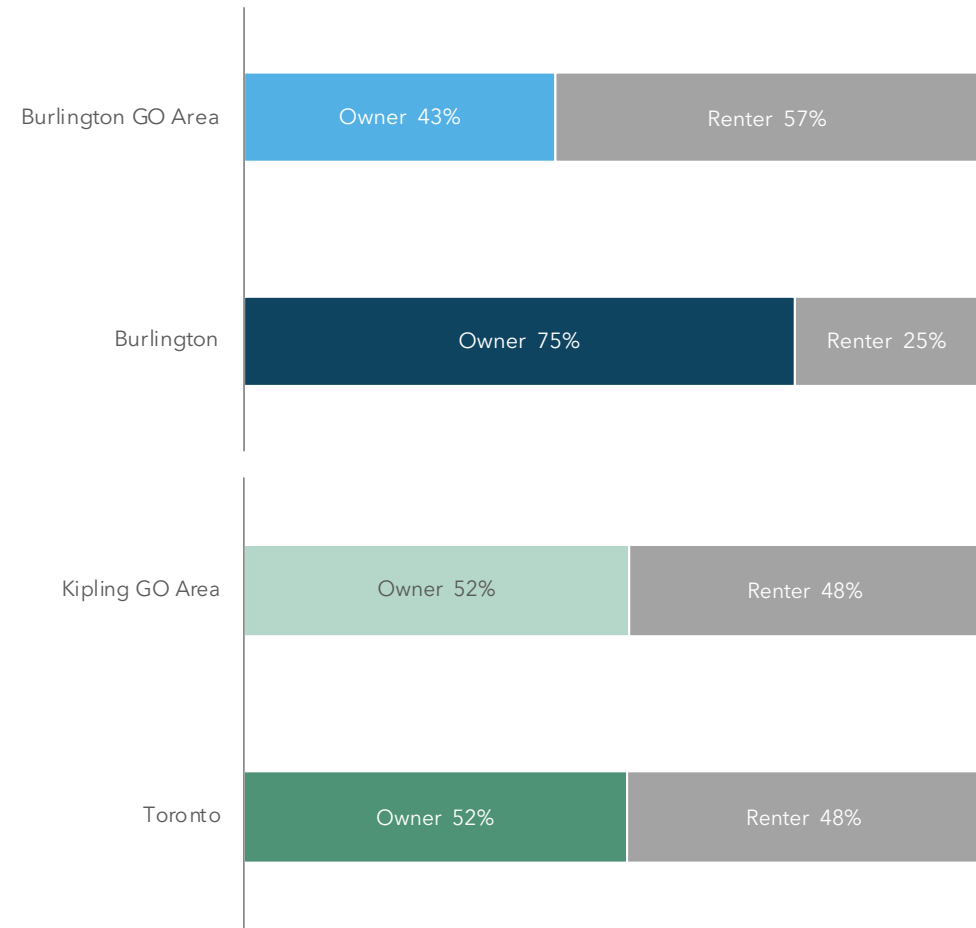
THOSE RESIDING NEAR A GO STATIONS ARE MORE LIKELY TO RENT

This trend is not surprising given the heightened concentration of apartments and smaller households.

Between 2016 and 2021:

- The share of renter households in the Burlington GO Area increased by 6% . By comparison, the City of Burlington only experienced a 1% increase over this period.
- While previously tracking below the City, the share of renter households in the Kipling GO Area increased by 2% from 2016 and bringing the local area in line with the City.

Relative to the City, the share of renter households increased more significantly around GO Station Areas.





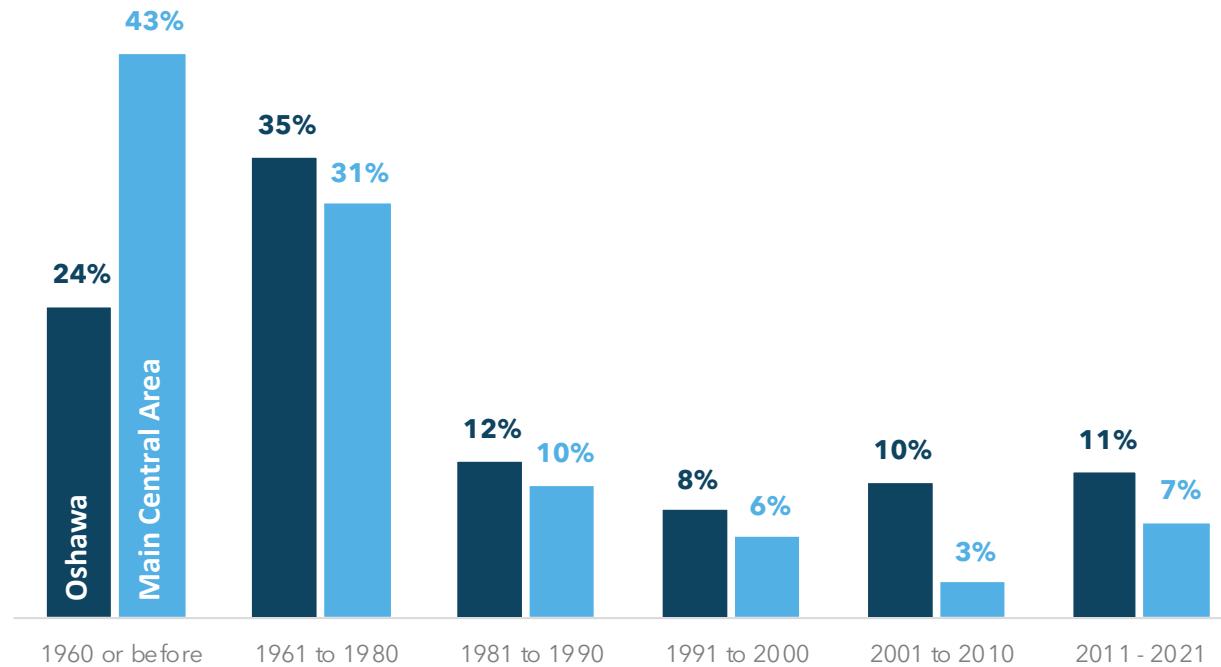
MARKET PROFILE: RESIDENTIAL

300 RITSON RDS: MARKET ASSESSMENT

300 RITSON RD S: MARKET ASSESSMENT

NEARLY ¾ OF THE MCAs HOUSING STOCK WAS BUILT BEFORE 1980

Historically comprised of workforce housing, the Main Central Area is home to post-war bungalow and older apartment buildings. Census data clearly shows that investments in new housing have occurred elsewhere across the City in recent decades (e.g., northeast Oshawa).



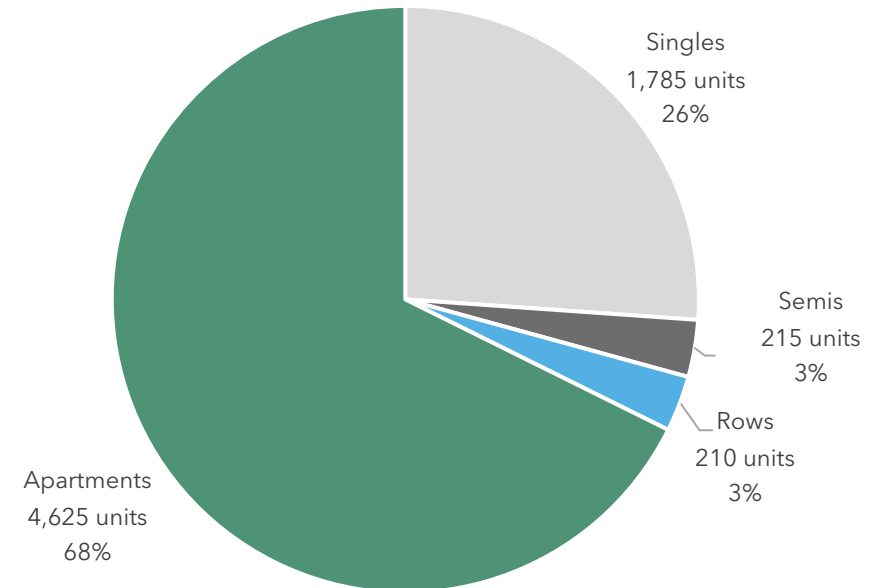
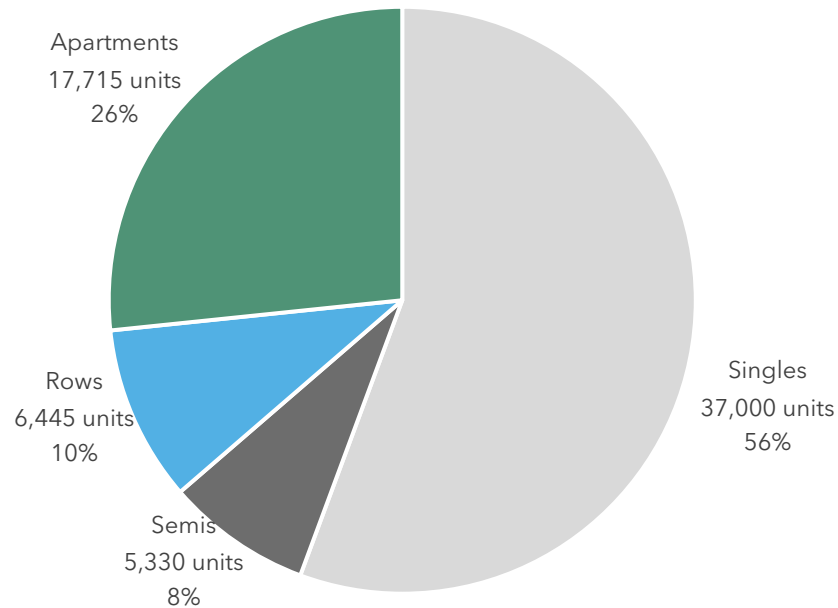
Source: Statistics Canada 2021 Census

300 RITSON RD S: MARKET ASSESSMENT

EXISTING HOUSING STOCK IN THE CITY IS MOSTLY LOW DENSITY

Nearly $\frac{3}{4}$ of the City's housing stock is in the form of ground-oriented homes (i.e., singles, semis and rows).

The MCA is the inverse of the City with more than $\frac{2}{3}$ of the housing stock as apartments.



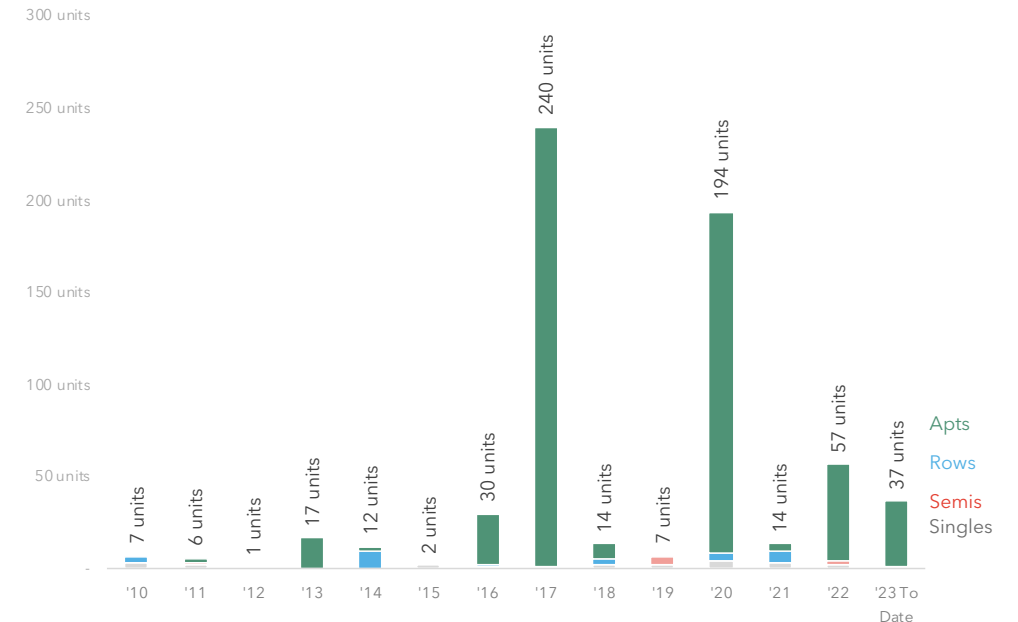
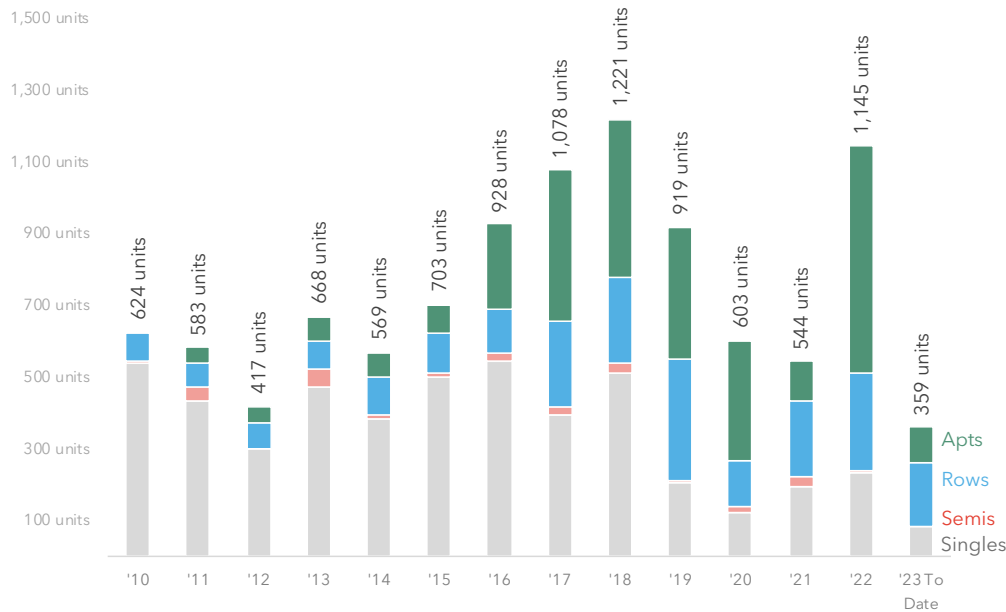
Source: Statistics Canada 2021 Census

300 RITSON RD S: MARKET ASSESSMENT

RECENT COMPLETIONS HAVE BEGUN TO INCLUDE MORE ROWS AND APARTMENTS

Even as recently as the early 2010s apartments were less than 10% of annual completions in Oshawa. More recently, apartments have surpassed 50% in select years while rows are consistently above 20%.

In the MCA there have been only a handful of new units each year, with the exceptions being when a new apartment building was completed (e.g., 2017 and 2020).



300 RITSON RD S: MARKET ASSESSMENT

THERE ARE MORE THAN 9,700 UNITS IN THE DEVELOPMENT PIPELINE

As of October 2022, there were approximately 98 new residential units under construction and 2,800 new residential units under application in the proposed Central MTSA. Furthermore, the City’s economic development department website highlights an additional 821 apartments in the Downtown development pipeline. **These new units could accommodate some 5,265 new residents¹.**

We also note that pre-application consultations have identified the potential for some 5,985 additional units and 64,045 square feet (5,950 square metres) of non-residential space across the Central MTSA, however, we note that these development concepts can—and likely will—evolve from pre-application consultation to formal application to the City. **These additional units could accommodate a further 10,525 new residents¹.**



Source: Parcel, based on information provided by the City of Oshawa. For the purpose of our analysis, we have included 135 Bruce Street in its entirety, despite the site being bisected by the northern boundary of the MTSA.

¹ Based on the PPU assumptions in the City’s DC Background Study (2019)

300 RITSON RD S: MARKET ASSESSMENT

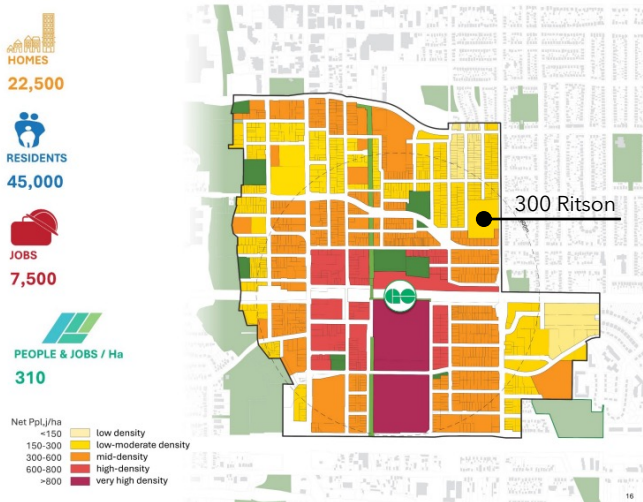
THE CITY IS UNDERTAKING AN MTSA STUDY TO GUIDE FUTURE GROWTH

The City is currently soliciting feedback from the community on three land use alternatives which accommodated between 45,000 and 51,000 residents and 7,500 to 8,500 jobs within the MTSA Study Area.

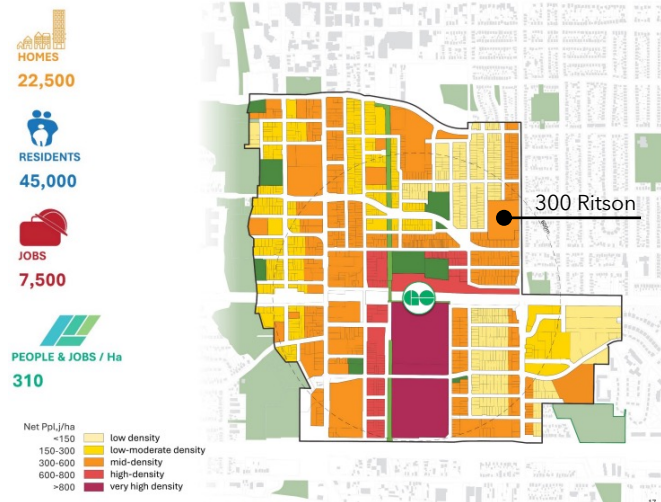
300 Ritson is shown as low-moderate density on Alternatives 1 & 3, and mid-density on Alternative 2.

Depending on the mix of residential and non-residential uses, this is likely to equate to approximately 28,000 square metres¹ of gross floor area.

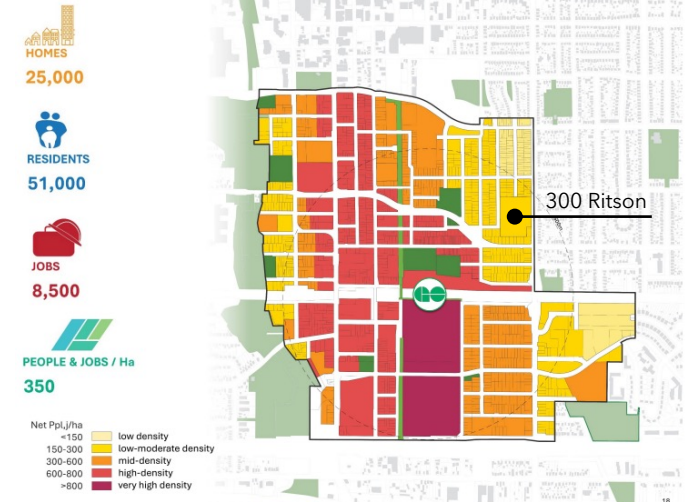
Alternative 1 | GO Station TOD Centre



Alternative 2 | Mid-rise High Street + TOD Centre



Alternative 3 | Bridging to Downtown

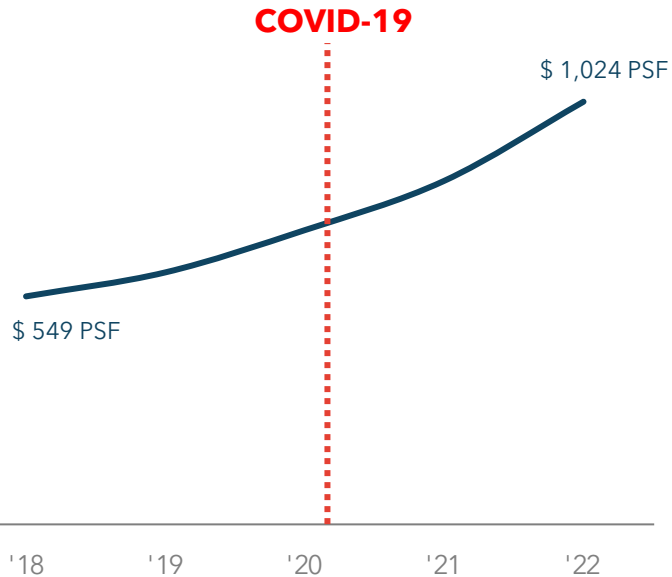


300 RITSON RD S: MARKET ASSESSMENT

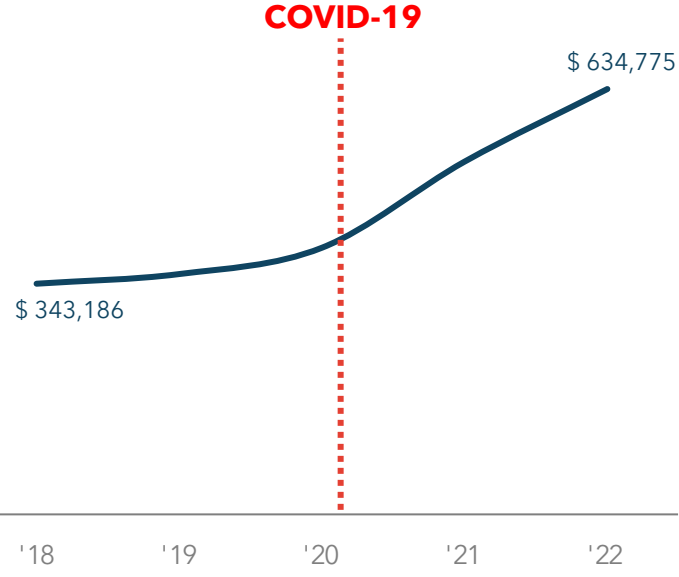
OSHAWA NEW CONSTRUCTION APARTMENT UNITS CONTINUE TO BECOME MORE EXPENSIVE

While average unit sizes remain relatively stable, prices continue to rise, nearly doubling the price per square (\$PSF) foot since 2018.

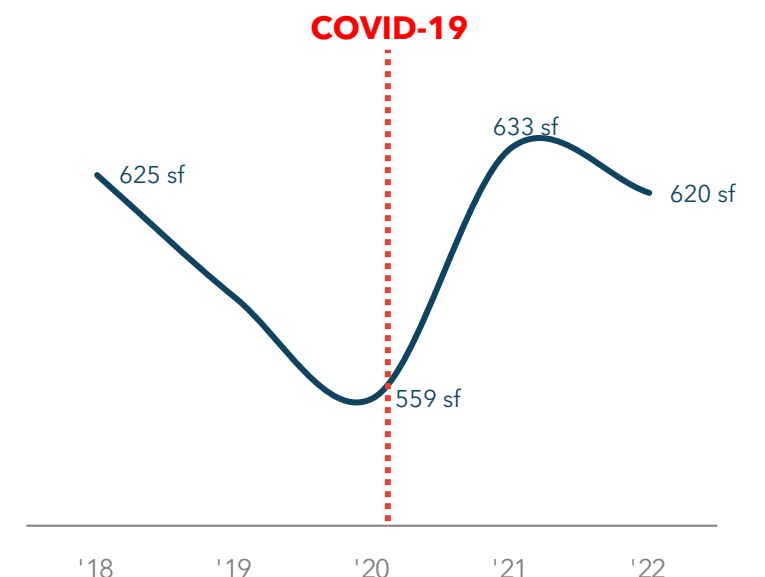
Price (\$PSF)



Price (\$)



Size (SF)

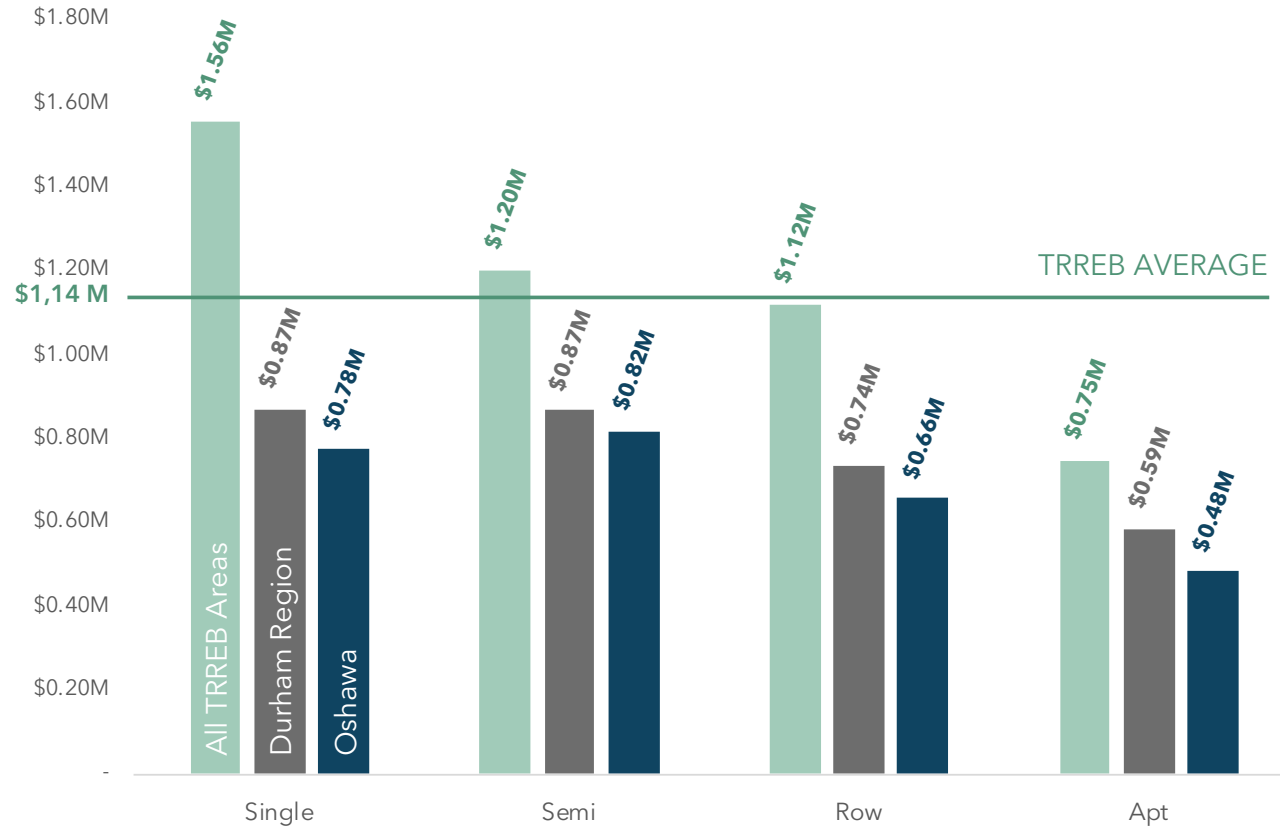


Source: Altus Data Studio

300 RITSON RD S: MARKET ASSESSMENT

RESALE HOMES IN OSHAWA ARE COMPARATIVELY AFFORDABLE ACROSS TYPOLOGIES

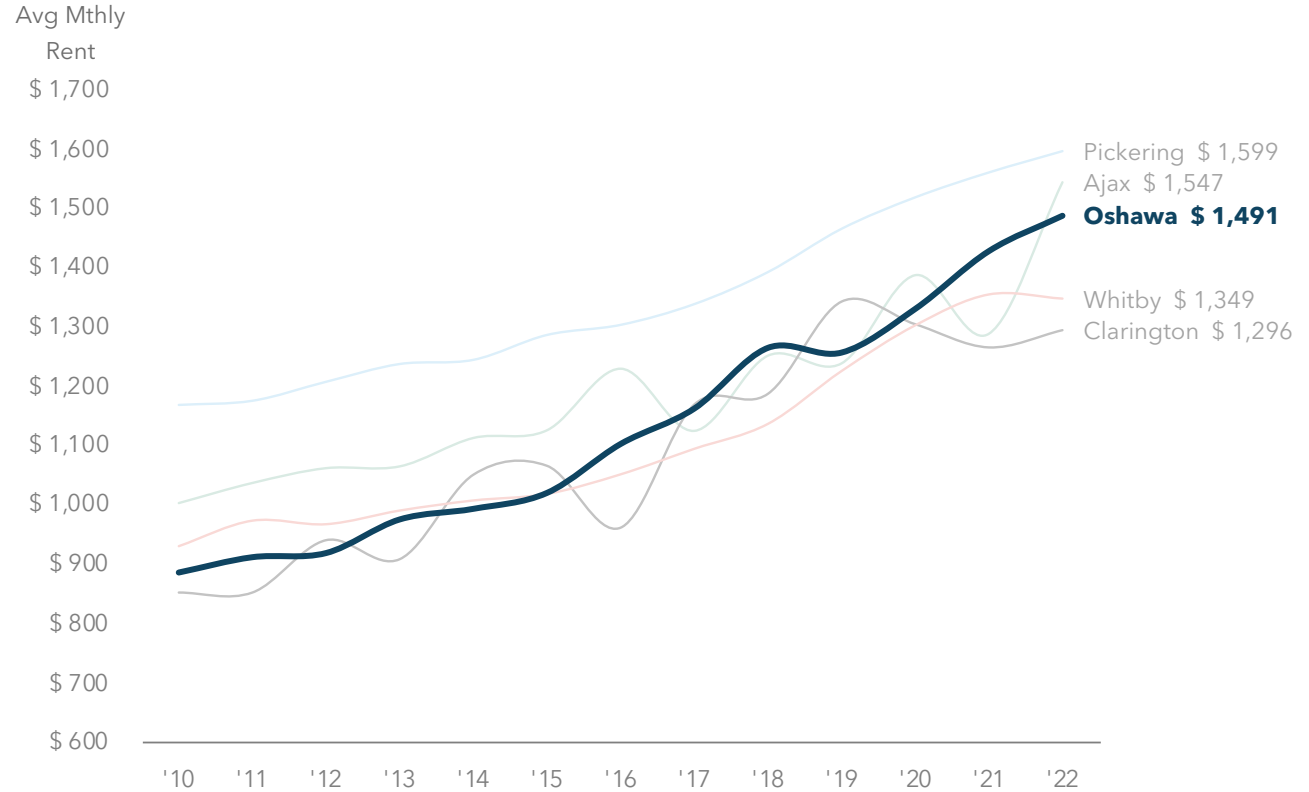
Across all unit types (singles, semis, rowhouses and apartments), resale homes in Oshawa consistently command lower prices relative to the market average for equivalent types of houses in the Region, and throughout the balance of the GTA.



300 RITSON RD S: MARKET ASSESSMENT

LIKE THE REST OF THE REGION, RENTS CONTINUE TO RISE

Oshawa's average monthly rent has risen considerably since 2010 and is just below its neighbours to the west who are closer to the City of Toronto.

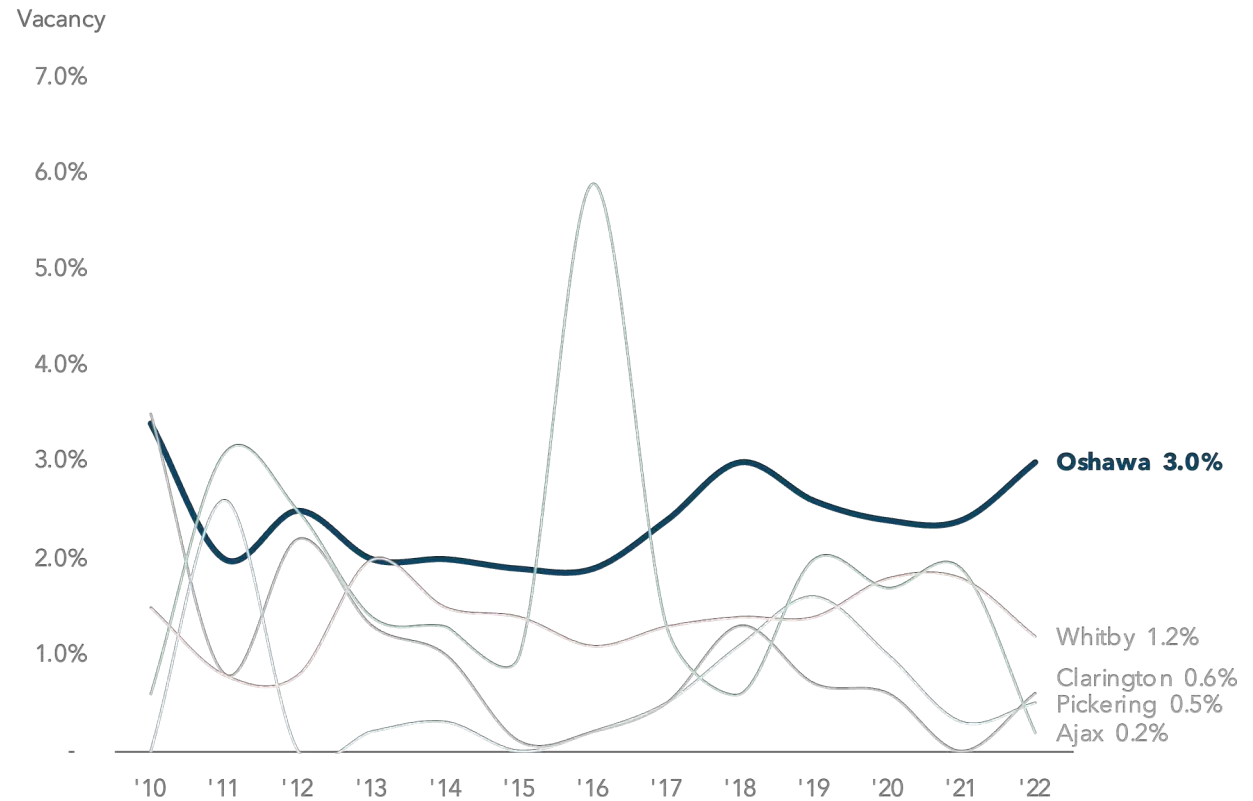


300 RITSON RD S: MARKET ASSESSMENT

VACANCY IS CONSISTENTLY HIGHER IN OSHAWA BUT AT THE LOWER END OF HEALTHY

Consistently hovering around 3%, Oshawa's vacancy is quite low, reducing options for local residents and keeping rent growth elevated.

That said, vacancy rates have consistently remained above other area municipalities, where they have trended toward critically low levels (~1% and below).





MARKET PROFILE: NON-RESIDENTIAL

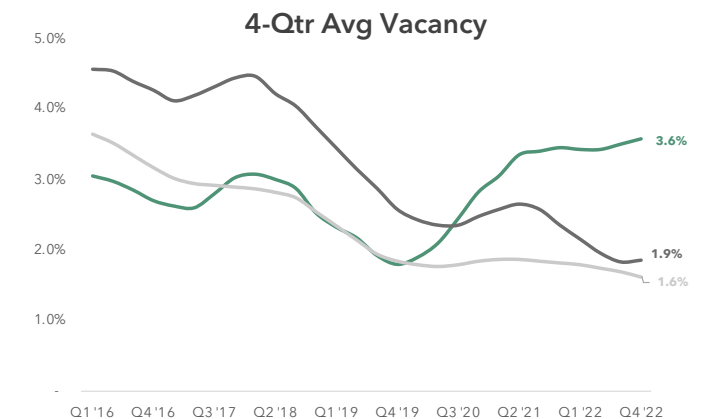
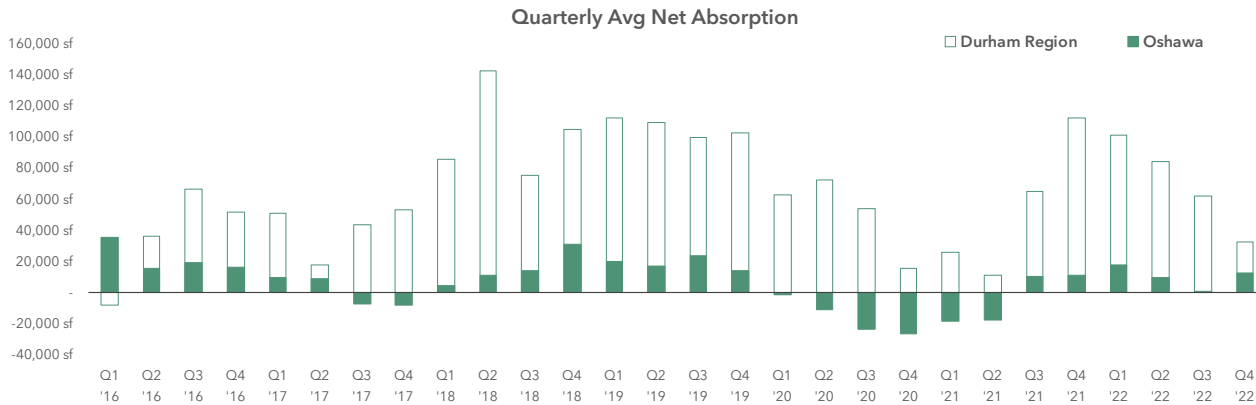
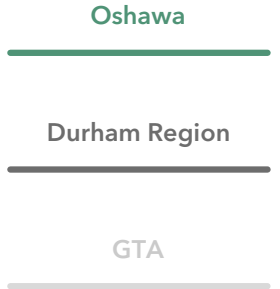
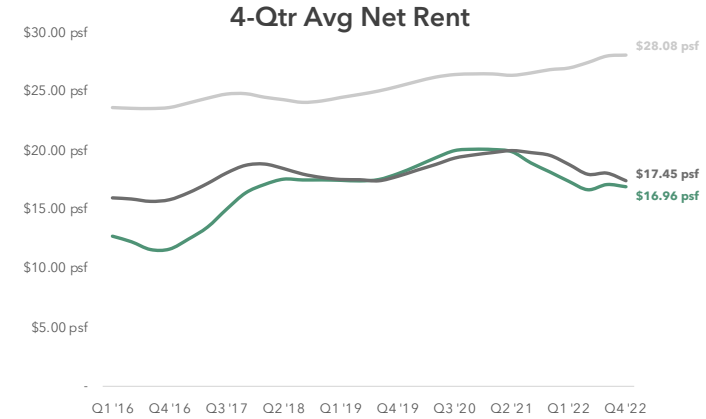
300 RITSON RDS: MARKET ASSESSMENT

300 RITSON RD S: MARKET ASSESSMENT

RETAIL MARKET CONDITIONS REMAIN RELATIVELY HEALTHY

Quick Facts

- 27%** Portion of Durham Region Retail space located in Oshawa
- 3%** Net Rental Rates in Oshawa compared to Durham Region
- HIGHER** Vacancy Rate than Durham Region
- 72.7%** of the Under Construction space in Durham Region is in Oshawa
- 9.9%** of the Under Construction space in GTA is in Oshawa
- 17.2%** of the Proposed space in Durham Region is in Oshawa
- 2.2%** of the Proposed space in GTA is in Oshawa



300 RITSON RD S: MARKET ASSESSMENT

OFFICE MARKET CONDITIONS ARE CHALLENGING FOR NEW DEVELOPMENT

Quick Facts

44% Portion of Durham Region Office space located in Oshawa

-12% Net Rental Rates in Oshawa compared to Durham Region

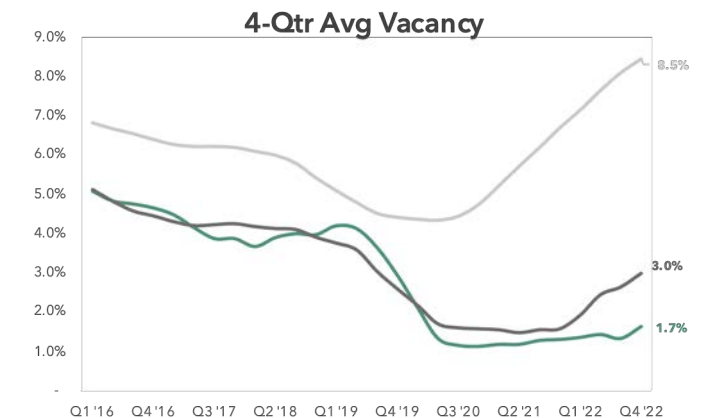
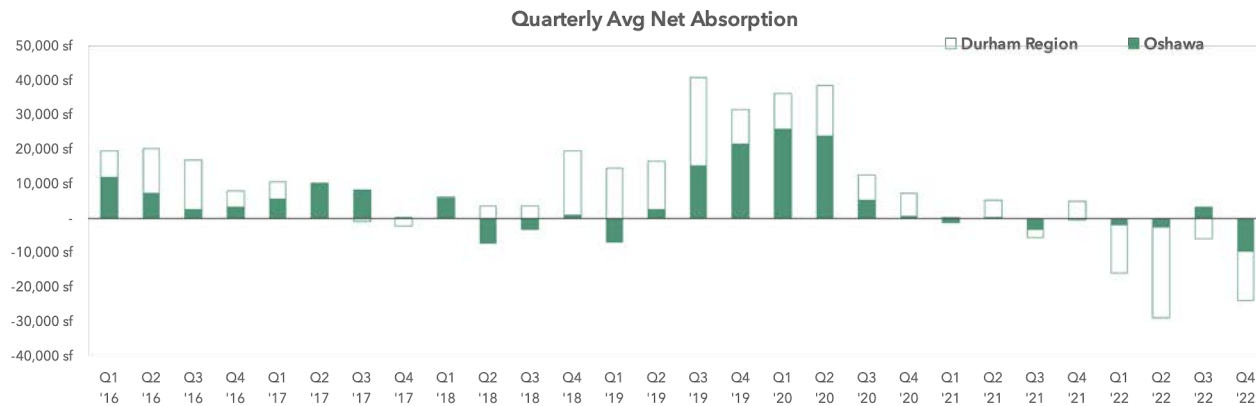
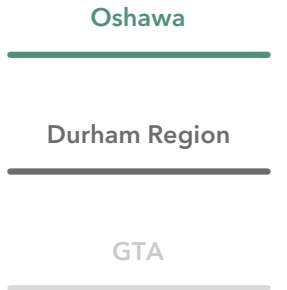
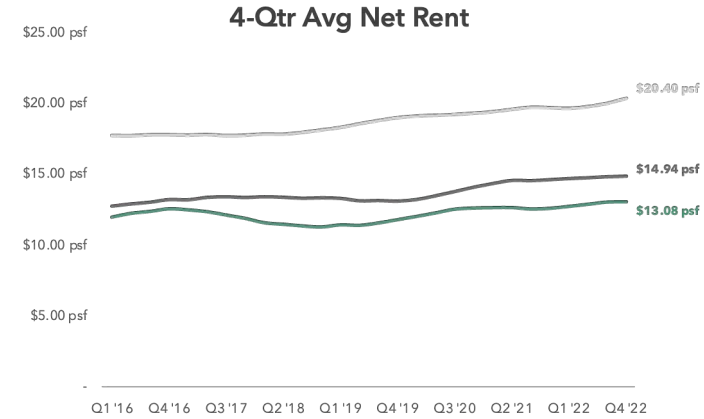
LOWER Vacancy Rate than Durham Region

27.3% of the Under Construction space in Durham Region is in Oshawa

0.3% of the Under Construction space in GTA is in Oshawa

0.0% of the Proposed space in Durham Region is in Oshawa

0.0% of the Proposed space in GTA is in Oshawa





FEASIBILITY CONSIDERATIONS

(KEY FACTORS)

300 RITSON RDS: MARKET ASSESSMENT

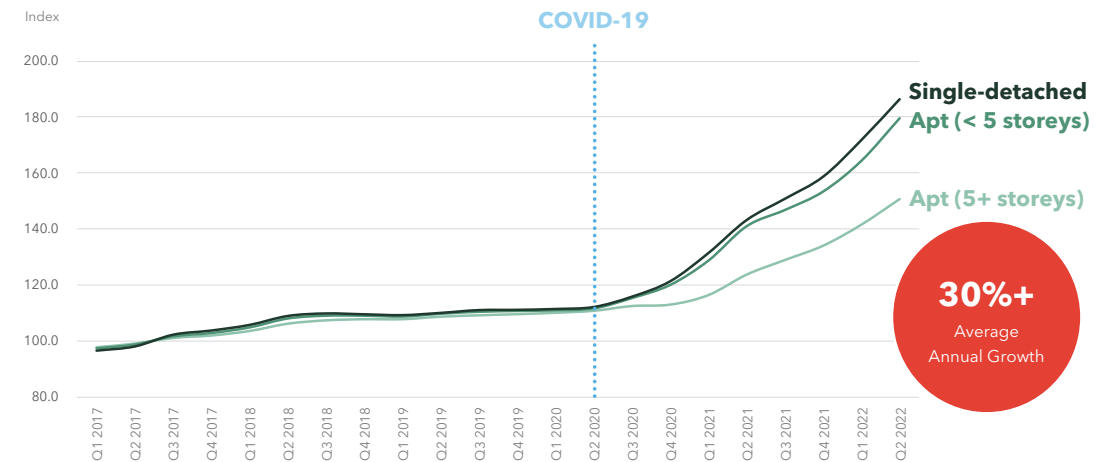
300 RITSON RD S: MARKET ASSESSMENT

HARD COST ESCALATION CHALLENGES THE FEASIBILITY OF ALL TYPES OF DEVELOPMENT

Factor #1: Hard Building Cost Escalation

- As emphasized through recent media coverage and corresponding data releases (e.g., Statistics Canada Construction Price Index, Altus Construction Cost Guide, etc.), per square foot **cost ratios have risen sharply since the beginning of the COVID-19 pandemic**. This has also been observed across all asset classes.
- Recognizing the potential diversity of housing options contemplated at the Ritson site, it is also interesting to note that the rate of increase has **not necessarily been uniform across all building typologies, nor housing formats**. For better or worse, cost escalation has been the most “sharp” for lower density / more ground-oriented housing formats (e.g., singles, apartments less than 5 storeys in height, etc.).

Residential CPI (Construction Price Index)



Source: Parcel, based on Statistics Canada data.

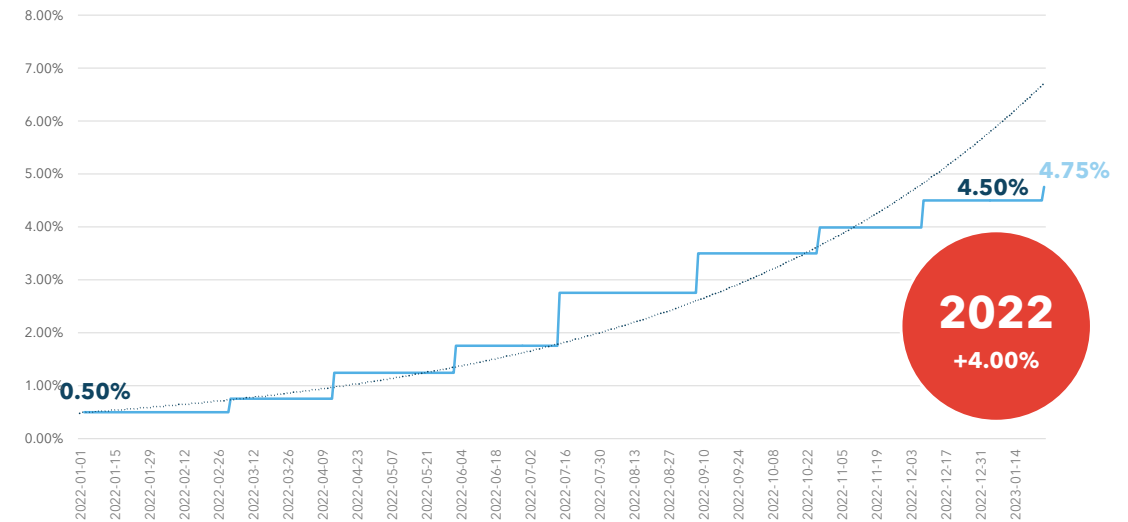
300 RITSON RD S: MARKET ASSESSMENT

RIISING INTEREST RATE ENVIRONMENT CREATES ADDITIONAL CHALLENGES

Factor #2: Interest Rate Increases

- Following an extended period of notably low interest rates leading up to the COVID-19 pandemic, 2022-23 has marked a period of notable adjustment, as recent government announcements continue to plot rates back up to approximately 4.75% as of late January 2023, and even higher today.
- In conjunction with the significant capital costs associated with developing new real estate, this can have **significant impacts on financing** (i.e., subject to the amount of equity available for a given project and/or the amount required to be financed via debt / loans).

Interest Rate (Bank Rate)



Source: Parcel, based on Statistics Canada data.

300 RITSON RD S: MARKET ASSESSMENT

THERE IS A NEED TO BALANCE FINANCIAL & NON-FINANCIAL MUNICIPAL OBJECTIVES

Factor #3: Land Use Policy & Government Fees

- In response to continued growth pressures and finite financial resources, municipalities across the Greater Toronto Area and beyond have been **steadily increasing the amounts levied against new developments** (e.g., one-time development charges, community benefits charges, parkland requirements / cash-in-lieu fees, etc.). Although this is highly jurisdiction-specific, the overall trend has been to require higher one-time payments for new development.
- Similarly, more structural policy changes continue to be implemented through new legislation, including recent announcements from the Province of Ontario with respect to Bill 23, which will effectively alter the amount of these fees that can be charged across selected types of development (**including affordable and rental housing specifically**). Although not yet fully defined, a new class of “attainable” housing is also expected to be introduced, which would similarly allow for certain relief of one-time development fees.
- Land use policy changes (e.g., land use permissions, urban design guidelines, etc.) can also directly impact the feasibility of a given project - particularly if the amount or scale of development required to achieve viability is not permitted as-of-right. This can either **render projects entirely infeasible** from the outset, or **risk a more lengthy—and likely costly—approvals process** that limits projects from getting “off the ground”.

300 RITSON RD S: MARKET ASSESSMENT

MARKET RESIDENTIAL CONTINUES TO REPRESENT THE “HIGHEST & BEST USE”

Factor #4: “Highest & Best Use” Inertia

- Unsurprisingly, **market residential (ownership) continues to represent the “highest and best use” for most typical development sites across the Greater Toronto Area** and beyond.
- With even purely market-based projects challenged by the various factors identified earlier, it has become increasingly difficult to achieve project feasibility for affordable housing that inherently results in a reduced—or “discounted”—revenue stream. Furthermore, regardless of profit motivations, this continues to squeeze the gap between total project costs and available revenues to offset them.
- It is also important to note that most highest and best use assessments are informed by two distinct components within the purview of land economics: (1) market opportunity or “demand”; and, (2) financial feasibility. **Whereas there is plenty of demand—or “need”—for affordable housing, it certainly does not allow for favourable conditions for financial viability.**

300 RITSON RD S: MARKET ASSESSMENT

HOUSING DEVELOPMENTS CAN BE CHALLENGED BY AN OVERSUPPLY OF NON-RESIDENTIAL

Factor #5: Non-Residential Use Requirements

- The inclusion of non-residential uses—such as neighbourhood-serving retail/service commercial uses, institutional facilities and other community functions—**can serve as an important amenity to growing communities.**
- That said, even new market residential projects can often become challenged or overburdened by the cumulative effects of various other limiting factors affecting feasibility, including **requirements for a significant amount* of non-residential space** (especially where demand may not be available).

As a general “rule-of-thumb”, we often observe that when a development project is required to dedicate **more than approximately 5-10% of its total floor area to non-revenue (or limited revenue) generating uses, it can begin to materially strain feasibility. This condition risks disincentivizing investment altogether that begins to look elsewhere. This relationship can be even more impactful in the case of predominantly—or exclusively—affordable housing developments, as well as those contemplating significant community / institutional uses, such as @ 300 Ritson.*



FEASIBILITY CONSIDERATIONS

(RES / NON-RES BALANCE)

300 RITSON RDS: MARKET ASSESSMENT

300 RITSON RD S: MARKET ASSESSMENT

Parcel

ACHIEVING AN APPROPRIATE BALANCE BETWEEN RESIDENTIAL & NON-RESIDENTIAL USES

In order to preserve conditions for financial feasibility, it will be necessary to ensure an appropriate balance of market housing (highest and best use), with other use types (e.g., affordable / below-market housing, commercial amenities, civic / institutional / community-serving uses, etc.).

- Local precedent projects track at **<1% non-residential**
(predominantly market-based commercial uses)
- Regional precedent projects track at **up to 20% non-residential**
(inclusive of market-based commercial uses + community uses)
- 300 Ritson is located at the periphery of the GTHA Region + periphery of the subject MTSA = non-residential percentages **may be even lower**

300 RITSON RD S: MARKET ASSESSMENT

THERE IS A MINIMUM RESIDENTIAL COMPONENT REQUIRED TO PRESERVE FEASIBILITY

250 Harmony

(Oshawa, Ontario)



- **100% residential**
- 0% non-residential (market)
- 0% non-residential (institutional)

135 Bruce Street

(Oshawa, Ontario)



- **100% residential**
- 0% non-residential (market)
- 0% non-residential (institutional)

144 - 155 First Ave

(Oshawa, Ontario)



- **99% residential**
- 1% non-residential (market)
- 0% non-residential (institutional)

300 RITSON RD S: MARKET ASSESSMENT

THERE IS A MINIMUM RESIDENTIAL COMPONENT REQUIRED TO PRESERVE FEASIBILITY

Sc. Junction

(Toronto, Ontario)



- **96% residential**
- 3% non-residential (market)
- 1% non-residential (institutional)

Bloor & Dufferin

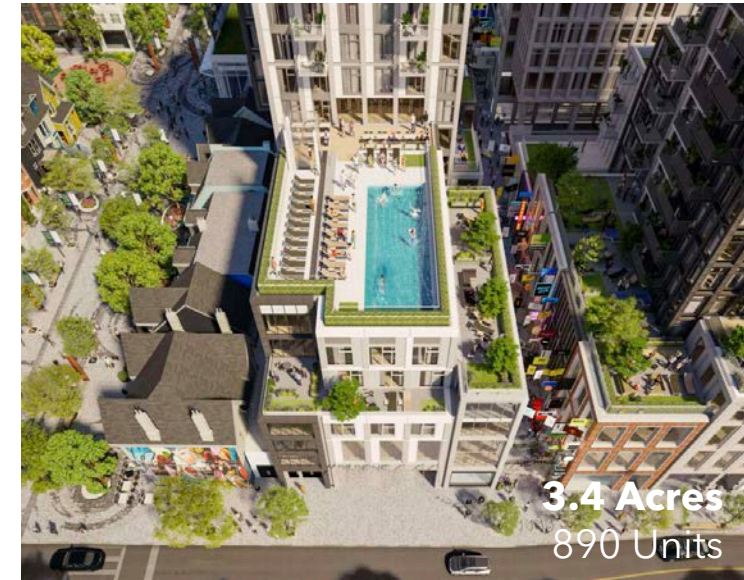
(Toronto, Ontario)



- **87% residential**
- 2% non-residential (market)
- 11% non-residential (institutional)

Mirvish Village

(Toronto, Ontario)



- **80% residential**
- 7% non-residential (market)
- 12% non-residential (institutional)

CONTACT US

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416-869-8264

250 University Avenue, #221, Toronto, Ontario, M5H 3E5



Appendix B:

Round 1 'What We Heard' Engagement Executive Summary

Ritson School Project Round 1 ‘What We Heard’ Engagement Executive Summary

Prepared by LURA Consulting

September 2023

Introduction and Background

The Region of Durham is working to expand access to affordable housing and community services and supports across all eight local area municipalities to promote equitable access for all residents. This process will look at the opportunities to use the existing school property to create more housing and support the Region’s commitment to initiate the development of 1,000 new affordable rental housing units by 2024 across the Region of Durham, as per At Home in Durham, the Durham Housing Plan 2014-2024, and the Region’s Master Housing Strategy.

The Ritson School Project aims to explore potential uses for the former elementary school building for community programming needs of residents in the surrounding neighbourhoods and Durham Region.

Round 1 Engagement Process Overview

Engagement Activity	Number of Participants
1 Public Community Conversation	50
1 Community Survey	187
3 Community Partner Workshops	43
1 Regional Staff Workshop	14
‘Have Your Say’ Portal Feedback	6
TOTAL	300

Project information was also communicated through a project video, mailed postcards, social media posts, and the project webpage FAQs.

Round 1 ‘What We Heard’ Summary Overview

A summary of feedback from round 1 engagement activities is provided below. A more detailed summary of feedback for each engagement can be found in the appendices.

Vision and Purpose

Participants highlighted the following priorities for the vision of 300 Ritson Road South:

- Increasing the supply of affordable rentals
- Access to community services and programs
- Increasing the supply of housing with supports
- Providing a mix of housing and service

Services and Programs

Participants identified the following services and programs that would be most valuable to the community:

- Housing (e.g., affordable, mixed-income, long-term care)
- Support for individuals experiencing homelessness, addiction, or other challenges (e.g., emergency shelter, food bank, addiction treatment)
- Health services (e.g., specialized health care, mental health, paramedic unit)
- Education and training (e.g., cultural education, Indigenous programming)
- Social services (e.g., employment support, immigration services)
- Children's services (e.g., childcare, early years programs)
- Food security (e.g., food bank, community kitchen, community garden)
- Other including:
 - Senior programming (e.g., adult day programs)
 - Office spaces and spaces for gatherings
 - Recreational and community-based programs

Partnerships and Resources

Participants identified the following partnerships and resources they would like the Region to consider:

- Financial services and institutions (e.g., tax clinics, banks)
- Educational institutions and libraries
- Local organizations and association
- Non-profit and cultural organizations
- Medical and health services
- Community and local groups (e.g., neighbourhood associations)
- Housing and accommodation service providers
- Social services and community organizations
- Recreational centers and programming
- Seniors' centers and aging-in-place service providers

Next Steps

The project team will review the feedback received and use it as one of many inputs to develop recommended design concepts for the site. Additional engagement on these design concepts is anticipated for Winter 2024.

Appendix C:

Community Engagement Drop-In Event &
Online Survey 'What We Heard' Summary

Ritson School Project Community Engagement Drop-In Event & Online Survey 'What We Heard' Summary

Prepared by LURA Consulting

August 18, 2023

Introduction and Background

The Region of Durham is working to expand access to affordable housing and community services and supports across all eight local area municipalities to promote equitable access for all residents. This process will look at the opportunities to use the existing school property to create more housing and support the Region's commitment to initiate the development of 1,000 new affordable rental housing units by 2024 across the Region of Durham, as per At Home in Durham, the Durham Housing Plan 2014-2024, and the Region's Master Housing Strategy.

The Ritson School Project aims to explore potential uses for the former elementary school building for community programming needs of residents in the surrounding neighbourhoods and Durham Region.

Purpose and Format

The project team held a drop-in open house style public session on July 11, 2023, from 6 p.m. to 8 p.m. at the Oshawa Public Library McLaughlin Branch (65 Bagot Street, Oshawa ON).

The purpose of the public session was to:

- Introduce the project and generate awareness.
- Understand housing, programming and service needs of community members.
- Educate and engage in an interactive and open environment.
- Meet the project team.

Staff from Durham Region were present to provide information about the project, answer questions, and gather feedback. The Region's staff were supported by their consultants Smart Density (Planning and Design) and LURA Consulting (Engagement and Facilitation).

Thirty-seven (37) people signed in at the meeting, with approximately 50 people in attendance. Sign-in was optional.

Following the meeting, an online survey with the same questions used in the public session was available to receive additional input from July 11 to August 15. During this time, 187 survey responses were received.



What We Heard

A summary of what we heard through the community engagement drop-in event and community survey is provided below and organized by engagement questions and themes.

Vision

Participants were almost evenly divided on the importance of four priorities for the vision of 300 Ritson Road South (**Figure 2**). **Increasing the supply of affordable rentals, providing access to community services and programs, increasing the supply of housing with supports, and providing a mix of housing and service** uses each received 21-22% of responses.

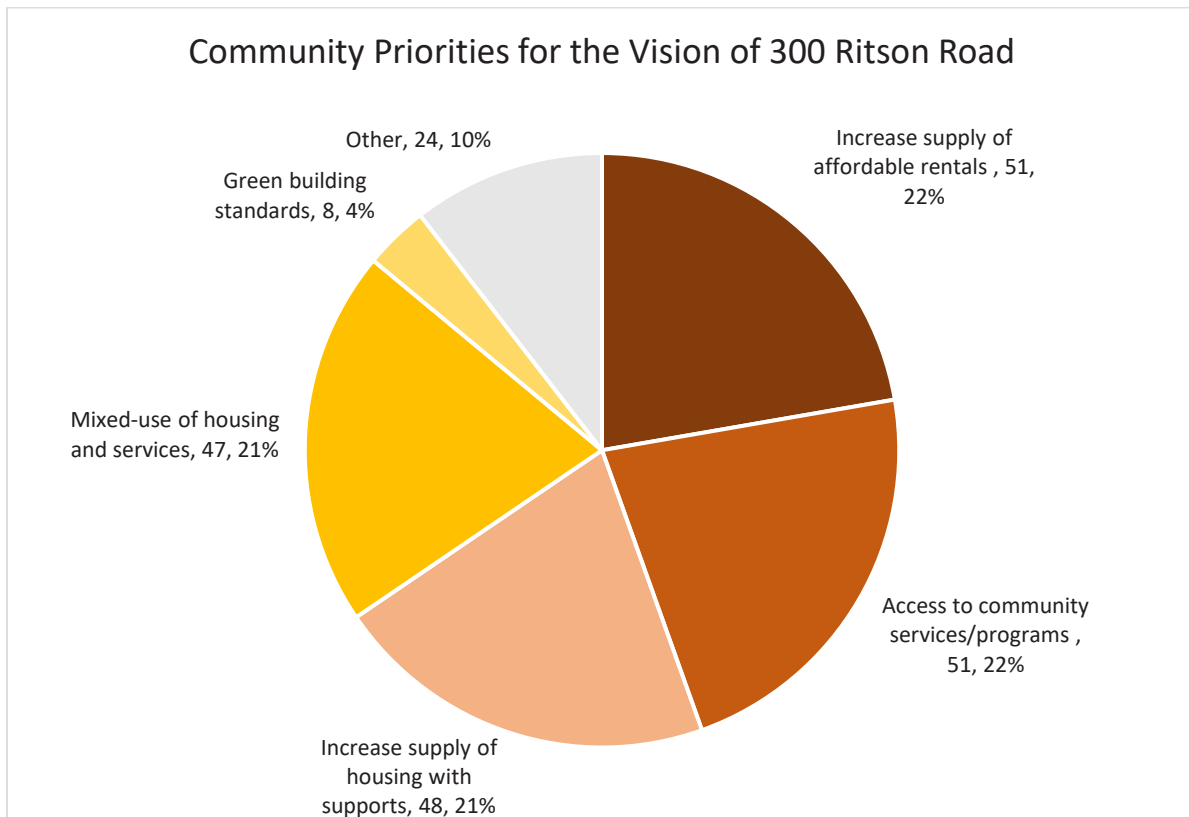


Figure 1. Summary of respondents' top priority for 300 Ritson Road South (Number of Responses: 229)

The project team received many comments further elaborating on participants' thoughts on the vision for the site:

- Overall, participants identified a desire for the site to serve as a reflection of the community's needs.
- Some participants identified key groups in need of housing that could potentially be accommodated on the site. These included seniors (living independently or through a long-term care or retirement facility), university students, and generally, individuals who would benefit from more affordable housing.
- Some participants supported the site's suitability for transitional or supportive housing, with some identifying the opportunity and benefits of wrap-around housing services. Some participants expressed concerns about on-site transitional or supportive housing,



recognizing that it would demand too much available space without providing opportunities for other community services and programs the community desires.

Participants were also asked what qualities would help to foster a welcoming environment:

- Some participants identified that the idea of a welcoming space carries different implications for user groups. Some people will feel inherently more/less welcome based on their gender, race, age, language, access to housing, employment, or other factors. An equitably welcoming space should acknowledge that some people and communities need unique support services to make them feel welcome.
 - Some examples included multi-faith rooms, information in multiple languages, and gender-neutral washrooms with child-changing facilities and washing facilities for religious practices.
- Participants identified the need to accommodate a variety of ways for people to travel to the site by including vehicle parking and amenities for safe bicycle parking.
- Participants indicated the space should be inclusive and provide opportunities for people to feel safe where prejudice is not tolerated.
- Participants identified that the space should be barrier-free.
- Some participants suggested that there could be a community stewardship initiative for the space to help nurture the community around the area.
- Participants referenced the importance of ensuring people feel ownership over the space and have a say in their spaces.
- A participant suggested that welcoming committees could be implemented to engage with people accessing the space/living in it so they have a person to connect with.



Valued Services

Participants indicated that Housing and Homelessness services would be most valuable to the community, followed by Physical and Mental Healthcare, then Education and Training (**Figure 3**).

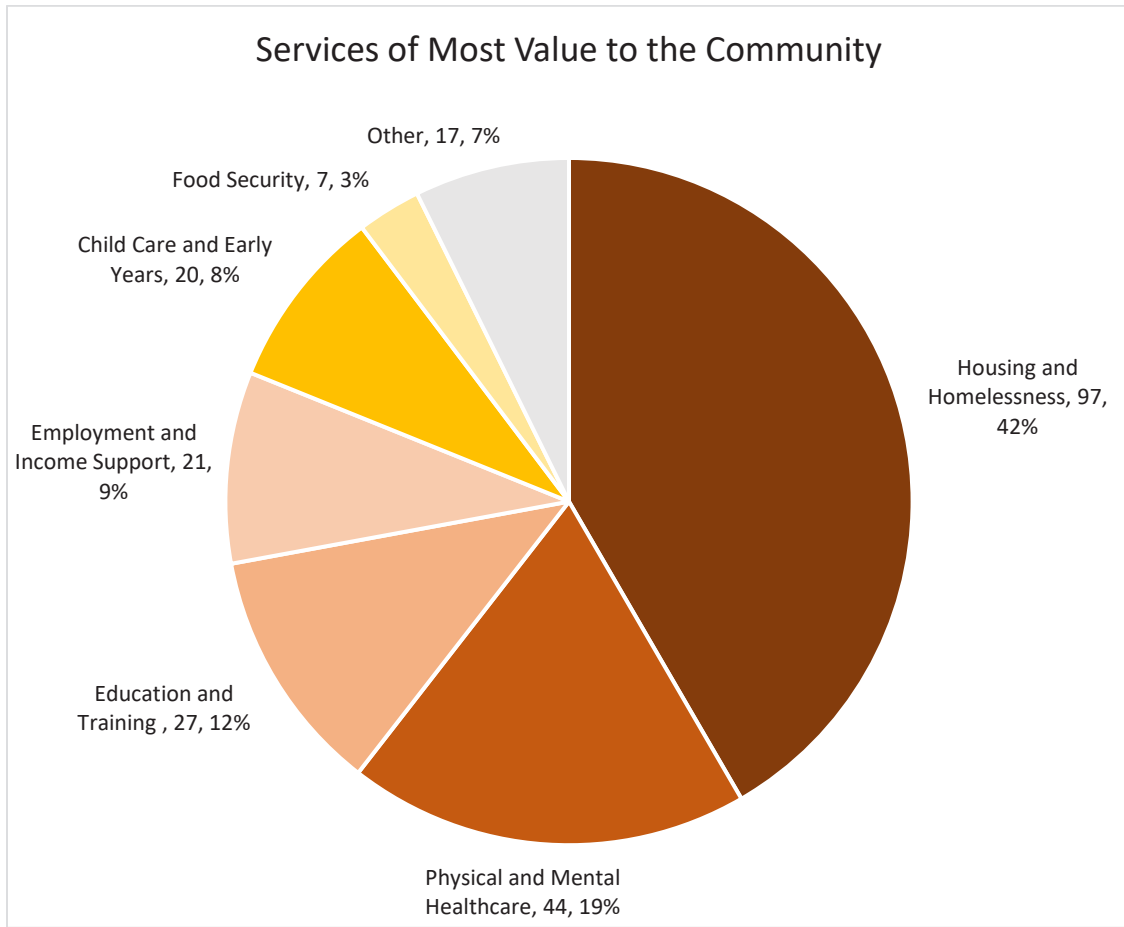


Figure 2. Summary of services respondents identify as most valuable to the community (Number of Responses: 233)



Current and Desired Programs and Services

Participants identified that the top programs and services they currently access include the Library, Recreation Services/Programs, and Healthcare Services/Programs. Participants expressed interest in future programs/services related to Community Services, Education and Training, and Mental Health Services/Programs (**Figure 4**).

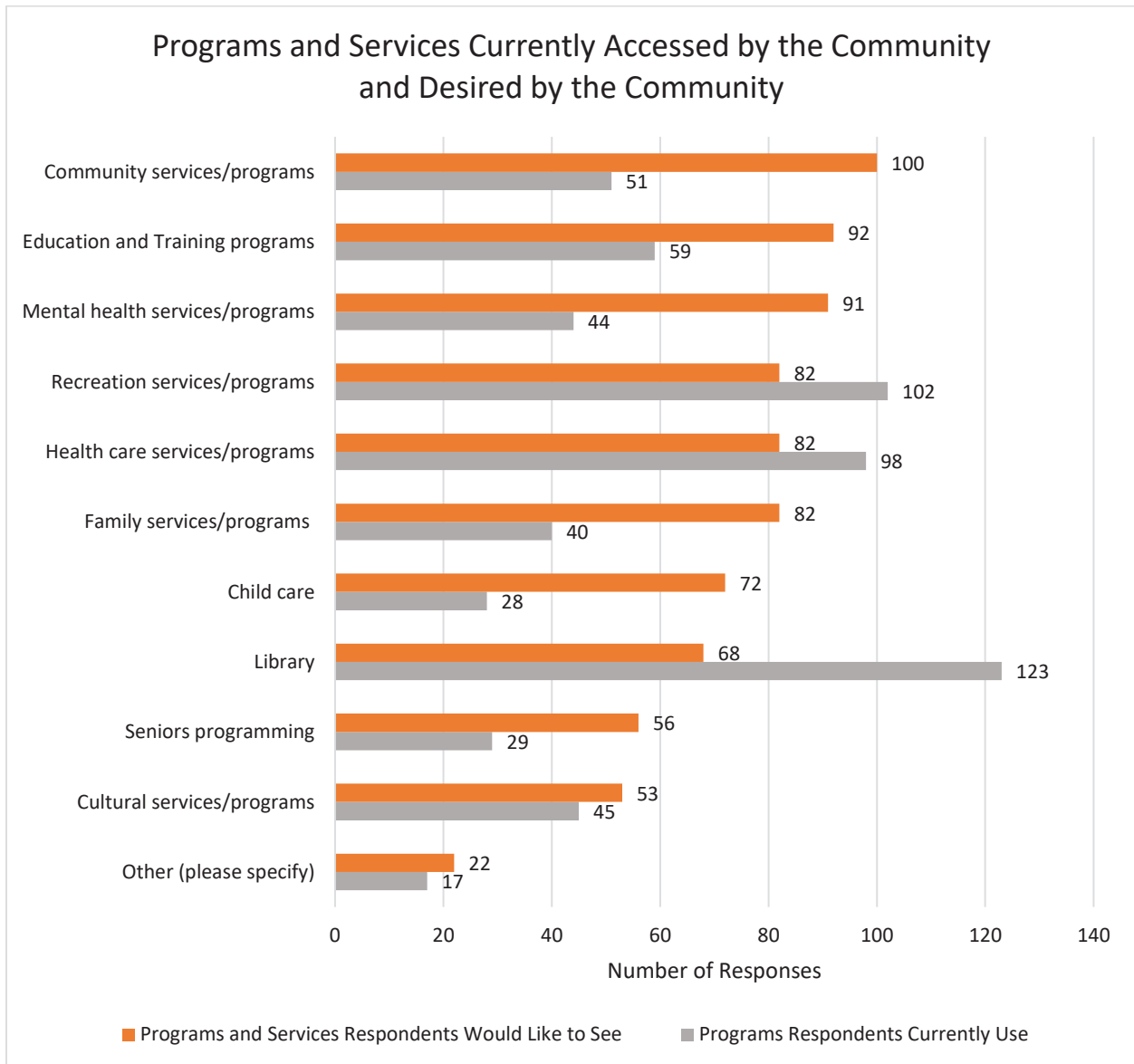


Figure 3. Summary of programs and services respondents currently use and desire to see reflected in the future of 300 Ritson Road South.

Participants also identified the following community programs and services they currently use:

- Schools, noting that several have closed in their community and related concerns associated with school capacity.
- Seniors-specific healthcare services.



Respondents also identified the following programs and services they would like to see in the future of Ritson School:

- Access to food either through groceries or a communal garden. This included urban farming/gardening.
- Spaces for gathering generally and specific needs, such as children's play and off-leash dog space. Family recreation and fitness were also noted.
- Opportunities for intergenerational connection.
- Paramedic unit.
- Long-term care.
- Indigenous healthcare navigator.
- Library.
- Childcare.
- Family services.
- Arts centre.
- Museum of Oshawa.
- Warming/cooling centre capabilities.

Participants were divided on whether housing and services should be separated so that the site provides only housing or only services or a more integrated housing and services model. Participants who supported the integration of housing and services generally indicated that this is a strong model for helping to support people. A participant referenced Cornerstone on Bloor Street in Oshawa as a similar successful model from which the project could learn to further build a unique service model.

Individuals who supported separating housing and services (only providing housing or services) generally indicated the affordable housing availability challenges facing Oshawa/Durham Region, requiring optimizing sites to deliver as much as possible. Some concerns were expressed regarding challenges to the surrounding community that may arise from social services and supportive/transitional housing concentrated under one roof.

Other feedback

Participants also provided additional feedback for the project team to understand as part of the community's desires for the site, including feedback received through the 'Have Your Say' portal on the webpage:

- Participants were eager for the project's timeline to be accelerated to deliver either housing or social programs and services, or a combination of both on the site.
- Some participants identified a connection between the community, the building, and the landscape's historic significance. Participants were interested in ensuring the building continues to look and feel like the original schoolhouse. Participants were also interested in ensuring the property's trees are protected.
- Some concerns were raised regarding the tradeoffs associated with historic preservation and the challenges it can pose for redevelopment. Historic preservation should clearly articulate the significance of preserving elements and not simply preserving something because it is old.
- There is interest in having Durham Region manage the housing on-site rather than a for-profit company.



- Participants were interested in understanding how "affordability" is defined in the context of this project.
- Individuals were generally concerned about housing affordability and the desire to ensure attainable affordable housing for the future use of this site.
- Interest in knowing more about the housing models being examined for the site – some participants were interested to know if co-op housing could be explored.
- Participants would like reassurance that efforts are being made to help individuals experiencing homelessness, addiction, or other issues.
- A participant suggested using the building as semi-permanent living quarters with opportunities for skill-building for homeless individuals until they are secure enough to live independently and can potentially relocate to other communities in Canada to utilize their newfound skills.
- Participants suggested transforming the building into a centralized hub for the homeless population where social supports and essential services, including counselling, addiction treatment, and mental health support, could be provided.
- A participant suggested employing local talents, such as teachers, nurses, social workers, and others within the building, to support the programs and services provided.
- A participant suggested using the field around the building for mixed housing, referring to examples like Ontario Shores and exploring the potential for collaboration with other communities across Canada.
- A participant suggested possibly including programs similar to Gate 3:16, where basic necessities and emergency shelters are provided.
- Participants are generally supportive of the micro-home projects nearby but are concerned with issues like fights and theft. Participants acknowledge that the outcome will largely depend on the use(s) of the site.
- Participants identified the potential need for on-site security presence and safety enhancements around the neighbourhood.
- Some participants expressed concerns about cleanliness and ongoing maintenance of the site.
- Some concerns were expressed related to service capacity, particularly school capacity.
- Participants highlighted the pressing need for more schools in Oshawa, as existing ones are overcrowded, and suggested reopening the building as an elementary school.
- The Canada-Wide Early Learning & Child Care (CWELCC) funding is helping families afford childcare, but the high demand has created long waitlists.

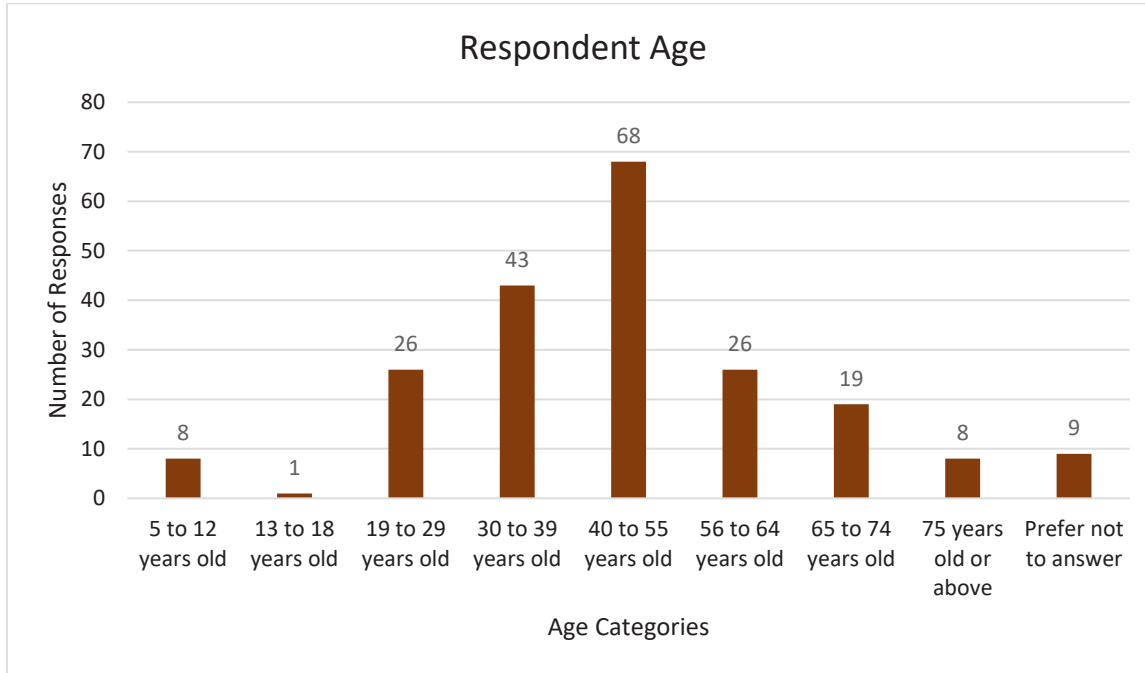
Next Steps

The project team will review the feedback received and use it as one of many inputs to develop design concepts for the site. Additional engagement on these design concepts is anticipated for Winter 2024.

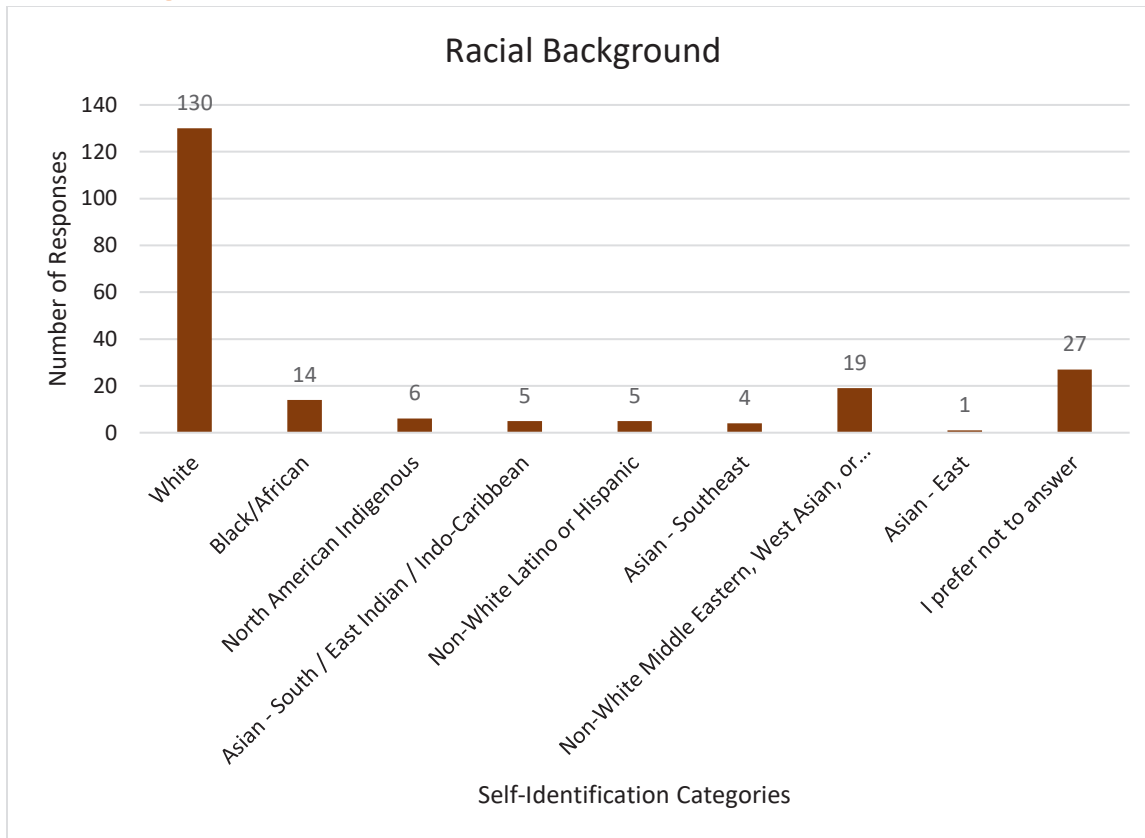


Appendix A – Online Survey Demographics

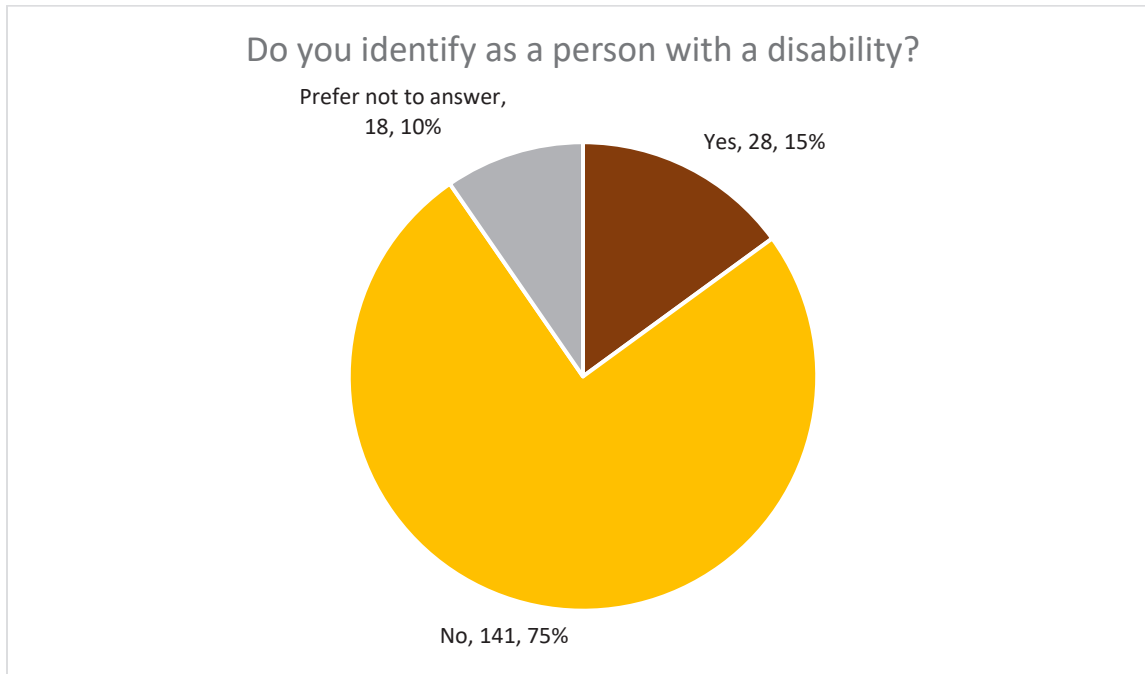
Age



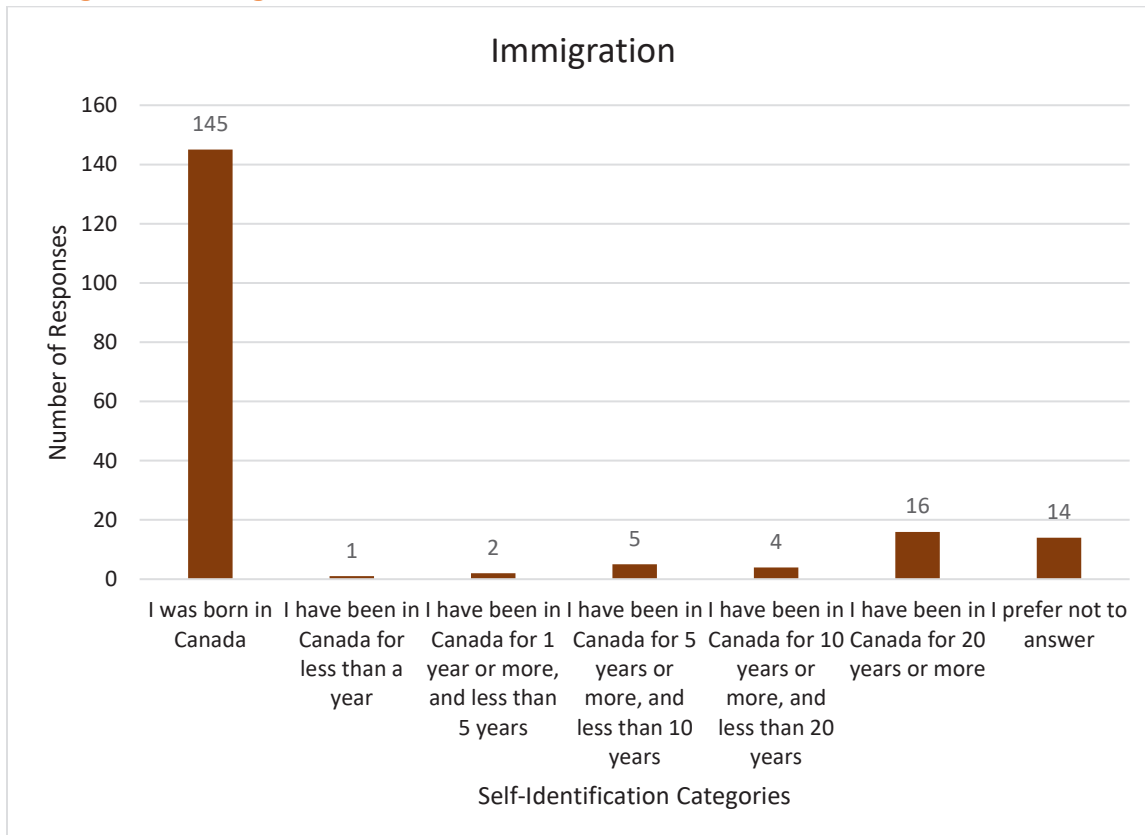
Racial Background



Disability



Immigration Background



Appendix D:

Stakeholder Workshops 'What We Heard' Summary

Ritson School Project Stakeholder Workshops 'What We Heard' Summary

Prepared by LURA Consulting

July 2023

Introduction and Background

The Region of Durham is working to expand access to affordable housing and community services and supports across all eight local area municipalities to promote equitable access for all residents. This process will look at the opportunities to use the school property to create more housing and support the Region's commitment to initiate the development of 1,000 new affordable rental housing units by 2024 across the Region of Durham, as per At Home in Durham, the Durham Housing Plan 2014-2024, and the Region's Master Housing Strategy.

The Ritson School Project aims to explore potential uses for the former elementary school building for community programming needs of residents in the surrounding neighbourhood and Durham Region.

Purpose and Format

The project team (Region of Durham, prime consultant Smart Density and sub-consultant LURA Consulting) held three (3) stakeholder sessions for businesses and service providers on July 13, 2023, at the Spark Centre (2 Simcoe Street South, Oshawa, ON).

- Session #1 engaged businesses and was held from 8 a.m. to 9 a.m.
- Session #2 engaged service providers and was held from 10 a.m. to 12 p.m.
- Session #3 engaged service providers and was held from 1 p.m. to 3 p.m.

The purpose of the stakeholder workshops was to:

- Introduce the project and generate awareness.
- Understand interests in commercial space and community needs.
- Understand service providers and their clients' needs.
- Understand interests and gaps for programs and service spaces.
- Build relationships and discuss potential partnerships.
- Meet the project team.

Zoie Browne and Susan Hall of LURA Consulting facilitated the workshops. They welcomed the participants, introduced the project and consultant team, and provided a brief overview presentation to highlight project opportunities and timeline. Participants were asked to introduce themselves and their business, organization, or group affiliation during each session. The project team divided participants into several groups to allow for group discussions and asked questions to better understand interests and gaps for programs, services, commercial uses, and the needs of the community, businesses, and service providers. LURA Consulting facilitated the discussions, and the project prime consultants Smart Density and the Region project leads received feedback.



Forty-four (43) people signed in at the meeting, which comprised ten (10) businesses and thirty-four (34) service providers.

The meeting agendas can be found in **Appendix A**, and the list of participants can be found in **Appendix B**.

What We Heard

Understanding the Current State

Participants identified the following as the biggest opportunities for the Ritson School Project for their community and businesses:

- Develop mixed housing options that combine affordable and market-rate units and establish a housing initiative that addresses homelessness (e.g., The Refuge Youth Outreach Centre).
- Develop a health hub incorporating social determinants of health and partner with the Durham Ontario Health Team (DOHT).
- Facilitate collaboration and integration among various social services.
- Diversify services, commercial offerings, and partnerships.
- Promote a sustainable approach to building design and social integration.
- Foster a more unified community identity while promoting a stronger sense of community and belonging.
- Establish a foreign language school with dormitories for international students.

Service Provider participants identified the following as the most significant services and programming needs for their organization, group, and/or clients:

- Office spaces with meeting rooms and storage for supplies and equipment.
- Space for medical consultations (private) and healthcare services.
- Services and support programs for mental health and disabilities.
- Community-based health and exercise programs.
- Programs and services that support youth involvement.

Community Services and Program Assets

The project team has developed a draft asset map of local programs and services. The following list includes elements that participants indicated as missing or needing to be added:

- **Schools**
 - Ontario Tech University
 - Durham College
- **Housing**
 - Student Housing
 - Supportive and Senior's Housing
 - Sunrise Seniors Place
 - Faith Place



- Naturally Occurring Retirement Communities (NORCs)¹
 - Women's Shelters
 - The Denise House
 - Transitional Housing and Correctional Half-Way House
 - Cornerstone Community Association Durham
 - Bloor Street East and Simcoe Street South locations noted
 - Micro-homes at Olive Avenue, Drew Street and Banting Avenue
- **Parks and Trails**
 - Brick by Brick Park
 - Oshawa Creek Trail
- **Heritage Properties and Assets**
 - Parkwood Estate
- **Indigenous Programs and Services**
 - Bawaajigewin Aboriginal Community Circle (BACC)
 - Oshawa and Durham Region Métis Council
 - Baagwating Indigenous Student Centre at Ontario Tech University
- **Social and Community Services**
 - Community Care Durham (CCD)
 - Community Development Council Durham (CDCD)
 - Home and Community Care Support Services
 - Boys and Girls Club Durham (BGC)
 - The Refuge Youth Outreach Centre
 - YWCA Durham
 - The Participation House
 - Community Living Durham North
 - John Howard Society of Durham Region
 - Backdoor Mission
 - Durham Outlook for the Needy
 - Feed the Need in Durham
 - Durham Region Unemployed Help Centre (DRUHC)
 - Durham Rape Crisis Centre (DRCC)
 - Canadian Mental Health Association Durham (CMHA)
 - Durham Community Health Centre (DCHC)
 - AIDS Committee of Durham Region (ACDR)
 - Ontario Works (200 John Street West)
 - Durham Community Legal Clinic
- **Art and Recreational Spaces**
 - Robert McLaughlin Gallery
 - Abilities Centre
- **Social and Community Establishments**
 - Grocery Stores
 - Pharmacy
 - Clinics

¹ A naturally occurring retirement community (NORC) refers to a community or neighborhood with a high proportion of older adult residents.



- Libraries
- Paramedic Services
- Drug and Alcohol Treatment Centres

Commercial Space Needs

Participants identified the following complementary commercial spaces that should be considered for inclusion on the site:

- Health and essential services (e.g., optical, dental, and medical facilities, pharmacy, grocery stores)
- Food establishments that are not limited to fast food and cafes
- Daycare facilities and programming for children
- Office and co-working spaces (e.g., CORE21, Spark Centre)
- Artist studios (e.g., Artscape)
- Banking facilities
- Spaces to enhance educational opportunities for community members

Participants highlighted the following conflicts/concerns that should be considered with other businesses and initiatives:

- Retail spaces should not be the primary focus, as many office and commercial spaces are currently vacant.
- Provide more facilities and opportunities for children to play downtown.
- Focus on maintaining employment opportunities in the area.
- The neighbourhood's changing dynamics have increased foot traffic, making it essential to design well-planned walkways to promote easy movement within the site.
- Address concerns about concentrating services and support in one area and the challenge of accessibility.
- Participants indicated that considerations should be made for:
 - transportation access and services (e.g., GO stations)
 - senior residences
 - outdoor/recreational spaces

Service and Programming Needs

Given the opportunity to offer services and programs for the community from this site, participants from various organizations and groups identified the following as the type of services and programs they would like to offer from the site.

- Community Hub (place for gatherings)
- Housing support and services
- Employment skills and training programs
- Life skills-based programming (e.g., cooking, budgeting, parenting courses)
- Programs and services targeted at supporting youth outreach and engagement
- Counselling and mental health-related services
- Developmental services
- Indigenous community programming
 - Space for prayers, healing, and traditional ceremonies



- Access to healers and traditional medicines
- Land-based programming
- Drum socials
- Sweat lodge
- Smudging
- Health care services
- Free or low-cost recreational programs
- Community food programs
 - Food banks
 - Community fridges
- Pet-friendly spaces

Participants highlighted the following groups and individuals that could benefit from these proposed services and programs.

- Seniors
- Youth
- People with disabilities
- Young couples and families
- Diverse communities, including Black and Indigenous peoples

Participants highlighted the following uses that could be considered for the space:

- Community kitchen for food education, meal preparation, and cooking classes
- Indoor and outdoor spaces for people to gather without time constraints.
- Program space for different age groups and cultural groups, such as a seniors' drop-in center and daycare facilities.
- Multi-purpose space for various activities like gym, yoga, and recreational sports.
- Venue for social events and large gatherings.
- Space to preserve and practice Indigenous teachings, traditions, and ceremonies.
- Community health center with primary and secondary health care offerings (e.g., walk-in clinic, medical assessments and labs, counselling offices)
- Office space and meeting rooms that can be booked as needed.
- Storage space for supplies and equipment needed by various agencies running programs.
- Green spaces such as a green roof, community garden, and medicine garden.
- Meditation and prayer rooms.

Participants provide the following additional comments about how the space can be utilized:

- The space must be accessible with features like accessible entrances, ramps, elevators, accessible parking spaces, automatic doors, and accessible washrooms.
- Create a space accessible to community groups (e.g., AA, NA, Rotary) with flexible scheduling.
- The space should support the on-site residents and the surrounding community and include amenities, programs, and services.
- Consider integrating health services under one roof for seamless access.



- Consider having designated full-time spaces (e.g., coffee shops) where profits get reinvested into the space.

Partnerships

Participants identified the following kinds of partnerships they would like the Region to consider:

- Financial services and institutions (e.g., tax clinics, banks)
- Educational institutions (e.g., Ontario Tech University, Durham College)
- Local organizations for skill development opportunities
- Medical and health services (e.g., Lakeridge Health)
- Community and local groups (e.g., neighbourhood associations)
- Housing and accommodation service providers
- Social services and community organizations (e.g., immigration services)
- Senior housing and aging-in-place service providers
- Heart and Stroke Foundation
- Autism Home Base
- Community Living Durham North
- Durham Outlook for the Needy
- Community Care Durham (CCD)
- Community Development Council Durham (CDCD)
- Durham Ontario Health (OHT)
- Durham Community Health Centre (CHC)
- Durham Association for Family Resources and Support (DAFRS)
- Developmental Services Ontario (DSO)
- Boys and Girls Club Durham (BGC)
- Durham Regional Police (DRP)

Additional Comments, Concerns, and Suggestions

Participants shared the following comments, concerns, and suggestions to the project team:

- Encourage community-driven engagement and partnerships between community organizations and businesses to provide a wide range of services and resources to the community.
- Blend the offered services and programs seamlessly into the existing neighbourhood, using a natural neighbourhood approach².
- There are many Indigenous groups in the Region; therefore, offering Indigenous-led programs and services can help foster a sense of belonging for Indigenous youth and families and ensure they feel seen, heard, and represented.
- Establish a Community Advisory Committee to help inform where gaps exist and actively involve community members throughout all stages of the project while adopting a "do with, not for" approach.
- Successful models from other locations (e.g., Toronto) should be considered to avoid reinventing the wheel.

² A natural neighborhood is where services are naturally provided in an accessible and supportive manner.



- There is a preference for context-sensitive lower-rise building(s) (e.g., 6-7 floors max) instead of a high-rise structure.
- Consider barriers to access and transportation issues to ensure the community can access services.

Next Steps

The project team will review the feedback received and use it as one of many inputs to develop design concepts for the site. Additional engagement on these design concepts is anticipated for Winter 2024.



Appendix A – Agendas

Session #1: Businesses: 8:00am – 9:00am

TIME	AGENDA ITEM
8:00am	Welcome and Project Overview
8:15am	Introductions and Understanding the Current State 1. What do you see as the biggest opportunity for the Ritson School Project for your community and business?
8:25am	Community Services and Program Assets 1. The project team has developed a draft asset map of local programs and services. Is anything missing or needs to be changed? Commercial Space Needs The vision for the Ritson School Project will see the renovation of the former elementary school building to be used for community programs that meet the current and future needs of residents in the surrounding neighbourhoods and communities. 2. What complimentary commercial spaces should be considered for inclusion in the site and why? 3. Are there any conflicts/concerns to consider with other businesses/initiatives?
8:45am	Partnerships 4. What kind of partnerships would you like the Region to consider?
8:55am	Thank you and Next Steps
9:00am	Adjourn



Session #2: Service Providers: 10:00am – 12:00pm

Session #3: Service Providers: 1:00pm – 3:00pm

TIME	AGENDA ITEM
10:00am 1:00pm	Welcome 1. <i>What are the biggest services and programming needs for your organization/group and clients?</i>
10:05am 1:15pm	Project Overview
10:15am 1:45pm	Service and Programming Needs 2. The project team has developed a draft asset map of local programs and services. Is anything missing or needs to be changed? 3. If your organization/group could offer services and programs for the community from this site, what would it be and why? a. Who would benefit and how? b. Are there adjacent services to consider? In order to give the project team a better idea of how much space might be needed... 4. What different uses might the space need to accommodate, and what kind of specific resources should be considered?
11:30am 2:30pm	Partnerships 2. What kind of partnerships would you like the Region to consider?
11:40am 2:40pm	Report Back
11:55am 2:55pm	Thank you and Next Steps
12:00pm 3:00pm	Adjourn



Appendix E:

Internal Programming Needs Analysis
Workshop 'What We Heard' Summary

Ritson School Project

Internal Programming Needs Analysis Workshop

‘What We Heard’ Summary

Prepared by LURA Consulting

July 2023

Introduction and Background

The Region of Durham is working to expand access to affordable housing and community services and supports across all eight local area municipalities to promote equitable access for all residents. This process will look at the opportunities to use the school property to create more housing and support the Region’s commitment to initiate the development of 1,000 new affordable rental housing units by 2024 across the Region of Durham, as per At Home in Durham, the Durham Housing Plan 2014-2024, and the Region’s Master Housing Strategy.

The Ritson School Project aims to explore potential uses for the former elementary school building for community programming needs of residents in the surrounding neighbourhood and Durham Region.

Purpose and Format

The project team held an internal programming needs analysis workshop for the Region of Durham stakeholders on June 20, 2023, from 4 p.m. to 6 p.m. at Regional Headquarters, 605 Rossland Road East.

The purpose of the workshop was to:

- Gather feedback about divisional perspectives for regional service/programming needs that may be incorporated into the Ritson School Project.
- Discuss information related to:
 - Proposed types of services that departments could provide in the building/site.
 - Identify department roles and highlight the value of having program space in the building that would benefit the community and/or Durham Region.
 - Space requirements.

Andrew McIntosh, Region of Durham, provided opening remarks. Zoie Browne and Susan Hall of LURA Consulting reviewed the agenda, provided a brief project overview, including preliminary market assessment research (conducted by Parcel and supported by the consultant lead’s Smart Density), and facilitated participant introductions and discussions.

The meeting agenda can be found in **Appendix A**, and the list of participants can be found in **Appendix B**.



What We Heard

A summary of what we heard is below and organized by discussion questions and themes.

What Regional services and programs should be considered for inclusion in the Ritson School Project?

- Children's services
 - o Early years programs and drop-ins (EarlyON)
 - o Children's developmental and behavioral support
- Seniors programming
 - o Adult Day Programs and drop-in
 - o Creating social opportunities that cater to seniors and services in one location
- Housing
 - o Affordable housing for families and seniors
 - o Mixed-income housing
 - o Low support respite
- Durham 311 Representative
- Ontario Works (IEHSD supports)
- Social services
 - o Settlement and newcomer services
 - o Human services intake
 - o Employment support
- Service Hub
 - o Community Safety Advisor
 - o Offers a place where agencies come together
 - o Agencies can have independent access
- Health
 - o Specialized healthcare
 - o Mental health (Counselling, family support)
 - o Infant development
 - o Sexual health clinic
 - o Community paramedicine program
 - o Urgent care clinic
- Office space
 - o Community Paramedicine Touchdown
- Indigenous programming (space that is shared but builds ownership and identity)
 - o Early learning
 - o Ceremony
 - o Language
 - o Healing garden
 - o Courtyard, greenspace, playground, gathering space
- Outdoor amenities and public green space
 - o Community garden

Why should these services be considered?

- Improve the quality of life
- Reduce poverty



- Enhance health and safety
- Serve underserved areas
- Promote accessibility
- Contribute to community vitality and well-being
- Leverage economic opportunities
- Address housing needs
- Ensure food security

Who do these services benefit, and how?

- Individuals in all stages of life
- Neighbourhoods and surrounding communities
- Local businesses
- Service providers
- Tenants
- Commuters
- Two generations of seniors
 - o Younger, close to retirement
 - o Older – look at keeping them out of long-term care and offer programs that support independent living.
- Indigenous
- New immigrants

Are there any conflicts/concerns to consider with other initiatives?

- Programs with age restrictions
- Competing programs nearby
- Costs and funding
- Staffing
- Space requirements
- Changing demographics and density (unsure what it will look like and its impact on current residents)
 - o GO station coming to the area, proximity to the highway, etc., will change the projected demographics.
- Traffic
- Lack of services for increasing population (banks, grocery stores)
- Lack of cohesiveness with the province
- Cultural protocols and practices
- Changing priorities of the government
- Duplication of services
- NIMBYism
- Micro home locations

Are there adjacent services to consider?

- Immigration and settlement services
- Recreational spaces (gym, playgrounds, outdoor space, etc.)
- Libraries
- Kitchens (for community, residents, and learning)



- Gardens
- Cafés
- Markets
- Hubs for health and wellness
- MTSA and access to transit
- Courthouse

Are there partnerships to consider?

- Non-profit and cultural organizations
- Schools
- Libraries
- Seniors' centers
- Non-profit housing
- Developers
- Legal aid
- Health
 - o Pharmacies
 - o Physicians
 - o Dental
 - o Mental Health and Well-being

How much space and what kind of resources should be considered?

- Flexible spaces were a noted value. This includes:
 - o Shared computers and technology access
 - o Staffing (permanent and rotational on a calendar)
- Single reception (e.g., Welcome Centre)
- Office space and meeting rooms
 - o Office space for 2-3 staff at a time
 - o Auditorium style for ~300 people
 - o Conference style for 30-50 people
 - o Indoor and outdoor open-concept style for 30-50 people
- Meeting equipment (e.g., chairs, tables, A/V, etc.)
- Storage (e.g., administrative and recreational supplies)
- Kitchen
- Lounge areas (e.g., movie and games night)

Are there any local groups you think should be engaged in this process?

- Bawaajigewin Aboriginal Community Circle (BACC)
- Métis Nation of Ontario
- Community Care Durham
- Durham Family & Cultural Centre
- Ifarada Institute
- Kujenga Wellness Project
- Durham Community Action Group
- Black-Led Engagement Network of Durham – BLEND
- The Canadian Jamaican Club of Oshawa



- Womxn of Colour Durham Collective
- Women’s Multicultural Resource & Counselling Centre
- Congress of Black Women of Canada, Oshawa / Whitby Chapter
- Canadian Council of Muslim Women
- Durham Educator’s Network for South Asians
- Durham Tamil Association
- Durham Chinese Culture Centre
- Back Door Mission
- Frontenac Youth Services
- DurhamOne
- GAP committee
- Durham Region AAC and Oshawa AAC
- Durham Black Educators Network (DBEN)
- Oshawa Senior Community Centres
- Pickering Welcome Centre
- Ajax Welcome Centre
- Achev Assessment Services
- Durham Community Health Centre (DCHC/Formerly Carea)
- Big Brothers Big Sisters of South-West Durham
- Oshawa Seniors Centre
- We Grow Food Organization
- Service Oshawa
- Oshawa Parks and Recreation
- Durham Regional Local Housing Corporation (DRLHC)
- Habitat for Humanity
- Lakeridge Health
- Queen’s University
- Trent University
- Ontario Tech University
- Durham College
- Durham District School Board (DDSB)
- Durham Catholic District School Board (DCDSB)

The following divisions have identified the following ways to support the Ritson School Project:

Planning Division

- Participate and assist in stakeholder engagement (e.g., project refinement, project updates, and communications).
- Provide planning-related due diligence.
- Provide planning rationale reports, exhibits, maps, and drafting of bylaws.
- Prepare application and submission to area municipalities (e.g., Oshawa).
- Attend and participate in public meetings and follow-up.
- Provide evidence at OLT hearings.
- Review and comment on materials prepared by external consultants.



DEI Division

- Participate and assist in outreach and community engagement.
- Provide inclusive and accessible design advice.
- Provide an equity review of materials (e.g., communications, RFPs, plans, and reports).

Finance Department

- Assist in developing and/or reviewing the business case for short and long-term options for support (e.g., new community housing choices and/or Regional programs/services to be potentially provided at the subject site).
- Support the revitalization, intensification, and development of strong and vibrant urban areas.
- Facilitate the development of mixed-income communities that are well-designed, well-managed, and built on a scale that ensures integration within the community.
- Support opportunities that promote social and economic integration within Durham's communities.
- Encourage planning and development that supports an improved live/work relationship.
- Investigate opportunities to alleviate the social housing waitlist in neighbourhoods where the need is greatest.
- Create buildings that are energy efficient while promoting conservation and ensuring accessibility.
- Encourage rental developments that allow community partners to provide affordable housing with supports for vulnerable people.
- Request that the federal and provincial governments re-establish their responsibilities, introduce and/or reintroduce funding, tax incentives, exemption and credits, loans, and sustainable funding programs that encourage developers to build affordable rental housing.
- Explore the opportunity to use Private Public Partnerships to:
 - o Leverage private sector expertise for housing, including development, construction, marketing, and property management.
 - o Ensure on-schedule and on-budget project delivery, innovation, and value-for-money, secured through a project agreement with payment based on performance guarantees.
 - o Ensure life-cycle project management, with construction and operational risks transferred to the private sector.
 - o Allow for a competitive bidding process to weigh benefits beyond costs, including social, environmental, and community factors and benefits.
 - o Enable projects to take on more risk, with potential transfer of financing risks to a private sector participant.

Recommendations:

- Know the things that people have already told the Region before hosting consultations.
 - o Retelling deficiencies about the community or things that are needed can be re-traumatizing.
 - o Create a dialogue with the existing community and an inclusive forum for community feedback.



- Slow the process down and have an extended timeline.
- Discuss and determine the best use of the housing component with the City of Oshawa staff.
- Look at the programs offered. Currently only looking at organization location, not programs.
- Look at opportunities for land ownership. This could include gifting as part of Indigenous Reconciliation.
- Open house or drop-in for the public, not town hall.
- Social service providers – open invitation (not limited), consider more than 1 session.

Other Information:

- Community analysis for EarlyON is done annually (an updated one is available in the fall).
- Tamarack approach¹.
- Bawaajigewin² needs assessment is available online.
- Heritage designation can be a challenge (time/costing).
- There is no Welcome Centre serving Oshawa and the eastern parts of the Region. Consider having a temporary space in the project for newcomers east of Ajax and Pickering.
- Follow-up with staff to learn more about micro homes pilot experience, Beaverton housing project experience, Early Years Indigenous Needs Assessment, equity, diversity, and inclusion known research and partnerships, and Oshawa’s Integrated Major Transit Area engagement process.

Next Steps

The project team will review the feedback received and use it as one of many inputs to develop design concepts for the site. Additional public and stakeholder engagement sessions will be held throughout July 2023.

¹ Tamarack develops and supports collaborative strategies that engage citizens and institutions to solve major community issues across Canada and beyond.

² The Bawaajigewin Aboriginal Community Circle (BACC) is an Aboriginal-led incorporated non-profit agency in Durham Region. BACC has conducted a large-scale community needs assessment through an Ontario Trillium Fund Grant to create a Strategic Plan that was responsive to the current needs of the community.



Appendix A: Workshop Agenda

TIME	AGENDA ITEM
4:00pm	Welcome and Project Overview
4:15pm	Introductions and Understanding the Current State 1. What do you see as the biggest opportunity for the Ritson School Project for your division and the community?
4:30pm	Shaping the Ritson School Project 2. What Regional services and programs should be considered for inclusion in the Ritson School Project? <ul style="list-style-type: none"> ▪ Why should these services be considered? ▪ Who do these services benefit, and how? ▪ Are there any conflicts/concerns to consider with other initiatives? ▪ Are there adjacent services to consider? ▪ Are there partnerships to consider? <p>For the suggested Regional services and programs...</p> 3. How much space and what kind of resources should be considered?
5:40pm	Community Engagement 4. Are there any local groups that you think should be engaged in this process?
5:50pm	Supporting the Ritson School Project 5. What role(s) could your division play in supporting the Ritson School Project?
5:55pm	Thank You and Next Steps
6:00pm	Adjourn



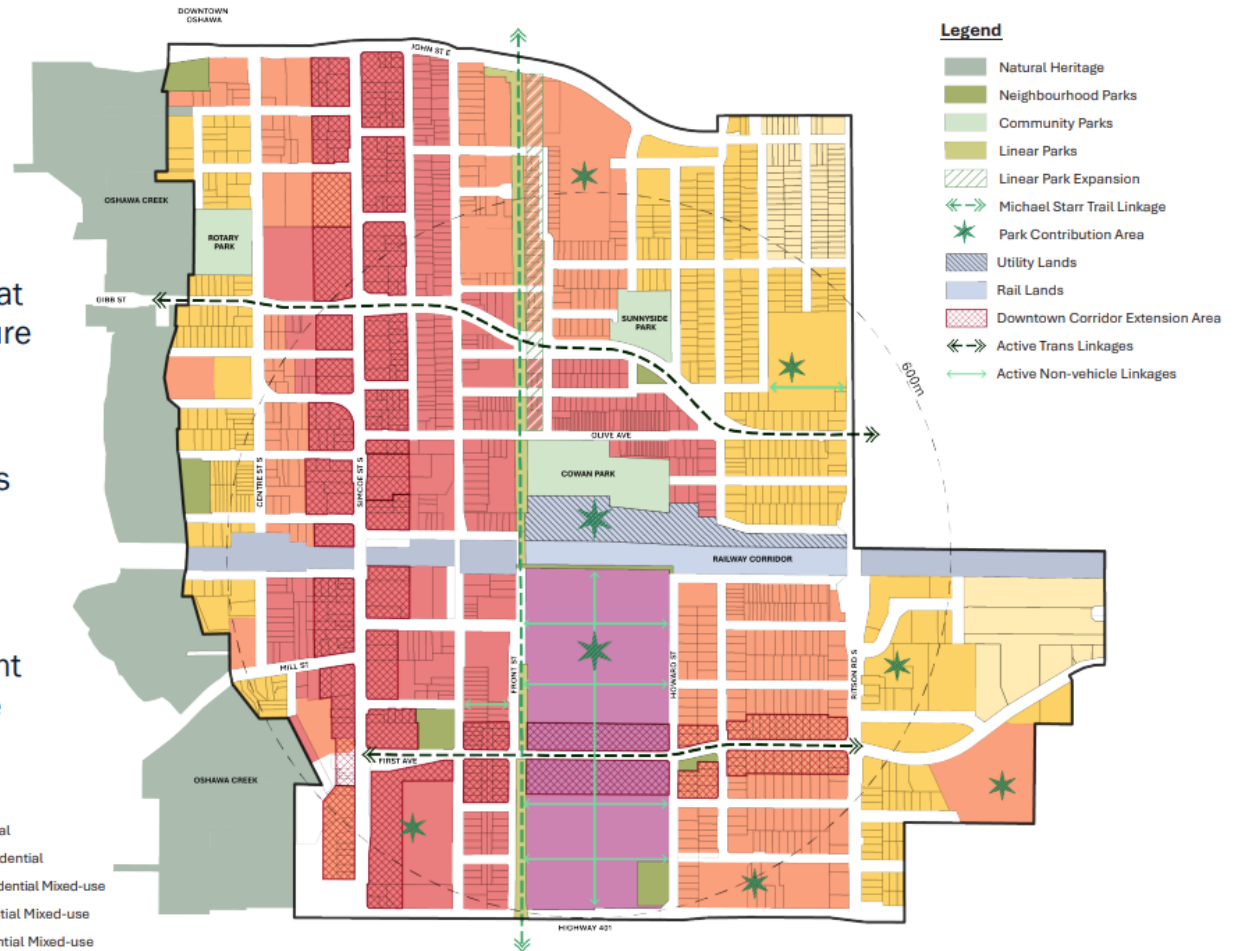
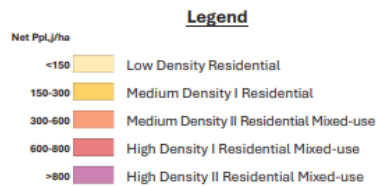
Attachment #2

Oshawa MTSA Study - Proposed Land Use Plan

LAND USE PLAN

The Land Use Plan provides guidance to update the policy framework for the M.T.S.A.

- **Defining Preliminary Land Use Designations** – including uses that will be described as part of a future Official Plan Update
- **Residential Mixed-Use Focus** – further defines the different types of mixed-use designations
- **Establishing Growth Targets** – through changing development practices of compact development and revised modal split over time



Sent Via Email



May 17, 2024

Planning Services
 City of Oshawa
 1st Floor, West Wing, City Hall
 50 Centre St. S.
 Oshawa, ON L1H 3Z7
planning@oshawa.ca

Attention: Mr. Tom Goodeve, Director, Planning Services

Dear Mr. Goodeve:

Re: Central Oshawa Major Transit Station Area Study

Thank you for the opportunity to comment on the above noted study and materials. The following comments are offered as it relates to the Region of Durham's ownership interest in the property at 300 Ritson Road South (the Ritson School site) and surrounding Region-owned lands.

The City of Oshawa is undertaking a comprehensive study to guide intensification, infrastructure development and land use change within the Central Oshawa Major Transit Station Area. The current phase of the study includes a Land Use Intensification Review and Urban Design Guidelines, for which comments have been requested by May 17, 2024. It is our understanding that City staff plan to present its final recommendations for consideration by Oshawa Council in the fall of 2024.

The Region acquired the Ritson School site in 2022 with the view to providing needed affordable housing within a mixed income model in conjunction with needed community uses. Adaptive reuse of the existing school building is central to the Region's development plans. Regional staff have undertaken initial public engagement to inform the preparation of a development concept.

Development on the site needs to address a range of factors including: delivering affordable housing; addressing the needs of a changing population; providing opportunities for community uses and services; providing opportunities for placemaking; heritage preservation through adaptive reuse of the former school building; providing publicly accessible open space; and, delivering a mixed-income tenancy model to support financial feasibility while reducing social barriers.

**The Regional
 Municipality of
 Durham**

Social Services
 Department

605 Rossland Rd. E.
 PO Box 623
 Whitby, ON L1N 6A3
 Canada

905-668-7711
 1-800-372-1102

durham.ca

Gary Muller
MCIP, RPP, PLE
 Director, Affordable
 Housing Development
 and Renewal

A Draft of the Land Use Intensification Review (LUIR) and Urban Design Guidelines dated March 28, 2024 was prepared by O2 and Parsons on behalf of the City and circulated for public review and comment. The LUIR is intended to provide flexible policy guidelines and policy recommendations to encourage development within the MTSA. In this regard, the following comments are provided:

i) The City had three Land Use Alternatives prepared for the purposes of understanding growth potential within the MTSA as a whole. Through subsequent work, “Alternative 3: Bridging to Downtown” was selected for further analysis. The Region has worked to develop a demonstration plan for the site that accounts for the existing school building and its designation under Part IV of the *Ontario Heritage Act*, the surrounding context, connectivity to local roads, the primary cycling network and proximity to the future GO station. Careful site design will enable appropriate transitions between future on-site development and the surrounding community. We request that the Ritson School site be included in the Medium Density II Residential category. This category is appropriate, given the size of the site and variety of built forms that are possible.

ii) The evaluation results (Figure 23) illustrate a “Park Contribution Area” and “Active Non-Vehicle Linkage” symbols on the site. The “Park Contribution Area” is shown south and west of the existing school building but given the profile of the school and its designation under Part IV of the *Ontario Heritage Act*, it is appropriate that the Park Contribution Area symbol be relocated to the front of the school building to provide public views and publicly accessible open space to the front façade of the school. In this regard, flexibility is also requested to enable consideration of Privately Owned Public Spaces (POPS) and strata options for Park Contribution Areas to enable consideration of underground parking options in areas so defined.

iii) An east-west “Active Non-Vehicle Linkage” is illustrated crossing the site extending from Banting Avenue. However, it is suggested that a north-south linkage extending from Clarke Street be provided instead, in recognition that the west façade of the school building will be a defining feature of this future publicly accessible pedestrian space.

iv) In terms of the Study process, please confirm our understanding that the City plans to convene a statutory public meeting in late 2024 or early 2025 on a City initiated amendment to the Oshawa Official Plan and Zoning By-law.

If you have any questions regarding the foregoing, please do not hesitate to contact me directly (gary.muller@durham.ca, 905-668-4113 ext. 2575).

Yours truly,

A handwritten signature in black ink, appearing to read 'Gary Muller', with a stylized flourish at the end.

Gary Muller, MCIP, RPP, PLE
Director, Affordable Housing Development and Renewal

c: Stella Danos-Papaconstantinou, Commissioner of Social Services
Brian Bridgeman, Commissioner of Planning and Economic Development
Meaghan Macdonald, Manager, Affordable Housing Development and Renewal

Attachment #4: 300 Ritson Development Principles

1. Redevelopment Parcel and Phasing Plan

Three complementary sites will accommodate future development, improvement and partnerships. The first phase, behind the existing school, presents the optimal opportunity to initiate housing development. The existing school building will form part of a future phase/block that will be reused to accommodate a mix of community and public uses, together with new housing opportunities.

2. Purpose Built Affordable and Market Rental Housing

Each block will provide a minimum of 30% affordable rental accommodation while the remainder may be market oriented. Block 1 will provide a minimum of 160 units. Preference will be given to proposals that can be delivered quickly through modular construction. Partnerships with non-profit, Indigenous, co-operative and/or other non-market providers or communities are encouraged. A mix of unit sizes including 1, 2 and 3 bedroom units will be provided.

3. Excellence in Urban Design

Contextually sensitive designs will provide heights and densities of buildings that are appropriately scaled in relation to the surrounding neighbourhood. Project buildings will frame streets and public spaces with frequent pedestrian entrances. Main pedestrian entrances will be sheltered from weather. High standards of architectural excellence and environmental sustainability will be presented through high-quality, durable, contextually sensitive, aesthetically pleasing architectural features and building materials. Crime Prevention Through Environmental Design techniques will be applied.

3. Pedestrian Accessibility and Circulation

Pedestrian circulation routes will include an east-west connection from Huron Street to Ritson Road, along a future east-west local road. All streets will include sidewalks or multi-use paths on both sides, street trees and pedestrian amenities as appropriate.

A publicly accessible open space (plaza) area will be provided behind the school building as an active, open, visible, accessible pedestrian space with future programming that will be tied to future ground floor non-residential uses within surrounding buildings. Surface parking in the area behind the school building will not be permitted. Buildings surrounding the plaza will have open, transparent, accessible building faces.

Project buildings will be designed for accessibility of residents of all ages and abilities using universal accessibility design principles, strategic placement and orientation of buildings, including street front facing buildings and entrances.

4. Traffic Connectivity

Traffic connections to Ritson Road network will be provided by a new east-west local road at the north end of the site. The new local road will provide driveway access to required underground parking areas, provide access from new development to Ritson Road, and avoid conflicts with existing intersections.

5. Publicly Accessible Open Space

Two publicly accessible open space areas will be provided. A formal open space area will form a courtyard in front of the Ritson School building, facing Ritson Road providing opportunities for public art, as well as ceremonial, formal or informal gatherings.

An open space area will be included on Block 1 and in front of the existing school in Block 2 which will provide access and amenity space for future residents.

6. Parking and Servicing

Below grade parking will be provided for each of the blocks, with the exception of under the existing school building. Underground parking may connect adjoining phases. Shared parking and/or reduced parking approaches are encouraged. Provide development loading, servicing and vehicular parking access within the interior of the site. Cycling infrastructure, bicycle parking and end-of-trip facilities will be included.

7. Placemaking

Opportunities for reconciliation and Indigenous cultural heritage through the design of new development should be included. Project design will provide opportunities for placemaking and public gathering through building placement, landscaping, and streetscape design measures. This will be reflected through quality urban design, public spaces and facilities.

Non-residential floor space is provided on the ground floors of buildings on each block, providing opportunities for future community related uses and complementary services.

8. Embracing Built and Cultural Heritage

Buildings will form part of a cohesive community, centred on the renovation, protection, preservation, enhancement and adaptive reuse of the heritage Ritson School building. Provides a vibrant and attractive public realm incorporating art, culture and heritage to contribute to a sense of place and identity. Buildings will promote inclusivity and diversity of cultures, religions, abilities and beliefs through project programs or designs.

9. Providing Meaningful Connections

Project designs and implementation practices will promote transit use. Ground floors of buildings that provide services to the broader community or form part of a community hub will be directly accessible by local transit routes and active transportation linkages.

10. Climate Resiliency

The project will align with the Region's climate emergency declaration and support implementation of the Durham Community Energy Plan, including use of energy efficiency measures to reduce utility operating costs and its operational GHG emissions footprint. Measures within the Durham Green Standard will be applied to reduce the urban heat island effect, such as: low carbon, net-zero and/or net-zero ready building design; green and cool roofs; or other low impact development measures, including green infrastructure.

Attachment #5: 300 Ritson Demonstration Plan

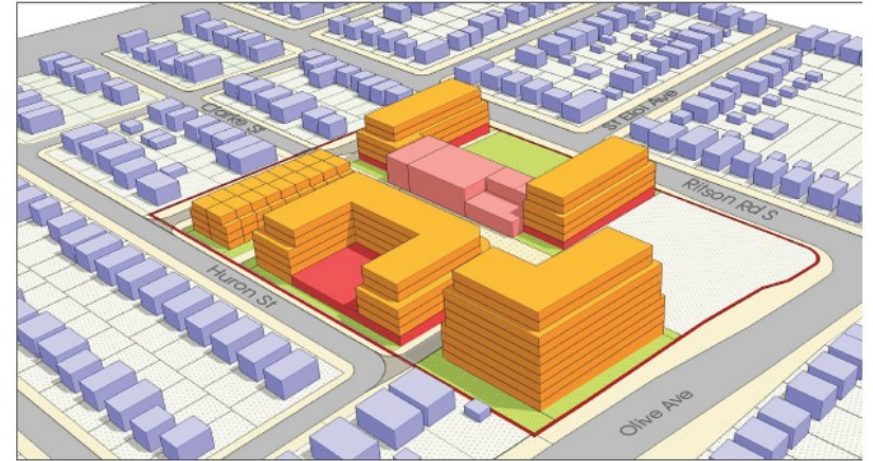
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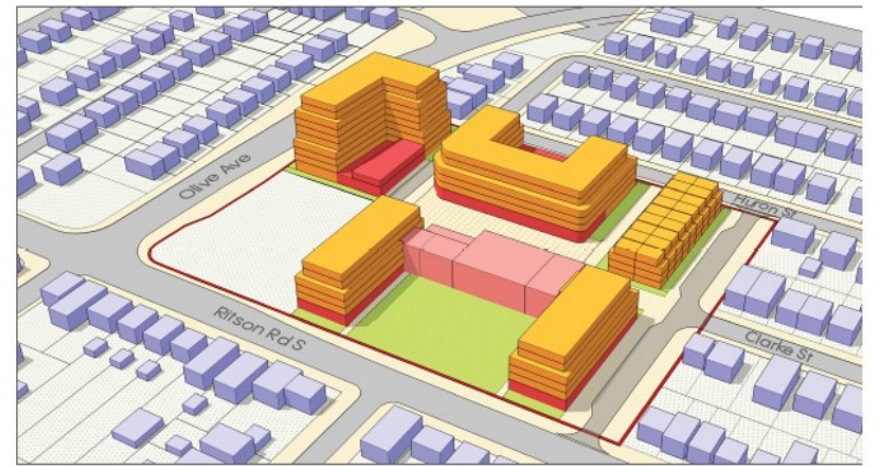
300 Ritson | Demonstration Plan



Site Plan ← N
 Residential
 Commercial and Community
 Former Ritson School
 Public Amenity Space
 Public Plaza
 Future Development



View to Northeast



View to Southwest



The Regional Municipality of Durham Report

To: Committee of the Whole
From: Commissioner of Finance and Commissioner of Works
Report: #2024-COW-29
Date: June 12, 2024

Subject:

2024 Asset Management Plan

Recommendation:

That the Committee of the Whole recommends to Regional Council:

- A) That the 2024 Regional Municipality of Durham Asset Management Plan be endorsed; and
 - B) That the 2024 Regional Municipality of Durham Asset Management Plan be posted on the Region's website and the Ministry of Municipal Affairs and Housing be advised.
-

Report:

1. Purpose

- 1.1 The 2024 Asset Management Plan details the state of the Region's infrastructure, service levels, asset performance, lifecycle costs, and climate change risks, adaptation and mitigation initiatives to protect the Region's assets.
- 1.2 The Region's Asset Management Plan is a collaborative cross-departmental effort produced from year-round asset management processes to maintain assets and identify investment needs to meet target service levels. The process is guided by the [Region's Corporate Strategic Asset Management Policy](#).
- 1.3 Aligned with best practices, the Asset Management Plan informs the Region's long-term planning and the annual business plans, budgets and nine-year capital forecast.

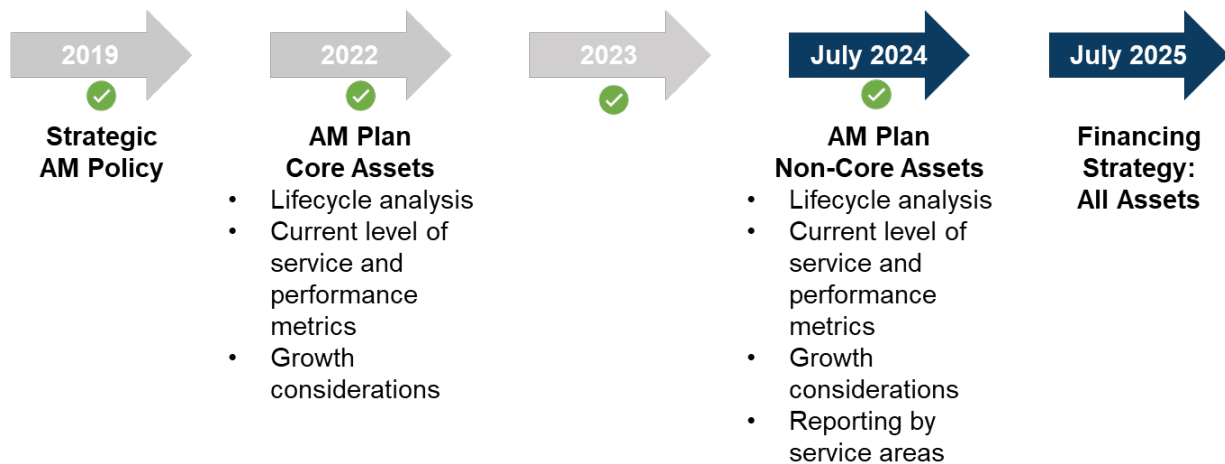
- 1.4 This report maintains the Region's compliance with provincial and federal regulatory requirements and meets the requirements for many senior government funding programs. In addition, with Regional Council's adoption of the 2024 Regional Municipality of Durham Asset Management Plan, the Region has met the new asset management requirements under Ontario Regulation 588/17 that are due by July 1, 2024.

2. Previous Reports and Decisions

- 2.1 On June 26, 2019, Region Council approved the Region's 2019 Asset Management Plan and the Region's Corporate Strategic Asset Management Policy ([Report #2019-COW-16](#)).
- 2.2 On September 30, 2020, Regional Council approved the Region's 2020 Corporate Asset Management Update Report ([Report #2020-COW-24](#)). This report provided an update to the Region's full 2019 Asset Management Plan.
- 2.3 On June 29, 2022 Regional Council approved the Region's 2022 Asset Management Plan ([Report #2022-COW-14](#)). This report presented the Region's asset management goals, approach and policies, and advised Council on the state of the Region's infrastructure, service levels, performance, lifecycle considerations and risk and climate change adaptation and mitigation initiatives.
- 2.4 This report is aligned with and is informed by the 2024 Business Plans and Budget for Property Tax Purposes ([Report #2024-F-3](#)), the 2024 Business Plans and Budget for the Consolidated Water Supply and Sanitary Sewerage Systems ([Report #2023-F-36](#)), the Transit Service and Financing Strategy (2023 – 2032) ([Report #2023-F-5](#)) and the 2023 – 2032 Region of Durham Paramedic Services Service and Financing Strategy ([Report #2023-COW-7](#)).

3. Complying with Ontario Regulation 588/17

- 3.1 On January 1, 2018, Ontario Regulation 588/17, Asset Management Planning for Municipal Infrastructure, under the Ontario Infrastructure for Jobs and Prosperity Act 2015, came into effect with a full implementation deadline of 2024. Due to the pandemic, the regulation was amended to provide a one-year extension to the implementation timelines. The regulation requires municipal asset management plans to include the following components by specific deadlines as outlined in Figure 1.

Figure 1: Ontario Regulation 588/17 Key Changes and Timeline

- 3.2 Compliance with Ontario Regulation 588/17 is required for senior government capital funding programs like the Canada Community-Building Fund (CCBF), formerly the Federal Gas Tax Fund.
- 3.3 The Region's 2024 Asset Management Plan achieves the new requirements outlined in Ontario Regulation 588/17 for all assets (core and non-core assets) reported by service area by July 1, 2024 including:
- Inventory with asset condition, replacement value and remaining useful life;
 - Current level of service and performance metrics;
 - Growth considerations; and
 - Lifecycle analysis including operating and capital investments.
- 3.4 Lifecycle analysis considers all operating and capital costs required for an asset to deliver its targeted service level over its useful life; from initial acquisition, repairs and maintenance, rehabilitation and eventual decommissioning costs. Ontario Regulation 588/17 requires the lifecycle analysis for a ten-year forecast period.
- 3.5 Regional staff will continue to refine lifecycle data processes and cost analysis aligned with the continual improvement practices enshrined in both the regulation and the Region's Corporate Strategic Asset Management Policy.
- 3.6 In addition to Ontario Regulation 588/17, the Region's Asset Management Plan ensures compliance and alignment with the following:
- The Development Charges Act and the provincial housing targets;
 - The Smart Growth for Our Communities Act;
 - Requirements under A Place to Grow: Growth Plan for the Greater Golden Horseshoe to support the next Municipal Comprehensive Review (Regional Official Plan Amendment);
 - The Region's Tangible Capital Assets (TCA) Policy;
 - PSAB requirements for the recording of Tangible Capital Assets; and

- Requirements for federal and provincial funding programs including the Canada Community-Building Fund Agreement.
- 3.7 Additionally, the Region is well positioned to meet additional reporting requirements in 2025 including the development of a financing strategy.
- 4. Financial Implications of Bill 23, More Homes Built Faster Act, 2022, Bill 134, Affordable Homes and Good Jobs Act, 2023 and related Legislation**
- 4.1 Bill 23, *More Homes Built Faster Act, 2022*, Bill 134, *Affordable Homes and Good Jobs Act, 2023* and related legislation have brought a number of changes impacting municipalities including:
- The province, in support of a goal to build 1.5 million new homes by 2031, has established specific housing targets for large and fast-growing single and lower-tier municipalities, including Durham's five lakeshore municipalities who have formally committed to housing pledges. While housing targets are on a local municipal level, meeting them requires advancing the construction of Regional infrastructure earlier than previously planned. This creates additional financial burden on the Region both from having to advance funding for large infrastructure projects, as well as for additional staff resource requirements to support and deliver a much larger, technical and complex ten-year capital program.
 - Changes to the Development Charges Act, 1997 that require municipalities to phase-in new development charge rates, allow developers to 'lock-in' their development charge rates at time of development application and provide development charge exemptions and discounts to select development categories. In addition, municipalities can no longer fund certain services (social housing and certain types of studies) through development charges. The implication is a smaller share of the Region's growth capital costs will be recoverable from development charges as the Region is required, under provincial legislation, to fund the impact of these provisions from nondevelopment charge sources. In the absence of provincial funding, regional property taxes and water and sanitary sewer user rate revenues will be required to fund these shortfalls.
 - The Region is actively monitoring the status of Bill 185, *Cutting Red Tape to Build More Homes Act, 2024* which, at the time this report was written, is before the Legislative Assembly of Ontario. If approved, some of the changes introduced through Bill 23 will be reversed. If approved, the Region will no longer be required to phase-in new development charge rates over five-years and growth-related studies will again be eligible for Development Charge financing. Any impacts resulting from this and other legislation will be incorporated into future updates of the Asset Management Plan.

5. Asset Management Planning Process

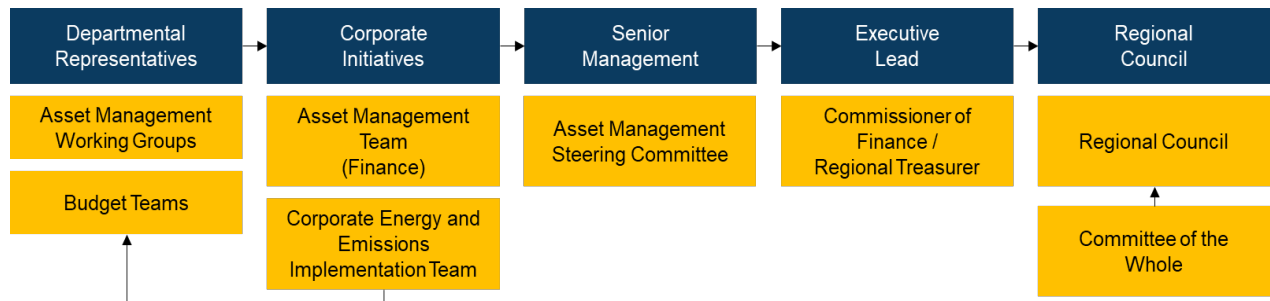
- 5.1 Formal asset management has been in place at the Region since 2004. The Region's Corporate Strategic Asset Management Policy articulated asset management goals, objectives, guiding principles as well as an asset management framework. In accordance with Ontario Regulation 588/17, the Region's Corporate Strategic Asset Management Policy must be reviewed and updated at least once every five years with the next update anticipated in 2025.
- 5.2 Asset management planning is a cross-departmental continuous year-round process that supports the development of Regional business and financial plans as illustrated in Figure 2. The asset management planning process is a cornerstone of the Region's annual business planning cycle.

Figure 2: Region's Asset Management Planning Process



- 5.3 The Asset Management Plan considers asset condition, remaining useful life and service needs and identifies operating and capital requirements including maintenance, repair, rehabilitation, and replacement over a ten-year period. Asset management investment needs and financing strategies are addressed through the annual business plans, budget and nine-year capital forecast.
- 5.4 Development of the Asset Management Plan is led by the Finance Department and overseen by a Director-level Steering Committee. Figure 3 illustrates the governance structure of asset management at the Region.

Figure 3: Regional Asset Management Governance Structure



5.5 Asset Management working groups, coordinated by the Finance Department collaboratively gather, analyze and report on the various asset management components detailed in Figure 4:

Figure 4: Asset Management Analysis Components

State of Infrastructure	Asset inventory, valuation, condition, age and remaining useful life
Service Level Targets	Desired asset service targets set by the Region and through legislation
Asset Performance	Metrics to assess how well an asset is meeting service level targets
Lifecycle Analysis	The capital and operating costs associated with an asset meeting service standards during its entire life (from initial acquisition to eventual disposal)
Climate Change	Greenhouse gas reduction and climate mitigation strategies for assets
Financial Planning	Expenditure forecast and financing strategies including maintenance, rehabilitation, replacement, disposal activities and non-infrastructure solutions
Risk Analysis	Summary of asset-related risks and mitigation strategies

6. Replacement Value of Regional Assets

6.1 The Region’s infrastructure assets have a total replacement value of approximately \$22.82 billion (as of December 31, 2023), of which \$14.88 billion are utility-rate supported and \$7.94 billion are property tax supported. Attachment #1 provides an overview of the Region’s asset inventory, replacement value and condition.



\$14.88 billion in utility-rate supported replacement value



\$7.94 billion in property tax supported replacement value

6.2 Replacement values are impacted by both growth (additional infrastructure) and inflationary cost increases. The December 31, 2023 replacement value of the Region’s assets has increased by \$1.94 billion (9.3 per cent) from December 31, 2022.

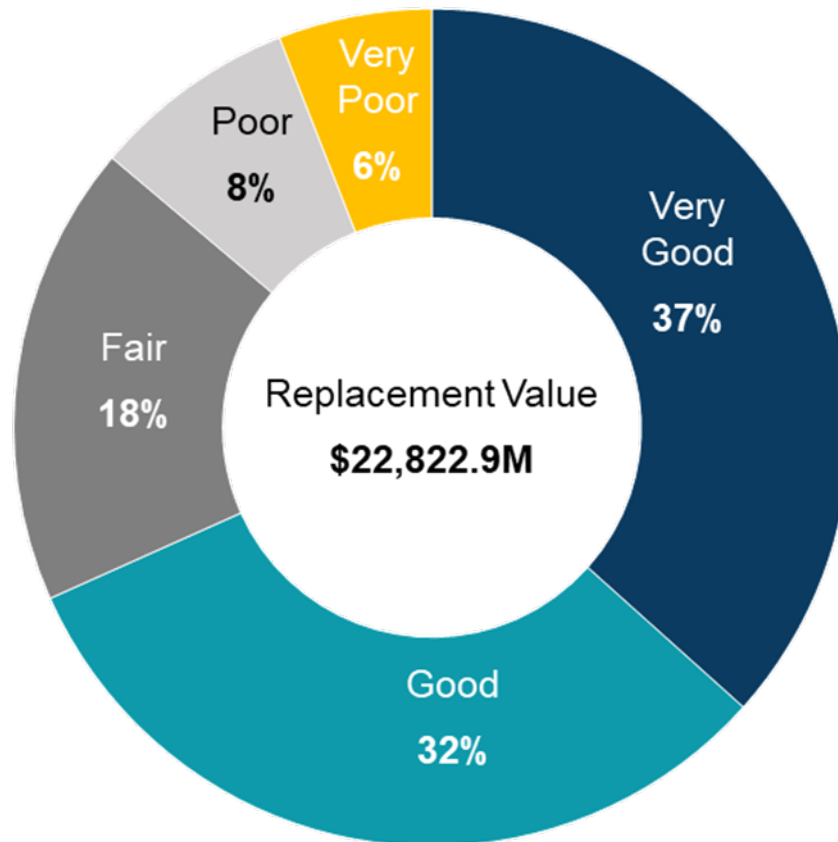
6.3 For 2023, approximately \$90,506 per Durham household would be required to replace the Region’s entire asset inventory. This is a representation of the community’s investment in Regional infrastructure.



\$90,506
Investment per Household to Replace all Assets

7. The Condition of the Region’s Infrastructure

7.1 Asset condition helps to inform the Region’s prioritization of maintenance, repair and replacement investments. The average condition across all Regional assets is Good and is consistent with the average condition in 2022. Across all assets, most are rated in Fair to Very Good condition (87 per cent based on proportion of total replacement value). Figure 5 below displays the total replacement values and condition ratings of the Region’s service areas.

Figure 5: Condition and Replacement Values for Regional Assets*

* Percentages may not add to 100 per cent due to rounding. The condition breakdown does not include condition for equipment assets as these are pooled assets.

- 7.2 An asset assessed as Poor or Very Poor condition does not represent a health or safety risk. Rather, these are assets that may not be performing as intended, may be experiencing higher than average rehabilitation and/or maintenance costs due to condition, or may be deemed to be at or near the end of its useful life. When warranted, Very Poor assets are considered for current year replacement or significant rehabilitation. Staff balance replacement and repair work with the impact of the asset's poor performance to ensure assets are not prematurely replaced and deliver best value to user rate and property taxpayers.
- 7.3 Table 1 outlines the approaches the Region's asset management staff employ to assess the condition of each asset class:

Table 1: Asset Condition Assessment Methods

Asset Class	Assessment Methods
Linear Water and Sewer (e.g., buried pipes)	Pipe material, break rates, inspections, remaining service life and operational concerns
Vertical Water and Sewer (e.g., plants and pumping stations)	Site-specific inspections
Roads and Traffic Infrastructure	Inspections and consideration of age-based condition rating where appropriate
Bridges and Culverts (greater than a three metre span)	Biennial visual inspections
Facilities	Building Condition Assessment (BCA) and age (where a BCA has not yet been completed)
Fleet	Estimated service life and inspection

7.4 The assets currently rated in Poor to Very Poor condition will continue to undergo assessment for investment through the 2025 Business Planning and Budget process.

8. Service Levels

8.1 Assets are instrumental in the Region delivering services at its desired service levels. Desired service levels are set both by regulatory compliance and Regional priorities. Regional plans, studies, policies, by-laws influencing all assets' service levels include:

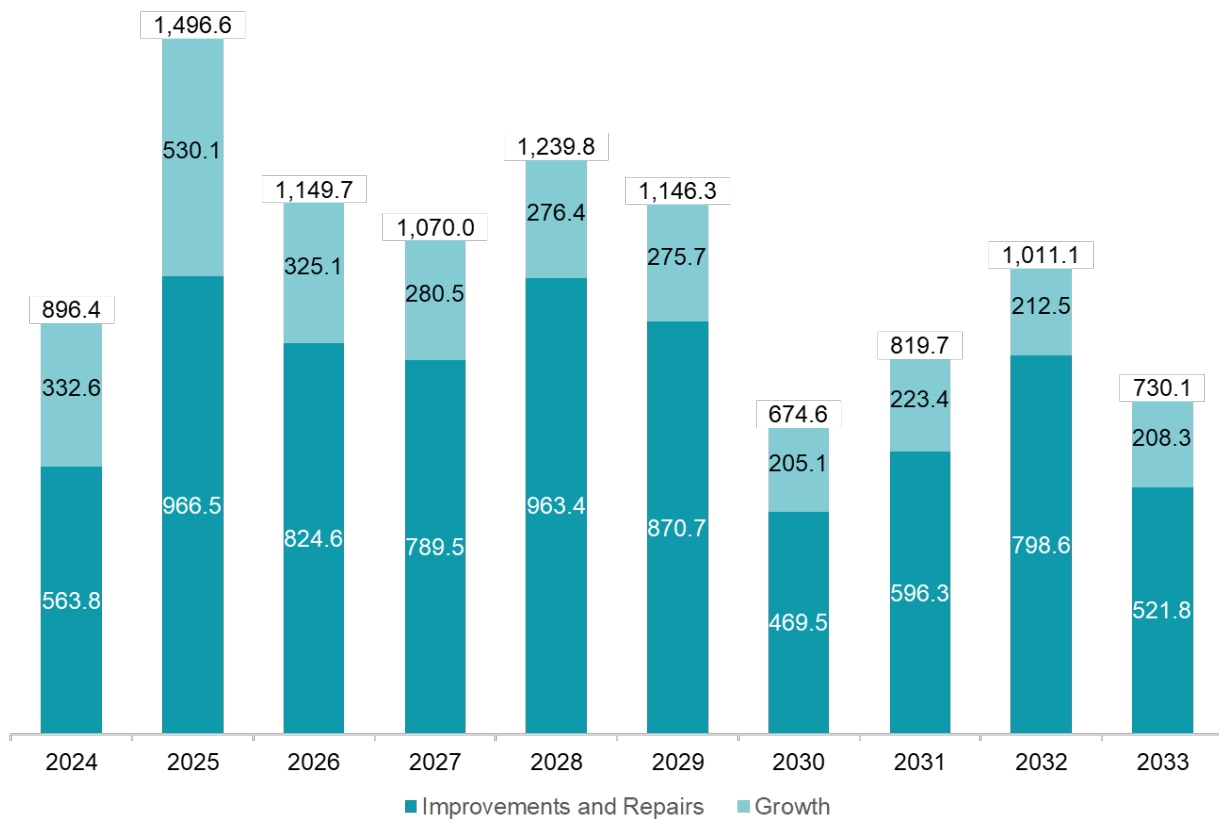
- Durham Region Strategic Plan: 2020 – 2024;
- The Regional Official Plan;
- Durham Region Corporate Climate Change Action Plan;
- Energy Conservation and Demand Management Plan (CDM);
- The 2022 Durham Accessibility and Inclusivity Standards;
- Light Duty Fleet Electrification Plan;
- The Durham Standard;
- Transit Service and Financing Strategy; and
- Region of Durham Paramedic Services Service and Financing Strategy.

- 8.2 Additionally, service levels are also influenced by:
- Departmental reports and plans;
 - Best engineering and industry practices;
 - Regulatory guidelines and/or requirements; and
 - Other performance expectations as defined through multiple reports as approved by Regional Council.
- 8.3 Desired service levels influence asset management planning and subsequent investment decisions. Attachments #2 through #9 outline the desired service levels for each service areas as well as performance measures to track progress.
- 8.4 Ontario Regulation 588/17 sets out specific technical metrics and qualitative descriptions that must be included in service level reporting for core assets (water, wastewater, roads, bridges, culverts, traffic systems).

9. Capital Forecast for Core and Non-Core Assets

- 9.1 The Region's 2024 Business Plans and Budget identified major capital investments for core and non-core assets of \$10,234.5 million from 2024 to 2033. As illustrated in Figure 6, approximately \$7,364.7 million of this investment is growth related and is primarily funded from development charges with any development charge shortfalls being funded from user rates, property taxes, reserves, reserve funds and debenture financing.
- 9.2 The balance of \$2,869.8 million for non-growth related infrastructure will to be funded primarily from property taxes, water and sewer user rates and Regional reserves and reserve funds.
- 9.3 Ten-year capital forecasts for each of the Region's Service areas is included in Attachments #2 through #9.

Figure 6: Ten-Year Capital Forecast (\$ millions)*

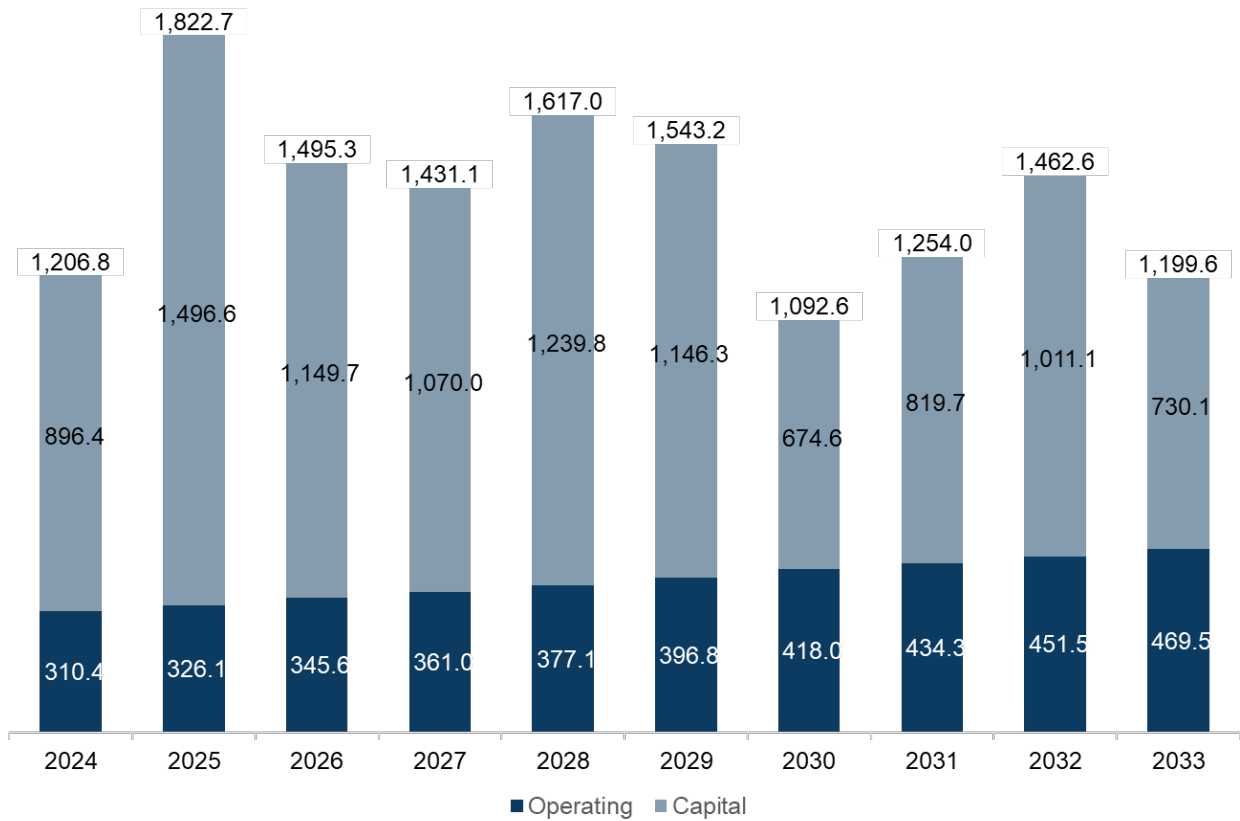


*Improvements and Repairs and Growth may not add to the Total due to rounding.

10. Lifecycle Considerations

- 10.1 Lifecycle analysis considers the costs for all capital and operating activities undertaken during the life of an asset to ensure it meets its desired service levels and target performance measures at the best value to user rate and property taxpayers. Lifecycle costs begin before an asset is even acquired including planning activities to determine needs, through to eventual asset disposal and possible site remediation activities.
- 10.2 Ontario Regulation 588/17 requires lifecycle analysis for core and non-core assets be included in the Region’s Asset Management Plan by July 1, 2024.
- 10.3 As illustrated in Figure 7, the 2024 gross lifecycle costs (operating and capital) for regional assets is \$1,206.8 million. Over the nine-year forecast period, total planned lifecycle expenditures for regional assets total \$12,918.0 million. Detailed lifecycle costing by service area are included in Attachments #2 through #9.

Figure 7: Ten-Year Lifecycle Costs (\$ millions)*

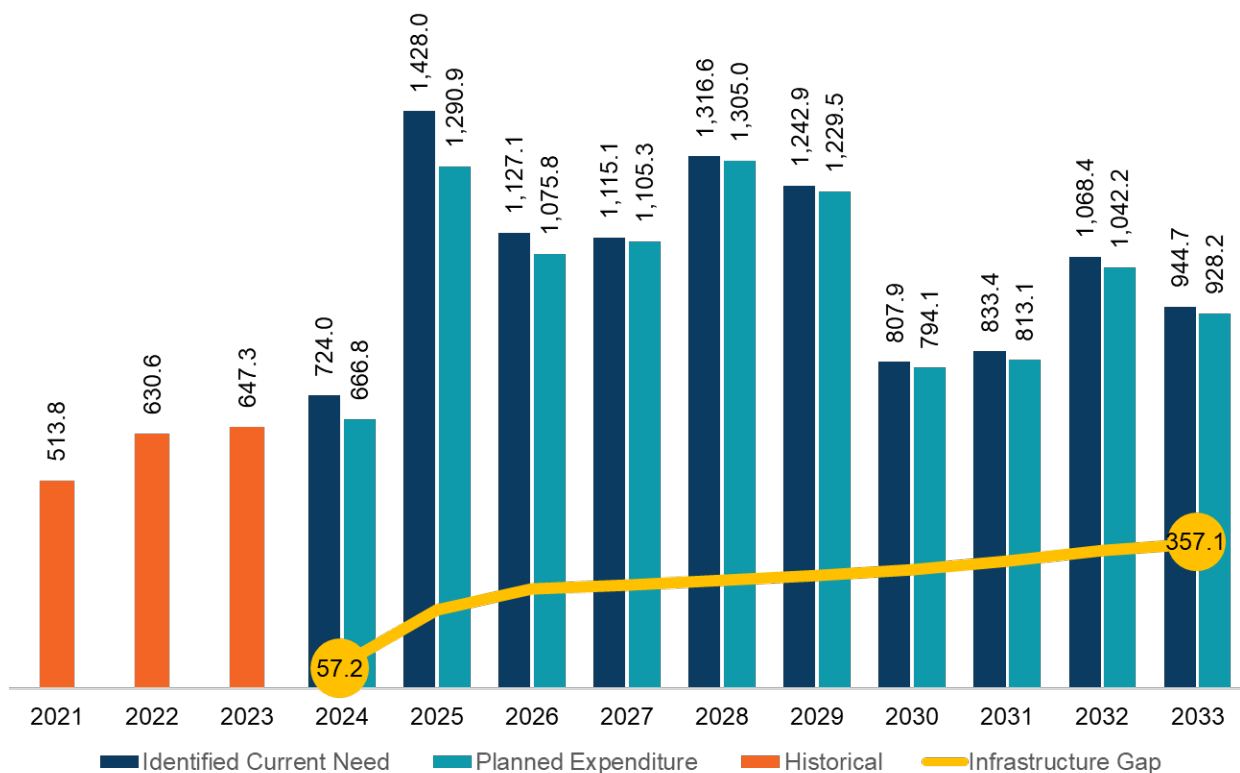


*Operating and Capital may not add to Total due to rounding.

11. Infrastructure Gap or Core Assets

11.1 As part of the lifecycle costing analysis for core assets, staff analysed the current planned funding against expected funding needs (both operating and capital) to meet service levels. Through this analysis, an infrastructure funding gap of \$57.2 million in 2024 was identified, increasing to \$357.1 million by 2033 based on planned investments (Figure 7).

Figure 8: Infrastructure Gap Analysis for Core Assets (\$ millions)



11.2 Forecasted infrastructure needs will be reviewed, updated, and refined during the 2025 business planning and budget and long-term financial planning processes. Funding needs, gaps and strategies to address these infrastructure needs will also be refined through ongoing long-term capital planning exercises and future business plans and budgets.

11.3 The Region faces significant financial challenges, similar to those faced by other Ontario municipalities, related to capital cost escalations over the forecast period. Statistics Canada’s Building Construction Price Index for non-residential buildings in the Toronto Census Metropolitan Area, for the period March 31, 2022, to March 31, 2023, identified an inflationary increase of 12.3 per cent. The increase in the index is reflective of the current inflationary environment, skilled labour and materials shortages, and increased cost of materials. The Region will continue to strategically

contribute to our capital replacement funds to ensure our forecasted infrastructure needs continue to support Regional programs and services.

12. Climate Change Mitigation and Adaptation Measures

- 12.1 The Durham Region Corporate Climate Action Plan has set targets to achieve net-zero corporate GHG emissions by 2045. The 2024 Business Plans and Budget includes a number of investments to reduce corporate GHG emissions from the Region's assets including the purchase of low carbon vehicles, the advancement of Durham Region Transit's zero emission fleet, facility initiatives, the usage of the Durham Standard, the use of recycled materials in construction projects, the completion of various deep energy retrofits of a number Regional facilities, and the undertaking of comprehensive building condition assessments and level 3 energy audits to document the baseline and inform the development of a greenhouse gas emissions reduction plan and pathway for the balance of the Region's facilities. Further details of these and other initiatives can be found in the Annual Climate Change Progress Report the latest of which was [Report #2024-COW-12](#). The Region of Durham's 2024 to 2029 Energy Conservation and Demand Management Plan (Report #2024-COW-30) provides an overview of the Region's planned future energy conservation and demand management measures.
- 12.2 Staff employ strategies to prepare for the impacts of a changing climate as part of ongoing asset management best practices and in accordance with Ontario Regulation 588/17 requirements. Asset design, including material types, technical specifications and location, is all impacted by consideration of climate adaptation.
- 12.3 The asset class attachments (Attachments #2 through #9) provide further details on the specific measures being employed to adapt assets to a changing climate and highlight the ways in which investments in assets are aligned with the Region's corporate GHG inventory reduction targets.

13. Risk

- 13.1 Regional staff proactively analyze potential risks to assets on an ongoing basis considering risk likelihood and impact. Identified risk mitigation strategies include coordinated responses to potential risk events, measures to ensure business continuity, and systems to address service interruption.
- 13.2 Attachments #2 through #9 details by service area of the risks specific to each asset class as well as mitigation measures.

14. Relationship to Strategic Plan

14.1 This report aligns with and addresses the following Durham Region Strategic Plan goal and priorities.

- Goal 5 Service Excellence – to provide exceptional value to Durham user rate and property taxpayers through responsive, effective and fiscally sustainable service delivery. By responsibly managing the Region’s assets, the proposed 2024 Asset Management Plan looks to optimize resources to deliver critical infrastructure and servicing for current and future generations.

15. Next Steps

15.1 Infrastructure needs identified in this report will inform the 2025 business planning and budget process, including the 2025 Budget Guideline Report, capital planning, and departmental 2025 to 2034 business plans and budgets.

15.2 Asset management staff will continue to work collaboratively to meet the remaining asset management regulatory requirements due by July 1, 2025. The specific next steps include:

- Continue aligning asset management practices with additional regulatory requirements including the development and presentation of a financing strategy;
- Refining data collection processes and analysis to improve asset management planning capabilities and lifecycle costing, to inform future business plans, budgets, capital forecasts, and long-term financial planning strategies;
- Refining the Region’s non-core asset inventory;
- Continuing to work with the Office of the CAO to seek alignment between corporate climate initiatives and asset management processes; and
- Continuing to assess risk, business continuity, asset criticality, and asset reliability.

16. Conclusion

16.1 The Asset Management process is a critical element in the Region’s business planning, budget and long-term financial planning processes. The Asset Management Plan details the current condition of the Region’s assets and forecasts future investment needs for repair, maintenance, and replacements.

16.2 The Region’s 2024 Asset Management Plan complies the additional reporting requirements for core and non-core assets required under Ontario Regulation 588/17.

- 16.3 The overall replacement value of the Region's assets is increasing due to growth demands for additional infrastructure and inflationary pressures which were higher in 2023 than in recent years. The asset class attachments (Attachments #2 through #9) provide additional details on the change in replacement values for each asset class.
- 16.4 The condition of the Region's assets remained relatively stable year-over-year as a result of preventative maintenance, rehabilitation and timely repairs and replacements with strategic investments planned that will address many assets currently in Very Poor condition.
- 16.5 As part of continual improvement, the asset management planning processes of data collection, asset assessment and asset and lifecycle analysis will continue to be refined and improved.
- 16.6 Regional staff will continue to work collaboratively to refine and enhance our lifecycle costing and the development of financing strategies for core and non-core assets. The Region is well positioned to meet these additional Ontario Regulation 588/17 requirements due in 2025.

Attachments:

Detailed 2024 Regional Municipality of Durham Corporate Asset Management Plan

Attachment #1: Regional Asset Inventory, Replacement Value and Condition

Attachment #2: Water Supply Asset Class Report

Attachment #3: Sanitary Sewerage Asset Class Report

Attachment #4: Transportation Asset Class Report

Attachment #5: Durham Region Transit Asset Class Report

Attachment #6: Social Services Department Asset Class Report

Attachment #7: Solid Waste Asset Class Report

Attachment #8: Health Department Asset Class Report

Attachment #9: Durham Regional Police Service Asset Class Report

Respectfully submitted,

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2024 Asset Management Plan

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Attachments

Attachment #1: Regional Asset Inventory, Replacement Value and Condition

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1. Overview of Asset Management Processes

- 1.1 Formal asset management has been in place at the Region of Durham since 2004. In 2019, Council approved the Region's first Corporate Strategic Asset Management Policy. The policy articulated asset management goals, objectives, guiding principles as well as an asset management framework. In accordance with Ontario Regulation 588/17 this policy must be reviewed and updated once every five years.
- 1.2 Year-round asset management planning processes are undertaken as part of the Region's best business practices of long-term financial planning as well as to ensure compliance with senior government grant programs.
- 1.3 Asset investment priorities are identified over a multi-year planning horizon based on lifecycle analysis, asset condition, and risks assessment with the objective of delivering approved service levels that are aligned with corporate goals and comply with regulatory requirements.
- 1.4 Financing to fund identified asset investment priorities is sought through the Region's annual business planning and budget process. Investment decisions balance asset condition and service needs with ensuring assets are not prematurely replaced to ensure best value for water and sewer customers, property taxpayers and the community.
- 1.5 The 2024 Asset Management Plan – in compliance with Ontario Regulation 588/17 – includes analysis of the following:
 - Current asset status (inventory, replacement value, condition, average age, and remaining useful life);
 - Reporting by service areas;
 - Service levels and asset performance based on Regionally-defined objectives, best practice and regulatory requirements;
 - Lifecycle analysis on operating and capital investment to maintain current levels of service over a ten-year period;
 - Climate mitigation and climate adaptation initiatives including linkages to the Corporate Climate Change Action Plan; and,
 - Infrastructure investment needs and financial planning strategies.
- 1.6 Development of the Asset Management Plan is a multi-departmental, collaborative process led by the Finance Department and overseen by a Steering Committee.
- 1.7 The Region's Asset Management Plan and supporting asset management processes are compliant with Ontario Regulation 588/17, the regulation governing municipal asset management plans. Ontario Regulation 588/17 was passed in 2018 with a phased implementation that must be fully implemented by municipalities by July 1, 2025 (as amended in 2021 due to the pandemic).

1.8 The Region's aggregated asset information (inventory, condition and replacement value) is provided in Attachment #1 and Attachments #2 through #9 provide details by service area.

2. The State of the Region's Infrastructure

2.1 Under the coordination of the Corporate Asset Management Team in Finance, year-round tracking, assessment and analysis of all Regional assets by departmental asset working teams determine inventory, valuations, conditions, average ages and remaining useful life.

Table 1: Key Components of the State of Infrastructure

Component	Description
Inventory	Asset inventories are tracked by asset class including consideration of new assets acquired and decommissioned assets. Year-over-year changes are identified and analyzed.
Replacement Costs	Asset replacement costs are updated annually using the most up to date information, with significant year-over-year changes analyzed.
Condition Assessment Ratings	Asset condition ratings from Very Good to Very Poor are assigned using the most appropriate assessment method and the best data available. Year-over-year changes in the rating are analyzed.
Remaining Useful Life	The average age and useful lives are updated and assigned relative to the asset lifespan.

Asset Inventory

2.2 Table 2 provides a summary of the Region's infrastructure assets as of December 31, 2023. Further details can be found in Attachment #1.

Table 2: Regional Infrastructure Summary

Asset Class	Assets Inventory
Water Supply System	2,693.4 km Watermains 29,249 Control and Specialty Valves 17,254 Hydrants 186,997 Service Connections 2,070 Fire Lines 185,362 Meters 14 Water Supply Plants and Well Systems 11 Pumping Stations 14 Water Storage Facilities 8 Combined Pumping Station/Storage
Sanitary Sewerage System	11 Water Pollution Control Plants 52 Pumping Stations 3 Other Wastewater Facilities 2,262 km Gravity Sewers 66 km Forcemains 32,981 Maintenance Holes 183,152 Service Connections
Transportation System	2,450 lane km Road Network 247 Bridges and Culverts 12,008 Storm Appurtenances 367 km Storm Mains and Culverts 16 Traffic Management Systems 26,461 Traffic Control Signs and Signals 338 km Traffic Communication Infrastructure 104 km Roadside Protection 127 CCTV

Asset Class	Assets Inventory
Durham Region Transit (DRT)	161 Conventional Buses 5 Specialized Buses 16 Supervisory Fleet 2 Maintenance, Administrative and Bus Storage Facilities 2,638 Bus Pads and Shelters
Social Services	27 Housing Facilities 4 Childcare Centers 4 Long-Term Care Facilities 10 Fleet Vehicles
Solid Waste	7 Facilities 6 Fleet Vehicles
Health	9 Paramedic Stations 82 Ambulances and other Paramedic Service Vehicles Shared Public Health Facility
Durham Regional Police Service	8 Facilities 378 Fleet Vehicles

Replacement Value of Regional Assets

- 2.3 As of December 31, 2023, the Region's infrastructure assets had an estimated replacement value of approximately \$22.82 billion representing an increase of 9.3 per cent from December 31, 2022.
- 2.4 Replacement values assist with long-term financial planning through informing cost estimates for eventual asset replacement at end of useful life. Regional staff consider the following information when assigning replacement values:
- Annual increases in benchmark construction costs (Statistic Canada's Non-Residential Building Construction Price Index) and other inflationary asset replacement cost pressures;
 - Updated market information including recent vendor quotes; and
 - Inclusion of new assets into the Region's inventory to accommodate growth.

The Condition of the Region's Assets

2.5 Asset condition assessment, coupled with service level targets, play an important role in replacement and maintenance decisions. Table 3 highlights the most common asset condition assessment approaches undertaken at the Region.

Table 3: Asset Condition Assessment Methods

Asset Class	Assessment Methods
Linear Water and Sewer (e.g., pipeline)	Pipe material, break rates, inspections, remaining service life and operational concerns.
Vertical Water and Sewer	Site specific inspections.
Roads and Traffic Infrastructure	Inspections and consideration of age-based condition rating where appropriate.
Bridges and Culverts >3m	Biennial visual inspections.
Facilities	Building Condition Assessment (BCA) and age (where BCA not yet complete)

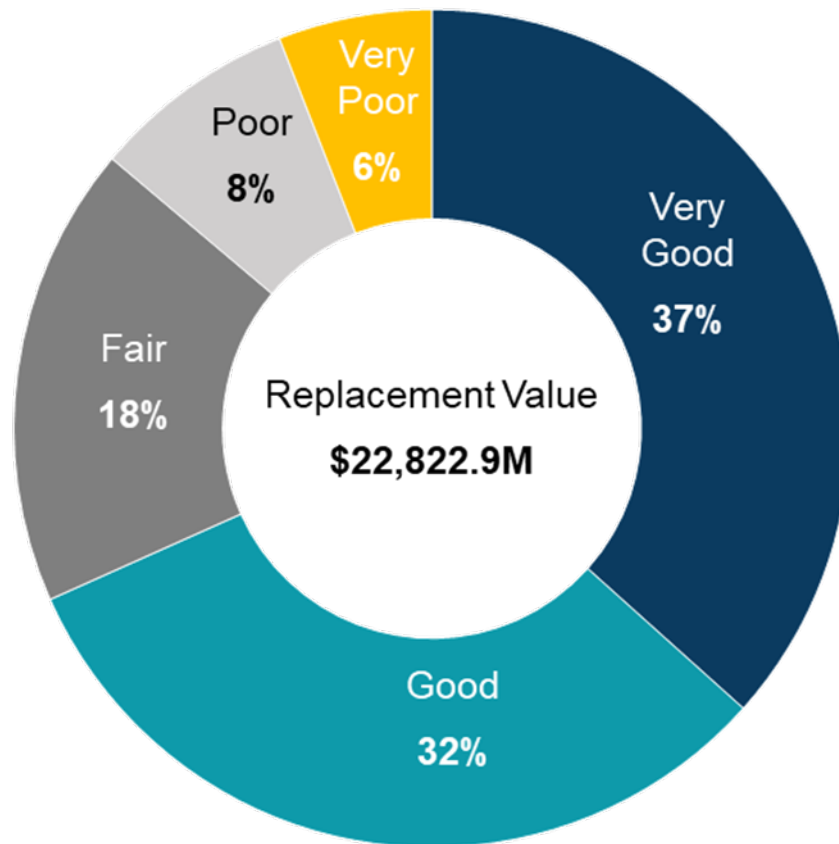
2.6 Using the above-mentioned approaches, Regional assets are assigned one of five condition ratings described in Table 4.

Table 4: Condition Rating Categories and Description

Rating	Description
Very Good	Asset is sound and functioning as intended. Typically, asset would be new.
Good	Asset is sound and functioning as intended. Typically, asset would be within mid-range of useful life.
Fair	Asset is starting to show signs of deterioration and functioning lower than intended. Typically, asset could be approaching later stages of useful life.
Poor	Asset is showing significant signs of deterioration and functioning much lower than intended. Typically, asset could be approaching the end of useful life.
Very Poor	Asset is not performing as intended. Typically, asset would be at the end of useful life.

- 2.7 An asset which has been classified as Poor or Very Poor does not represent a health or safety risk. Rather, these are assets that may not be performing as intended, may be experiencing higher than average rehabilitation and/or maintenance costs due to condition, or may be deemed to be at the end of their useful life. When warranted, Very Poor assets are considered for current year replacement or significant rehabilitation. Staff balance replacement and repair work with the impact of asset poor performance to ensure assets are not prematurely replaced and deliver best value to water and sewer ratepayers and property taxpayers.
- 2.8 The asset management working groups continue to refine, advance, and improve condition-based assessments including the planned completion of Facility BCAs for all Regional facilities.
- 2.9 Figure 1 illustrates the condition and replacement values for the Region’s assets as of December 31, 2023. More detailed information on the asset inventory, replacement value and condition is included in Attachment #1.

Figure 1: Condition and Replacement Values for Regional Assets*



* Percentages may not add to 100 per cent due to rounding. The condition breakdown does not include condition for equipment assets as these are pooled assets.

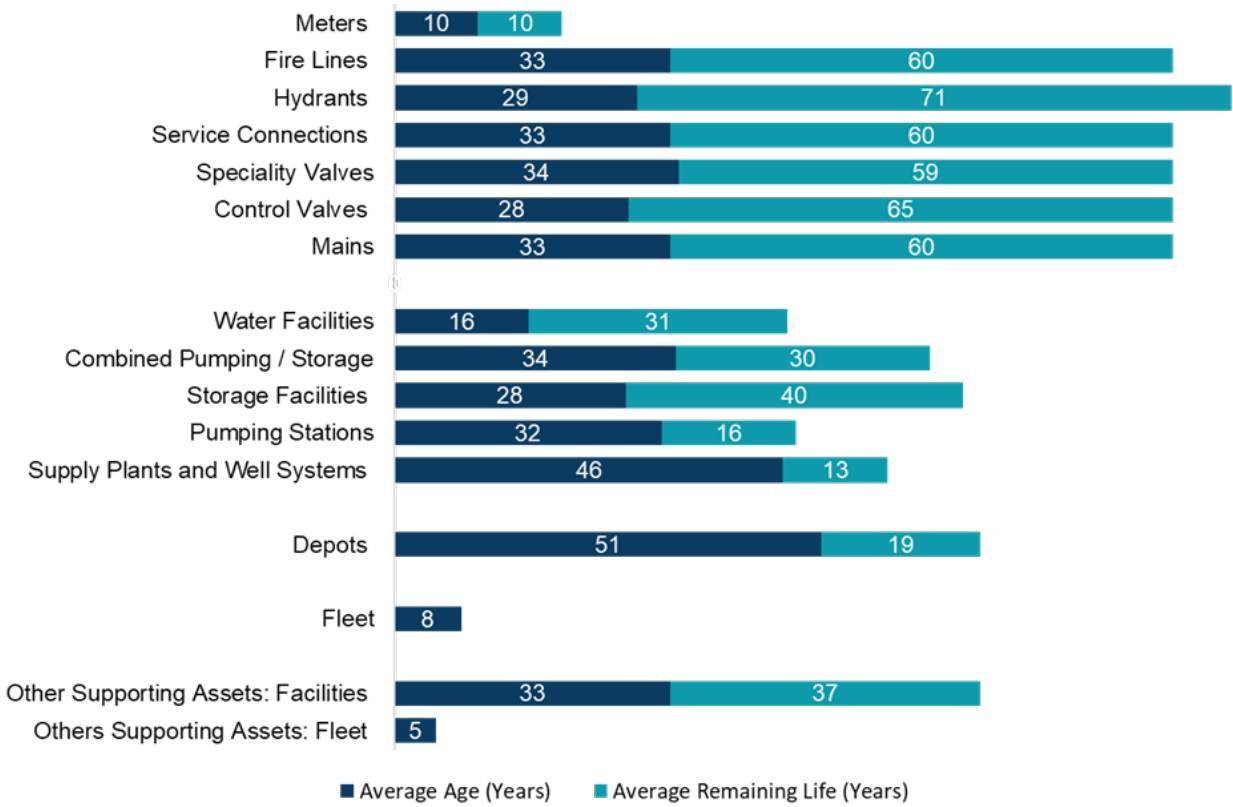
2.10 The assets currently rated in Poor to Very Poor condition will continue to undergo assessment through the 2025 Business Planning and Budget cycle for continued investment. Ongoing maintenance and repair investments for assets in Fair to Very Good condition will continue through annual business planning and budget processes.

Average Age and Remaining Life of Regional Assets

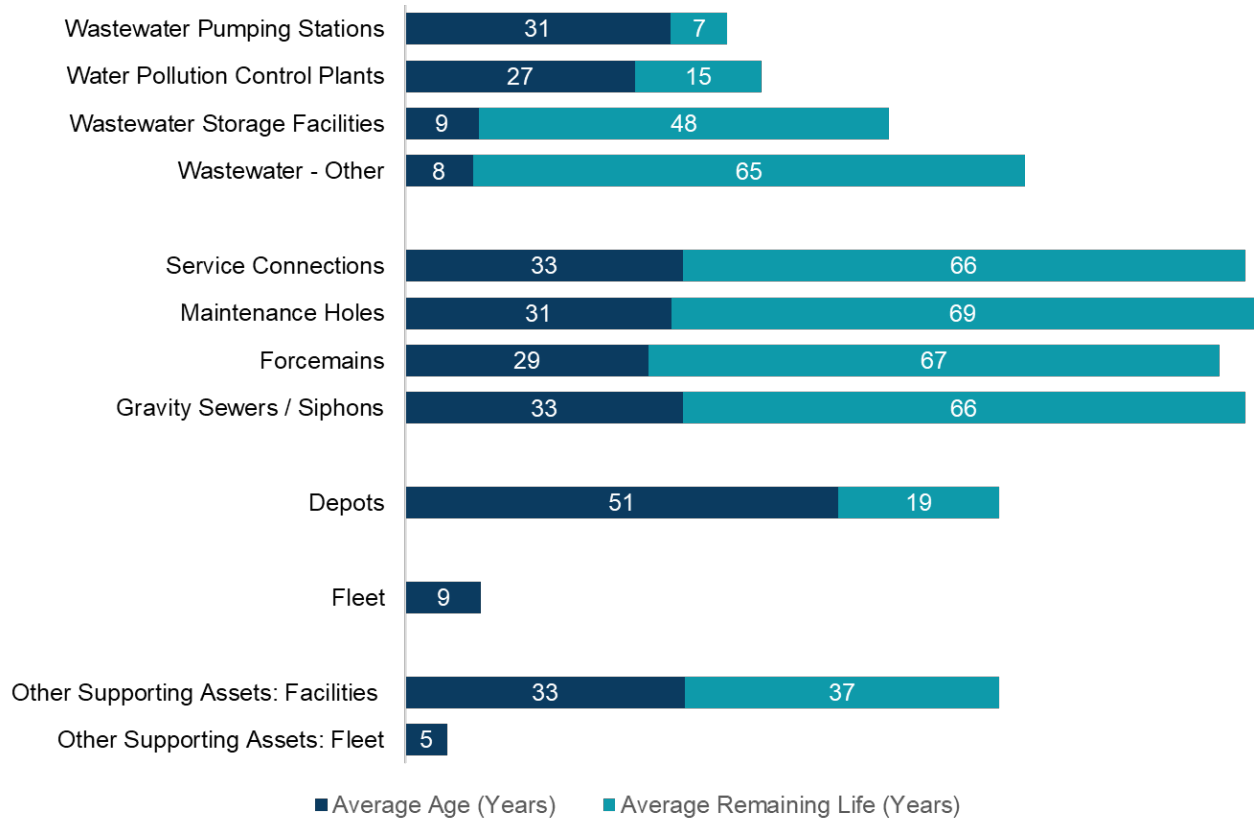
2.11 Figure 2 summarizes the average age and estimated remaining life by asset class as of December 31, 2023.

Figure 2: Average Age and Remaining Useful Life

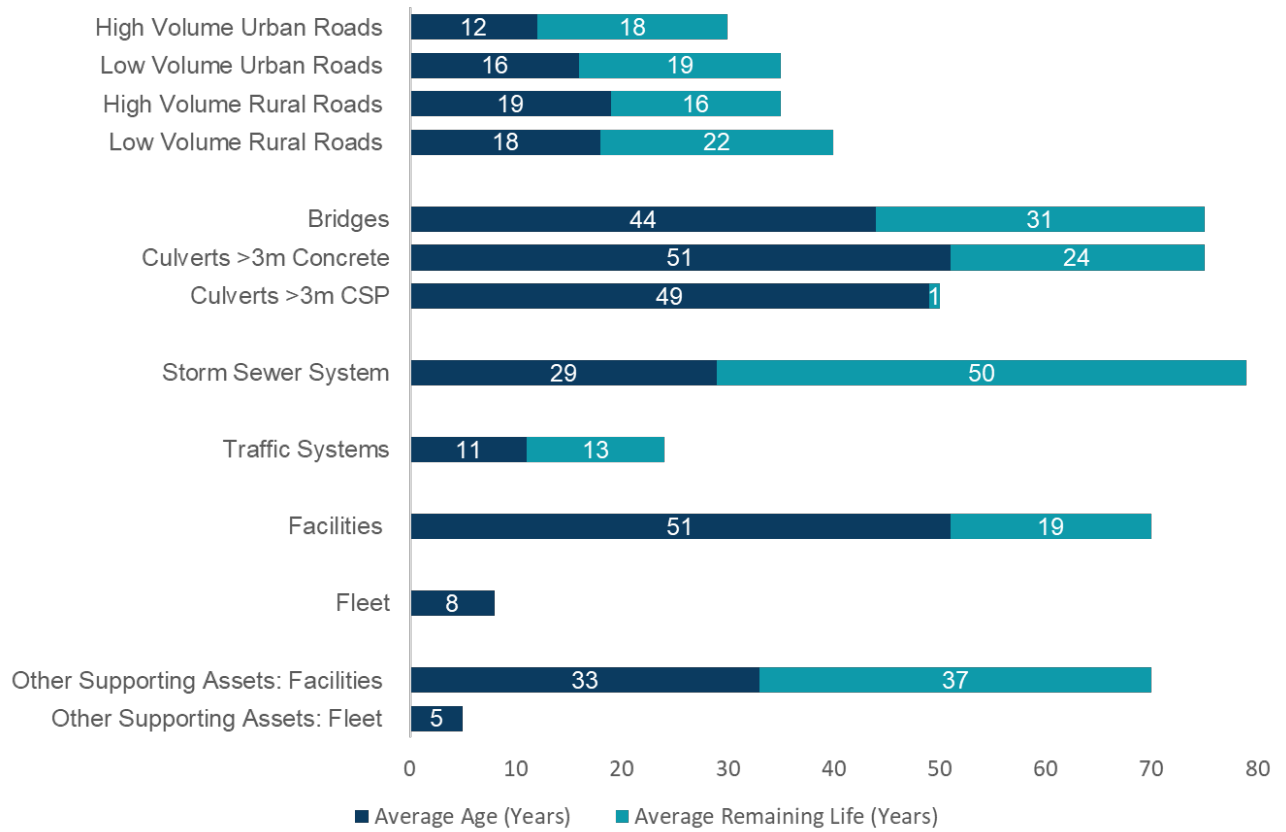
Water Supply



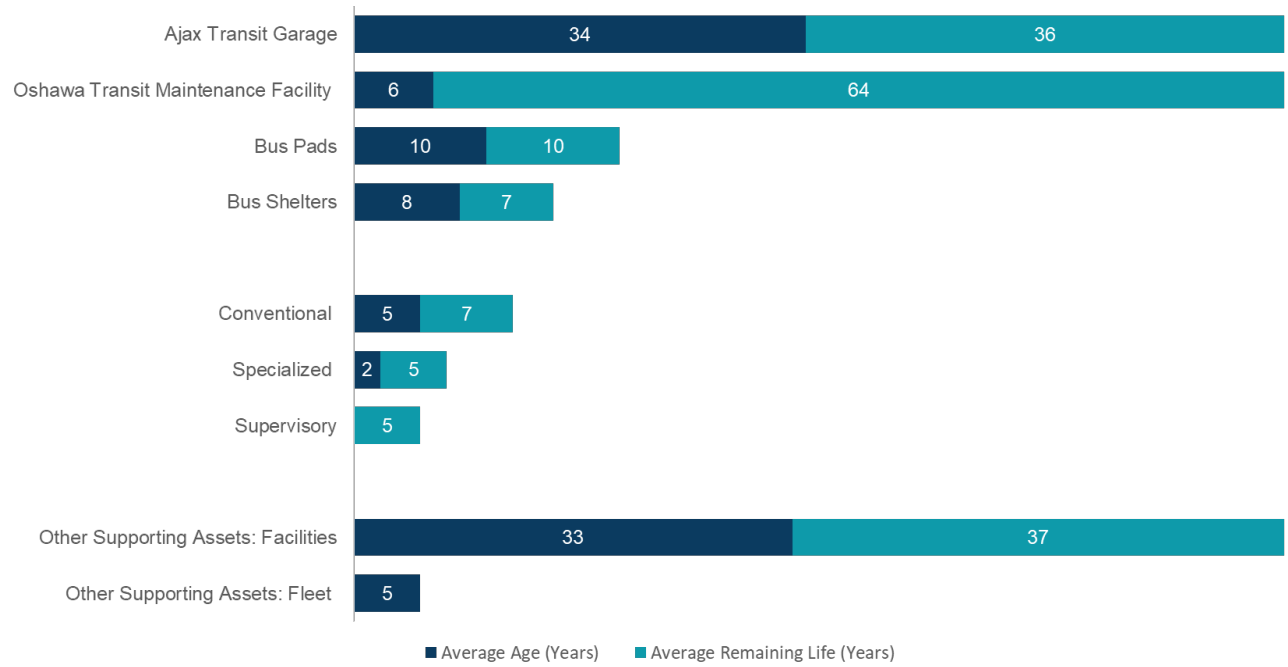
Sanitary Sewerage



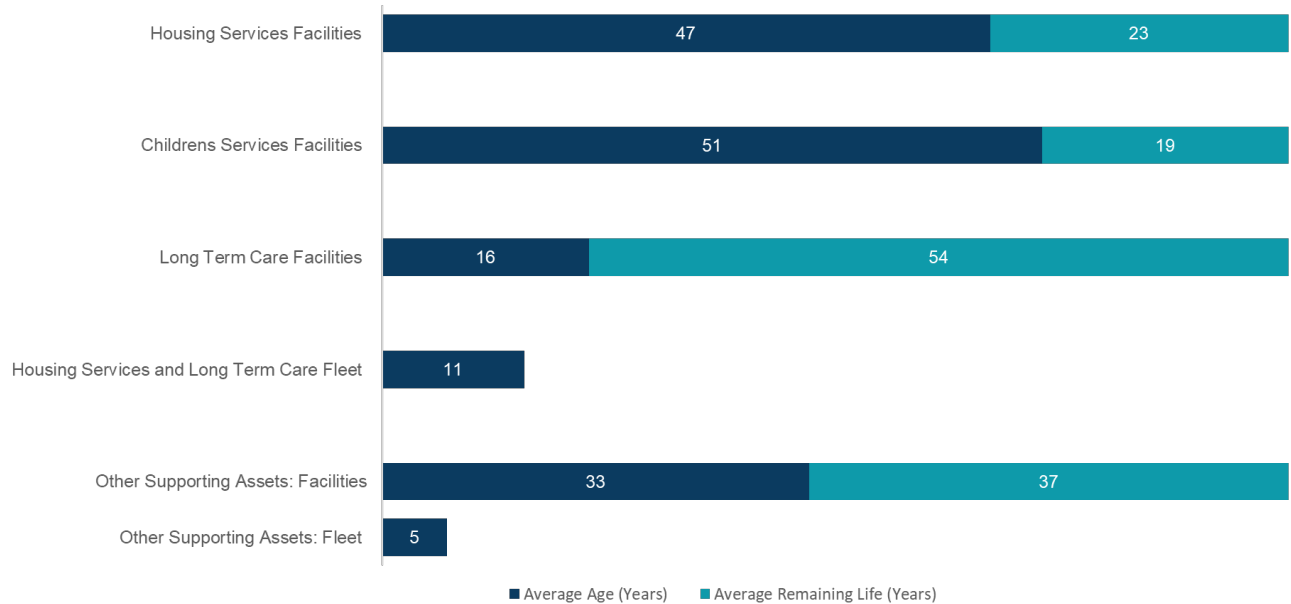
Transportation System



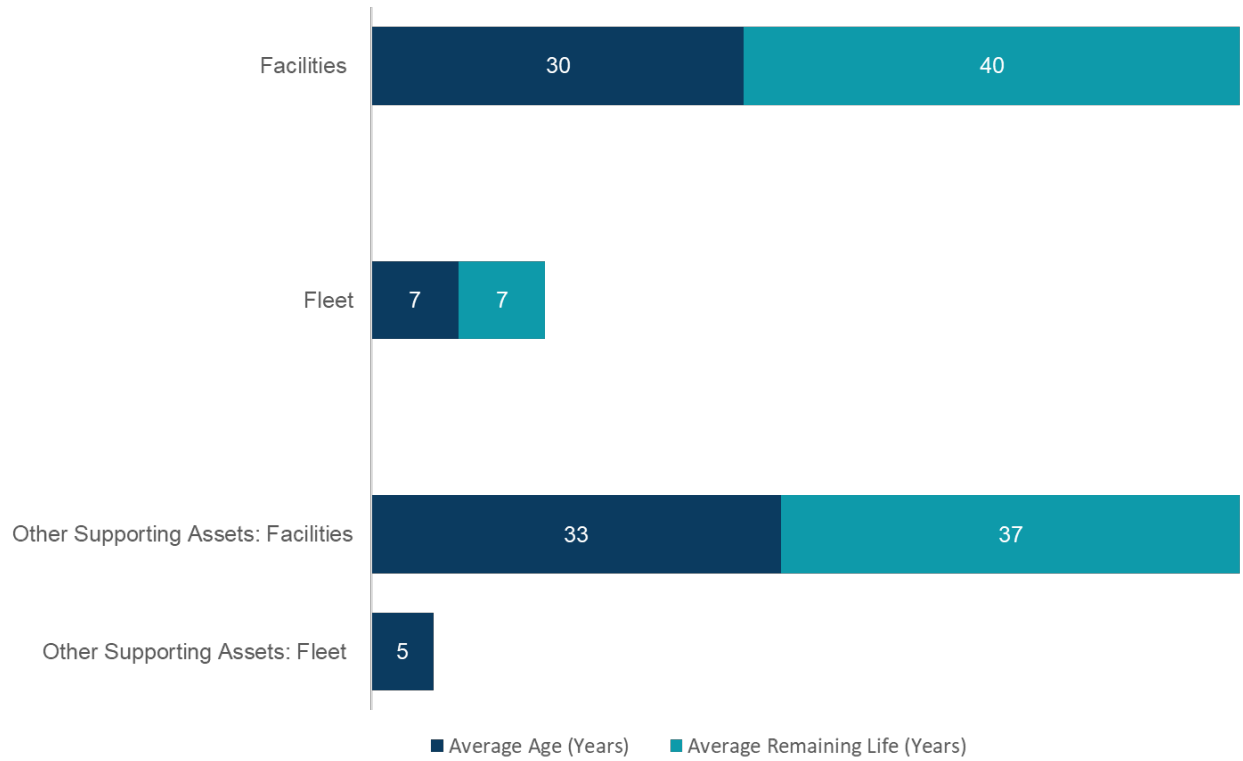
Durham Region Transit



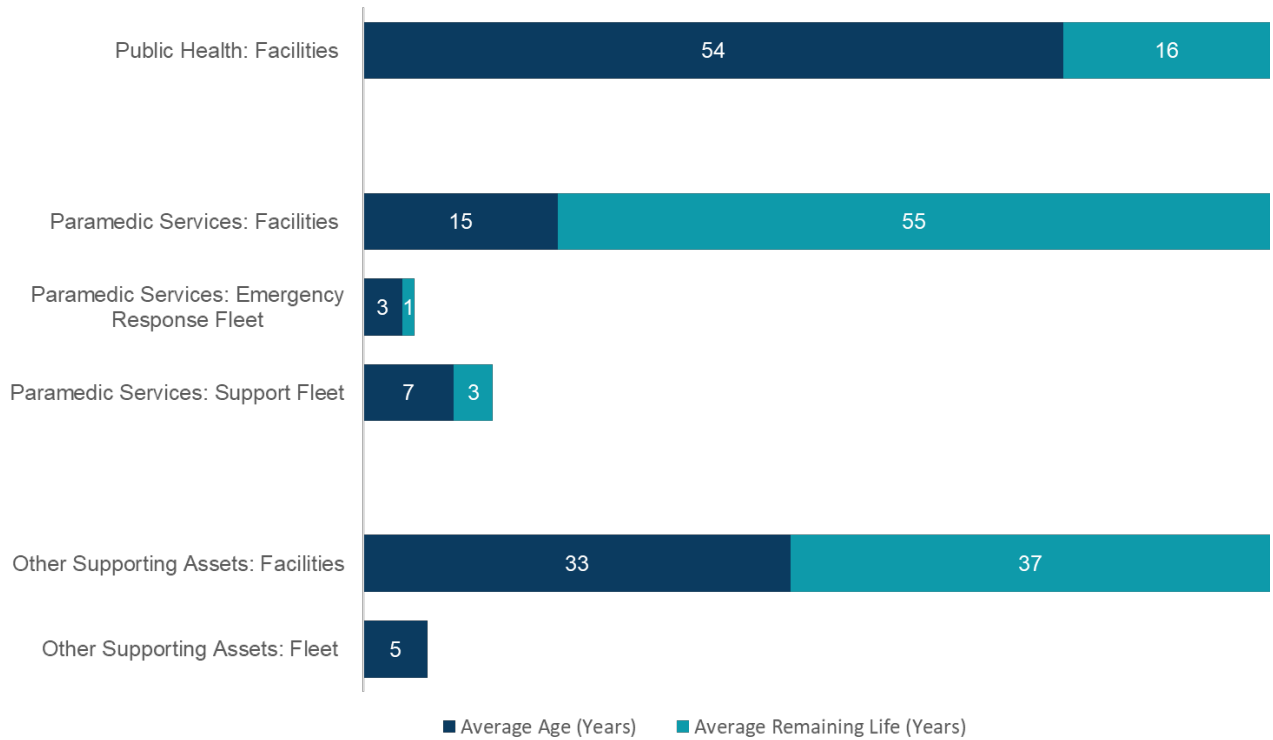
Social Services



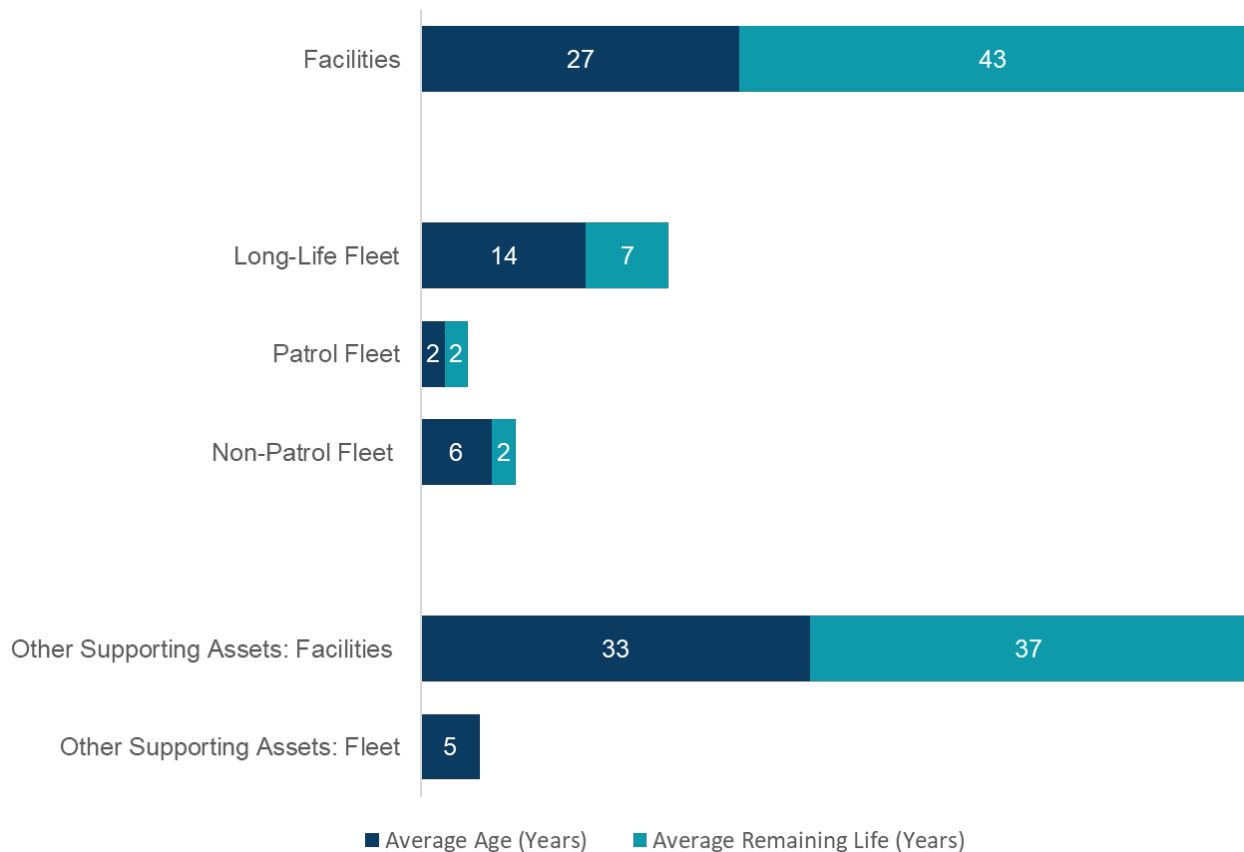
Solid Waste



Health



Durham Regional Police Service



- 2.12 Asset useful life considers when an asset came into service, how it has been performing, expected lifespan of the asset and any rehabilitation work undertaken to extend its life.
- 2.13 Asset useful life can play a role in informing long-term financial planning for asset replacement. Generally, assets that have reached the end of their useful life may experience additional repair and maintenance costs and may be prioritized for replacement or rehabilitation to extend their useful life.
- 2.14 It is also important to assess which assets are considered as operating “Beyond Useful Life” but are still functioning as designed and may be assigned favourable condition ratings of Fair to Very Good. Regional staff monitor the performance and condition of assets operating beyond expected useful life as part of ongoing asset management processes.

3. Asset Management Service Levels and Performance Measurement

- 3.1 Level of service is a key consideration that influences asset management planning and investment decisions. Assets must be maintained, through ongoing maintenance activities as well as timely repairs, rehabilitation and/or eventual replacement to ensure service levels can be provided.
- 3.2 Asset management related service levels are defined through the following:
- Approved Regional strategic and master plans, related service standards, supporting plans, policies and by-laws;
 - Regulatory compliance requirements; and,
 - Other performance expectations as defined through best practice and Regional Council direction.
- 3.3 Ontario Regulation 588/17 requires municipalities to include both community service levels which provide qualitative descriptions on asset reliability and asset management practices as well as technical service levels which focus on service delivery and reliability in their Asset Management Plans.
- 3.4 Details on the Region's community and technical service levels for each of the Region's assets, by service area, are provided in Attachments #2 through #9 as required under Ontario Regulation 588/17.
- 3.5 Moving forward, existing service levels will continue to be refined to reflect Regional Council approved goals, plans, policies, strategies as well as best engineering practices.

4. Durham Region's Corporate Goals and Objectives

Durham Region Strategic Plan

- 4.1 The Durham Region Strategic Plan 2020-2024, translates the Region's vision of, "a healthy, prosperous community for all" into concrete goals for Durham's communities. Strategic Plan goals inform asset investment decisions and operating and maintenance activities.
- 4.2 Regional assets and corporate asset management processes support the Region in meeting its Strategic Plan goals. Figure 3 outlines which Strategic Plan goals can be directly linked to asset management.

Figure 3: Strategic Plan Goals Linkages to Asset Management



- 4.3 The Strategic Plan goals can be further directly linked to the targeted levels of service of an individual asset class as these targets reflect both legislated standards and corporate goals and objectives. Detailed tables linking each service-level target to Strategic Plan goals and other corporative priorities can be found in each asset class attachment (Attachments #2 through #9).
- 4.4 The Region is developing a new Strategic Plan for presentation to Regional Council in late 2024. The 2025 Asset Management Plan will reflect and integrate the new Strategic Plan goals.

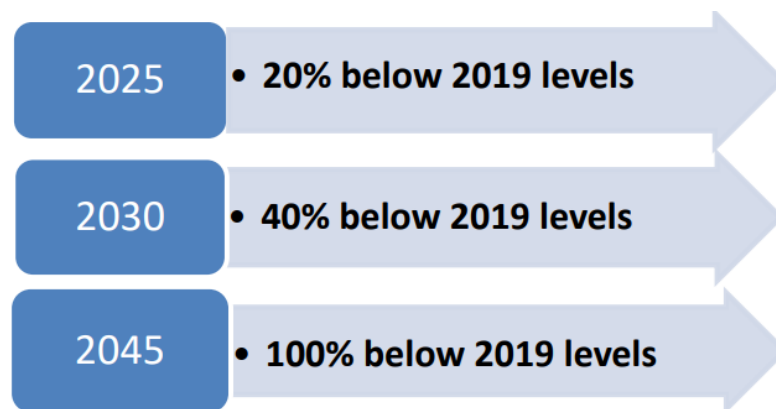
Corporate Strategic Asset Management Policy Goals

- 4.5 The Corporate Strategic Asset Management Policy approved by Council in 2019 has been reviewed and remains aligned with best practices for asset management and various Regional priorities and plans. The following are the Policy's seven objectives:
- 1) The Region will maintain its assets in a safe condition throughout their lifecycles with tolerable risks mitigated through effective strategies, to deliver Regional services at approved levels in a financially prudent and sustainable manner;
 - 2) The Region will maximize the value of its assets by undertaking the most appropriate and cost-effective maintenance, repair, rehabilitation, and/or replacement activities at the most optimal time, to achieve the lowest possible lifecycle cost as feasible;
 - 3) The Region will demonstrate leadership in sustainable asset management, including investments in assets to mitigate (reduce energy use and emissions) and adapt to climate change (to build resiliency), as part of asset management planning;
 - 4) The Region will proactively monitor, identify, and implement asset related risk mitigation measures to ensure the continuity of asset related services, as part of asset management planning;
 - 5) The Region will strive for continuous improvements and innovation in asset management planning, including data analysis, technologies, processes, practices, strategies, and coordination with its lower tier municipalities, neighboring municipalities and senior governments;
 - 6) The Region's asset management planning and reporting process will be transparent and accountable through the development and approval of an Asset Management Plan by Regional Council (which reports performance as well as ensures compliance with all senior government legislative, regulatory, and grant funding reporting requirements); and
 - 7) Infrastructure capital needs identified through asset management planning, as well as risk and climate adaptation and mitigation measures, will be addressed based on funding allocated through the Region's Business Planning and Budget process.

Climate Change Adaptation and Mitigation

- 4.6 Addressing climate change is a critical priority for the Region that is reflected in the Durham Region Strategic Plan 2020 – 2024, the 2020 Council declaration of a climate emergency and the Region’s 2021 Corporate Climate Action Plan (CCAP) that positions the Region as a leader in the community-wide effort.
- 4.7 In 2019, the Region introduced a Corporate Strategic Asset Management Policy that specifies that leadership in sustainable asset management, including investments in assets to mitigate (reduce greenhouse gas emissions) and adapt to climate change (to build resiliency), be a key part of asset management planning.
- 4.8 The Region’s 2021 Corporate Climate Action Plan (CCAP) establishes corporate GHG emission reduction targets and a carbon budgeting framework. As shown in Figure 4, the Region is moving towards a target of 100 per cent reduction in corporate GHG emissions from the 2019 baseline by 2045.

Figure 4: Corporate GHG Reduction Targets



- 4.9 The clear establishment of corporate performance targets provides guidance for corporate facility operations and helped inform the Region’s 2024 to 2029 Energy Conservation and Demand Management Plan, included on the June 12, 2024 Committee of the Whole agenda (Report #2024-COW-30).
- 4.10 Corporate climate change considerations and related initiatives continue to be integrated into the Region’s asset management planning processes and reporting requirements. Within each asset class attachment, specific climate resiliency and mitigation risks and actions are identified and linked to target service levels as appropriate. Key asset-related climate change initiatives include:
- Build on flood risk and vulnerability assessment work completed with the Conservation Authorities in 2021 – 2023 to incorporate flood risk data into corporate decision-making that informs capital planning and asset management for critical infrastructure by expanding flood risk assessment work into areas of the Region where significant development is planned over the coming decades.

- Advance the implementation of the Region’s Light Duty Fleet Electrification Strategy with the replacement of a number of vehicles with electric and hybrid electric vehicles in both Durham Regional Police Services and the Region’s Work’s fleet.
 - Implement Durham Region Transit’s fleet electrification plan, including the purchase of 34 battery electric buses in 2024 (delivery in 2026) and related charging equipment at Durham Region Transit’s Raleigh Depot in Oshawa, Westney Depot in Ajax and a new facility in North Oshawa (pending approval of federal grant funding).
 - Delivery of electrical vehicle charging infrastructure funded in part through Natural Resources Canada’s (NRCan) Zero Emission Vehicle Infrastructure Program (ZEVIP).
 - Apply the Durham Standard to the development of new and major rehabilitation of existing Regional facilities. The Durham Standard provides a green development standard of net zero facilities for new construction and major facility retrofits for Region-owned facilities (and leased facilities where appropriate).
 - Complete Greenhouse Gas Reduction Pathway Feasibility Studies for up to 55 Regional sites allowing for improved pursuit of funding opportunities and incorporation into budget forecasting.
 - Complete deep energy building retrofits of Durham Regional Local Housing Corporation’s senior’s housing portfolio to reduce energy consumption and carbon emissions under the Federation of Canadian Municipalities’ Sustainable Affordable Housing Program.
 - Completion and implementation of the Water and Wastewater GHG Emission Management Strategy that charts a path to decarbonize water supply and wastewater treatment operations over the next 20 years.
 - Continue utilization of recycled materials for road construction.
- 4.11 The 2024 Asset Management Plan’s assessment of climate-related risks and climate adaptation and mitigation initiatives complies with the requirement of Ontario’s asset management planning regulation (Ontario Regulation 588/17) to consider vulnerabilities that may be caused by climate change as part of asset management planning.
- 4.12 GHG emission impacts (with a view towards reduction targets) and climate resiliency will continue to be integrated into asset planning and supporting lifecycle analysis, where possible.

Barrier Free Infrastructure

- 4.13 Ensuring inclusive and accessible environments is a key corporate value for Durham Region and new facility and retrofit projects, whether owned or leased by the Region, are guided by the Durham Standard and provincial requirements.

- 4.14 Provincial requirements include those related to the Ontario Building Code Act, Accessibility for Ontarians with Disabilities Act, 2005 (AODA), The Ontarians with Disabilities Act, (ODA), Ontario Regulation 191/11 Integrated Accessibility Standards Regulation (IASR): the Provincial Policy Statement, and the Human Rights Code.
- 4.15 The Accessibility Advisory Committee (AAC) and/or the AAC Site Plan review sub-committee continue to be consulted by staff for their review and input on projects.
- 4.16 The following are ongoing asset-related accessibility initiatives:
- New public facilities are designed and built for full accessibility;
 - Existing facility upgrades include removing trip hazards and implementing accessibility features (e.g., depressed curbs, ramps, smooth sidewalks, tactile plates, automatic doors and accessible reception areas, parking, entrances and washrooms etc.);
 - Effective facility and transportation enhancements including accessible signage, bus stops/shelters, traffic signals, pedestrian poles and signals, sidewalks, curbs and reduced crossing distances at cross walks; and,
 - Increased maintenance activities to enhance accessibility through enhanced snow clearing and de-icing.

Coordination of Planning and Partnerships with Other Governments

- 4.17 Successful coordination and partnerships with other governments related to asset management include:
- Partnership with the City of Oshawa and Town of Whitby to deliver an integrated solid waste management system. Oshawa and Whitby collect garbage and organic waste in their municipalities, while the Region collects these in the other six area municipalities as well as Blue Box material collections (until transition to extended producer responsibility) across all eight municipalities;
 - The Durham York Energy Centre (DYEC) in the Municipality of Clarington is co-owned by the Region of Durham (78.6 per cent) and York Region (21.4 per cent) and is operated by the private sector through a design-build-operate public-private-partnership (P3) model under a 20-year Project Agreement to 2036;
 - The Next Generation Interoperable Communications Platform (NextGen) allows Durham Regional Police Service, Regional Departments, fire services and public works staff from the area municipalities, and Ontario Power Generation (OPG) to jointly use the communication platform to improve service efficiency and achieve cost efficiencies;

- DRT and Metrolinx coordination and partnerships include:
 - DRT continued participation in the Metrolinx-led Joint Transit Procurement Initiative (TPI) for the procurement of vehicles, equipment, technology, supplies and services to increase buying power, assist in standardization of equipment and leverage industry expertise.
 - DRT continues to use the PRESTO fare collection system under agreement with Metrolinx.
 - DRT continues to leverage Metrolinx Radio service under agreement with Metrolinx.
 - DRT, Works, Federal and Provincial Government coordination and partnerships include the ongoing implementation of Investing in Canada Infrastructure Program (ICIP) Transit Stream projects, including vehicle replacements, facility construction and bus rapid transit implementation;
 - The Regions of York and Durham work in partnership to operate, maintain and expand the Duffin Creek Water Pollution Control Plant (WPCP) and related sanitary sewerage infrastructure;
 - The Region works with the five conservation authorities to ensure environmental objectives are met related to watershed planning, environmental conservation and protection, as well as contracting with the Lake Simcoe Region Conservation Authority for the management of the Durham Regional Forest on behalf of the Region;
 - The Region in partnership with the Region of York, Region of Peel, City of Toronto and nine Conservation Authorities have developed the Oak Ridges Moraine Groundwater Program which provides a collaborative approach to collecting, analyzing and disseminating water resource data and information as a basis for effective stewardship and management of water resources; and
 - Co-ordination of planning and timing for infrastructure construction with the local area municipalities (e.g., Roads Capital Budget and Water and Sewer Capital Budget, Area Municipal Road Program, MTO and GO Transit Projects).
- 4.18 The Region's best business practice for coordination complies with Ontario Regulation 588/17 to coordinate where possible connected and/or interrelated assets with other municipalities and delivers on the Region's commitment to continuous improvement. This is also consistent with the Region's Corporate Strategic Asset Management Policy.

5. Lifecycle Overview

- 5.1 Lifecycle costing is a comprehensive consideration of the capital and operating activities (Table 5) that must be taken during the life of an asset to ensure it meets the desired service levels and target performance measures. Lifecycle costs can begin before an asset is even acquired through planning activities to determine needs (e.g., master plans) and continue through to eventual asset disposal and possible site remediation activities.
- 5.2 The focus of capital lifecycle activities includes ongoing regular inspections and timely preventative repair and maintenance and applying the most appropriate treatment at the optimal time. The goal of capital lifecycle activities is to maximize asset lifespan at the lowest possible cost and risk.
- 5.3 Operating lifecycle activities considers direct (e.g., fuel costs for fleet) and indirect activities (e.g., tree trimming programs along Regional Roads) required to ensure the asset can meet its service goals.
- 5.4 Ontario Regulation 588/17 requires lifecycle costing analysis for a ten-year period for core assets and non-core assets. The analysis must include:
- Full lifecycle costing of assets; all maintenance, repair, replacement and related-operating activities required over the life of an asset (from acquisition to disposal).
 - Options for which lifecycle activities could be undertaken to meet desired service levels including risks associated with any options and which represent the lowest cost to deliver on service levels.
- 5.5 The Region is in compliance with Ontario Regulation 588/17. Additional details of this analysis can be found in each asset class attachment (Attachments #2 through #9).

Table 5: Key Concepts: Asset Lifecycle Activities

Activity Type	Description
Operating	All operating activities required to ensure the asset can meet service level delivery (e.g., snow plowing roads)
Maintenance	Regular scheduled inspections and preventative maintenance, or repair activities associated with unexpected events
Renewal and Rehabilitation	Major repairs designed to extend asset life, restore level of service and/or defer the need for replacement

Activity Type	Description
Replacement	Replacement occurs when the asset has reached the end of its useful life and/or renewal and rehabilitation activities are no longer considered appropriate
Disposal	Activities associated with the decommissioning of an asset including sale or disposal
Expansion	Planned activities to expand services either to enhance service levels or meet growth demands

6. Capital Forecast and Financing Options

6.1 Growth-related infrastructure requirements are forecasted as part of the Region’s business and capital planning process and as part of development charge (DC) background studies.

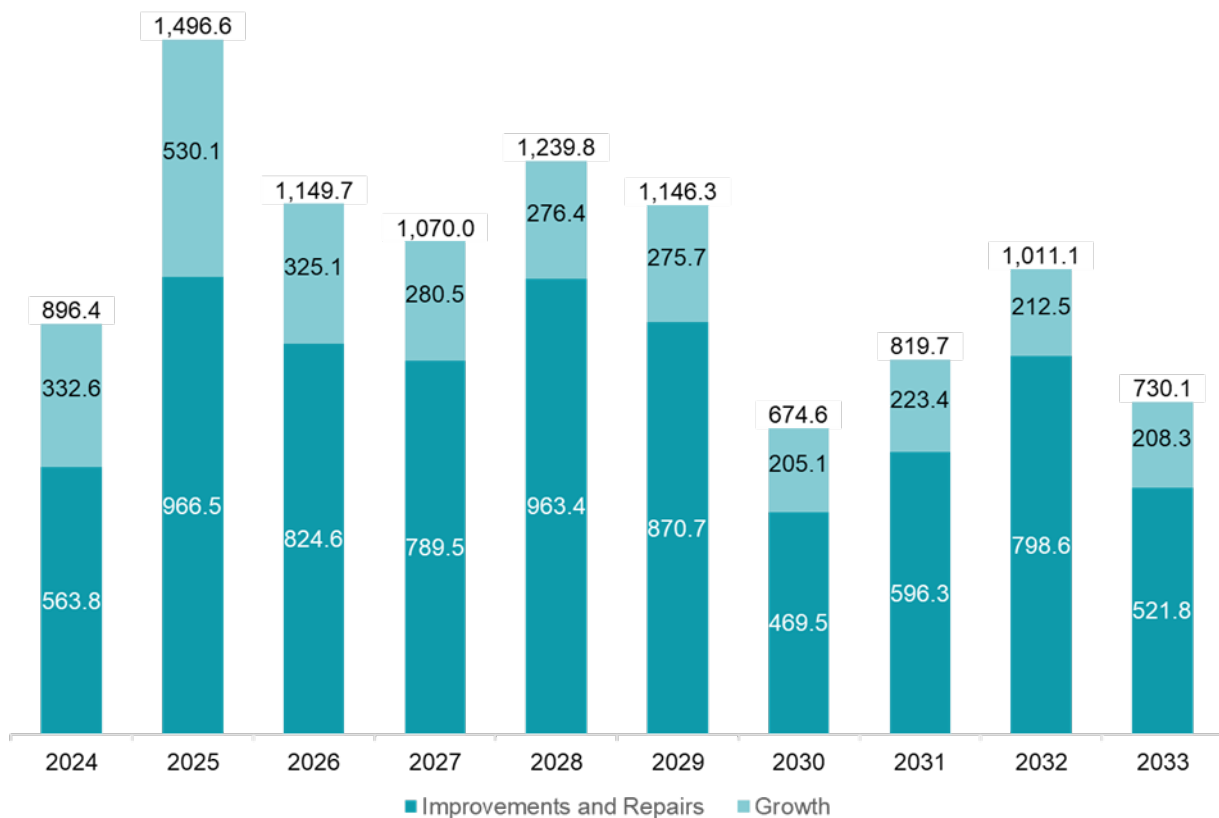
6.2 Bill 23, *More Homes Built Faster Act, 2022*, Bill 134, *Affordable Homes and Good Jobs Act, 2023* and related legislation have brought a number of changes impacting municipalities including:

- The province, in support of a goal to build 1.5 million new homes by 2031, has established specific housing targets for large and fast-growing single and lower-tier municipalities, including Durham’s five lakeshore municipalities who have formally committed to housing pledges. While housing targets are on a local municipal level, meeting them requires advancing the construction of Regional infrastructure earlier than previously planned. This creates additional financial burden on the Region both from having to advance funding for large infrastructure projects, as well as for additional staff resource requirements to support and deliver a much larger, technical and complex ten-year capital program.
- Changes to the Development Charges Act, 1997 that require municipalities to phase-in new development charge rates, allow developers to ‘lock-in’ their development charge rates at time of development application and provide development charge exemptions and discounts to select development categories. In addition, municipalities can no longer fund certain services (social housing and certain types of studies) through development charges. The implication is a smaller share of the Region’s growth capital costs will be recoverable from development charges as the Region is required, under provincial legislation, to fund the impact of these provisions from nondevelopment charge sources. In the absence of provincial funding, regional property taxes and water and sanitary sewer user rate revenues will be required to fund these shortfalls.

- The Region is actively monitoring the status of Bill 185, Cutting Red Tape to Build More Homes Act, 2024 which, at the time this report was written, is before the Legislative Assembly of Ontario. If approved, some of the changes introduced through Bill 23 will be reversed. If approved, the Region will no longer be required to phase-in new development charge rates over five-years and growth-related studies will again be eligible for Development Charge financing. Any impacts resulting from this and other legislation will be incorporated into future updates of the Asset Management Plan.

6.3 Capital growth requirements were considered as part of the 2024 Budget and nine-year forecast.

Figure 5: Ten-Year Capital Forecast (\$ millions)*



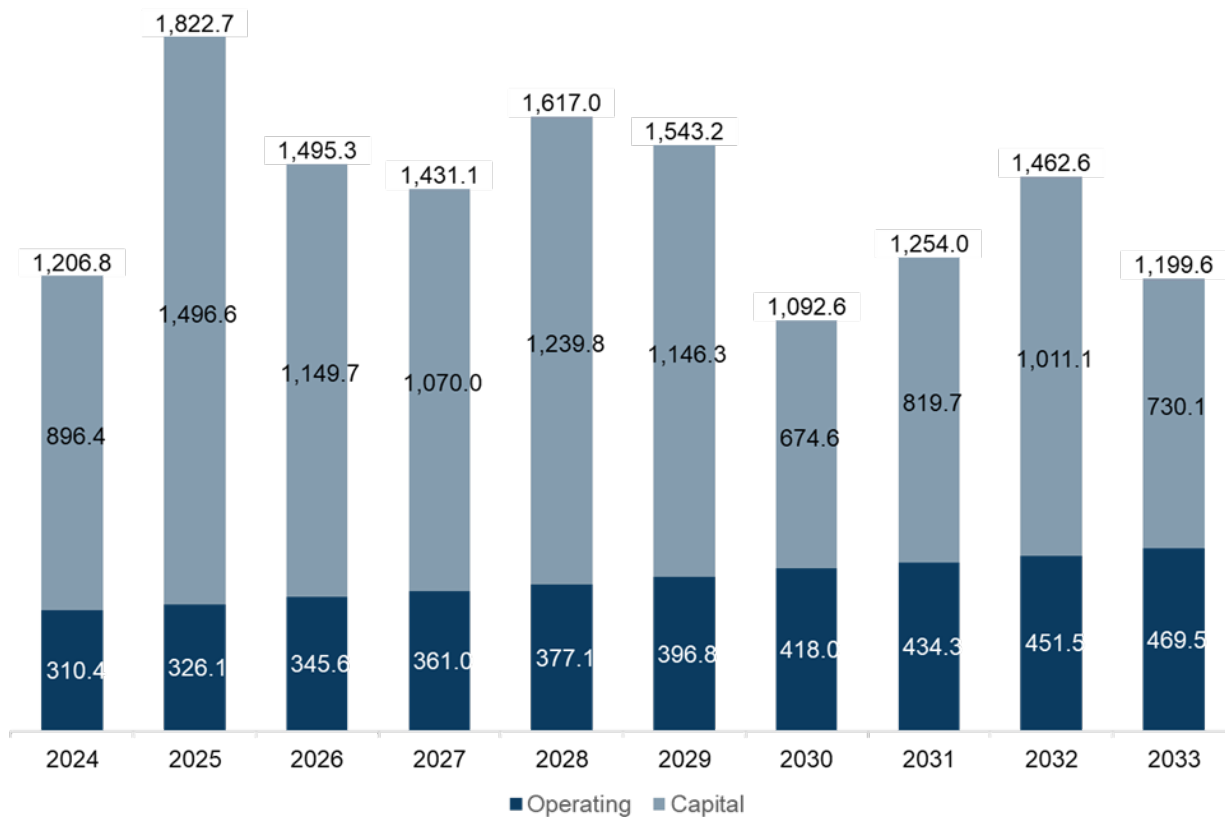
*Improvements and Repairs and Growth may not add to Total due to rounding.

6.4 Forecasted infrastructure needs will be updated, refined and reprioritized during the 2025 business planning and budget process and long-term capital planning. Funding needs, gaps and strategies to address these infrastructure needs will also be refined through business planning, budgets and long-term financial planning.

7. Lifecycle Analysis

- 7.1 Lifecycle analysis considers the costs for all capital and operating activities undertaken during the life of an asset to ensure it meets its desired service levels and target performance measures at the best value to user rate and property taxpayers. Lifecycle costs begin before an asset is even acquired including planning activities to determine needs, through to eventual asset disposal and possible site remediation activities.
- 7.2 Regional staff undertook lifecycle costing analysis to determine historical and planned capital and operating lifecycle activities. Asset management practices such as condition assessments and expected useful life analysis inform capital and operating lifecycle activities. To assess capital lifecycle costs, staff considered rehabilitation and replacement activities that extend the useful life of assets and/or meet service delivery targets. In addition to repair and maintenance activities, staff considered other ongoing operating expenditures required for assets to meet target service levels. Some examples include overhead costs (e.g., office/depot space, training, software, etc.), gas and fuel, utilities and fleet rentals.
- 7.3 Ontario Regulation 588/17 requires lifecycle analysis for core and non-core assets be included in the Region's Asset Management Plan by July 1, 2024.
- 7.4 As illustrated in Figure 6, the 2024 gross lifecycle costs (operating and capital) for regional assets is \$1,206.8 million. Over the nine-year forecast period, total planned lifecycle expenditures for regional assets total \$12,918.0 million. Detailed lifecycle costing by service area are included in Attachments #2 through #9.

Figure 6: Ten-Year Lifecycle Costs (\$ millions)*

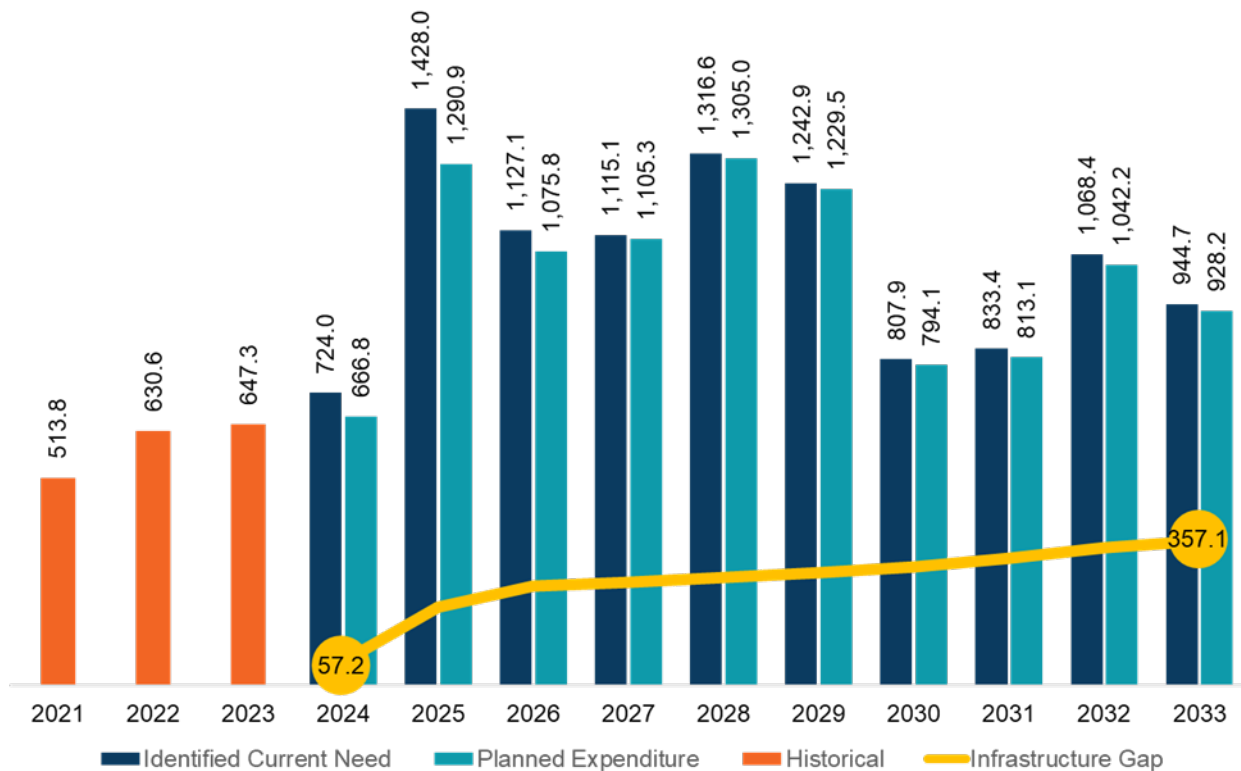


*Operating and Capital may not add to Total due to rounding.

Infrastructure Gap Analysis

7.5 As part of the lifecycle costing analysis for core assets, staff analysed the current planned funding against expected funding needs (both operating and capital) to meet service levels. Through this analysis, an infrastructure funding gap of \$57.2 million in 2024 was identified, increasing to \$357.1 million by 2033 based on planned investments (Figure 7).

Figure 7: Infrastructure Gap Analysis Core Assets (\$ millions)



- 7.6 Year-over-year variability in planned capital spending is primarily a result of major water supply and sanitary sewerage plant renewal and expansion projects over the forecast period. The Region continues to utilize flexible financing sources such as the Asset Management Reserves, Development Charge funding, Water Rate Stabilization Reserve Fund, Sewer Rate Stabilization Reserve Fund and the strategic use of debt financing to ensure predictable, stable and gradual changes to user rates. Further details on Regional financing strategies can be found in Table 6. Reserve funds will play a critical role in the forecast years.
- 7.7 The identified current need reflects accelerating project timelines for some non-urgent projects. Not accelerating these projects may result in increased repair and maintenance work or not meeting service level targets which is balanced with cost savings to property taxpayers and utility ratepayers and ensuring full value is extracted from assets by avoiding premature replacement. Further details on lifecycle costing and infrastructure gap analysis for core assets can be found in Attachments #2 through #4.
- 7.8 Forecasted infrastructure needs will be reviewed, updated, and refined during the 2025 business planning and budget and long-term financial planning processes. Funding needs, gaps and strategies to address these infrastructure needs will also be refined through ongoing long-term capital planning exercises and future business plans and budgets.

- 7.9 The Region faces significant financial challenges, similar to those faced by other Ontario municipalities, related to capital cost escalations over the forecast period. Statistics Canada's Building Construction Price Index for non-residential buildings in the Toronto Census Metropolitan Area, for the period March 31, 2022, to March 31, 2023, identified an inflationary increase of 12.3 per cent. The increase in the index is reflective of the current inflationary environment, skilled labour and materials shortages, and increased cost of materials. The Region will continue to strategically contribute to our capital replacement funds to ensure our forecasted infrastructure needs continue to support Regional programs and services.
- 7.10 Moving forward, Regional staff will be further refining lifecycle costing analysis and data collection.

8. Funding Options

- 8.1 The Region's financing approach for assets is guided by the Long-Term Financial Planning Framework and the Corporate Asset Management Policy's goal to deliver Regional services at approved levels in a financially prudent and sustainable manner. Asset management planning and the annual budget planning exercises inform investment needs.
- 8.2 The annual property tax levy, water supply and sanitary sewerage user rates, reserves, reserve funds, development charges, Canada Community-Building Funds, provincial gas tax revenue and the strategic and sustainable use of debt are important financing tools to maintain and expand Regional assets.
- 8.3 Table 6 provides a summary of the Region's key infrastructure financing options. Further details of planned capital investments in 2024 and during the nine-year forecast can be found in the asset class attachments.

Table 6: Key Regional Financing Sources

Funding Source	Purpose
Regional Roads Rehabilitation Reserve Fund	Provides funding to address the rehabilitation needs of the road network.
Regional Roads Reserve - Growth	Provides property tax funding for the property tax portion of growth-related projects.
Vision Zero Initiatives Reserve Fund	Supports projects to meet Regional Council Vision Zero targets.
Regional Bridge Rehabilitation Reserve Fund	Addresses bridge rehabilitation and replacement needs.

Funding Source	Purpose
Water Rate Stabilization Reserve Fund and Sewer Rate Stabilization Reserve Fund	In addition to providing funding to stabilize water and sewer user rates, funds are used for major water and sanitary sewer capital projects and asset management needs.
Water Supply and Sanitary Sewerage Asset Management Reserve Funds	Funds high priority capital initiatives related to repair, rehabilitation and replacement of existing water supply and sanitary sewer assets.
General Levy Asset Management Reserve Fund	Funds high priority capital initiatives related to repair, rehabilitation and replacement of existing assets (i.e., general purpose needs, such as facilities).
Equipment Replacement Reserve	Funding for regional works equipment and fleet replacements.
Various Service Area Reserve Funds	Funds rehabilitation, replacement and growth needs for DRT, RDPS and Social Housing.
Capital Impact Stabilization Reserve Fund and Capital Project Reserve	Enables contributions towards capital project financing to mitigate impacts on tax levy from major projects, provides capital funding for Regional priorities and ongoing business continuity.
Development Charges	Funding to pay for infrastructure growth needs. The Region charges development charges for all eligible asset classes to maximize recoveries related to growth infrastructure per the principle that 'growth pays for growth' as permitted under the Development Charges Act (DCA) legislation.
Canada Community-Building Fund (formally Federal Gas Tax) and Provincial Gas Tax	Provincial Gas Tax funds: expanding and improving public transit. Canada Community-Building Funds: source of funding for eligible Regional infrastructure projects.
User Rates	A portion of annual water and sanitary sewer user rate revenues are dedicated to the highest priority needs.
Property Taxes	A portion of annual property tax revenues are utilized to finance upgrades, rehabilitation and the replacement of infrastructure assets for Regional roads, transit and other tax-supported programs.

Funding Source	Purpose
Debt Financing	For large-scale capital projects which may require significant up-front financing over a shorter time horizon, debt financing options provide the ability to distribute the costs over a longer time horizon to current and future users who will benefit from the use of the infrastructure asset.

9. Risk Assessment

- 9.1 Staff continuously monitor and assess asset risk including likelihood and impact and the effectiveness of mitigation controls.
- 9.2 Table 7 includes a sample of identified risks for the Region’s assets in achieving its service level standards as well as the mitigation controls to address these risks.

Table 7: Asset-Related Risks and Mitigation Measures

Risk	Existing Controls	Remediation
Disruption to Water Supply	Maintenance, repair and rehabilitation (e.g., lining and cathodic pipe protection) Studies, inspections, monitoring controls and systems (e.g., leak detection, SCADA alerts) Source water and well head protection	Continue condition assessments and prioritize repair, maintenance, and rehabilitation needs and programs Continue erosion mitigation studies and strategies, monitoring, and use of systems Continue to include prioritized remediation work and system improvements for funding through financial and business planning
Loss of Utilities and Fuel	Essential services policies and business continuity/emergency plans Standby power, on call service contracts, system redundancies, and re-routing plans Fuel delivery system and water and sewer monitoring systems	Continue programs to ensure facility/depot standby power and fuel storage systems, water and sewer monitoring, service contracts and continuity plans Assess criticality of facilities/depots and continue prioritization and planning Continue implementation of Traffic UPS equipment

Risk	Existing Controls	Remediation
Major Facility System Failures	<p>Well maintained assets and equipment (i.e., proactive and preventive maintenance programs)</p> <p>Business continuity/emergency plans</p> <p>Standby power, on call service contracts, parts inventory, and system redundancies</p> <p>Capital and financing planning</p>	<p>Continued condition assessments and maintenance and rehabilitation program</p> <p>Continue programs to ensure standby power, fuel storage systems, IT services, service contracts and continuity plans</p> <p>Prioritize remediation work and continue rehabilitation funding</p>
Disruption to Sanitary Sewerage Collection	<p>Asset condition assessments for forcemains and gravity pipes</p> <p>Maintenance, repair and rehabilitation</p> <p>System alerts/controls and emergency response planning</p> <p>Increase contingency through pipe twinning</p>	<p>Continued condition assessments (including larger pipe inspections) and maintenance, repairs and rehabilitation programs and funding through budget process</p> <p>Reassess contingency planning and prioritize needs and available funding</p> <p>Continue with SCADA system upgrades to improve management control during storms</p>
Sanitary Sewerage Inflow and Infiltration (I/I)	<p>I/I program, flow monitoring equipment and performance assessments during storms</p> <p>Capital investments and system repairs</p> <p>Household drainage surveys and education</p>	<p>Continue to prioritize I/I program strategies</p> <p>Continue to include and prioritize funding through the financial and business planning and budget process</p>

10. Next Steps

- 10.1 Infrastructure needs identified in this report will inform the 2025 business planning and budget process, including the 2025 Budget Guideline Report, capital planning, and departmental 2025 to 2034 business plans and budgets.
- 10.2 Asset management staff will continue to work collaboratively to meet the remaining asset management regulatory requirements due by July 1, 2025. The specific next steps include:

- Continue aligning asset management practices with additional regulatory requirements including the development and presentation of a financing strategy;
- Refining data collection processes and analysis to improve asset management planning capabilities and lifecycle costing, to inform future business plans, budgets, capital forecasts, and long-term financial planning strategies;
- Refining the Region's non-core asset inventory;
- Continuing to work with the Office of the CAO to seek alignment between corporate climate initiatives and asset management processes; and
- Continuing to assess risk, business continuity, asset criticality, and asset reliability.

11. Conclusions

- 11.1 The Asset Management process is a critical element in the Region's business planning, budget and long-term financial planning processes. The Asset Management Plan details the current condition of the Region's assets and forecasts future investment needs for repair, maintenance, and replacements.
- 11.2 The Region's 2024 Asset Management Plan complies the additional reporting requirements for core and non-core assets required under Ontario Regulation 588/17.
- 11.3 The overall replacement value of the Region's assets is increasing due to growth demands for additional infrastructure and inflationary pressures which were higher in 2023 than in recent years. The asset class attachments (Attachments #2 through #9) provide additional details on the change in replacement values for each asset class.
- 11.4 The condition of the Region's assets remained relatively stable year-over-year as a result of preventative maintenance, rehabilitation and timely repairs and replacements with strategic investments planned that will address many assets currently in Very Poor condition.
- 11.5 As part of continual improvement, the asset management planning processes of data collection, asset assessment and asset and lifecycle analysis will continue to be refined and improved.
- 11.6 Regional staff will continue to work collaboratively to refine and enhance our lifecycle costing and the development of financing strategies for core and non-core assets. The Region is well positioned to meet the additional Ontario Regulation 588/17 requirements due in 2025.

Regional Asset Inventory, Replacement Value and Condition

Provides an overview of Regional assets and their critical considerations

Asset Service Area	2021			2022			2023		
	Inventory	Replacement Value (\$m)	Condition	Inventory	Replacement Value (\$m)	Condition	Inventory	Replacement Value (\$m)	Condition
Water Supply System									
Vertical Assets - Treatment, Pumping and Storage									
Supply Plants and Well Systems	14.0	719.5	Fair	14.0	837.6	Fair	14.0	906.5	Fair
Pumping Stations	11.0	35.6	Fair	11.0	41.4	Fair	11.0	45.4	Fair
Water Storage Facilities	14.0	79.5	Good	14.0	92.4	Good	14.0	100.0	Good
Combined Pumping Station/Storage Facilities (Other)	8.0	206.8	Fair	8.0	263.3	Fair	8.0	285.0	Fair
	5.0	4.0	Good	5.0	4.6	Good	5.0	5.0	Good
Vertical Assets Subtotal	52.0	1,045.4	Fair	52.0	1,239.3	Fair	52.0	1,342.0	Fair
Linear Assets - Water Distribution									
Mains (km)	2,631.2	2,909.9	Good	2,639.9	3,392.9	Good	2,693.4	3,756.1	Good
Control Valves	27,698.0	236.5	Good	27,858.0	276.3	Good	28,537.0	307.4	Good
Specialty Valves	696.0	17.2	Good	697.0	20.2	Good	712.0	22.5	Good
Service Connections	182,448.0	960.6	Good	184,132.0	1,126.6	Good	186,997.0	1,126.6	Good
Hydrants	16,785.0	201.0	Good	16,866.0	234.7	Good	17,254.0	259.9	Good
Fire Lines	1,948.0	22.2	Good	2,042.0	27.1	Good	2,070.0	29.8	Good
Meters	182,063.0	36.6	Good	183,357.0	37.1	Good	185,362.0	46.1	Good
Depots	1.7	20.2	Fair	1.7	23.4	Poor	1.7	25.4	Poor
Linear Assets Subtotal		4,404.2	Good		5,138.3	Good		5,573.8	Good
Fleet	142.0	12.6	Good	136.0	15.0	Fair	164.0	17.1	Fair
Equipment		27.3			28.5			30.2	

Regional Asset Inventory, Replacement Value and Condition

Provides an overview of Regional assets and their critical considerations

Asset Service Area	2021			2022			2023		
	Inventory	Replacement Value (\$m)	Condition	Inventory	Replacement Value (\$m)	Condition	Inventory	Replacement Value (\$m)	Condition
Other Supporting Assets									
Facilities	0.5	17.1	Very Good	0.5	19.8	Good	0.5	21.5	Good
Fleet	0.2	0.0	Good	0.3	0.0	Fair	0.3	0.0	Fair
Equipment		3.9			4.3			4.7	
Other Supporting Assets Subtotal	0.7	21.0	Very Good	0.8	24.1	Good	0.8	26.2	Good
Water Supply System Total		5,510.5	Good	6,445.2	Good	6,989.3	Good		
Sanitary Sewerage System									
Vertical Assets - Treatment, Pumping and Storage									
Water Pollution Control Plants	11.0	1,236.5	Fair	11.0	1,439.4	Good	11.0	1,557.9	Fair
Wastewater Pumping Stations	51.0	327.3	Fair	51.0	380.4	Fair	52.0	417.2	Fair
Wastewater Storage Facilities	2.0	7.5	Very Good	2.0	8.8	Very Good	2.0	9.5	Very Good
Facilities (Other)	1.0	2.6	Very Good	1.0	3.0	Very Good	1.0	3.3	Very Good
Vertical Assets Subtotal	65.0	1,574.0	Fair	65.0	1,831.7	Good	66.0	1,987.9	Fair
Linear Assets - Sewage Collection									
Gravity Sewers/Siphons (km)	2,204.5	2,808.8	Good	2,215.3	3,282.3	Good	2,261.6	3,639.6	Good
Forcemains (km)	65.1	139.9	Good	65.1	162.5	Very Good	65.5	176.3	Good
Maintenance Holes	32,096.0	533.2	Good	32,313.0	625.3	Good	32,981.0	690.4	Good
Service Connections	178,581.0	1,013.1	Very Good	180,687.0	1,191.7	Very Good	183,152.0	1,307.4	Very Good
Depots	1.7	20.2	Fair	1.7	23.4	Poor	1.7	25.4	Poor
Linear Assets Subtotal		4,515.2	Good		5,285.1	Good		5,839.2	Good
Fleet	88.0	12.7	Good	78.0	10.8	Good	89.0	13.6	Fair
Equipment		17.4			20.5			21.7	

Regional Asset Inventory, Replacement Value and Condition

Provides an overview of Regional assets and their critical considerations

Asset Service Area	2021			2022			2023		
	Inventory	Replacement Value (\$m)	Condition	Inventory	Replacement Value (\$m)	Condition	Inventory	Replacement Value (\$m)	Condition
Other Supporting Assets									
Facilities	0.5	17.8	Very Good	0.4	20.7	Good	0.4	22.4	Good
Fleet	0.2	0.0	Good	0.3	0.0	Fair	0.3	0.0	Fair
Equipment		5.1			5.6			6.1	
Other Supporting Assets Subtotal	0.7	22.9	Very Good	0.7	26.3	Good	0.7	28.5	Good
Sanitary Sewerage System Total		6,142.2	Good		7,174.4	Good		7,890.9	Good
Transportation System									
Roads, Bridges and Culverts									
Urban (lane km)	1,068.3	1,341.5	Fair	1,090.0	1,598.9	Fair	1,103.5	1,752.2	Fair
Rural (lane km)	1,392.7	1,541.3	Fair	1,377.4	1,815.2	Fair	1,346.4	2,031.7	Fair
Bridges and Culverts (> 3m)	240.0	788.6	Good	246.0	932.6	Good	247.0	999.1	Good
Roads, Bridges and Culverts Subtotal	2,701.0	3,671.4	Fair	2,713.4	4,346.7	Fair	2,696.9	4,783.0	Fair
Storm Sewer System									
Storm Sewer Mains (km)	321.8	573.1	Fair	329.7	680.1	Fair	335.6	745.7	Fair
Culverts (< 3m)	29.8	44.0	Fair	30.1	51.5	Fair	31.4	57.4	Fair
Maintenance Holes	5,053.0	35.0	Fair	5,182.0	45.1	Fair	5,309.0	46.2	Fair
Catchbasins	5,878.0	40.7	Fair	6,058.0	48.7	Fair	6,208.0	54.0	Fair
Outfalls	475.0	1.2	Fair	480.0	1.4	Fair	491.0	1.4	Fair
Storm Sewer System Subtotal		693.9	Fair		826.9	Fair		904.8	Fair

Regional Asset Inventory, Replacement Value and Condition

Provides an overview of Regional assets and their critical considerations

Asset Service Area	2021			2022			2023		
	Inventory	Replacement Value (\$m)	Condition	Inventory	Replacement Value (\$m)	Condition	Inventory	Replacement Value (\$m)	Condition
Traffic Control System									
Control Signals/ Flashing Beacons	493.0	88.3	Good	496.0	78.9	Fair	509.0	110.8	Good
Traffic Management Systems	16.0	5.7	Fair	16.0	7.6	Fair	16.0	5.2	Fair
Communications Infrastructure (km)	337.9	12.6	Good	337.9	14.6	Good	337.9	15.8	Good
Regulatory, Warning and Information Signs	20,961.0	4.7	Very Good	17,586.0	4.4	Very Good	25,952.0	4.9	Very Good
Roadside Protection (km)	110.9	23.1	Very Good	104.2	20.9	Very Good	104.2	20.9	Very Good
Closed-Circuit Television	108.0	0.4	Fair	120.0	0.3	Fair	127.0	0.5	Poor
Traffic Control System Subtotal		134.7	Good		126.8	Good		158.1	Good
Facilities	3.4	32.6	Poor	3.4	37.8	Poor	3.4	41.0	Poor
Fleet	148.0	31.9	Good	141.0	37.4	Good	225.0	48.9	Fair
Equipment		7.6			8.9			8.9	
Other Supporting Assets									
Facilities	0.3	11.8	Very Good	0.3	13.7	Good	0.3	14.8	Good
Fleet	0.3	0.0	Good	0.5	0.0	Fair	0.5	0.0	Fair
Equipment		7.1			7.9			8.6	
Other Supporting Assets Subtotal	0.6	18.9	Very Good	0.8	21.6	Good	0.8	23.4	Good
Transportation System Total	152.0	4,591.0	Fair	145.2	5,406.2	Fair	229.2	5,968.2	Fair

Regional Asset Inventory, Replacement Value and Condition

Provides an overview of Regional assets and their critical considerations

Asset Service Area	2021			2022			2023		
	Inventory	Replacement Value (\$m)	Condition	Inventory	Replacement Value (\$m)	Condition	Inventory	Replacement Value (\$m)	Condition
Durham Regional Transit									
Facilities	3.0	91.9	Very Good	3.0	106.9	Good	2.0	96.3	Very Good
Fleet	241.0	136.9	Fair	230.0	135.9	Good	182.0	121.5	Good
Bus Pads and Shelters	2,579.0	11.3	Very Good	2,538.0	14.4	Very Good	2,638.0	14.9	Very Good
Equipment		15.3			16.5			16.8	
Other Supporting Assets									
Facilities	0.2	6.6	Very Good	0.2	7.7	Good	0.2	8.4	Good
Fleet	0.4	0.0	Good	0.6	0.0	Fair	0.6	0.0	Fair
Equipment		9.3			10.3			11.2	
Other Supporting Assets Subtotal	0.6	15.9	Very Good	0.8	18.0	Good	0.8	19.6	Good
Durham Regional Transit Total	2,823.6	271.3	Good	2,771.8	291.7	Good	2,822.8	269.1	Very Good
Social Services									
Housing Services									
Facilities	23.0	293.7	Very Poor	24.0	354.5	Poor	27.0	403.5	Poor
Fleet	10.0	0.7	Good	9.0	1.0	Fair	8.0	0.8	Good
Equipment		0.2			0.2			0.5	
Housing Services Subtotal	33.0	294.6	Very Poor	33.0	355.7	Poor	35.0	404.8	Poor

Regional Asset Inventory, Replacement Value and Condition

Provides an overview of Regional assets and their critical considerations

Asset Service Area	2021			2022			2023		
	Inventory	Replacement Value (\$m)	Condition	Inventory	Replacement Value (\$m)	Condition	Inventory	Replacement Value (\$m)	Condition
Childrens Services									
Facilities	4.0	10.3	Poor	4.0	12.0	Poor	zz	13.0	Fair
Equipment		0.7			0.7			0.7	
Childrens Services Subtotal	4.0	11.0	Poor	4.0	12.7	Poor	0.0	13.7	Fair
Long Term Care Facilities									
Facilities	4.0	295.8	Good	4.0	343.9	Good	4.0	372.2	Good
Fleet	3.0	0.2	Fair	3.0	0.2	Good	2.0	0.2	Good
Equipment		18.8			20.5			21.9	
Long Term Care Facilities Subtotal	7.0	314.8	Good	7.0	364.6	Good	6.0	394.3	Good
Other Supporting Assets									
Facilities	1.2	44.3	Very Good	1.2	51.5	Good	1.2	55.8	Good
Fleet	1.1	0.1	Good	1.5	0.1	Fair	2.5	0.2	Fair
Equipment		25.7			28.4			30.9	
Other Supporting Assets Subtotal	2.3	70.1	Very Good	2.7	80.0	Good	3.7	86.9	Good
Social Services Total	46.3	690.5	Poor	46.7	813.0	Fair	44.7	899.6	Fair
Solid Waste									
Facilities	7.0	296.8	Very Good	7.0	345.0	Very Good	7.0	373.3	Very Good
Fleet	8.0	0.7	Good	8.0	0.7	Good	6.0	1.7	Good
Equipment		14.5			14.5			14.5	

Regional Asset Inventory, Replacement Value and Condition

Provides an overview of Regional assets and their critical considerations

Asset Service Area	2021			2022			2023		
	Inventory	Replacement Value (\$m)	Condition	Inventory	Replacement Value (\$m)	Condition	Inventory	Replacement Value (\$m)	Condition
Other Supporting Assets									
Facilities	0.1	3.2	Very Good	0.1	3.7	Good	0.1	4.0	Good
Fleet	0.1	0.0	Good	0.1	0.0	Fair	0.1	0.0	Fair
Equipment		1.2			1.3			1.5	
Other Supporting Assets Subtotal	0.2	4.4	Very Good	0.2	5.0	Good	0.2	5.5	Good
Solid Waste Total	15.2	316.4	Very Good	15.2	365.2	Very Good	13.2	395.0	Very Good

Health

Public Health									
Facilities	0.3	4.8	Very Poor	0.3	5.6	Very Poor	0.3	6.1	Very Poor
Equipment		2.3			3.3			3.3	
Public Health Subtotal	0.3	7.1	Very Poor	0.3	8.9	Very Poor	0.3	9.4	Very Poor
Paramedic Services									
Facilities	8.0	36.1	Good	9.0	43.7	Very Good	9.0	47.3	Very Good
Fleet	84.0	10.9	Good	82.0	16.8	Good	82.0	16.4	Good
Equipment		5.6			6.1			6.4	
Paramedic Services Subtotal	92.0	52.6	Good	91.0	66.6	Very Good	91.0	70.1	Very Good

Regional Asset Inventory, Replacement Value and Condition

Provides an overview of Regional assets and their critical considerations

Asset Service Area	2021			2022			2023		
	Inventory	Replacement Value (\$m)	Condition	Inventory	Replacement Value (\$m)	Condition	Inventory	Replacement Value (\$m)	Condition
Other Supporting Assets									
Facilities	0.8	32.2	Very Good	0.8	37.4	Good	0.8	40.5	Good
Fleet	0.6	0.0	Good	0.8	0.1	Fair	0.8	0.1	Fair
Equipment		12.8			14.2			15.3	
Other Supporting Assets Subtotal	1.4	45.0	Very Good	1.6	51.7	Good	1.6	55.9	Good
Health Total	93.7	104.7	Good	92.9	127.2	Good	92.9	135.4	Good
Durham Region Police Service									
Facilities	8.0	131.8	Good	8.0	153.2	Good	8.0	165.8	Fair
Fleet	363.0	25.8	Very Good	367.0	29.5	Very Good	378.0	31.0	Very Good
Equipment		49.2			52.5			53.6	
Other Supporting Assets									
Facilities	0.5	19.8	Very Good	0.5	23.0	Good	0.5	24.9	Good
Other Supporting Assets Subtotal	0.5	19.8	Very Good	0.5	23.0	Good	0.5	24.9	Good
Durham Region Police Service Total	371.5	226.6	Good	375.5	258.2	Good	386.5	275.3	Fair
TOTAL		17,853.3	Good		20,881.1	Good		22,822.9	Good

1. 2021 Replacement values have been restated to reflect reporting by service area.
 2. The condition and quantity is not included for equipment assets as these are pooled assets.



Water Supply

Asset Class Report

Replacement
Value

\$6,989.3M

Average
Condition

GOOD

Service Level Objectives

To provide a safe and sufficient water supply while complying with all Provincial and Federal Acts and Regulations.

To protect the environment and the quality and quantity of ground and surface water.

To support the coordination of growth and achieve and maintain an optimal condition standard for all existing and new water supply system assets.

-
- | | |
|---|-------------------------------|
| • 14 Water Supply Plants and Well Systems | • 2,693 km watermains |
| • 11 Water Pumping Stations | • 28,537 control valves |
| • 8 Combined Water Pumping Stations/ Storage Facilities | • 186,997 service connections |
| • 14 Water Storage Facilities | • 712 Specialty Valves |
| • 5 Other Water Facilities | • 17,254 Hydrants |
| | • 2,070 Fire Lines |
| | • 185,362 Meters |

1.1. Water Supply Inventory Overview

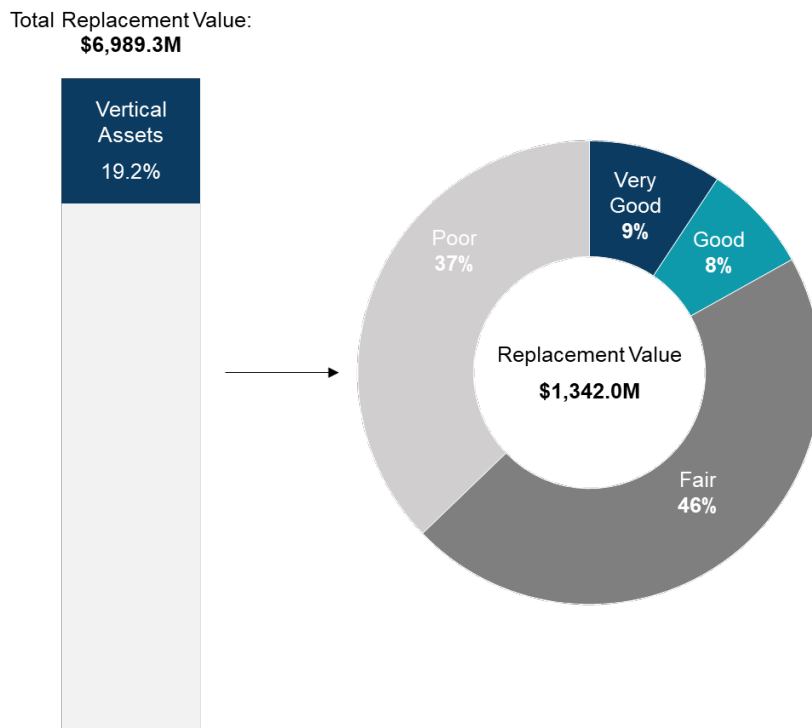
Durham’s water supply system assets consist of vertical and linear assets, fleet assets, equipment assets, and other supporting assets. Vertical assets treat, store and pump drinking water and linear assets distribute the water to residents and businesses through pipes. Supporting assets include a portion of the Region’s administrative facilities, fleet and equipment that support the Region’s water supply system.

1.2. Water Supply Condition Ratings, Replacement Values and Average Ages

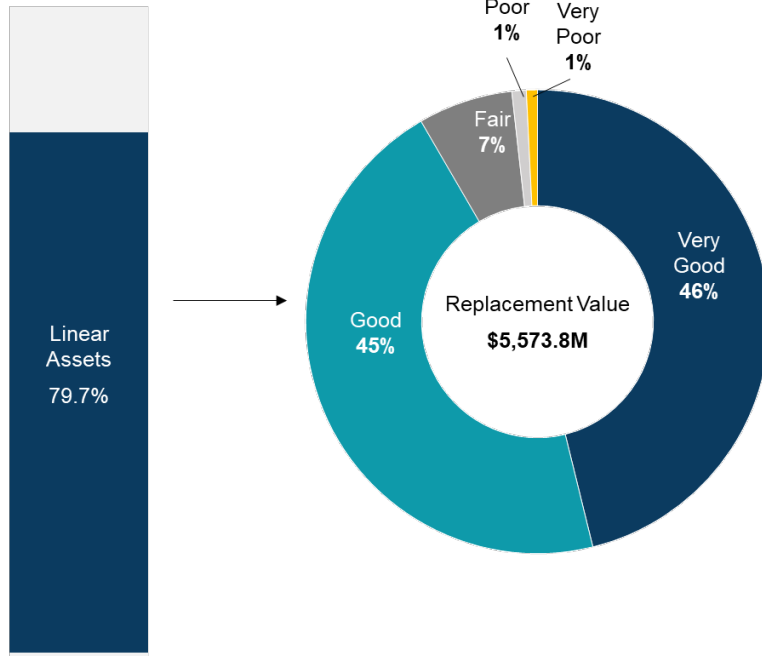
The overall water supply condition rating in 2023 was Good representing no year-over-year condition change. Condition ratings for linear assets (Good), vertical assets (Fair), fleet (Fair) and other supporting assets (Good) also remained stable year-over-year. Overall replacement values totalled \$6,989.3 million, an 8.4 per cent increase over 2022 primarily a result of inflationary replacement cost increases and increases to linear assets to accommodate growth.

Figure 1 illustrates the condition rating and replacement value of water supply assets.

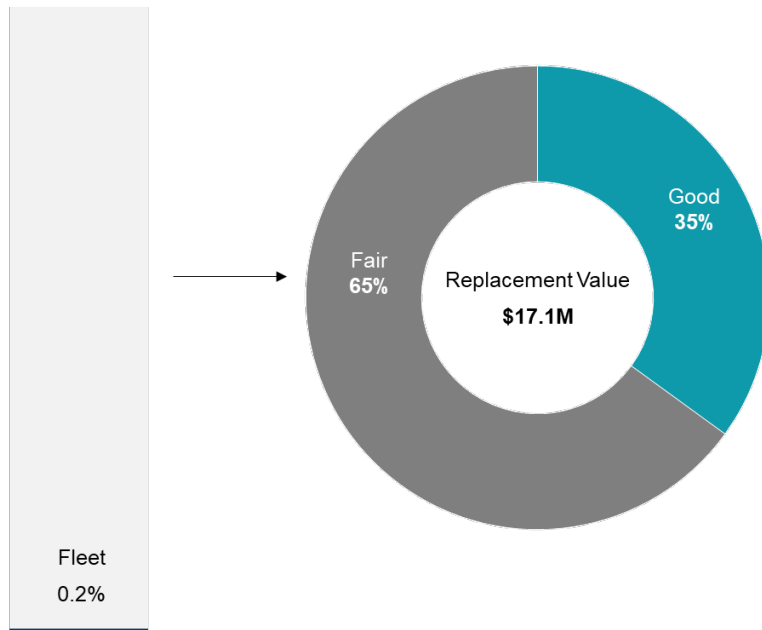
Figure 1: Water Supply Assets Condition and Replacement Values*



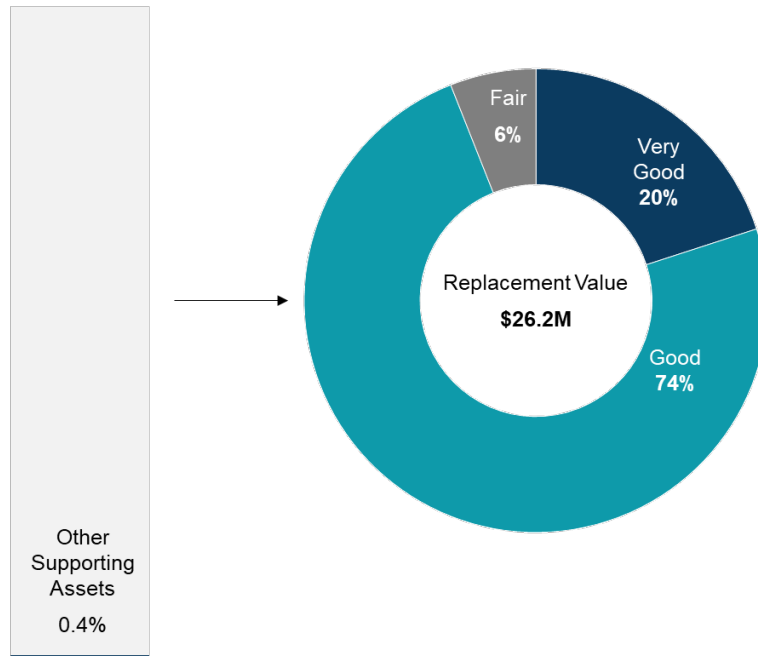
Total Replacement Value:
\$6,989.3M



Total Replacement Value:
\$6,989.3M



Total Replacement Value:
\$6,989.3M



* Percentages may not add to 100 per cent due to rounding. The condition breakdown does not include the condition for equipment assets as these are pooled assets.

1.3. Water Supply Condition Assessment Methods

Table 1 outlines the assessment methods used to determine condition ratings.

Table 1: Water Supply Condition Assessment Methods

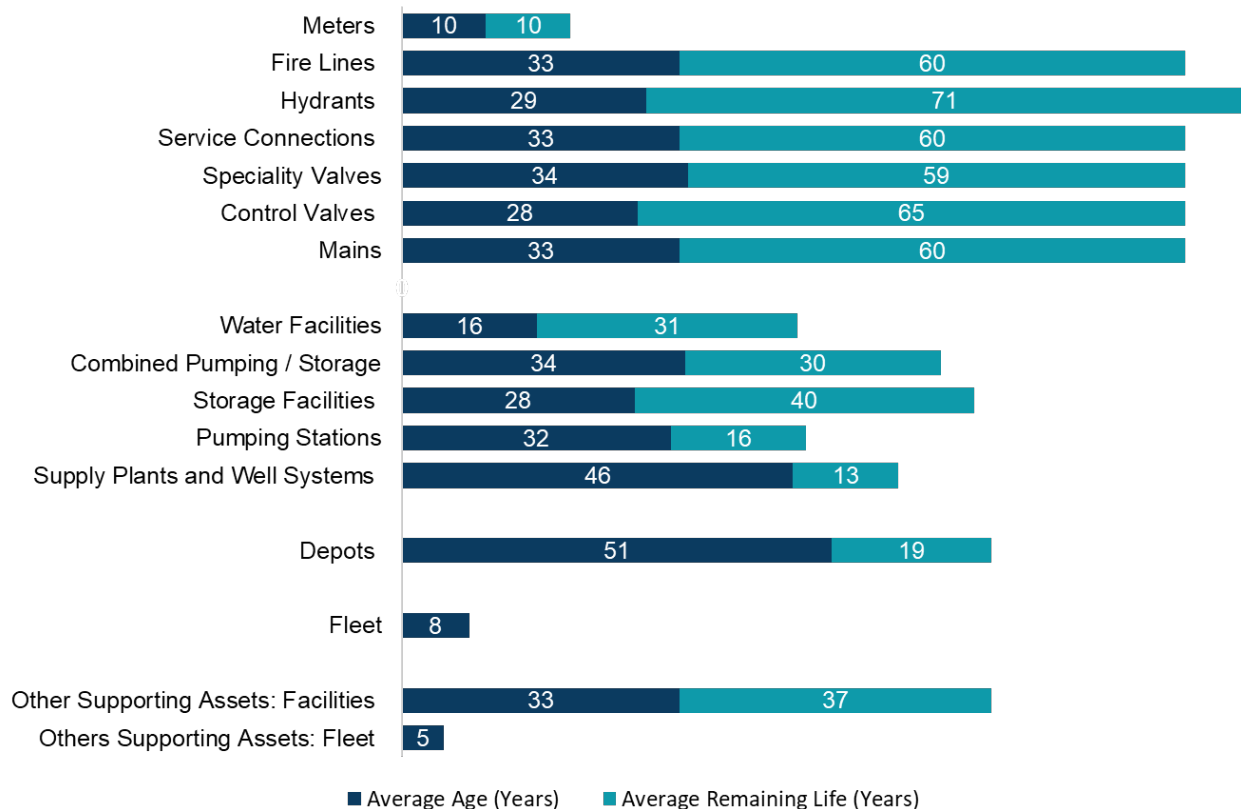
Asset Class	Assessment Methods
Plants, pumping stations, wells and reservoirs	Site-specific detailed condition assessments for the process equipment and building structure are planned at all facilities in the coming years. They are coordinated with upcoming capital projects where possible. In the interim, a high-level scoring was done for all sites by Operations and Facilities staff for long range planning. Staff also recommend repair work for incorporation into the annual operating and capital budgets.
Water towers/standpipes	Annual site-specific inspections per legislated requirements.
Watermains	Consideration of the number of watermain breaks, break rate, pipe material, age, maintenance concerns and issues, lining type, and cathodic protection.
Fire lines, hydrants and water meters	Condition rating is based on age.

Asset Class	Assessment Methods
Control valves, service connections and specialty valves	Condition rating is based on the connected watermain condition scores.
Fleet	Mileage and vehicle inspection.
Facilities	Regional staff employ a Building Condition Assessment (BCA) method for assess the condition of Regionally-owned facilities. For each facility, a BCA is performed on a 10-year cycle by external consultants. BCAs assess the condition of major building elements, sub-structures, shells, interiors, services and site work.

1.4. Water Supply Average Age and Remaining Useful Life

Figure 2 summarizes the average age and remaining asset life of water system assets. Overall, the water system is relatively young as evidenced by generally significant remaining useful life.

Figure 2: Water System Average Age and Remaining Useful Life



1.5. Water Supply Levels of Service and Performance Measurement

Service level objectives and performance targets are set through Regional Council approved master plans, studies, policies and procedures, as well as through departmental studies and regulatory and/or compliance guidelines.

Table 2: Plans, Studies, Policies, Procedures, Regulations that Inform Service Levels

Regional Plans, Studies, Policies, & Procedures
<ul style="list-style-type: none"> • Regional Water Supply System Design Standards & Specifications • Regional Water Supply System By-law 89-2003 • Regional Backflow Prevention By-law 24-2018 • Region's Service Connection Cleaning By-law 90-2003 • Service Levels for Water Operation • The Great Lakes St Lawrence Cities Initiative and the Sustainable Municipal Water Management Framework • Credit Valley, Toronto and Region and Central Lake Ontario Source Protection Plan • South Georgian Bay Lake Simcoe Source Protection Plan • Trent Conservation Coalition Source Protection Plan • Lake Simcoe Protection Plan
Regulatory Compliance Requirements and Guidelines
<ul style="list-style-type: none"> • Ontario Safe Drinking Water Act 2002 and associated Regulations: <ul style="list-style-type: none"> • Ontario Regulation 169/03 Ontario Drinking Water Quality Standards • Ontario Regulation 170/03 Drinking Water Systems • Ontario Regulation 128/04 Certification of Drinking Water System Operators and Water Quality Analysts • Ontario Regulation 188/07 Licensing of Municipal Drinking Water Systems • Ontario Regulation 453/07 Financial Plans • Ontario Regulation 248/03 Drinking Water Testing Services • Clean Water Act 2006

Regulatory Compliance Requirements and Guidelines

- Ontario Water Resources Act, R.S.O. 1990 and associated Regulations:
 - R.R.O. 1990, Reg. 903: Wells
 - Ontario Regulation 387/04 Water Taking and Transfer
- Great Lakes Protection Act, 2015
- Lake Simcoe Protection Act, 2008
- Environmental Protection Act, R.S.O. 1990
- Water Opportunities and Conservation Act, 2010
- Oak Ridges Moraine Conservation Act, 2001
- Greenbelt Act, 2005
- Planning Act, R.S.O. 1990
- Building Code Act, 1992 and Ontario Regulation 332/12 Building Code
- Ontario Regulation 319/08 Small Drinking Water Systems
- Canadian Drinking Water Guidelines
- Environmental Management Standard ISO 14001
- Quality Management Standard ISO 9001:2000
- Technical Support Document for Ontario Drinking Water Standards, Objectives, and Guidelines.

Detailed service level descriptions and targets are outlined in the Community Levels of Service, Technical Levels of Service and Performance Measures subsections that follow.

Community Levels of Service

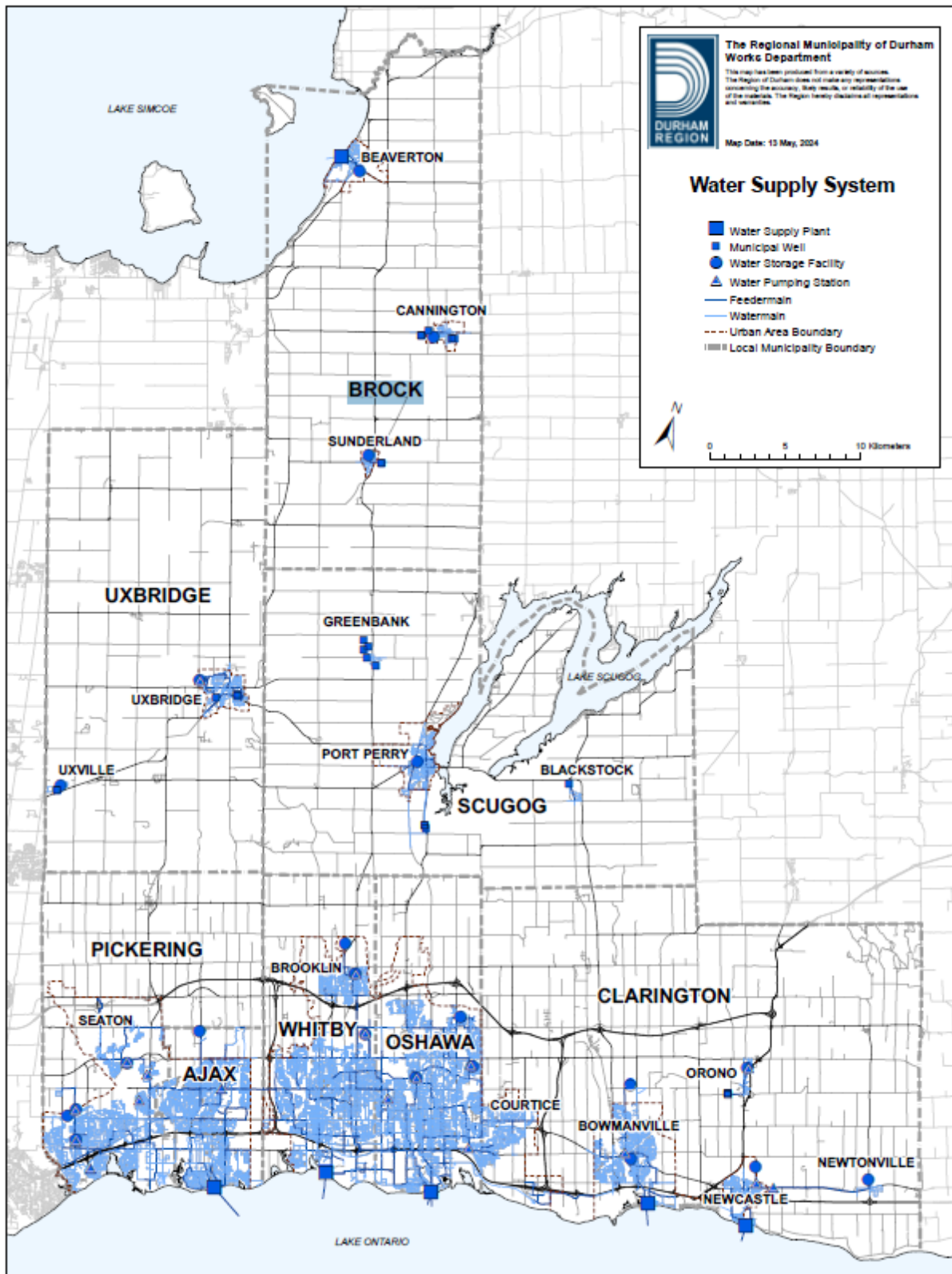
Community levels of service provide qualitative descriptions of service reliability, service standards and service scope as required by Ontario Regulation 588/17.

Table 3: Community Levels of Service

Criteria	Description
Description, which may include maps, of the user groups or areas of the municipality that are connected to the municipal water system.	Approximately 95 per cent of Durham's municipal tap water comes from Lake Ontario, with the remaining from underground sources (wells) and Lake Simcoe for the Beaverton area. Map 1 identifies the areas that are connected to the Region of Durham's water supply system.

Criteria	Description
Description, which may include maps, of the user groups or areas of the municipality that have fire flow.	Proximity to a hydrant is a benefit of being connected to the water supply system for fire protection. There are 17,254 fire hydrants in Durham Region. There is 100 per cent fire flow in the Region of Durham with 92 per cent of residents having direct supply from hydrants.
Description of boil water advisories and service interruptions.	Boil water advisories can be issued due to adverse water quality testing results or suspected contaminants. They protect water users from potential health risks. Due to the Region's rigorous and thorough water treatment and testing process, there were zero boil advisory days in 2023.

Map 1: Durham Region's Water Supply and Fire Flow System



Technical Levels of Service

Ontario Regulation 588/17 includes a list of required technical metrics for water supply systems as shown in Table 4.

Table 4: Technical Service Levels per Ontario Regulation 588/17

Technical Metric	Target	Year of Measure		
		2021	2022	2023
Percentage of Properties Connected to the Region's Water Supply System	100 per cent of Properties with Proximity to a Watermain to be Connected	99%	99%	99%
Measures the percentage of properties connected to the Region's treated water supply system. Only properties within an Urban Boundary can be potentially connected to a water system. Durham has a number of properties in rural areas.				
Percentage of Properties Where Fire Flow is Available	100 per cent of Properties with Proximity to a Watermain has Fire Flow	100%	100%	100%
This measure tracks the percentage of properties that have fire flow in the Region. Any property in proximity to a watermain has fire flow through hydrants.				
Service Interruptions due to Watermain breaks	0.00 per cent	0.00%	0.00%	0.00%
The number of connection-days per year where service is disrupted due to watermain breaks compared to the total number of properties connected to the municipal water system.				
Boil Water Advisory Days	Zero days annually	0	0	0
The number of connection-days per year where a boil water advisory notice is in place compared to the total number of properties connected to the municipal water system.				

Performance Measures

Beyond community service levels and technical reporting requirements of Ontario Regulation 588/17, a number of performance metrics are being tracked to measure how well assets are meeting service level objectives.

Table 5: Performance Measures

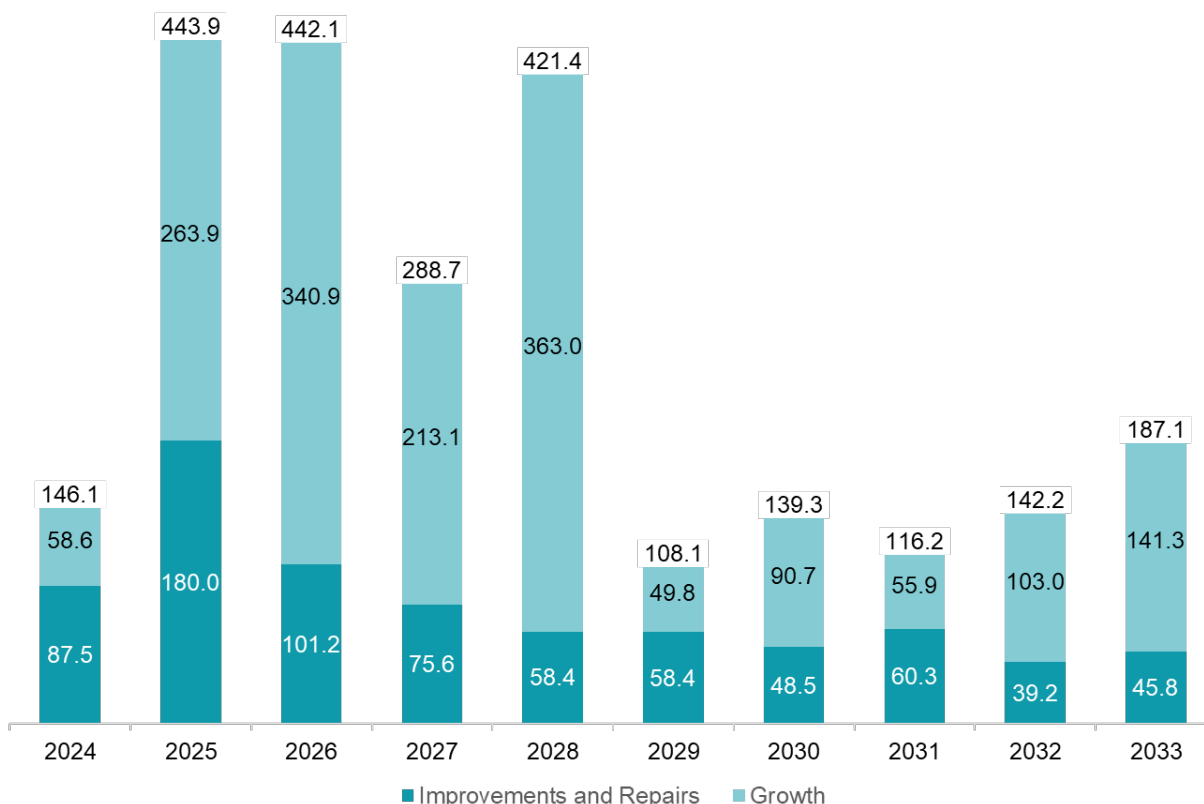
Performance Measure	Target	Year of Measure		
		2021	2022	2023
Condition Index Rating	0.2 per cent of linear assets rated as very poor	0.58%	0.62%	0.61%
<p>Measure identifies the per cent of linear assets (watermains, hydrants, valves, service connections, fire lines and water meters) rated as "Very Poor" calculated on total replacement value of these assets.</p>				
Non-Revenue Water	Reduce non-revenue water by 0.5 per cent annually	13.69%	14.00%	14.20%
<p>Measures non-revenue water as a percentage of total water treated. Non-revenue water is a total of unbilled authorized consumption, apparent losses and real losses. Examples of each type are as follows:</p> <ul style="list-style-type: none"> • Unbilled Authorized = flushing hydrants at dead ends, in new developments or following replacement or repair of hydrant. • Apparent Losses = unauthorized consumption like water theft at hydrants and customer metering inaccuracies. • Real Losses = leakage on mains and service connections, overflows at water storage facilities and at point of customer metering. 				
Valves Inspected	100 per cent of line valves ≥300mm every 2 years	84%	96%	78%
	100 per cent of line valves <300mm every 6 years	89%	94%	90%
<p>Percent of valves inspected per current Durham Service Levels. The purpose is to ensure all valves are operational when required for use and to minimize water losses.</p>				
Hydrants Inspected	100 per cent of hydrants inspected annually	99%	99%	98%
<p>Measures the percentage of hydrants inspected annually per Durham Service Level. The goal is to ensure sufficient, reliable service for fire protection.</p>				
Condition Index Rating	0 per cent of vertical assets rated as very poor	0.00%	0.00%	0.00%
<p>Measure identifies the percentage of plants (including wells, pumping stations and water storage facilities) rated very poor. The condition percentage is based on replacement value rather than number of sites.</p>				

Performance Measure	Target	Year of Measure		
		2021	2022	2023
Compliance to Drinking Water Standards and MECP Regulatory Requirements	100 per cent compliance of drinking water test results annually	99.88%	99.84%	99.95%
<p>Measures compliance to MECP drinking water standards using number of drinking water test results within standards (Ontario Regulation 169/03 microbiological tests only) / total number of drinking water tests performed at the plants and on the distribution system. Purpose is to ensure a safe water source for all residents of Durham. Microbiological tests on commissioned and operating systems including any tests carried out in addition to Regulatory requirements.</p>				
Back-up power capabilities	100 per cent of plants, wells, and pumping stations with back up generators	86%	87%	87%
	100 per cent of generators newer than 30 years in age	76%	70%	62%
<p>Ensure that all plants, wells and pumping stations' back-up power generators are no older than 30 years. Portable generators used at maintenance hole-type pumping stations and those too small to house a generator are not included in the calculation. The age measure is calculated using only the number of existing generators currently in place.</p>				
Mainline Valves in Operable Condition	100 per cent of valves in operable condition	99%	99%	99%
<p>This measures the percent of valves that are found to be operable during annual inspections. The Region strives to keep all valves operable, and schedules required valve repairs as soon as possible.</p>				

1.6. Water System Capital Forecast

Major capital investments for the water supply system identified through the 2024 business plans and budget process (rehabilitation and growth) total \$146.1 million for 2024 and \$2,289.0 million over the 2025 to 2033 forecast period.

Figure 3: Water System Capital Forecast (\$ millions)*



*Improvements and Repairs and Growth may not add to Total due to rounding.

The 2024 Water Supply Capital Budget includes \$20.4 million in linear betterments and replacements (watermains, valves, connections) to address those assets in various conditions with differing risk profiles and is based on the ability to achieve access as part of Regional Road, Area Municipal Road, Ministry of Transportation Ontario (MTO) projects.

There is an additional \$3.4 million included for other linear replacements such as water meters and hydrants.

For water supply buildings and plant equipment (vertical assets), there is approximately \$19.3 million approved in the 2024 Water Supply Capital Budget to address asset management needs.

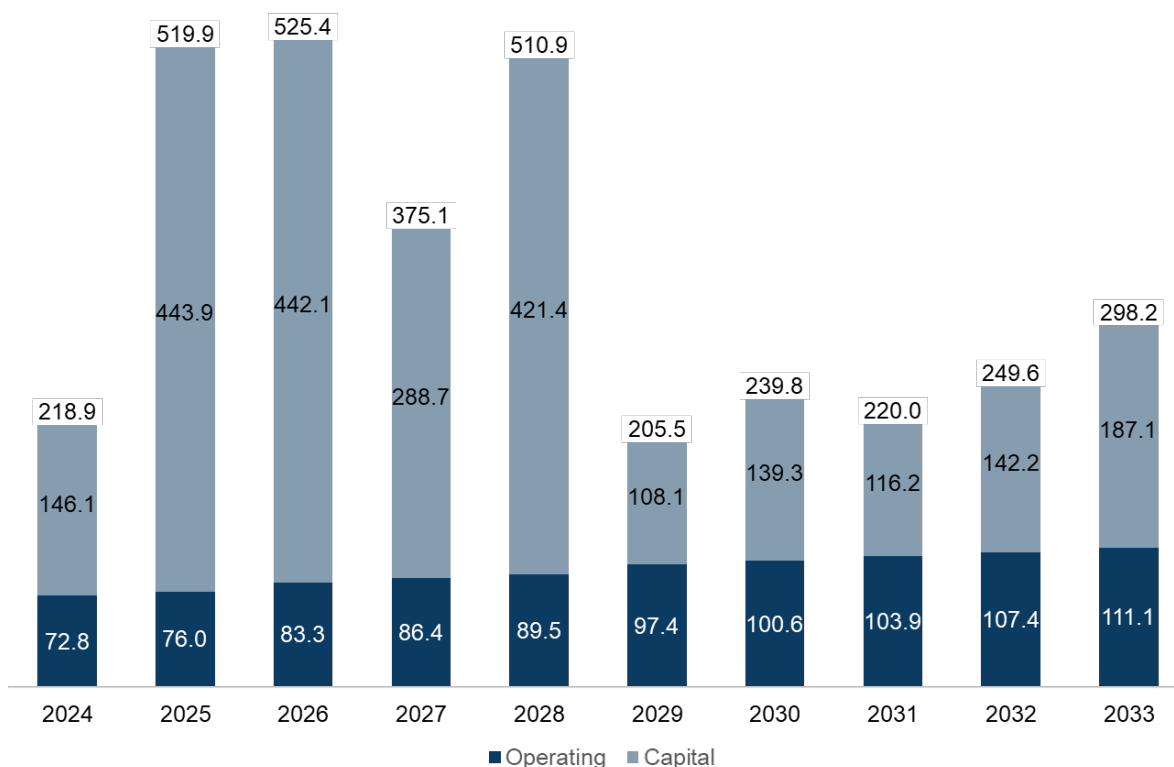
Capital investments in water supply assets to meet growth needs totals approximately \$58.6 million in 2024 and \$1,621.6 million over the 2025 to 2033 forecast period.

1.7. Lifecycle

Water Supply System maintenance and rehabilitation lifecycle activities aim to extend the useful life of linear and vertical assets and improve service delivery. For some linear assets such as cast iron and ductile iron watermains, there are activities that can be done to slow deterioration and extend the useful life.

Figure 4 illustrates the projected capital and maintenance lifecycle costs for the water supply asset class.

Figure 4: Lifecycle Costs Water Supply Operating and Capital (\$ millions)*



*Operating and Capital may not add to Total due to rounding.

Lifecycle Activities

In the past, cement lining was used to improve water flow and quality as well as reduce internal pipe corrosion. The structural lining technology that is used by the Region now provides the same benefits but also renews the pipe to an almost new condition. Cathodic protection is used extensively throughout the Region to slow external corrosion on iron watermains. These rehabilitation methods have the benefit of improving the condition of the watermains while limiting the amount of disruption to residents and the cost to rate payers.

Full pipe replacement is preferred when the watermain condition is in very poor condition or when there is an opportunity to coordinate with other infrastructure work such as road reconstruction or sanitary sewer replacement.

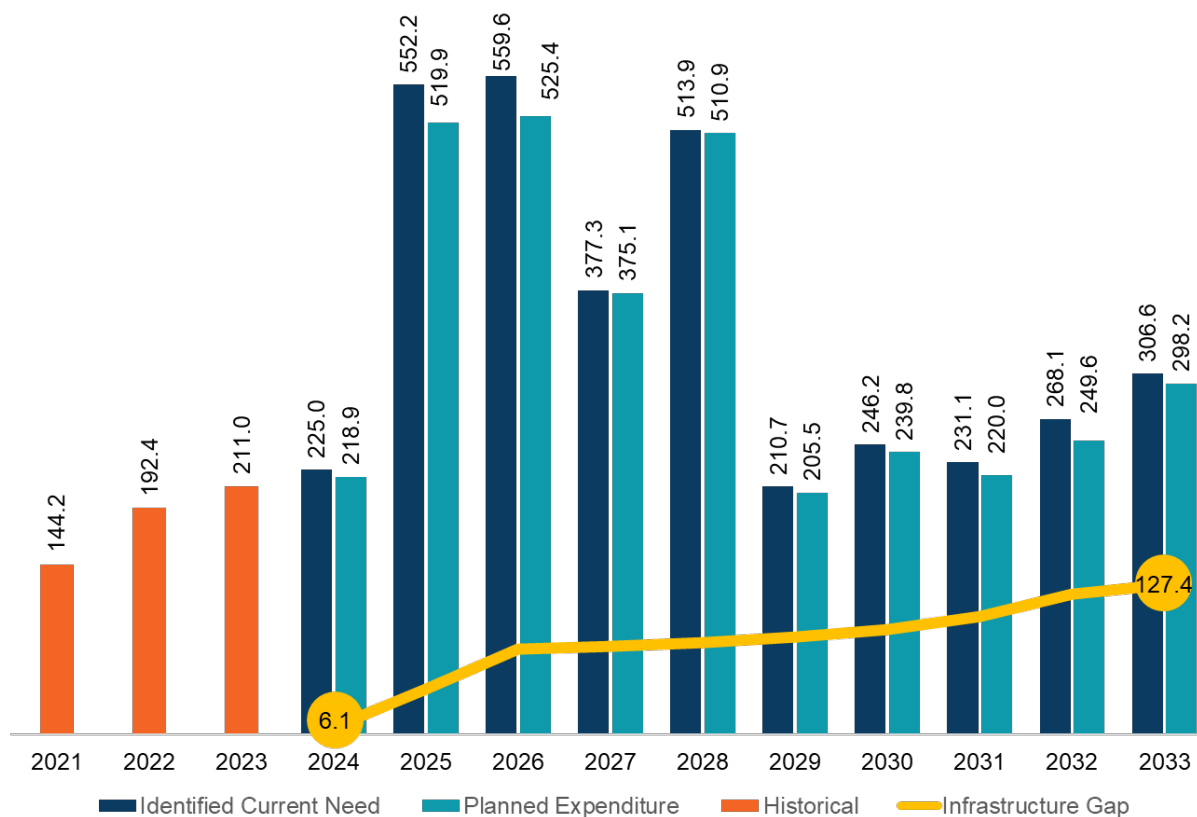
For vertical water system assets, lifecycle activities are informed by detailed site-specific condition assessments as well as by Operations and Facilities staff knowledge of issues as they attend the various sites regularly. The detailed inspections inform rehabilitation and renewal activities and forecast investment needs over the long-term.

In addition to repair and maintenance activities, other ongoing operating expenditures are required to ensure water assets can meet service levels. Some examples include gas and fuel, utilities, chemicals, fleet rentals and overhead costs (e.g., office staff, training, software, etc.).

Total operating lifecycle expenditures for water total \$928.3 million over the 2024 Budget and nine-year forecast period (2025 to 2033) while capital expenditures total \$2,435.1 million over this period. Figure 5 below provides planned capital and operating expenditures for the water system for 2024 and the nine-year forecast period. Additionally, staff have undertaken an analysis to forecast the funding required to optimally sustain current service levels.

Any rehabilitation or replacement work required to meet health and safety or legislative standards are reflected in the planned total expenditures while the identified current need builds on the approved budget to accelerate some lower priority works as illustrated in Figure 5.

Figure 5: Water System: Lifecycle Gap Analysis (\$ millions)



In 2024, the infrastructure gap is estimated at \$6.1 million. Based on currently planned expenditures this infrastructure gap grows to \$127.4 million in 2033.

The identified current need reflects accelerating replacements for some non-urgent linear projects. Not accelerating these projects may result in increased repair and maintenance work which is balanced with cost savings to rate payers and ensuring full value is extracted from assets by avoiding premature replacement. It is important to note that the planned total expenditure poses no health and safety risk or material impacts to service as compared to the identified current need scenario.

Staff will continue to monitor funding needs and refine identification and assessment processes.

Moving forward, staff will be further refining lifecycle costing analysis and data collection for both linear and vertical water supply assets that will be reported in future asset management plans.

1.8. Climate Change

Climate Mitigation: Water Supply System Strategies to Reduce GHG Emissions

The Durham Region Corporate Climate Action Plan has set targets to achieve net-zero GHG emissions by 2045. The corporate GHG inventory includes emissions produced to treat, store and pump water as well as non-energy GHG emissions associated with water management operations.

Key climate change mitigation accomplishments in water supply systems for 2023 include:

- Energy management programs and equipment replacements which are more energy efficient to reduce the growth of emissions.
- Adoption of a Light-Duty Fleet Electrification Plan for corporate light duty fleets.

Key 2024 to 2033 initiatives that support GHG reductions include:

- Completion and implementation of the Water & Wastewater GHG Emission Management Strategy that charts a path to decarbonize water supply and wastewater treatment operations over the next 20 years.
- Significant water supply process and facility upgrades including the implementation of initiatives from Durham's 2024 to 2029 Energy Conservation and Demand Management Plan.

Climate Adaptation: Increasing the Resiliency of Water Supply System

A changing climate can put additional pressures on systems through extreme weather events that necessitate proactive measures and modifications to system design.

Priority climate change mitigation measures for the water supply system include:

- New well and pumphouses with standby power at Cannington Water Supply System, Sunderland Water Supply System Site 1, Sunderland Water Supply System Site 2.
- Updates at Rosebank Road Water Pumping Station, Cherrywood Water Pumping Station, Grandview Water Pumping Station, Waverly Road Water Pumping Station, Newtonville Water Pumping Station, Orono Water Supply System, Mill Street Water Pumping Station, and Beaverton Water Supply Plant including standby power.
- Upgrades to the uninterrupted power supply at the Oshawa Water Supply Plant and the Bowmanville Water Supply Plant.
- Continued advancement of sustainability as a core element in the design and construction of Regional infrastructure using best practices and innovations developed through in-house research and partnerships with academia.

Climate adaptation will continue to be addressed through the business planning, budget and long-term financial planning processes to ensure a proactive approach.

1.9. Risk Assessment

Regional staff investigate potential risks to water supply assets on an ongoing basis, considering probability, potential consequences and suitability of risk mitigation controls. Table 6 highlights some key identified risks as well as ongoing and new mitigation measures.

Table 6: Water Systems Risk Mitigation Strategies

Risk	Mitigation
Loss of external utilities	Standby generation assessments, options analysis and implementation. Uninterrupted Power Supply (UPS) systems and upgrades. Update depot-specific contingency plans and training programs. Essential services policies, contingency plans, and continuity plans. Capital redundancy and work around programs. (e.g., twinning, looping, etc.).

Risk	Mitigation
<p>Disruption to water supply and water quantity losses</p>	<p>Maintenance and infrastructure rehabilitation and replacement programs.</p> <p>Inspections, risk assessments and source water protection practices.</p> <p>Capital redundancy and continuity programs (e.g., twinning, looping, etc.).</p> <p>Engineering, hydrology, design and erosion mitigation studies and strategies.</p> <p>Water meter replacement and funding strategy.</p> <p>Wellhead protection and management program.</p> <p>Cement lining and cathodic pipe protection strategy.</p> <p>Bulk water dispensing strategy.</p> <p>Leak detection program.</p> <p>SCADA alerts and controls.</p>
<p>Potential for water contamination</p>	<p>Regional source water protection plans and wellhead protection programs.</p> <p>Water quality testing and SCADA alerts and controls.</p> <p>Lead pipe strategy.</p> <p>Sewer Use By-law and Backflow Prevention Program and By-law.</p> <p>Maintain effective emergency, contingency, and continuity plans.</p> <p>Spill control procedures.</p> <p>Maintenance and infrastructure rehabilitation and replacement programs.</p>



Sanitary Sewerage System

Asset Class Report

Replacement
Value

\$7,890.9M

Average
Condition

GOOD

Service Level Objectives

To provide safe and reliable wastewater collection and treatment for all Durham residents, businesses and industries.

To protect the environment, improve the quality of effluent discharged, and comply with all Provincial and Federal Acts and Regulations.

To support the coordination of growth and maintain an optimal condition standard for all existing and new sanitary sewerage system assets.

-
- 11 Water Pollution Control Plants
 - 52 Pumping Stations
 - 3 Other Wastewater Facilities
 - 2,262 km Gravity Sewers
 - 66 km Forcemains
 - 32,981 Maintenance Holes
 - 183,152 Service Connections

1.1 Asset Inventory Overview

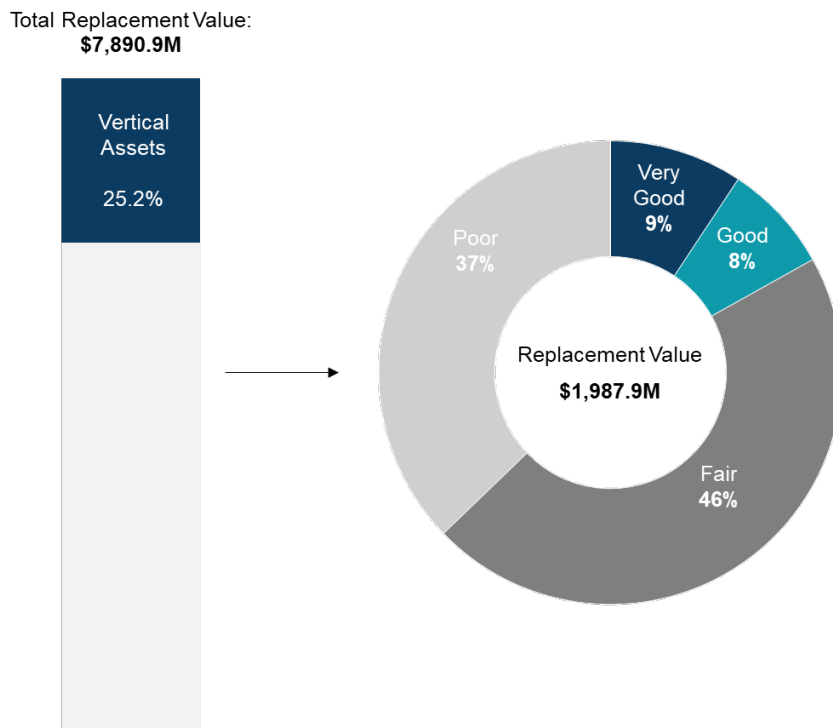
Durham Region’s sanitary sewerage system consists of vertical and linear assets, fleet assets, equipment assets and other supporting assets. Vertical assets refer to facilities that treat and pump sanitary sewage and store excess sewage while linear assets collect sanitary sewage and provide a piped route from customers to the treatment plants. Supporting assets include a portion of the Region’s administrative facilities, fleet and equipment that support the Region’s sanitary sewerage system.

1.2 Sanitary Sewerage Condition Ratings, Replacement Values and Average Ages

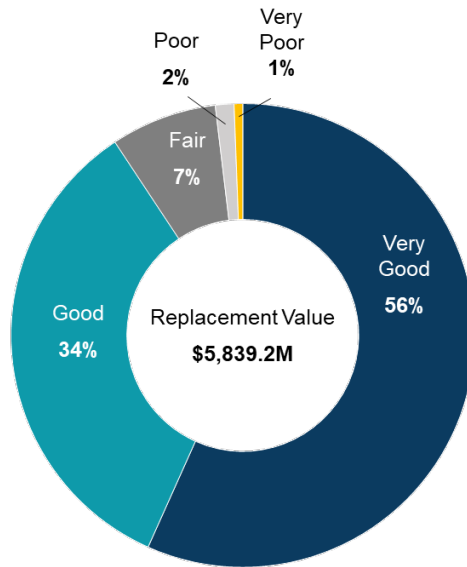
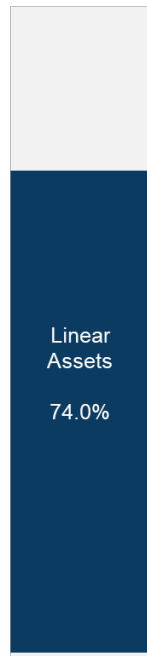
The overall condition rating for sanitary sewerage remained Good in 2023, representing no year-over-year condition change. Condition ratings for linear assets (Good) remained stable while vertical assets dropped to Fair in 2023 compared to Good in 2022. Overall replacement values increased 10.0 per cent over 2022 primarily as a result of inflationary replacement cost increases and increases to linear assets to accommodate growth including the addition of a new wastewater pumping station.

Figure 1 below illustrates the condition rating and replacement value of sanitary sewerage assets.

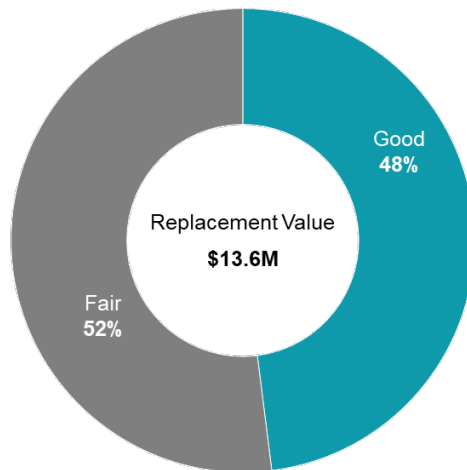
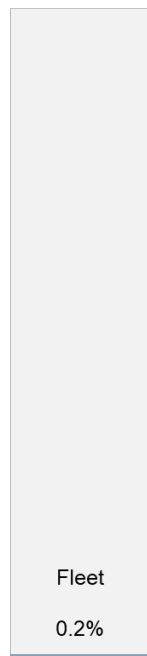
Figure 1: Sanitary Sewerage Assets Condition and Replacement Values



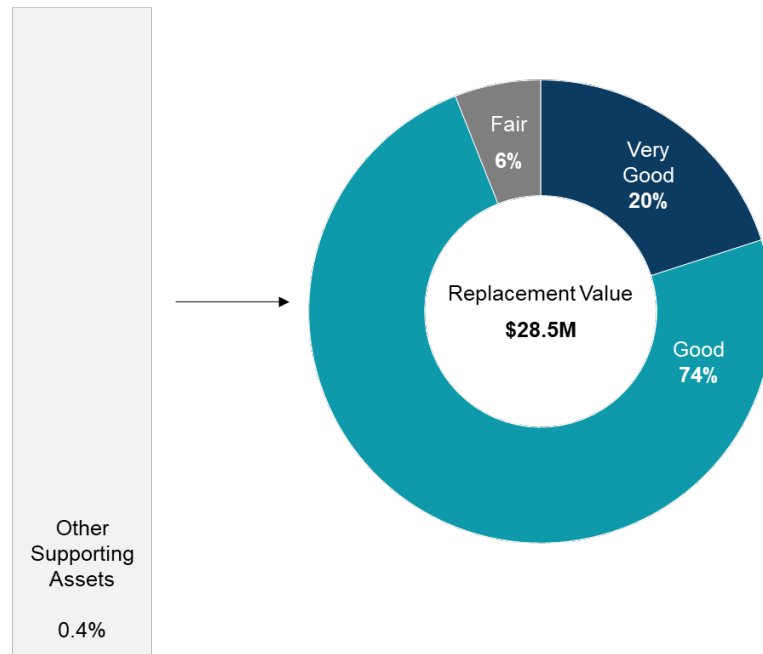
Total Replacement Value:
\$7,890.9M



Total Replacement Value:
\$7,890.9M



Total Replacement Value:
\$7,890.9M



* Percentages may not add to 100 per cent due to rounding. The condition breakdown does not include the condition for equipment assets as these are pooled assets.

1.3 Sanitary Sewerage Condition Assessment Methods

Table 1 outlines the assessment methods used to determine condition ratings.

Table 1: Sanitary Sewerage Condition Assessment Methods

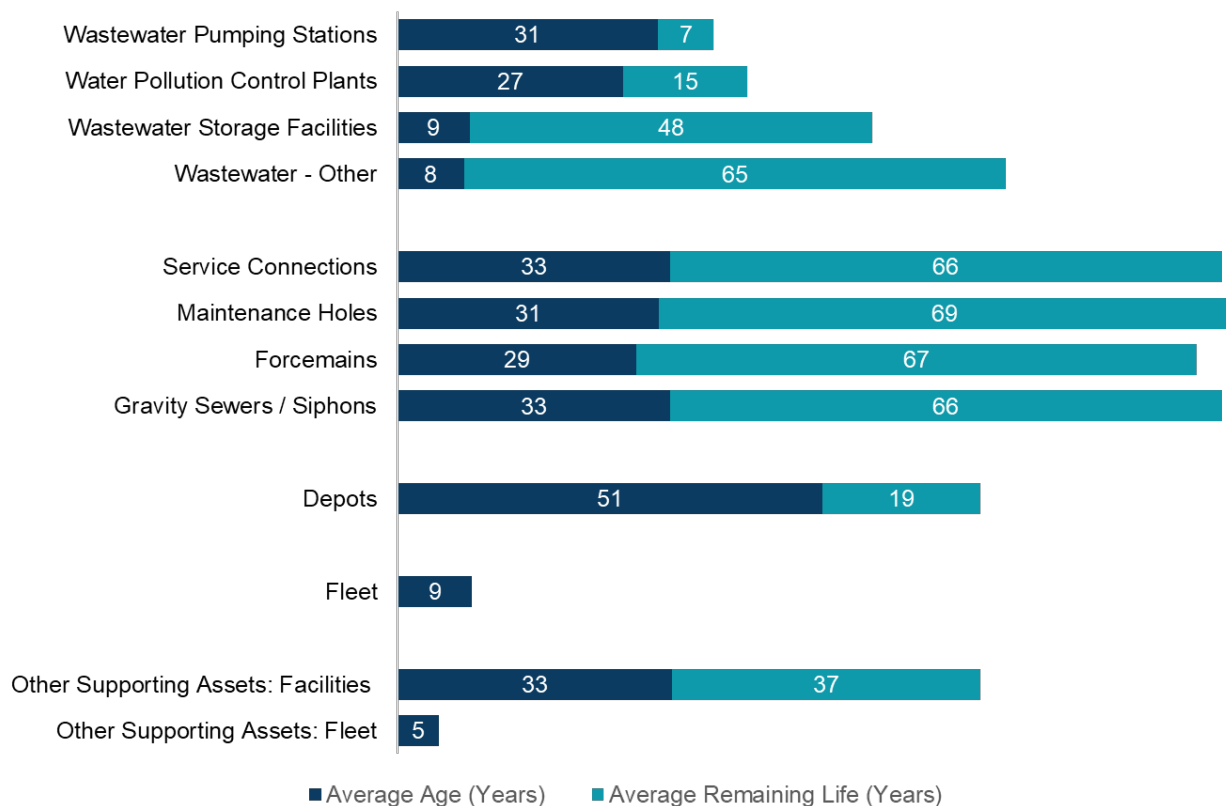
Asset Class	Assessment Methods
Plants, Pumping Stations and Storage	Site-specific detailed condition assessments for the process equipment and building structure are planned at all facilities in the coming years. They are coordinated with upcoming capital projects where possible. In the interim, a high-level scoring was done for all sites by Operations and Facilities staff for long range planning. Staff recommend repair work for incorporation into the annual operating and capital budgets.
Gravity Sanitary Sewers and Forcemains	Structural grade score from CCTV inspections, material type, age of the pipe and any concerns or issues from Maintenance Operations are used to compile a score for each pipe segment. Forcemains also use break history in scoring.
Maintenance Holes and Chambers	Infrastructure age.

Asset Class	Assessment Methods
Service Connections	Assigned same score as the gravity sewer they are connected to.
Fleet	Mileage and vehicle inspection.
Facilities	Regional staff employ a Building Condition Assessment (BCA) method for assess the condition of Regionally-owned facilities. For each facility, a BCA is performed on a 10-year cycle by external consultants. BCAs assess the condition of major building elements, sub-structures, shells, interiors, services and site work.

1.4 Sanitary Sewerage Average Age and Remaining Useful Life

Figure 2 summarizes the average age and remaining asset life of sanitary sewerage system. Overall, the sanitary sewerage system is relatively young as evidenced by generally significant remaining useful life.

Figure 2: Sanitary Sewerage System Average Age and Remaining Useful Life



1.5 Sanitary Sewerage Levels of Service and Performance Measurement

Service levels objectives and performance targets are set through Regional Council approved master plans, studies, policies and procedures, as well as through departmental studies and regulatory and/or compliance guidelines.

Table 2: Plans, Studies, Policies, Procedures, Regulations that Inform Service Levels

Regional By-Laws, Departmental Studies, Policies, & Procedures
<ul style="list-style-type: none"> • The Region's Sanitary Sewer System By-Law • Service Levels for Sanitary Sewerage Operation • The Region's Service Connection Cleaning By-law 90-2003 • Water Pollution Control Plan and Storm Water System By-law • Regional Sanitary Sewerage System Design Standards and Specifications
Regulatory Compliance Requirements and Guidelines
<ul style="list-style-type: none"> • Wastewater System Effluent Regulations (WSER) • Environmental Protection Act of Ontario • Pollution Prevention Plan (P2) • Lake Simcoe Protection Plan • Water Opportunities and Water Conservation Act • Ontario Water Resources Act • Fisheries Act • Ontario Regulation 129/04 Licencing of Sewage Works Operators • Ontario Regulation 248/03 Drinking Water Testing Services • Clean Water Act • Human Pathogens and Toxins Act and Regulation (SOR/2015-44) • Canadian Biosafety Standard and Guidelines • ISO/IEC 17025:2017 General requirements for competence of testing and calibrating laboratories

Detailed service level descriptions and targets are outlined in the Community Level of Service, Technical Levels of Service and Performance Measures subsections that follow.

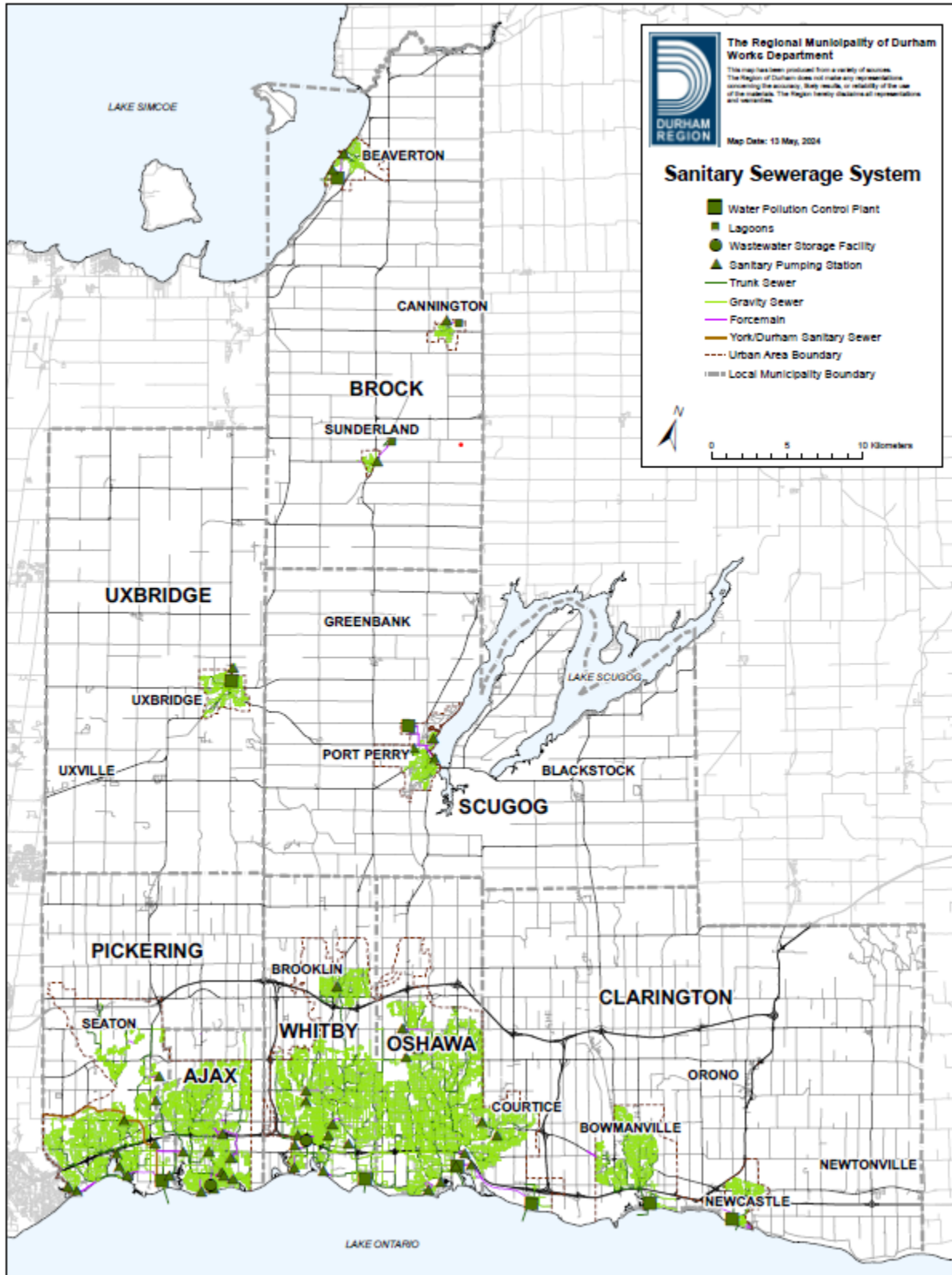
Community Levels of Service

Community levels of service provide qualitative descriptions of service reliability, service standards and service scope as required in Ontario Regulation 588/17.

Table 3: Community Levels of Service

Criteria	Description
Description, which may include maps of areas of the municipality that are connected to the wastewater system.	Refer to Map 1.
Description of how stormwater can get into sanitary sewers in the wastewater system, causing sewage to overflow into streets or backup into homes.	Infiltration can occur at poor joints in the pipe or at lids of maintenance holes along the sewer system. In older neighbourhoods, the foundation drains are connected to the sewer system.
Description of how sanitary sewers in the municipal wastewater system are designed to be resilient to avoid events described above.	<p>Annual inflow & infiltration reduction program to continue identifying potential stormwater entry points in the sanitary sewerage system.</p> <p>Additional flow monitoring work on key sewers on selected sanitary sewers to identify cross connections from the storm drainage system and rainwater downspouts.</p> <p>Prohibiting the connection of foundation drains to the sanitary sewerage system for new builds and educating the public on disconnecting existing foundation drains.</p> <p>Backflow prevention program on all water services that could pose a hazard to the municipal drinking water system.</p>
Description of the effluent (treated sewage liquid) that is discharged from sewage treatment plants.	The Region's sanitary sewage is treated in accordance with Ministry of the Environment, Conservation and Parks effluent quality regulations. Effluent undergoes full unit processes as per each plant's Environmental Compliance Approval before being discharged into the plant's approved receiving water body.

Map 1: Map of Durham Region Sanitary Sewerage System



Technical Levels of Service

Ontario Regulation 588/17 includes a list of required technical metrics for sanitary sewerage systems as shown in Table 4.

Table 4: Technical Service Levels per Ontario Regulation 588/17

Technical Metric	Target	Year of Measure		
		2021	2022	2023
Percentage of Properties connected to Region's Wastewater System	100 per cent of Properties with Proximity to a Sanitary Sewer to be Connected	99%	99%	99%
Measures the percentage of properties in proximity to a sanitary sewer that are connected to Durham's wastewater system. Only properties within an Urban Boundary can be potentially connected to a sewage system. Durham has a number of properties in rural areas.				
Number of Effluent Violations Per Year to Total Number of Properties Connected to Region's Wastewater System	0 per cent of Effluent Violations to Properties Connected to Region's Wastewater System	0%	0%	0%
This measures the percentage of effluent violations compared to the total number of properties connected to the Region's wastewater system.				
Number of Wastewater Backups to Total Number of Properties Connected to Region's Wastewater System	0 per cent of Wastewater Backups to Properties Connected to Region's Wastewater System	0%	0%	0%
This measures the percentage of wastewater backups compared to the total number of properties connected to the Region's wastewater system.				

Performance Measures

Beyond community service levels and technical reporting requirements of Ontario Regulation 588/17, a number of performance metrics are being tracked to measure how well assets are meeting service level objectives.

Table 5: Performance Measures

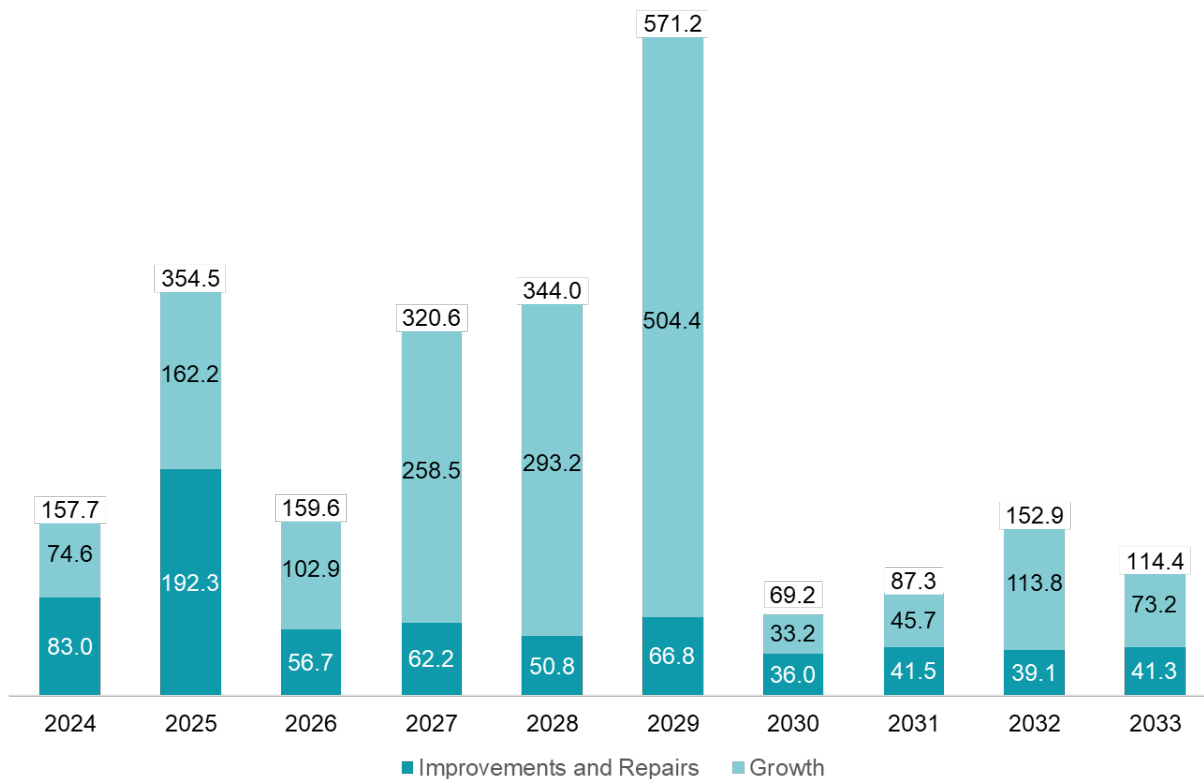
Performance Measure	Target	Year of Measure		
		2021	2022	2023
Condition Index Rating	0.1 per cent of linear assets rated as very poor	0.71%	0.63%	0.63%
<p>Measure identifies the percentage of sewer system (gravity, forcemains, maintenance holes, chambers and service connections) rated as “Very Poor” calculated on the total replacement value of these assets. Condition scoring factors include material type of pipe, remaining service life, CCTV inspection score and Operational staff input.</p>				
Mainline Sewer Inspections	10 per cent of sanitary sewers inspected by CCTV per year	6.70%	8.19%	8.22%
<p>Measures percentage of sanitary sewers inspected by CCTV every year as per Durham Service Levels. The target is 10 per cent of gravity sewers only (not including siphons) per year so a number of 10 per cent or greater in the above chart is meeting the target. The procedure provides a report on the condition of gravity sewers (preventative inspection). Based on the results, a full replacement or a repair/rehabilitation is scheduled as required.</p>				
Sanitary Maintenance Hole Inspections	50 per cent of maintenance holes inspected annually	47%	44%	44%
<p>Measures the percentage of maintenance holes inspected on a two-year cycle as per Durham Service Levels. The target is 50 per cent inspected each year. It is a preventative maintenance procedure which validates condition.</p>				
Mainline Sewer Cleanings	50 per cent of ≤375mm diameter sewers cleaned annually	49%	39%	50%
<p>Measures percentage of sewers cleaned based on size as per Durham Service Levels. A value in the chart above of 50 per cent indicates that the target has been met for the gravity pipes 375 mm diameter and less. This is a maintenance program that can reduce the number of sewer blockages and emergency type calls.</p>				
Condition Index Rating	0 per cent of vertical assets rated as very poor	0.00%	0.00%	0.00%
<p>Measure identifies the percentage of plants, pumping stations and sewage storage facilities which are rated “Very Poor”. A high-level assessment completed by plant operations staff for the process equipment and facilities staff for the building condition is used for scoring until a detailed condition inspection can be done at that location. It is anticipated that detailed condition assessments of all facilities will be done over the next 5 to 7 years. The condition percentage is calculated on replacement value not number of sites.</p>				

Performance Measure	Target	Year of Measure		
		2021	2022	2023
Odour Complaints	0 valid odour complaints per year	0	0	0
<p>Odour complaints can be indicative of the operating process at the sewerage treatment plants. The annual target for this measure is zero valid odour complaints from the public.</p>				
Compliance with MECP Regulatory Requirements	0 per cent wastewater bypassed treatment annually	0.00%	0.02%	0.00%
<p>Measures the percentage of untreated wastewater in accordance with wastewater bypasses as reported to the MECP (numerator) as a share of total megalitres of treated wastewater plus estimated megalitres of untreated wastewater (denominator).</p>				
Back up Power Capabilities	100 per cent of plants and pumping stations with back-up generators	96%	98%	98%
	100 per cent of generators newer than 30 years in age	61%	62%	60%
<p>Ensure that all plants (lagoons not included) and pumping stations have a back up power generator that is no older than 30 years. Only pumping stations that can house a generator are included in the calculation. Portable generators can be used at the other locations. The age measure is calculated using only the number of existing generators currently in place.</p>				

1.6 Sanitary Sewerage System Capital Forecast

Major capital investments for sanitary sewerage services identified through the 2024 business planning and budget process (improvements and repairs and growth) total \$157.7 million for 2024 and \$2,173.6 million over the 2025 to 2033 forecast period.

Figure 3: Sanitary Sewerage Capital Forecast (\$ millions)*



*Improvements and Repairs and Growth may not add to Total due to rounding.

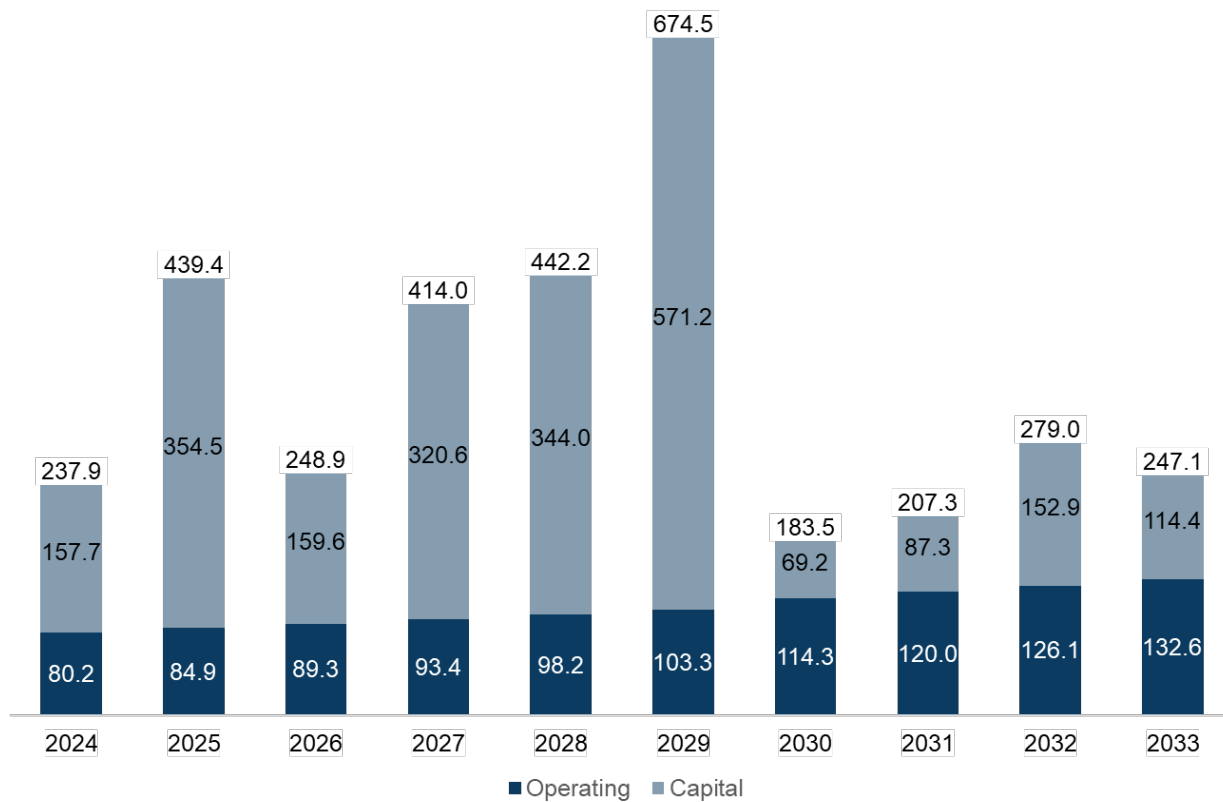
The 2024 Sanitary Sewerage Systems Business Plans and Budget includes \$14.0 million to address the priority sewer linear assets in poor or very poor condition and \$20.6 million to address asset management needs in sanitary sewerage buildings and equipment.

1.7 Lifecycle

Sanitary sewerage system maintenance and rehabilitation lifecycle activities aim to extend the useful life of linear and vertical assets and improve service delivery. For linear assets these renewal activities include pipe liners, ream and seal technology, and pipe segment replacements.

Figure 4 illustrates capital and maintenance lifecycle costs for the Sanitary Sewerage asset class.

Figure 4: Lifecycle Costs Sanitary Sewerage Operating and Capital (\$ millions)*



*Operating and Capital may not add to Total due to rounding.

Total operating lifecycle expenditures for sanitary sewerage systems total \$1,042.4 million over the 2024 Budget and nine-year forecast period (2025 to 2033) while capital expenditures total \$2,331.3 million over this period.

Lifecycle Activities

Full replacements are preferred when the linear asset condition is in Very Poor condition, or when there is an opportunity to coordinate with other infrastructure work such as road reconstruction or watermain replacement for cost savings.

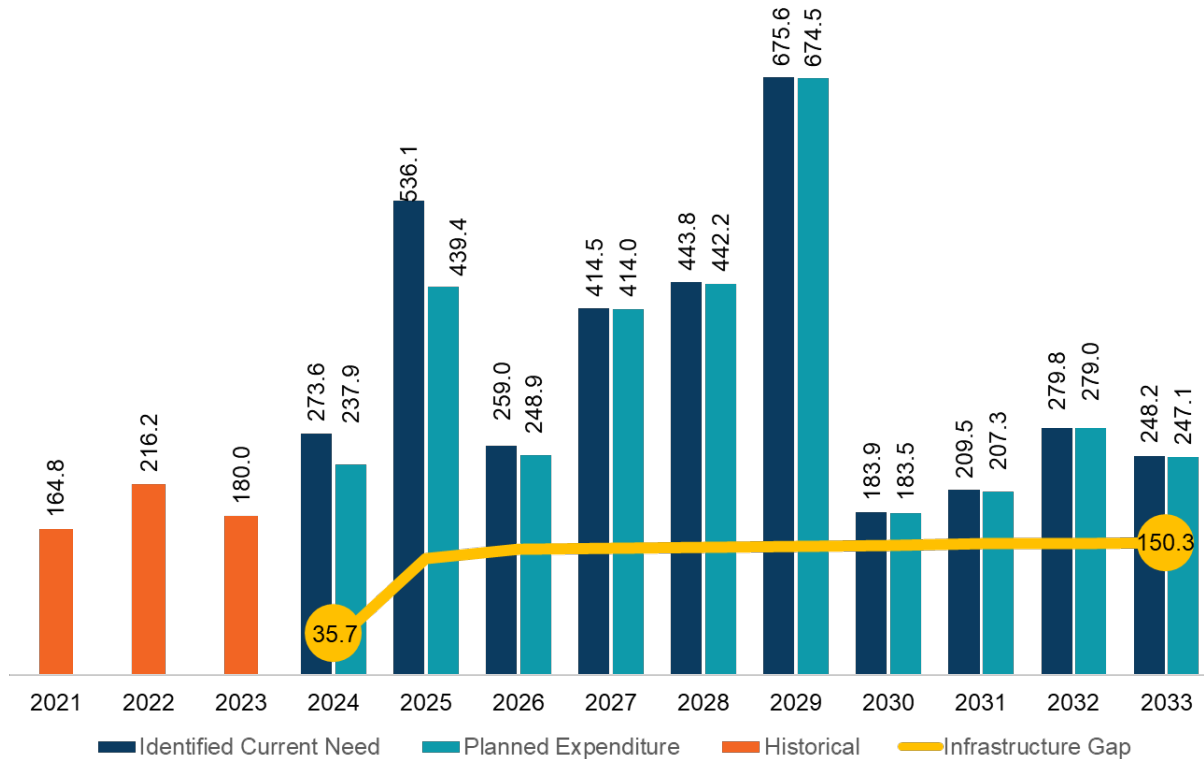
For vertical sewage system assets, lifecycle activities are informed by detailed site-specific condition assessments as well as by Operations and Facilities staff knowledge of issues by attending the various sites regularly. The detailed inspections inform rehabilitation and renewal activities and forecast investment needs over the long-term.

In addition to repair and maintenance activities, other ongoing operating expenditures are required to ensure sanitary sewerage assets can meet service levels. Some examples include gas and fuel, utilities, chemicals, fleet rentals and overhead costs (e.g., office staff, training, software, etc.).

Lifecycle Gap Analysis

Staff have undertaken an analysis to forecast the funding required to optimally sustain current service levels. Any rehabilitation or replacement work required to meet health and safety or legislative standards are reflected in the planned total expenditures while the identified current need builds on the approved budget to accelerate some non-urgent works as illustrated in Figure 5.

Figure 5: Sanitary Sewerage: Lifecycle Gap Analysis (\$ millions)



In 2024, the infrastructure gap is estimated at \$35.7 million. Based on currently planned expenditures this infrastructure gap increases to \$150.3 million in 2033.

The identified current need primarily reflects earlier replacements for some non-urgent linear projects. Not accelerating these projects, may result in increased repair and maintenance work. It is important to note that the planned expenditure investment level poses no health and safety risk or material impacts to service as compared to the identified current need scenario.

Staff will continue to monitor funding needs and refine identification and assessment processes. Moving forward, staff will be further refining lifecycle costing analysis and data collection for both linear and vertical sanitary sewerage assets that will be reported in future asset management plans.

1.8 Climate Change

Climate Mitigation: Sanitary Sewerage Strategies to Reduce GHG Emissions

The Durham Region Corporate Climate Action Plan has set targets to achieve net-zero GHG emissions by 2045. The corporate GHG inventory includes emissions produced to pump and treat wastewater as well as non-energy GHG emissions associated with wastewater management operations.

Key climate change mitigation accomplishments for sanitary sewerage systems in 2023 include:

- Energy management programs and equipment replacements which are more energy efficient to reduce the growth of emissions.
- Adoption of a Light-Duty Fleet Electrification Plan for corporate light-duty fleets.

Key Budget 2024 to 2033 initiatives that support GHG reductions include:

- Completion and implementation of the Water & Wastewater GHG Emission Management Strategy that charts a path to decarbonize water supply and wastewater treatment operations over the next 20 years. The Strategy considers key opportunities such as process emissions measurement, production, and utilization of renewable natural gas and wastewater heat recovery.
- Significant sanitary sewerage process and facility upgrades, renewable energy utilization (e.g., digester gas utilization at wastewater treatment facilities) including the implementation of initiatives from Durham's 2024 to 2029 Energy Conservation and Demand Management Plan.

Climate Adaptation: Increasing the Resiliency of Sanitary Sewerage System

A changing climate can put additional pressures on systems through extreme weather events that necessitate proactive measures and modifications to system design. Priority climate change mitigation measures for sanitary sewerage system include:

- Ensure adequate standby power, redundancies, business continuity and supervisory control and data (SCADA) systems throughout program areas;
- Reduce potential infiltration and inflow of groundwater or stormwater into the sanitary sewer collection system to mitigate flooding and inflow risk;
- Enhance erosion protection at creek crossings to protect sanitary sewer systems; and,
- Continued advancement of sustainability as a core element in the design and construction of Regional infrastructure using best practices and innovations developed through in-house research and partnerships with academia.

Climate adaptation will continue to be addressed through the business planning, budget and long-term financial planning processes to ensure a proactive approach.

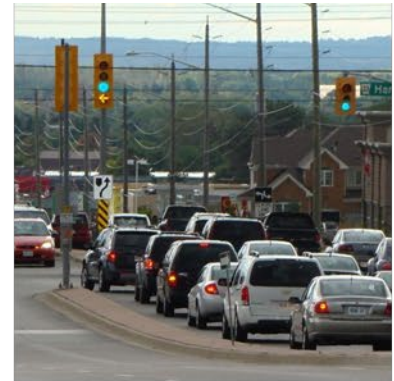
1.9 Risk Assessment

Regional staff investigate potential risks to sanitary sewerage system assets on an ongoing basis. Table 6 highlights some high impact potential risks as well as ongoing and new risk mitigation measures.

Table 6: Sanitary Sewerage Systems Risk Mitigation Strategies

Risk	Mitigation
Broken forcemain/trunk sanitary sewer	Pipe twinning capital program to increase forcemain redundancy. SCADA system alerts, controls and improvements. Maintain emergency, contingency re-routing and continuity plans. Forcemain condition assessment pilot project. Inspection and asset repairs, maintenance, and replacements.
Sanitary sewerage inflow and infiltration (I&I)	Gather data to understand performance during extreme storms. System repairs, proactive maintenance, and capital investments. Monitor flows, conduct household drainage surveys and I&I education. Minimize on-site water retention.
Disruptions to wastewater treatment services (e.g., extended loss of power)	Maintain emergency, contingency and continuity plans. Ensure adequate stand-by power and UPS as needed. On-call service contracts. SCADA alerts, response, communication and control. Repairs, preventative maintenance and rehabilitation investments.
Potential contamination of adjacent drinking water sources	Source Water Protection Plan implementation. Phosphorous Reduction Strategy. Effluent Requirements. Sewer Use By-law.

Risk	Mitigation
	<p>SCADA alerts, response, communication and control.</p> <p>Monitor and ensure adequate capacity at all facilities.</p> <p>Vertical and linear condition assessments.</p> <p>Plant upgrades/ replacements.</p> <p>Capital improvements and effluent improvements.</p> <p>Maintain emergency, contingency and continuity plans.</p>



Transportation System

Asset Class Report

Replacement
Value

\$5,968.2M

Average
Condition

FAIR

Service Level Objectives

Achieve and maintain an acceptable condition standard for all Regional transportation assets.

Regional roads will be continuous and connected.

Regional roads will be reliable, functional, and serve all modes and users as appropriate and feasible within the context of each project.

Regional roads will be expanded and grow with the Region to provide capacity for users.

Continue to plan asset management infrastructure investments that recognize service impacts.

- 2,450 lane km Road Network
- 247 Bridges and Culverts >3m
- 12,008 Storm Appurtenances
- 367 km Storm Mains and Culverts
- 16 Traffic Management Systems
- 26,461 Traffic Control
- 338 km Traffic Communication Infrastructure
- 104 km Roadside Protection
- 127 CCTV

1.1 Description of Transportation System Assets

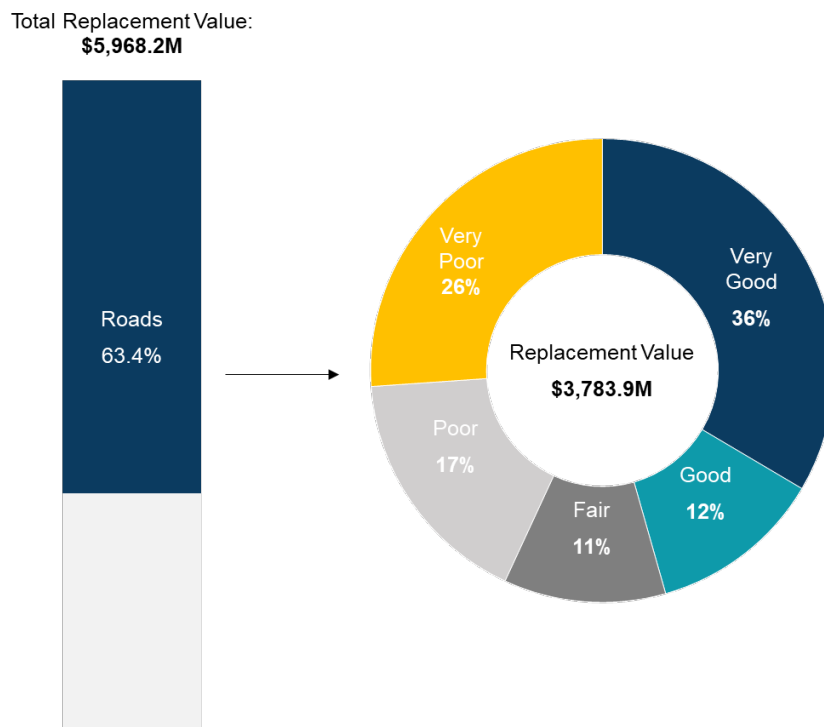
Durham’s transportation system assets include a network of urban and rural arterial road segments (including bus only and cycling lanes), bridges, culverts, infrastructure to capture storm water flows from Regional roads, traffic control, safety systems, facilities, fleet assets, equipment assets and other supporting assets. Supporting assets include a portion of the Region’s administrative facilities, fleet and equipment that supports the Region’s transportation system.

1.2 Transportation Condition Ratings, Replacement Values and Average Ages

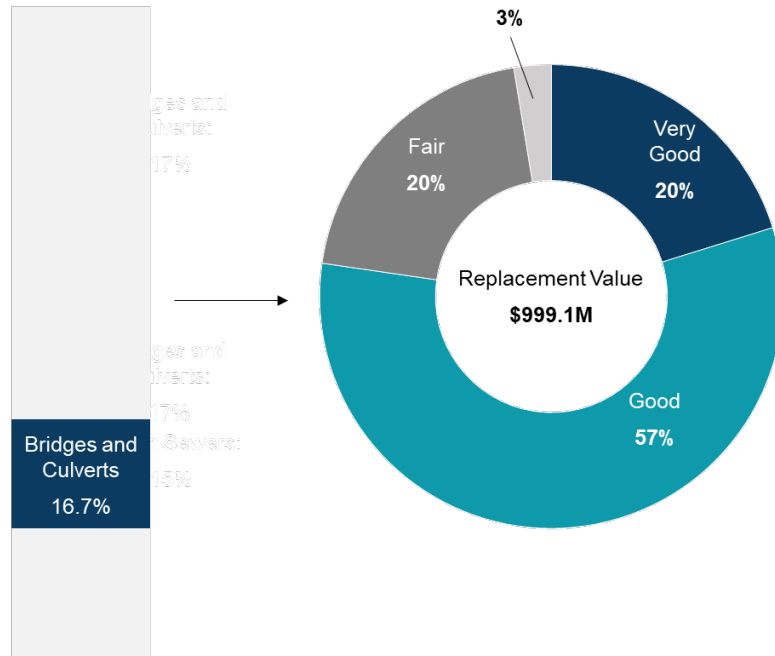
The Transportation asset class has an overall condition rating of Fair comprised of the road network (Fair), bridges and culverts (Good), storm sewers (Fair), and traffic control (Good). Condition ratings have remained stable year-over-year for Transportation asset classes.

The average Pavement Condition Index (PCI) for Regional Roads was 55.4 in 2023, a slight increase from 52.0 in 2022. The average Bridge Condition Index (BCI) for bridges increased slightly from 76.6 in 2022 to 76.9 in 2023 while the average BCI for culverts greater than 3m decreased slightly from 74.2 in 2022 to 74.1 in 2023.

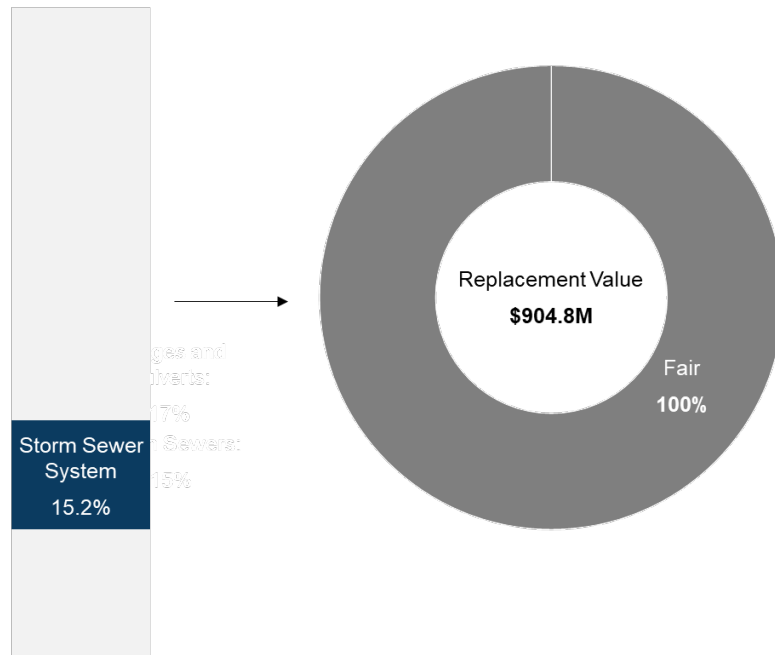
Figure 1: Transportation Condition and Replacement Values



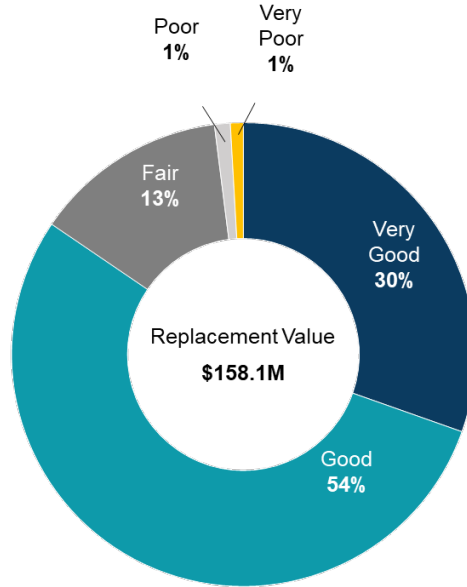
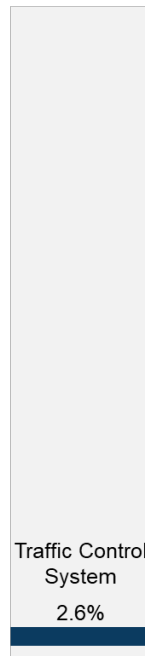
Total Replacement Value:
\$5,968.2M



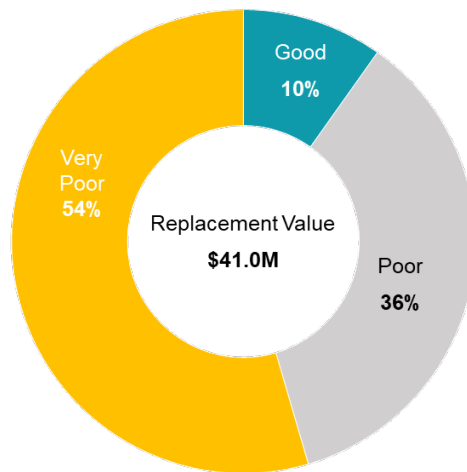
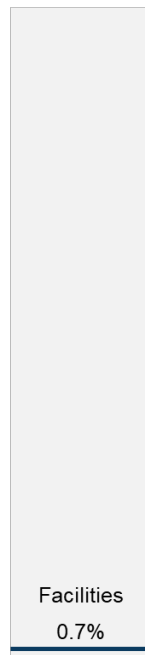
Total Replacement Value:
\$5,968.2M



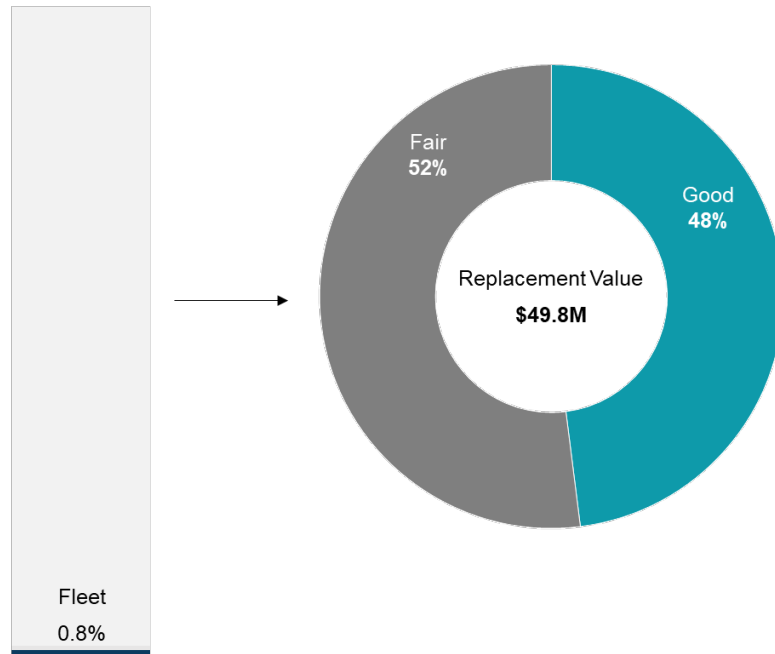
Total Replacement Value:
\$5,968.2M



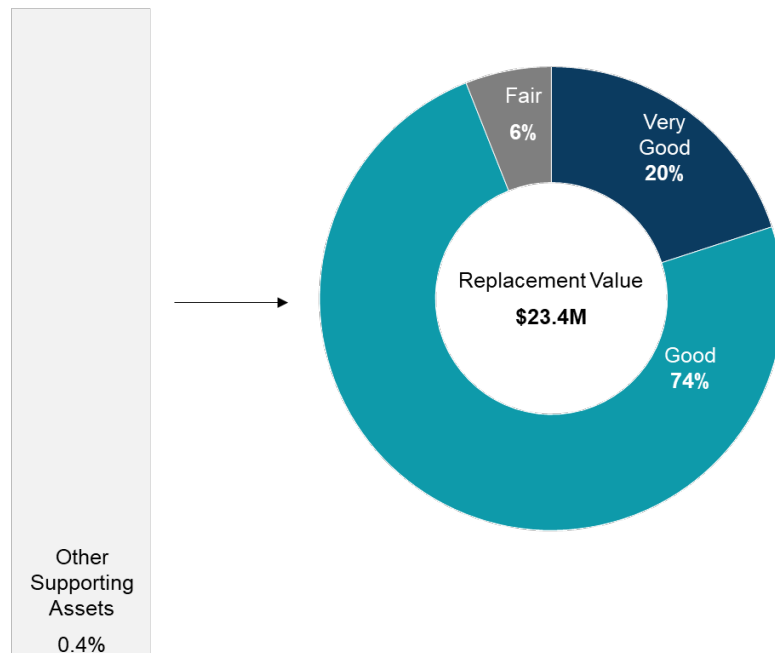
Total Replacement Value:
\$5,968.2M



Total Replacement Value:
\$5,968.2M



Total Replacement Value:
\$5,968.2M



* Percentages may not add to 100 per cent due to rounding. The condition breakdown does not include the condition for equipment assets as these are pooled assets.

Overall replacement value of \$5,968.2 million represents an increase of 10.4 per cent (\$562.0 million) from 202 to 2023 driven primarily by inflationary increases to construction and material costs, shifts among the four types of roads and other minor increases to overall asset inventory.

1.3 Transportation Condition Assessment Methods

Table 1 provides details on the assessment methods used to determine the condition of Transportation assets.

Table 1: Transportation Assets Condition Assessment Methods.

Asset Class	Assessment Methods
Roads	<p>Typically the Works Department assesses the pavement for 50 per cent of the road network annually to generate a Pavement Condition Index (PCI) based on:</p> <ul style="list-style-type: none"> • Road surface condition (i.e., ride). • Structural adequacy (i.e., distress). <p>In 2023, the Region completed 100 per cent of the road network. PCI is converted into a condition rating.</p>
Bridges and culverts greater than 3m*	<p>Works Department assessment of 50 per cent of inventory annually to generate Bridge Condition Index (BCI). For BCI, each structure element is inspected in accordance with the Ministry of Transportation Ontario Structure Inspection Manual 2018. BCI is then calculated using the MTO Bridge Condition Index Manual 2009 and is a weighted average of all structure elements and their conditions. BCI is converted into a condition rating.</p>
Traffic Control Signals	<p>Each signalized intersection is rated based on condition.</p>
Traffic Signs	<p>Visual condition assessments including testing for reflectivity.</p>
Other Traffic Assets	<p>A combination of condition assessments and age-based assessments.</p>
Fleet	<p>Mileage and vehicle inspection.</p>

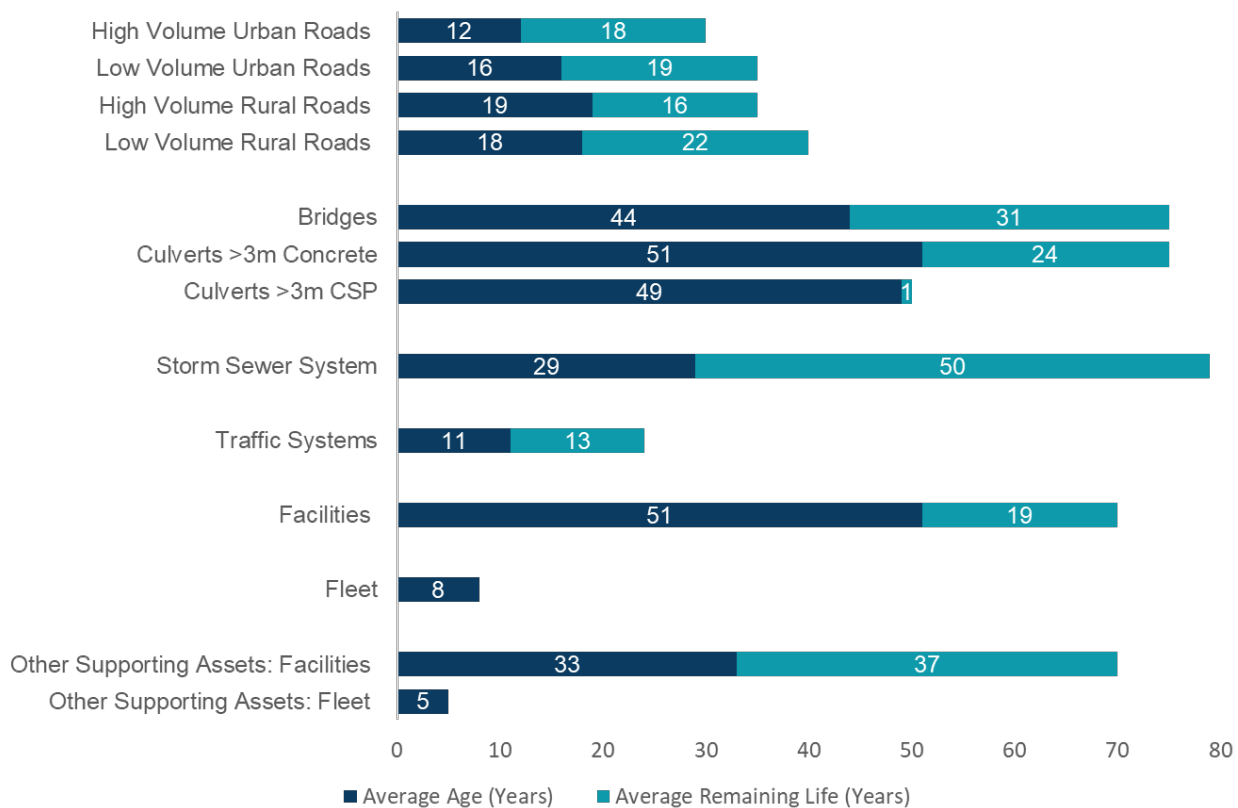
Asset Class	Assessment Methods
Facilities	Regional staff employ a Building Condition Assessment (BCA) method to assess the condition of Regionally-owned facilities. For each facility, a BCA is performed on a 10-year cycle by external consultants. BCAs assess the condition of major building elements, sub-structures, shells, interiors, services and site work.

*BCI is not used to rate or indicate the safety of a bridge or culvert. Any safety issues are immediately reported to the Region by the inspector for immediate action and repair.

1.4 Transportation System Average Age and Remaining Useful Life

Figure 2 summarizes the average age and remaining life of the transportation system.

Figure 2: Transportation System Remaining Useful Life



1.5 Levels of Service and Performance Measurement

Service levels objectives and performance targets are set through Regional Council approved master plans, studies, policies and procedures, as well as through departmental studies and regulatory and/or compliance guidelines.

Table 2: Plans, Studies, Policies, Procedures, Regulations that Inform Service Levels

Departmental Plans, Studies, Policies, & Procedures
<ul style="list-style-type: none"> • Transportation Master Plan • Road Maintenance Operations Service Levels • Transportation System Design and Maintenance Standards and Specifications • Salt Management Plan • Traffic and Parking By-law • Intelligent Transportation System Strategic Plan • Sign Inventory and Reflectivity Review • Roadside Protection Inventory Review • Regional Cycling Plan • Vision Zero
Regulatory Compliance Guidelines and Requirements
<ul style="list-style-type: none"> • Minimum Maintenance Standards for Municipal Highways (Ontario Regulation 239/02) • Standards for Bridges (Ontario Regulation 472/10) • Public Transportation and Highway Improvement Act, • Transportation Association of Canada Geometric Design Guide for Canadian Roads • Environmental Assessment Act • Canada Transportation Act • Highway Traffic Act

Detailed service level descriptions and targets are outlined in the Community Level of Service, Technical Levels of Service and Performance Measures subsections that follow.

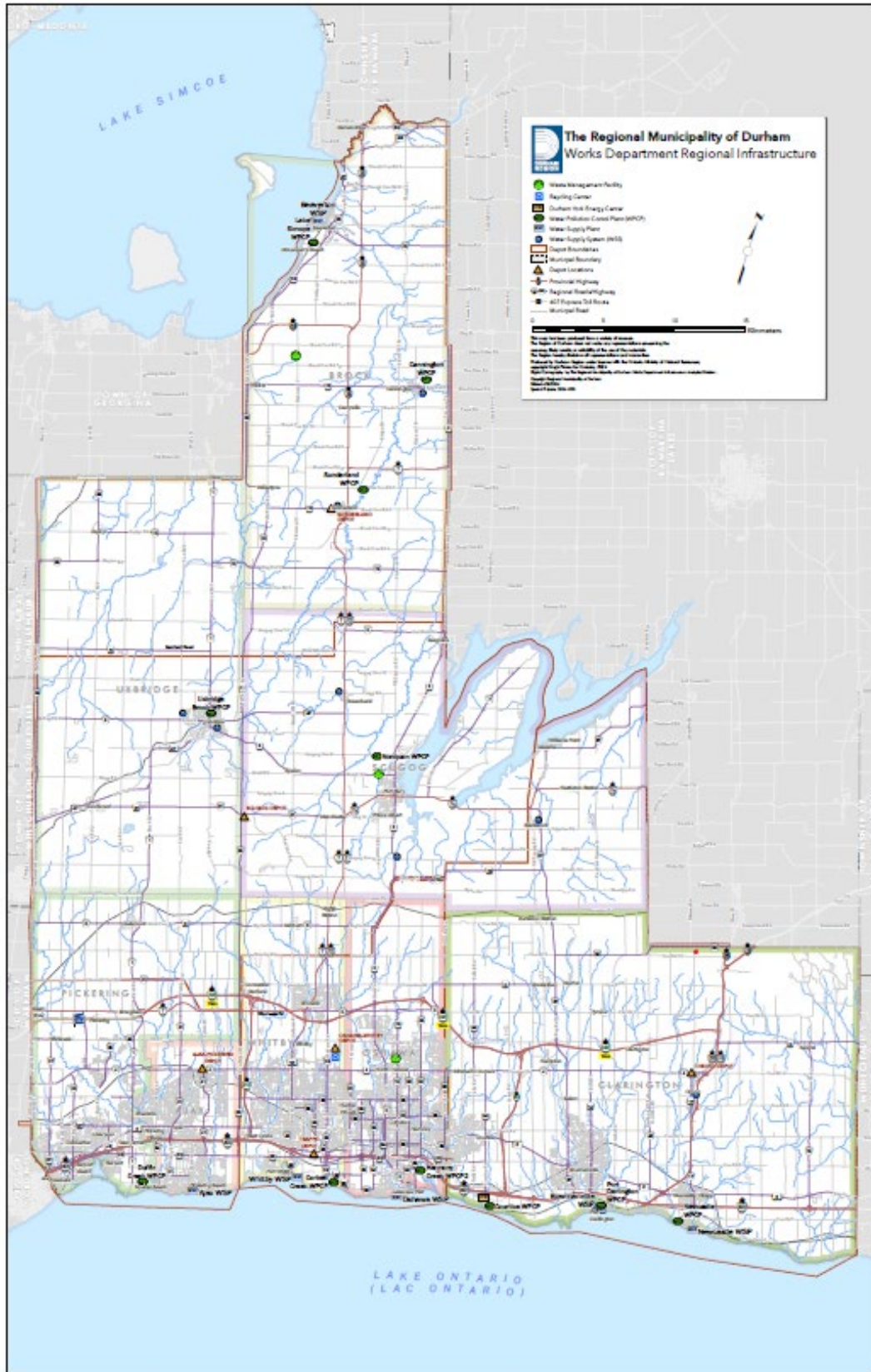
Community Levels of Service

Community levels of service provide qualitative descriptions of service reliability, service standards and service scope and reporting criteria are mandated in Ontario Regulation 588/17.

Table 3: Community Levels of Service

Criteria	Description
Description, which may include maps, of the road network in the municipality and its level of connectivity.	Refer to Map 1.
Description, which may include maps, of the user groups or areas of the municipality that are protected from flooding, including the extent of the protection provided by the municipal stormwater management system.	Refer to Map 2.
Description or images that illustrate the different levels of road class pavement condition.	Refer to Figure 3.
Description of the traffic that is supported by municipal bridges (e.g., heavy transport vehicles, motor vehicles, emergency vehicles, pedestrians, cyclists).	The Region's bridges and culverts are designed, built and support all vehicular traffic, including motor vehicles, heavy transport vehicles and emergency vehicles. Cyclists and pedestrians are also accommodated where bike lanes, sidewalks and/or multi-use paths are provided on the bridge structures.
Description or images of the condition of bridges and how this would affect use of the bridges.	Refer to Figure 4.
Description or images of the condition of culverts and how this would affect use of the culverts.	Refer to Figure 4.

Map 1: Durham Region Road Network



Map 2: Regional Floodplain Potential

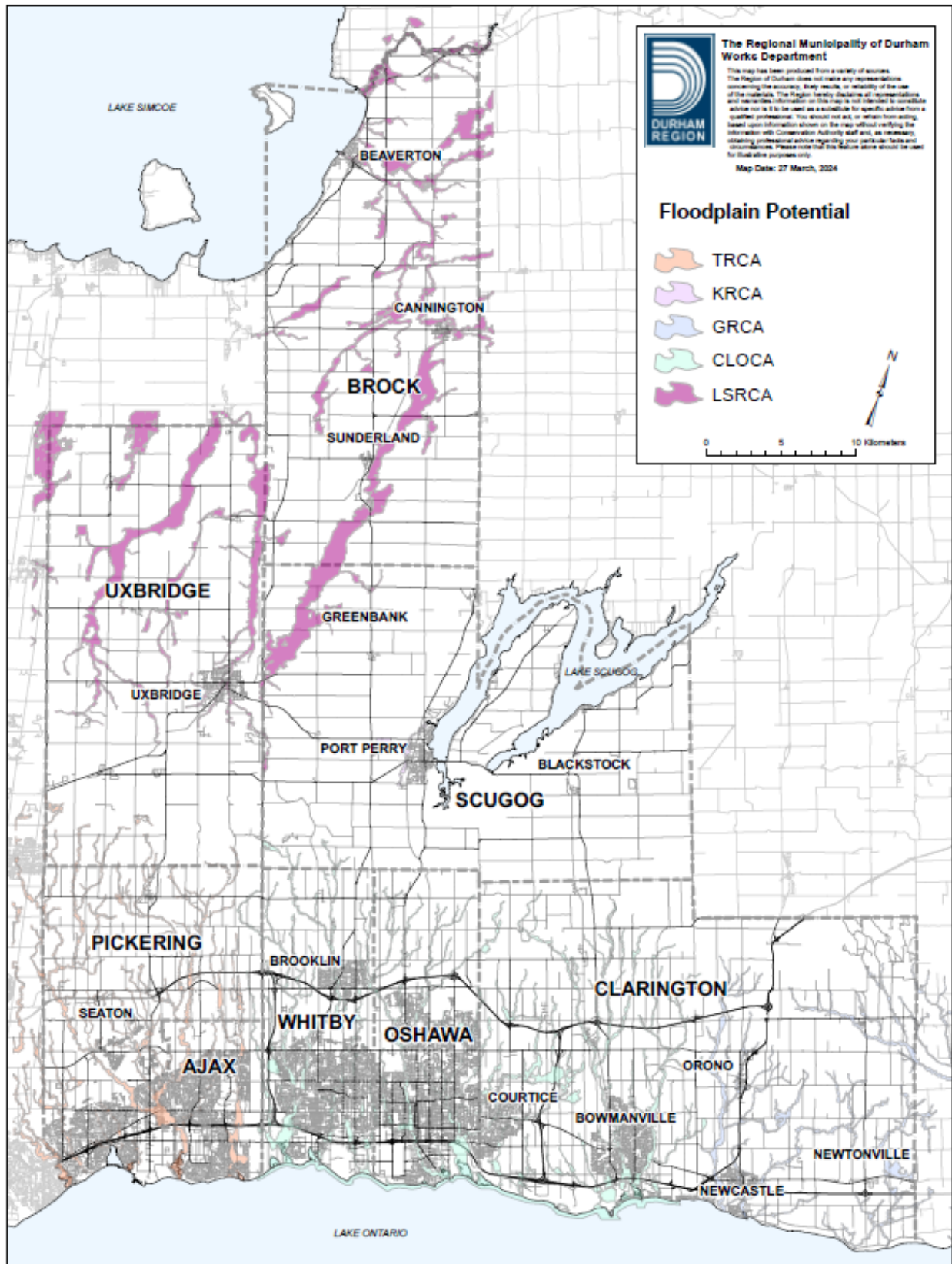


Figure 3: Regional Road Condition Index Rating

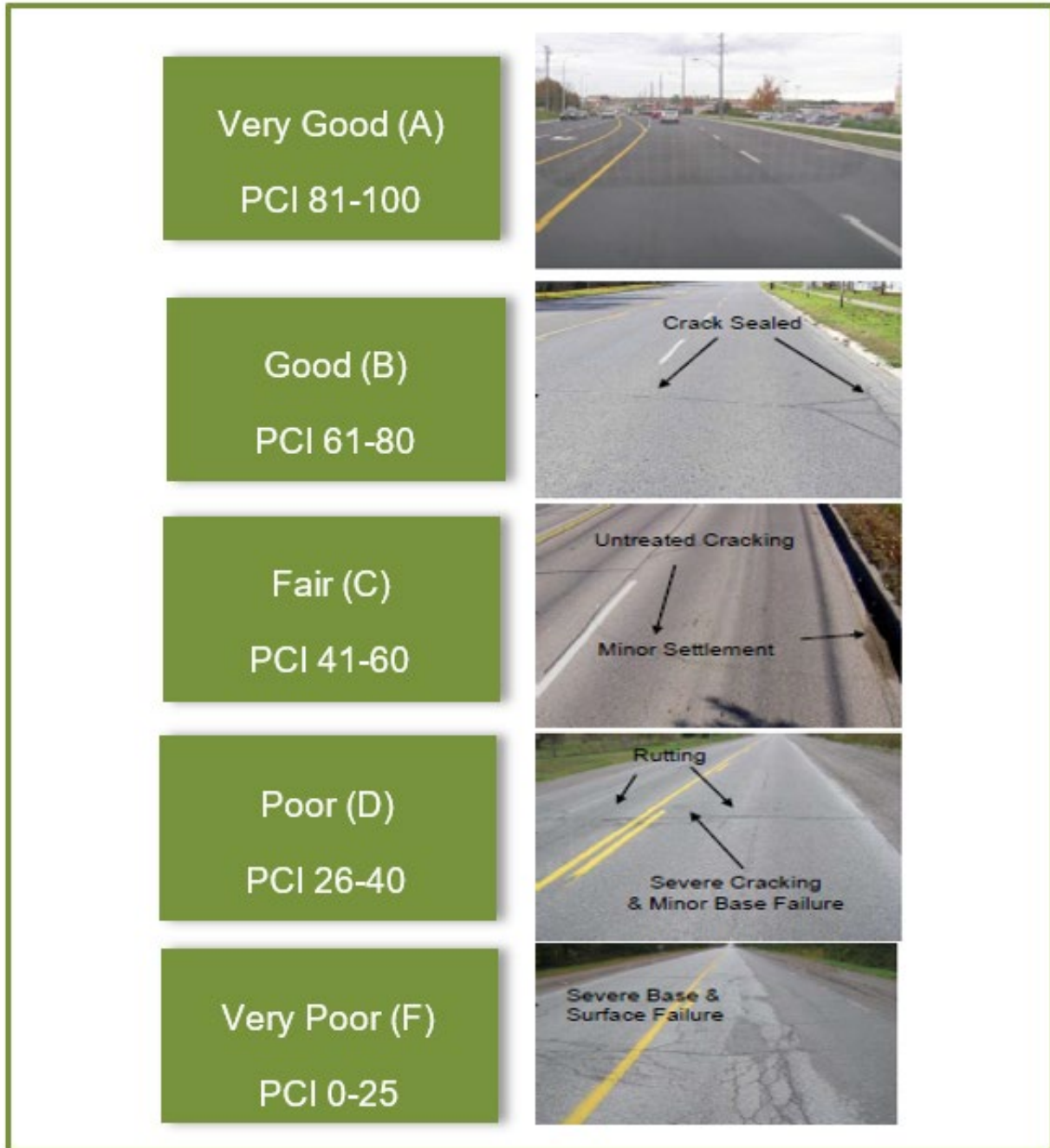










Figure 4: Structure BCI Condition Ratings

Rating	Bridge Condition	Culvert Condition	Description/How Condition Impacts Use
<p>Very Good (BCI 80-100)</p>			<p>New bridge or culvert, no signs of deterioration, use not affected</p>
<p>Good (BCI 70-79)</p>			<p>Minor signs of deterioration, minor levels of maintenance required, use not affected</p>
<p>Fair (BCI 60-69)</p>			<p>Signs of deterioration, exceeding levels of maintenance, may require load posting</p>
<p>Poor (BCI < 60)</p>			<p>Significant deterioration, approaching end of service life, may require load posting</p>

Technical Levels of Service

Ontario Regulation 588/17 mandates reporting on prescribed technical metrics for roads, bridges, culverts greater than 3m and stormwater management assets.

Table 4: Technical Levels of Service per Ontario Regulation 588/17

Technical Metric	Target	Year of Measure		
		2021	2022	2023
Network average pavement condition index (PCI)	Network average PCI rating of 65	52.0	52.0	55.4
PCI summary of every regional road segment in a network-weighted average. PCI is rated between 0 to 100, with 100 being the best condition and 0 being the worst condition.				
Number of lane km's of regional roads per Durham's land area (km ²).	To achieve a target of 1.1	0.97	0.97	0.97
This measure reports the number of Regional road lane kilometres as a proportion of the size of the Region's land area (2,537 km ²). This measure identifies growth in the Regional road network over time relative to its land size.				
Weighted average bridge condition index value for structures	Inventory weighted average BCI rating of 70 for Bridges	75.9	76.6	76.9
	Inventory weighted average BCI rating of 70 for culverts (> 3m)	76.6	74.2	74.1
Summary of the inventory weighted average bridge condition index (BCI) value for bridges and culverts greater than 3m.				
Number of bridges with loading and dimensional restrictions	To have no bridges with loading or dimensional restrictions	1	2	2
This measure summarizes the number of bridges that have loading and/or dimensional restrictions. The target is 0 to ensure the transportation network is fully accessible, functional and available for all users.				

Technical Metric	Target	Year of Measure		
		2021	2022	2023
Number of culverts with loading and dimensional restrictions	To have no culverts with loading or dimensional restrictions	1	1	0
<p>This measure summarizes the number of culverts that have loading and/or dimensional restrictions. The target is 0 to ensure the transportation network is fully accessible, functional and available for all users.</p>				
Percentage of bridges in the municipality with loading or dimensional restrictions	To have 0% of bridges with loading or dimensional restrictions	1%	2%	2%
<p>This measure provides the percentage of the Region’s bridges that have a loading or dimensional restriction. The target is 0 to ensure the transportation network is fully accessible, functional and available for all users.</p>				
Percentage of culverts in the municipality with loading or dimensional restrictions	To have 0% of culverts with loading or dimensional restrictions	1%	1%	0%
<p>This measure provides the percentage of the Region’s culverts that have a loading or dimensional restriction. The target is 0 to ensure the transportation network is fully accessible, functional and available for all users.</p>				
Percentage of properties in municipality resilient to a 100-year storm	90% of properties resilient to 100-year storm	94%	N/A	95%
<p>2021 was the first year technical levels of service for stormwater were analyzed/reported. These measures will continue to be reviewed and refined for future Asset Management Reports.</p>				
Percentage of the municipal stormwater management system resilient to a 5-year storm	100 per cent of the SWM system resilient to a 5-year storm	98%	N/A	98%
<p>2021 was the first year technical service levels for stormwater were analyzed/reported. These measures will continue to be reviewed and refined for future Asset Management Reports.</p>				

Note the Region does not have unpaved, collector or local roads and does not report on these technical metrics.

Performance Measures

Beyond community service levels and technical reporting requirements of Ontario Regulation 588/17, Transportation tracks a number of performance metrics to measure how well assets are meeting service level objectives.

Table 5: Transportation Performance Measures

Performance Measures	Target	Year of Measure		
		2021	2022	2023
Road Condition Distribution	No more than 25 per cent of Inventory is in Poor to Very Poor Condition	42%	42%	44%
Measure identifies percentage of road assets (lane kms) falling into the Poor to Very Poor condition category (not weighted by replacement value). Target recognizes that implementation of additional funding generally is phased over time. Condition distribution provides a clearer overall picture rather than just focusing on one asset condition. Current/Baseline measure data is the percentage of total lane kms.				
Structure Condition for Bridges and Culverts	85 per cent of Structures Rated Good to Very Good	69.9%	71.3%	67.6%
This measure summarizes the percentage of bridges and culverts (quantity) that are rated in Good to Very Good condition based on the bridge condition index (BCI) value (not weighted by replacement value).				

1.6 Transportation Capital Forecast

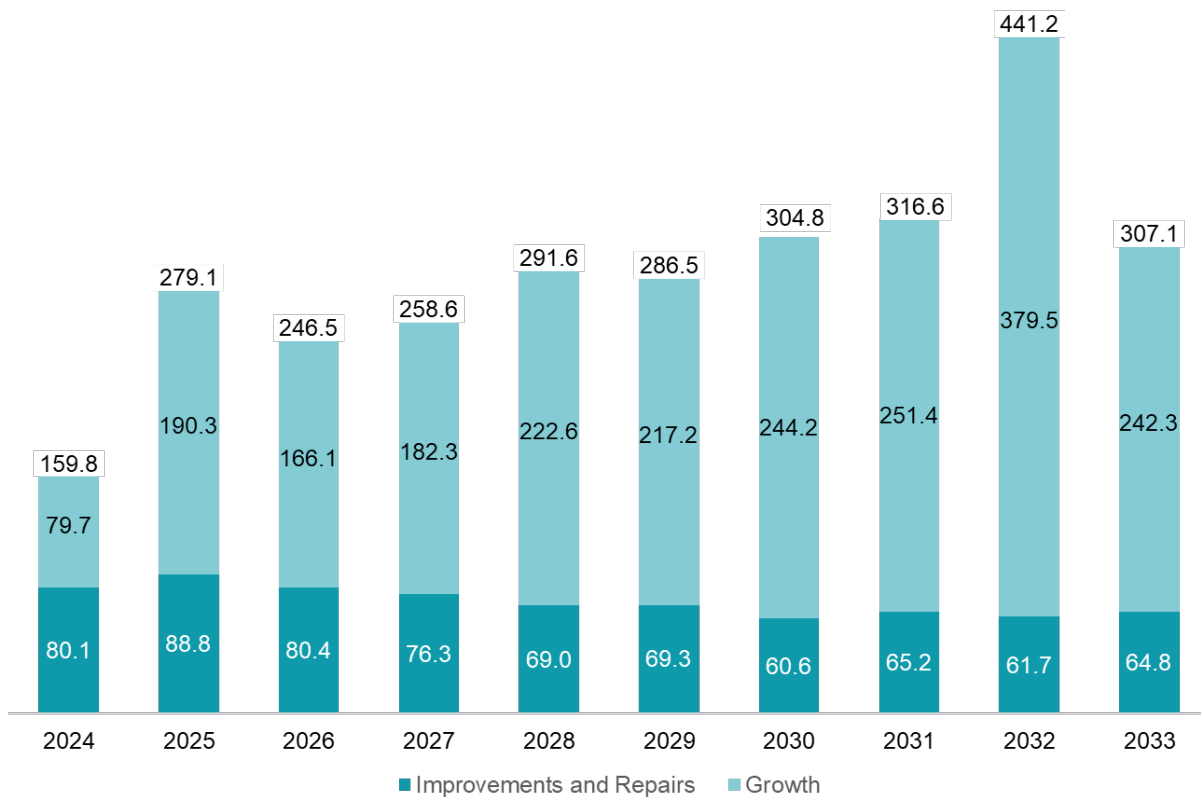
Major capital investments for Transportation identified through the 2024 business planning and budget process (improvements and repairs and growth) total \$159.8 million and includes:

- \$38.7 million for road rehabilitation projects, \$18.1 million for bridge rehabilitation and replacement projects.
- \$32.4 million in Transportation infrastructure to support bus rapid transit which is partially funded through the Investing in Canada Infrastructure Program Transit Stream (ICIP). This initiative will contribute to reducing community GHG emissions.
- \$1.5 million in capital expenses related to increasing safety on the Regional road network.

The total transportation capital expenditure over the 2025-2033 forecast period is estimated at \$2.7 billion. Key highlights of the forecast include:

- Annual average investment of \$47 million throughout the forecast period to increase the average pavement condition of the Region’s road network.
- The forecast also includes significant costs related to bridge rehabilitation and replacements, including pressures in 2025 and 2026 related to the advancement of rehabilitation work on three bridges in coordination with Metrolinx as it implements the Bowmanville GO Rail Expansion project.
- \$12.4 million in cycling infill projects over the forecast to support the Regional Cycling Plan.

Figure 9: Transportation Capital Forecast (\$ millions)*



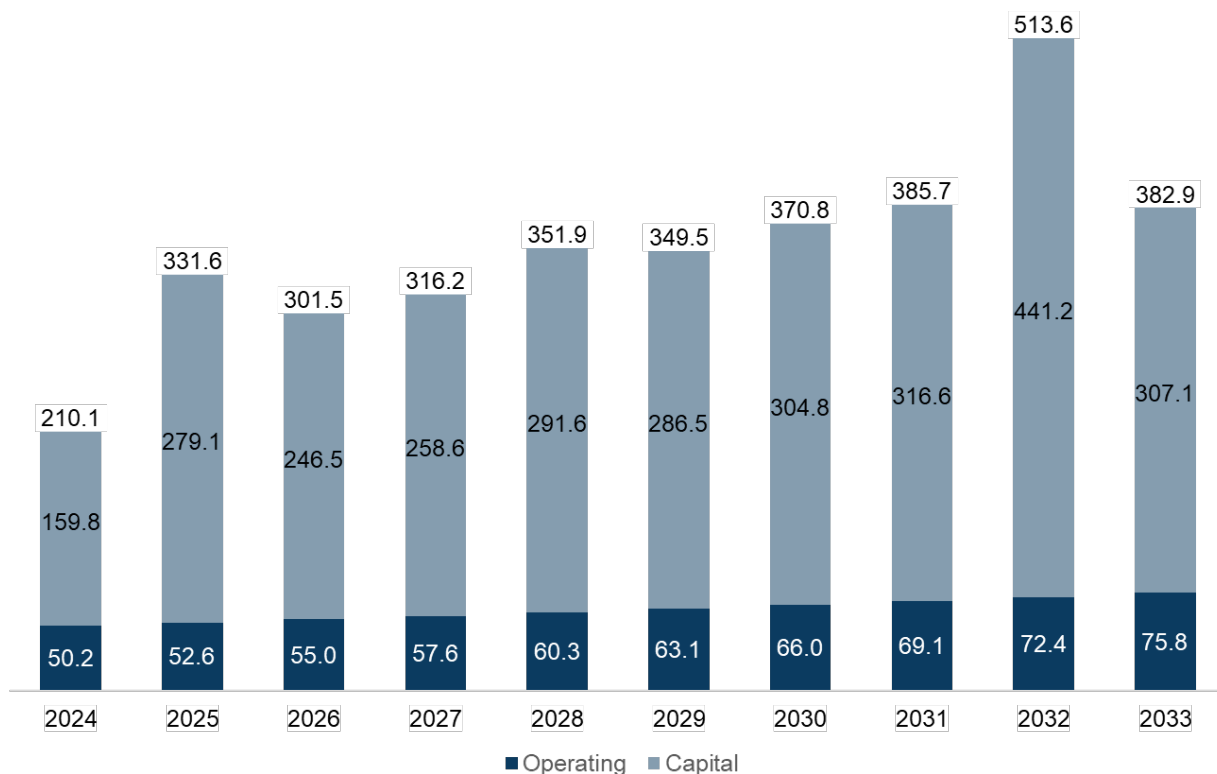
*Improvements and Repairs and Growth may not add to Total due to rounding.

1.7 Lifecycle

Transportation lifecycle activities include capital investments and operating activities required to meet service needs at the lowest cost and risk for Regional roads, bridges, culverts, stormwater management systems assets and traffic systems over their entire useful lives.

Figure 5 illustrates operating and capital lifecycle costs for the Transportation asset class.

Figure 5: Lifecycle Costs Transportation Operating and Capital (\$ millions)*



*Operating and Capital may not add to Total due to rounding.

Total operating lifecycle expenditures for Transportation totals \$622.1 million over the 2024 Budget and nine-year forecast period (2025 to 2033) while capital expenditures total \$2,891.7 million over this period.

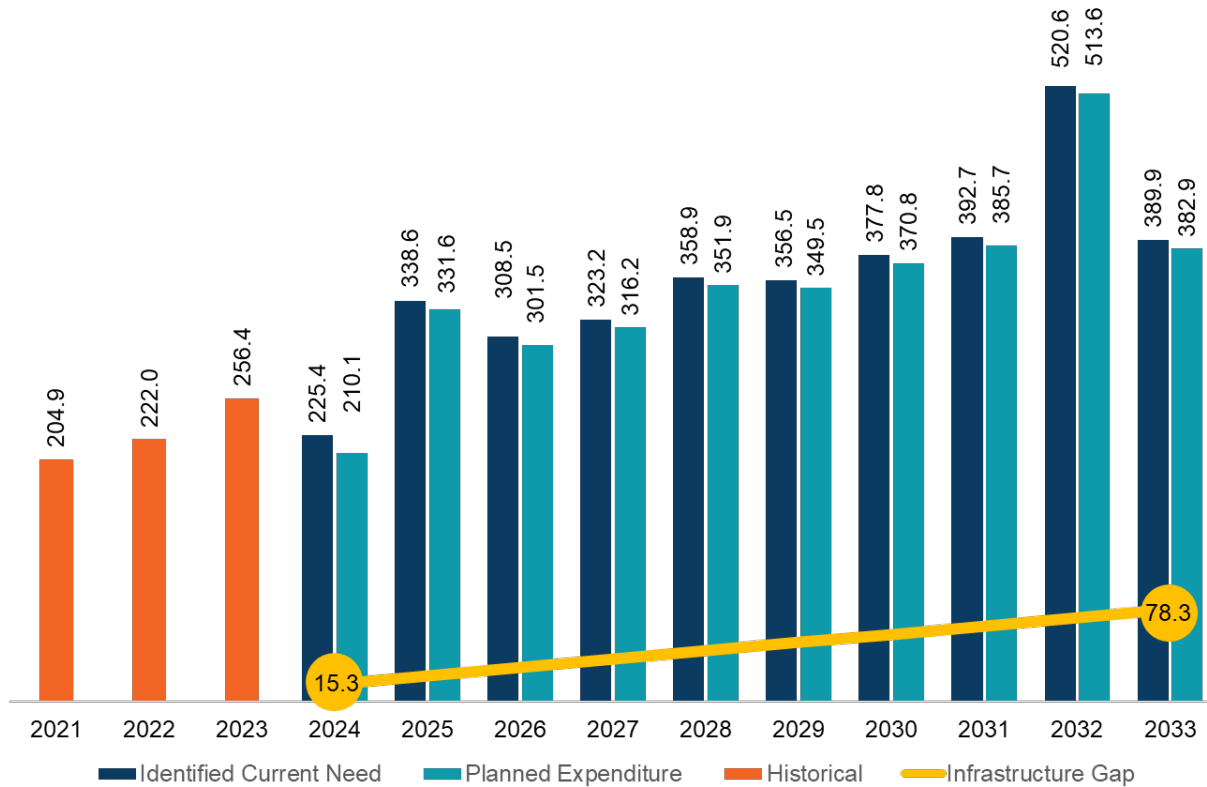
Lifecycle Activities

Staff in various service areas of Transportation (Roads, Structures and Traffic) have undertaken an analysis to forecast the current funding required to optimally sustain current service levels. Figure 6 illustrates historical lifecycle costs as well as identifies an infrastructure gap for the Transportation Asset class as a whole. Any rehabilitation or replacement work required to meet health and safety or legislative standards are reflected in the planned total expenditures.

In 2024, the infrastructure gap is estimated at \$15.3 million. Based on currently planned expenditures this infrastructure gap increases to \$78.3 million by 2033.

Further details on lifecycle costing and the identified infrastructure gap are provided in the subsections that follow.

Figure 6: Transportation: Lifecycle Gap Analysis (\$ millions)



Roads

Timely road maintenance and rehabilitation lifecycle activities can extend the useful life of a road avoiding costly, premature replacement and improve PCI ratings for the Regional roads network. Figures 7 and 8 illustrates how following rehabilitation and maintenance guidelines can prolong the useful life of a road.

Figure 7: Preventative Maintenance Impact on Road Replacement (High Volume Urban)

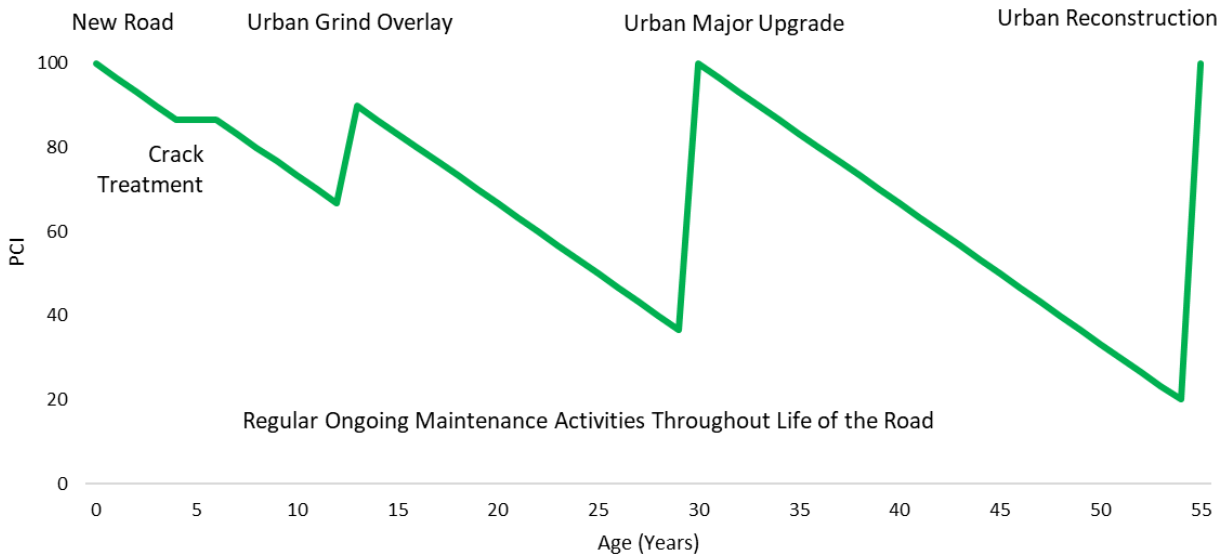
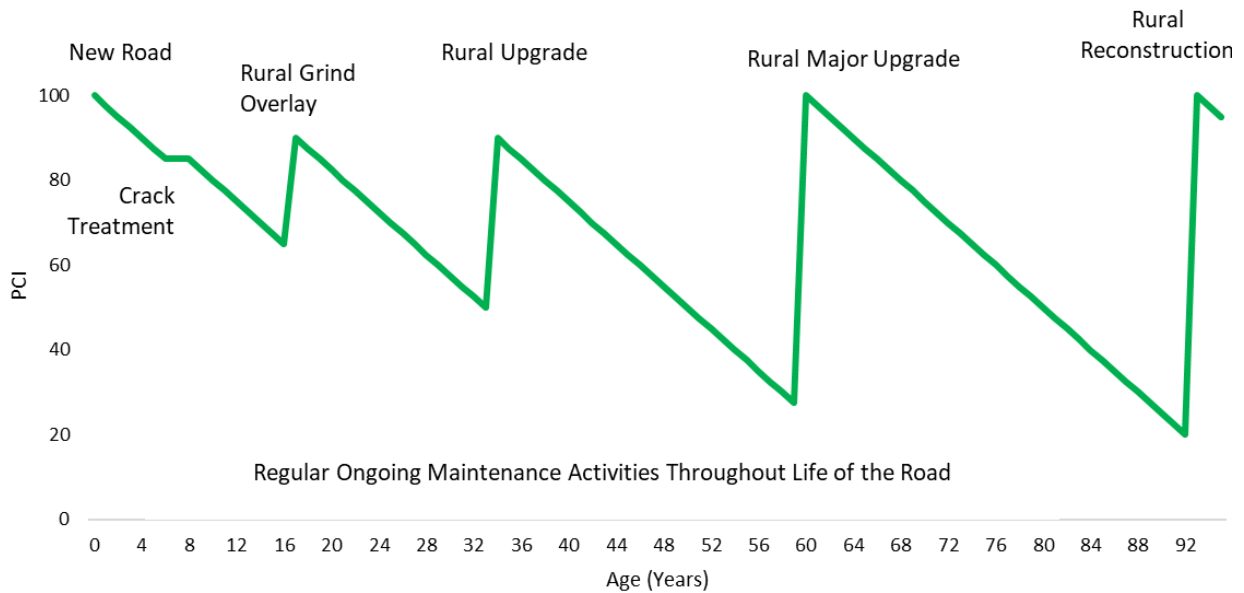


Figure 8: Preventative Maintenance Impact on Road Replacement (Low Volume Rural Roads)



The Region uses a road rehabilitation optimization software program, along with road treatment guidelines (Table 6), and the consideration of other factors (e.g., volumes), to determine the timing and type of treatment to be applied within the confines of available funding.

Table 6: Road Maintenance Guideline

Activity	PCI Criteria	PCI Reset
Rural/Urban Crack Treatment	PCI >80<= 90	Maintain
Rural Grind Overlay	PCI >65<= 75	90
Rural Upgrade	PCI >35<= 65	90
Rural Major Upgrade	PCI =>20<= 35	100
Rural Reconstruction	PCI <20	100
Urban Grind Overlay	PCI >45<= 70	90
Urban Major Upgrade	PCI >30<= 45	100
Urban Reconstruction	PCI<= 30	100

The exact timing and type of road lifecycle treatment can vary due to car and truck volumes and strategic prioritization decisions. For example, there may be instances where it would be beneficial to allow the pavement condition of a particular road to reach the next suggested treatment type to align timing of rehabilitation works.

In addition to maintenance activities, staff must undertake other ongoing operating activities to ensure that Regional roads deliver their expected levels of service. Some key non-maintenance operating lifecycle activities include winter plowing, roadside dust control, and overhead (payroll, communication expenses, vehicle fuel) at facilities and depots.

The identified current need for roads is not met in planned expenditures resulting in a cumulative infrastructure funding gap of \$78.3 million by 2033. Identified current needs represents a backlog of reconstruction or rehabilitation of roads falling below a PCI of 65. Planned expenditures reflect prioritizing road investments and an overall slower pace of improving network road conditions.

Bridges and Culverts (greater than 3m)

The bridges and culverts greater than 3m are inspected biennially, where a Bridge Condition Index (BCI) is calculated that assists in informing which treatment shall be applied to structures to maintain or improve their condition. The BCI is not used to rate or indicate the safety of a bridge or culvert. Any safety issues are immediately reported to the Region by the inspector for immediate action and repair.

The Region's bridge maintenance and repairs program and culvert maintenance and repairs program are essential to maintaining the Region's bridge network in a safe and optimal condition and extending their useful life at the lowest cost to taxpayers.

In addition to maintenance activities, staff must undertake other ongoing operating activities to ensure that Regional structures deliver their expected levels of service. Some key non-maintenance operating lifecycle activities include tree and lawn cutting, bridge cleaning/washing, and overhead (staff support and administrative expenses).

The current approved budget and planned nine-year forecast are meeting service needs for bridges and culverts, as such there is no identified infrastructure funding gap.

Traffic

The capital traffic program targets and prioritizes annual modernization needs of aging traffic signal equipment (typically traffic signal controllers) to improve reliability, functionality, and operating efficiency as well as to address the replacement for LED traffic signals.

In addition to capital replacement and improvement activities, staff must undertake operating activities to ensure that the traffic network delivers its expected levels of service. Some operating costs include overhead (payroll, communication expenses, uniforms, software), signal maintenance and systems and a portion of facility costs for 101 Consumers Drive in Whitby.

The planned expenditures deliver traffic signal capital improvements according to forecast and approved schedules which result in improved service over the nine-year forecast period without the risk of premature replacement of assets. It is important to note that the approved budget and forecast poses no health and safety risk as compared to the identified current need scenario.

Going forward, lifecycle costing for Transportation will be refined including refining assumptions to identify needs and further defining traffic service levels. These improvements will be reflected in future asset management reports and lifecycle gap analysis.

1.8 Climate Change

Climate Mitigation: Transportation Strategies to Reduce GHG Emissions

The Durham Region Corporate Climate Action Plan has set targets to achieve net-zero GHG emissions by 2045. The corporate GHG inventory related to Transportation assets includes emissions associated with Works Depots used to support the operating and maintenance of the Regional Road network and from operating traffic signals. GHG emissions from Transportation assets represent a very small portion of overall corporate emissions.

Climate Adaptation: Increasing the Resiliency of Transportation Assets

Staff continue to assess transportation strategies to mitigate against the impacts of a changing climate and have already integrated several considerations into Regional business and financial plans.

Risk and climate related mitigation programs for 2024 include:

- Continuation of the Uninterrupted Power Supply (UPS) for traffic signals to ensure adequate backup power for key intersections (\$0.5 million);
- Paved shoulders for rural road construction projects where feasible (as recommended in the Transportation Master Plan);
- Other ongoing traffic initiatives including \$0.6 million for Intelligent Transportation Systems (ITS) projects, \$1.0 million for Accessible Pedestrian Signal (APS) installations, and \$1.5 million for roadway safety program and Durham Vision Zero Program; and
- Implementation of the Region's Light-Duty Fleet Electrification Plan for corporate light duty fleets

Moving forward, staff will continue to investigate, monitor, and explore ongoing proactive strategies and programs, which help prevent adverse climate impacts to roads and structures including:

- Resilient Asphalt: Monitoring the impacts of climate changes on the performance of asphalt and concrete products used in regional roads construction, with product specifications adjusted as needed to mitigate and enhance materials' performance;
- Adaptive Structures (culverts, bridges and storm sewers): Monitoring of the impacts from increased storm intensity on the capacity and integrity of regional structures;
- Build on flood risk and vulnerability assessment work completed with the Conservation Authorities in 2021 – 2023 to incorporate flood risk data into corporate decision-making that informs capital planning and asset management for critical infrastructure by expanding flood risk assessment work into areas of the Region where significant development is planned over the coming decades;
- Embankment and Erosion Control: Adjusting specifications and design criteria to mitigate erosion. Road shoulders are primed with liquid asphalt and liquid calcium chloride to control dust and erosion with frequent inspections of erosion prone areas; and

- Road Safety and Response: State-of-the-art road weather information systems to monitor weather/pavement conditions (e.g. infrared road temperature sensors).

Staff will continue to ensure asset management plans advance long-term and effective responses to climate change.

1.9 Risk Assessment

Table 7 includes a sample of identified risks for the Region’s Transportation assets in achieving its service level standards as well as the mitigation controls to address these risks.

Table 7: Risk Mitigation Strategies

Risk	Mitigation
Extended power outage	Ensure standby power at traffic intersections and Traffic Operations Centre. Ensure effective emergency, contingency and business continuity plans.
Asset structural failures or impacts to asset effectiveness	Optimization of asset life cycles, proactive maintenance and cleaning. Asset Management database, inspections and patrols. Pest control programs (e.g., beaver damage to culverts, bridges). Design considerations for future storm events. Effective emergency, contingency and business continuity plans. Adequate redundancies and proactive detours and closures where required.
Extreme wind events and storms beyond existing capacity/response capability affecting roads, structures and sites.	Adequate redundancies and proactive detours and closures where required. Effective emergency, contingency and business continuity plans (REMS). Post-storm clean-up protocol, assessments and improvements.

Risk	Mitigation
<p>An increase in winter freeze-thaw cycles and temperatures at or near 0°C</p>	<p>Extensive winter control programs (e.g., salt management plan).</p> <p>State-of-the-art weather systems and Roadway Condition Advisory System.</p> <p>Optimization of asset life cycles including proactive maintenance.</p> <p>Design considerations and erosion control (roads, shoulders, structures).</p>
<p>Potential for road washouts/ditch flooding and overland flooding that could cause contaminant migration (e.g., road salt, oil, grease)</p>	<p>Optimization of asset life cycles, proactive maintenance and cleaning.</p> <p>Inspections and patrols.</p> <p>Effective emergency, contingency and business continuity plans (REMS).</p> <p>Adequate redundancies and proactive detours and closures where required.</p> <p>Design considerations and erosion control (roads, shoulders, structures).</p>
<p>Motor vehicle road incidents</p>	<p>Design, inspection and maintenance standards.</p> <p>Road signage, roadside protection and inventory assessments.</p> <p>Effective emergency, contingency and business continuity plans.</p> <p>Extensive Winter Control Program (RCAS) and Roadway Event Management System (e.g., speed and condition warnings).</p> <p>Implementation of the Region’s Vision Zero Program.</p> <p>Proactive detours and closures where required for safety.</p>



Durham Region Transit

Asset Class Report

Replacement
Value

\$269.1M

Average
Condition

VERY GOOD

Service Level Objectives

Increase ridership and enhance customer experience.

Develop and operate a transit system that is available, consistent, direct, frequent and seamless thereby providing enhanced mobility for Durham Region residents and visitors with an attractive alternative to the personal car.

Increase operational effectiveness through asset management planning for future growth and existing assets.

Maintain an acceptable condition standard for all Regional Transit assets.

- 161 Conventional Buses
- 5 Specialized Buses
- 16 Supervisory Fleet
- 2 Maintenance, Administrative and Bus Storage Facilities
- 2, 638 Bus Pads and Shelters

1.1 Asset Inventory Overview

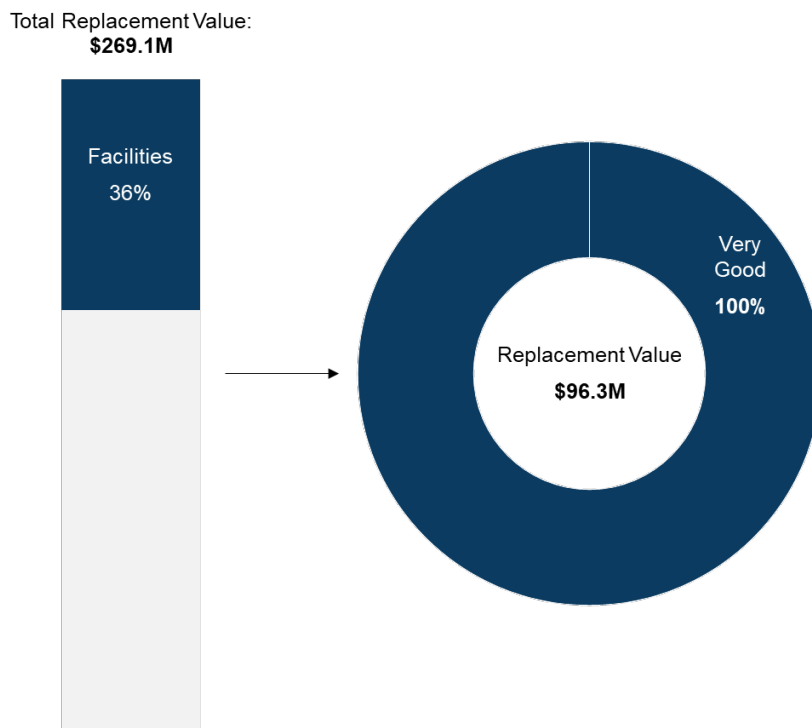
Durham Region Transit’s (DRT) assets consist of a fleet of revenue vehicles, non-revenue vehicles, facilities, hard surface bus stops and shelters, equipment and other supporting assets. Supporting assets include a portion of the Region’s administrative facilities, fleet and equipment that support the DRT.

1.2 DRT Condition Ratings, Replacement Values and Average Ages

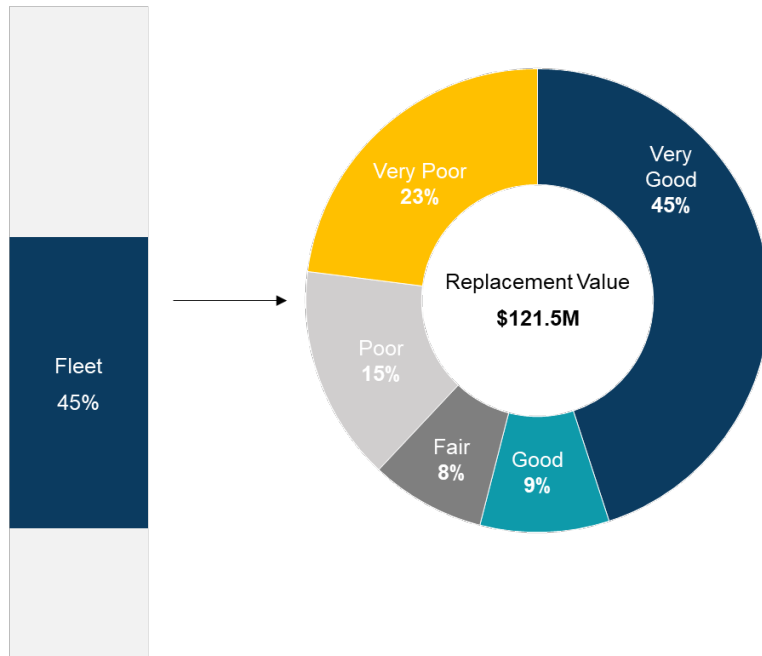
The overall DRT condition rating in 2023 was Very Good. Overall replacement values totalled \$269.1 million, a decrease of \$22.6 million from 2024 which is primarily the result of the 2023 fire and the loss of the Raleigh Transit facility and buses as well as the service delivery transition of demand response transit. These asset reductions are partially offset by inflationary pressures.

Figure 1 below illustrates the condition rating and replacement value of DRT assets.

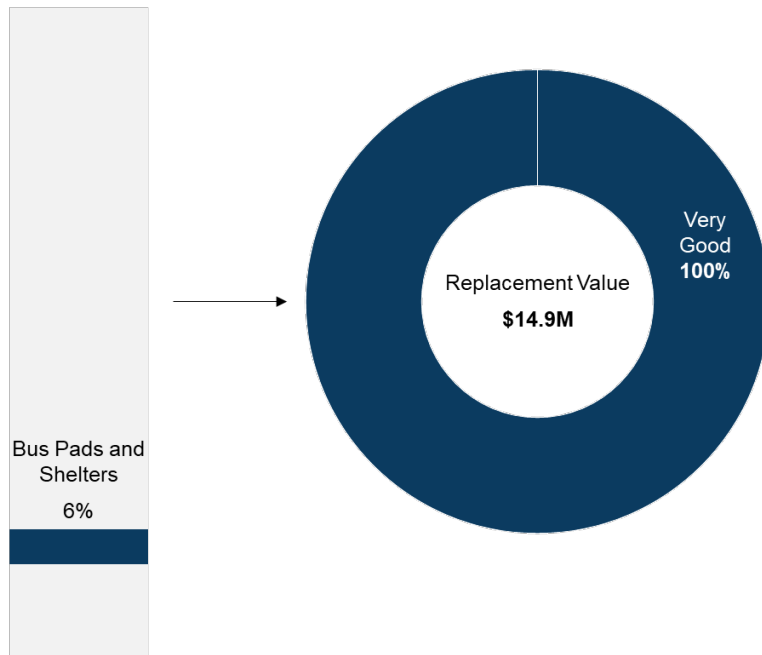
Figure 1: DRT Assets Condition and Replacement Values*

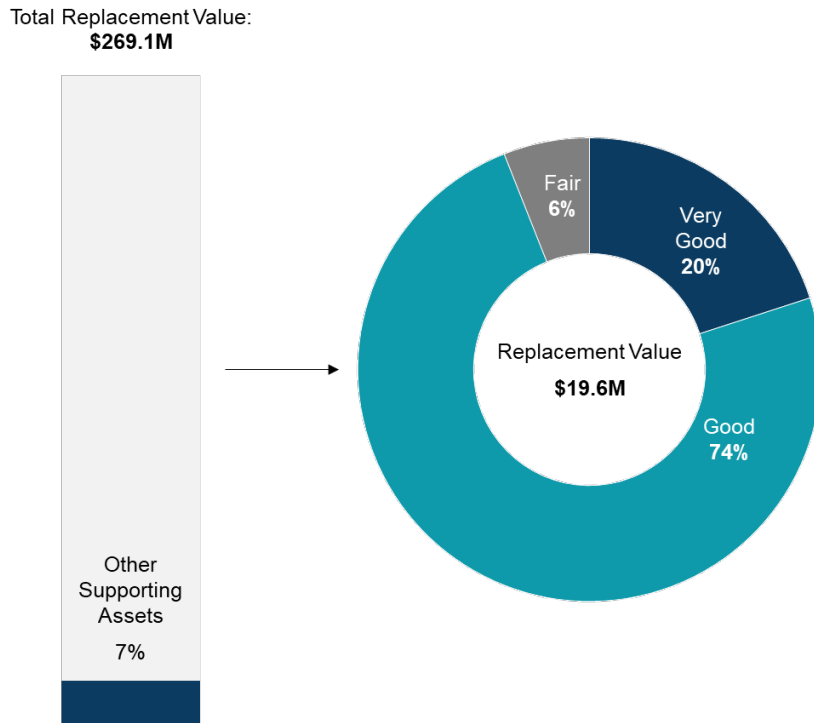


Total Replacement Value:
\$269.1M



Total Replacement Value:
\$269.1M





* Percentages may not add to 100 per cent due to rounding. The condition breakdown does not include the condition for equipment assets as these are pooled assets.

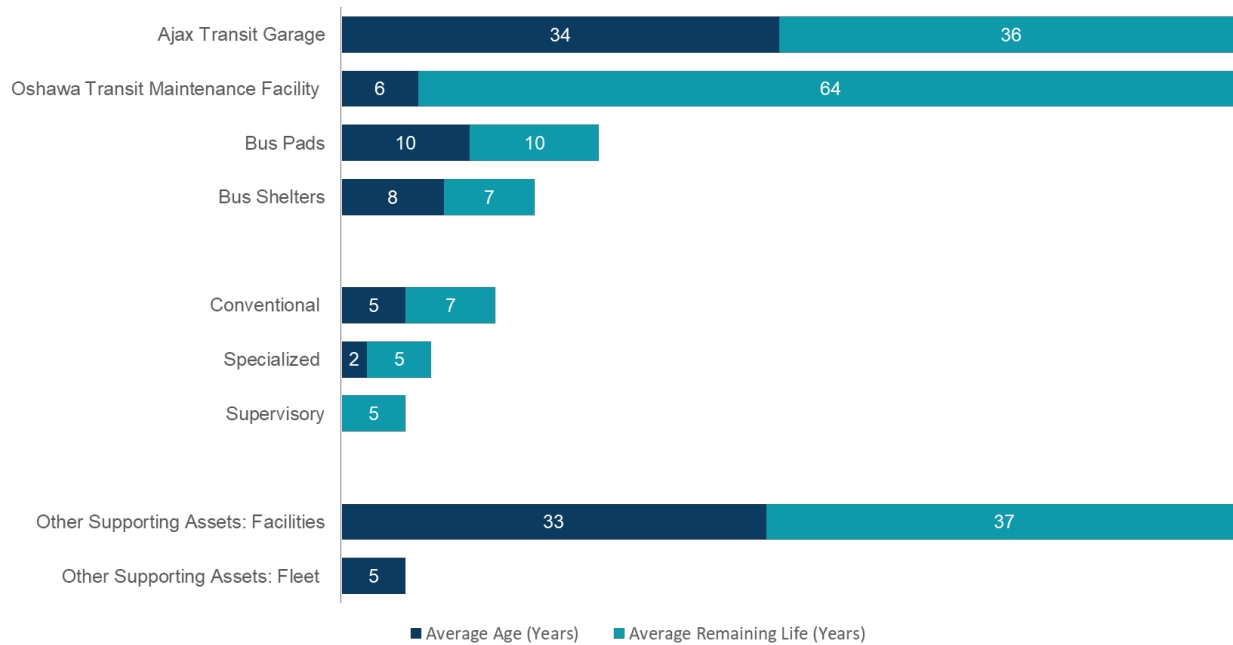
Table 1 outlines the assessment methods used to determine condition ratings.

Table 1: DRT Condition Assessment Methods

Asset Class	Assessment Methods
Facilities	<p>Building Condition Assessments (BCA). Facilities staff undertake high-level surveys where assessments have not yet been undertaken.</p> <p>Condition rating criteria are used as the basis for rating facility sub structures, shells, interiors, and site work, which are considered major building elements evaluated through the BCA assessment.</p>
Bus Stop Pads and Shelters	<p>All bus shelters have been installed since 2016 except for 2 older ones which are in good condition. There is no formal method for assessing the condition of bus shelters however, when there is an issue with bus shelters, they are repaired immediately.</p>
Fleet	<p>Condition rating criteria is based on mileage.</p>

Figure 2 summarizes the average age and remaining asset life of the DRT storage and maintenance garages and fleet as of December 31, 2023. The Transit Maintenance Facility and Ajax Transit Garage are relatively young while ongoing maintenance and rehabilitation has resulted in a Very Good rating. Recovery from the Raleigh bus fire continues to pose operational risk for Durham Region Transit. The 2024 approved budget included funding for the design of the rebuild of this facility.

Figure 2: DRT Average Age and Remaining Useful Life



As of December 31, 2023, the average age of DRT’s conventional fleet is 5 years.

1.3 DRT Community Levels of Service

Table 2 outlines the various Regional Council approved plans, studies, and policies, as well as regulatory and or compliance guidelines that inform DRT’s service level priorities.

Table 2: Plans, Studies, Policies, Procedures, Regulations that Inform Service Levels

Departmental Plans, Studies, Policies, & Procedures
<ul style="list-style-type: none"> • Transit Service and Financing Strategy (2023 – 2032) • Durham Region Transit Demand Responsive Transit Study • Transportation Master Plan • 2024 DRT Business Plans and Budget • Regional Transit 2022 Development Charge Background Study and By-law • Facility Needs Study • Durham Standard which provides a green development standard of net zero facilities for new construction and major facility retrofits for Region-owned facilities (and leased facilities where appropriate) • Regional Official Plan
Regulatory/Compliance Guidelines
<ul style="list-style-type: none"> • Ministry of Transportation Periodic Mandatory Commercial Vehicle Inspections (PMCVI) • Motor Vehicle Inspection Station Licencing & Standards • Public Transportation and Highway Improvement Act • Commercial Vehicle Operators Registration Program (CVOR) • Motor Vehicle Repair Standards • Truck and Bus National Safety Code • Ontario Building Code Standards • Accessibility for Ontarians with Disabilities Act (AODA) • Environmental Assessment Act • Ontario Fire Code

Technical Service Levels and Performance Measures

Asset management staff have identified key asset-related technical service levels and performance measures as noted in Table 3.

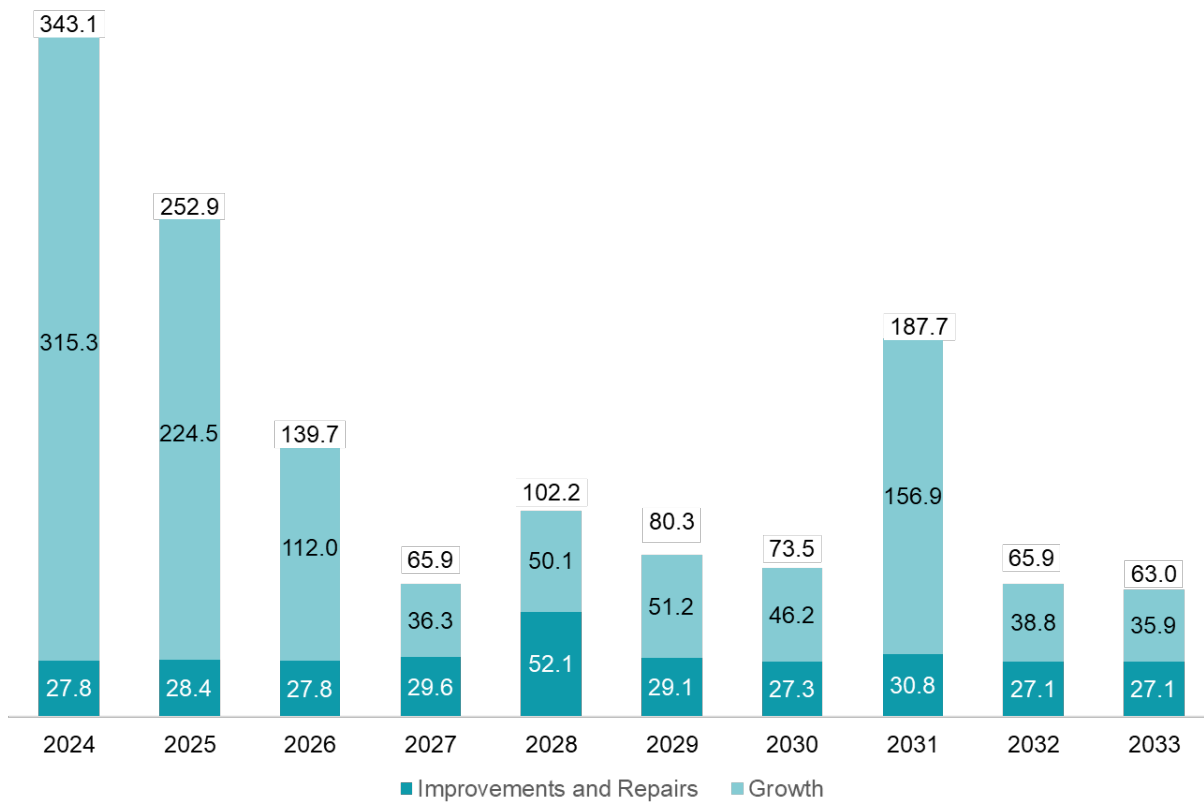
Table 3: DRT Performance Measures

Performance Measure	Target	Year of Measure		
		2021	2022	2023
Average Conventional Fleet Age	Maintain Average Age of Conventional Fleet at 7 years of age	6.4	7.3	7.2
This performance measure captures the average age of the conventional bus fleet.				
Percentage of Conventional Fleet Exceeding 12 Year Useful Life	To allow no more than 10 per cent of conventional bus fleet to exceed 12 years of age or older	8.5%	10.7%	14.0%
This performance measure identifies the percentage of conventional bus fleet which is 12 years of age or older. Typically, it is acceptable to have a small portion of the fleet exceed its useful life to a threshold of 10 per cent.				
Kilometres per litre of Diesel Fuel	To achieve 2.1 kilometres per litre of diesel fuel	2.3	2.5	TBC
This performance measure captures the fuel economy of DRT's conventional fleet by calculating the number of kilometres that is achieved for each litre of diesel fuel. Target is based on industry standards.				

1.4 DRT Capital Forecast

Major capital investments for DRT identified through the 2024 business plans and budget process total \$343.1 million for 2024 and \$1,031.2 million over the 2025 to 2033 forecast period.

Figure 3: Durham Region Transit Capital Forecast (\$ millions)*



*Improvements and Repairs and Growth may not add to Total due to rounding.

The 2024 DRT Business Plans and Budget include the following significant capital projects:

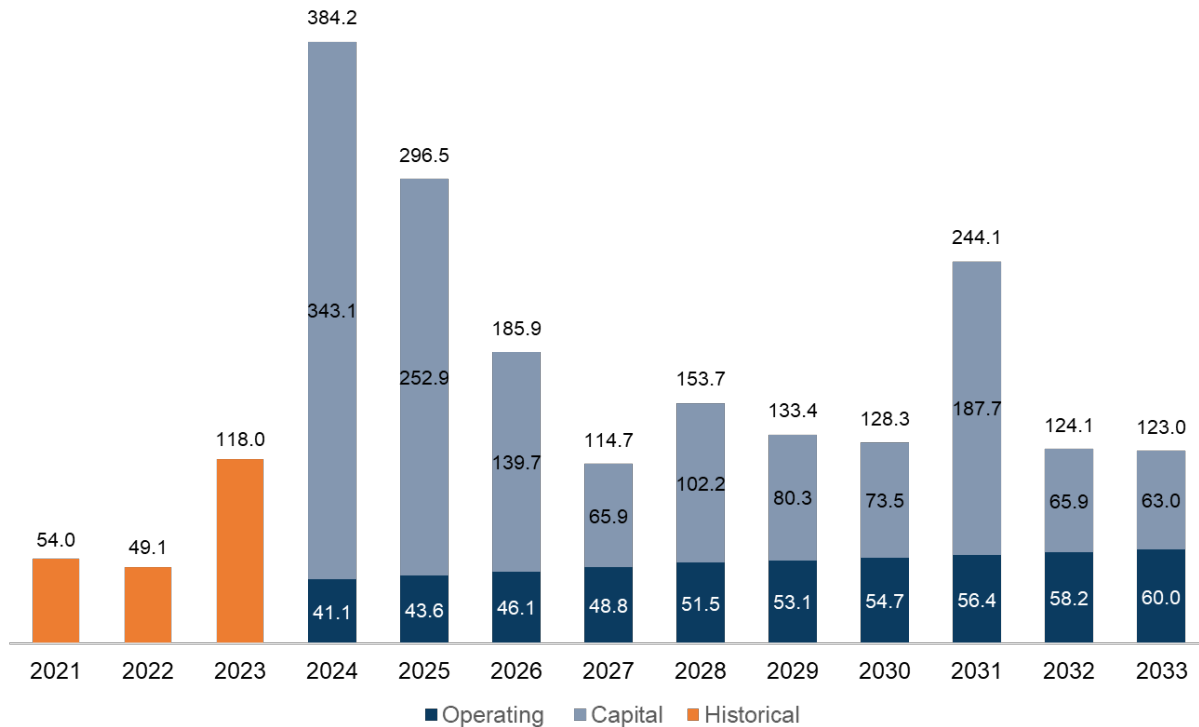
- 34 battery electric buses to be delivered in 2026 (\$59.3 million) (pending approval of federal grant funding);
- Electrical vehicle charging infrastructure and related equipment (\$7.5 million) (pending approval of federal grant funding);
- Construction expenses for DRT’s new indoor bus storage/servicing facility in North Oshawa to support fleet electrification (\$239.7 million) (pending approval of federal grant funding);
- Construction of Harmony Terminal and upgrades to the Pickering Parkway Termination (\$15.0 million)
- Design work for the reconstruction of the Raleigh storage facility (\$8.7 million); and
- Bus stop infrastructure (\$5.7 million), including infrastructure partially funded by the federal and provincial Investing in Canada Infrastructure Program (ICIP). Acquisition of two replacement BRT buses (\$1.4 million).

1.5 Lifecycle

Durham Region Transit’s maintenance and rehabilitation lifecycle activities aim to extend the useful life of assets and improve service delivery.

Figure 4 illustrates capital and maintenance lifecycle costs for DRT.

Figure 4: Lifecycle Costs Durham Region Transit Operating and Capital (\$ millions)*



*Operating and Capital may not add to Total due to rounding.

Fleet Maintenance and Repairs

Vehicle deterioration occurs by component, rather than holistically. DRT maintains the condition of its fleet assets using a three phased approach:

- Annual review of major powertrain components on a bus-by-bus basis;
- A preventative maintenance schedule based on manufacturers’ recommendations and a semi-annual vehicle safety inspection process as regulated by the Ontario Ministry of Transportation.
- Required unscheduled repairs and running repairs.

Fleet preventative maintenance is scheduled when kilometres reach prescribed targets. Kilometers are tracked through nightly recording of kilometers driven for each bus into the fuel reporting software, which is then transferred to Maximo, the Region's maintenance management workorder software system.

Table 4: Preventative Maintenance Schedules for DRT Conventional Fleet

Inspection Type	KMs
A Inspection	Every 10,000 km
B Inspection	Every 20,000 km
C Inspection	Every 40,000 km
D Inspection	Every 80,000 km

DRT targets an expected useful life of twelve years for conventional buses after which point a bus can require significant structural refurbishment and becomes more costly to repair. Both maintenance costs and bus reliability can be impacted as a bus nears the end of its useful life and eventually, the bus will become a spare and used only when necessary.

Facilities Maintenance and Repairs

Facilities deteriorate by component rather than as a whole. Staff in the Facilities area of the Works Department undertake maintenance, repair and rehabilitation activities for these components at optimal times to allow the assets to provide service levels at the lowest risk in the most cost-effective manner.

Maintenance and replacement decisions are informed through the information in the Region's maintenance management workorder software system and Ameresco, the Region's capital asset management workorder planning software system (CAMPs). DCAM staff can better identify and refine forecasted future repair, maintenance, and rehabilitation needs and subsequent cost estimates based on the recording and tracking of past treatments, current condition ratings and needs, useful life, changing compliance, building and energy codes, modernization and return on investment.

Table 6 provides a summary of some useful life guidelines for facility components, which provides some broad time frames for when replacements could potentially occur. Changing compliance, building and energy codes, modernization, return on investment and other specific needs of DRT are also considerations in facility infrastructure decisions.

Table 5: Building Elements’ Useful Life

Less than 10 Years	12 to 20 Years	25 to 50 Years	Over 50 Years
Interior Finishes	Building Envelope	Mechanical Electrical Plumbing Elevators	Structure

1.8 Climate Change

Climate Mitigation: DRT Strategies to Reduce GHG Emissions

The Durham Region Corporate Climate Action Plan has set targets to achieve net-zero GHG emissions by 2045.

DRT’s E-Mission Zero Fleet Electrification Plan outlined DRT’s approach to transitioning all vehicles to zero greenhouse gas tailpipe emission alternatives by 2037 with a focus on battery electric technologies. The plan is aligned with the Region’s Climate Change Action Plan (CCAP) and the 2020-2024 Strategic Plan.

Implementation of Durham Region Transit’s fleet electrification plan continues to advance in alignment with the Transit Service and Financing Strategy (2023 – 2032). Pending approval of federal grant funding, the Region will proceed with the planned purchase of 34 battery electric buses in 2024 (with anticipated delivery in 2026), procurement and installation of related charging equipment at Durham Region Transit’s Raleigh Depot in Oshawa, Westney Depot in Ajax and a new facility in North Oshawa. While transit’s share of the overall corporate carbon footprint may increase as the DRT fleet expands, DRT continues to explore and implement strategies to make transit an attractive alternative to personal vehicles to support community GHG reductions.

Climate Adaptation: Increasing the Resiliency of DRT Assets

The current focus of DRT climate adaptation work includes ensuring effective and up-to-date emergency, contingency and business continuity plans, in addition to adequate standby power and redundancies (e.g., spare parts and vehicles). DRT is also expanding bus shelters, which will increase protection against the potential impacts of a changing climate (e.g., a higher frequency of extreme storms) in addition to the usual impacts of cold and ice related to winter weather.

Climate adaptation will continue to be addressed through the Region’s business planning cycle, including risk management, asset management and long-term financial planning processes to ensure a proactive approach.

1.9 Risk Assessment

Regional staff analyze potential risks to DRT’s assets on an ongoing basis. Table 6 highlights some high impact potential risks and ongoing and planned risk mitigation measures.

Table 6: DRT Risk Mitigation Strategies

Risk	Mitigation
<p>Chargeable Equipment Failure (e.g., engine and/or transmission failure, emission control systems)</p>	<p>Preventative maintenance, repairs, replacements and proper storage of vehicles and equipment.</p> <p>Inspections and maintenance of operational and compliance standards.</p> <p>Inventories of critical parts and spare vehicles and re-scheduling/re-routing.</p> <p>Maintenance protocols and warranties.</p> <p>Driver training and protocols.</p>
<p>Loss of External Utilities or Fuel</p>	<p>Maintain effective up-to-date emergency, contingency and continuity plans.</p> <p>Ensure adequate standby power at DRT facilities and other Region Facilities.</p> <p>Development of fuel shortage plans.</p> <p>Essential services policies and procedures.</p>
<p>Vehicle Collision</p>	<p>Supervisory investigation.</p> <p>Driver screening, training and recertification programs.</p> <p>Compliance and licensing standards.</p> <p>MTO specified procedures inspection audit of Driver Certification Program by Internal Audit Division.</p> <p>Maintain effective emergency and contingency plans.</p>

Risk	Mitigation
<p>Security Breach (e.g., theft, vandalism, terrorism)</p>	<p>On-site/on-bus safety systems and protocols including on-board surveillance system.</p> <p>Geographical Positioning System technology on buses and other vehicles.</p> <p>Durham Region Transit Security Strategy.</p> <p>Maintain effective up-to-date emergency, contingency and continuity plans.</p>
<p>Weather Related (e.g., Winter ice/cold and more frequent freeze-thaw cycles)</p>	<p>Winter control program (e.g., vehicle, shelter and facility warming and/or de-icing and snow removal etc.).</p> <p>In-bus water/ice slip hazard identification and mitigation.</p> <p>Asset management – preventative maintenance (e.g., in-bus HVAC).</p> <p>Post-storm clean-up.</p> <p>Condition audits and inspections.</p> <p>Maintain effective up-to-date emergency, contingency and continuity plans.</p>



Social Services

Asset Class Report

Replacement
Value

\$899.6M

Average
Condition

FAIR

Service Level Objectives

Take care of people by providing high-quality programs and human services that meet the needs of Durham residents at all stages of their lives

- 27 Housing Facilities
- 4 Long-Term Care Facilities
- 4 Childcare Centers
- 12.5 Fleet Vehicles

1.1. Social Services Department Inventory Overview

The Social Service's Department provides direction and management of facilities, vehicles, equipment and other supporting assets for the delivery of Housing Services, Childrens Services and Long-term Care Services for Seniors. Supporting assets include a portion of the Region's administrative facilities, fleet and equipment that support the Region's social services.

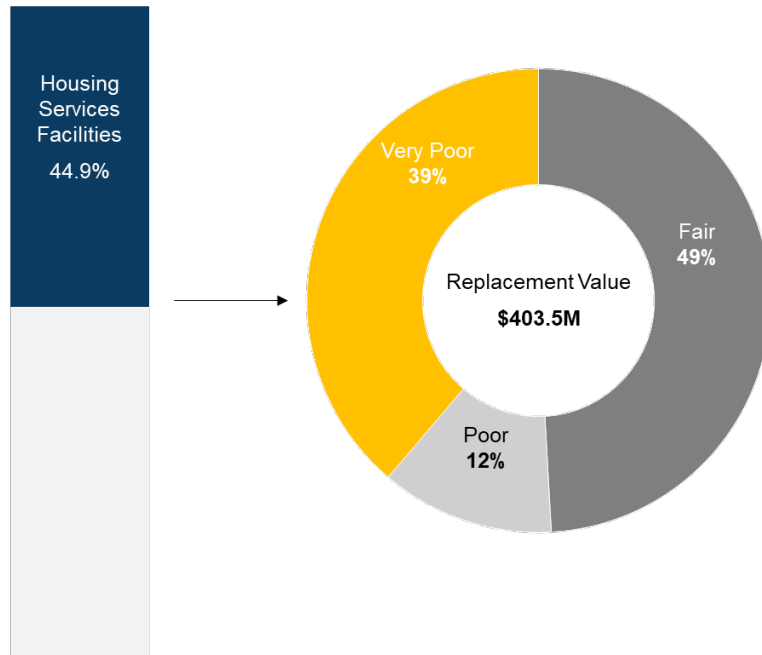
1.2. Condition Ratings, Replacement Values and Average Ages

The overall rating in 2023 was Fair with an overall replacement value of \$899.6 million.

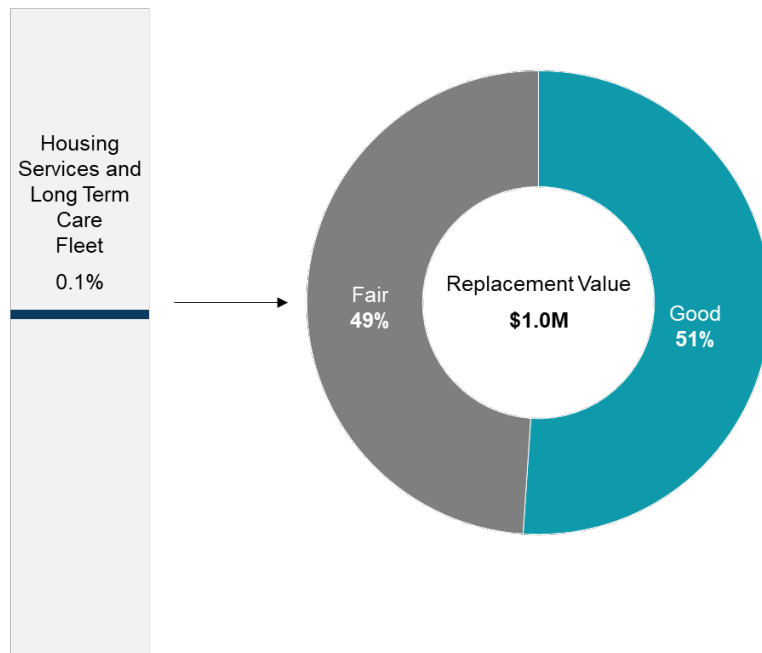
Figure 1 illustrates the condition rating and replacement value of Social Services Department assets.

Figure 1: Assets Condition and Replacement Values*

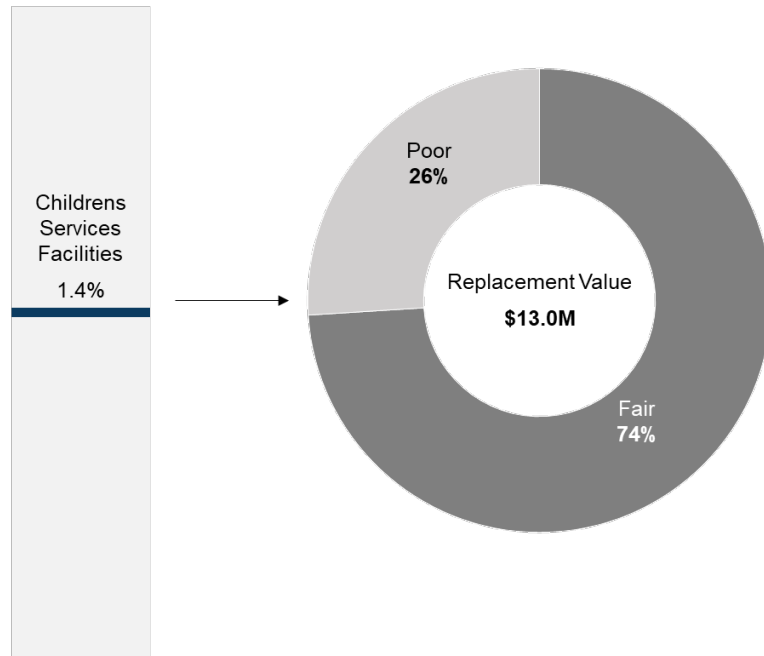
Total Replacement Value:
\$899.6M



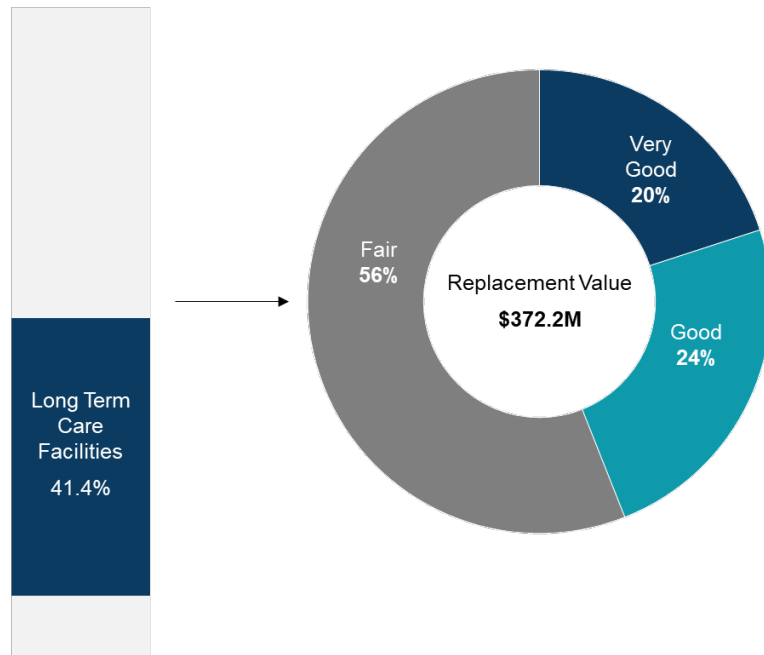
Total Replacement Value:
\$899.6M



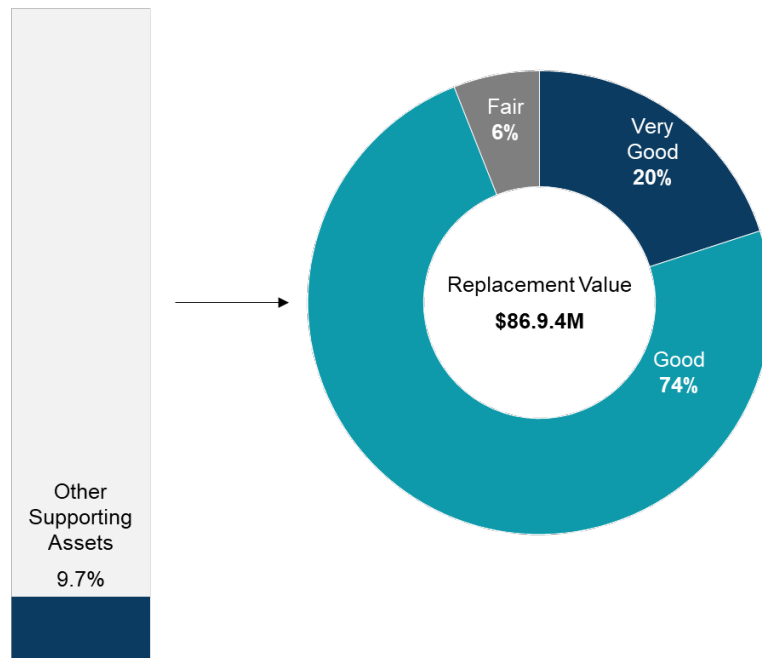
Total Replacement Value:
\$899.6M



Total Replacement Value:
\$899.6M



Total Replacement Value:
\$899.6M



* Percentages may not add to 100 per cent due to rounding. The condition breakdown does not include the condition for equipment assets as these are pooled assets.

1.3. Assessment Methods

Table 1 outlines the assessment methods used to determine condition ratings.

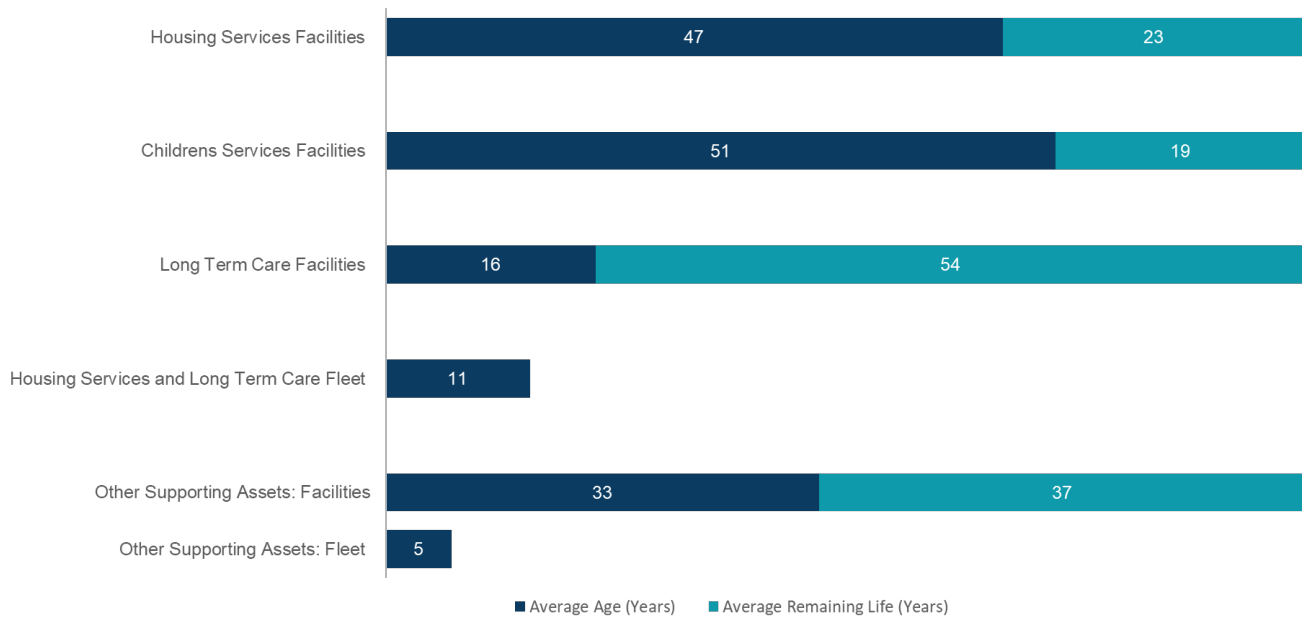
Table 1: Condition Assessment Methods

Asset Class	Assessment Methods
Fleet	Mileage, vehicle inspection
Facilities	Regional staff employ a Building Condition Assessment (BCA) method for assessing the condition of Regionally-owned facilities. For each facility, a BCA is performed on a 10-year cycle by external consultants. BCAs assess the condition of major building elements, sub-structures, shells, interiors, services and site work.

1.4. Average Age and Remaining Useful Life

Figure 2 summarizes the average age and remaining asset life of the Social Services assets.

Figure 2: Average Age and Remaining Useful Life



1.5. Levels of Service and Performance Measurement

Service level objectives and performance targets are set through the Durham Regional Council and approved plans, studies, policies and procedures, as well as through regulatory and/or compliance guidelines.

Table 2: Plans, Studies, Policies, Procedures, Regulations that Inform Service Levels

Regional Plans, Studies, Policies, & Procedures
<ul style="list-style-type: none"> • At Home in Durham • 2023 to 2027 Early Learning and Child Care Service Plan • Annual Business Plans and Budgets • Durham Region’s Strategic Plan
Regulatory Compliance Requirements and Guidelines
<ul style="list-style-type: none"> • Child Care and Early Years Act, 2014 • Long-Term Care Homes Act, 2007 • Fixing Long Term Care Act, 2021 • Various provincial legislation, agreements and guidelines

Technical Service Levels and Performance Measures

Asset management staff have identified key asset-related technical service levels and performance measures as noted in Table 3.

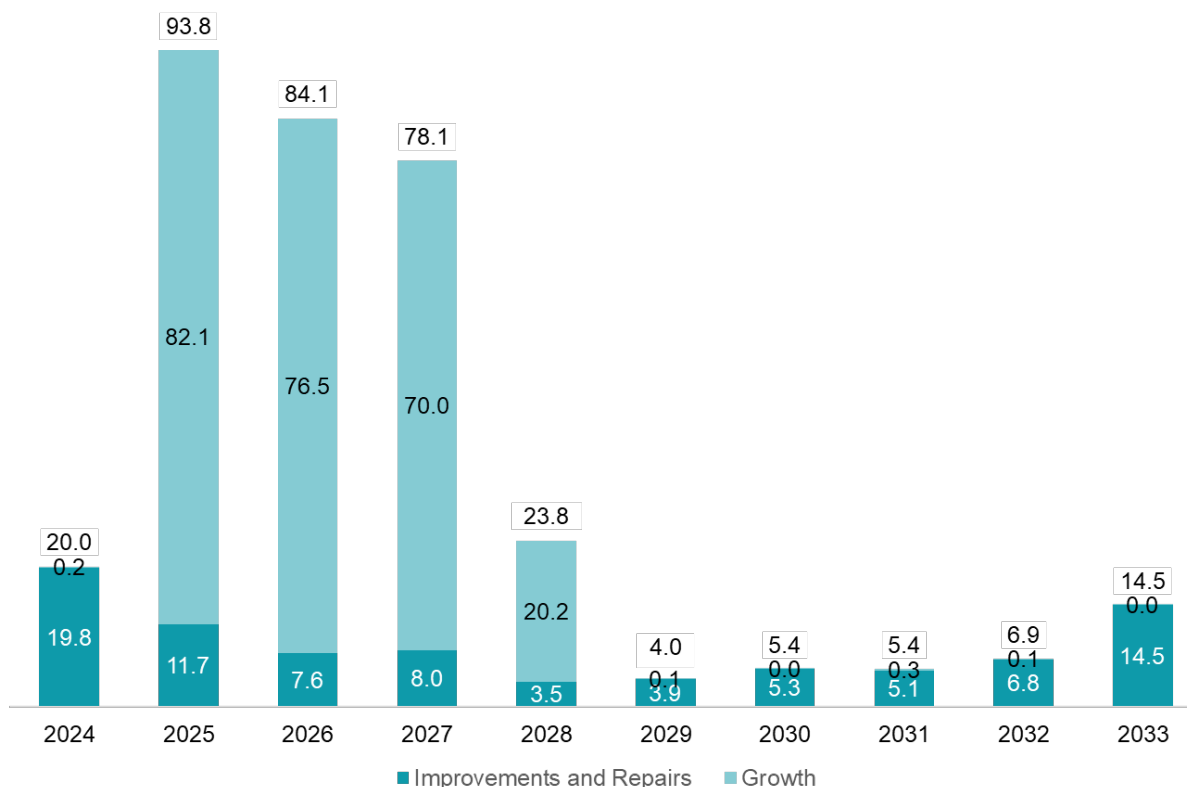
Table 3: Performance Measures

Performance Measure	Target	Year of Measure		
		2021	2022	2023
Facility Condition Index (FCI)	0% of facilities rated as either Poor or Very Poor	49.4%	48.2%	26.3%
Measure used as an indicator of relative facility condition. The FCI is defined as the ratio of current maintenance cost to the current replacement value of the facility. It is recognized that the baseline measure may shift as BCAs are completed and FCI ratings are updated to reflect more up-to-date information.				
% of facilities with completed Building Condition Assessments	100% of facilities to have a completed BCA	0%	0%	14.2%
This measures the percentage of facilities that have had a Building Condition Assessment. Performance target is to complete BCA for all Regionally owned facilities.				

1.6. Social Services Capital Forecast

Major capital investments for Social Services assets identified through the 2024 business plans and budget process (rehabilitation and growth) total \$20.0 million for 2024 and \$315.9 million over the 2025 to 2033 forecast period.

Figure 5: Capital Forecast (\$ millions)*



*Improvements and Repairs and Growth may not add to Total due to rounding.

Highlights of the 2024 capital plan include \$2.4 million to replace aging equipment in the Region’s four long-term care homes including beds, ceiling lifts, kitchen appliances, shower chairs, and furniture.

A major priority for the Region is the redevelopment of the social housing portfolio. The capital forecast for 2025, 2026 and 2027 includes a provision of \$220 million for the redevelopment of two social housing sites. The cost estimates are indicative only and will be further refined and updated in advance of the 2025 Budget and will be informed by the Region’s ongoing work. Significant senior government funding contributions will be required to advance these redevelopments.

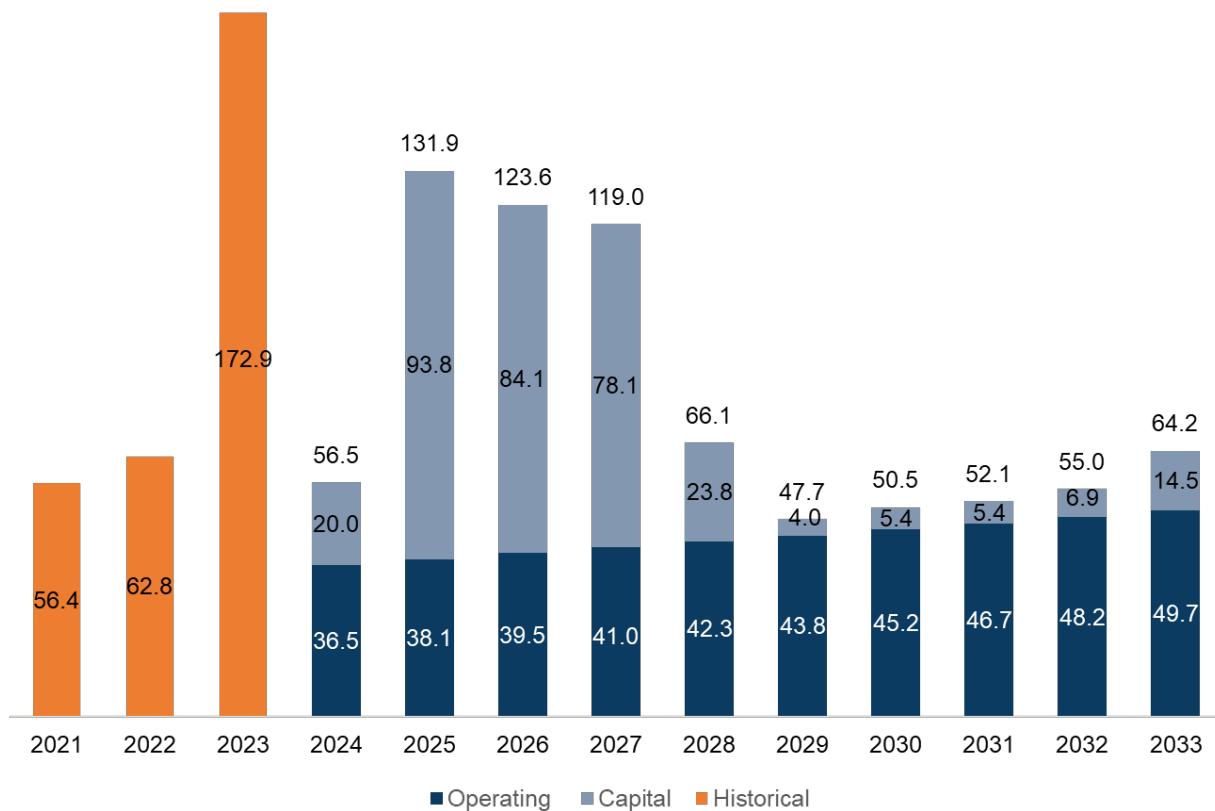
Staff are developing a 10-year Housing Service and Financing Strategy that will be brought forward to Council in conjunction with the 2025 Business Plans and Budget. This strategy will be informed by the Region’s Asset Management Plan and will provide an integrated 10-year operating and capital forecast for Housing Services.

1.7. Lifecycle

Maintenance and rehabilitation lifecycle activities aim to extend the useful life of assets and improve service delivery.

Figure 3 illustrates capital and maintenance lifecycle costs for the Social Services Department assets.

Figure 3: Lifecycle Costs Operating and Capital (\$ millions)*



*Operating and Capital may not add to Total due to rounding.

Moving forward, staff will be further refining lifecycle costing analysis and data collection for assets that will be reported in future asset management plans.

1.8. Climate Change

Climate Change Mitigation

Supporting Council's declaration of a climate change emergency in 2019, the Region continues to integrate a climate lens into the annual business planning and budget process to align corporate capital and operating plans with achieving the Region's greenhouse gas reduction target of net zero by 2045. The Durham Standard provides a green development standard of net zero facilities for new construction and major facility retrofits for Region-owned facilities (and leased facilities where appropriate).

Staff will continue to identify and evaluate opportunities to advance deep energy retrofits of the Social Services facilities over the capital forecast. The completion of the Greenhouse Gas Reduction Pathway Feasibility Studies for up to 55 Regional sites will further support this work and position the Region to pursue outside funding opportunities.

In addition, the Social Services Department will advance the implementation of the Region's Light Duty Fleet Electrification Strategy where operationally feasible.

1.9. Risk Assessment

Table 4 includes a sample of identified risks for the Region’s fleet and facilities in achieving its service level standards as well as the mitigation controls identified to address these risks.

Table 4: Risk Mitigation Strategies

Risk	Mitigation
Loss of Fuel	Maintain effective and up-to-date emergency, contingency and continuity plans. Ensure adequate standby power. Essential services policies and procedures. Audit of fuel purchasing cards. Fuel deliveries and re-routed programs/services and redundancies. Mobile services and on-call service contracts.
Security Breaches and Theft	Onsite safety systems and protocols (e.g., surveillance, patrols, fencing, emergency training, policies and plans). Geographical Positioning System technology on vehicles. Maintain effective and up-to-date emergency, contingency and continuity plans.
Vehicle Accidents	Supervisory oversight. Compliance and licensing standards. Maintain effective emergency and contingency plans.
Equipment Failures	Preventative maintenance and capital replacement programs and plans. External service contracts. Safety codes, warranties and guidelines. Inspections, checklists and accreditations. Proper equipment and vehicle storage. Fleet maintenance re-scheduling and redundancies (e.g., spare vehicles and parts inventory).

Risk	Mitigation
Winter ice/cold and more frequent freeze-thaw cycles	Slip hazard identification and mitigation. Inspections. Maintain effective and up-to-date emergency, contingency and continuity plans.



Solid Waste

Asset Class Report

Replacement
Value

\$395.0M

Average
Condition

VERY GOOD

Service Level Objectives

Responsible for the collection, processing and disposal of garbage, recyclables (until transition to extended producer responsibility) and compost, the collection of special waste such as electronic and household hazardous waste, and the operation of the Durham York Energy Centre

- 7 Facilities
- 6 Fleet Vehicles

1.1. Solid Waste Inventory Overview

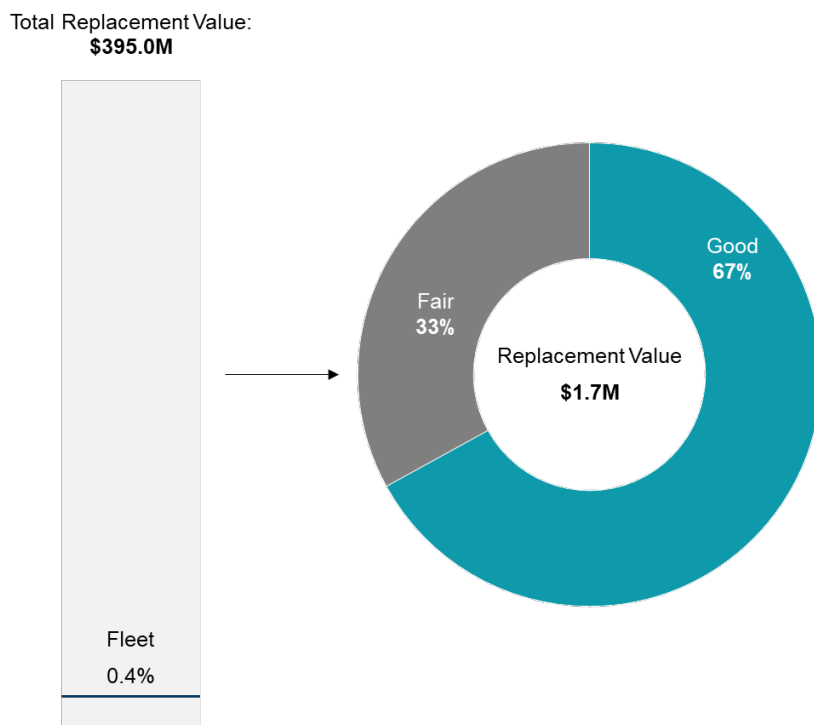
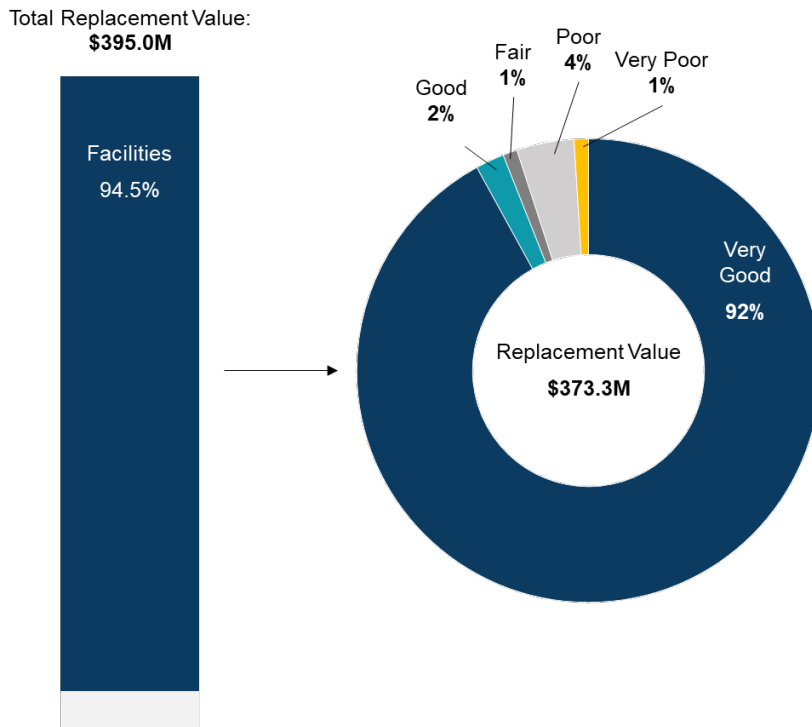
Solid Waste operates a series of facilities, fleet, equipment and associated supporting assets. Supporting assets include a portion of the Region's administrative facilities, fleet and equipment that support solid waste services.

1.2. Condition Ratings, Replacement Values and Average Ages

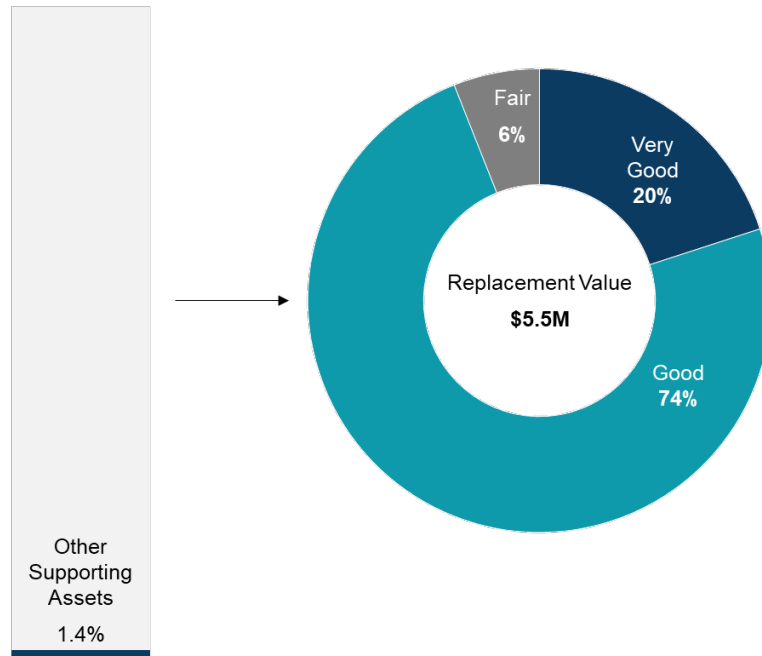
The overall rating in 2023 was Very Good with an overall replacement value \$395.0 million.

Figure 1 illustrates the condition rating and replacement value of Solid Waste assets.

Figure 1: Assets Condition and Replacement Values*



Total Replacement Value:
\$395.0M



* Percentages may not add to 100 per cent due to rounding. The condition breakdown does not include the condition for equipment assets as these are pooled assets.

1.3. Assessment Methods

Table 1 outlines the assessment methods used to determine condition ratings.

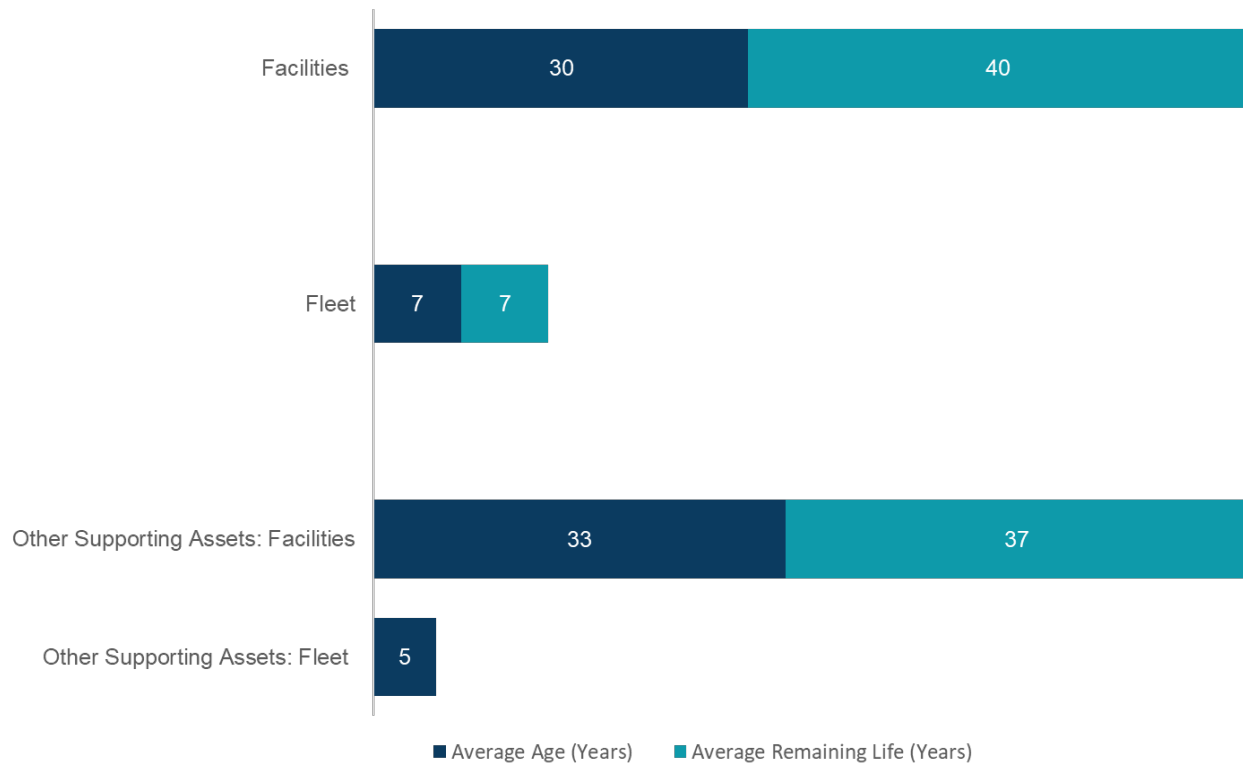
Table 1: Condition Assessment Methods

Asset Class	Assessment Methods
Fleet	Mileage, vehicle inspection
Facilities	Regional staff employ a Building Condition Assessment (BCA) method for assessing the condition of Regionally-owned facilities. For each facility, a BCA is performed on a 10-year cycle by external consultants. BCAs assess the condition of major building elements, sub-structures, shells, interiors, services and site work.

1.4. Average Age and Remaining Useful Life

Figure 2 summarizes the average age and remaining asset life of assets.

Figure 2: Average Age and Remaining Useful Life



1.5. Levels of Service and Performance Measurement

Service level objectives and performance targets are set through Durham Regional Council, approved plans, studies, policies and procedures, as well as through regulatory and/or compliance guidelines.

Table 2: Plans, Studies, Policies, Procedures, Regulations that Inform Service Levels

Regional Plans, Studies, Policies, & Procedures
<ul style="list-style-type: none"> • Region’s Long-term Waste Management Strategy • Region's Corporate Climate Change Action Plan • Durham Standard • Annual Business Plans and Budgets • Durham Region’s Strategic Plan

Regulatory Compliance Requirements and Guidelines

- Environmental Protection Act, 1990
- Ontario Regulation 347
- Extended Producer’s Responsibility
- Various provincial legislation, agreements and guidelines

Technical Service Levels and Performance Measures

Asset management staff have identified key asset-related technical service levels and performance measures as noted in Table 3.

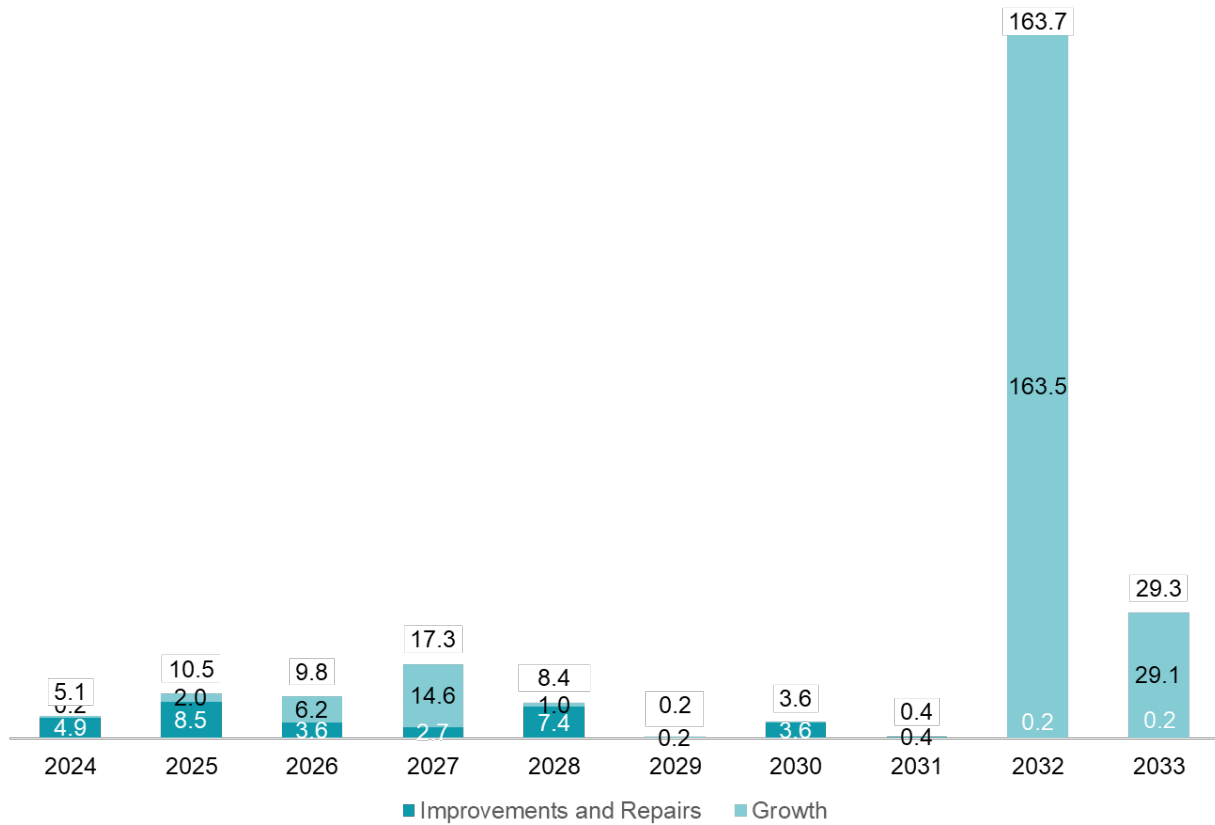
Table 3: Performance Measures

Performance Measure	Target	Year of Measure		
		2021	2022	2023
Facility Condition Index (FCI)	0% of facilities rated as either Poor or Very Poor	0%	0%	5%
Measure used as an indicator of relative facility condition. The FCI is defined as the ratio of current maintenance costs to the current replacement value of the facility. It is recognized that the baseline measure may shift as BCAs are completed and FCI ratings are updated to reflect more up-to-date information.				
% of facilities with completed Building Condition Assessments	100% of facilities to have a completed BCA	0%	14.3%	42.9%
This measures the percentage of facilities that have had a Building Condition Assessment. Performance target is to complete a BCA for all Regionally owned facilities.				

1.6. Solid Waste Capital Forecast

Major capital investments for Solid Waste assets identified through the 2024 business plans and budget process (rehabilitation and growth) total \$5.1 million for 2024 and \$243.2 million over the 2025 to 2033 forecast period.

Figure 3: Capital Forecast (\$ millions)*



*Improvements and Repairs and Growth may not add to Total due to rounding.

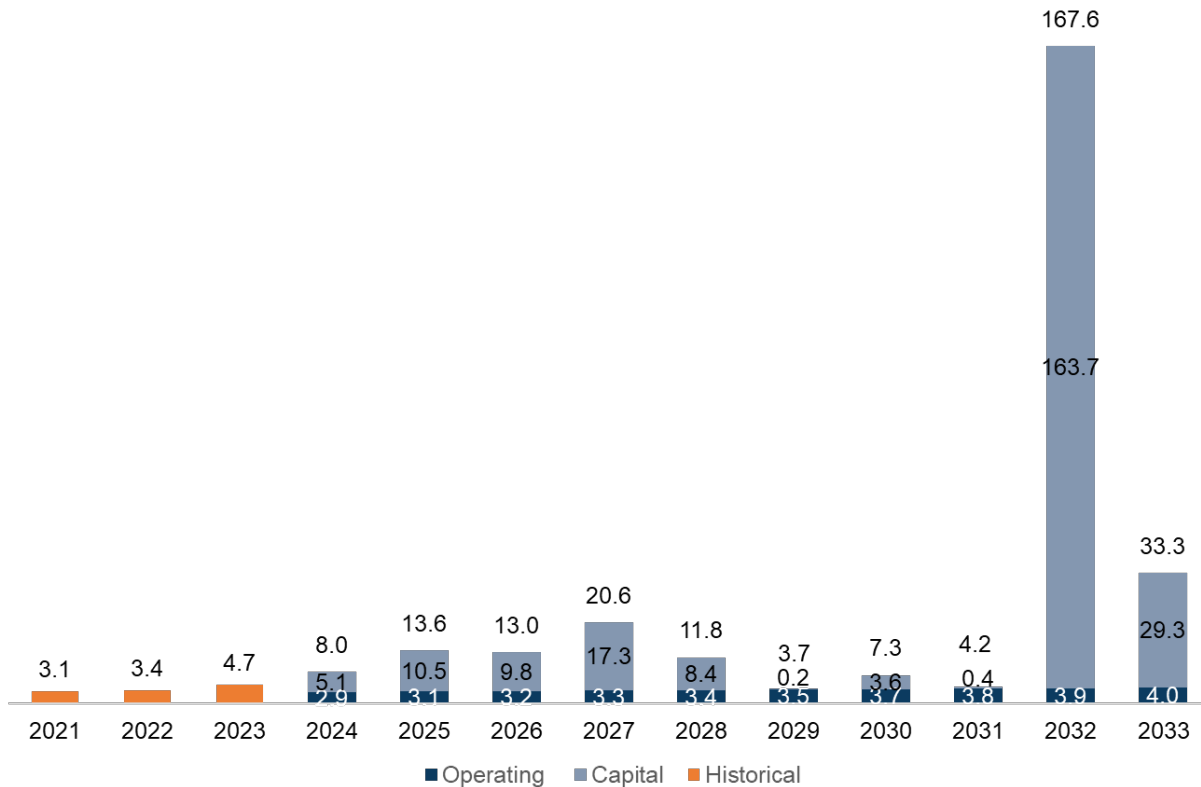
The 2032 capital forecast includes a provision for a Mixed Waste Pre-sort and Anerobic Digestion Facility. This project is subject to additional business case analysis, review and Council consideration.

1.7. Lifecycle

Maintenance and rehabilitation lifecycle activities aim to extend the useful life of assets and improve service delivery.

Figure 4 illustrates capital and maintenance lifecycle costs for Solid Waste assets.

Figure 4: Lifecycle Costs Operating and Capital (\$ millions)*



*Operating and Capital may not add to Total due to rounding.

Moving forward, staff will be further refining lifecycle costing analysis and data collection for assets that will be reported in future asset management plans.

1.8. Climate Change

Climate Change Mitigation: Reducing GHG Emissions from Fleet

Supporting Council’s declaration of a climate change emergency in 2019, the Region continues to integrate a climate lens into the annual business planning and budget process to align corporate capital and operating plans with achieving the Region’s greenhouse gas reduction target of net zero by 2045. The Durham Standard provides a green development standard of net zero facilities for new construction and major facility retrofits for Region-owned facilities (and leased facilities where appropriate).

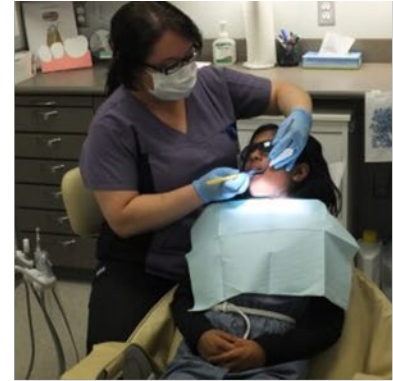
In addition, Solid Waste staff will advance the implementation of the Region’s Light Duty Fleet Electrification Strategy where operationally feasible.

1.9. Risk Assessment

Table 4 includes a sample of identified risks for the Region’s fleet and facilities in achieving its service level standards as well as the mitigation controls identified to address these risks.

Table 4: Risk Mitigation Strategies

Risk	Mitigation
Loss of Fuel	Maintain effective and up-to-date emergency, contingency and continuity plans. Ensure adequate standby power. Essential services policies and procedures. Audit of fuel purchasing cards. Fuel deliveries and re-routed programs/services and redundancies. Mobile services and on-call service contracts.
Security Breaches and Theft	Onsite safety systems and protocols (e.g., surveillance, patrols, fencing, emergency training, policies and plans). Geographical Positioning System technology on vehicles. Maintain effective and up-to-date emergency, contingency and continuity plans.
Vehicle Accidents	Supervisory oversight. Compliance and licensing standards. Maintain effective emergency and contingency plans.
Equipment Failures	Preventative maintenance and capital replacement programs and plans. External service contracts. Safety codes, warranties and guidelines. Inspections, checklists and accreditations. Proper equipment and vehicle storage. Fleet maintenance re-scheduling and redundancies (e.g. spare vehicles and parts inventory).
Winter ice/cold and more frequent freeze-thaw cycles	Slip hazard identification and mitigation. Inspections. Maintain effective and up-to-date emergency, contingency and continuity plans.



Health Department

Asset Class Report

Replacement
Value

\$135.4M

Average
Condition

GOOD

Service Level Objectives

Protects and promotes the health of Durham Region residents through the delivery of public health and paramedic programs and services

- 82 Ambulances and other Paramedic Service Vehicles
- 9 Paramedic Stations
- Shared Public Health Facility

1.1. Health Department Inventory Overview

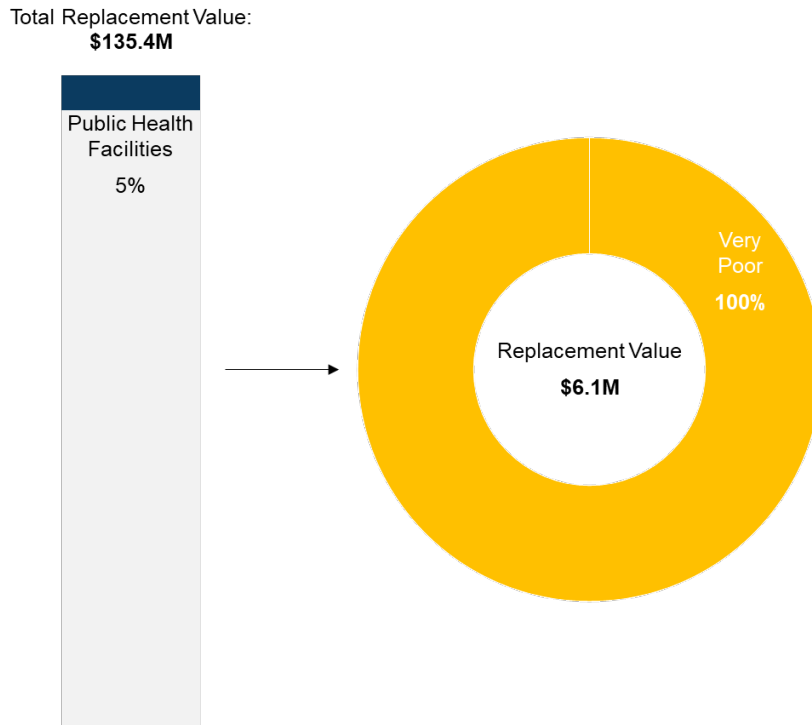
The Health Department provides direction and management of vehicles, facilities and equipment and other supporting services for Public Health services and Region of Durham Paramedic Services (RDPS). Supporting assets include a portion of the Region's administrative facilities, fleet and equipment that supports the Health Department.

1.2. Condition Ratings, Replacement Values and Average Ages

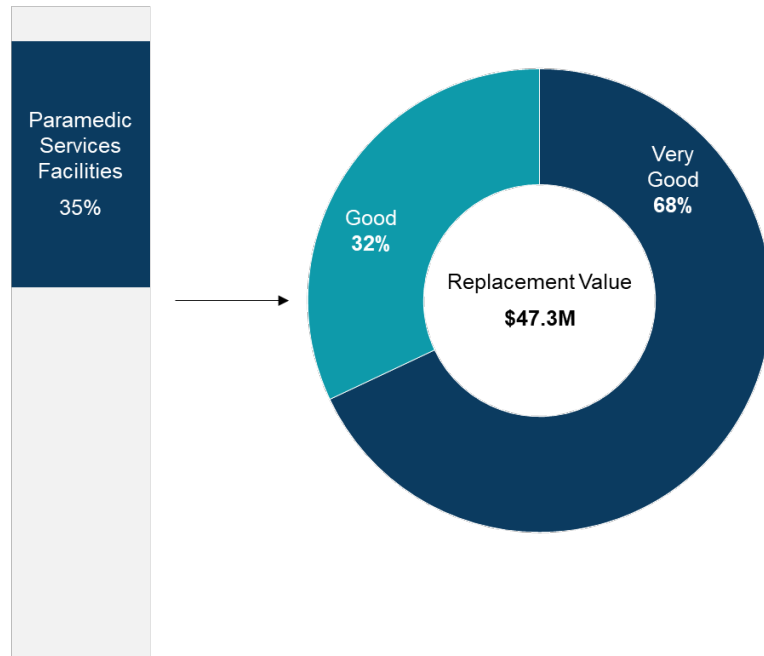
The overall rating in 2023 was Good with an overall replacement value of \$135.4 million.

Figure 1 illustrates the condition rating and replacement value of Health Department assets.

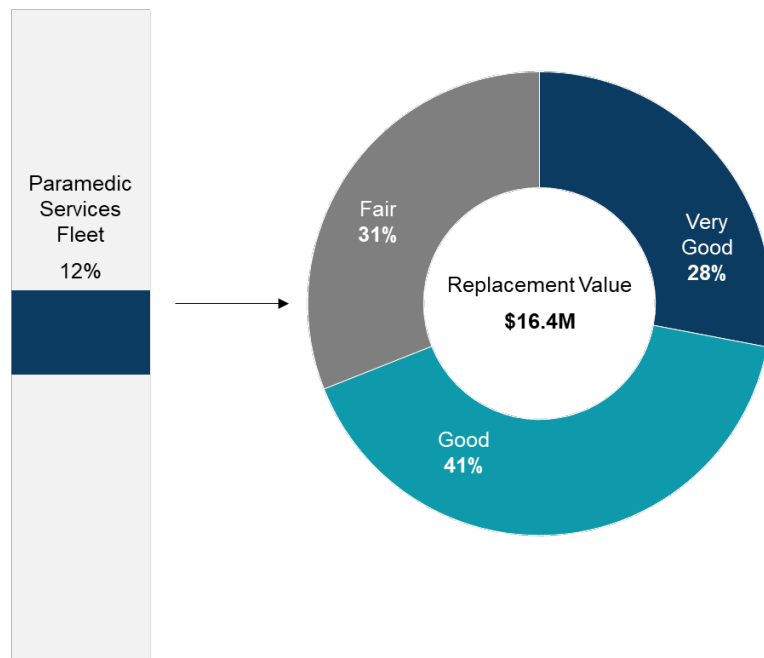
Figure 1: Assets Condition and Replacement Values*

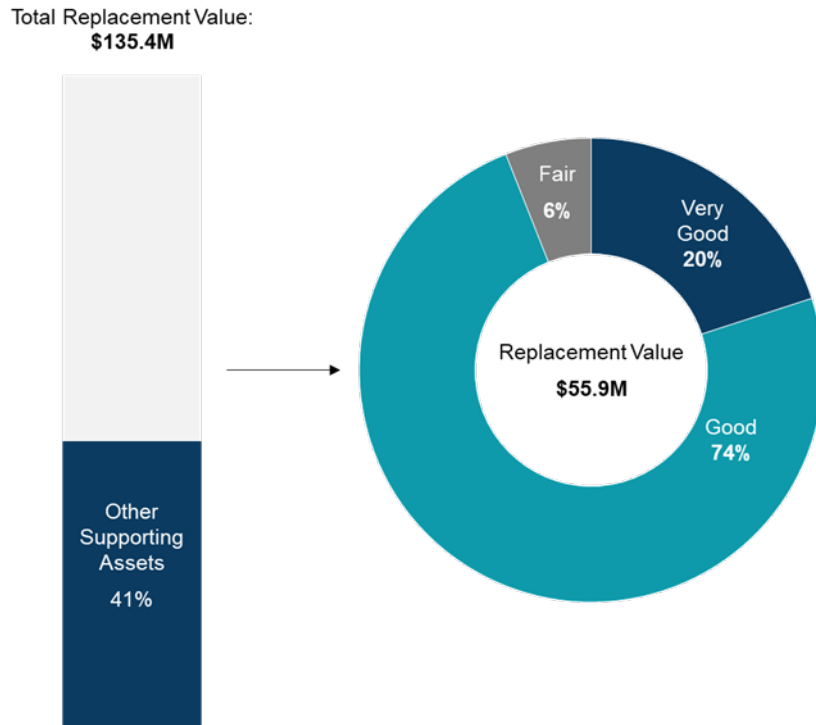


Total Replacement Value:
\$135.4M



Total Replacement Value:
\$135.4M





* Percentages may not add to 100 per cent due to rounding. The condition breakdown does not include the condition for equipment assets as these are pooled assets.

1.3. Assessment Methods

Table 1 outlines the assessment methods used to determine condition ratings.

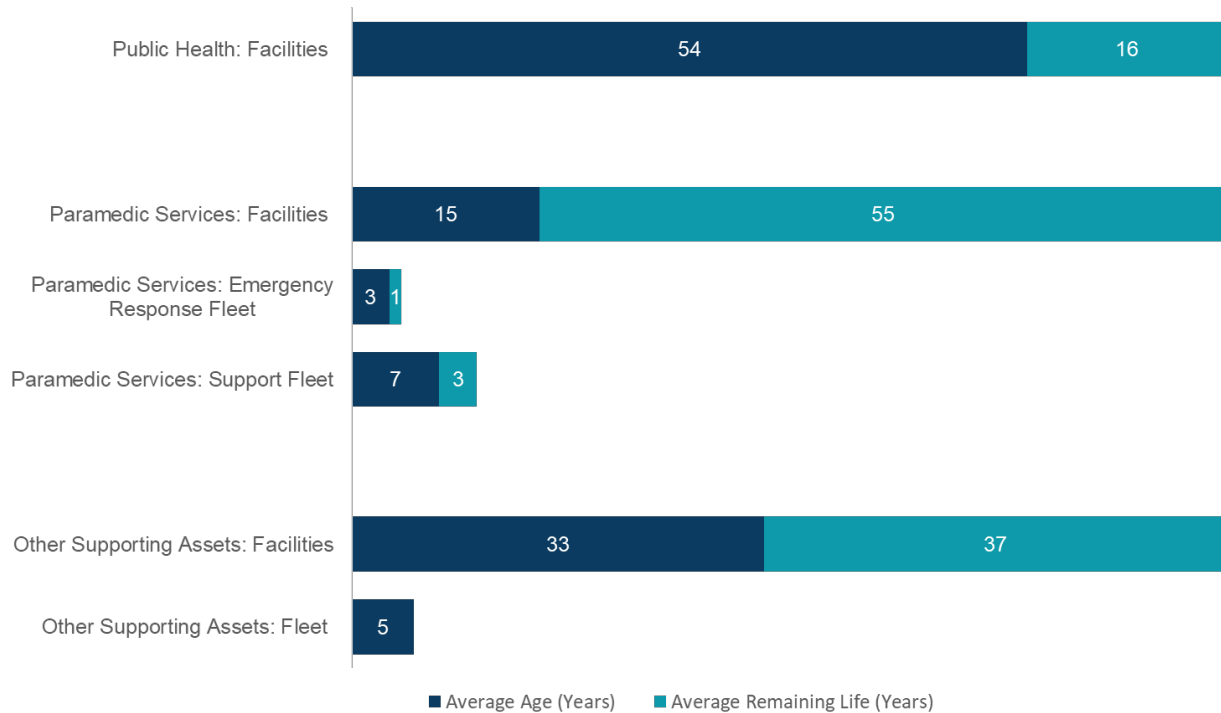
Table 1: Condition Assessment Methods

Asset Class	Assessment Methods
Fleet	Mileage, vehicle inspection
Facilities	Regional staff employ a Building Condition Assessment (BCA) method for assessing the condition of Regionally-owned facilities. For each facility, a BCA is performed on a 10-year cycle by external consultants. BCAs assess the condition of major building elements, sub-structures, shells, interiors, services and site work.

1.4. Average Age and Remaining Useful Life

Figure 2 summarizes the average age and remaining asset life of assets.

Figure 2: Average Age and Remaining Useful Life



1.5. Levels of Service and Performance Measurement

Service level objectives and performance targets are set through the Durham Regional Council and approved plans, studies, policies and procedures, as well as through regulatory and/or compliance guidelines.

Table 2: Plans, Studies, Policies, Procedures, Regulations that Inform Service Levels

Regional Plans, Studies, Policies, & Procedures
<ul style="list-style-type: none"> • 2023 – 2032 Region of Durham Paramedic Services Service and Financing Strategy • Annual Business Plans and Budgets • Durham Region’s Strategic Plan

Regulatory Compliance Requirements and Guidelines

- Child Care and Early Years Act, 2014
- Immunization of School Pupils Act, 1990
- Ambulance Act, 1990
- Ontario Public Health Standards
- Various provincial requirements

Technical Service Levels and Performance Measures

Asset management staff have identified key asset-related technical service levels and performance measures as noted in Table 3.

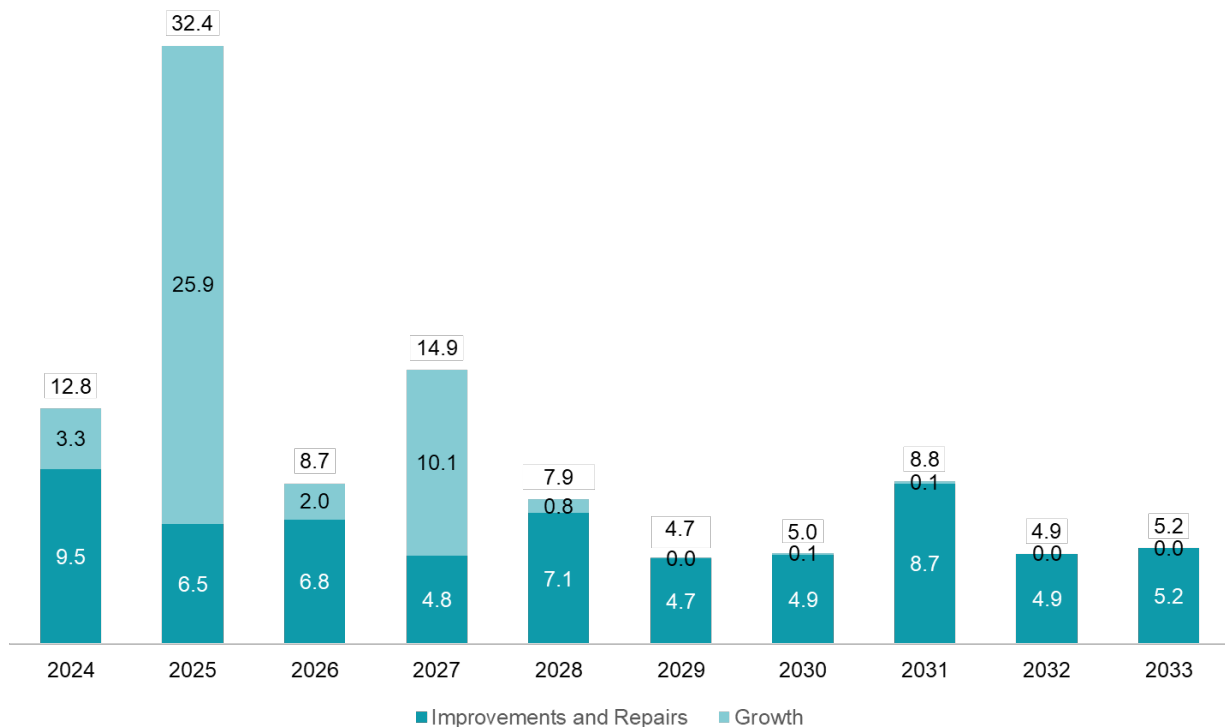
Table 3: Performance Measures

Performance Measure	Target	Year of Measure		
		2021	2022	2023
Facility Condition Index (FCI)	0% of facilities rated as either Poor or Very Poor	30%	10%	10%
Measure used as an indicator of relative facility condition. The FCI is defined as the ratio of current maintenance cost to the current replacement value of the facility. It is recognized that the baseline measure may shift as BCAs are completed and FCI ratings are updated to reflect more up-to-date information.				
% of facilities with completed Building Condition Assessments	100% of facilities to have a completed BCA	90%	90%	90%
This measures the percentage of facilities that have had a Building Condition Assessment. Performance target is to complete BCA for all Regionally owned facilities.				

1.6. Capital Forecast

Major capital investments in Health assets identified through the 2024 business plans and budget process (rehabilitation and growth) total \$12.8 million for 2024 and \$92.5 million over 2025 to 2033 forecast period.

Figure 5: Capital Forecast (\$ millions)*



*Improvements and Repairs and Growth may not add to Total due to rounding.

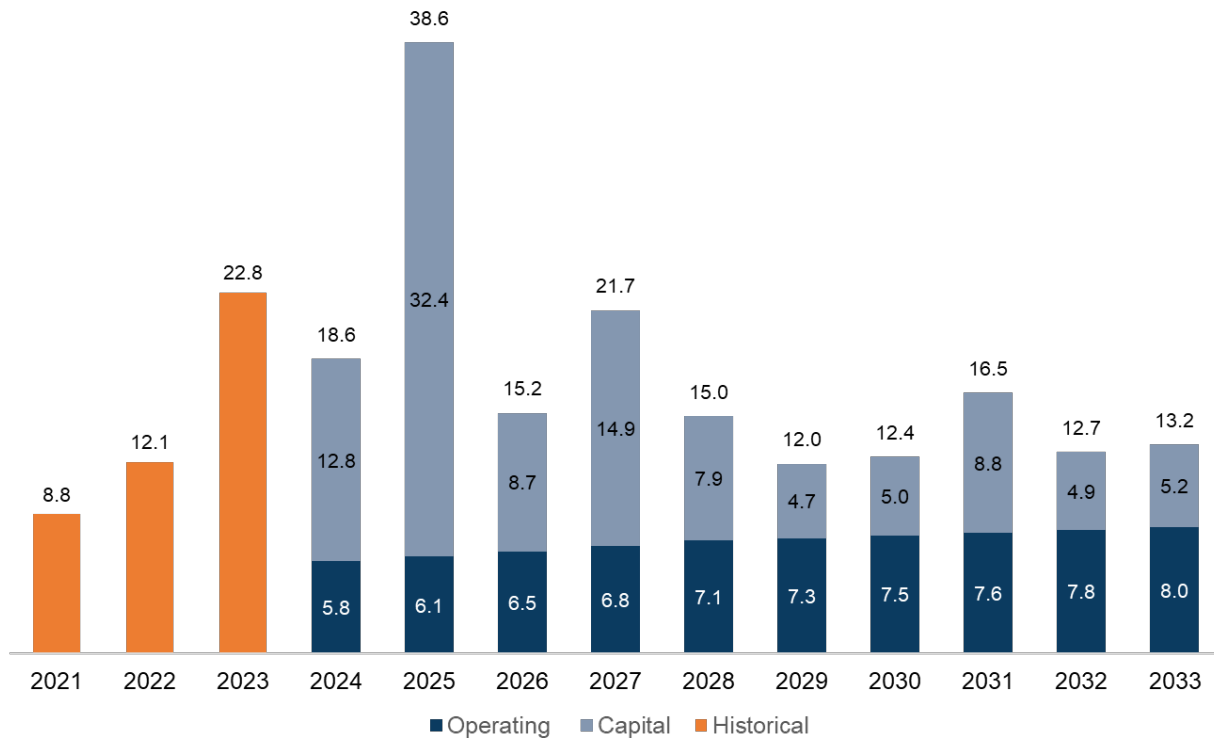
The 2024 capital budget and nine year capital forecast is informed and aligned with the 10-year Region of Durham Paramedic Services Service and Financing Strategy (2023 – 2032) and includes increased investment in repairs and improvements at the Region’s existing paramedic stations as well as investments in new paramedic stations to meet the needs of the community.

1.7. Lifecycle

Maintenance and rehabilitation lifecycle activities aim to extend the useful life of assets and improve service delivery.

Figure 3 illustrates capital and maintenance lifecycle costs for Health Department assets.

Figure 3: Lifecycle Costs Operating and Capital (\$ millions)*



*Operating and Capital may not add to Total due to rounding.

Moving forward, staff will be further refining lifecycle costing analysis and data collection for assets that will be reported in future asset management plans.

1.8. RDPS Fleet Lifecycle Management

RDPS has two main vehicle types: emergency response vehicles (ambulances, rapid response vehicles, and emergency support units) and management support vehicles. These vehicle types are managed differently given their use in operations.

The Region has a rigorous preventative maintenance program to keep vehicles in peak working condition while optimizing cost efficiency by ensuring preventative maintenance is completed and avoiding more costly repairs. Preventative maintenance programs for ambulances are delivered in accordance with provincial standards.

RDPS uses a staged vehicle deployment approach for ambulance and other emergency response vehicles that balance service demands and maximizes the life of the fleet, where:

- For the first 3 years of a vehicle’s life it serves as frontline.
- After 3 years, a vehicle becomes a spare/contingency.
- After 4 years, the vehicle becomes a secondary spare and is mainly utilized in support of contracted event services (e.g., Canadian Tire Motorsport Park, Tribute Communities Centre events).

- After 4.5 years, vehicles are classified as pending decommission and are replaced shortly thereafter subject to annual Business Plans and Budget approvals.

Vehicles demonstrating higher prevalence of mechanical issues and maintenance requirements and/or unusually high kilometres of travel or engine hours are replaced first. Retired rapid response vehicles, command vehicles and management support vehicles are often used administratively as paramedic transport vehicles until such time as they are permanently decommissioned and removed from service. Paramedic transport vehicles are used during shift changes to transport incoming paramedics to change tours of duty where on-duty paramedic crews are operationally unable to return to their originating paramedic response station. This is required, for example, for hospital offload delay challenges.

Moving forward, staff will be further refining lifecycle costing analysis and data collection for assets that will be reported in future asset management plans.

1.9. Climate Change

Climate Change Mitigation

Supporting Council's declaration of a climate change emergency in 2019, the Region continues to integrate a climate lens into the annual business planning and budget process to align corporate capital and operating plans with achieving the Region's greenhouse gas reduction target of net zero by 2045. The Durham Standard provides a green development standard of net zero facilities for new construction and major facility retrofits for Region-owned facilities (and leased facilities where appropriate).

In addition, staff will advance the implementation of the Region's Light Duty Fleet Electrification Strategy where operationally feasible.

1.10. Risk Assessment

Table 4 includes a sample of identified risks for the Region's fleet and in achieving its service level standards as well as the mitigation controls identified to address these risks.

Table 7: Risk Mitigation Strategies

Risk	Mitigation
Loss of Fuel	<p>Maintain effective and up-to-date emergency, contingency and continuity plans.</p> <p>Ensure adequate standby power.</p> <p>Essential services policies and procedures.</p> <p>Audit of fuel purchasing cards.</p> <p>Fuel deliveries and re-routed programs/services and redundancies.</p> <p>Mobile services and on-call service contracts.</p>
Security Breaches and Theft	<p>Onsite safety systems and protocols (e.g., surveillance, patrols, fencing, emergency training, policies and plans).</p> <p>Geographical Positioning System technology on vehicles.</p> <p>Maintain effective and up-to-date emergency, contingency and continuity plans.</p>
Vehicle Accidents	<p>Supervisory oversight.</p> <p>Compliance and licensing standards.</p> <p>Maintain effective emergency and contingency plans.</p>
Equipment Failures	<p>Preventative maintenance and capital replacement programs and plans.</p> <p>External service contracts.</p> <p>Safety codes, warranties and guidelines.</p> <p>Inspections, checklists and accreditations.</p> <p>Proper equipment and vehicle storage.</p> <p>Fleet maintenance re-scheduling and redundancies (e.g., spare vehicles and parts inventory).</p>
Winter ice/cold and more frequent freeze-thaw cycles	<p>Slip hazard identification and mitigation.</p> <p>Inspections.</p> <p>Maintain effective and up-to-date emergency, contingency and continuity plans.</p>



Durham Regional Police Service

Asset Class Report

Replacement
Value

\$275.3M

Average
Condition

FAIR

Service Level Objectives

Responsible for the delivery of policing services and community support programs to ensure the safety and security of all residents.

- 8 Facilities
- 378 Fleet Vehicles

1.1. Durham Regional Police Service Inventory Overview

Durham Regional Police Service (DRPS) assets consist of vehicles, facilities, equipment and other supporting assets. Other supporting assets include a portion of the Region’s administrative facility that supports the DRPS.

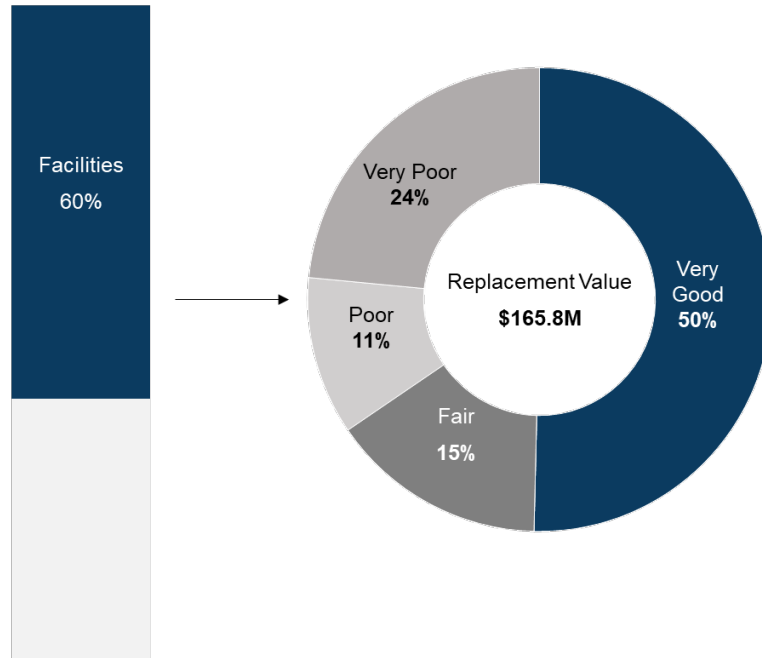
1.2. Condition Ratings, Replacement Values and Average Ages

The overall rating in 2023 was Fair with an overall replacement value of \$275.3 million.

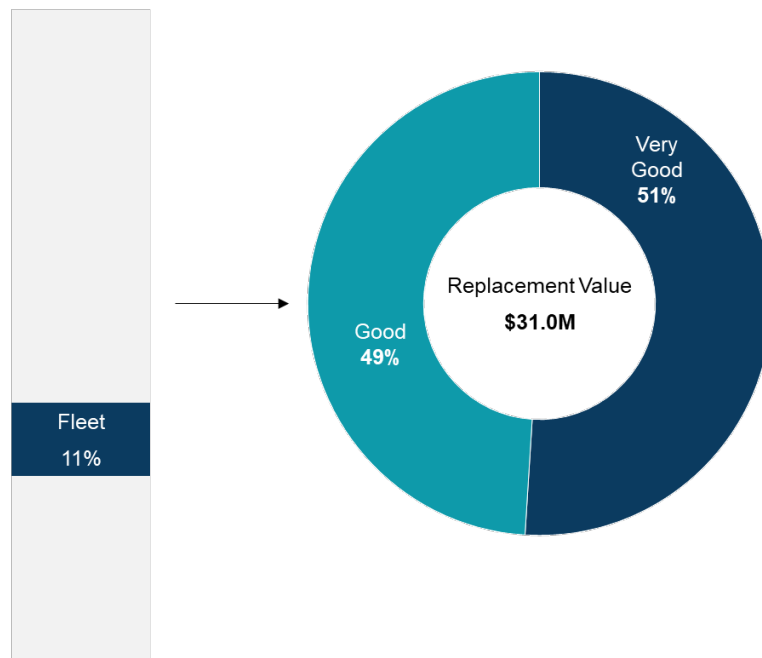
Figure 1 illustrates the condition rating and replacement value of DRPS assets.

Figure 1: Assets Condition and Replacement Values*

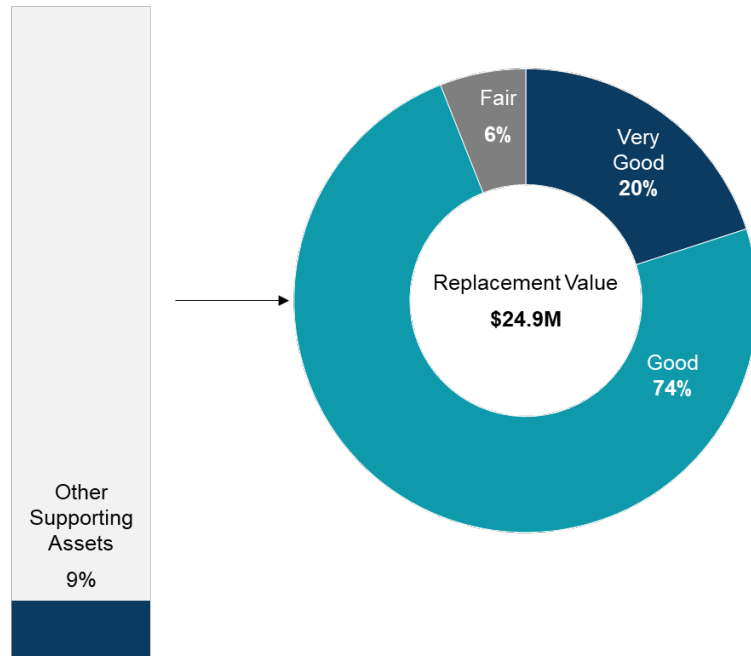
Total Replacement Value:
\$275.3M



Total Replacement Value:
\$275.3M



Total Replacement Value:
\$275.3M



* Percentages may not add to 100 per cent due to rounding. The condition breakdown does not include the condition for equipment assets as these are pooled assets.

1.3. Assessment Methods

Table 1 outlines the assessment methods used to determine condition ratings.

Table 1: Condition Assessment Methods

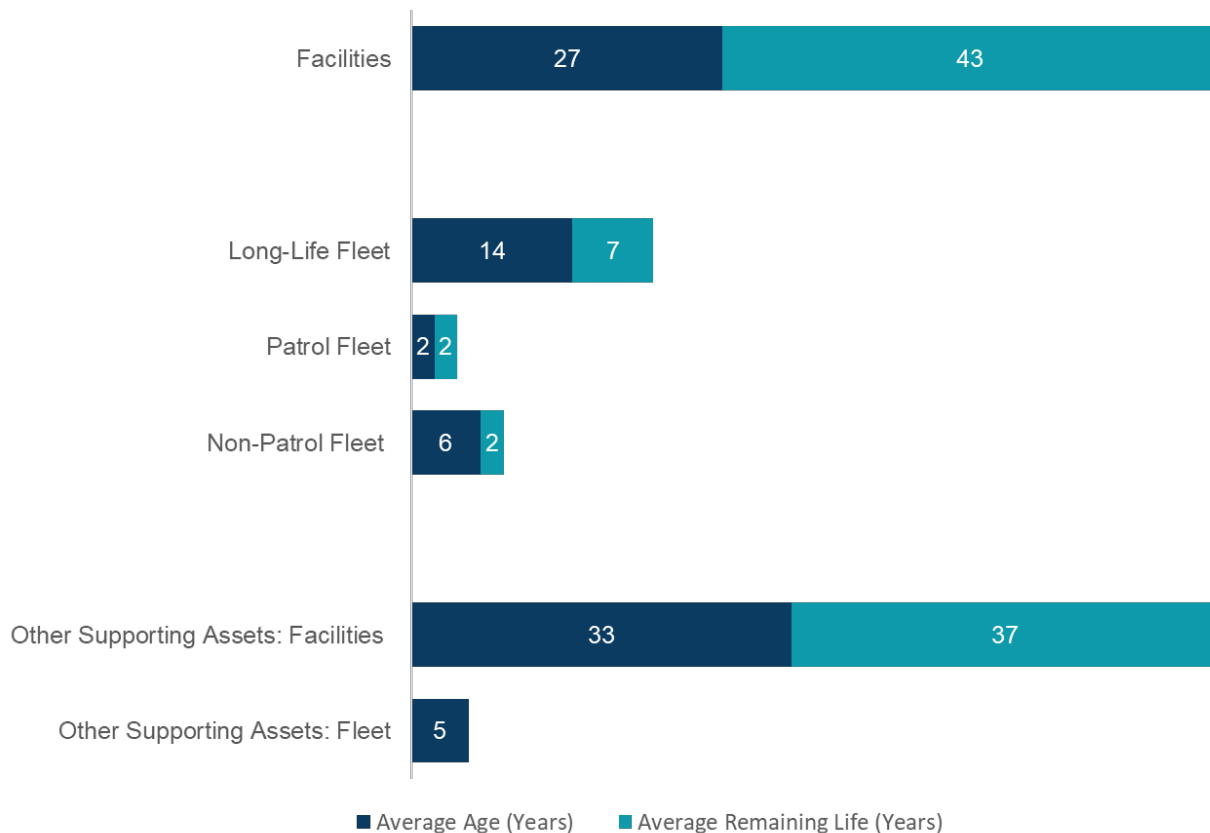
Asset Class	Assessment Methods
Fleet	<p>Age, odometer, ongoing/pending maintenance requirements, and visual assessment for condition factors as per the scale below:</p> <ul style="list-style-type: none"> • A+ or A++ would be Excellent or “as new” condition, A has minor wear and tear but still in peak operating condition. • B is a mid-life vehicle which, while it may have significant use, is still highly reliable but shows its age with more obvious signs of interior/exterior wear and tear from severe or long service. • C is approaching end of life due or overdue for replacement based on time, odometer reading, condition or greater emergence of costly maintenance/repair issues and non-safety related component failures.

Asset Class	Assessment Methods
Facilities	Regional staff employ a Building Condition Assessment (BCA) method for assessing the condition of Regionally-owned facilities. For each facility, a BCA is performed on a 10-year cycle by external consultants. BCAs assess the condition of major building elements, sub-structures, shells, interiors, services and site work.

1.4. Average Age and Remaining Useful Life

Figure 2 summarizes the average age and remaining asset useful life of assets.

Figure 2: Average Age and Remaining Useful Life



1.5. Levels of Service and Performance Measurement

Service level objectives and performance targets are set through Durham Regional Council, approved plans, studies, policies and procedures, as well as through regulatory and/or compliance guidelines.

Table 2: Plans, Studies, Policies, Procedures, Regulations that Inform Service Levels

Regional Plans, Studies, Policies, & Procedures
<ul style="list-style-type: none"> • Board End Policies • Durham Regional Police Service Annual Report • Durham Regional Police Service Strategic Plan • Annual Business Plans and Budgets • Durham Region’s Community Safety and Wellbeing Plan
Regulatory Compliance Requirements and Guidelines
<ul style="list-style-type: none"> • Community Safety and Policing Act (2019) • Highway Traffic Act • Motor Vehicle Inspection Station Licencing and Standards • Motor Vehicle Repair Standards • Various provincial requirements

Technical Service Levels and Performance Measures

Asset management staff have identified key asset-related technical service levels and performance measures as noted in Table 3.

Table 3: Performance Measures

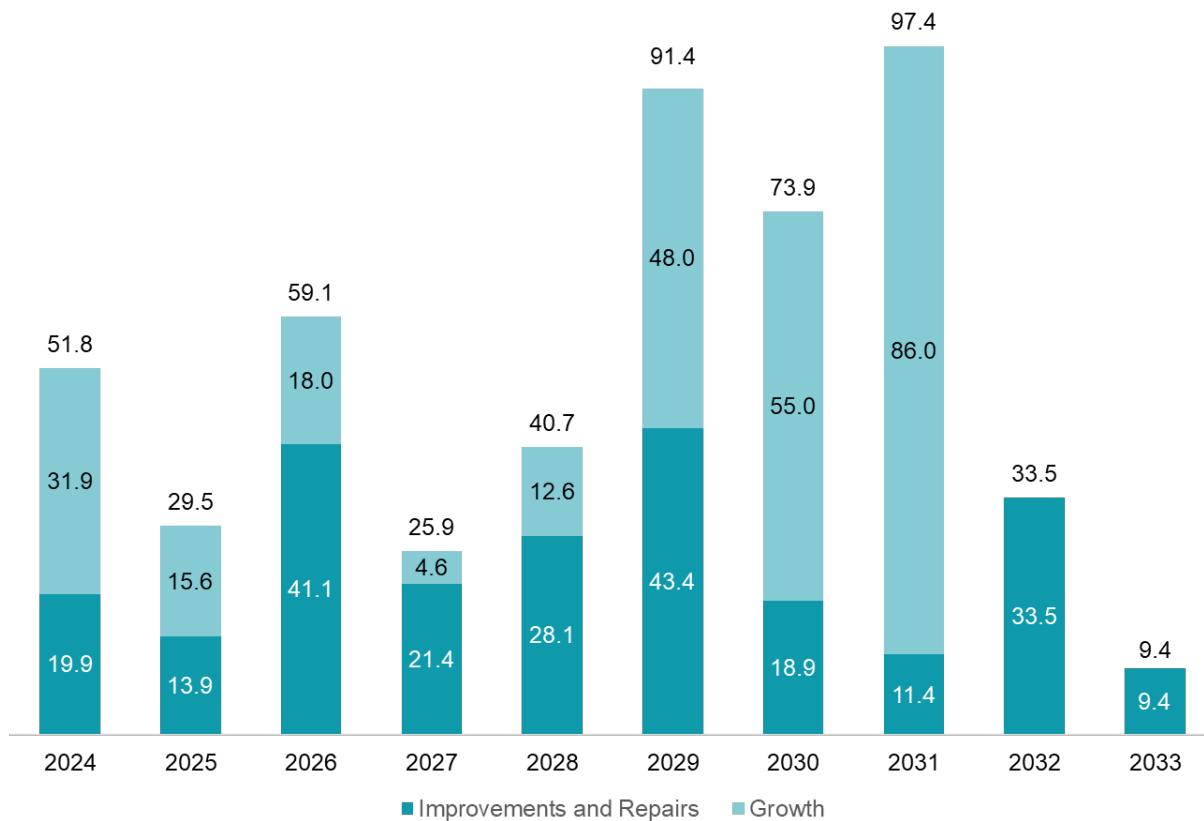
Performance Measure	Target	Year of Measure		
		2021	2022	2023
Facility Condition Index (FCI)	0% of facilities rated as either Poor or Very Poor	25%	50%	38%
Measure used as an indicator of relative facility condition. The FCI is defined as the ratio of current maintenance costs to the current replacement value of the facility. It is recognized that the baseline measure may shift as BCAs are completed and FCI ratings are updated to reflect more up-to-date information.				

Performance Measure	Target	Year of Measure		
		2021	2022	2023
% of facilities with completed Building Condition Assessments	100% of facilities to have a completed BCA	0%	0%	0%
This measures the percentage of facilities that have had a Building Condition Assessment. Performance target is to complete a BCA for all Regionally owned facilities.				

1.6. Capital Forecast

Major capital investments in DRPS assets identified through the 2024 business plans and budget process (rehabilitation and growth) total \$51.8 million for 2024 and \$460.7 million over the 2025 to 2033 forecast period.

Figure 5: Capital Forecast (\$ millions)*



*Improvements and Repairs and Growth may not add to Total due to rounding.

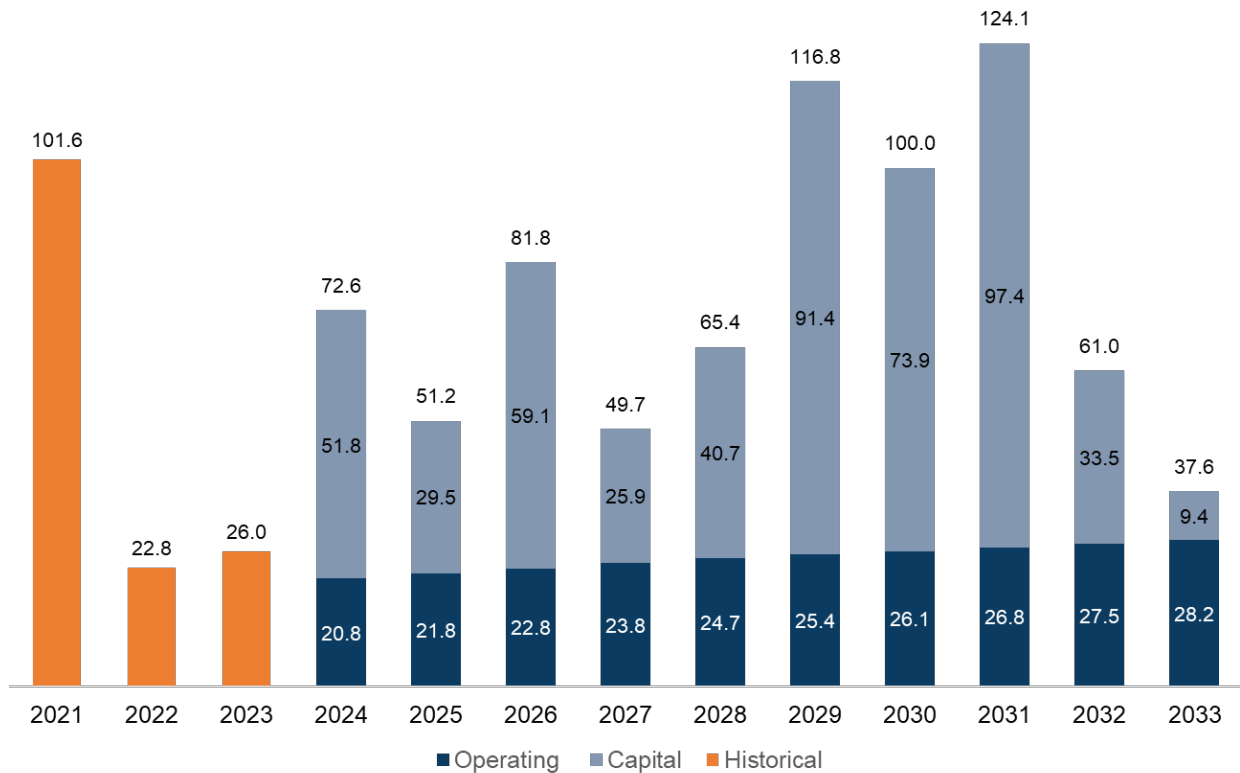
DRPS is currently conducting a long-term facility needs study that is anticipated to be completed by the end of the year. Once completed this study will help inform future business plans and budgets and asset management plans.

1.7. Lifecycle

Maintenance and rehabilitation lifecycle activities aim to extend the useful life of assets and improve service delivery.

Figure 3 illustrates capital and maintenance lifecycle costs for DRPS assets.

Figure 3: Lifecycle Costs Operating and Capital (\$ millions)*



*Operating and Capital may not add to Total due to rounding.

Moving forward, staff will be further refining lifecycle costing analysis and data collection for assets that will be reported in future asset management plans.

1.8. DRPS Fleet Lifecycle Management

DRPS has a preventative maintenance program to ensure vehicles remain at peak operating condition to minimize the risk of failure and optimize cost efficiency by maintaining versus repairing the fleet. DRPS vehicles are maintained in accordance with guidelines based on manufacturers’ service program and severe duty requirements.

DRPS employs the following fleet replacement criteria:

- Marked patrol automobiles are replaced at the earlier of 5 years of service or 160,000 to 200,000 km;
- Unmarked vehicles are replaced at the earlier of 7 years of service or 170,000 to 200,000 km; and,

- HD Trucks are replaced at the earlier of 10 years of service or 300,000 km.
- Long life vehicles are replaced on a 20-30 year schedule.

The replacement schedule ensures that vehicles are available for officers to serve the public, while minimizing the total cost of ownership over their useful life. The kilometres driven and vehicle age do not fully capture the engine wear resulting from the significant time cruiser engines are required to idle while officers are carrying out their duties which also impacts the useful life of the vehicles. This should be captured in future years through the introduction of fleet maintenance telematics.

Consistent with the fleet replacement plan for DRPS, the 2024 DRPS Business Plans and Budget includes the replacement of 37 marked patrol vehicles (\$1.86 million), and 19 unmarked vehicles (\$0.8 million) as well as the addition of four new marked patrol vehicles (\$0.2 million), and one new unmarked vehicle (\$0.04 million) to respond to growth in service requirements. The cost of the primary response vehicles does not include the transfers of upfit equipment from old to new vehicles or purchase of new equipment (e.g., sirens, light bars, push bars, communication systems, etc.) which forms part of the overall maintenance budget and is required to meet operational requirements and ensure public safety. This upfit amount is not reported in Tables 4 and 5 below. The nine-year capital forecast (2024 to 2032) includes the projected replacement of 310 marked vehicles (\$24.5 million) and 157 unmarked vehicles (\$6.6 million).

The following are fleet maintenance and fuel measures for 2022 and 2023.

Table 4: DRPS Maintenance and Fuel Measures for Primary Response Vehicles

Year	Annual Vehicle Availability	Annual Kilometers	Maintenance Cost	Fuel Cost	
			Annual Cost	Annual Total	\$/Km
2022	95.7%	5,345,260	\$902,943	\$1,582,901	\$0.30
2023	94.3%	5,324,336	\$1,113,189	\$1,543,858	\$0.29

Table 5: DRPS Maintenance and Fuel Measures for Secondary Response Vehicles

Year	Annual Vehicle Availability	Annual Kilometers	Maintenance Cost	Fuel Cost	
			Annual Cost	Annual Total	\$/Km
2022	96.5%	3,251,935	\$718,177	\$535,556	\$0.16
2023	96.8%	3,221,189	\$593,008	\$550,979	\$0.17

Moving forward, DRPS will continue to monitor, track, and refine lifecycle costing for internal fleet management, investment decisions through business planning and budgets, external and internal reporting, and to comply with the future requirements of Ontario Regulation 588/17. Updates will be reported in future Asset Management Plans.

1.9. Climate Change

Climate Change Mitigation

Supporting Council's declaration of a climate change emergency in 2019, the Region continues to integrate a climate lens into the annual business planning and budget process to align corporate capital and operating plans with achieving the Region's greenhouse gas reduction target of net zero by 2045. The Durham Standard provided a green development standard of net zero facilities for new construction and major facility retrofits for Region-owned facilities (and leased facilities where appropriate).

In addition, staff are advancing the implementation of the Region's Light Duty Fleet Electrification Strategy where operationally feasible.

Key climate change mitigation accomplishments in 2023 include:

- Addition of 4 plug-in electric vehicles and additional hybrid models where available.
- Greater education and enforcement of the anti-idling policy has also had an impact on GHG emissions.
- DRPS fuel consumption reduced by 32,250 litres from 2022 due to increasing use of vehicles with hybrid, stop-start and electric power and improved fuel mileage by 0.39 litres/100 km. Further, in 2023 our vehicles travelled about 46,000 km less than in 2022, resulting in a savings of about 7,800 litres of fuel due to reduced travel to meet the needs of the public, though this varies year by year due to number of calls for service.
- In total, in 2023 the DRPS fleet reduced its output by approximately 25 tonnes of carbon emissions.

Key 2022 initiatives that support fleet greening include:

- DRPS fleet vehicle replacements continue to transition the fleet to lower emission outputs through the reduction of vehicles powered solely by an internal combustion engine (ICE), and the adoption of technologies to support green fleet operations. As an example, fleet maintenance telematics ensure prompt attention to vehicle faults that impact fuel consumption and emissions and provide engine idle monitoring and reporting to address anti-idle policy compliance.

1.10. Risk Assessment

Table 6 includes a sample of identified risks for the Region's fleet in achieving its service level standards as well as the mitigation controls identified to address these risks.

Table 6: Risk Mitigation Strategies

Risk	Mitigation
Loss of Fuel	Maintain effective and up-to-date emergency, contingency and continuity plans. Ensure adequate standby power. Essential services policies and procedures. Audit of fuel purchasing cards. Fuel deliveries and re-routed programs/services and redundancies. Mobile services and on-call service contracts.
Security Breaches and Theft	Onsite safety systems and protocols (e.g., surveillance, patrols, fencing, emergency training, policies and plans). Geographical Positioning System technology on vehicles. Maintain effective and up-to-date emergency, contingency and continuity plans.
Vehicle Accidents	Supervisory oversight. Driver screening, training and recertification programs. Compliance and licensing standards. Maintain effective emergency and contingency plans.
Equipment Failures	Preventative maintenance and capital replacement programs and plans. External service contracts. Safety codes, warranties and guidelines. Inspections, checklists and accreditations. Proper equipment and vehicle storage. Fleet maintenance re-scheduling and redundancies (e.g., spare vehicles and parts inventory).
Winter ice/cold and more frequent freeze-thaw cycles	Slip hazard identification and mitigation. Inspections. Maintain effective and up-to-date emergency, contingency and continuity plans.



The Regional Municipality of Durham Report

To: Committee of the Whole
From: Commissioner of Finance, Commissioner of Works and CAO
Report: #2024-COW-30
Date: June 12, 2024

Subject:

Region of Durham's 2024 to 2029 Energy Conservation and Demand Management Plan

Recommendations:

That the Committee of the Whole recommends to Regional Council:

- A) That per the requirements of Ontario Regulation 25/23 of the Electricity Act, the Region of Durham's 2024 to 2029 Energy Conservation and Demand Management Plan, included as Attachment #1, be endorsed; and
 - B) That the Region of Durham's 2024 to 2029 Energy Conservation and Demand Management Plan be made available to the Ontario Ministry of Energy, Northern Development and Mines and posted to the Region's website by July 1, 2024.
-

Report:

1. Background

- 1.1 The Region of Durham is required under Ontario Regulation 25/23 (formerly Ontario Regulation 507/18) of the Electricity Act to publish an updated five-year Energy Conservation and Demand Management (ECDM) Plan by July 1, 2024. To date, the Region has completed two prior ECDM Plans, namely the [2014 to 2019 ECDM Plan](#) (Report #2014-J-17) and the [2019 to 2024 ECDM Plan](#) ([Report #2019-COW-9](#)).
- 1.2 Durham Region's 2024 to 2029 ECDM Plan (Attachment #1), provides a review of progress made during the past five (5) years as well as an overview of planned future energy conservation and demand management measures. This updated ECDM Plan and report has been developed and informed by the Region's climate change staff working group, reviewed and endorsed by senior management and is designed to educate and inform Regional staff, elected officials, and the public about the Region's past and future efforts to reduce energy consumption and related greenhouse gas (GHG) emissions from corporate operations.

- 1.3 This report recommends the endorsement of the Region of Durham's 2024 to 2029 ECDM Plan which meets the July 1, 2024 implementation date as required under Ontario Regulation 25/23. The ECDM Plan will be made available to the public through the Region's corporate website.

2. Reporting Requirements

- 2.1 As defined under the regulation, the Region's ECDM Plan requires Regional Council's endorsement and should include:

- The annual energy consumption for the last year for which complete information is available;
- Goals and objectives for conserving and reducing energy consumption and managing energy demand;
- Proposed measures, including timelines, costs, and savings estimates;
- Reporting of conservation measures in place prior to plan development; and
- Descriptions of renewable energy generation facilities operated by the Region, including energy produced on an annual basis.

- 2.2 As the 2024 to 2029 ECDM Plan update is a renewal of the Region's 2019 to 2024 Plan, the regulation requires it include the following information:

- Description of current and proposed measures for conserving and otherwise reducing energy consumption and managing its demand for energy;
- Revised forecast of expected results of current and proposed measures;
- Report of actual results achieved; and
- Description of any proposed changes to be made to assist the public agency in reaching any targets it has established or forecasts it has made.

3. Accomplishments of the Region's 2019 to 2024 ECDM Plan

- 3.1 Regional operational areas have continued to embed energy conservation into daily operations, plans, and procedures which has helped to reduce energy consumption resulting in operational efficiencies and cost savings. Numerous technical, strategic and organizational initiatives have been advanced since 2019, including but not limited to:
- Adoption of the Corporate Climate Action Plan that set a net zero GHG reduction target by 2045;
 - Endorsement of the Durham Standard which provides a green development standard of net zero facilities for new construction and major facility retrofits for Region-owned facilities (and leased facilities where appropriate);

- Launch of the GHG Emission Reduction Pathways Studies for all Regional facilities (except water and wastewater plants and DYEC) to identify facility retrofits and renewable energy options to transition the building to net zero by 2045;
- Completion of the Water and Wastewater GHG Emissions Management Strategy that charts a path to decarbonize water supply and wastewater treatment operations over the next 20 years. The Strategy considers key opportunities such as process emissions measurement, production, and utilization of renewable natural gas and wastewater heat recovery;
- Adoption of a Light-Duty Fleet Electrification Plan for corporate light duty fleets;
- Endorsement of the Durham Region Transit's Electrification Plan that will see all DRT fleet vehicles transition to zero emission by 2037, conditional on senior government funding; and
- Numerous technical measures and strategies resulting in absolute energy and GHG reductions in the form of equipment replacement, facility upgrades, renewable energy utilization (e.g., digester gas utilization at wastewater treatment facilities). Implied energy and GHG emissions avoided through the acquisition of new efficient and low carbon assets and infrastructure (e.g., construction of new energy-efficient Regional facilities) is also tracked.

3.2 The 2019 to 2024 ECDM Plan identified several objectives and actions targeting behavioral and organizational elements including, but not limited to, corporate awareness and engagement, implementation of energy-related standards regarding operations, maintenance, asset management, procurement, and improvement of performance measures.

4. Updated Goals for the Region's 2024 to 2029 ECDM Plan

4.1 While the 2024 to 2029 ECDM Plan recognizes the progress made in prioritizing energy efficiency and further integrating energy efficiency into existing processes, it also acknowledges several areas for improvement. Priority areas have also been identified through engagement and feedback of staff and senior management. As such, the renewed ECDM Plan will seek to sustain the momentum created by the prior plan and build on successes achieved to-date, as well as over the next five years with goals established for the following broad areas of focus:

- Goal 1 – Governance: Further strengthen the established corporate governance framework to ensure clear lines of oversight, accountability, and financing for implementation of energy and GHG emissions management initiatives;
- Goal 2 – Education and Knowledge Mobilization: Enhance corporate energy awareness, education, and information sharing within and across operational areas; and

- Goal 3 – Process Management: Continue to standardize approaches to further integrate energy conservation and climate mitigation and adaptation considerations into asset management, project scoping and implementation, business planning and budget processes.

The ECDM Plan renewal was developed through cross departmental and interdisciplinary strategic consultations under the guidance of senior management. These included key personnel from major program areas plus feedback and guidance from the Facilities Decarbonization Functional Working Group, including input from the Green Fleet Working Group members, and the Corporate Climate Leadership Committee.

The resulting goals, objectives, and actions in the updated ECDM Plan target areas for improvement regarding behavioral and organizational elements and seeks to ensure further alignment with current planning processes and overarching sustainability plans and strategies. Measures through asset management planning, studies, plans, audits, and assessments will be considered through annual Business Planning and Budget processes.

5. Relationship to Strategic Plan

5.1 This report aligns with the following strategic goals and priorities in the Durham Region Strategic Plan:

1. Goal #1 – Environmental Sustainability
 - Goal 1.1 - Accelerate the adoption of green technologies and clean energy solutions through strategic partnerships and investment;
 - Goal 1.4 - Demonstrate leadership in sustainability and addressing climate change; and
 - Goal 1.5 - Expand sustainable and active transportation.

6. Conclusion

6.1 This report recommends the Region of Durham's renewed five-year ECDM Plan be endorsed by Regional Council to meet the reporting requirements under Ontario Regulation 25/23 of the Electricity Act.

6.2 Looking forward, plans for 2024 to 2029 focus on implementing many of the initiatives and recommendations noted in the strategic plans noted above and as outlined in the updated 2024 to 2029 ECDM Plan. The initiatives outlined therein (to be brought forward for consideration through the Region's annual Business Planning and Budget processes) can be expected to have significant and long-term energy and GHG reduction impacts, which will provide a strong foundation and strategic corporate alignment, as the Region moves forward.

7. Attachment

Attachment #1 – Region of Durham’s 2024 to 2029 Energy Conservation and Demand Management Plan

Respectfully submitted,

Original Signed By

Nancy Taylor, BBA, CPA, CA
Commissioner of Finance

Original Signed By

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Commissioner of Works

Recommended for Presentation to Committee

Original Signed By

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Region of Durham's 2024 to 2029 Energy Conservation and Demand Management Plan



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1. Introduction

The Regional Municipality of Durham (the Region) is required under Ontario Regulation 25/23 (formerly Ontario Regulation 507/18) of the Electricity Act to publish an updated five-year Energy Conservation and Demand Management (ECDM) Plan by July 1st, 2024. This plan has been reviewed and approved by senior management and is designed to educate and inform Regional staff, elected officials, and the public about the Region's past and future efforts to reduce energy consumption and related greenhouse gas (GHG) emissions from corporate operations.

This report will describe the Region's 2023 energy consumption profile, renewable energy generation, and previous and future energy efficiency measures undertaken at Regional facilities across operating divisions. A core interdepartmental ECDM Plan renewal team comprised of staff from the Office of the CAO Strategic Initiatives Division, the Finance Department, Works Department Facilities Design, Construction & Asset Management Division, as well as the Works Department Infrastructure Analytics Team. This core team collaborated with numerous divisional and agency representatives to collect feedback in order to set the strategic direction for energy efficiency for corporate fleet and facility operations for the 2024 to 2029 ECDM Plan period.

2. Background and Context

The Regional Municipality of Durham is an upper-tier municipality comprised of eight local municipalities with a total population of almost 750,000 across an area of 2,535 square kilometres.¹ As one of the fastest-growing regions in Ontario, Durham Region's population is expected to grow to approximately 895,000 by 2026 and 960,000 by 2031. This projected growth in population will increase demand for services and supporting infrastructure.

Durham Region delivers a wide range of services to its residents and visitors that include:

- Court Services
- Family and Children's Services
- Housing Services
- Seniors Services including Long-Term Care Homes
- Planning and Economic Development
- Police Services
- Public Health and Paramedic Services
- Public Works including planning and maintenance of Regional Roads, Bridges and Storm Draining Systems
- Solid Waste Management
- Public Transit
- Water/Wastewater Treatment, Storage, Pumping and Distribution

¹ The eight local municipalities in Durham Region include the Cities of Oshawa and Pickering, the Towns of Ajax and Whitby, the Municipality of Clarington, and the northern rural Townships of Brock, Scugog, and Uxbridge.

To support these services, Durham Region owns and/or operates assets in the form of buildings, transit vehicles, fleet vehicles, water supply and wastewater facilities, various equipment as well as all supporting infrastructure (e.g., traffic control signals, telecommunications infrastructure).

In 2023, the operation of these corporate assets collectively emitted approximately 178,000 tonnes of GHG (carbon dioxide and equivalents), representing a small fraction (estimated at approximately three per cent) of total GHG emitted by the greater Regional community. Climate mitigation (including energy efficiency) and adaptation initiatives have been a Regional priority for many years. Following Regional Council's adoption of the prior ECDM Plan (2019 to 2024), the Region took significant steps to address climate change, sustainability, and energy efficiency including the continued alignment of various Regional plans and strategies, as noted below.²

2.1. Durham Region Official Plan

In May 2023 Regional Council adopted a [new Regional Official Plan](#) to guide decisions on long-term growth and development and provide policies to ensure an improved quality of life. The Regional Official Plan includes policies and objectives that align with the ECDM Plan. These objectives include ensuring reduction of overall GHG emissions and other air pollutants generated by the Region's own corporate activities, striving towards a net-zero corporate carbon footprint, and prioritization of energy efficient and low carbon design in corporate buildings supported by approved policy.

2.2. Asset Management Plan and Strategic Asset Management Policy

In 2019, Regional Council approved the Region's Strategic Asset Management Policy which encapsulates the Region's asset management goals, process, and policies. Among the goals of the Strategic Asset Management Policy is to demonstrate leadership in sustainable asset management, including investments to reduce energy usage and GHG emissions, and adapt to climate change. As part of the asset management planning process, lifecycle analysis is used to ensure consideration of all operating and capital costs required for an asset to deliver its targeted service level over its useful life. Life cycle analysis considers initial acquisition, repairs, maintenance, and rehabilitation, through to eventual asset decommissioning costs. The 2024 Asset Management Plan (Report #2024-COW-29), which complies with O. Reg. 588/17, is being considered by Regional Council on June 26, 2024. The Region's 2022 Asset Management Plan was adopted by Regional Council on June 29, 2022.

² Following a 2009 Regional Council directive, corporate climate change initiatives and reporting were integrated into established business processes, including business plans and budgets, asset management and risk management programs.

2.3. Corporate Climate Action Plan

In March 2021, Council approved a [Corporate Climate Action Plan](#) (CCAP) including GHG emissions reduction targets for corporate operations, as shown in Figure 1 below, and a corporate carbon budget management framework that aligns with the Region's business planning and budget process. Through a system of reporting and accountability linked to existing budget processes, the Region is driving implementation of energy efficiency and GHG reduction initiatives across corporate departments and divisions. An annual CCAP update report is presented to Council that outlines progress made against corporate GHG targets including initiatives which contribute to improved energy efficiency and reductions in GHGs.

Figure 1: Corporate Climate Action Plan Targets



2.4. Durham Standard

In April 2023, Regional Council adopted a corporate standard for all Regional facilities, including new building construction and existing building renovation and expansion projects, to support alignment with regional policy. The [Durham Standard](#) is applicable to Regionally-owned and operated facilities (and to Regionally-leased facilities, to the extent possible). Specific to building sustainability and resilience, the Durham Standard sets a zero GHG intensity design target and requires high energy efficiency performance in new construction and building retrofits. The Standard does make provisions for on-site combustion of fossil fuels for backup power requirements.

The Durham Standard directs staff to consider off-site impacts to improve community connectivity, encourage active transportation, and reduce community-wide GHG emissions. These measures include considering multimodal infrastructure strategies and transportation demand management measures to reduce single occupancy vehicle trips; provision for a minimum number of electric vehicle (EV) chargers in parking areas; and using refrigerants that have an ozone depletion potential of zero (or below threshold global warming potential levels).

2.5. Water and Wastewater GHG Emissions Management Strategy

The Water and Wastewater (W&WW) GHG Emissions Management Strategy (the 'Strategy'), as presented to Regional Council on May 17, 2024 through Report #2024-INFO-34, charts a path to decarbonizing water supply and wastewater treatment operations over the next 20 years. Key elements of the Strategy include:

- A framework for quantifying and reporting GHG emissions from the Region's W&WW system assets, based on best practices;
- Baseline GHG emissions for tracking progress;
- GHG reduction targets specific to the W&WW sector that identifies the limitations and gaps in meeting CCAP GHG reduction targets;
- Key performance indicators (KPI) for each W&WW system, as applicable; and
- Developing an action plan for future improvements and a roadmap for GHG reductions for the Region's W&WW facilities including prioritizing initiatives to achieve GHG reduction targets with a goal of net zero by 2045.

Fugitive process emissions related to methane (CH₄) and nitrous oxide (N₂O) account for the majority of GHG emissions for wastewater utilities in Ontario. When implementing the Strategy, the potential trade-offs between energy efficiency and process emission reductions will require careful consideration. While numerous targeted measures have been identified and assessed within the Strategy, three opportunities in particular account for more than 90 per cent of the overall GHG reduction potential identified during the strategy development, including:

- Reduction of wastewater treatment process N₂O emissions – employing actual monitoring and mitigation versus current theoretical emission quantification methods;
- Wastewater thermal energy recovery from the collection system – utilizing recoverable thermal energy to support heating and cooling with potential of more than 40 MW of thermal capacity identified across the Regional network;³ and,
- Upgrade of biogas to renewable natural gas (RNG) for grid injection - ability to meet all plant internal heating requirements and make supply available to displace conventional natural gas supplies at other Regional facilities or make available for marketing to outside entities.

The Strategy is a key roadmap towards improving energy efficiency and achieving measurable GHG emission reductions across Regional W&WW assets which will be incorporated into the Region's capital budget and nine-year capital forecast.

³ For context, 40MW is equivalent to the electricity demand of approximately 2,500 homes.

2.6. Light-Duty Fleet Electrification Plan

In April 2023, Regional Council approved the Durham Region Light-Duty Fleet Electrification Plan which outlined preliminary target years for 100 per cent electrification by each of the Region's four fleet groups (paramedic services, police service, transit service, and public works). The Plan provides a high-level strategy for replacing the Region's existing light-duty fleet to low and zero carbon options, outlining the proposed number and level of EV chargers needed by facilities to support this transition. Implementation of this plan will require coordination between fleet and facility managers to ensure that there is adequate EV charging capacity at Regional facilities to support vehicle electrification.

Further discussion on progress on fleet electrification initiatives including the implementation of supporting EV charging infrastructure can be found in Section 5.3.2 g).

2.7. Durham Region Transit Fleet Electrification Plan

In 2022, Regional Council endorsed DRT's Electrification Plan to transition all fleet vehicles to zero emission technologies by 2037. The Plan includes a coordinated suite of initiatives including battery electric vehicles, charging equipment, and related electrical and depot maintenance facility infrastructure upgrades that sets the foundation for the transition to zero emissions vehicles and was dependent on the receipt of significant senior government funding.

Further discussion on the progress of DRT's Fleet Electrification Plan initiatives including the implementation of supporting EV charging infrastructure, facility upgrades, and bus procurement can be found in Section 5.3.2 g).

3. Scope of Energy Conservation and Demand Management Plan

The ECDM plan is a corporate-wide plan that focuses on energy and GHG emissions resulting from the Region's service delivery to residents and for which the Region has direct control over in its management (e.g., excludes contracted services). It does not include community-generated GHG emissions, or emissions that fall outside the geographic boundary of the Region. The Region utilizes several hundred facilities and corporate fleet vehicles to support the delivery of Regional services (including both Regionally-owned or leased facilities and/or fleets).

As noted in Section 2 above, Regional operations form a small portion of total community-wide GHG emissions, but assets under municipal control, such as those providing transit service, do have an impact on community-wide emissions.

An overview of Regional operations within the scope of the updated ECDM Plan is outlined in Table 1. This summary is an overview of corporate assets utilizing utility-billed energy as of year-end 2023.

Table 1: Regional Asset Profile by Operational Area as of Year-End 2023

Operational Area	Description
Child Care Facilities	Four Regionally-owned childcare centres with total combined gross floor area (GFA) of just over 18,100 sq. ft.
Transit Facilities & Fleet	Two Regionally-owned transit maintenance sites (includes multiple end-use accounts) with total combined GFA of just under 188,000 sq. ft. ² 182 total fleet vehicles including 40-foot and 60-foot diesel buses and PHEV buses and light-duty non-revenue vehicles (includes four gas PHEV with remainder consisting of diesel and gasoline vehicles)
Paramedic Services Facilities & Fleet	Eight Region-owned stations (Headquarters (HQ) incl. Logistics Building) and three leased facilities with total combined GFA of over 76,500 sq. ft. 82 total ambulances and light-duty supervisory/emergency response/other vehicles (all gasoline with exception of one hybrid light duty vehicle)
Long-Term Care Facilities	Four Region-owned LTC facilities, total combined GFA over 717,000 sq. ft.
Social Housing Facilities	17 Durham Regional Local Housing Corporation (DRLHC) bulk-metered seniors' buildings (just under 600,000 sq. ft) and DRLHC family units in the City of Oshawa (over 388,000 sq. ft).
Works Depots & Fleet	Five Region-owned Works Depots with total combined GFA of over 145,800 sq. ft. (including salt/sand domes, sheds, etc.). Almost 400 total gasoline, diesel, hybrid and/or PHEV fueled vehicles (light, medium and/or heavy duty) ³
Police Services Facilities & Fleet	Eight Region-owned buildings and twelve leased facilities with total combined GFA of over 478,000 sq. ft. (not including NextGen towers, related infrastructure, and associated loads) Almost 400 owned and/or leased marked and/or unmarked vehicles including 65 hybrid and/or full electric light-duty vehicles (remaining are gasoline, diesel, and other fuel e.g., marine)
Solid Waste Management Facilities	Five Regionally-owned locations with total combined GFA of over 37,000 sq. ft. (not including Materials Recovery Facility (MRF) or Durham York Energy Centre (DYEC) which are operated under contract). End-use accounts shared with Garrard Rd. Water PS and Reservoir.

Operational Area	Description
Regional HQ & Other Offices/Misc. Facilities	Seven Region-owned facilities, including Regional HQ and 101 Consumer Dr. facility (Health Protection and Traffic Operations) with total GFA of over 715,000 sq. ft. (not including the parking garage). Additional leased space for Health, Social Services, and other office spaces (several locations) with total GFA of over 114,000 sq. ft.
Traffic Signals	Almost 500 individually-billed traffic signal related accounts.
Water Supply	15 water supply plants and well systems, 20 water pumping stations, 19 water storage facilities and other miscellaneous vertical infrastructure.
Sanitary Sewerage	11 wastewater treatment facilities (including Duffin Creek WPCP), 55 wastewater pumping stations and other miscellaneous vertical infrastructure.

Notes:

- As per O. Reg. 25/23, energy reporting covers all energy usage for all Region-owned and leased facilities and includes corporate fleet fuel usage. Contracted services (including leased facilities and/or fleets) which the Region is not directly responsible for energy consumption and billing are not included. Fleets consist of on-road vehicles; fuel consuming equipment is not included in summary.
- Does not account for reduced available sq. ft. area due to fire at 710 Raleigh Ave. in August 2023.
- Works vehicles also include administrative/support vehicles for other Regional operations including courier and water billing services, LTC, Social Housing, construction services, plant, and traffic.
- Total infrastructure and assets in-service may vary at different time of year. Totals above coincide with year-end 2023 totals as reflected in the 2024 Asset Management Plan (Report #2024-COW-29).

4. Corporate Energy Consumption and Greenhouse Gas Emissions

4.1. Current Status

In 2023, Durham Region was billed for a gross total of approximately 1,520 megajoules (MJ) of energy (estimated 1,195 MJ net), which represents a gross billed cost of \$48.4 million (including York Region share of Duffin Creek WPCP) and resulted in 56,200 tonnes of CO₂e (estimated 47,900 tonnes CO₂e net of York Region's estimated share of Duffin Creek WPCP) corporate energy related GHG emissions. This energy use and related GHG emissions are the direct result of critical services provided by the Region. Table 2 provides a breakdown of 2023 GHG emissions, energy, and cost by broad-class operating area.

Table 2: Breakdown of 2023 Gross GHG Emissions, Energy, and Cost⁴

Source	GHG Emissions		Energy		Annual	
	Tonnes CO ₂ e	%	MJ	%	\$millions	%
Buildings ⁵	12,200	22%	359	24%	\$9.3	19%
Transit Fleet	17,800	32%	251	17%	\$10.9	23%
Non-Transit Fleet	9,300	16%	130	8%	\$5.7	12%
Water and Wastewater Infrastructure	16,900	30%	780	51%	\$22.5	46%
Gross Total	56,200	100%	1,520	100%	\$48.4	100%
Estimated Net Total	47,900		1,195			

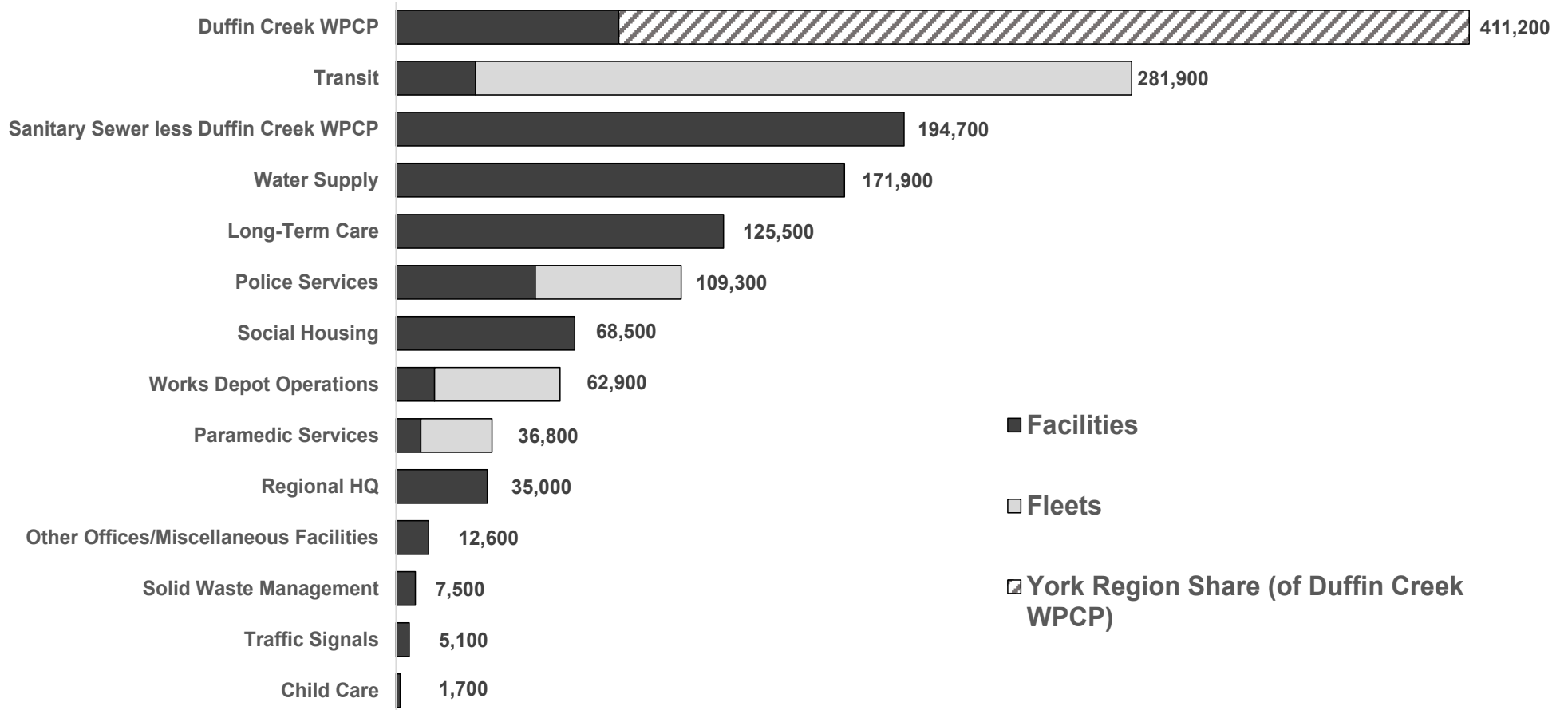
As noted in Figure 2 below, the Duffin Creek Water Pollution Control Plant (WPCP) represents Durham's largest billed share of total energy usage (gross billed, including York Region estimated share). Durham transit operations including both facilities and fleet energy usage are the next biggest share at 18 per cent (of gross billed totals) and sanitary sewer treatment operations (less Duffin Creek WPCP) and water supply represent 13 per cent and 11 per cent of gross billed energy, respectively. Following these, the next largest corporate energy users are long-term care buildings (8 per cent), the housing portfolio and police service offices (each 4 per cent), followed by Regional Headquarters (2 per cent).

Based on 2023 totals, fleet fuels as a whole represent approximately 25 per cent of the gross billed energy totals with transit fleet energy consumption representing approximately two-thirds of the fleet totals, followed by police service (15 per cent), public works operations (13 per cent) and paramedic services (7 per cent).

⁴ Total costs are reported as gross and net of York Region's share of Duffin Creek WPCP apportioned according to co-ownership sharing arrangements. Totals may not add due to rounding.

⁵ Buildings include traffic signals and lighting.

Figure 2: 2023 Energy Usage by Operational Area – Fleet and Facilities (Total MJ)



4.2. Historical Trends

The 2012 year was initially established as a baseline year for energy measurement in the Region's first ECDM Plan (2014 to 2019) and continues to be used to assess progress on energy consumption, cost, and associated GHG emissions over time. While the Region has previously only reported on facilities for prior ECDM Plan updates, given the growing interconnectedness of building and fleet operations with the planned electrification of corporate fleets, the Region has included data relating to its corporate fleets in this ECDM Plan update.

Figure 3: Gross Billed Facilities and Fleet Energy Costs and Usage (2012 - 2023)

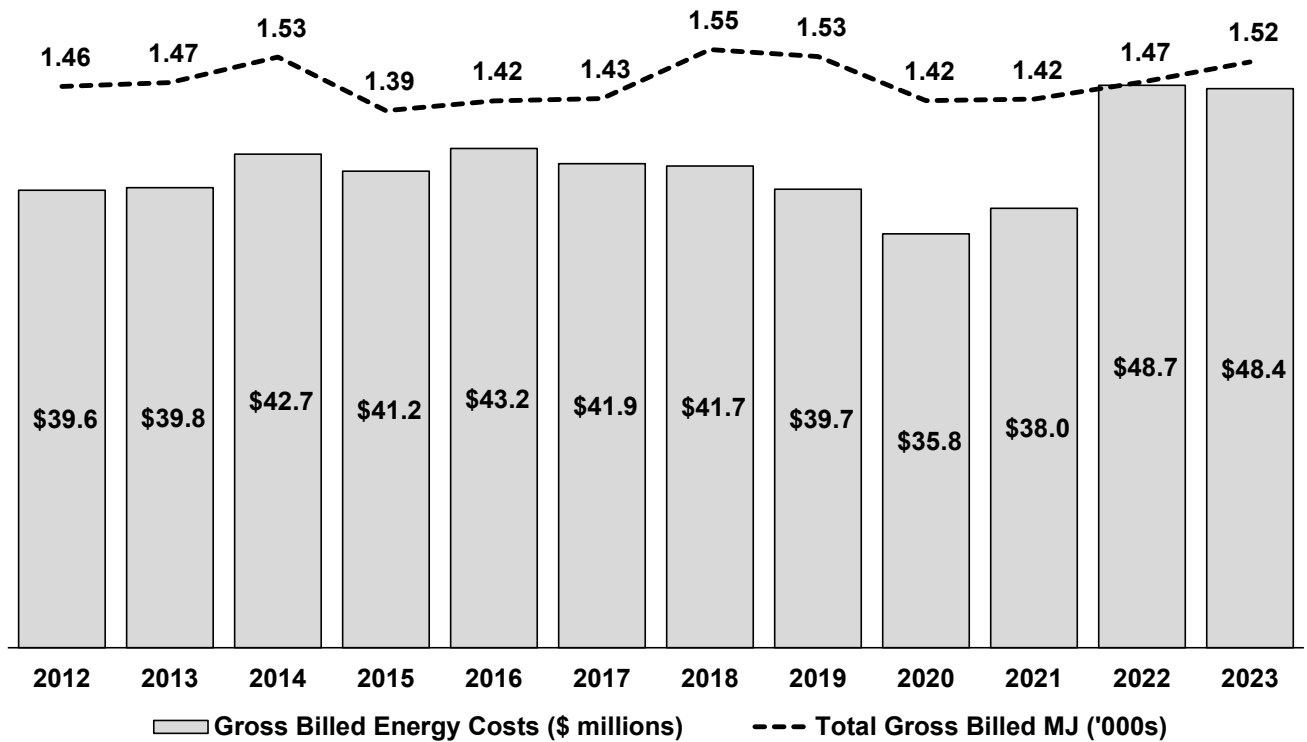
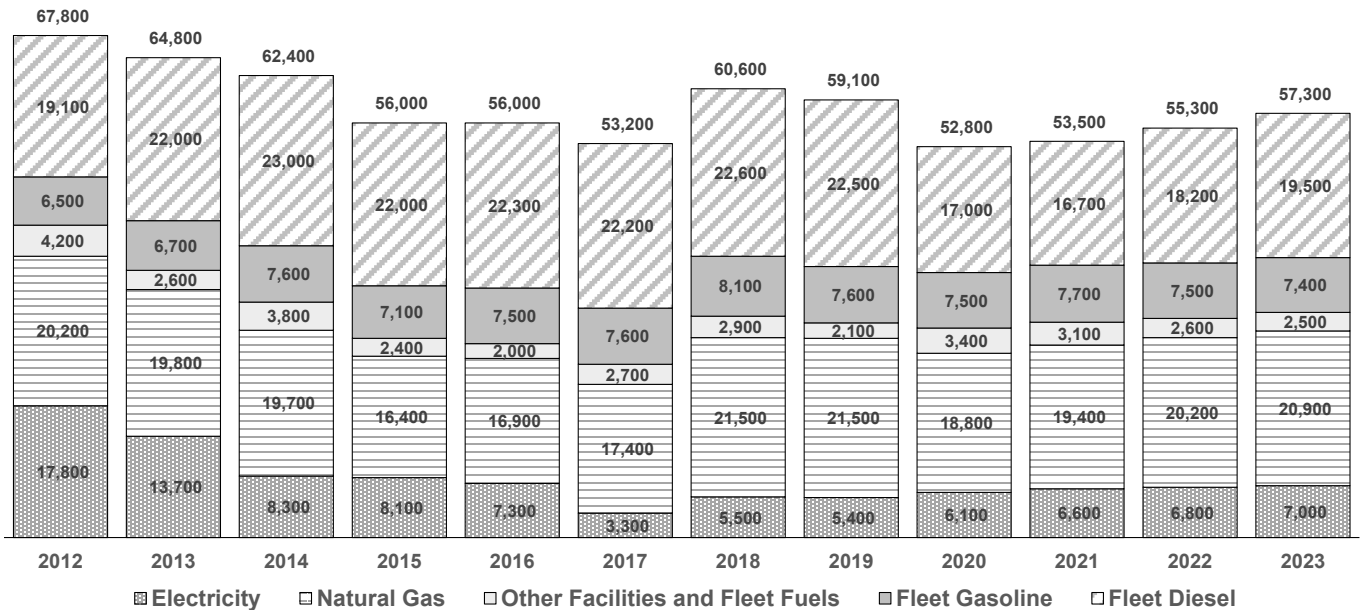


Figure 4: Gross Facilities and Fleet Emissions by Energy Type (2012 to 2023)



Additional technical metrics for energy performance and related costs over the 2012 to 2023 period are presented in Appendix A by operational program area.

5. Regional Progress in Alignment with Strategic Plans, Studies, and Directives

Regional staff continue to implement numerous technical measures and organizational improvements to enhance energy efficiency across program areas. The following sections outline the following:

- Progress made over the period of the prior ECDM Plan period as it relates to various organizational, behavioural, and technological initiatives;
- Corporate goals and objectives for energy efficiency for the 2024 to 2029 period;
- Progress underway to advance the revised goals and objectives; and
- Specific technical ECDM and related sustainability measures completed, underway, or planned.

5.1. ECDM Plan Organizational Measures: 2019 to 2024 Progress

Energy efficiency and conservation can be enhanced through organizational (e.g., policy, procedures), behavioural (e.g. awareness, engagement) and technical (e.g. equipment and/or digital control) initiatives. The 2019 to 2024 ECDM Plan identified several objectives and actions targeting behavioural and organizational elements. Table 3 provides a summary of some of the key areas of progress made in advancing energy efficiency. Refer to Appendix A for a list of technical measures completed through the course of the 2019 to 2024 ECDM plan (year-to-date) including proposed and/or planned near-term measures.

5.2. ECDM Plan Update for 2024 to 2029: Alignment with Corporate Sustainability Objectives

The ECDM Plan renewal has been developed through cross departmental and inter-disciplinary strategic consultations under the guidance of senior management. These included key personnel across major program areas plus feedback and guidance from the Facilities Decarbonization Functional Working Group (including input from the Green Fleet Working Group members) and the Corporate Climate Leadership Committee. The resulting goals, objectives, and actions in Table 4 target areas for improvement regarding behavioral and organizational elements and seek to ensure further alignment with current planning processes and overarching sustainability plans and strategies. Measures through asset management planning, studies, plans, audits, and assessments will be considered through annual Business Planning and Budget processes.

Table 3: 2019 to 2024 ECDM Goals and Objectives with Progress/Updates

Objectives	Progress/Updates	Challenges/Gaps
Goal 1: Formalize a corporate network that establishes clear lines of authority and accountability for energy management		
<p>a) Establish a corporate energy network & organization chart, ensuring senior management involvement, communications, and support.</p>	<ul style="list-style-type: none"> • Development of a Corporate Climate Governance and Management Structure, as outlined in Section 2.3, builds clearer lines of governance and internal accountability. • Corporate Climate Leadership Committee, consisting of senior level staff from across departments, meets quarterly to provide leadership, oversight, and direction. • Functional Working Groups established to provide subject matter input towards development and acceleration energy transition plans. 	<ul style="list-style-type: none"> • Need to develop all remaining Working Groups and Implementation Team to support the framework. • Further work can be done to improve communications and information sharing between Working Groups, Implementation Team, and Leadership Committee. • Consider expanding participation on Working Groups across departments to highlight initiatives being implemented including operational strategies. • Ensure that energy management and GHG targets are embedded in all corporate plans and studies. • Need to launch a communication plan for energy management under the Implementation Team.
<p>b) Establish energy user groups in key operational areas (e.g., HQ, DRPS, RDPS, LTC & DRLHC).</p>	<ul style="list-style-type: none"> • Three Certified Energy Managers retained full time by the Region, supporting corporate energy and sustainability initiatives across all operational areas. • Energy Management Plans are now a required part of engineering design for vertical process infrastructure (e.g., water and wastewater treatment plants). 	<ul style="list-style-type: none"> • Need to formalize energy user groups for access to utility platform, customize reporting, and training. • Need to create opportunities to showcase successes, discuss challenges/opportunities at operational level. • Need better lines of communication across operational areas to the Working Groups to discuss initiatives and challenges. • Operational areas have suggested potential for tenant engagement around energy conservation that may be integrated into current tenant fire safety meetings. • Opportunity to educate staff on energy efficiency, greenhouse gas calculations, energy reporting.

Objectives	Progress/Updates	Challenges/Gaps
<p>c) Implement energy objectives through asset management / life-cycle planning, business planning, and budget processes.</p>	<ul style="list-style-type: none"> • Corporate Strategic Asset Management (AM) Policy acknowledges the roles of the climate working groups in advising on the identification, assessment, and implementation on climate mitigation and adaptation measures. A key part of AM analysis and strategy development requires consideration of asset-related risk and resiliency. • Energy Management Plans are now a required part of engineering design for vertical process infrastructure. • Utility Platforms and energy reporting tools are inclusive of water consumption information for benchmarking. • Sustainability Office and Finance staff meet three times a year with Divisions to discuss GHG emissions across operations, planning, and future budget, providing support, and reporting. • Addition of climate lens to departmental Budget and Forecast templates to ensure climate evaluations are embedded in the development of current year budget and forecast submissions. • Green Fleet Working Group have added life-cycle costing into planning and replacement schedule, as per Light-Duty Fleet Electrification Plan. 	<ul style="list-style-type: none"> • Need greater visibility and tracking of water usage by facility going forward. Historical water consumption cost and consumption data to be added to data platform. • Need to ensure that water conservation measures are applied through Durham Standard where fixture replacement and retrofits are undertaken. • Consider strengthening energy and GHG emissions in the AM Policy renewal. • Need to operationalize energy and GHG reporting through decision making, annual budget process, annual inventory update, and Council reports. • Need to improve project database sharing between design, capital, and operations staff for accountability, including finance & technical staff. • Need to tie energy and GHGs into AM and project planning at operational level. • Need to work to ensure cost estimates are accurate and reflect various energy efficient and low carbon options. • Continue to work to bundle more “related” work across the portfolio rather than piecemeal initiatives for greater efficiencies and savings. • Improve the development of AM and lifecycle plans with identifying cost savings by initiatives/project to validate projects that may have a higher upfront cost offset by operational savings.

Objectives	Progress/Updates	Challenges/Gaps
Goal 2: Enhance corporate energy awareness, education, and information sharing		
<p>a) Formalize a process for the annual review, dissemination and coordination of capacity-building training opportunities, seminars, and subject-matter experts for staff.</p>	<ul style="list-style-type: none"> • Annual review of energy and GHG emission reductions undertaken are tracked through carbon budgeting process and annual inventory update. • Working Group information sessions with guest speakers provide education on existing services. • Corporate communications focused on GHG-reduction initiatives through updates to senior leadership on key initiatives. • Staff continue to participate in training sessions including Envision, Energy Star Portfolio Manager, RetScreen, asset/energy management platforms, etc. 	<ul style="list-style-type: none"> • Need to review roles and responsibilities for Communications Plan to be hosted by Implementation Team to cover all energy and GHG needs. • Need project delivery staff training focused on decarbonization technologies and systems.
<p>b) Improve communication and recognition of achievements through establishment of an Energy Communications Plan.</p>	<ul style="list-style-type: none"> • Funding opportunities shared with user groups for applicable projects. • Ongoing funding such as Enbridge Gas and SaveOnEnergy shared with Working Groups. • Development of W&WW GHG Management Strategy provides recommendations to communicate with external stakeholders and regulatory requirements. 	<ul style="list-style-type: none"> • Communications and responsibility noted earlier. • Insider website no longer hosts energy data repository although same historical billing information made available to staff through utility platform. • Consider ways to better communicate energy performance of corporate operations to those not directly involved in Working Groups. • Consider enhanced web presence through corporate intranet and public-facing web interface. • Recognize successful initiatives and champion achievements at the staff level. • Assess opportunities for showcasing successful initiatives corporate-wide.

Objectives	Progress/Updates	Challenges/Gaps
<p>Goal 3: Standardize approaches and continue integration of energy conservation into asset management, financial planning, and budget processes</p>		
<p>a) Develop more comprehensive process for analysis of energy baselines and the identification of viable opportunities.</p>	<ul style="list-style-type: none"> • Region is completing comprehensive GHG Emission Reduction Pathways studies as noted in Section 5.3.1. • Durham Standard sets the minimum performance level required for capital projects, as noted in Section 2.4. • Durham Standard outlines processes to achieve the required performance at the lowest lifecycle cost. • Climate Mitigation and Environmental Initiatives Reserve Fund established in 2019 to further support energy and climate initiatives. • The Region has been successful in securing external funding and incentives to date and will continue to maximize funding opportunities in the future. 	<ul style="list-style-type: none"> • Progress is being made through various operating divisions on development of comprehensive GHG Emission Reduction Pathway studies but full cycle of completion not yet achieved and no ASHRAE Level 2 or 3 audits in place for many of these facilities. • “Project-ready” list is frequently reviewed but challenging to maintain as projects in advance state of readiness often proceeding regardless. Shovel-ready project lists could perhaps be reviewed with frequency at Working Group meetings to ensure lists are up to date and reflect where background studies have been completed.

Objectives	Progress/Updates	Challenges/Gaps
<p>b) Improve ongoing business case development through asset management planning.</p>	<ul style="list-style-type: none"> • Durham Standard noted above. • GHG Emission Reduction Pathways findings will determine suitability for renewable energy systems and process to evaluate technical and financial feasibility. • Development of W&WW GHG Emissions Management Strategy involves the establishment of baseline GHG emissions for water distribution, wastewater collection and treatment processes applicable to Regional facilities. 	<ul style="list-style-type: none"> • Resources and expertise of the Working Groups should be further leveraged where projects being investigated can be further discussed. • Challenges currently exist with developing business cases to support project budgets. Detailed assessment and options consideration at the design stages will identify energy savings to be included in business cases to support budget investment. • Development of GHG Emission Reduction Pathways will provide greater understanding of baseline conditions and impacts of various potential measures. However, the studies are still in early stages of development so the complete “road map” has yet to be fully developed. Once developed these “road maps” can be incorporated in future capital budgets and forecasts.
<p>c) Continue development and implementation of appropriate standards and standardized processes.</p>	<ul style="list-style-type: none"> • Durham Standard noted above. • Performance at the lowest lifecycle cost through Durham Standard noted above. 	<ul style="list-style-type: none"> • Durham Standard still requires the development of a Renewable Energy Plan. • Findings of the GHG Emission Reduction Pathways studies will determine suitability for renewable energy systems and establish evaluation of technical and financial feasibility options.

Objectives	Progress/Updates	Challenges/Gaps
Goal 4: Enhance energy monitoring, performance measurement, and reporting		
<p>a) Improve building and equipment performance monitoring capabilities.</p>	<ul style="list-style-type: none"> • Continued migration of energy sub-metering systems for water and wastewater vertical infrastructure and HQ to a single web-based platform: <ul style="list-style-type: none"> ○ Two-thirds of sub-meters on platform; ○ staff can access data for facilities; ○ one sub-meter for all vertical infrastructure; ○ now applied to all new vertical infrastructure and retroactively to existing facilities as upgraded. • Access to online portals through Local Distribution Companies (LDCs) provide access to interval metered commercial accounts. • Region reports annual energy benchmark reporting through Energy Star Portfolio Manager. • Migration of corporate energy billing data to secure cloud-based platform which is an add-on to the Region's existing Building Condition Assessment & AM software. • Works Facilities Maintenance staff continuously improving centralized building automation systems (BAS) diagnostic functions. 	<ul style="list-style-type: none"> • Currently sub-metering system does not contain sub-metering for significant natural gas loads. Continue investigating this option. • Currently sub-metering on centralized systems is not available beyond HQ and in-service water and sewer accounts. Continue investigating this option. • Utility-based portals not always inclusive of all accounts greater than 50 kilowatts (kW) and method of access not through centralized single portal. • All hourly, daily, and monthly billing data will not be available through a single centralized source, as this function is not available on utility platform. • Water consumption data is not yet included in Utility Data for Regional facilities. Consumption metrics still require development. • Compliance-driven requirements may on occasion conflict with energy conservation ambitions and can be subject to change.

Objectives	Progress/Updates	Challenges/Gaps
<p>b) Implement energy targets and performance measures.</p>	<ul style="list-style-type: none"> • CCAP established GHG emission reduction targets as presented in Figure 4. • Durham Standard includes minimum targets for performance around GHG and energy usage. • GHG Emission Pathways Studies will present recommendations for net zero operations in corporate facilities. • As noted in Goal 3, the GHG Emission Reduction Pathways studies are instrumental in creating the roadmap to transitioning facilities to Net Zero. • Annual energy reporting through Energy Star Portfolio Manager has the ability to benchmark against municipal peers through open data format. • W&WW GHG Emissions Management Strategy will provide recommendations for systems improvements to reduce GHG emissions from the operations and processes as well as recommend a long-term strategy around biogas usage, other green alternatives, among other considerations. 	<ul style="list-style-type: none"> • Specific energy performance metrics have not yet been established, as the comprehensive Pathways roadmap is the next step on building a holistic plan for facility decarbonization. • Need to develop a process to separate the effects of fleet electrification from facility operations to benchmark consumption by facilities versus fleet. • With changes in operations and patterns of occupancy across Regional facilities including a hybrid work model and continued movement to modernized workspaces, further review and assessment of building utilization levels will be needed to evaluate building performance and overall space requirements. • Considering alternative metrics to provide added context to energy intensity by facility and performance over time (e.g., energy use intensity (EUI) using per occupant metrics by facility).

Table 4: Updated 2024 to 2029 ECDM Goals and Objectives

Goals	Objectives
<p>Goal 1 - Governance: Further strengthen the established corporate governance framework to ensure clear lines of oversight, accountability, and financing for implementation of energy and GHG emissions management initiatives</p>	<ul style="list-style-type: none"> • Continued engagement of corporate leadership at Commissioner/Director level through Corporate Climate Leadership Committee (CCLC), Implementation Management Team, and Working Groups. Establish the mandate and terms of reference for new Working Groups, not yet active. • Work towards development and tracking of suitable department and CCLC-endorsed energy, water, and GHG performance targets by operational area and at suitable asset sub-levels, particularly LTC. • Ensure relevant energy and GHG-related key performance indicators (KPI) for facilities, fleet, W&WW operations, and that they are available and considered as part of regular program-level reviews and performance measurement. • Support decision making, effective oversight, and direction on energy, water, and GHG initiatives, improve annual data collection and identify and address gaps such as the need for supporting studies. • Improve the carbon forecasting process with access to improved energy and GHG estimation methods and available information obtained through supporting studies/plans. • Where appropriate, continue to leverage the Climate Change Mitigation and Environmental Initiatives Reserve Fund for project start up and matching funding opportunities. • Staff will continue to apply for external funding and incentives to maximize funding opportunities for regional projects including utility-based grants and incentives (e.g., Enbridge Gas demand side management (DSM) programs, IESO SaveOnEnergy incentives) and grant and program financing options available through levels of senior government. • Opportunity to improve leveraging of internal resources such as: <ul style="list-style-type: none"> ○ BAS support from Facilities Management for LTC, ○ energy managers to engage with Facilities staff for grant incentive eligibility and funding applications, ○ expansion of sub-metering capabilities for facilities, ○ consolidation of metering into a centralized server for improved access to real time data.

<p>Goal 2 – Education and Knowledge Mobilization:</p> <p>Enhance corporate energy awareness, education, and information sharing within and across operational areas</p>	<ul style="list-style-type: none">• Establish an Energy Communications Plan that utilizes channels for communication to highlight corporate initiatives, lessons learned, successes in energy management, and climate mitigation efforts.• Formalize a process for the annual review, dissemination, and coordination of capacity-building training opportunities and seminars for staff including presentation and supply of relevant materials and information by subject matter experts.• Leverage available grant funding opportunities to support education and training opportunities.• Improve communications and recognition of achievement through communicating energy strategies, successes, and sharing of knowledge throughout the corporation.• Improved department-wide awareness of available grant/funding opportunities to support energy, water, and GHG-related initiatives (along with continued maintenance of eligible, shovel-ready projects).• Develop energy and water consumption dashboards for the utility platform with associated training for facility managers, operators, frontline, and finance staff to raise awareness of facility data, costs, and GHG emissions.• Develop a Policy and Standard for Sustainable Infrastructure Design for linear assets.• Support divisions in developing tenant engagement and awareness campaigns to help encourage positive behaviors around energy and water consumption.• Create an energy managers community of practice that connects staff across the MUSH (municipalities, universities, school boards and hospitals) sector to share lessons learned on energy efficiency through the implementation of the Durham Greener Buildings program.
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<p>Goal 3 – Process Management:</p> <p>Continue to standardize approaches to further integrate energy conservation and climate mitigation and adaptation considerations into asset management, project scoping and implementation, business planning, and budget processes.</p>	<ul style="list-style-type: none">• Develop more comprehensive process for analysis of energy baselines with development of relevant asset and sub-asset level KPIs for facilities and fleets supported by key studies.• Once GHG Emissions Reduction Pathway studies are complete, need to develop a comprehensive asset-level roadmap across portfolios for the purpose of developing potential financing strategies and integrating this work into the Region's capital budget and nine-year forecast.• Work towards integration of initiatives identified in the W&WW GHG Management Strategy into the business planning and budget process.• Improve on department-level business case development for projects with establishment of common inputs and financial performance indicators including rates of return, paybacks, energy input assumptions.• Work to ensure project costing estimates are reflective of newer and sometimes more complex technologies.• Develop a sustainable infrastructure design policy and standards for linear assets including transportation, W&WW, and waste management projects and facilities.• Improve linkages between design, capital, and operations staff including among multiple user groups inclusive of fleet for new construction and major renovations of facilities. This will include enhanced collaboration with respective LDCs. Ensure AM process and life-cycle costing considers complete cost of ownership with consideration of climate change mitigation/adaptation implications on a life-cycle basis.• Continue the implementation of Durham Standard-defined processes for project evaluation.• Establish inter-departmental working group to develop a Renewable Energy Generation and Carbon Offsets Purchasing Procedure/Policy (as recommended in development of Durham Standard).
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5.3. Corporate Initiatives Underway

The following sub-sections outline key areas of focus and related progress being made in alignment with the strategic plans, initiatives and directives as outlined throughout Section 2.

5.3.1. Building Retrofitting & GHG Emissions Reduction Pathways Studies

Regional staff have initiated comprehensive GHG Emission Reduction Pathways Studies for all non-water supply and sanitary sewer (process-related) facilities which will provide a comprehensive road map to achieving net zero GHG emissions. The studies will include the development of detailed energy modelling including a baseline “business-as-usual” model and net zero GHG outcome model and will recommend technology options, assess available electrical grid capacity and potential limitations, provide schematic designs in addition to preliminary cost estimates by initiative. The GHG Emission Reduction Pathway Studies will also assess the need for facility recommissioning where a facility has experienced significant operational changes over time (e.g., Long-Term Care facilities due to operational adjustments brought forward due to new and/or amended Ministry regulations). Through a 20-year implementation plan, the detailed studies will outline the technical measures and operational strategies to take the Region’s facilities to net zero GHG emissions, including assessing potential for on-site renewable energy generation opportunities. Once completed, the implementation plans will be incorporated into future capital budgets and forecasts.

5.3.2. Energy Generation and Energy/Carbon Offsets

As outlined within the Durham Community Energy Plan (DCEP), energy generation and the ability to displace the need for higher GHG-emitting energy sources plays a crucial role in advancing corporate and community climate goals. The following sections outline related work to-date across corporate operations.

a) Solar Photovoltaic Technologies

The Region has experience with rooftop solar photovoltaic (PV) systems where current Regional applications to-date have been operating under IESO microFIT power purchase agreement (PPA) contracts. Details on the existing rooftop solar PV systems are shown in Table 5.

Table 5: DRLHC Rooftop Solar PV System Performance Summary

Location	Generation Capacity	Date of Operation	Contract Rate (/kWh)	Contract Expiry	Performance (Up to April 2024)
Bowling Green Towers, 850 Green St. Whitby	10 kW capacity	August 2011	\$0.802	August 2031	Cumulative 165,000 kWh generation to grid; PPA revenues of almost \$131,800
King Charles Court, 155 King St. E, Oshawa	10 kW capacity	April 2013	\$0.549	April 2033	Cumulative 117,000 kWh generation to grid; PPA revenues of over \$61,500
Dean Heights, 439 Dean Ave., Oshawa	10 kW capacity	April 2013	\$0.549	April 2033	Cumulative 117,000 kWh generation to grid; PPA revenues of over \$61,600
Windsor Place, 315 Colborne St. W, Whitby	10 kW capacity	April 2013	\$0.549	April 2033	Cumulative 122,000 kWh generation to grid; PPA revenues of over \$64,000

Prior to the expiry of the PPA contracts, the Region will assess opportunities to repurpose the rooftop solar PV systems to operate under a net metering or a behind the meter configuration to assist in offsetting site electricity usage to help further lower utility costs and associated GHGs.

As of the date of this updated Plan, the Region is also developing two new rooftop solar PV systems, consisting of:

- ~59 kW rooftop solar PV system for the new Seaton Paramedic Station and Training Facility in Pickering which will operate under a net metering configuration; and
- ~140 kW rooftop solar PV system for the new Beaverton Supportive Housing facility which will operate under a net metering configuration where it is estimated that up to 50 per cent of the building's electrical load requirements will be met by the generation system (with net building energy requirements being met solely by electricity).

Staff are also assessing opportunities to install rooftop solar PV systems at Fairview Lodge Long-Term Care home and at Regional Headquarters where detailed costing and engineering work has been undertaken for the sites. In addition, there may be opportunity for a rooftop solar PV system for the Traffic Operations/Health Protection facility located at

101 Consumers Dr., Whitby, subject to further review and assessment of feasibility following the deep energy retrofit measures underway through the facility optimization and modernization work.

Additional investigative work in assessing solar PV generation opportunities using established screening and evaluative criteria is to be undertaken as part of the Durham Standard, as outlined in Section 2.4.

b) Durham York Energy Centre

The Durham York Energy Centre (DYEC) produces energy from the combustion of municipal solid waste (MSW). The facility has a gross electrical output of up to 17.5 MW of electricity and a net output of ~14 MW, where ~2 MW are used to power internal DYEC operations. The remaining electricity, sold back to the grid through the IESO, is enough to power approximately 10,000 homes per year. From the date of operations until end of April 2024, the DYEC has generated in excess of 837 million kWh of electricity to grid and provided over \$69 million in revenues paid by the IESO through Hydro One Networks to offset the costs of waste processing and is shared with York Region.

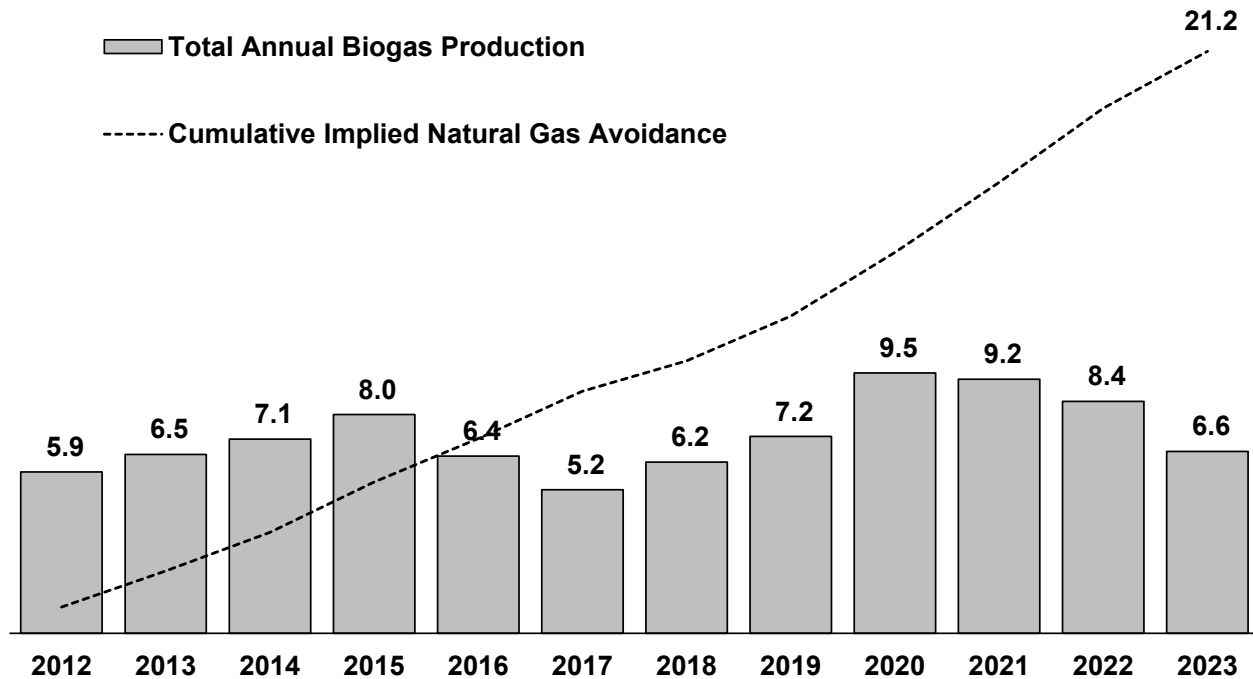
The DYEC, with limited infrastructure investment, has the technical capability of supplying a portion of its steam output to support a District Energy (DE) system (a centralized thermal energy supply) for adjacent residential and commercial end-use customers for their domestic space and water heating requirements. Through [Report #2024-COW-1](#), Regional Council endorsed in principle the concept of a DE system in the Courtice Transit Oriented Community (CTOC) that leverages waste heat from DYEC. As of the date of this Plan, further work continues to assess ownership and delivery models, work to integrate DE concepts into the CTOC Secondary Plan, assess external and senior government funding/grant sources to support the project and update the preliminary business case. Furthermore, potential synergies with major end-users (e.g., Courtice WPCP) may assist in avoiding conventional natural gas use for heating requirements in the future (or create opportunity for RNG production which can be injected into the natural gas distribution system and utilized in Regional facilities and/or used for beneficial use elsewhere).

c) Biogas Production, Utilization, and Upgrading Opportunities

Digester gas (biogas) is a by-product of the AD process at secondary wastewater treatment facilities and is utilized in dual-fuelled boilers for process and internal heating purposes at several Regional wastewater treatment plants. To-date, digester gas has served to materially displace site natural gas usage, decrease flaring requirements, and reduce energy costs and associated GHGs through a self-produced renewable energy.

Figure 5 shows implied natural gas avoidance across the Region's five wastewater treatment facilities that produce digester gas (including Duffin Creek WPCP). It is estimated that from 2012 to 2023 (inclusive) over 21 million cubic metres of cumulative natural gas usage has been displaced or avoided as a result of the utilization of biogas in plant processes (i.e., dual-fired boilers) which equates to ~36,800 tonnes of CO₂e avoidance.

Figure 5: Wastewater Plant Biogas Production and Implied Natural Gas Avoidance (millions of cubic metres (m³))



While GHG and energy cost avoidance from displaced fossil fuels is notable, there remains potential to further biogas utilization opportunities given an average of almost 60 per cent of all raw biogas produced across all five wastewater treatment plants is flared. Staff recognize the potential for this renewable energy source and have completed several key studies which have assessed biogas utilization options for Regional wastewater facilities, including:

- Courtice WPCP Integrated Resource Recovery (IRR) Phase 2 Study - completed in August 2020 and built upon the work of the prior Phase 1 Study (completed July 2017). It reviewed, among other initiatives, pre-digestion pre-treatment processed to increase overall biogas production to offset conventional energy sources (contingent on an optimal biogas utilization strategy being in place);
- Duffin Creek WPCP Integrated Resource Recovery (IRR) Study - completed August 2021, the study assessed the technical and financial viability of several shortlisted opportunities including, but not limited to, AD gas biogas purification to RNG for injection into the Enbridge Gas distribution system for marketing and/or internal use at Regional facilities; and
- W&WW GHG Emissions Management Strategy - April 2024, the study (as outlined in Section 2.5) built on prior IRR studies and assessed biogas optimization strategies to enhance production and utilization of RNG for self-consumption and/or market excess production (may also consist of separately marketing the physical commodity and the associated environmental attributes).

Based on the anticipated biogas production from the Region's wastewater facilities, including Duffin Creek WPCP, there is potential to generate sufficient RNG to offset all on-site heating requirements. There are also sufficient additional volumes that could be used to offset conventional natural gas usage at other Regional facilities through the Region's managed natural gas pool (see [Section 5.3.2 f](#)) for more details). In addition, there may be opportunities to further increase overall RNG output and GHG reduction potential should the Region's RNG development program be combined with additional strategies, including but not limited to, thermal hydrolysis pre-treatment and/or on-site sewer thermal energy recovery.

Biogas upgrading to RNG, and injection initiatives are being planned within the Region's current 10-year capital program for wastewater services (i.e., Duffin Creek WPCP) and similar initiatives for the remaining plants will be assessed for potential future implementation.

There may also be opportunities for production of RNG through organics processing in the future. Following Regional Council's decision to pause the procurement process for the Mixed-Waste Pre-Sort and Anaerobic Digestion (AD) Project in June 2022, staff developed an Organics Management Plan, endorsed by Council in March 2023 ([Report #2023-WR-3](#)). As noted in Report #2023-WR-3, the next steps to move the Region's organics management plan forward comprise of short- and long-term processes. The short-term process provides operational continuity by securing third- party organics processing capacity at a suitable AD facility beyond the end date of the current organics processing contract of June 30, 2024.

The long-term process focuses on the future viability of the Region's AD Project. Regional staff will monitor the performance of the short-term organics management plan and adjust the long-term organics management plan requirements as appropriate. A future AD facility may provide additional opportunities for RNG production, whether for internal use and/or external marketing opportunities.

d) Geothermal Systems

Geothermal systems are technologies which harness heat within the earth for heat or to generate electricity, heating and/or cooling. Geothermal systems are a renewable energy source which can provide a sustainable baseload energy supply with low GHG emissions. The Region is proceeding on work utilizing geothermal technology as part of two new construction projects:

- Seaton Paramedic Station and Training Facility (Pickering) - includes a geothermal system that will provide heating and cooling for the building. Combined with a solar PV, this facility will effectively be a zero-carbon building (anticipated 2024 completion); and
- Clarington Police Complex Phase 2 (Clarington) - designed to include a geothermal field for heating and cooling although the facility will maintain natural gas service as backup for emergency redundancy (anticipated March 2025 completion).

While the technology yields notable potential, the opportunities for geothermal systems may be limited due to site-specific considerations (e.g., geotechnical factors) and the significant upfront cost. However, as noted in Section 5.3.2 e), renewable energy resources will be investigated as part of the Durham Standard and implemented based on site suitability and technical and financial feasibility.

e) Durham Standard and Development of a Renewable Energy Generation Plan

Although the Durham Standard does not directly prescribe renewable energy for new facility development, it does offer targets that can be used in facility design that, in principle, cannot be achieved without some sort of onsite generation:

- Total energy use intensity limit of 100 ekWh/m² and thermal energy use demand intensity of 30 ekWh/m²;
- 50 per cent energy use intensity improvement over Ontario Building Code SB-10;
- Passive House Certification; or
- Canada Green Building Council Zero Carbon Building Certification.

Going forward, the Durham Standard will also involve the development of a Renewable Energy Generation Plan which will include a number of activities, including but not limited to the review of Regional assets to identify the potential for solar, geo-exchange, and RNG generation based on location characteristics, as part of, or coordinated with, the facility-level zero-carbon planning process. This will include consultation with LDCs to determine available energy distribution/transmission system capacity. Assets with high potential (e.g., structural loads, existing power capacity, etc.) will be further assessed for project viability.

The Plan will also outline the process for developing supporting business cases and potential procurement methods, financing options, investment criteria and propose a program implementation strategy (with consideration of appropriate timing for installation, alongside other concurrent asset renewal and related activities).

The Durham Standard recommends the establishment of a cross-departmental working group to develop the procedures for this initiative where it is envisioned that the findings and recommendations of the GHG Emission Reduction Pathways Studies will be leveraged to help identify suitable renewable energy generation opportunities across Regional portfolios.

f) Durham Standard and Energy/Carbon Offset/Credit Policy

The Durham Standard also recommends the development of a corporate policy and process for retaining energy and/or environmental attributes and related credits/offsets which will allow for the potential marketing of excess attributes and related credits/offsets in the future. Appropriate protocols and processes for accreditation and 3rd party verification will need to be established in order to ensure credibility of such instruments and the energy and/or reductions/avoidance they are associated with. Opportunities in this area may include, but are not limited to, credits created from

avoided methane emissions in landfills, and attributions associated with the production of RNG.

As part of developing an overarching corporate policy and process for retaining energy, environmental attributes and related credits/offsets, staff will need to identify potential initiatives for which the Region may wish to retain such instruments which could include collaboration on community-based waste heat recovery projects, support for residential and/or commercial retrofit activities and certain contracted services (e.g., waste collection services). Staff will also consider areas where such instruments may be retained to offset corporate GHG emissions.

g) Fleet Decarbonization Initiatives

As previously noted, given the growing interconnectedness between building operations and fleets (whether for public and/or for corporate fleets) with increased electrification, the undertaking of the Region's corporate ECDM Plan must now consider the planning of building and fleet assets and supporting infrastructure in a holistic manner where close collaboration must be undertaken with LDCs to understand system capacity availability.

To-date, notable progress has been made towards the implementation of EV chargers to ensure the necessary infrastructure is in place to align with the procurement of vehicles reliant on the chargers. As of the date of this ECDM Plan, the Region has been successful in securing several rounds of funding under Natural Resources Canada's (NRCan) Zero Emission Vehicle Infrastructure Program (ZEVIP) which has, and continues to support, the planning and delivery of numerous EV chargers Region-wide.

Through collaborative submissions with local municipal and other broader public sector (BPS) partners, the Region itself has been approved for over \$1.5 million in federal funding which, upon completion of all installations, along with previously installed chargers (non-ZEVIP supported installs), will see a network of over 140 total Level 2 and Level 3 chargers across Region-owned facilities to support a combination of public and/or corporate fleet charging activities. Additional details regarding specific locations of EV charger installations can be found in Appendix A.

Going forward, the Durham Standard will require that EV charging equipment be provided for a minimum of 30 per cent of total parking spaces while providing electrical rough-ins for remaining spots to accommodate future charging infrastructure. Furthermore, to reduce single occupant vehicle trips, the Durham Standard notes that if providing more than the minimum parking required under the Zoning By-law, the excess spaces must be dedicated priority parking spaces for low-emitting vehicles, carpooling/ridesharing and/or for publicly accessible spaces dedicated to shared vehicle systems such as carsharing, ridesharing, or micro-mobility systems.

As it relates to corporate light-duty fleets, as noted in Section 2.6, the Region has completed and adopted a [Light-Duty Fleet Electrification Plan](#). The plan sets out the required number and type of EV chargers needed to support the integration of plug-in

hybrid EVs (PHEV) and full EVs for corporate fleet. Preliminary targets are for 100 per cent light-duty fleet electrification by operational division. A plan for conversion or replacement of non-transit medium- and heavy-duty fleets will be developed in the future, as suitable technology options become more readily available.

Specific to DRT service, as noted in Section 2.7, the DRT Fleet Electrification Plan includes numerous initiatives that will assist in transitioning the fleet operations to net zero GHG. Near-term initiatives to advance this program include:

- DRT's E-Bus Pilot is partially supported by Infrastructure Canada's Canada Community-Building Fund (CCBF) funding, where \$12.1 million will fund the purchase of six battery electric buses (delivery is expected by mid-2024) and associated charging infrastructure. The Region is also leveraging the expertise of EnerForge, the non-regulated arm of local utility OPUC, to deliver the installation and support the ongoing maintenance of the pilot charging infrastructure being installed at DRT's 710 Raleigh Ave. maintenance depot facility;
- Partnering with the Canada Infrastructure Bank (CIB) to secure low-interest debt financing to support the incremental purchase cost of up to 98 battery-electric buses. Repayment of the loan will be sourced from anticipated savings realized from reduced maintenance and fuel costs over the life of the electric buses (compared to conventional diesel buses); and,
- Planning the design and construction of a new flagship net zero GHG transit operations and maintenance facility at 2400 Thornton Rd. in Oshawa, capable of hosting a fleet of zero emission vehicles.

While not related to fleet electrification, staff are investigating a potential pilot on the use of renewable diesel as a seasonal alternative for medium- and heavy-duty fleet vehicles, excluding winter periods. A non-binding Request-for-Information (RFI) was undertaken in the Fall 2023 to assess market opportunities and understand the range of product offerings from various vendors as well as associated environmental benefits and potential operating implications. Renewable diesel is a cleaner, green fuel, which could potentially reduce GHG emissions from summer diesel by 60 per cent or more on a life-cycle basis. Potential cost implications continue to be assessed considering price premiums and potential exemptions on applicable carbon fuel surcharges.

Regular updates on the progress of Light-Duty Fleet Electrification Plan implementation (including replacement of the existing internal combustion engine fleet vehicles, DRT electrification initiatives and other fleet decarbonization initiatives) will be provided through annual CCAP reporting to Regional Council.

5.3.3. Energy Procurement and Commodity Management

Aside from the implementation of technical measures and operational strategies aimed at improving asset performance and reducing energy costs, GHG emissions and optimizing

overall total cost of ownership, the Region is actively managing its utility accounts to mitigate price risks and provide enhanced degrees of budget predictability.

a) Commodity Cost and Utility Rate Structure Management

The Region (including DRLHC) has over 700 electricity end-use accounts across OPUC, Elexicon Energy and Hydro One Networks and over 450 natural gas end-use accounts with Enbridge Gas (accounts partially or fully active in 2023). Given the complexities in managing various account structures and to assist with Regional rate structure and price hedging strategies, the Region also retains the services and support of energy advisors to provide market intelligence (e.g., budget forecast support, regulatory updates, and administrative support for the Region's energy end-use accounts).

Examples of electricity management strategies can, where beneficial, include hedging and Regulated Price Plan (RPP) strategies and Industrial Conservation Initiative (ICI) Program support (including peak demand curtailment notifications)

Most of the Region's natural gas accounts (except DRLHC accounts) are managed under a Direct Purchase Agreement (DPA) framework with Enbridge Gas. This allows the Region, supported by its natural gas advisor, to manage the physical commodity portion of the Enbridge natural gas bill. Governed by Master Service Agreements (MSA) with Enbridge, all nominations, balancing and management of physical balances (Banked Gas Account) are undertaken through the Entrac portal system. Base supply agreements with pre-qualified natural gas suppliers ensure a competitive process for natural gas purchases.

The base DPA framework also enables the utilization of future self-produced and/or externally procured RNG at Regional facilities. To further the Region's understanding of RNG supply opportunities, in early-2023, the Region completed a non-binding RFI to understand potential opportunities for direct procurement of RNG supply for use within the Region's managed pools (as well as term, volumes, pricing, etc.) and to understand RNG marketability and pricing arrangements should the Region eventually produce its own RNG.

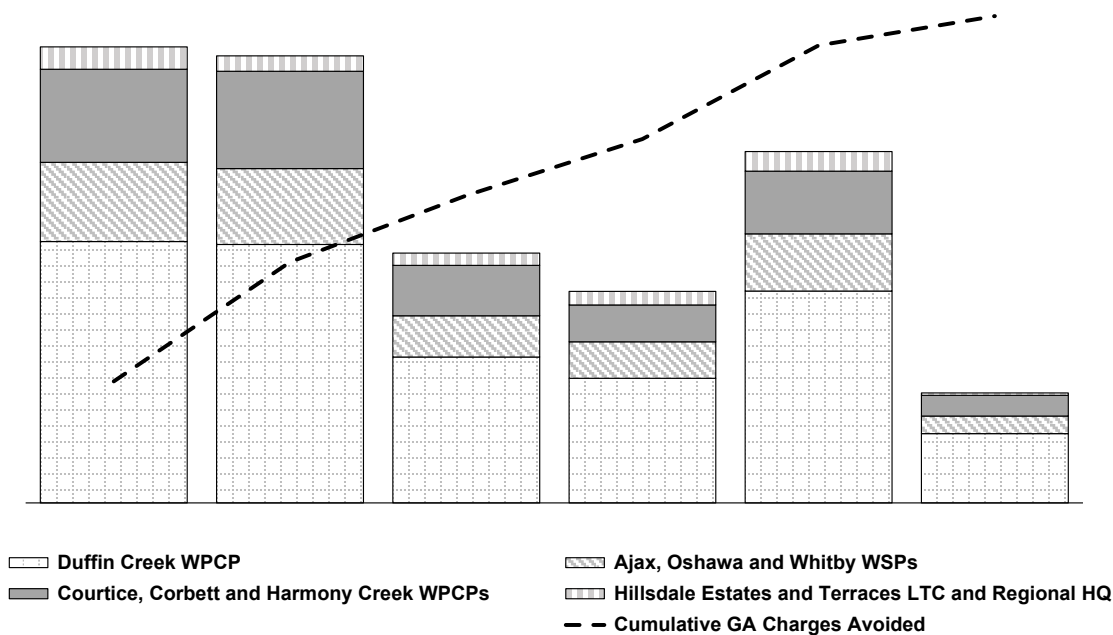
DRLHC natural gas accounts are billed according to default Enbridge system gas rates or are enrolled in the Housing Services Corporation (HSC) natural gas bulk purchase program (mainly family units in the City of Oshawa). The Region is regularly provided with program price and term options for managing the commodity and transportation portion of the invoice.

5.4. Additional Electricity Demand Management Initiatives

The Region has been an active participant in the IESO's Industrial Conservation Initiative (ICI) program. Per Ontario Regulation 429/04 under the Electricity Act, 1998, customers who participate in the ICI program (classified as Class 'A' customers), pay the Global Adjustment (GA) charge based on their percentage contribution to the top five peak Ontario demand hours (i.e., peak demand factor) over a 12-month base period. Remaining Class 'B' customers continue to pay the GA charge on a kWh-basis intended to recover the balance of GA-related costs among the rate-base.

The Region currently has eleven accounts with a Class 'A' designation (all generally 1 MW or more or aggregate to 1 MW threshold) under the ICI program for the purposes of determining GA costs. To-date, the Class 'A' designation has applied to various Regional accounts since July 1, 2017, and more specifically, has been applicable to the Duffin Creek WPCP Sub 2/1 account since July 1, 2015. As shown in Figure 6, to-date the Region has benefitted significantly from ICI program participation, where it is estimated that from January 2019 to the end of April 2024, the Region has avoided over \$25.7 million in GA charges.

Figure 6: Regional Industrial Conservation Initiative Cost Avoidance Summary



To the extent that fleet electrification (e.g., electrification of bus fleets) and fuel switching of building fuel systems (e.g., switch to electric boilers, non-gas heat pumps, etc.) adds to facility electrical demand, there is an increased likelihood of account eligibility and greater participation in the ICI program, which may alter utility cost structures and approaches to managing building operations. The Region currently coordinates peak demand reductions during system-wide peak periods with the support of IESO market data and recommendations from our electricity advisor. Going forward the Region may consider the viability of leveraging renewable energy generation, storage infrastructure and/or strategic management of operations/loads to maximize the potential financial benefits of Class 'A' eligibility.

5.4.1. Performance Monitoring and Reporting

To further drive energy conservation, the Region has been working to improve access to utility billing data including consumption and cost, to improve the reporting and visibility of energy information and proactively identify trends and identify operational issues.

a) Energy and Water Consumption and Cost Data Tracking and Reporting

In 2023, the Region procured a third-party cloud-based, secure energy and sustainability data tracking platform. It will provide staff access and track relevant energy and water consumption and cost data over time, benchmark industry targets, identify potential savings opportunities, and create customizable reports. The platform will also allow staff to create consumption baselines and cost avoidance reports using built-in weather normalization features and allow for assessment of GHG emissions.

With broad rollout of the dashboard, training and the ongoing development of customized dashboards and reports, staff envision this platform will provide greater opportunities to monitor utility consumption and drive energy management improvements. There is also flexibility to extract and export data for the Region's annual energy and GHG reports, including through Energy Star Portfolio Manager (ESPM), in compliance with O. Reg 25/23 under the *Electricity Act*.

b) Real-Time Power Monitoring and Sub-Metering

Power meters provide granular, real-time (and historical) power data to any user who has access to a corporate computer and the applicable vendor web application. Power data may be used by any Regional staff member to gain valuable insights into facility operations. The data can also support the implementation of energy saving measures, determining requirements for existing facility upgrades, and settling billing discrepancies with electrical utilities. As most power meters have the ability to detect and log power quality issues, facility managers and operations staff have the ability to identify whether the power issues are coming from the LDC side or whether it is specific to the facility itself.

To date, there has been 186 power meters installed throughout the various facilities, namely water and wastewater treatment facilities and pumping stations. Over the next several years, the Region will focus efforts on expanded coverage and consolidation of existing power meters into a centralized power monitoring server at Regional Headquarters.

c) Annual Corporate Reporting and Update on ECDM Initiatives

Tracking and updates on the progress of key strategic initiatives, including ECDM measures and other climate mitigation projects, will continue to be presented quarterly to the Corporate Climate Leadership Committee.

Annual reporting to Regional Council on the corporate GHG inventory versus the interim and long-term GHG targets will continue to be undertaken through the annual CCAP progress update. This will include all GHG mitigation efforts, including ECDM initiatives which are key contributors to the Region's decarbonization goals.

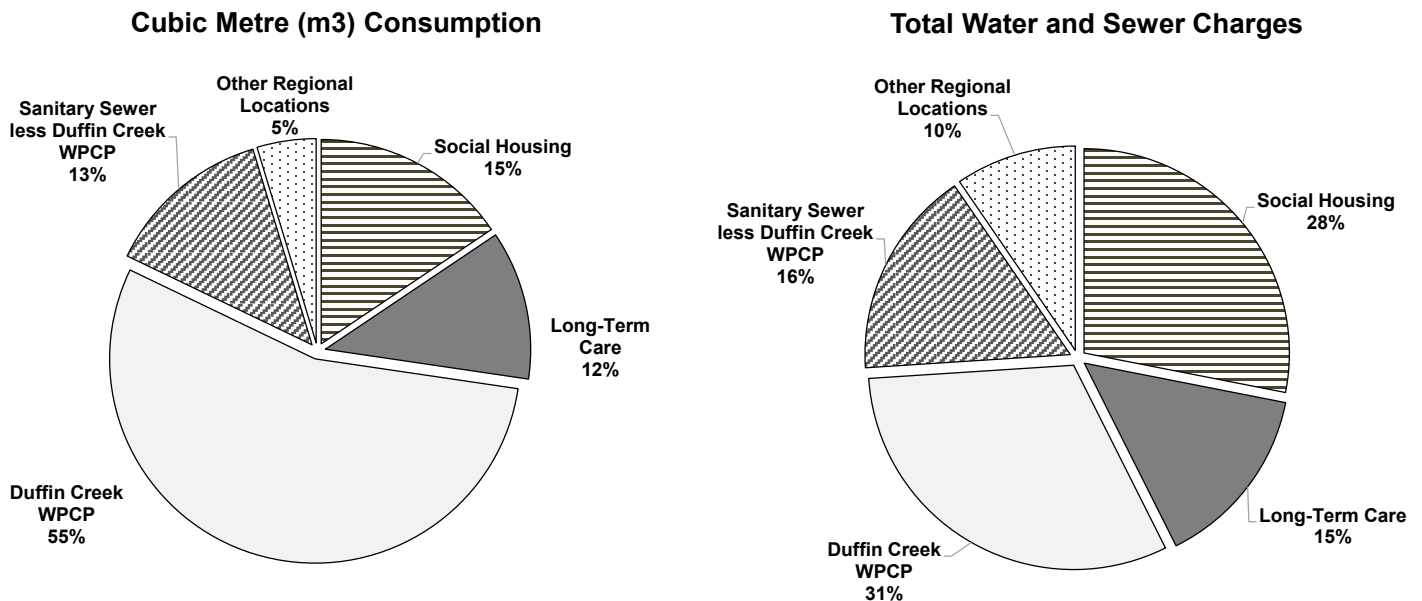
All of the Region's energy conservation initiatives support overarching corporate net zero GHG targets, including the monitoring of energy performance at Regional facilities. The Durham Standard has two EUI targets directly related to energy performance (see Section

2.4) which can be used to track progress on existing, and newly constructed facilities, and identify areas for further facility improvement.

5.4.2. Water Conservation Measures

Water usage and sanitary sewer discharge are material utility costs at Regional facilities, particularly for the Region's larger wastewater treatment facilities (including Duffin Creek WPCP), Long-Term Care facilities and the DRLHC seniors' buildings and family unit portfolio. The latter two operational areas are heavily driven by occupant end-usage. Excluding water and wastewater and solid waste operations, LTC and DRLHC total just under 90 per cent of all water consumption volumes. Figure 7 provides a high-level summary of 2023 water and sanitary sewer consumption and costs across billed Regional facilities, where it is estimated that operations were responsible for over \$2.5 million in total volumetric and fixed charges and almost one million cubic metres (m³) of usage.

Figure 7: 2023 Billed Water and Sanitary Sewer Consumption and Cost – Share by Operational Area⁶



Reductions in the treatment, pumping, and distribution of water as well as the discharge and movement of sanitary sewer, impacts energy and GHG emissions at the system-level given the Region is effectively the utility for water and wastewater services. As such, further promotion is needed on the reduction of water consumption across corporate operations.

The Region is moving towards integration of all historical water consumption and cost data across billed facilities (owned and/or leased) into the Region's newly procured, third-party

⁶ Sanitary sewer metered volumes, where applicable, are equal to water consumption volumes for billing purposes. Charges across accounts will vary by meter size, total consumption volumes and other charges (e.g. fire line).

cloud-based, secure energy and sustainability data tracking platform (as noted in Section [REDACTED]). This will improve regular reporting and benchmarking of water consumption across facilities. In addition, the GHG Emission Reduction Pathways Studies for all Regional facilities will also make recommendations for water consumption savings.

6. Conclusion: Looking Forward

Looking forward, plans for 2024 to 2029 will focus on implementing the strategic plans outlined in this document, notably the:

- Implementation of the Durham Standard;
- Implementation and reporting of the Corporate Climate Action Plan;
- Completion of all GHG Emissions Pathway Studies followed by a centralized plan that provides a roadmap for decarbonization of all corporate facilities;
- Approval and implementation of the Water and Wastewater GHG Emissions Management Strategy;
- Continued implementation of the Light-Duty Fleet Electrification Plan;
- Implementation of DRT's E-Mission Zero Program Plan;
- Continued installation of the EV charger network;
- Future development of district energy;
- Consideration of renewable energy and carbon offset options; and,
- Investigation of renewable natural gas options (e.g., biogas from anaerobic digestion processes).

These initiatives are anticipated to have significant and long-term energy and GHG reduction impacts, which will provide a strong foundation and strategic corporate alignment, as the Region moves forward.

7. Appendix A

Figure 8: Summary of Energy Efficiency Initiatives for 2019 to 2024 (YTD) Housing

Operational Area	Facility Name	Address	Municipality	Project Description	Total Est. Cost (Rounded)	Approx. In-Service Year	Electricity Savings (kWh)	Natural Gas Savings (m3)	Fuel Savings (L)	Estimated Operational Savings/Year	Incentive / Measure Value (if applicable)	Annual GHG Reductions (rounded)
Housing	Beatrice Terrace Seniors Building (DRLHC)	385 Beatrice St. E.	Oshawa	Boiler Replacement	\$ 38,000	2019 and onward	Project expected to realize natural gas and related operational cost savings and GHG emission reductions					
Housing	Beaverton Supportive Housing	133 Main St. W	Beaverton	Installation of two (2) Level 2 electric vehicle chargers for public/corporate fleet usage and provision for additional future chargers	\$ 40,000	Underway / planned	Net energy, operational and GHG benefits will be dependent on actual charging activity in comparison to status quo scenario				Up to \$10,000 (pending completion)	-
Housing	Beaverton Supportive Housing	133 Main St. W	Beaverton (Brock)	New facility construction including installation of rooftop solar PV system (with net metering to offset facility site load requirements)	\$24.4 million	Anticipated 2024	Approximately 140 kW rooftop solar PV system for the facility which will operate under a net metering configuration where it is estimated that up to 50 per cent of the building's electrical load requirements will be met by the generation system (with net building energy requirements being met solely by electricity)					
Housing	Bowling Green Towers Seniors Building (DRLHC)	850 Green St.	Whitby	Emergency Boiler Replacement	\$ 77,000	2020 and onward	Project expected to realize natural gas and related operational cost savings and GHG emission reductions					
Housing	Bowling Green Towers Seniors Building (DRLHC)	850 Green St.	Whitby	Replacement of the Domestic Water Distribution System, Suspended Ceiling System, and Corridor Lighting	\$ 655,000	2022	Project expected to realize electricity and related operational cost savings and GHG emission reductions					
Housing	Brookside Apartments Seniors Building (DRLHC)	20 Perry St.	Uxbridge	Interior Lighting Upgrades	\$ 20,000	2019 and onward	Project expected to realize electricity and related operational cost savings and GHG emission reductions					
Housing	Brookside Apartments Seniors Building (DRLHC)	20 Perry St.	Uxbridge	Replacement of domestic hot water boilers	\$ 151,100	2021	Project expected to realize natural gas and related operational cost savings and GHG emission reductions					
Housing	Dean Heights Seniors Building (DRLHC0)	439 Dean Ave.	Oshawa	Installation of three (3) Level 2 electric vehicle chargers for corporate fleet usage	\$ 60,000	Underway / planned	Net energy, operational and GHG benefits will be dependent on actual charging activity in comparison to status quo scenario				Up to \$15,000 (pending completion)	-
Housing	Fairport Lodge Seniors Building (DRLHC)	1330 Foxglove Ave.	Pickering	Interior Lighting Replacements	\$ 12,000	2020 and onward	Project expected to realize electricity and related operational cost savings and GHG emission reductions					
Housing	Fairport Lodge Seniors Building (DRLHC)	1330 Foxglove Ave.	Pickering	LED Lighting Upgrade	\$ 11,600	2020 and onward	3,000 kWh	-	-	\$ 360	\$1,737	90 kg CO2e
Housing	Harwood Manor Seniors Building (DRLHC)	655 Harwood Ave. S	Ajax	Installation of three (3) Level 2 electric vehicle chargers for corporate fleet usage	\$ 60,000	Underway / planned	Net energy, operational and GHG benefits will be dependent on actual charging activity in comparison to status quo scenario				Up to \$15,000 (pending completion)	-
Housing	Harwood Manor Seniors Building (DRLHC)	655 Harwood Ave.	Ajax	Interior Lighting Replacements	\$ 18,000	2020 and onward	Project expected to realize electricity and related operational cost savings and GHG emission reductions					
Housing	Harwood Manor Seniors Building (DRLHC)	655 Harwood Ave.	Ajax	Lighting Upgrade	\$ 12,000	2021 and onward	Project expected to realize electricity and related operational cost savings and GHG emission reductions					
Housing	Harwood Manor Seniors Building (DRLHC)	655 Harwood Ave.	Ajax	Lighting Upgrade	\$ 17,700	2021 and onward	Project expected to realize electricity and related operational cost savings and GHG emission reductions					
Housing	Harwood Manor Seniors Building (DRLHC)	655 Harwood Ave., S	Ajax	Replacement of windows and doors	\$ 2,110,000	2024 and onward	Project expected to realize electricity and/or natural gas and related operational cost savings and GHG emissions reductions					
Housing	Kellett Manor Seniors Building (DRLHC)	327 Kellett St.	Port Perry (Scugog)	Domestic Hot Water Boilers, Relocation & Replacement	\$ 136,000	2020 and onward	Project expected to realize natural gas and related operational cost savings and GHG emission reductions					
Housing	Kellett Manor Seniors Building (DRLHC)	327 Kellett St.	Port Perry (Scugog)	Emergency Lighting Upgrade	\$ 16,300	2022 and onward	Project expected to realize electricity and related operational cost savings and GHG emission reductions					

Figure 9: Summary of Energy Efficiency Initiatives for 2019 to 2024 (YTD) Housing continued

Operational Area	Facility Name	Address	Municipality	Project Description	Total Est. Cost (Rounded)	Approx. In-Service Year	Electricity Savings (kWh)	Natural Gas Savings (m3)	Fuel Savings (L)	Estimated Operational Savings/Year	Incentive / Measure Value (if applicable)	Annual GHG Reductions (rounded)
Housing	Kellett Manor Seniors Building (DRLHC)	327 Kellett St.	Port Perry (Scugog)	Hallway Lighting Upgrades (in Addition to DHW Recirculation Lines Project)	\$ 230,000	2020 and onward	Project expected to realize electricity and related operational cost savings and GHG emission reductions					
Housing	King Charles Court Seniors Building (DRLHC)	155 King St. E	Oshawa	Back-Up Diesel Generator	\$ 458,000	2020 and onward	Anticipated to enhance building climate resilience and help ensure continuity of operations					
Housing	King Charles Court Seniors Building (DRLHC)	155 King St. E	Oshawa	Building envelope upgrades	Supported by SHAIIP grant funding	2024	Anticipated electricity and/or natural gas and related operational cost savings and GHG emission reductions					
Housing	King Charles Court Seniors Building (DRLHC)	155 King St., E	Oshawa	Installation of two (2) Level 2 electric vehicle chargers for corporate fleet usage	\$ 40,000	Underway / planned	Net energy, operational and GHG benefits will be dependent on actual charging activity in comparison to status quo scenario				Up to \$10,000 (pending completion)	-
Housing	King Charles Court Seniors Building (DRLHC)	155 King St. E	Oshawa	Replacement of MAU unit	\$ 289,000	2024	Project expected to realize electricity and/or natural gas and related operational cost savings and GHG emissions reductions					
Housing	King Charles Court Seniors Building (DRLHC)	155 King St. E	Oshawa	Replacement of windows and doors	\$ 998,100	2023	Project expected to realize electricity and/or natural gas and related operational cost savings and GHG emissions reductions					
Housing	Nelson Seniors Building (DRLHC)	2 Nelson St.	Bowmanville (Clarington)	Domestic Hot Water Service	\$ 185,000	2022 and onward	Project expected to realize electricity and/or natural gas and related operational cost savings and GHG emissions reductions					
Housing	Nelson Seniors Building (DRLHC)	4 Nelson St.	Bowmanville (Clarington)	Domestic Hot Water Service	\$ 106,000	2022 and onward	Project expected to realize electricity and/or natural gas and related operational cost savings and GHG emissions reductions					
Housing	Nelson Seniors Building (DRLHC)	4 Nelson St.	Bowmanville (Clarington)	Lighting Upgrade	\$ 3,100	2020 and onward	Project expected to realize electricity and related operational cost savings and GHG emission reductions					
Housing	Nelson Seniors Building (DRLHC)	2 Nelson St.	Bowmanville (Clarington)	Replacement of MAU unit	\$ 135,000	2025	Anticipated electricity and/or natural gas and related operational cost savings and GHG emission reductions					
Housing	Spruce Haven Seniors Building (DRLHC)	103 Cameron St. W	Cannington (Brock)	Replacement of domestic hot water system including boiler	\$ 160,000	2025	Anticipated electricity and/or natural gas and related operational cost savings and GHG emission reductions					
Housing	Spruce Lawn Apartments Seniors Building (DRLHC)	385 Rosa St.	Port Perry (Scugog)	Installation of two (2) Level 2 electric vehicle chargers for corporate fleet usage	\$ 40,000	Underway / planned	Net energy, operational and GHG benefits will be dependent on actual charging activity in comparison to status quo scenario				Up to \$10,000 (pending completion)	-
Housing	Various Locations (DRLHC)	Various Locations	Various	Furnace Replacements	\$ 94,000	2021 and onward	Project expected to realize electricity and natural gas and related operational cost savings and GHG emission reductions					
Housing	Various Locations (DRLHC)	Various Locations	Various	Furnace Replacements	\$ 37,600	2021 and onward	Project expected to realize electricity and natural gas and related operational cost savings and GHG emission reductions					
Housing	Villa Valeau Seniors Building (DRLHC)	1910 Faylee Cres.	Pickering	Interior Lighting Upgrades	\$ 12,000	2020 and onward	Project expected to realize electricity and related operational cost savings and GHG emission reductions					
Housing	Villa Valeau Seniors Building (DRLHC)	1910 Faylee Cres.	Pickering	Replacement of MAU unit and domestic hot water boilers	\$ 508,000	2024 and onward	Project expected to realize electricity and natural gas and related operational cost savings and GHG emission reductions					
Housing	Wayside Apartments Seniors Building (DRLHC)	342 Main St.	Beaverton (Brock)	Interior Lighting Upgrades	\$ 13,000	2019 and onward	Project expected to realize electricity and related operational cost savings and GHG emission reductions					

Figure 10: Summary of Energy Efficiency Initiatives for 2019 to 2024 (YTD) Housing continued

Operational Area	Facility Name	Address	Municipality	Project Description	Total Est. Cost (Rounded)	Approx. In-Service Year	Electricity Savings (kWh)	Natural Gas Savings (m3)	Fuel Savings (L)	Estimated Operational Savings/Year	Incentive / Measure Value (if applicable)	Annual GHG Reductions (rounded)
Housing	Windsor Place Seniors Building (DRLHC)	315 Colborne St. W	Whitby	Common Area Lighting Upgrades	\$ 22,000	2021 and onward	Project expected to realize electricity and related operational cost savings and GHG emission reductions					
Housing	Windsor Place Seniors Building (DRLHC)	315 Colborne St. W.	Whitby	Emergency Lighting Upgrades	\$ 18,000	2019 and onward	Project expected to realize electricity and related operational cost savings and GHG emission reductions					
Housing	Windsor Place Seniors Building (DRLHC)	315 Colborne St. W	Whitby	Installation of three (3) Level 2 electric vehicle chargers for corporate fleet usage	\$ 60,000	Underway / planned	Net energy, operational and GHG benefits will be dependent on actual charging activity in comparison to status quo scenario				Up to \$15,000 (pending completion)	-
Housing	Windsor Place Seniors Building (DRLHC)	315 Colborne St., W	Whitby	Replacement of windows and doors	\$ 916,000	2024 and onward	Project expected to realize electricity and/or natural gas and related operational cost savings and GHG emissions reductions					
Housing	Various Facilities	Various Locations	Various	Undertaking of GHG Emission Reduction Pathways studies including baseline and modified energy models to outline pathway to net zero by 2045	\$ 400,000	Underway / planned	-	-	-	-	Up to \$250,000 (pending completion)	-

Figure 11: Summary of Energy Efficiency Initiatives for 2019 to 2024 (YTD) Paramedics

Operational Area	Facility Name	Address	Municipality	Project Description	Total Est. Cost (Rounded)	Approx. In-Service Year	Electricity Savings (kWh)	Natural Gas Savings (m3)	Fuel Savings (L)	Estimated Operational Savings/Year	Incentive / Measure Value (if applicable)	Annual GHG Reductions (rounded)
Paramedic Services	Region of Durham Paramedic Services Headquarters	4040 Anderson St.	Whitby	Installation of four (4) Level 2 electric vehicle chargers for public/corporate fleet usage	\$ 40,000	2021 and onward	Net energy, operational and GHG benefits will be dependent on actual charging activity in comparison to status quo scenario				\$20,000	-
Paramedic Services	Seaton Region of Durham Paramedic Services Station	Concession Rd 5 & Sideline 16 Rd.	Pickering	Installation of two (2) Level 2 electric vehicle chargers for public/corporate fleet usage	\$ 20,000	Underway / planned	Net energy, operational and GHG benefits will be dependent on actual charging activity in comparison to status quo scenario				Up to \$10,000 (pending completion)	-
Paramedic Services	Seaton Region of Durham Paramedic Services Station	Concession Rd 5 & Sideline 16 Rd.	Pickering	New facility construction	\$14.2 million	Anticipated 2024	Approximately 59 kW rooftop solar PV system for the facility which will operate under a net metering configuration. Geothermal system will provide heating and cooling for the building (combined with solar will effectively be a zero-carbon building)					
Paramedic Services	Various Facilities	Various Locations	Various	Undertaking of GHG Emission Reduction Pathways studies including baseline and modified energy models to outline pathway to net zero by 2045	\$ 100,000	Underway / planned	-	-	-	-	-	-

Figure 12: Summary of Energy Efficiency Initiatives for 2019 to 2024 (YTD) Solid Waste

Operational Area	Facility Name	Address	Municipality	Project Description	Total Est. Cost (Rounded)	Approx. In-Service Year	Electricity Savings (kWh)	Natural Gas Savings (m3)	Fuel Savings (L)	Estimated Operational Savings/Year	Incentive / Measure Value (if applicable)	Annual GHG Reductions (rounded)
Solid Waste	Clarington Household Special Waste Depot	1998 Bowmanville Ave.	Bowmanville (Clarington)	Installation of two (2) Level 2 electric vehicle chargers for corporate fleet usage	\$ 24,000	Underway / planned	Net energy, operational and GHG benefits will be dependent on actual charging activity in comparison to status quo scenario			Up to \$10,000 (pending completion)	-	
Solid Waste	Durham Recycling Centre	4600 Garrard Rd.	Whitby	Installation of two (2) Level 2 electric vehicle chargers for corporate fleet usage	\$ 26,400	Underway / planned	Net energy, operational and GHG benefits will be dependent on actual charging activity in comparison to status quo scenario			Up to \$10,000 (pending completion)	-	
Solid Waste	Durham York Energy Centre	1835 Energy Dr.	Courtice (Clarington)	Installation of two (2) Level 2 electric vehicle chargers for corporate fleet usage	\$ 36,000	Underway / planned	Net energy, operational and GHG benefits will be dependent on actual charging activity in comparison to status quo scenario			Up to \$10,000 (pending completion)	-	
Solid Waste	Durham York Energy Centre	1835 Energy Dr.	Courtice (Clarington)	LED Lighting Upgrade	\$ 23,700	2021 and onward	249,900 kWh	-	-	\$ 29,988	\$7,740	7,500 kg CO2e
Solid Waste	Municipal Household Special Waste Facility	1998 Bowmanville Ave.	Bowmanville (Clarington)	Replacement of exterior lighting	\$ 64,500	2022 and onward	Anticipated electricity and related operational cost savings and GHG emission reductions					
Solid Waste	Various Facilities	Various Locations	Various	Undertaking of GHG Emission Reduction Pathways studies including baseline and modified energy models to outline pathway to net zero by 2045	\$ 100,000	Underway / planned	-	-	-	-	-	-

Figure 13: Summary of Energy Efficiency Initiatives for 2019 to 2024 (YTD) Long-Term Care

Operational Area	Facility Name	Address	Municipality	Project Description	Total Est. Cost (Rounded)	Approx. In-Service Year	Electricity Savings (kWh)	Natural Gas Savings (m3)	Fuel Savings (L)	Estimated Operational Savings/Year	Incentive / Measure Value (if applicable)	Annual GHG Reductions (rounded)
Long Term Care	Fairview Lodge Long-Term Care (LTC) Homes for the Aged	632 Dundas St. W	Whitby	Installation of four (4) Level 2 electric vehicle chargers for public/corporate fleet usage	\$ 80,000	2022 and onward	Net energy, operational and GHG benefits will be dependent on actual charging activity in comparison to status quo scenario			\$20,000	-	
Long Term Care	Hillsdale Estates Long-Term Care (LTC) Homes for the Aged	590 Oshawa Blvd. N	Oshawa	Class A Account - Demand curtailment during system-wide peak events as part of the Industrial Conservation Initiative (ICI) program	\$ -	2021	-	-	-	\$ 25,000	-	-
Long Term Care	Hillsdale Estates Long-Term Care (LTC) Homes for the Aged	590 Oshawa Blvd. N	Oshawa	Class A Account - Demand curtailment during system-wide peak events as part of the Industrial Conservation Initiative (ICI) program	\$ -	2022	-	-	-	\$ 54,000	-	-
Long Term Care	Hillsdale Estates Long-Term Care (LTC) Homes for the Aged	590 Oshawa Blvd. N	Oshawa	Class A Account - Demand curtailment during system-wide peak events as part of the Industrial Conservation Initiative (ICI) program	\$ -	2023	-	-	-	\$ 42,000	-	-
Long Term Care	Hillsdale Estates Long-Term Care (LTC) Homes for the Aged	590 Oshawa Blvd. N	Oshawa	Installation of four (4) Level 2 electric vehicle chargers for public/corporate fleet usage	\$ 80,000	2022 and onward	Net energy, operational and GHG benefits will be dependent on actual charging activity in comparison to status quo scenario			\$20,000	-	
Long Term Care	Hillsdale Terraces Long-Term Care (LTC) Homes for the Aged	600 Oshawa Blvd. N	Oshawa	Class A Account - Demand curtailment during system-wide peak events as part of the Industrial Conservation Initiative (ICI) program	\$ -	2021	-	-	-	\$ 21,000	-	-
Long Term Care	Hillsdale Terraces Long-Term Care (LTC) Homes for the Aged	600 Oshawa Blvd. N	Oshawa	Class A Account - Demand curtailment during system-wide peak events as part of the Industrial Conservation Initiative (ICI) program	\$ -	2022	-	-	-	\$ 33,000	-	-
Long Term Care	Hillsdale Terraces Long-Term Care (LTC) Homes for the Aged	600 Oshawa Blvd. N	Oshawa	Class A Account - Demand curtailment during system-wide peak events as part of the Industrial Conservation Initiative (ICI) program	\$ -	2023	-	-	-	\$ 39,000	-	-
Long Term Care	Hillsdale Terraces Long-Term Care (LTC) Homes for the Aged	600 Oshawa Blvd. N	Oshawa	Class A Account - Demand curtailment during system-wide peak events as part of the Industrial Conservation Initiative (ICI) program	\$ -	Underway / planned	-	-	-	\$4,000 (YTD Jan to Apr)	-	-
Long Term Care	Hillsdale Terraces Long-Term Care (LTC) Homes for the Aged	600 Oshawa Blvd. N	Oshawa	Installation of four (4) Level 2 electric vehicle chargers for public/corporate fleet usage	\$ 80,000	2022 and onward	Net energy, operational and GHG benefits will be dependent on actual charging activity in comparison to status quo scenario			\$20,000	-	
Long Term Care	Lakeview Manor Long-Term Care (LTC) Homes for the Aged	133 Main St. W	Beaverton	Installation of four (4) Level 2 electric vehicle chargers for public/corporate fleet usage	\$ 80,000	2022 and onward	Net energy, operational and GHG benefits will be dependent on actual charging activity in comparison to status quo scenario			\$20,000	-	
Long Term Care	Seaton Long-Term Care Home for the Aged Facility	Whitevale Rd. & Brock Rd.	Pickering	New facility construction	\$144.8 million	Anticipated 2026	Facility expected to realize 30% less annual energy use and EUI versus ASHRAE 90.1 2013 Standard and with 74% fewer GHG (when measured on gross floor area basis)					
Long Term Care	Various Facilities	Various Locations	Various	Undertaking of GHG Emission Reduction Pathways studies including baseline and modified energy models to outline pathway to net zero by 2045	\$ 300,000	Underway / planned	-	-	-	-	-	-

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Figure 14: Summary of Energy Efficiency Initiatives for 2019 to 2024 (YTD) Offices

Operational Area	Facility Name	Address	Municipality	Project Description	Total Est. Cost (Rounded)	Approx. In-Service Year	Electricity Savings (kWh)	Natural Gas Savings (m3)	Fuel Savings (L)	Estimated Operational Savings/Year	Incentive / Measure Value (if applicable)	Annual GHG Reductions (rounded)
Offices	Regional Headquarters Administration Building	605 Rossland Rd. E	Whitby	Attempt to save 2% of electricity consumption by optimizing the Building Automation System at Durham Region Headquarters Building	\$ 75,000	2020 and onward	923,000 kWh	-	-	\$ 110,760	-	27,690 kg CO2e
Offices	Regional Headquarters Administration Building	605 Rossland Rd. E	Whitby	Class A Account - Demand curtailment during system-wide peak events as part of the Industrial Conservation Initiative (ICI) program	\$ -	2019	-	-	-	\$0.332 million	-	-
Offices	Regional Headquarters Administration Building	605 Rossland Rd. E	Whitby	Class A Account - Demand curtailment during system-wide peak events as part of the Industrial Conservation Initiative (ICI) program	\$ -	2020	-	-	-	\$0.23 million	-	-
Offices	Regional Headquarters Administration Building	605 Rossland Rd. E	Whitby	Class A Account - Demand curtailment during system-wide peak events as part of the Industrial Conservation Initiative (ICI) program	\$ -	2021	-	-	-	\$0.137 million	-	-
Offices	Regional Headquarters Administration Building	605 Rossland Rd. E	Whitby	Class A Account - Demand curtailment during system-wide peak events as part of the Industrial Conservation Initiative (ICI) program	\$ -	2022	-	-	-	\$0.113 million	-	-
Offices	Regional Headquarters Administration Building	605 Rossland Rd. E	Whitby	Class A Account - Demand curtailment during system-wide peak events as part of the Industrial Conservation Initiative (ICI) program	\$ -	2023	-	-	-	\$0.208 million	-	-
Offices	Regional Headquarters Administration Building	605 Rossland Rd. E	Whitby	Class A Account - Demand curtailment during system-wide peak events as part of the Industrial Conservation Initiative (ICI) program	\$ -	Underway / planned	-	-	-	\$48,000 (YTD Jan to Apr)	-	-
Offices	Regional Headquarters Administration Building	605 Rossland Rd. E	Whitby	Installation of four (4) Level 2 electric vehicle chargers for public/corporate fleet usage	\$ 80,000	2021 and onward	Net energy, operational and GHG benefits will be dependent on actual charging activity in comparison to status quo scenario				\$20,000	-
Offices	Regional Headquarters Administration Building	605 Rossland Rd. E	Whitby	Installation of six (6) Level 2 electric vehicle chargers for public/corporate fleet usage	\$ 120,000	2019 and onward	Net energy, operational and GHG benefits will be dependent on actual charging activity in comparison to status quo scenario				-	-
Offices	Regional Headquarters Administration Building	605 Rossland Rd., E	Whitby	LED Lighting Retrofit	\$ 82,200	Underway / planned	136,650 kWh	-	-	\$ 16,398	\$8,460	4,100 kg CO2e
Offices	Regional Headquarters Administration Building	605 Rossland Rd. E	Whitby	LED lighting upgrade - upgrade certain 4' fluorescent fixtures to LED	\$ 1,600	2022 and onward	25,000 kWh	-	-	\$ 3,000	-	750 kg CO2e
Offices	Regional Headquarters Administration Building	605 Rossland Rd. E	Whitby	LED Retrofitting of Front Foyer	\$ 26,600	2020 and onward	59,000 kWh	-	-	\$ 7,080	\$4,000	1,770 kg CO2e
Offices	Regional Headquarters Administration Building	605 Rossland Rd., E	Whitby	Main entrance revolving door system project	\$ 232,000	Underway / planned	Anticipated electricity and/or natural gas and related operational cost savings and GHG emission reductions					
Offices	Regional Headquarters Administration Building	605 Rossland Rd. E	Whitby	Office Modernization Project	\$27 million	Underway / planned	Anticipated electricity and/or natural gas and related operational cost savings and GHG emission reductions					
Offices	Various Facilities	Various Locations	Various	Undertaking of GHG Emission Reduction Pathways studies including baseline and modified energy models to outline pathway to net zero by 2045	\$ 100,000	Underway / planned	-	-	-	-	-	-
Offices	Traffic Operations/Health Protection Division	101 Consumers Dr.	Whitby	Installation of four (4) Level 2 electric vehicle chargers for public/corporate fleet usage	\$ 80,000	2021 and onward	Net energy, operational and GHG benefits will be dependent on actual charging activity in comparison to status quo scenario				\$20,000	-
Offices	Traffic Operations/Health Protection Division	101 Consumers Dr.	Whitby	Office Modernization Project including major energy retrofitting	\$18.6 million	Underway / planned	Deep retrofit will achieve high level of energy efficiency and near-zero GHG where measures include (but not limited to) window upgrades, replacement of natural gas RTU with electric units and energy recovery wheels as well as heating to be supplied through electric air source heat pumps and new BAS system controls					
Offices	Workplace Modernization Project (WMP) Office swing space	1500 Hopkins St.	Whitby	Installation of new ductless split A/C unit in electrical room	\$ 10,200	2022 and onward	Anticipated electricity and related operational cost savings and GHG emission reductions					
Offices	Various Locations	Various Locations	Various	Participation in the IESO's Energy Manager Program	Staff salary/related expenses	2019 to 2021	Electricity savings per IESO's EEM Program Targets. Operational cost benefits from electricity saved. Incentives and savings may also be related to other CDM initiatives outlined herein					

Region of Durham's 2024 to 2029 Energy Conservation and Demand Management Plan

Figure 15: Summary of Energy Efficiency Initiatives for 2019 to 2024 (YTD) Police

Operational Area	Facility Name	Address	Municipality	Project Description	Total Est. Cost (Rounded)	Approx. In-Service Year	Electricity Savings (kWh)	Natural Gas Savings (m3)	Fuel Savings (L)	Estimated Operational Savings/Year	Incentive / Measure Value (if applicable)	Annual GHG Reductions (rounded)
Police	Durham Regional Police Service Central East Division	77 Centre St. N	Oshawa	BAS Replacement, water balancing, air balancing of AHU and VAV's	\$ 158,200	2022 and onward	127,000 kWh	-	-	\$ 15,240	-	3,810 kg CO2e
Police	Durham Regional Police Service Central East Division	77 Centre St. N	Oshawa	Boiler Upgrade	\$ 432,800	2022 and onward	-	77,772 m3	-	-	\$28,708	150,250 kg CO2e
Police	Durham Regional Police Service Central East Division	77 Centre St., N	Oshawa	Chiller Replacement Project	\$ 582,000	2022 and onward	202,000 kWh	-	-	\$ 24,240	\$32,000	6,060 kg CO2e
Police	Durham Regional Police Service Central East Division	77 Centre St., N	Oshawa	Installation of two (2) Level 2 electric vehicle chargers for corporate fleet usage	\$ 25,000	Underway / planned	Net energy, operational and GHG benefits will be dependent on actual charging activity in comparison to status quo scenario				Up to \$10,000 (pending completion)	-
Police	Durham Regional Police Service Central East Division	77 Centre St., N	Oshawa	LED Lighting Retrofit - Part A	\$ 66,100	2022 and onward	47,887 kWh	-	-	\$ 5,750	\$10,675	1,440 kg CO2e
Police	Durham Regional Police Service Central East Division	77 Centre St., N	Oshawa	LED Lighting Retrofit - Part B	\$ 39,100	2023 and onward	30,100 kWh	-	-	\$ 3,612	\$6,798	900 kg CO2e
Police	Durham Regional Police Service Central East Division	77 Centre St., N	Oshawa	LED Lighting Retrofit - Part C	\$ 113,300	2023 and onward	41,760 kWh	-	-	\$ 5,011	\$9,522	1,250 kg CO2e
Police	Durham Regional Police Service Central West Division	480 Taunton Rd.	Whitby	Installation of two (2) Level 2 electric vehicle chargers for corporate fleet usage	\$ 40,000	Underway / planned	Net energy, operational and GHG benefits will be dependent on actual charging activity in comparison to status quo scenario				Up to \$10,000 (pending completion)	-
Police	Durham Regional Police Service Centre for Investigative Excellence (Clarington Police Complex Phase 2)	2222 Bloor St/2046 Maple Grove Rd.	Courtice (Clarington)	Installation of four (4) Level 2 electric vehicle chargers for corporate fleet usage	\$ 80,000	Underway / planned	Net energy, operational and GHG benefits will be dependent on actual charging activity in comparison to status quo scenario				Up to \$20,000 (pending completion)	-
Police	Durham Regional Police Service Clarington Police Complex Phase 2 New Construction	2222 Bloor St/2046 Maple Grove Rd.	Courtice (Clarington)	New facility construction	\$102.75 million	Anticipated 2024	New facility will include a geothermal field for heating and cooling although will maintain natural gas service as backup for emergency redundancy					
Police	Durham Regional Police Service East Division (Clarington Police Complex)	2222 Bloor St/2046 Maple Grove Rd.	Courtice (Clarington)	Installation of two (2) Level 2 electric vehicle chargers for corporate fleet usage	\$ 50,000	Underway / planned	Net energy, operational and GHG benefits will be dependent on actual charging activity in comparison to status quo scenario				Up to \$10,000 (pending completion)	-
Police	Durham Regional Police Service North Division	15765 Highway 12	Port Perry (Scugog)	Installation of two (2) Level 2 electric vehicle chargers for corporate fleet usage	\$ 40,000	Underway / planned	Net energy, operational and GHG benefits will be dependent on actual charging activity in comparison to status quo scenario				Up to \$10,000 (pending completion)	-
Police	Durham Regional Police Service Operations Training Centre	4060 Anderson St.	Whitby	Installation of two (2) Level 3 fast electric vehicle chargers (>100kW each) for corporate fleet usage	\$ 250,000	Underway / planned	Net energy, operational and GHG benefits will be dependent on actual charging activity in comparison to status quo scenario				Up to \$150,000 (pending completion)	-
Police	Durham Regional Police Service Regional Support Centre (Clarington Police Complex Phase 2)	2222 Bloor St/2046 Maple Grove Rd.	Courtice (Clarington)	Installation of four (4) Level 2 electric vehicle chargers for corporate fleet usage	\$ 80,000	Underway / planned	Net energy, operational and GHG benefits will be dependent on actual charging activity in comparison to status quo scenario				Up to \$20,000 (pending completion)	-
Police	Durham Regional Police Service West Division	1710 Kingston Rd.	Pickering	Chiller and BAS System Upgrade	\$ 346,000	2021 and onward	17,500 kWh	-	-	\$ 2,100	\$6,096	530 kg CO2e
Police	Durham Regional Police Service West Division	1710 Kingston Rd.	Pickering	Installation of two (2) Level 2 electric vehicle chargers for corporate fleet usage	\$ 40,000	Underway / planned	Net energy, operational and GHG benefits will be dependent on actual charging activity in comparison to status quo scenario				Up to \$10,000 (pending completion)	-
Police	Various Facilities	Various Locations	Various	Undertaking of GHG Emission Reduction Pathways studies including baseline and modified energy models to outline pathway to net zero by 2045	\$ 120,000	Underway / planned	-	-	-	-	-	-

Figure 16: Summary of Energy Efficiency Initiatives for 2019 to 2024 (YTD) Sanitary Sewer

Operational Area	Facility Name	Address	Municipality	Project Description	Total Est. Cost (Rounded)	Approx. In-Service Year	Electricity Savings (kWh)	Natural Gas Savings (m3)	Fuel Savings (L)	Estimated Operational Savings/Year	Incentive / Measure Value (if applicable)	Annual GHG Reductions (rounded)
Sanitary Sewer	Corbett Creek Water Pollution Control Plant	2400 Forbes St.	Whitby	Class A Account - Demand curtailment during system-wide peak events as part of the Industrial Conservation Initiative (ICI) program	\$ -	2019	-	-	-	\$0.497 million	-	-
Sanitary Sewer	Corbett Creek Water Pollution Control Plant	2400 Forbes St.	Whitby	Class A Account - Demand curtailment during system-wide peak events as part of the Industrial Conservation Initiative (ICI) program	\$ -	2020	-	-	-	\$0.633 million	-	-
Sanitary Sewer	Corbett Creek Water Pollution Control Plant	2400 Forbes St.	Whitby	Class A Account - Demand curtailment during system-wide peak events as part of the Industrial Conservation Initiative (ICI) program	\$ -	2021	-	-	-	\$0.304 million	-	-
Sanitary Sewer	Corbett Creek Water Pollution Control Plant	2400 Forbes St.	Whitby	Class A Account - Demand curtailment during system-wide peak events as part of the Industrial Conservation Initiative (ICI) program	\$ -	2022	-	-	-	\$0.261 million	-	-
Sanitary Sewer	Corbett Creek Water Pollution Control Plant	2400 Forbes St.	Whitby	Class A Account - Demand curtailment during system-wide peak events as part of the Industrial Conservation Initiative (ICI) program	\$ -	2023	-	-	-	\$0.37 million	-	-
Sanitary Sewer	Corbett Creek Water Pollution Control Plant	2400 Forbes St.	Whitby	Class A Account - Demand curtailment during system-wide peak events as part of the Industrial Conservation Initiative (ICI) program	\$ -	Underway / planned	-	-	-	\$92,000 (YTD Jan to Apr)	-	-
Sanitary Sewer	Corbett Creek Water Pollution Control Plant	2400 Forbes St.	Whitby	Digester gas utilization in boilers offsetting conventional natural gas usage	\$ -	2019	-	245,300 m3	-	\$ 110,400	-	470 tonnes CO2e
Sanitary Sewer	Corbett Creek Water Pollution Control Plant	2400 Forbes St.	Whitby	Digester gas utilization in boilers offsetting conventional natural gas usage	\$ -	2020	-	561,400 m3	-	\$ 252,600	-	1,080 tonnes CO2e
Sanitary Sewer	Corbett Creek Water Pollution Control Plant	2400 Forbes St.	Whitby	Digester gas utilization in boilers offsetting conventional natural gas usage	\$ -	2021	-	520,200 m3	-	\$ 234,100	-	1,010 tonnes CO2e
Sanitary Sewer	Corbett Creek Water Pollution Control Plant	2400 Forbes St.	Whitby	Digester gas utilization in boilers offsetting conventional natural gas usage	\$ -	2022	-	546,300 m3	-	\$ 245,800	-	1,060 tonnes CO2e
Sanitary Sewer	Corbett Creek Water Pollution Control Plant	2400 Forbes St.	Whitby	Digester gas utilization in boilers offsetting conventional natural gas usage	\$ -	2023	-	485,700 m3	-	\$ 218,600	-	940 tonnes CO2e
Sanitary Sewer	Corbett Creek Water Pollution Control Plant	2400 Forbes St.	Whitby	Digester gas utilization in boilers offsetting conventional natural gas usage	\$ -	Underway / planned	-	259,100 m3 (YTD Jan to May)	-	\$116,600 (YTD Jan to May)	-	500 tonnes CO2e (YTD Jan to May)
Sanitary Sewer	Corbett Creek Water Pollution Control Plant	2400 Forbes St.	Whitby	HVAC and BAS system replacement	\$ 835,000	Underway / planned	Anticipated electricity and/or natural gas and related operational cost savings and GHG emission reductions					
Sanitary Sewer	Courtice Water Pollution Control Plant	100 Osborne Rd.	Courtice (Clarington)	Class A Account - Demand curtailment during system-wide peak events as part of the Industrial Conservation Initiative (ICI) program	\$ -	2019	-	-	-	\$0.52 million	-	-
Sanitary Sewer	Courtice Water Pollution Control Plant	100 Osborne Rd.	Courtice (Clarington)	Class A Account - Demand curtailment during system-wide peak events as part of the Industrial Conservation Initiative (ICI) program	\$ -	2020	-	-	-	\$0.503 million	-	-
Sanitary Sewer	Courtice Water Pollution Control Plant	100 Osborne Rd.	Courtice (Clarington)	Class A Account - Demand curtailment during system-wide peak events as part of the Industrial Conservation Initiative (ICI) program	\$ -	2021	-	-	-	\$0.338 million	-	-
Sanitary Sewer	Courtice Water Pollution Control Plant	100 Osborne Rd.	Courtice (Clarington)	Class A Account - Demand curtailment during system-wide peak events as part of the Industrial Conservation Initiative (ICI) program	\$ -	2022	-	-	-	\$0.237 million	-	-

Figure 17: Summary of Energy Efficiency Initiatives for 2019 to 2024 (YTD) Sanitary Sewer continued

Operational Area	Facility Name	Address	Municipality	Project Description	Total Est. Cost (Rounded)	Approx. In-Service Year	Electricity Savings (kWh)	Natural Gas Savings (m3)	Fuel Savings (L)	Estimated Operational Savings/Year	Incentive / Measure Value (if applicable)	Annual GHG Reductions (rounded)
Sanitary Sewer	Courtice Water Pollution Control Plant	100 Osborne Rd.	Courtice (Clarington)	Class A Account - Demand curtailment during system-wide peak events as part of the Industrial Conservation Initiative (ICI) program	\$ -	2023	-	-	-	\$0.346 million	-	-
Sanitary Sewer	Courtice Water Pollution Control Plant	100 Osborne Rd.	Courtice (Clarington)	Class A Account - Demand curtailment during system-wide peak events as part of the Industrial Conservation Initiative (ICI) program	\$ -	Underway / planned	-	-	-	\$128,000 (YTD Jan to Apr)	-	-
Sanitary Sewer	Courtice Water Pollution Control Plant	100 Osborne Rd.	Courtice (Clarington)	Digester gas utilization in boilers offsetting conventional natural gas usage	\$ -	2019	-	535,200 m3	-	\$ 240,800	-	1,030 tonnes CO2e
Sanitary Sewer	Courtice Water Pollution Control Plant	100 Osborne Rd.	Courtice (Clarington)	Digester gas utilization in boilers offsetting conventional natural gas usage	\$ -	2020	-	524,600 m3	-	\$ 236,100	-	1,010 tonnes CO2e
Sanitary Sewer	Courtice Water Pollution Control Plant	100 Osborne Rd.	Courtice (Clarington)	Digester gas utilization in boilers offsetting conventional natural gas usage	\$ -	2021	-	530,000 m3	-	\$ 238,500	-	1,020 tonnes CO2e
Sanitary Sewer	Courtice Water Pollution Control Plant	100 Osborne Rd.	Courtice (Clarington)	Digester gas utilization in boilers offsetting conventional natural gas usage	\$ -	2022	-	576,600 m3	-	\$ 259,500	-	1,110 tonnes CO2e
Sanitary Sewer	Courtice Water Pollution Control Plant	100 Osborne Rd.	Courtice (Clarington)	Digester gas utilization in boilers offsetting conventional natural gas usage	\$ -	2023	-	515,200 m3	-	\$ 231,800	-	1,000 tonnes CO2e
Sanitary Sewer	Courtice Water Pollution Control Plant	100 Osborne Rd.	Courtice (Clarington)	Digester gas utilization in boilers offsetting conventional natural gas usage	\$ -	Underway / planned	-	199,000 m3 (YTD Jan to May)	-	\$89,600 (YTD Jan to May)	-	390 tonnes CO2e (YTD Jan to May)
Sanitary Sewer	Courtice Water Pollution Control Plant	100 Osborne Rd.	Courtice (Clarington)	Turbo blower upgrade project	\$ 400,000	Underway / planned	400,000 kWh	-	-	\$ 48,000	-	12,000 kg CO2e
Sanitary Sewer	Duffin Creek Water Pollution Control Plant	901 McKay Rd.	Pickering	Blower building optimization and aeration system (maximum opening valve strategy)	\$ -	2019 and onward	1.2 million kWh	-	-	\$ 144,000	-	36,000 kg CO2e
Sanitary Sewer	Duffin Creek Water Pollution Control Plant	901 McKay Rd.	Pickering	Class A Account - Demand curtailment during system-wide peak events as part of the Industrial Conservation Initiative (ICI) program	\$ -	2019	-	-	-	\$3.876 million	-	-
Sanitary Sewer	Duffin Creek Water Pollution Control Plant	901 McKay Rd.	Pickering	Class A Account - Demand curtailment during system-wide peak events as part of the Industrial Conservation Initiative (ICI) program	\$ -	2020	-	-	-	\$3.833 million	-	-
Sanitary Sewer	Duffin Creek Water Pollution Control Plant	901 McKay Rd.	Pickering	Class A Account - Demand curtailment during system-wide peak events as part of the Industrial Conservation Initiative (ICI) program	\$ -	2021	-	-	-	\$2.163 million	-	-
Sanitary Sewer	Duffin Creek Water Pollution Control Plant	901 McKay Rd.	Pickering	Class A Account - Demand curtailment during system-wide peak events as part of the Industrial Conservation Initiative (ICI) program	\$ -	2022	-	-	-	\$1.849 million	-	-
Sanitary Sewer	Duffin Creek Water Pollution Control Plant	901 McKay Rd.	Pickering	Class A Account - Demand curtailment during system-wide peak events as part of the Industrial Conservation Initiative (ICI) program	\$ -	2023	-	-	-	\$3.142 million	-	-
Sanitary Sewer	Duffin Creek Water Pollution Control Plant	901 McKay Rd.	Pickering	Class A Account - Demand curtailment during system-wide peak events as part of the Industrial Conservation Initiative (ICI) program	\$ -	Underway / planned	-	-	-	\$1.027 million (YTD Jan to Apr)	-	-
Sanitary Sewer	Duffin Creek Water Pollution Control Plant	901 McKay Rd.	Pickering	Compressor upgrades for new and old incinerator buildings	\$ 90,000	Underway / planned	323,000 kWh	-	-	\$ 38,760	-	9,690 kg CO2e

Figure 18: Summary of Energy Efficiency Initiatives for 2019 to 2024 (YTD) Sanitary continued

Operational Area	Facility Name	Address	Municipality	Project Description	Total Est. Cost (Rounded)	Approx. In-Service Year	Electricity Savings (kWh)	Natural Gas Savings (m3)	Fuel Savings (L)	Estimated Operational Savings/Year	Incentive / Measure Value (if applicable)	Annual GHG Reductions (rounded)
Sanitary Sewer	Duffin Creek Water Pollution Control Plant	901 McKay Rd.	Pickering	Digester gas utilization in boilers offsetting conventional natural gas usage	\$ -	2019	-	853,400 m3	-	\$ 384,000	-	1,650 tonnes CO2e
Sanitary Sewer	Duffin Creek Water Pollution Control Plant	901 McKay Rd.	Pickering	Digester gas utilization in boilers offsetting conventional natural gas usage	\$ -	2020	-	1,094,800 m3	-	\$ 492,700	-	2,110 tonnes CO2e
Sanitary Sewer	Duffin Creek Water Pollution Control Plant	901 McKay Rd.	Pickering	Digester gas utilization in boilers offsetting conventional natural gas usage	\$ -	2021	-	1,265,700 m3	-	\$ 569,500	-	2,450 tonnes CO2e
Sanitary Sewer	Duffin Creek Water Pollution Control Plant	901 McKay Rd.	Pickering	Digester gas utilization in boilers offsetting conventional natural gas usage	\$ -	2022	-	1,134,900 m3	-	\$ 510,700	-	2,190 tonnes CO2e
Sanitary Sewer	Duffin Creek Water Pollution Control Plant	901 McKay Rd.	Pickering	Digester gas utilization in boilers offsetting conventional natural gas usage	\$ -	2023	-	870,400 m3	-	\$ 391,700	-	1,680 tonnes CO2e
Sanitary Sewer	Duffin Creek Water Pollution Control Plant	901 McKay Rd.	Pickering	Digester gas utilization in boilers offsetting conventional natural gas usage	\$ -	Underway / planned	-	453,400 m3 (YTD Jan to May)	-	\$204,000 (YTD Jan to May)	-	880 tonnes CO2e (YTD Jan to May)
Sanitary Sewer	Duffin Creek Water Pollution Control Plant	901 McKay Rd.	Pickering	Exterior and Interior Lighting Upgrade	\$ 307,800	2021 and onward	306,300 kWh	-	-	\$ 36,756	\$28,671	9,190 kg CO2e
Sanitary Sewer	Duffin Creek Water Pollution Control Plant	901 McKay Rd.	Pickering	Installation of four (4) Level 2 electric vehicle chargers for corporate fleet usage	\$ 80,000	2022 and onward	Net energy, operational and GHG benefits will be dependent on actual charging activity in comparison to status quo scenario				\$20,000	-
Sanitary Sewer	Duffin Creek Water Pollution Control Plant	901 McKay Rd.	Pickering	Installation of timers on Stage 3 secondary clarifiers scum removal motors	\$ 6,000	2019 and onward	55,000 kWh	-	-	\$ 6,600	-	1,650 kg CO2e
Sanitary Sewer	Duffin Creek Water Pollution Control Plant	901 McKay Rd.	Pickering	Installation of variable frequency drive (VFD) on IF Fan Reactor 3	\$ 60,000	2021 and onward	177,000 kWh	-	-	\$ 21,240	-	5,310 kg CO2e
Sanitary Sewer	Duffin Creek Water Pollution Control Plant	901 McKay Rd.	Pickering	Installation of variable frequency drive (VFD) on IF Fan Reactor 4	\$ 60,000	2022 and onward	177,000 kWh	-	-	\$ 21,240	-	5,310 kg CO2e
Sanitary Sewer	Duffin Creek Water Pollution Control Plant	901 McKay Rd.	Pickering	Installation of ammonia control on one train at Stage 3	\$ 180,000	Underway / planned	600,000 kWh	-	-	\$ 72,000	-	18,000 kg CO2e
Sanitary Sewer	Duffin Creek Water Pollution Control Plant	901 McKay Rd.	Pickering	Lighting upgrades for tunnels, maintenance and exterior areas	\$ 48,130	2022 and onward	191,000 kWh	-	-	\$ 22,920	\$18,330	5,730 kg CO2e
Sanitary Sewer	Duffin Creek Water Pollution Control Plant	901 McKay Rd.	Pickering	Renovation and expansion of the Regional Environmental Lab	\$10 million	Underway / planned	Anticipated net energy and related operational cost savings and GHG emission reductions versus a business-as-usual building standard					
Sanitary Sewer	Harmony Creek Water Pollution Control Plant	785 Colonel Sam Dr.	Oshawa	Aeration system upgrade	\$ 443,400	2020 and onward	557,000 kWh	-	-	\$ 66,840	-	16,710 kg CO2e
Sanitary Sewer	Harmony Creek Water Pollution Control Plant	785 Colonel Sam Dr.	Oshawa	Class A Account - Demand curtailment during system-wide peak events as part of the Industrial Conservation Initiative (ICI) program	\$ -	2019	-	-	-	\$0.363 million	-	-
Sanitary Sewer	Harmony Creek Water Pollution Control Plant	785 Colonel Sam Dr.	Oshawa	Class A Account - Demand curtailment during system-wide peak events as part of the Industrial Conservation Initiative (ICI) program	\$ -	2020	-	-	-	\$0.307 million	-	-

Figure 19: Summary of Energy Efficiency Initiatives for 2019 to 2024 (YTD) Sanitary Sewer continued

Operational Area	Facility Name	Address	Municipality	Project Description	Total Est. Cost (Rounded)	Approx. In-Service Year	Electricity Savings (kWh)	Natural Gas Savings (m3)	Fuel Savings (L)	Estimated Operational Savings/Year	Incentive / Measure Value (if applicable)	Annual GHG Reductions (rounded)
Sanitary Sewer	Harmony Creek Water Pollution Control Plant	785 Colonel Sam Dr.	Oshawa	Class A Account - Demand curtailment during system-wide peak events as part of the Industrial Conservation Initiative (ICI) program	\$ -	2021	-	-	-	\$0.105 million	-	-
Sanitary Sewer	Harmony Creek Water Pollution Control Plant	785 Colonel Sam Dr.	Oshawa	Class A Account - Demand curtailment during system-wide peak events as part of the Industrial Conservation Initiative (ICI) program	\$ -	2022	-	-	-	\$0.048 million	-	-
Sanitary Sewer	Harmony Creek Water Pollution Control Plant	785 Colonel Sam Dr.	Oshawa	Class A Account - Demand curtailment during system-wide peak events as part of the Industrial Conservation Initiative (ICI) program	\$ -	2023	-	-	-	\$0.214 million	-	-
Sanitary Sewer	Harmony Creek Water Pollution Control Plant	785 Colonel Sam Dr.	Oshawa	Class A Account - Demand curtailment during system-wide peak events as part of the Industrial Conservation Initiative (ICI) program	\$ -	Underway / planned	-	-	-	\$86,000 (YTD Jan to Apr)	-	-
Sanitary Sewer	Harmony Creek Water Pollution Control Plant	785 Colonel Sam Dr.	Oshawa	Digester gas utilization in boilers offsetting conventional natural gas usage	\$ -	2020	-	137,100 m3	-	\$ 61,700	-	260 tonnes CO2e
Sanitary Sewer	Harmony Creek Water Pollution Control Plant	785 Colonel Sam Dr.	Oshawa	Digester gas utilization in boilers offsetting conventional natural gas usage	\$ -	2021	-	237,400 m3	-	\$ 106,800	-	460 tonnes CO2e
Sanitary Sewer	Harmony Creek Water Pollution Control Plant	785 Colonel Sam Dr.	Oshawa	Digester gas utilization in boilers offsetting conventional natural gas usage	\$ -	2022	-	436,800 m3	-	\$ 196,500	-	840 tonnes CO2e
Sanitary Sewer	Harmony Creek Water Pollution Control Plant	785 Colonel Sam Dr.	Oshawa	Digester gas utilization in boilers offsetting conventional natural gas usage	\$ -	2023	-	195,500 m3	-	\$ 88,000	-	380 tonnes CO2e
Sanitary Sewer	Harmony Creek Water Pollution Control Plant	785 Colonel Sam Dr.	Oshawa	Digester gas utilization in boilers offsetting conventional natural gas usage	\$ -	Underway / planned	-	91,500 m3	-	\$41,200 (YTD Jan to May)	-	180 tonnes CO2e (YTD Jan to May)
Sanitary Sewer	Harmony Creek Water Pollution Control Plant	785 Colonel Sam Dr.	Oshawa	Replace 6 explosion proof two lamp 80W (input wattage 74W) T12 fixtures with 28.3W explosion proof LED fixtures	\$ 16,200	2022 and onward	200 kWh	-	-	\$ 24	-	6 kg CO2e
Sanitary Sewer	Lake Simcoe Water Pollution Control Plant	885 Concession Rd. 5	Brock	Boiler replacement	\$ 368,000	2022 and onward	Anticipated natural gas and related operational cost savings and GHG emission reductions					
Sanitary Sewer	Newcastle Water Pollution Control Plant	1000 Toronto St.	Newcastle (Clarington)	Boiler replacement	\$ 110,700	2022 and onward	Anticipated natural gas and related operational cost savings and GHG emission reductions					
Sanitary Sewer	Nonquon River Water Pollution Control Plant	1730 Scugog Line 8	Scugog	Blower process optimization strategy	\$ -	2023 and onward	50,000 kWh	-	-	\$ 6,000	-	1,500 kg CO2e
Sanitary Sewer	Uxbridge Brook Water Pollution Control Plant	127 Main St.	Uxbridge	LED Lighting Upgrade	\$ 21,960	2022 and onward	27,000 kWh	-	-	\$ 3,240	\$3,952	810 kg CO2e
Sanitary Sewer	Various Locations	Various Locations	Various	Participation in the IESO's Energy Manager Program	Staff salary/related expenses	2019 to 2022	Electricity savings per IESO's EEM Program Targets. Operational cost benefits from electricity saved. Incentives and savings may also be related to other CDM initiatives outlined herein					

Region of Durham's 2024 to 2029 Energy Conservation and Demand Management Plan

Figure 20: Summary of Energy Efficiency Initiatives for 2019 to 2024 (YTD) Transit

Operational Area	Facility Name	Address	Municipality	Project Description	Total Est. Cost (Rounded)	Approx. In-Service Year	Electricity Savings (kWh)	Natural Gas Savings (m3)	Fuel Savings (L)	Estimated Operational Savings/Year	Incentive / Measure Value (if applicable)	Annual GHG Reductions (rounded)
Transit	Durham Region Transit (East) Maintenance Facility	710 Raleigh Ave.	Oshawa	Installation of additional lighting in parking lot	\$ 47,100	2021 and onward	Anticipated electricity and related operational cost savings and GHG emission reductions					
Transit	Durham Region Transit East Maintenance Facility	710 Raleigh Ave.	Oshawa	Installation of eight (8) Level 2 electric vehicle chargers for corporate fleet usage	\$ 160,000	Underway / planned	Net energy, operational and GHG benefits will be dependent on actual charging activity in comparison to status quo scenario				Up to \$40,000 (pending completion)	-
Transit	Durham Region Transit East Maintenance Facility	715 Farewell St.	Oshawa	Installation of four (4) Level 2 electric vehicle chargers for corporate fleet usage	\$ 80,000	Underway / planned	Net energy, operational and GHG benefits will be dependent on actual charging activity in comparison to status quo scenario				Up to \$20,000 (pending completion)	-
Transit	Durham Region Transit East Maintenance Facility	710 Raleigh Ave.	Oshawa	Installation of six (6) fast chargers for corporate light/medium/heavy duty fleet usage and supporting transformer/facility upgrades to accommodate ten (10) additional single fast charger dispensers (minimum 90kW draw each)	Part of electric bus pilot initiative	Underway / planned	Net energy, operational and GHG benefits will be dependent on actual charging activity in comparison to status quo scenario				Up to \$300,000 (pending completion)	-
Transit	Durham Region Transit East Maintenance Facility	710 Raleigh Ave.	Oshawa	Installation of two (2) fast chargers for corporate light/medium/heavy duty fleet usage (minimum 50kW draw each)	\$ 160,000	Underway / planned	Net energy, operational and GHG benefits will be dependent on actual charging activity in comparison to status quo scenario				Up to \$100,000 (pending completion)	-
Transit	Durham Region Transit East Maintenance Facility	715 Farewell St.	Oshawa	Installation of two (2) Level 2 electric vehicle chargers for public/corporate fleet usage	\$ 40,000	2021 and onward	Net energy, operational and GHG benefits will be dependent on actual charging activity in comparison to status quo scenario				\$10,000	-
Transit	Durham Region Transit Maintenance Facilities (3 locations)	Various Locations	Various	Undertaking of GHG Emission Reduction Pathways studies including baseline and modified energy models to outline pathway to net zero by 2045	\$ 130,000	-	-	-	-	-	\$16,000	-
Transit	Durham Region Transit West Maintenance Facility	110 Westney Rd.	Ajax	Installation of eight (8) fast chargers for corporate light/medium/heavy duty fleet usage (minimum 50kW draw each)	\$ 640,000	Underway / planned	Net energy, operational and GHG benefits will be dependent on actual charging activity in comparison to status quo scenario				Up to \$400,000 (pending completion)	-
Transit	Durham Region Transit West Maintenance Facility	110 Westney Rd.	Ajax	Installation of four (4) Level 2 electric vehicle chargers for corporate fleet usage	\$ 80,000	Underway / planned	Net energy, operational and GHG benefits will be dependent on actual charging activity in comparison to status quo scenario				Up to \$20,000 (pending completion)	-
Transit	Durham Region Transit West Maintenance Facility	110 Westney Rd.	Ajax	Installation of two (2) Level 2 electric vehicle chargers for corporate fleet usage	\$ 40,000	Underway / planned	Net energy, operational and GHG benefits will be dependent on actual charging activity in comparison to status quo scenario				Up to \$10,000 (pending completion)	-
Transit	Durham Region Transit West Maintenance Facility	110 Westney Rd.	Ajax	Installation of two (2) Level 2 electric vehicle chargers for public/corporate fleet usage	\$ 40,000	2022 and onward	Net energy, operational and GHG benefits will be dependent on actual charging activity in comparison to status quo scenario				\$10,000	-
Transit	New DRT North Thornton Transit Maintenance Facility	2400 Thornton Rd. N	Oshawa	New facility construction	\$ 600,000,000	Underway / planned	To be built following the Durham Standard where anticipated net energy and related GHG emission reductions expected versus alternative business-as-usual standard					

Region of Durham's 2024 to 2029 Energy Conservation and Demand Management Plan

Figure 21: Summary of Energy Efficiency Initiatives for 2019 to 2024 (YTD) Water Supply

Operational Area	Facility Name	Address	Municipality	Project Description	Total Est. Cost (Rounded)	Approx. In-Service Year	Electricity Savings (kWh)	Natural Gas Savings (m3)	Fuel Savings (L)	Estimated Operational Savings/Year	Incentive / Measure Value (if applicable)	Annual GHG Reductions (rounded)
Water Supply	Ajax Water Supply Plant	75 Lake Driveway	Ajax	Class A Account - Demand curtailment during system-wide peak events as part of the Industrial Conservation Initiative (ICI) program	\$ -	2019	-	-	-	\$0.534 million	-	-
Water Supply	Ajax Water Supply Plant	75 Lake Driveway	Ajax	Class A Account - Demand curtailment during system-wide peak events as part of the Industrial Conservation Initiative (ICI) program	\$ -	2020	-	-	-	\$0.479 million	-	-
Water Supply	Ajax Water Supply Plant	75 Lake Driveway	Ajax	Class A Account - Demand curtailment during system-wide peak events as part of the Industrial Conservation Initiative (ICI) program	\$ -	2021	-	-	-	\$0.28 million	-	-
Water Supply	Ajax Water Supply Plant	75 Lake Driveway	Ajax	Class A Account - Demand curtailment during system-wide peak events as part of the Industrial Conservation Initiative (ICI) program	\$ -	2022	-	-	-	\$0.268 million	-	-
Water Supply	Ajax Water Supply Plant	75 Lake Driveway	Ajax	Class A Account - Demand curtailment during system-wide peak events as part of the Industrial Conservation Initiative (ICI) program	\$ -	2023	-	-	-	\$0.377 million	-	-
Water Supply	Ajax Water Supply Plant	75 Lake Driveway	Ajax	Class A Account - Demand curtailment during system-wide peak events as part of the Industrial Conservation Initiative (ICI) program	\$ -	Underway / planned	-	-	-	\$109,000 (YTD Jan to Apr)	-	-
Water Supply	Ajax Water Supply Plant	75 Lake Driveway	Ajax	Convert 6 250W metal halide fixtures (these are off most of the time) and 30 400W metal halide fixtures (these are on 24/7/365) to 15 220W LED high bay lights with motion sensors in room	\$ 9,000	2021 and onward	116,000 kWh	-	-	\$ 13,920	-	3,480 kg CO2e
Water Supply	Ajax Water Supply Plant	75 Lake Driveway	Ajax	Improvements to cooling in the motor control centre (MCC) room	\$ 321,400	Underway / planned	Anticipated electricity and related operational cost savings and GHG emission reductions					
Water Supply	Ajax Water Supply Plant	75 Lake Driveway	Ajax	Installation of four (4) Level 2 electric vehicle chargers for corporate fleet usage	\$ 80,000	Underway / planned	Net energy, operational and GHG benefits will be dependent on actual charging activity in comparison to status quo scenario				Up to \$20,000 (pending completion)	-
Water Supply	Ajax Water Supply Plant	75 Lake Driveway	Ajax	Replace 22 (108W) 8 foot long fluorescent fixtures. There are four 4' 32W bulbs per fixture. 13 181W LED fixtures will be installed in place of the 22 fluorescent fixtures. The new LED lights will be controlled by motion sensor	\$ 2,800	2021 and onward	19,500 kWh	-	-	\$ 2,340	-	590 kg CO2e
Water Supply	Beaverton Water Supply Plant	133 Main St. W	Beaverton (Brock)	Installation of dehumidifier in basement	\$ 140,100	2020 and onward	Anticipated electricity and related operational cost savings and GHG emission reductions					
Water Supply	Bowmanville Water Supply Plant	145 Port Darlington Rd.	Bowmanville (Clarington)	Installation of one (1) Level 2 electric vehicle charger for corporate fleet usage	\$ 20,000	Underway / planned	Net energy, operational and GHG benefits will be dependent on actual charging activity in comparison to status quo scenario				Up to \$5,000 (pending completion)	-
Water Supply	Garrard Rd. Water Pumping Station	4600 Garrard Rd.	Whitby	Replacement of axial fan	\$ 142,800	Underway / planned	Anticipated electricity and related operational cost savings and GHG emission reductions					
Water Supply	Grandview Rd. Water Pumping Station	Grandview St. S	Oshawa	HVAC system upgrades	\$ 630,000	Underway / planned	Anticipated electricity and/or natural gas and related operational cost savings and GHG emission reductions					
Water Supply	Harwood Water Pumping Station	144 Rossland Rd E	Ajax	Replace 6 250W (input wattage 288W) wall packs with four 45W low bay LED fixtures on motion sensor	\$ 500	2021 and onward	550 kWh	-	-	\$ 66	-	17 kg CO2e
Water Supply	Oshawa Water Supply Plant	1540 Ritson Rd. S	Oshawa	Class A Account - Demand curtailment during system-wide peak events as part of the Industrial Conservation Initiative (ICI) program	\$ -	2019	-	-	-	\$0.297 million	-	-
Water Supply	Oshawa Water Supply Plant	1540 Ritson Rd. S	Oshawa	Class A Account - Demand curtailment during system-wide peak events as part of the Industrial Conservation Initiative (ICI) program	\$ -	2020	-	-	-	\$0.306 million	-	-

Figure 22: Summary of Energy Efficiency Initiatives for 2019 to 2024 (YTD) Water Supply continued

Operational Area	Facility Name	Address	Municipality	Project Description	Total Est. Cost (Rounded)	Approx. In-Service Year	Electricity Savings (kWh)	Natural Gas Savings (m3)	Fuel Savings (L)	Estimated Operational Savings/Year	Incentive / Measure Value (if applicable)	Annual GHG Reductions (rounded)
Water Supply	Oshawa Water Supply Plant	1540 Ritson Rd. S	Oshawa	Class A Account - Demand curtailment during system-wide peak events as part of the Industrial Conservation Initiative (ICI) program	\$ -	2021	-	-	-	\$0.147 million	-	-
Water Supply	Oshawa Water Supply Plant	1540 Ritson Rd. S	Oshawa	Class A Account - Demand curtailment during system-wide peak events as part of the Industrial Conservation Initiative (ICI) program	\$ -	2022	-	-	-	\$0.132 million	-	-
Water Supply	Oshawa Water Supply Plant	1540 Ritson Rd. S	Oshawa	Class A Account - Demand curtailment during system-wide peak events as part of the Industrial Conservation Initiative (ICI) program	\$ -	2023	-	-	-	\$0.265 million	-	-
Water Supply	Oshawa Water Supply Plant	1540 Ritson Rd. S	Oshawa	Class A Account - Demand curtailment during system-wide peak events as part of the Industrial Conservation Initiative (ICI) program	\$ -	Underway / planned	-	-	-	\$100,000 (YTD Jan to Apr)	-	-
Water Supply	Oshawa Water Supply Plant	1540 Ritson Rd. S	Oshawa	HVAC system upgrade for chemical room	\$ 247,800	Underway / planned	Anticipated electricity and/or natural gas and related operational cost savings and GHG emission reductions					
Water Supply	Oshawa Water Supply Plant	1540 Ritson Rd. S	Oshawa	Installation of three (3) Level 2 electric vehicle chargers for corporate fleet usage	\$ 60,000	Underway / planned	Net energy, operational and GHG benefits will be dependent on actual charging activity in comparison to status quo scenario				Up to \$15,000 (pending completion)	-
Water Supply	Oshawa Water Supply Plant	1540 Ritson Rd. S	Oshawa	Replace 6 250W (288W with ballast factor) high bay lamps with 6 220W LED lamps with motion sensors	\$ 1,000	2022 and onward	13,200 kWh	-	-	\$ 1,584	-	400 kg CO2e
Water Supply	Rosebank Rd. Water Pumping Station	30 Rosebank/Sheppard	Pickering	Replacement of dehumidifier	\$ 304,600	Underway / planned	Anticipated electricity and related operational cost savings and GHG emission reductions					
Water Supply	Whitby Water Supply Plant	289 Water St.	Whitby	Class A Account - Demand curtailment during system-wide peak events as part of the Industrial Conservation Initiative (ICI) program	\$ -	2019	-	-	-	\$0.344 million	-	-
Water Supply	Whitby Water Supply Plant	289 Water St.	Whitby	Class A Account - Demand curtailment during system-wide peak events as part of the Industrial Conservation Initiative (ICI) program	\$ -	2020	-	-	-	\$0.339 million	-	-
Water Supply	Whitby Water Supply Plant	289 Water St.	Whitby	Class A Account - Demand curtailment during system-wide peak events as part of the Industrial Conservation Initiative (ICI) program	\$ -	2021	-	-	-	\$0.185 million	-	-
Water Supply	Whitby Water Supply Plant	289 Water St.	Whitby	Class A Account - Demand curtailment during system-wide peak events as part of the Industrial Conservation Initiative (ICI) program	\$ -	2022	-	-	-	\$0.142 million	-	-
Water Supply	Whitby Water Supply Plant	289 Water St.	Whitby	Class A Account - Demand curtailment during system-wide peak events as part of the Industrial Conservation Initiative (ICI) program	\$ -	2023	-	-	-	\$0.207 million	-	-
Water Supply	Whitby Water Supply Plant	289 Water St.	Whitby	Class A Account - Demand curtailment during system-wide peak events as part of the Industrial Conservation Initiative (ICI) program	\$ -	Underway / planned	-	-	-	\$54,000 (YTD Jan to Apr)	-	-
Water Supply	Whitby Water Supply Plant	289 Water St.	Whitby	Replace 21 400W (452W with ballast factor) high bay lamps with 12 220W LED high bay lamps	\$ 2,000	2021 and onward	17,700 kWh	-	-	\$ 2,124	-	530 kg CO2e
Water Supply	Whitby Water Supply Plant	289 Water St.	Whitby	Twelve 400W (458W input wattage) Metal-Halide lamps to be replaced with 197W LED lamps in low lift pump area	\$ 2,460	2020 and onward	41,000 kWh	-	-	\$ 4,920	-	1,230 kg CO2e

Figure 23: Summary of Energy Efficiency Initiatives for 2019 to 2024 (YTD) Works Dept

Operational Area	Facility Name	Address	Municipality	Project Description	Total Est. Cost (Rounded)	Approx. In-Service Year	Electricity Savings (kWh)	Natural Gas Savings (m3)	Fuel Savings (L)	Estimated Operational Savings/Year	Incentive / Measure Value (if applicable)	Annual GHG Reductions (rounded)
Works Depots	Ajax/Pickering Works Maintenance Depot	2020 Salem Rd.	Ajax	Installation of four (4) Level 2 electric vehicle chargers for corporate fleet usage	\$ 17,200	Underway / planned	Net energy, operational and GHG benefits will be dependent on actual charging activity in comparison to status quo scenario				Up to \$20,000 (pending completion)	-
Works Depots	Orono Works Maintenance Depot	3480 Taunton Rd.	Orono (Clarington)	Installation of four (4) Level 2 electric vehicle chargers for corporate fleet usage	\$ 19,975	2022 and onward	Net energy, operational and GHG benefits will be dependent on actual charging activity in comparison to status quo scenario				\$20,000	-
Works Depots	Orono Works Maintenance Depot	3480 Taunton Rd.	Orono (Clarington)	Replacement of furnace in mechanics office	\$ 29,993	2023	Anticipated electricity and/or natural gas and related operational cost savings and GHG emission reductions					
Works Depots	Oshawa/Whitby Works Maintenance Depot	825 Conlin Rd.	Whitby	Installation of four (4) Level 2 electric vehicle chargers for corporate fleet usage	\$ 52,000	Underway / planned	Net energy, operational and GHG benefits will be dependent on actual charging activity in comparison to status quo scenario				Up to \$20,000 (pending completion)	-
Works Depots	Oshawa/Whitby Works Maintenance Depot	825 Conlin Rd.	Whitby	LED Lighting Upgrade	\$ 20,000	2021 and onward	36,000 kWh	-	-	\$ 4,320	\$9,536	1,080 kg CO2e
Works Depots	Oshawa/Whitby Works Maintenance Depot	825 Conlin Rd.	Whitby	LED Lighting Upgrade	\$ 29,400	2020 and onward	44,000 kWh	-	-	\$ 5,280	\$2,369	1,320 kg CO2e
Works Depots	Oshawa/Whitby Works Maintenance Depot	825 Conlin Rd.	Whitby	LED Lighting Upgrade	\$ 29,400	2021 and onward	43,900 kWh	-	-	\$ 5,268	\$2,154	1,320 kg CO2e
Works Depots	Oshawa/Whitby Works Maintenance Depot	825 Conlin Rd.	Whitby	Replacement of furnace in fleet garage	\$ 149,200	2022	Anticipated electricity and/or natural gas and related operational cost savings and GHG emission reductions					
Works Depots	Scugog Works Maintenance Depot	10 Goodwood Rd.	Scugog	Installation of four (4) Level 2 electric vehicle chargers for corporate fleet usage	\$ 47,000	Underway / planned	Net energy, operational and GHG benefits will be dependent on actual charging activity in comparison to status quo scenario				Up to \$20,000 (pending completion)	-
Works Depots	Sunderland Works Maintenance Depot	S995 River St.	Brock	Installation of four (4) Level 2 electric vehicle chargers for corporate fleet usage	\$ 22,500	Underway / planned	Net energy, operational and GHG benefits will be dependent on actual charging activity in comparison to status quo scenario				Up to \$20,000 (pending completion)	-
Works Depots	Various Facilities	Various Locations	Various	Undertaking of GHG Emission Reduction Pathways studies including baseline and modified energy models to outline pathway to net zero by 2045	\$ 200,000	Underway / planned	-	-	-	-	-	-

8. Appendix B

Figure 24: 2012 to 2023 Energy Usage Tables-by Operation Area

Total Energy Usage by Operational Area (2012 to 2023)

Electricity ('000 kWh)		2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Transit		1,558.5	1,906.6	2,103.6	1,972.5	2,012.3	2,222.7	2,724.4	2,628.6	2,709.5	2,352.6	2,407.4	2,283.3
Child Care		309.5	286.4	258.4	243.6	243.9	223.7	231.7	196.6	158.0	163.6	160.4	165.3
Long-Term Care		13,763.9	13,215.0	12,679.5	10,586.3	13,667.4	13,102.5	13,154.3	12,524.5	12,925.7	13,075.7	13,020.6	12,912.5
Local Housing MURBs		8,200.2	8,722.6	8,853.5	8,207.5	7,953.8	7,738.9	8,131.5	8,186.5	7,775.3	7,433.0	7,957.4	7,061.4
Paramedic Services		877.5	949.1	1,018.9	935.3	922.1	914.8	923.5	918.3	948.1	922.1	1,031.0	1,074.1
Regional HQ		8,289.0	7,938.4	7,798.5	7,649.1	7,634.2	7,409.8	7,431.2	7,514.6	6,583.5	6,328.8	6,307.9	6,273.1
Other Offices/Misc. Accounts		1,200.0	1,257.3	1,347.3	1,334.8	1,429.1	1,421.6	1,440.6	1,383.8	1,144.4	1,152.9	1,858.2	1,476.3
Police Services		5,167.3	5,221.4	6,127.5	6,000.6	7,584.2	7,145.8	7,315.5	7,254.2	7,066.5	6,899.0	7,097.2	6,732.7
Works Depots		1,257.7	1,231.3	1,216.5	1,146.3	1,133.3	1,182.1	1,146.4	1,122.9	1,112.6	1,144.9	1,159.9	1,133.1
Traffic Signals		1,107.9	1,262.0	1,424.8	1,215.9	1,309.7	1,330.4	1,308.7	1,328.4	1,343.5	1,357.8	1,438.9	1,406.3
Solid Waste Management		278.1	324.8	361.8	292.6	343.8	386.2	353.7	294.3	265.2	284.0	285.5	242.4
Water Supply		39,756.2	39,323.2	40,044.5	39,695.3	40,928.3	38,781.1	41,331.6	41,387.8	41,604.0	41,680.7	42,757.5	44,137.9
Sanitary Sewer less Duffin Creek WPCP		35,505.8	35,243.8	35,632.1	33,552.3	34,365.5	35,723.7	36,693.4	38,125.0	37,835.6	37,553.2	37,917.4	39,456.3
Duffin Creek WPCP (Durham and York Share)		61,212.8	60,535.0	65,430.8	62,814.3	59,385.3	57,866.0	61,969.3	62,326.9	63,347.0	63,532.8	65,556.7	71,049.3
Electricity Sub-Total		178,484.3	177,416.8	184,297.5	175,646.4	178,912.9	175,449.2	184,155.7	185,192.4	184,818.9	183,881.1	188,956.0	195,404.0
Sub-Total Gross Energy ('000 GJ)		642.5	638.7	663.5	632.3	644.1	631.6	663.0	666.7	665.3	662.0	680.2	703.5
Sub-Total Net Energy ('000 GJ)		465.0	469.7	479.6	454.5	476.4	465.6	486.9	488.5	485.1	480.0	490.8	497.4
Natural Gas ('000 m³)													
Transit		391.2	504.0	600.9	558.6	578.2	698.3	802.3	838.8	777.6	704.6	715.2	597.6
Child Care		32.8	38.7	43.3	38.9	33.5	36.3	39.1	41.6	43.4	34.1	33.3	30.2
Long-Term Care		1,939.5	2,119.6	2,057.4	1,655.1	1,789.9	1,759.2	1,933.1	1,925.3	1,956.7	2,021.1	2,007.9	2,118.2
Local Housing MURBs		547.7	631.7	653.4	630.6	567.3	563.5	611.3	608.2	568.8	503.9	498.6	502.0
Local Housing Family Units		750.0	763.3	755.7	761.9	679.5	718.2	700.6	750.6	683.3	651.2	705.1	654.2
Paramedic Services		127.8	145.6	180.3	143.8	150.2	154.2	179.0	168.5	166.2	148.6	178.2	152.3
Regional HQ		380.1	418.3	418.8	416.0	368.0	369.3	382.4	368.5	311.5	282.6	306.1	318.5
Other Offices/Misc. Accounts		64.3	73.9	86.3	75.5	69.3	85.8	72.0	39.8	53.3	143.4	175.6	187.4
Police Services		421.1	604.7	653.1	582.1	665.4	772.5	811.0	839.3	802.8	774.3	860.2	781.9
Works Depots		171.3	205.5	306.9	323.9	255.2	273.8	280.5	316.6	291.4	275.7	339.7	287.9
Water Supply		469.2	418.5	403.1	451.5	406.5	327.0	372.2	426.9	391.5	376.7	362.8	328.6
Sanitary Sewer less Duffin Creek WPCP		772.6	1,034.6	1,009.5	993.0	1,076.3	1,058.7	1,238.3	1,598.8	1,335.4	1,221.0	1,437.5	1,369.5
Duffin Creek WPCP (Durham and York Share)		4,587.1	3,403.7	3,171.6	1,901.8	2,119.1	2,226.8	3,730.8	3,202.1	2,349.4	2,913.2	2,831.3	3,504.2
Natural Gas Sub-Total		10,654.8	10,362.3	10,340.3	8,532.8	8,758.6	9,043.5	11,152.7	11,124.9	9,731.4	10,050.4	10,451.5	10,832.4
Sub-Total Gross Energy ('000 GJ)		396.8	385.9	385.1	317.8	326.2	336.8	415.3	414.3	362.4	374.3	389.2	403.4
Sub-Total Net Energy ('000 GJ)		260.5	289.1	294.1	262.9	265.1	272.1	308.2	322.8	296.1	292.5	308.0	302.8
Stationary Diesel ('000 L)													
Transit		-	-	-	-	-	0.5	0.5	0.9	0.6	0.6	1.2	0.5
Long-Term Care		10.2	7.9	10.7	6.3	12.1	7.4	14.5	8.8	6.0	6.0	6.5	2.8
Paramedic Services		1.2	3.3	2.9	2.1	2.0	2.7	1.9	2.7	1.3	0.9	1.0	0.7
Regional HQ		12.4	14.6	4.2	-	13.3	3.9	6.1	1.0	-	-	17.6	14.5
Other Offices/Misc. Accounts		-	2.5	0.1	0.7	0.3	0.7	0.3	0.2	0.6	0.7	0.4	-
Police Services		0.6	1.7	2.7	-	2.7	-	7.8	1.6	3.3	6.1	2.5	2.3
Works Depots		-	-	-	-	-	-	0.4	-	0.2	0.6	0.6	0.5
Water Supply		71.7	76.6	96.6	80.4	70.9	68.1	65.7	70.3	86.0	65.9	92.5	77.3
Sanitary Sewer less Duffin Creek WPCP		50.5	84.3	40.9	46.6	52.9	45.6	51.6	55.1	40.0	51.3	64.3	43.6
Duffin Creek WPCP (Durham and York Share)		26.1	6.0	218.0	17.0	6.2	67.5	84.4	4.6	63.0	103.2	63.7	36.3
Stationary Diesel Sub-Total		172.9	196.9	376.1	153.1	160.4	196.3	233.2	145.3	200.1	235.2	250.3	178.3
Sub-Total Gross Energy ('000 GJ)		6.7	7.6	14.5	5.9	6.2	7.6	9.0	5.6	7.7	9.1	9.7	6.9
Sub-Total Net Energy ('000 GJ)		5.8	7.4	7.7	5.4	6.0	5.5	6.3	5.5	5.8	5.8	7.7	5.7
Furnace Oil ('000 L)													
Other Offices/Misc. Accounts		7.2	13.3	11.5	11.2	9.7	6.2	9.3	11.4	5.8	3.6	8.1	8.3
Duffin Creek WPCP (Durham and York Share)		1,262.5	687.4	924.4	624.3	491.3	694.7	751.2	552.7	986.8	848.2	661.8	640.7
Furnace Oil Sub-Total		1,269.7	700.7	935.9	635.5	501.0	700.9	760.5	564.0	992.6	851.8	669.9	649.0
Sub-Total Gross Energy ('000 GJ)		46.6	25.7	34.4	23.3	18.4	25.7	27.9	20.7	36.4	31.3	24.6	23.8
Sub-Total Net Energy ('000 GJ)		10.4	7.1	8.9	6.1	4.9	6.3	7.5	5.6	9.8	8.1	6.2	5.9
Propane Fuel ('000 L)													
Other Offices/Misc. Accounts		0.8	8.8	5.0	3.4	0.8	0.7	-	0.0	-	2.9	-	-
Police Services		15.8	14.4	0.2	-	-	-	-	-	-	-	-	-
Solid Waste Management		1.4	-	6.2	3.6	4.2	3.7	4.1	3.2	2.4	2.9	2.8	1.2
Propane Fuel Sub-Total		18.0	23.2	11.5	7.0	5.0	4.4	4.1	3.3	2.4	5.8	2.8	1.2
Sub-Total Energy ('000 GJ)		0.5	0.6	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0
Fleet Gasoline ('000 L)													
Transit		10.3	13.8	34.0	24.2	9.4	-	96.3	123.4	-	-	-	-
Paramedic Services		443.6	537.9	727.1	694.2	721.4	760.4	803.0	610.9	493.1	702.4	845.8	785.8
Police Services		1,705.2	1,682.3	1,805.1	1,626.9	1,704.5	1,612.0	1,660.6	1,620.5	1,777.8	1,653.0	1,521.2	1,543.7
Public Works		500.2	515.6	551.2	571.0	649.2	724.2	770.6	760.2	810.1	817.1	712.2	691.5
Fleet Gasoline Sub-Total		2,659.2	2,749.6	3,117.3	2,916.2	3,084.6	3,096.7	3,330.5	3,115.0	3,081.0	3,172.5	3,079.2	3,021.0
Sub-Total Energy ('000 GJ)		92.2	95.3	108.0	101.1	106.9	107.3	115.4	108.0	106.8	110.0	106.7	104.7
Fleet Diesel ('000 L)													
Transit		6,036.6	6,999.4	7,381.2	7,185.9	7,209.9	7,217.8	7,425.3	7,259.6	5,421.4	5,418.5	5,860.2	6,499.2
Paramedic Services		148.0	83.6	20.6	1.3	0.8	0.3	0.2	0.2	0.1	-	-	-
Public Works		778.8	959.0	983.3	828.5	914.1	879.8	824.5	933.1	778.3	669.7	771.3	625.1
Fleet Diesel Sub-Total		6,963.3	8,042.0	8,385.1	8,015.8	8,124.8	8,097.9	8,250.0	8,192.9	6,199.8	6,088.2	6,631.5	7,124.3
Sub-Total Energy ('000 GJ)		269.3	311.1	324.3	310.1	314.3	313.2	319.1	316.9	239.8	235.5	256.5	275.6
Fleet Other ('000 L)													
Transit		64.8	57.2	74.2	79.4	83.5	84.8	70.2	64.8	35.4	41.8	35.4	69.6
Fleet Other Sub-Total		64.8	57.2	74.2	79.4	83.5	84.8	70.2	64.8	35.4	41.8	35.4	69.6
Sub-Total Energy ('000 GJ)		2.2	2.0	2.6	2.8	2.9	2.9	2.4	2.2	1.2	1.4	1.2	2.4
Total Gross Energy ('000 GJ)		1,456.9	1,466.9	1,532.7	1,393.4	1,419.1	1,425.3	1,552.3	1,534.5	1,419.8	1,423.7	1,468.3	1,520.3
Total Net Energy ('000 GJ)		1,105.9	1,182.2	1,225.6	1,142.9	1,176.6	1,173.1	1,246.0	1,249.5	1,144.7	1,133.4	1,177.1	1,194.5

Figure 25: 2012 to 2023 Energy Usage Tables-by Operation Area continued

Total Energy Cost by Operational Area (2012 to 2023)

Electricity (\$000s)		2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Transit	\$	183.0	249.8	273.9	296.9	340.6	384.8	449.2	456.5	438.6	369.8	362.6	350.6
Child Care	\$	37.8	39.9	36.4	39.7	48.2	37.1	33.1	28.4	22.7	24.5	25.8	27.6
Long-Term Care	\$	1,592.9	1,716.3	1,668.4	1,643.3	2,371.5	1,970.1	1,443.7	1,513.7	1,621.6	1,633.2	1,593.7	1,675.7
Local Housing MURBs	\$	876.9	999.5	1,091.9	1,124.4	1,243.0	1,002.1	905.8	955.9	972.8	899.1	1,000.4	954.3
Paramedic Services	\$	109.1	130.0	145.4	152.6	171.1	152.6	150.8	150.4	159.3	144.5	162.3	175.7
Regional HQ	\$	963.1	1,019.8	1,008.7	1,185.5	1,327.9	1,191.9	1,053.6	950.9	892.8	752.3	792.2	731.4
Other Offices/Misc. Accounts	\$	152.2	177.0	196.6	226.7	279.4	252.1	230.7	222.0	188.6	177.4	288.1	228.8
Police Services	\$	620.3	708.8	858.9	988.6	1,408.7	1,339.5	1,279.6	1,324.9	1,318.0	1,170.3	1,180.9	1,158.4
Works Depots	\$	160.6	175.3	184.3	198.5	221.3	215.5	202.6	206.0	209.8	206.1	209.4	207.7
Traffic Signals	\$	153.7	196.1	239.0	212.3	271.2	244.1	219.4	225.9	235.7	249.1	273.9	288.7
Solid Waste Management	\$	35.9	49.1	57.6	54.0	72.1	70.6	59.1	59.1	43.6	46.6	49.0	43.6
Water Supply	\$	4,821.5	5,304.4	5,504.8	6,286.7	7,295.1	6,144.5	5,861.8	5,953.3	6,039.0	5,676.7	5,911.2	6,066.9
Sanitary Sewer less Duffin Creek WPCP	\$	4,104.5	4,539.7	4,668.2	5,172.7	5,938.4	5,341.7	4,813.2	4,900.2	4,788.3	4,709.7	4,989.0	5,035.8
Duffin Creek WPCP (Durham and York Share)	\$	6,442.5	7,771.4	8,591.6	8,738.7	8,026.5	7,776.8	6,867.7	6,058.6	6,350.8	6,554.1	7,344.0	7,478.4
Gross Electricity Sub-Total	\$	20,254.1	23,077.2	24,525.9	26,320.6	29,015.6	26,123.5	23,570.4	23,005.5	23,281.6	22,613.4	24,182.5	24,423.8
Natural Gas (\$000s)		2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Transit	\$	101.6	114.7	148.9	186.3	188.3	219.5	250.0	218.7	204.3	206.3	336.7	338.2
Child Care	\$	15.8	15.3	17.3	19.1	17.7	18.5	18.4	17.0	16.7	15.3	21.0	22.6
Long-Term Care	\$	509.8	446.8	501.1	581.5	617.0	599.3	585.9	494.6	494.4	566.2	906.6	1,104.3
Local Housing MURBs	\$	158.8	188.1	226.0	234.5	178.8	191.9	198.6	192.9	188.1	190.0	252.6	273.7
Local Housing Family Units	\$	332.6	486.6	475.3	472.8	421.1	455.2	426.6	449.6	448.3	423.0	536.3	589.0
Paramedic Services	\$	46.6	45.0	58.4	62.8	65.1	64.5	73.1	60.3	58.4	59.7	101.7	110.5
Regional HQ	\$	96.1	94.7	109.3	140.5	120.0	123.9	113.7	96.2	82.7	84.4	151.8	172.7
Other Offices/Misc. Accounts	\$	23.1	21.9	26.9	30.8	28.6	33.0	30.1	15.8	21.4	55.8	92.5	114.9
Police Services	\$	126.7	139.0	168.8	205.3	239.7	279.8	266.4	238.7	224.5	247.9	416.2	451.8
Works Depots	\$	56.2	51.6	79.6	115.6	97.3	99.9	99.7	90.9	83.0	89.7	165.2	172.8
Water Supply	\$	135.3	100.3	110.1	157.9	146.1	121.6	128.8	123.6	111.8	119.0	180.1	193.1
Sanitary Sewer less Duffin Creek WPCP	\$	238.2	233.5	269.1	355.2	375.2	368.7	389.2	431.5	365.8	374.8	687.6	764.4
Duffin Creek WPCP (Durham and York Share)	\$	1,236.8	701.0	764.4	672.5	728.8	763.2	1,094.0	812.2	614.9	829.2	1,359.0	1,859.0
Gross Natural Gas Sub-Total	\$	3,077.6	2,638.5	2,955.1	3,234.9	3,223.7	3,338.9	3,674.6	3,242.0	2,914.4	3,261.4	5,207.4	6,166.9
Stationary Diesel (\$000s)		2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Transit	\$	-	-	-	-	-	0.5	0.5	0.9	0.4	0.7	1.5	0.7
Long-Term Care	\$	10.6	8.6	11.2	5.5	8.5	6.8	15.0	8.5	4.3	6.4	11.1	4.5
Paramedic Services	\$	1.3	2.8	3.0	1.7	1.4	2.3	2.1	2.4	1.1	1.2	2.0	1.2
Regional HQ	\$	12.6	12.6	4.0	-	8.7	3.5	5.9	0.9	-	-	32.0	20.7
Other Offices/Misc. Accounts	\$	-	2.2	0.1	0.6	0.2	0.6	0.3	0.2	0.4	0.8	0.6	-
Police Services	\$	0.6	1.8	2.6	-	2.2	-	7.7	1.6	2.6	7.7	4.5	3.6
Works Depots	\$	-	-	-	-	-	-	0.4	-	0.2	0.6	1.2	0.7
Water Supply	\$	71.2	70.9	104.9	67.1	49.4	58.8	65.3	66.5	62.2	65.5	152.1	114.5
Sanitary Sewer less Duffin Creek WPCP	\$	45.4	79.6	42.8	38.0	37.0	37.7	51.7	49.3	31.6	51.8	110.3	64.4
Duffin Creek WPCP (Durham and York Share)	\$	23.4	5.4	223.2	13.7	4.5	58.7	72.4	4.3	59.1	91.5	99.2	50.4
Gross Stationary Diesel Sub-Total	\$	165.1	184.0	391.9	126.6	111.9	168.8	221.4	134.5	161.9	226.2	414.4	260.6
Furnace Oil (\$000s)		2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Other Offices/Misc. Accounts	\$	7.3	13.6	12.1	8.8	6.1	4.9	8.7	9.9	4.4	2.9	12.6	11.9
Duffin Creek WPCP (Durham and York Share)	\$	1,253.3	688.3	940.6	471.0	322.6	554.1	700.8	471.9	642.4	817.2	1,102.6	893.3
Gross Furnace Oil Sub-Total	\$	1,260.6	701.9	952.7	479.8	328.7	559.0	709.5	481.8	646.8	820.1	1,115.3	905.2
Propane Fuel (\$000s)		2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Other Offices/Misc. Accounts	\$	0.5	4.3	3.2	2.2	0.5	0.4	-	0.0	-	1.1	-	-
Police Services	\$	10.8	9.9	0.2	-	-	-	-	-	-	-	-	-
Solid Waste Management	\$	0.9	-	4.0	2.3	2.2	2.1	3.9	2.2	1.6	1.3	2.0	0.8
Gross Propane Fuel Sub-Total	\$	12.3	14.2	7.4	4.5	2.7	2.5	3.9	2.2	1.6	2.4	2.0	0.8
Fleet Fuels (Gasoline, Diesel and Other) (\$000s)		2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Transit	\$	10,772.7	8,652.4	9,161.3	7,262.1	6,273.8	7,432.9	8,906.2	8,315.0	4,920.0	6,183.8	11,151.2	10,882.5
Paramedic Services	\$	726.6	767.1	821.5	685.7	721.9	844.7	984.4	716.0	663.7	1,003.5	1,468.7	1,240.4
Police Services	\$	1,948.3	2,077.2	2,192.2	1,700.9	1,537.1	1,645.5	1,796.5	1,979.3	1,764.5	2,140.7	2,546.7	2,448.1
Public Works	\$	1,349.7	1,688.2	1,693.0	1,401.0	1,966.2	1,761.4	1,800.0	1,789.2	1,454.3	1,759.8	2,571.7	2,032.0
Gross Fleet Fuels Sub-Total	\$	14,797.3	13,184.9	13,868.0	11,049.7	10,499.0	11,684.5	13,487.0	12,799.4	8,802.5	11,087.7	17,738.4	16,603.1
Total Gross Cost (\$000s)	\$	39,567.0	39,800.8	42,701.0	41,216.1	43,181.6	41,877.3	41,666.8	39,665.5	35,808.8	38,011.2	48,660.1	48,360.3

Figure 26: 2012 to 2023 Energy Usage Tables-by Operation Area continued

Total Energy-Related Emissions by Operational Area (2012 to 2023)

Electricity (tonnes CO ₂ e)		2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Transit		171.4	146.8	88.4	84.8	80.5	42.2	81.7	76.2	75.9	70.6	72.2	68.5
Child Care		34.0	22.1	10.9	10.5	9.8	4.3	6.9	5.7	4.4	4.9	4.8	5.0
Long-Term Care		1,514.0	1,017.6	532.5	455.2	546.7	248.9	394.6	363.2	361.9	392.3	390.6	387.4
Local Housing MURBs		902.0	671.6	371.8	352.9	318.2	147.0	243.9	237.4	217.7	223.0	238.7	211.8
Paramedic Services		96.5	73.1	42.8	40.2	36.9	17.4	27.7	26.6	26.5	27.7	30.9	32.2
Regional HQ		911.8	611.3	327.5	328.9	305.4	140.8	222.9	217.9	184.3	189.9	189.2	188.2
Other Offices/Misc. Accounts		132.0	96.8	56.6	57.4	57.2	27.0	43.2	40.1	32.0	34.6	55.7	44.3
Police Services		568.4	402.0	257.4	258.0	303.4	135.8	219.5	210.4	197.9	207.0	212.9	202.0
Works Depots		138.3	94.8	51.1	49.3	45.3	22.5	34.4	32.6	31.2	34.3	34.8	34.0
Traffic Signals		121.9	97.2	59.8	52.3	52.4	25.3	39.3	38.5	37.6	40.7	43.2	42.2
Solid Waste Management		30.6	25.0	15.2	12.6	13.8	7.3	10.6	8.5	7.4	8.5	8.6	7.3
Water Supply		4,373.2	3,027.9	1,681.9	1,706.9	1,637.1	736.8	1,239.9	1,200.2	1,164.9	1,250.4	1,282.7	1,324.1
Sanitary Sewer less Duffin Creek WPCP		3,905.6	2,713.8	1,496.5	1,442.7	1,374.6	678.7	1,100.8	1,105.6	1,059.4	1,126.6	1,137.5	1,183.7
Duffin Creek WPCP (Durham and York Share)		6,733.4	4,661.2	2,748.1	2,701.0	2,375.4	1,099.5	1,859.1	1,807.5	1,773.7	1,906.0	1,966.7	2,131.5
Electricity Gross Emissions Sub-Total		19,633.3	13,661.1	7,740.5	7,552.8	7,156.5	3,333.5	5,524.7	5,370.6	5,174.9	5,516.4	5,668.7	5,862.1
Electricity Net Emissions Sub-Total		14,207.8	10,045.4	5,594.9	5,429.0	5,293.7	2,457.5	4,057.3	3,935.1	3,773.0	3,999.9	4,089.7	4,145.1
Natural Gas (tonnes CO ₂ e)		2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Transit		743.1	961.4	1,146.4	1,073.7	1,114.0	1,346.0	1,550.2	1,620.6	1,502.3	1,361.5	1,381.9	1,154.7
Child Care		62.4	73.8	82.6	74.8	64.6	69.9	75.6	80.5	83.9	65.9	64.3	58.3
Long-Term Care		3,683.9	4,043.0	3,925.0	3,181.2	3,448.3	3,391.3	3,735.1	3,719.9	3,780.6	3,905.0	3,879.5	4,092.7
Local Housing MURBs		1,040.4	1,204.9	1,246.5	1,212.1	1,093.0	1,086.3	1,181.1	1,175.1	1,099.0	973.7	963.4	970.0
Local Housing Family Units		1,424.5	1,456.0	1,441.6	1,464.4	1,309.1	1,384.5	1,353.7	1,450.3	1,320.3	1,258.1	1,362.3	1,264.0
Paramedic Services		242.8	277.8	344.0	276.4	289.4	297.2	345.8	325.6	321.2	287.1	344.3	294.3
Regional HQ		721.9	797.8	798.9	799.7	709.0	711.9	738.9	712.0	601.9	546.1	591.3	615.5
Other Offices/Misc. Accounts		122.1	141.0	164.7	145.1	133.5	165.5	139.1	76.9	103.0	277.2	339.3	362.0
Police Services		799.9	1,153.4	1,246.0	1,118.8	1,281.9	1,489.1	1,566.9	1,621.6	1,551.2	1,496.0	1,662.0	1,510.7
Works Depots		325.3	392.0	585.6	622.5	491.7	527.8	542.0	611.7	563.0	532.8	656.3	556.2
Water Supply		891.3	798.3	769.1	867.8	783.1	630.3	719.1	824.7	756.5	727.8	701.1	634.9
Sanitary Sewer less Duffin Creek WPCP		1,467.4	1,973.4	1,926.0	1,908.7	2,073.5	2,040.9	2,392.5	3,089.0	2,580.2	2,359.2	2,777.5	2,646.0
Duffin Creek WPCP (Durham and York Share)		8,712.6	6,492.4	6,050.7	3,655.4	4,082.5	4,292.6	7,208.4	6,186.8	4,539.3	5,628.6	5,470.4	6,770.5
Natural Gas Gross Emissions Sub-Total		20,237.5	19,765.2	19,727.1	16,400.6	16,873.7	17,433.2	21,548.4	21,494.8	18,802.4	19,418.7	20,193.6	20,929.7
Natural Gas Net Emissions Sub-Total		13,285.4	14,808.2	15,068.5	13,568.1	13,715.5	14,086.5	15,992.6	16,746.9	15,365.2	15,177.1	15,978.0	15,708.9
Stationary Diesel (tonnes CO ₂ e)		2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Transit		-	-	-	-	-	1.3	1.4	2.5	1.7	1.6	3.1	1.2
Long-Term Care		27.5	21.3	28.7	16.9	32.5	19.8	39.1	23.7	13.4	16.2	17.6	7.4
Paramedic Services		3.3	8.7	7.8	5.7	5.4	7.2	5.2	7.2	3.4	2.5	2.6	1.8
Regional HQ		33.4	39.3	11.2	-	35.7	10.5	16.3	2.7	-	-	47.4	38.9
Other Offices/Misc. Accounts		-	6.7	0.3	1.9	0.8	1.8	0.8	0.6	1.7	1.8	0.9	-
Police Services		1.7	4.6	7.3	-	7.4	-	21.0	4.3	8.9	16.5	6.6	6.2
Works Depots		-	-	-	-	-	-	1.0	-	0.6	1.5	1.7	1.4
Water Supply		192.9	206.1	259.8	216.2	190.7	183.2	176.6	189.1	231.3	177.2	248.8	207.8
Sanitary Sewer less Duffin Creek WPCP		135.9	226.9	109.9	125.4	142.2	122.6	138.8	148.3	107.7	137.8	172.9	117.2
Duffin Creek WPCP (Durham and York Share)		70.1	16.0	586.4	45.7	16.6	181.6	227.0	12.5	169.4	277.6	171.4	97.6
Stationary Diesel Gross Emissions Sub-Total		464.9	529.6	1,011.5	411.7	431.3	528.0	627.3	390.8	538.1	632.6	673.1	479.7
Stationary Diesel Net Emissions Sub-Total		406.7	516.6	536.0	374.3	417.7	379.2	441.4	380.6	400.0	405.8	532.3	399.5
Furnace Oil (tonnes CO ₂ e)		2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Other Offices/Misc. Accounts		19.9	36.7	31.8	30.8	26.8	17.1	25.6	31.5	16.1	9.9	22.4	23.1
Duffin Creek WPCP (Durham and York Share)		3,488.0	1,899.1	2,554.1	1,724.9	1,357.3	1,919.3	2,075.5	1,526.9	2,726.4	2,343.5	1,828.6	1,770.2
Furnace Oil Gross Emissions Sub-Total		3,508.0	1,935.9	2,585.9	1,755.7	1,384.1	1,936.4	2,101.1	1,558.4	2,742.4	2,353.5	1,851.0	1,793.2
Furnace Oil Net Emissions Sub-Total		783.5	531.0	669.0	455.8	366.9	472.2	563.1	418.9	737.1	606.2	465.7	443.5
Propane Fuel (tonnes CO ₂ e)		2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Other Offices/Misc. Accounts		1.2	13.7	7.8	5.3	1.3	1.1	-	0.0	-	4.4	-	-
Police Services		24.5	22.3	0.4	-	-	-	-	-	-	-	-	-
Solid Waste Management		2.1	-	9.7	5.5	6.5	5.7	6.3	5.0	3.8	4.5	4.4	1.9
Propane Fuel Gross Emissions Sub-Total		27.9	36.0	17.9	10.8	7.8	6.8	6.3	5.0	3.8	9.0	4.4	1.9
Fleet Gasoline (tonnes CO ₂ e)		2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Transit		25.1	33.8	83.4	59.3	23.0	-	236.3	302.7	-	-	-	-
Paramedic Services		1,088.3	1,319.6	1,783.6	1,702.9	1,769.6	1,865.5	1,969.8	1,498.7	1,209.6	1,723.0	2,074.8	1,927.6
Police Services		4,182.9	4,126.8	4,428.0	3,991.0	4,181.3	3,954.4	4,073.7	3,975.3	4,361.1	4,054.9	3,731.8	3,786.9
Public Works		1,227.0	1,264.9	1,352.1	1,400.7	1,592.6	1,776.6	1,890.3	1,864.9	1,987.3	2,004.5	1,747.1	1,696.4
Fleet Gasoline Gross Emissions Sub-Total		6,523.4	6,745.1	7,647.2	7,153.8	7,566.4	7,596.5	8,170.1	7,641.5	7,558.0	7,782.5	7,553.6	7,410.9
Fleet Diesel (tonnes CO ₂ e)		2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Transit		16,587.1	19,232.6	20,281.7	19,745.2	19,811.2	19,832.9	20,403.0	19,947.5	14,896.7	14,888.6	16,102.4	17,858.3
Paramedic Services		406.6	229.7	56.7	3.7	2.2	0.8	0.5	0.6	0.3	-	-	-
Public Works		2,139.9	2,635.0	2,701.9	2,276.6	2,511.7	2,417.5	2,265.4	2,563.9	2,138.5	1,840.1	2,119.3	1,717.5
Fleet Diesel Gross Emissions Sub-Total		19,133.6	22,097.4	23,040.3	22,025.5	22,325.0	22,251.1	22,668.9	22,512.0	17,035.5	16,728.8	18,221.7	19,575.8
Fleet Other (tonnes CO ₂ e)		2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Total Fleet		168.2	148.6	192.7	205.5	216.7	220.1	181.1	167.3	91.3	107.8	91.4	180.9
Fleet Other Gross Emissions Sub-Total		168.2	148.6	192.7	205.5	216.7	220.1	181.1	167.3	91.3	107.8	91.4	180.9
Total Gross Emissions (tonnes CO₂e)		69,696.7	64,918.8	61,963.1	55,516.5	55,961.5	53,305.7	60,827.9	59,140.5	51,946.4	52,549.2	54,257.4	56,234.1
Total Net Emissions (tonnes CO₂e)		54,536.4	54,928.2	52,766.4	49,222.8	49,909.7	47,470.0	52,080.8	51,807.4	44,964.0	44,817.0	46,936.9	47,866.4

9. Appendix C

Figure 27: Energy Use Intensity (EUI) – Water Supply, by System, 2023 versus 2012 Baseline (GJ/ML Flow)

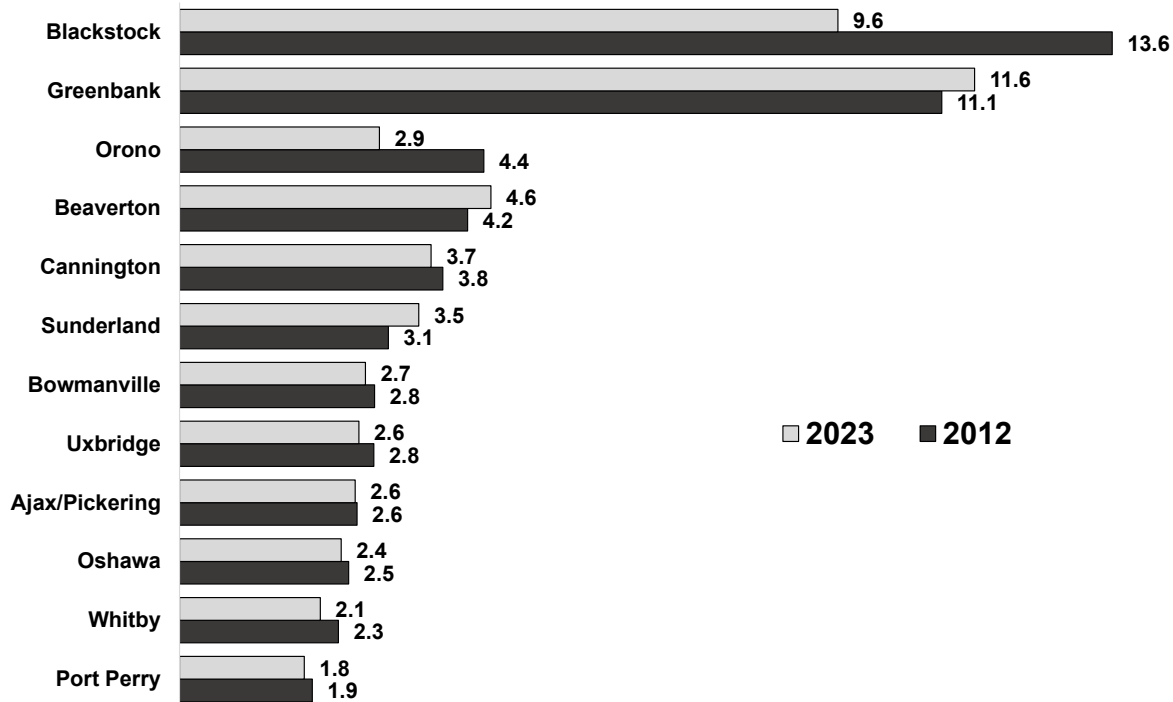


Figure 28: Energy Use Intensity (EUI) – Sanitary Sewerage, by System, 2023 versus 2012 Baseline (GJ/ML Flow)

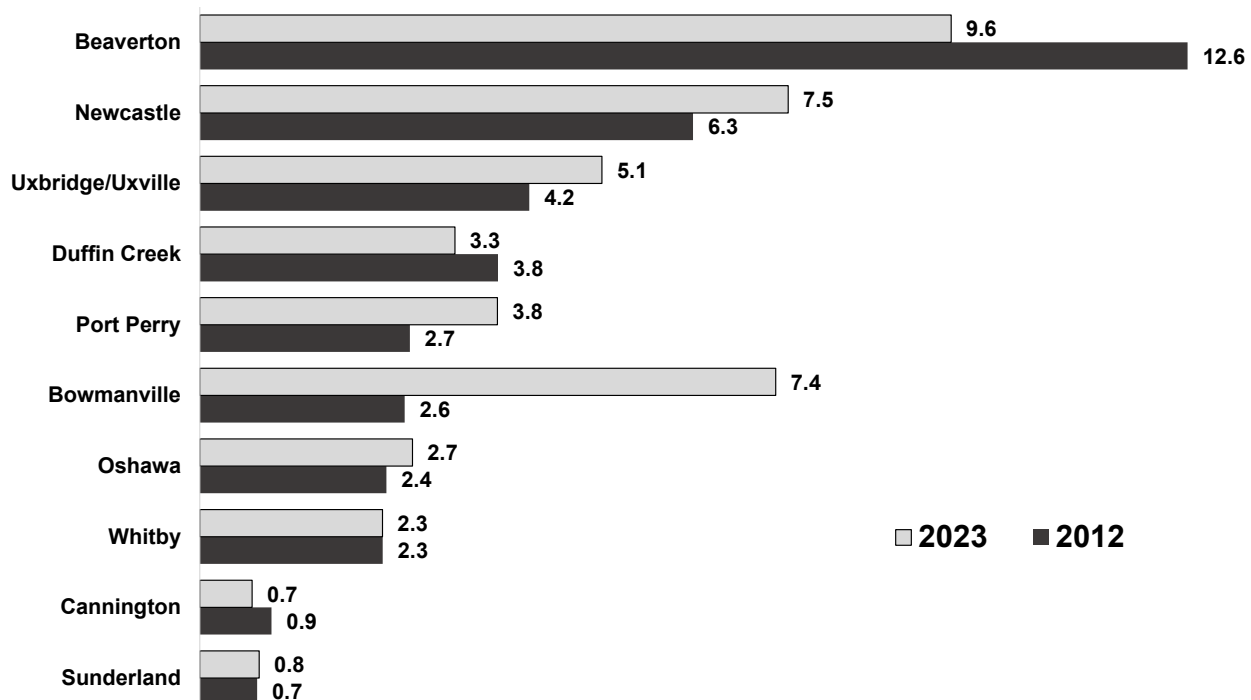


Figure 29: Nominal Energy Use Intensity (EUI) – Facilities, 2023 versus 2012 Baseline (GJ/ft²)

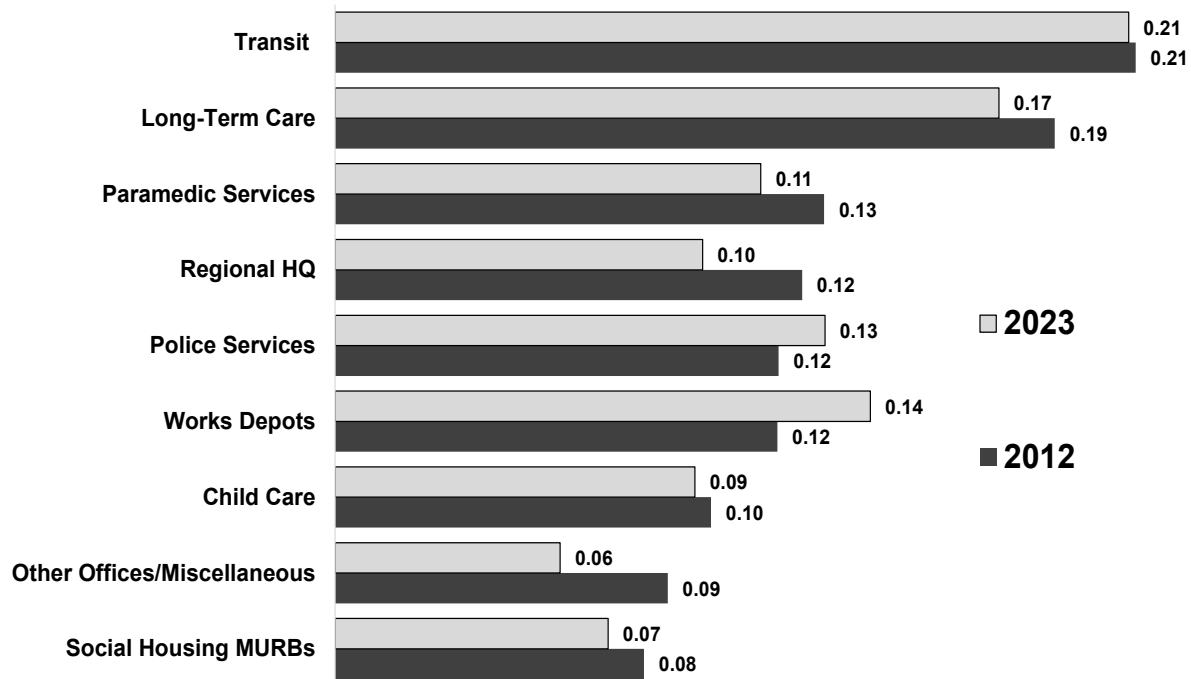
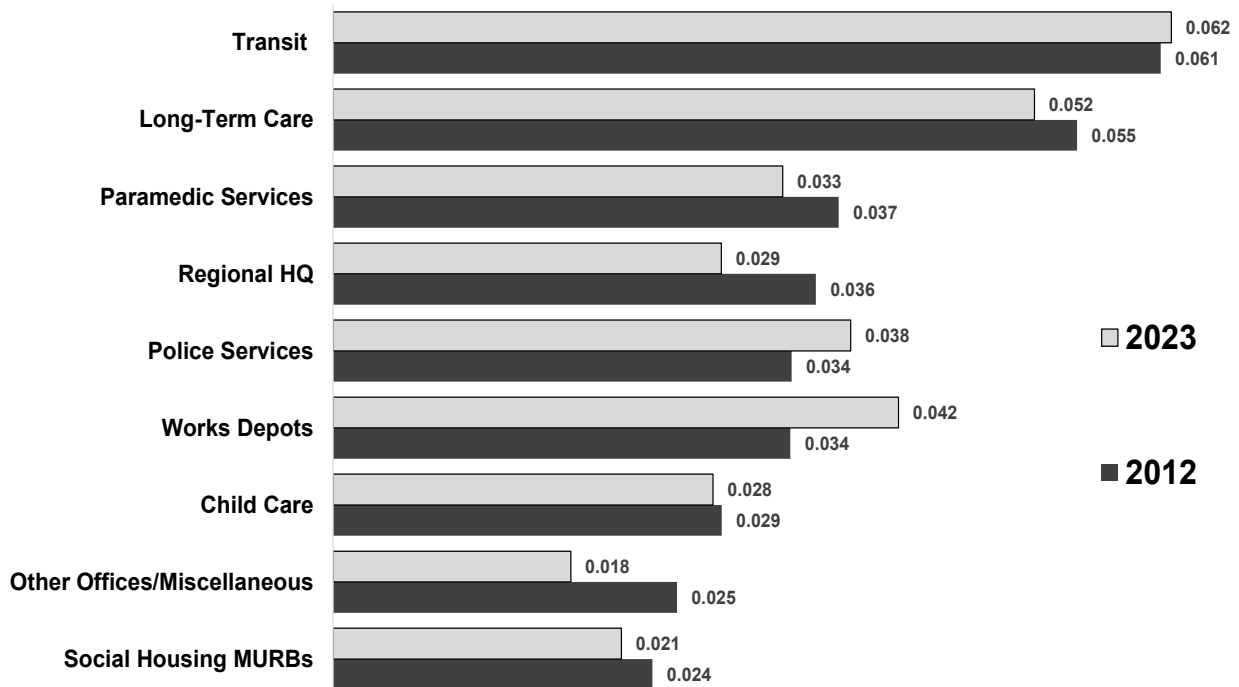


Figure 30: Normalized Energy Use Intensity (EUI) – Facilities, 2023 versus 2012 Baseline (GJ/Degree Day/'000 ft²)





The Regional Municipality of Durham Report

To: Committee of the Whole
From: Commissioner of Finance and Commissioner of Planning and Economic Development
Report: #2024-COW-31
Date: June 12, 2024

Subject:

Request for Funding from the Central Lake Ontario Conservation Authority for the Acquisition of Land adjacent to the Long Sault Conservation Area in the Municipality of Clarington (PIN 267430090)

Recommendation:

That the Committee of the Whole recommends to Regional Council:

- A) That in response to the request for funding from the Central Lake Ontario Conservation Authority, that funding in the amount of \$94,212, representing 40 per cent of the estimated eligible acquisition costs for approximately 16.57 hectares (40.94 acres) of land located adjacent to the Long Sault Conservation Area in the Municipality of Clarington (PIN 267430090), be approved and financed from the Region's Land Conservation and Protection Reserve Fund subject to the Central Lake Ontario Conservation Authority's Board of Directors' approval of the land purchase at their meeting on June 18, 2024; and
 - B) That the Commissioner of Finance be authorized to adjust the total payment amount to Central Lake Ontario Conservation Authority pending a review of the eligibility of final costs incurred pursuant to the Region's Land Acquisition Funding Policy.
-

Report:

1. Purpose

- 1.1 The purpose of the report is to advise Council of, and seek approval for, Central Lake Ontario Conservation Authority's request for funding under the Durham Region Land Acquisition Funding Policy for Conservation Authorities for the purchase of approximately 16.57 hectares (40.94 acres) of land adjacent to the Long Sault Conservation Area in the Municipality of Clarington.

2. Previous Reports and Decisions

- 2.1 In October 2007, Regional Council adopted the recommendations of Report 2007-J-36 entitled “Durham Region Land Acquisition Funding Policy for Conservation Authorities”. This report identified a process and eligibility requirements by which the Region’s five Conservation Authorities could apply for funding from the Region’s Land Conservation and Protection Reserve Fund to finance the acquisition of properties for conservation purposes.
- 2.2 A goal of this policy is to ensure that land acquisition efforts of Regional Council in partnership with Conservation Authorities in Durham Region, will contribute to the protection, enhancement and restoration of the natural environment in Durham Region.

3. Central Lake Ontario Conservation Authority’s Request for Funding

- 3.1 Central Lake Ontario Conservation Authority is requesting approval for \$94,212 in funding from the Region, representing 40 per cent of the total estimated eligible acquisition costs of \$235,530 as outlined in Table One. Central Lake Ontario Conservation Authority has been awarded funding from Environment and Climate Change Canada in the amount of \$117,765 towards the acquisition of this property. The Central Lake Ontario Conservation Authority has committed funding of \$23,553 for the balance of the acquisition costs.

Table One

Description	Total Estimated Cost \$	Recommended Estimated Regional Portion (40 per cent) \$
Purchase Price	220,000	88,000
Survey, Legal Fees, Appraisal Cost, Land Transfer Tax, Environmental Site Assessment Costs	15,530	6,212
Total	235,530	94,212

- 3.2 Central Lake Ontario Conservation Authority has negotiated an agreement of purchase and sale for the acquisition of a 16.57 hectare (40.94 acre) parcel, known as Part Lot 10, Concession 9, Darlington in the Municipality of Clarington (PIN 267430090), adjacent to the Long Sault Conservation Area. Portions of this property are identified as a Key Natural Heritage Feature in the current Regional

Official Plan. It is located within the Greenbelt Plan Area – Oak Ridges Moraine in the current Regional Official Plan.¹

- 3.3 Central Lake Ontario Conservation Authority’s Board of Directors is reviewing the proposed acquisition of this property at their June 18, 2024 Board meeting and as such the Region’s financial contribution towards the acquisition of this property is contingent on the approval of the land purchase by the Central Lake Ontario Conservation Authority’s Board of Directors.

4. Advancing Regional Planning Objectives

- 4.1 In accordance with the Land Acquisition Funding Policy for Conservation Authorities, Regional Planning staff have reviewed Central Lake Ontario Conservation Authority’s request and concluded that the request meets the primary planning criteria for eligibility.
- 4.2 Specifically, the acquisition of this property meets the objectives of the current Durham Regional Official Plan as this property:
- is being purchased for conservation purposes;
 - is located within or contributes to the enhancement of the current Regional Official Plan Greenlands System outside of urban areas;
 - contains key natural heritage and/or key hydrological features; and
 - supports the long-term planning and growth management of the Region.

5. Financial Considerations

- 5.1 The Region of Durham has established the Land Conservation and Protection Reserve Fund to, in part, make funding available to the Region’s five Conservation Authorities for the purpose of acquiring environmentally sensitive lands.
- 5.2 The request from Central Lake Ontario Conservation Authority for \$94,212 in funding towards the eligible acquisition costs meets the maximum amount allowed within the Council approved Conservation Land Acquisition Funding Policy that limits the Region’s maximum contribution for land purchases for conservation properties to 40 per cent of the total eligible costs.
- 5.3 There are sufficient uncommitted funds available in the Land Conservation and Protection Reserve Fund to finance the recommended funding of \$94,212 for Central Lake Ontario Conservation Authority’s land acquisition.

¹ The terminology in this report reflects the current Regional Official Plan. A new Regional Official Plan was adopted by Regional Council in May 2023 and is currently with the Province for approval.

6. Relationship to Strategic Plan

6.1 This report aligns with/addresses the following strategic goals and priorities in the Durham Region Strategic Plan:

- Goal 1.3 Environmental Sustainability – to protect, preserve and restore the natural environment, including greenspaces, waterways, parks, trails, and farmlands; and
- Goal 5.1 Service Excellence – to provide exceptional value to Durham taxpayers through responsive, effective and financially sustainable service delivery.

7. Conclusion

7.1 The request from Central Lake Ontario Conservation Authority for \$94,212 in funding for the acquisition of approximately 16.57 hectares (40.94 acres) of land adjacent to the Long Sault Conservation Area is recommended for approval as it meets the requirements of the Durham Region Land Acquisition Policy for Conservation Authorities.

8. Attachments

Attachment #1: Letter and Map from Central Lake Ontario Conservation Authority requesting funding for the acquisition of the subject property

Respectfully submitted,

Original Signed By

Nancy Taylor, BBA, CPA, CA
Commissioner of Finance

Original Signed By

Brian Bridgeman, MCIP, RPP
Commissioner of Planning and Economic
Development

Recommended for Presentation to Committee

Original Signed By

Elaine C. Baxter-Trahair
Chief Administrative Officer



Healthy watersheds for
today and tomorrow.

May 27, 2024

CLOCA IMS: AFNB49

Mrs. Nancy Taylor
Commissioner of Finance and Treasurer
The Regional Municipality of Durham
605 Rossland Road East, PO Box 623
Whitby, ON L1N 6A3

Dear Mrs. Taylor:

Subject: Request for funding under the Durham Region Land Acquisition Funding Policy

Please accept this letter as a request for funding in the amount of \$94,212 under the Durham Region Land Acquisition Funding Policy for Conservation Authorities (LAFP) for the purchase of approximately 17 hectares (41 acres) of land entirely surrounded by the Long Sault Conservation Area. The total cost is \$235,530 outlined as follows:

Purchase price	\$220,000
survey, legal fees, land transfer tax, appraisal, env site ass, fencing	\$15,530 (estimated)
Total cost	\$235,530

In accordance with the Regions LAFP, we are requesting 40% of the total acquisition costs. We have been awarded funding from Environment Climate Change Canada for the acquisition of this property. The funding breakdown is as follows:

ECCC - \$117,765

Durham Region - \$94,212

CLOCA - \$23,553

Total - \$235,530

A letter of opinion for the subject property was completed and the purchase price is within the opined value.

The subject property is designed natural core area and natural linkage area in the Oak Ridges Moraine Conservation Plan. The Durham Regional Official Plan designates the property Oak Ridges Moraine within the Greenlands System.

The subject property meets CLOCAs Land Securement Strategy as it is located on the Oak Ridges Moraine and is surrounded by the Long Sault Conservation Area. This is a logical acquisition to fill a gap within the Long Sault Conservation Area and will ensure protection of important natural features and functions found on the property and in the long-term provide for public passive recreational uses through trails.

The request meets the primary planning criteria for LAFP eligibility. Specifically, the acquisition of this property meets the objectives of the Durham Regional Official Plan as this property:

- is being purchased for conservation purposes;
- is located within and contributes to the enhancement of the Regional Official Plan Greenlands System outside of urban areas;
- contains key natural heritage and/or key hydrological features; and
- supports the long-term planning and growth management of the Region.

The long-term intended use of the subject property will be environmental protection and passive recreation. As such, the projected net operating and capital costs required to support the stewardship plans for the subject property is negligible. There will be no short-term operational stewardship expenses and any long-term stewardship expenses is expected to be minor.

We will be seeking our Boards endorsement for the acquisition of this property at their June 18th meeting.

Sincerely,



Chris Darling, MCIP, RPP
Chief Administrative Officer

CD/lv

Attach: location map

cc: Nicole Pincombe, Region of Durham
Elizabeth Roy, Chair, Central Lake Ontario Conservation Authority

W

DS
LT

DS
MT



16.57 HA
40.94 AC



Long Sault Conservation Area



© Copyright Central Lake Ontario Conservation Authority, 2024

Map Compiled by the Central Lake Ontario Conservation Authority, 100 Whiting Ave., Cobourg, Ontario, L9H 3T3

This map is for information purposes only and the Authority takes no responsibility for, nor guarantees, the accuracy of all the information contained within the map.

Source: CLOCA, 2024, Regional Municipality of Durham, 2024.

Ortho Photo: First Base Solutions, April 2022





Projection: NORTH AMERICAN DATUM 1983 UNIVERSAL TRANSVERSE MERCATOR (6 DEGREES) PROJECTION, ZONE 17, CENTRAL MERIDIAN (81 DEGREES WEST)

Date Printed: April 23, 2024



Tomlin Property
Long Sault Conservation Area
CON 9 PT LOT 10
Municipality of Clarington

Legend

-  Tomlin Property
-  Assessment Parcel
-  Long Sault Conservation Area
-  Durham East Cross Conservation Area





The Regional Municipality of Durham Report

To: Committee of the Whole
From: Commissioner of Finance, Commissioner of Planning and Economic Development and Commissioner of Works
Report: #2024-COW-32
Date: June 12, 2024

Subject:

Request for Regional Financial Assistance under the Regional Revitalization Program by Medallion Developments Ltd. operating as Bruce Street Developments Ltd. ("Medallion") for the Development of two Purpose-Built Rental Apartment Buildings (Phase 1) on Vacant Lands located at 135 Bruce Street in the City of Oshawa

Recommendation:

That Committee of the Whole recommends to Regional Council:

A) That the application submitted by the City of Oshawa, on behalf of Medallion, under the Regional Revitalization Program (RRP), requesting Regional financial assistance for the development of two purpose-built rental apartment buildings (Phase 1) on vacant lands located at 135 Bruce Street in the City of Oshawa be approved, subject to the following conditions:

- i) The Region to provide up to \$3,900,000, or the amount of assistance provided by the City of Oshawa, whichever is the lesser amount, for the development, with funding provided from the Regional Revitalization Reserve Fund and transferred to the City of Oshawa for distribution to Medallion, in accordance with the timing and flow of funds under the RRP:

Full building permit issued to Medallion	50%
Framing inspection (or equivalent structural completion), passed by the area municipal building inspection authority	40%
Occupancy permit received from the area municipal building authority or passed pre-occupancy inspection of those municipalities which do not issue an occupancy permit;	10%

- ii) The City of Oshawa executes the necessary agreements with Medallion for the provision of financial assistance by the City;
 - iii) Medallion must pay all applicable Regional Development Charges due at building permit issuance;
 - iv) All costs associated with works for the development of the lands will be borne by the developer, Medallion, in keeping with Regional policies;
 - v) Satisfaction of any performance criteria outlined in agreements between the City of Oshawa and Medallion in regard to incentives (financial or other) provided under the City's Urban Growth Centre Community Improvement Plan and applicable City By-laws;
 - vi) The City of Oshawa enter into an agreement with the Region that outlines the terms and conditions for Regional financial assistance to ensure accountability for Regional funding; and,
 - vii) The City of Oshawa agrees to annual post-project reviews and audits for five years after substantial occupancy of the development of lands, in conjunction with the Region, to provide accountability and ensure effective utilization of Regional resources; and,
- B) That as per the RRP, the increased property tax revenue generated from the increased current value assessment of the development project in the City of Oshawa be used to replenish the Regional Revitalization Reserve Fund for approximately five years after substantial occupancy.
-

Report:

1. Purpose

- 1.1 The purpose of this report is to consider a request for Regional financial assistance under the Regional Revitalization Program (RRP) for the redevelopment of lands known as the old Fittings site by Medallion Developments Inc. operating as Bruce Street Developments Ltd. ("Medallion") located at 135 Bruce Street in the City of Oshawa.
- 1.2 On April 26, 2024, Regional staff received an application from the City of Oshawa, on behalf of Medallion, under the RRP. The City continues to finalize their agreement(s) with Medallion, but given the long history and potential of this redevelopment site, Regional and City staff have worked together in order to advance the Region's consideration of this application, subject to the satisfactory outcome of the City's arrangements.

2. Key Elements of the Regional Revitalization Program

2.1 Regional Council established the RRP on October 8, 2008 (Report #2008-J-37) for a term of five years. The RRP was renewed indefinitely by Regional Council on March 5, 2014 (Report #2014-J-10). Key elements and application requirements of the RRP are contained in the Guideline for the Regional Revitalization Program – Region of Durham.

2.2 The RRP is a partnership between the Region of Durham and participating area municipalities and aims to strategically target Regional investment towards key areas that advance the goals of the Regional Official Plan and achieve positive economic and community objectives and support development that would not otherwise proceed without municipal financial assistance.

2.3 The RRP contains the following key elements:

- The RRP targets new projects within Community Improvement Plan (CIP) Areas as recommended by area municipalities;
- The RRP focuses on initiatives that advance goals of the Regional Official Plan (ROP) as a basis for achieving positive economic and community objectives;
- The RRP encourages both residential and employment growth in the Region's key urban locations, including Regional Centres and Regional Corridors, and brownfield sites throughout the Region, which are given preference;
- The project must entail significant and substantial revitalization and/or development. Construction cannot already be underway. Examples of eligible project types are:
 - New construction
 - Additions to existing buildings
 - Redevelopment
 - Brownfield Redevelopment
- Projects involving façade improvements are not eligible under the RRP;
- Program eligibility is determined through the submission of an application, including a business case by the supporting area municipality, which demonstrates the benefits of the project and the need for Regional financial assistance. Area municipalities must submit an application, including a business case, to the Region's Commissioner of Finance;
- Applications are reviewed and evaluated by the Commissioners of Planning and Economic Development, Works and Finance to ensure that program eligibility and business case requirements are addressed;
- Recommendations regarding project selection are then presented to the Finance & Administration Committee or the Committee of the Whole and Regional Council;
- Regional financial assistance under the RRP is not to be greater than the area municipality's financial assistance;
- Funds for approved community improvement projects will be transferred to

the applicable area municipality at the following stages:

- Building permit issued by area municipality: 50%
- Framing inspection, or equivalent structural completion, Passed by the area municipal building inspection authority: 40%
- Occupancy permit received from area municipal building authority or passed preoccupancy inspection of those municipalities which do not issue an occupancy permit: 10%
- The participating area municipalities are required to provide relevant project information for all qualified community improvement projects approved through the RRP on an annual basis for the five years after substantial occupancy of each project;
- Funding is provided through the Regional Revitalization Reserve Fund, which is replenished through the dedication of the increased Regional property tax revenue of the RRP projects, resulting from increased current value assessment, for a time period after substantial occupancy to be determined by Regional Council at project approval; and
- Regional financial assistance operates like a grant; it is not an exemption from Regional Development Charges, a reduction in property taxes, or a contribution towards Regional infrastructure.

3. Request for Regional Assistance

3.1 On April 26, 2024, Regional staff received an RRP application from the City of Oshawa, on behalf of Medallion. Medallion is requesting a grant equivalent to the maximum allowable under the RRP.

3.2 Further, as part of the RRP application, the following City Council motion was endorsed on September 26, 2022 and referred back to City staff:

“...that Medallion work with the staff at the Region of Durham to include an agreement with a license plan for Durham Region to lease one unit/floor in all new 10floor+ Medallion apartment buildings in the City of Oshawa for the Region of Durham to be permitted to sublet for affordable accessible social housing in the City of Oshawa.”

4. Medallion’s Proposal

4.1 Medallion Developments Inc., operating as Bruce Street Developments Ltd. (“Medallion”), is proposing to develop a multi-phased mixed-use development located between Bruce Street to the north, the rear yards of houses fronting onto Stacey Avenue to the south, Court Street to the west and Drew Street to the east in Downtown Oshawa.

4.2 Phase 1 consists of a new purpose-built apartment building at 135 Bruce Street. The first tower, “Building A”, is proposed to be 22 storeys in height and includes 19 studio units, 167 one-bedroom units, 106 two-bedroom units and 11 three-bedroom units

(303 units in total). The second tower, “Building B”, is proposed to be 10 storeys in height and includes 8 studio units, 113 one-bedroom units, 76 two-bedroom units and 9 three-bedroom units (206 units in total). Combined, the proposed Phase 1 development of the Site will result in a total of 509 units.

- 4.3 Currently, the site located at 135 Bruce Street is a vacant brownfield with an area of 10.7 hectares (26.5 acres.) and occupies the northwest corner of the property. The land is currently owned by Medallion.
- 4.4 The subject site is commonly referred to as the former Fittings site, since it was formerly used for industrial purposes by Fittings Limited. In 1987, Fittings Limited ceased operations and the site subsequently became available for redevelopment.
- 4.5 All units in the proposed development are purpose-built residential apartment rental units. The total construction budget for this project is approximately \$221.2 million.
- 4.6 Medallion and the Region’s Housing Services Division are actively investigating a rent supplement agreement to ensure that some Rent-Geared-to-Income units are available in this building, Medallion had similar rent supplement agreements with the Region in other locations.

Challenges and Extraordinary Costs

- 4.7 According to the proposal, the following table summarizes the challenges and extraordinary costs for redeveloping the existing site:

Extraordinary Cost	(\$)
Significant environment costs associated with the development project, including remediation costs for contamination, such as soil disposal, groundwater management, the installation of an active vapour system and associated vapour barrier system requirements	4,015,200
Above Grade Parking - Additional design/construction costs due to soil conditions and soil contamination	2,134,000
Longer absorption rates on revitalization projects, including extra public relation costs	1,127,000
Additional security during construction	396,000
Extra maintenance costs for addressing vandalism, illegal dumping, drug use and living encampments	75,000
Additional security for two buildings (short term)	920,000
Certificate of Property use - Ministry requirement to test and monitor (short term)	63,000

5. Project Support by the City of Oshawa

5.1 On September 26, 2022, City Council supported a request for development incentives under the City's Urban Growth Community Improvement Plan. The City of Oshawa's total contribution towards this project is estimated to be \$3,893,568. This contribution represents an Increased Assessment Grant of 50 per cent per year for a total of 16 years. City staff has indicated that this value may change over the 16-year grant period to ensure the grant total is achieved based on Municipal Property Assessment Corporation's final assessment.

6. Evaluation under the RRP

6.1 Challenges highlighted by Market Analysis

- The Greater Toronto Area (GTA) is experiencing surging demand for rental apartment buildings. In recent years, the demand for rental housing has reached unprecedented levels due to a rapidly growing population. Rental market conditions are characterized by low vacancy rates and remarkable rent growth.
- Purpose-built rentals are the most common form of rental housing in the GTA, but purpose-built rentals contributed the least amount of new supply over the past ten years.
- According to the Ontario Ministry of Finance medium-growth scenario, the GTA population is expected to grow by 1.27 million by 2031, an extra 445,920 above growth recorded during the previous 10-year period. Record high immigration is occurring as population outflows increase.
- Home ownership rates are dropping as affordability continues to decline. The surge in housing prices in recent years, combined with quickly rising interest rates, has increased the percentage of household income required to service the average mortgage to a record high.
- Despite strong demand-side fundamentals, developers have been facing several supply-side challenges that impede the provision of rental housing in the Toronto GTA, including:
 - Limited and costly residential vacant land.
 - CMHC and Statistics Canada's Municipal Land Use and Regulation Survey found approval timelines for new developments in the GTA to be the longest in the country. Long timelines end up adding costs to development (for interest on loans, equipment rentals and labour, for example), as do government fees levied on new construction.
 - The rapid rise in construction costs and interest rates in recent years has lowered expected returns and increased the amount of equity developers need to bring to a project. Bringing equity to a project is especially challenging for rental developments, which don't benefit from equity accumulated through pre-construction sales, like condominiums.

- Rising operating expenses (for insurance and utilities, for example) are a significant risk to the expected return of projects.
 - Builders indicate that constraints on skilled labour capacity will resurface once development conditions improve.
-
- In the City of Oshawa, there has been a recent trend toward higher density forms of housing development, likely because of policy and lifestyle preferences, as well as limited land supply and rising land costs.
 - Due to the GO Train extension and the 407 East extension, the City of Oshawa will continue to benefit from improving regional connectivity, which may further support high density development. As such, the trend towards rental apartment forms of development is likely to continue and is expected to represent a greater proportion of total housing starts in the upcoming years.
 - Over the last two decades, several purpose built rental projects have occurred in Downtown Oshawa with assistance by the City and the Region:
 - 44-50 Bond Street West (Parkwood Residences). This project involved the redevelopment of an abandoned office complex into a residential condominium project. The project contains 120 residential apartment units. Financial assistance of \$250,000 was provided under the Pilot Regional Downtown Revitalization Program in 2003.
 - 100 Bond Street East (Bond and Mary Development Inc. - Phase 1). This mixed use residential/commercial development contains 239 apartment units and 13,000 square feet of ground floor commercial. Financial assistance of \$430,000 was provided under the RRP in 2015.
 - Genosha Hotel (TT7 Inc). This project involved the redevelopment of a mixed-use apartment/commercial building. The project contains 86 apartment units and 22,000 square feet of commercial. Financial assistance of \$564,000 was provided under the RRP in 2017.
 - 80 Bond Street East ((Bond and Mary Development Inc. - Phase 2). This mixed use residential/commercial development contains 370 apartment units and 5,000 square feet of ground floor commercial. Financial assistance of \$580,000 was provided under the RRP in 2018.

6.2 Project Satisfies Mandatory Criteria under the RRP

6.2.1 The proposed project by Medallion satisfies several mandatory criteria for eligibility and consideration under the RRP, including:

- The project is located within a designated Centre (Downtown Oshawa Urban Growth Centre) and within the City of Oshawa's Urban Growth Centre Community Improvement Plan (formerly the Central Business District Renaissance CIP);
- The project supports Regional Official Plan (ROP) policies, which encourage both residential and employment growth in a Regional Centre (Urban Growth Centre), on a brownfield site;
- The project entails significant and substantial revitalization and/or development and construction cannot already be underway;
- The project has been recommended by the City of Oshawa; and,
- A financial commitment has been provided by the City of Oshawa.

6.2.2 The proposed development would also satisfy Goal 3: Greater Housing Choice - diversify housing options by type, size and tenure, under At Home in Durham, Durham Housing Plan 2014 – 2024.

6.2.3 In addition, there are expected immediate and long-term economic benefits associated with the development, including:

- Direct employment in construction and administration related to the development, as well as the spin-off employment from the demand for goods and services by those employees;
- Direct impact from the initial capital expenditures related to construction (i.e. hard construction costs);
- Potential synergies with new private sector residential investment on the subject site, supporting ridership of local transit and providing additional benefit to downtown businesses through increased foot traffic in the Downtown core;
- Regional DCs generated by the development are estimated to be \$11.8 million at current rates; and
- Higher annual Regional property taxes generated by the development due to increased current value assessment (taxes estimated to be \$1.2 million in its first year post-construction – in 2019 \$s).

7. Financial Implications

7.1 Under the RRP, projects are required to fully pay all applicable Regional fees and charges, including Development Charges (DCs). The estimated applicable Regional DCs (based on current rates) for the proposed development are approximately \$11.8 million. Actual DCs will be determined at time of building permit issuance for the proposed project and will be payable over five installments beginning at time of occupancy (with any DCs exemptions that may become available with the June 1, 2024 introduction of the Affordable Housing DC exemption). Phase 1 of Medallion's

proposal at 135 Bruce Street can be serviced within the existing sanitary sewer and water supply systems, with only new service connections being required.

- 7.2 The proposal identifies significant environment costs associated with the development project, including remediation costs for contamination, such as soil disposal, groundwater management, the installation of an active vapour system and associated vapour barrier system requirements. According to Medallion's proposal, these extraordinary costs are estimated to be \$4,015,200. In addition, for the lifespan of Phase 1 (e.g., Buildings A and B), Medallion will be required to spend an estimated \$31,500 annually to implement the required monitoring/testing as per the Certificate of Property use issued by the Ministry of the Environment. In addition, as outlined in Section 4.7 above, there are extraordinary security, building modifications and longer marketing and occupancy timeframes at an estimated cost of \$3,900,000.
- 7.3 The Medallion project faces several unique cost challenges. Rental apartment development is subject to a particular risk that is not faced by condominium apartment development. Since purpose-built rental projects generate little or no revenue until the units begin to be occupied, construction financing is more challenging for purpose-built rental projects to secure than for condominium projects. The risk can be greater when there has been only limited market rental or condominium apartment development in the downtown area of the municipality for many years.
- 7.4 Regional staff recommend a payment of up to \$3,900,000, or the amount of assistance provided by the City of Oshawa, whichever is the lesser amount under the Regional Revitalization Program which recognizes the aforementioned site-specific challenges associated with this proposed project and is the maximum financial assistance allowed under the RRP. This high-density redevelopment, a brownfield in a downtown Community Improvement Plan (CIP), maximizes the utilization of existing municipal infrastructure through intensification in a Regional Centre, subject to the City of Oshawa providing a greater or equal amount of financial assistance.
- 7.5 In addition, Regional staff are working with Medallion to enter into a Rent Supplement agreement with Medallion upon completion of the proposed project. Under such agreements, the Region would pay Medallion the difference between the rent-geared-to-income the tenant pays the landlord and the market rent for the rental unit. The market rent is negotiated with the Region and is generally around Canada Mortgage Housing Corporation (CMHC)'s average market rent for the area. Such payments to the landlord are made on a monthly basis. Regional Housing Services Division staff will work with Medallion to determine the projected timeline for lease-up to ensure those units are included in the Region's forecast to ensure availability.
- 7.6 It is recommended that the application submitted by the City of Oshawa, on behalf of Medallion under the RRP, requesting Regional financial assistance for the development of two purpose-built rental apartment buildings (Phase 1) on vacant lands located at 135 Bruce Street in the City of Oshawa be approved, subject to the following conditions:

- i) The Region to provide up to \$3,900,000, or the amount of assistance provided by the City of Oshawa, whichever is the lesser amount, for the development, with funding provided from the Regional Revitalization Reserve Fund and transferred to the City of Oshawa for distribution to Medallion, in accordance with the timing and flow of funds under the RRP:

Full building permit issued to Medallion 50%

Framing inspection (or equivalent structural completion),
passed by the area municipal building inspection authority 40%

Occupancy permit received from the area municipal building
authority or passed preoccupancy inspection of 10%
those municipalities which do not issue an
occupancy permit;

- ii) Medallion must pay all applicable Regional Development Charges due at building permit issuance;
- iii) All costs associated with works for the development of the lands will be borne by the developer, Medallion, in keeping with Regional policies;
- iv) Satisfying any performance criteria outlined in agreements between the City of Oshawa and Medallion in regard to incentives (financial or other) provided under the City's Urban Growth Centre Community Improvement Plan and applicable City By-laws;
- v) The City of Oshawa enter into an agreement with the Region that outlines the terms and conditions for Regional financial assistance to ensure accountability for Regional funding; and,

The City of Oshawa agrees to annual post-project reviews and audits for five years after substantial occupancy of the development of lands, in conjunction with the Region, to provide accountability and ensure effective utilization of Regional resources;

- 7.7 In addition, it is recommended that as per the RRP, the increased property tax revenue generated from the increased current value assessment of the development project in the City of Oshawa be used to replenish the Regional Revitalization Reserve Fund for approximately five years after substantial occupancy.

8. Conclusion

- 8.1 The RRP is a partnership between the Region of Durham and participating area municipalities and aims to strategically target Regional investment towards key areas of Durham Region's area municipalities that advance the goals of the Regional Official Plan and achieve positive economic and community objectives where development would otherwise not proceed.

8.2 This report has been prepared with assistance from Social Services – Housing Division and Corporate Services – Legal Services Division.

Respectfully submitted,

Original Signed By

Nancy Taylor, BBA, CPA, CA
Commissioner of Finance

Original Signed By

Brian Bridgeman, MCIP, RPP, PLE
Commissioner of Planning and
Economic Development

Original Signed By

Ramesh Jagannathan, MBA, M.Eng., P.Eng., PTOE
Commissioner of Works

Recommended for Presentation to Committee

Original Signed By

Elaine C. Baxter-Trahair
Chief Administrative Officer

If this information is required in an accessible format, please contact 1-800-372-1102 ext. 3540.



The Regional Municipality of Durham Report

To: Committee of the Whole
From: Commissioner of Works and Commissioner of Finance
Report: #2024-COW-33
Date: June 12, 2024

Subject:

Project Update and Approval of Additional Capital Financing for the Construction of the Seaton Region of Durham Paramedic Services Response Station and Training Centre in the City of Pickering

Recommendation:

That the Committee of The Whole recommends to Regional Council:

- A) That the total project budget for the of the Seaton Region of Durham Paramedic Services Response Station and Training Centre in the City of Pickering be increased by \$1,900,000 for a revised project budget of \$16,143,000; and
- B) That the total estimated project cost of \$16,143,000 be financed as follows:

Previously approved financing

Development Charges	\$4,050,000
Property Taxes	5,917,014
Capital Project Reserve	3,368,986
Climate Mitigation and Environmental Initiatives Reserve Fund	<u>907,000</u>
Total Previously Approved Financing	<u>\$14,243,000</u>

Additional Financing Required

Capital Impact Stabilization Reserve Fund	<u>\$1,900,000</u>
Total Revised Project Financing	<u>\$16,143,000</u>

Report:**1. Purpose**

- 1.1 The purpose of this report is to provide an update and obtain approval for additional capital financing for the construction of the Seaton Regional Municipality of Durham (Region) Paramedic Services Response Station and Training Centre in the City of Pickering (Pickering).

2. Background

- 2.1 The land being used for the construction of the paramedic response station was provided to the Region by the Province of Ontario as part of the Community Lands Agreement for the development of Seaton. The parcel being utilized for this facility is larger than previous RDPS sites (4 acres vs the typical 1.5 to 2 acres) and created the opportunity to consider additional functions and facilities at this location including a training centre and driver training pad.
- 2.2 Funding in the amount of \$4,500,000 million for the design and construction of the Seaton Paramedic Response Station was approved in the 2018 and 2019 capital budgets. The scope of the project was to develop the design for the Paramedic Response Station and the Training Centre, with only the Paramedic Response Station advancing to construction in Phase I of the site development.
- 2.3 The construction contract was awarded to M.J Dixon Construction Ltd in 2022 with substantial completion of the project to be achieved by March 24, 2023, and full project completion by April 21, 2023. The project timeline has since been extended to October 2024.
- 2.4 The confidential memo, Attachment #1, provides an update on the project.

3. Previous Reports and Decisions

- 3.1 Through [Report #2020-COW-19](#), Regional Council authorized staff to advance the construction of the Training Centre into Phase 1 of the project and provided an additional \$6.0 million in financing for a revised project budget of \$10.5 million. This increase was to advance the construction of the Training Centre and to increase the budget for the station based on Class B Cost estimate prepared by the Project Consultant.

- 3.2 In July 2020, an increase in the project budget and associated financing from the Climate Mitigation and Environmental Initiatives Reserve Fund in the amount of \$907,000 was approved to provide for the addition of a geothermal system and the installation of solar panels. These measures will reduce the carbon emissions from the planned facility by an estimated 71 per cent and energy consumption by an estimated 36 per cent compared to the base building design. The addition of these measures and required financing resulted in a revised estimated total project cost of \$11,407,000.
- 3.3 In February 2022, through [Report #2022-COW-6](#), Regional Council approved additional funding of \$2,836,000 for the award of Regional Municipality of Durham Contract #T-1160-2021 to the lowest compliant bidder, M.J. Dixon Construction Limited, for a revised total project budget of \$14,243,000.

4. Financial Implications

- 4.1 Section 17.1 of the Budget Management Policy requires approval of the applicable Standing Committee and Regional Council for increases in capital project financing greater than \$250,000 for approved projects.
- 4.2 The project budget increase for the construction of the Seaton Paramedic Response Station and Training Centre required for the project is \$1,900,000, resulting in a revised project budget of \$16,143,000.
- 4.3 The recommended increase in the project budget and associated financing is mainly due to supply chain issues and change orders, and includes the following:

Description	Approved Project Budget	Additional Project Budget	Revised Project Budget
Design and Contract Administration	\$981,000	\$1,000,000	\$1,981,000
Construction	12,582,000	750,000	13,332,000
Permits and Utilities	550,000	-	550,000
Fixtures and Furniture	130,000	150,000	280,000
Total	\$14,243,000	\$1,900,000	\$16,143,000

- 4.4 Financing for the project, including the additional financing of \$1,900,000 can be provided as follows:

Previously approved financing

Development charges	\$4,000,050
Property taxes	3,931,014
Capital Project Reserve	3,368,986
Climate Mitigation and Environmental Initiatives Reserve Fund	907,000
Contribution from Revenue Fund	<u>1,986,000</u>
Total Previously Approved Financing	<u>\$14,243,000</u>

Additional Financing

Capital Impact Stabilization Reserve Fund	<u>\$1,900,000</u>
Total Revised Project Financing	<u>\$16,143,000</u>

- 4.5 It is proposed that the additional financing of \$1,900,000 be provided from the Capital Impact Stabilization Reserve Fund.

5. Relationship to Strategic Plan

- 5.1 This report aligns with/addresses the following strategic goals and priorities in the Durham Region Strategic Plan:

- a. Goal #1 – Environmental Sustainability
 - Accelerate the adoption of green technologies and clean energy solutions through strategic partnerships and investment.
 - Demonstrate leadership in sustainability and addressing climate change.
- b. Goal #2 – Community Vitality
 - Support a high quality of life for all through human services delivery.
- c. Goal #5 – Service Excellence:
 - Optimize resources and partnerships to deliver exceptional quality services and value.
 - Collaborate for a seamless service experience.
 - Drive organizational success through innovation, and skilled workforce, and modernized services.

6. Conclusion

- 6.1 It is recommended that Regional Council grant approval to additional financing of \$1,900,000.
- 6.2 For additional information, contact: Christine Dunkley, Director, Corporate Infrastructure & Strategic Business Services at 905-668-7711, extension 3475.

7. Attachments

- 7.1 Attachment #1: Confidential Memo - Project Update – Under Separate Cover

Respectfully submitted,

Original signed by:

Ramesh Jagannathan, MBA, M.Eng., P.Eng., PTOE
Commissioner of Works

Original signed by:

Nancy Taylor, BBA, CPA, CA
Commissioner of Finance

Recommended for Presentation to Committee

Original signed by:

Elaine C. Baxter-Trahair
Chief Administrative Officer