

The Regional Municipality of Durham Committee of the Whole Agenda

Regional Council Chambers Regional Headquarters Building, 605 Rossland Road East, Whitby

Wednesday, May 2, 2018

9:00 AM

- 1. Declarations of Interest
- 2. Statutory Public Meetings
- 3. Delegations
- 4. Presentations
 - 4.1 Brad Anderson, Principal Planner, re: Durham Region Broadband Strategy (2018-INFO-55) [Item 8.1 C)]
 - 4.2 Gary Muller, Director of Planning, re: "Envision Durham". The Municipal Comprehensive Review of the Durham Regional Official Plan (2018-COW-93) [Item 8.2 C)]
- 5. Works

Waste

- 5.1 Communications
 - A) Information Report #2018-INFO-45: Organics Management Methods

6-14

Pulled from March 23, 2018 Council Information Package by Councillor Jordan

Recommendation: Receive for Information

- 5.2 Reports
 - A) Organics Management Request for Information Assessment (2018-COW-98)

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5.4 Reports

A) Extension of Lease Agreement between the Regional Municipality of Durham and the Central Lake Ontario Conservation Authority for the use of the former Darlington Landfill Site (2018-COW-76)

15-17

B) Declaration of Lands as Surplus Located at 175 Hunt Street in the Town of Ajax and Approval to Transfer the Surplus Land to the Town of Ajax (2018-COW-80)

18-21

C) Approval to Negotiate and Award a Three Year Sole Source Agreement for Analytical Services with Maxxam for the York-Durham Regional Environmental Laboratory located at the Duffin Creek Water Pollution Control Plant, in the City of Pickering (2018-COW-82)

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D) Approval to Negotiate and Award the Sole Source
Purchase for a Liquid Chromatograph Coupled to a Hybrid
Triple Quadrupole/Linear Ion Trap Mass Spectrometer for
the York-Durham Regional Environmental Laboratory,
Located at the Duffin Creek Water Pollution Control Plant,
in the City of Pickering (2018-COW-83)

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E) Authorization to Execute Agreements for the Provision of Laboratory Consumables and Gases/Bulk Liquid Argon for the York-Durham Regional Environmental Laboratory located at the Duffin Creek Water Pollution Control Plant, in the City of Pickering (2018-COW-84)

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F) Report on Tenders and Additional Financing for Regional Municipality of Durham Contract T-1012-2018 for the Replacement of the Vehicle Hoist at the Works Department Maintenance Operations Depot located in the Town of Ajax (2018-COW-85)

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G) Municipal Class Environmental Assessment Reform Process (2018-COW-86)

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| A) Write-off of Arrears of Former Tenants of the Durham Regional Local Housing Corporation for the Year Endo December 31, 2017 (2018-COW-81) B) The 2019 Regional Business Planning and Budget Prand the Preliminary 2019 Timetable (2018-COW-87) C) Brock Community Health Centre Request for Capital Funding (2018-COW-88) | 56-58 ocess 59-67 68-71 |
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| and the Preliminary 2019 Timetable (2018-COW-87) C) Brock Community Health Centre Request for Capital Funding (2018-COW-88) | 59-67 68-71 V-94) 72-76 |
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| | C) | "Envision Durham". The Municipal Comprehensive Review of the Durham Regional Official Plan (2018-COW-93) | 366-378 |
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| | A) | Quarter Horse Racing Industry in Durham Region (2018-COW-89) | 381-384 |
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Other Business 9.

10. Confidential Matters

There are no confidential matters to be considered.

11. Date of Next Meeting

Wednesday, June 6, 2018 at 9:00 AM

12. Adjournment



The Regional Municipality of Durham Information Report

From: Commissioner of Works

Report: #2018-INFO-45 Date: #2018-INFO-45

Subject:

Organics Management Methods

Recommendation:

Receive for information

Report:

1. Purpose

1.1 The purpose of this report is to provide an overview of the three primary organics management methods used in Ontario and the greenhouse gas (GHG) implications of each method. This will form part of the information session identified in Report #2017-COW-180 on the basics of organics management.

2. Background

- 2.1 The Regional Municipality of Durham (Region) currently provides curbside organics collection to all single-family homes in the Region. Food waste is collected weekly throughout the year, while leaf and yard waste is collected during the growing season on a published schedule.
- 2.2 All of the collected material is aerobically composted on behalf of the Region by a third party. The final product meets Ontario's strict compost quality guidelines for 'AA' compost. Under this provincial guideline, 'AA' compost cannot contain any foreign matter (plastic, metal, etc.) larger than 25 millimetres (mm).
- 2.3 The Region does not provide organics collection to multi-residential buildings receiving other Region waste services such as garbage and Blue Box collection.
- 2.4 In November 2017, the Ministry of Environment and Climate Change (MOECC) published a draft Food and Organic Waste Framework (Framework) for consultation. The Framework includes organic diversion requirements for municipalities and the Industrial, Commercial and Institutional (IC&I) sector and an eventual organics disposal ban. The finalized document is expected to be

published in the spring of 2018.

3. Questions and Answers about Organics Management Methods

3.1 What are household organics?

a. Household organics typically include food waste such as fruit and vegetable peels, bones, eggshells, coffee grounds and tea leaves; soft paper waste such as tissues and paper towels; dryer lint; and hair. Leaf and yard waste are also considered organic material but are typically collected separately. Some municipal organic programs also collect pet waste, diapers, and sanitary products.

3.2 What is the carbon cycle?

- a. Carbon is an essential element in living organisms and is also the primary component of fossil fuels. The carbon cycle is the exchange of carbon between the organic and inorganic elements in the atmosphere and the earth. Elements that release carbon are referred to as sources while elements that absorb carbon are called sinks. As carbon is used in one form, it cycles through the earth and the atmosphere as illustrated in Figure 1 (Attachment #1).
- b. Carbon sources include human and animal breathing, fossil fuel combustion, decay of dead matter, and volcanic eruptions. The primary carbon sink is plant matter that absorbs carbon dioxide as part of photosynthesis. An imbalance between carbon sources and sinks results in excess carbon in the atmosphere in the form of carbon dioxide. The scientific consensus is that the excess carbon dioxide in the atmosphere is the primary cause of the current climate change patterns.

3.3 How does food waste impact climate change?

a. When food decomposes, the decay process also releases carbon into the atmosphere.

3.4 What do organics release when they decay?

- a. When organic material decays in the presence of oxygen, carbon dioxide is released. Carbon dioxide is the GHG present in the greatest volume in the atmosphere and is the most common GHG. Organic material that decays without oxygen releases methane. Methane is present in the atmosphere in a much smaller quantity but is a much more potent GHG.
- b. Because of the GHG impact, the MOECC has made food waste avoidance and diversion from disposal a priority for mitigating climate change.

- c. In a controlled system, the methane that is released when organics decay without oxygen can be captured. Capturing the methane impacts climate change in two ways: the methane is not released into the atmosphere to increase GHG levels and the biogenic methane from food waste decay can be used as a substitute for fossil fuels.
- 3.5 Why is biogenic carbon treated differently than fossil fuel carbon?
 - a. Carbon released from the combustion of biomass based fuels is considered carbon neutral because the carbon released is the same carbon that was previously removed from the atmosphere during the growing cycle. There is no net increase in atmospheric carbon. Carbon from combustion of fossil fuels is a new contribution of carbon to the atmosphere.
- 3.6 How are organics in Ontario managed?
 - a. Most large urban municipalities in Ontario provide curbside sourceseparated organics collection for single-family homes. The collected organics are either composted or anaerobically digested. In most medium to small size municipalities, organics are part of the residual waste stream and disposed of with garbage. In multi-residential and other commercial and institutional establishments, organics are also typically disposed of with garbage.
- 3.7 What happens to organic material when it is landfilled?
 - a. In the landfill, organic material decomposes in the absence of oxygen and generates methane gas. Methane is a GHG considered 20 to 30 times more potent than carbon dioxide over 100 years.
- 3.8 Is landfill gas captured for energy?
 - a. Some landfills are equipped with methane capture systems and the gas is either flared or used to generate heat or electricity. However, these systems are not 100 per cent efficient, and many older or smaller landfills are not equipped with methane capture systems. According to the MOECC's Climate Change Strategy, solid waste disposal on land is the source of the majority of GHGs generated in Ontario from waste disposal activities.
- 3.9 The Region only provides source-separated organics collection for single-family homes. What happens to organics that are not source separated?
 - a. In the Region, any organic matter not source separated by the resident, is disposed of at the Durham York Energy Centre (DYEC). Carbon dioxide is the main GHG released when the organics are combusted.
- 3.10 Is Ontario banning the disposal of organics?
 - a. Disposal of organics in landfill or energy-from-waste will no longer be an

option in Ontario if the MOECC's organics disposal ban moves forward as proposed in the Food and Organic Waste Framework. The target date for a provincial disposal ban is 2022/2023.

3.11 How does composting organic waste work?

- a. Composting is an aerobic biological process that involves microorganisms decomposing organic matter in the presence of oxygen. Organic matter is converted to a stable product with no toxic effects on plants when used as a soil supplement. Commercial aerobic composting of residential food waste typically occurs indoors with mechanical mixing and aeration. It is monitored and controlled for oxygen and temperature. The elevated temperature, above 55 degrees Celsius, reduces or eliminates pathogens and weed seeds. If not managed properly, aerobic composting can produce significant odours that are offensive to the surrounding community. The composting process typically takes three to four weeks with additional time for curing. Figure 2 (Attachment #2) illustrates the typical steps in a commercial composting system.
- 3.12 Why does the Region not accept pet and hygiene waste in the current organics diversion program?
 - a. Aerobic composting is regulated in Ontario under the General Waste Management Regulation (O. Reg. 347, 1990) and the Ontario Compost Quality Standards. The Standards outline requirements for feedstock, foreign matter and use requirements for finished compost to be considered Grade 'AA', 'A' or 'B'. 'AA' compost has the most stringent standards and is the highest grade of finished compost. Due to the strict quality standards for aerobic composting, difficult to manage materials such as pet waste, diapers, and hygiene products cannot be included in the process. Aerobic composting systems do not include efficient mechanisms to remove plastics.

3.13 Does composting generate any GHGs?

a. Due to the aeration that occurs during the compost process, carbon dioxide is the dominant GHG produced during composting. The gas is released into the atmosphere.

3.14 What is anaerobic digestion?

a. Anaerobic digestion is a naturally occurring biological process that uses microorganisms to break down organic material in the absence of oxygen. It is the same type of process that occurs naturally in a landfill to generate methane. However, in a controlled process, the breakdown of organics occurs much more quickly and effectively and the methane gas can be efficiently captured for beneficial reuse. Engineered anaerobic digestion occurs within specially designed reactors where critical conditions such as

moisture, temperature, and pH levels are controlled to maximize biogas generation and waste decomposition rates. Figure 3 (Attachment #3) illustrates the typical steps in a commercial anaerobic digestion process.

- 3.15 How much biogas (methane) is produced in anaerobic digestion?
 - a. One tonne of source-separated organics typically produces between 100 and 150 cubic metres (m³) of biogas.
- 3.16 How can the biogas (methane) from an anaerobic digestion facility be used?
 - a. Depending on the amount of purification of the biogas, the methane generated in anaerobic digestion can be used in a variety of ways. Low-grade biogas uses include a heat source for the anaerobic digestion process, or boiler and furnace fuels. Medium grade biogas can be used for district heating or in a combined heat and power plant, while high-grade biogas can be injected into the natural gas distribution system or be used as transportation fuel. The higher the grade of biogas use, the more cleaning and purification is required to remove non-methane components of the gas.
- 3.17 What are the benefits of anaerobic digestion compared to aerobic composting?
 - a. Benefits of anaerobic digestion include the ability to treat a more contaminated waste stream that contains plastics since the pre-treatment process allows for efficient mechanical removal of non-organic components. During the initial mixing and shredding of organic materials for anaerobic digestion, plastic floats to the top of the tanks and can be easily separated from the digestible organic material. It is this initial step that allows municipalities, such as the City of Toronto, to accept plastic bags, diapers, and hygiene products in their organics stream.
 - b. Anaerobic digestion also generates a renewable natural gas that can be used in a variety of applications to offset fossil fuel use.
- 3.18 Which type of organics diversion system provides the greatest GHG reductions?
 - a. Anaerobic digestion offers the largest GHG reduction impact of any organics management strategy since GHGs are not released into the atmosphere and the methane generated is captured and used to offset fossil fuel energy use elsewhere.

4. Conclusion

- 4.1 Decomposition of organic matter is a naturally occurring process that can be enhanced in engineered systems. Both aerobic and anaerobic decomposition release greenhouse gases.
- 4.2 Anaerobic digestion generates methane, which is a more potent greenhouse gas than carbon dioxide which is generated in aerobic composting. However, the

methane generated in an engineered anaerobic digestion system can be captured and used to offset fossil fuel needs, thus providing a significant greenhouse gas reduction.

4.3 Further information will be provided to members of Regional Council as part of the Request For Information (#RFI-1158-2017) reporting. At Regional Council's direction, an organics management presentation could be provided to supplement the information available in this report. Additional information on organics management could also be provided by Regional staff, consultants or industry representatives, if requested by Regional Council.

5. Attachments

Attachment #1: Figure 1: The Carbon Cycle

Attachment #2: Figure 2: Typical Commercial Composting Operation

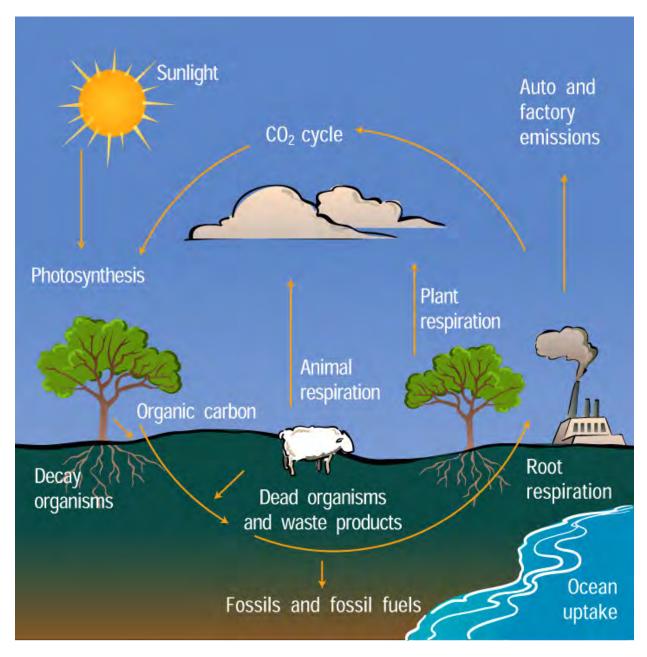
Attachment #3: Figure 3: Typical Anaerobic Digestion Operation

Respectfully submitted,

Original signed by:

S. Siopis, P.Eng. Commissioner of Works

Figure 1: The Carbon Cycle



Source: Kid's Crossing Living the Greenhouse (https://eo.ucar.edu/kids/green/cycles6.htm)

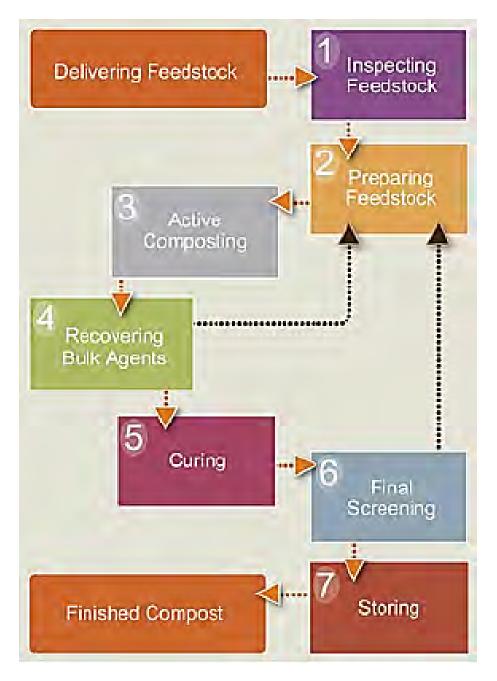


Figure 2: Typical Commercial Composting Operation

Source: Environment Canada Technical Document on Municipal Solid Waste Processing

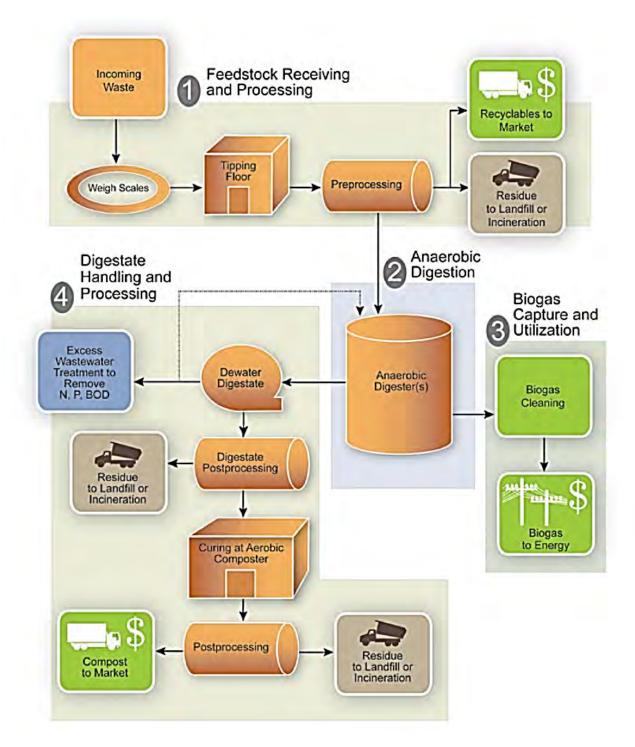


Figure 3: Typical Anaerobic Digestion Operation

Source: Environment Canada Technical Document on Municipal Solid Waste Processing

If this information is required in an accessible format, please contact 1-800-372-1102 ext. 3540.



The Regional Municipality of Durham Report

To: The Committee of the Whole From: Commissioner of Works

Report: #2018-COW-98 Date: May 2, 2018

Subject:

Organics Management Request for Information Update

Recommendations:

That the Committee of the Whole receives this report for information and forwards it to Regional Council for information.

Report:

1. Purpose

- 1.1 The purpose of this report is to provide an update on the assessment of the responses to the Request for Information (RFI) #1158-2017 for Mixed-Waste Transfer and Pre-Sorting, Organics Processing, and Beneficial Use of By-Products/End Products for the Regional Municipality of Durham (Region).
- 1.2 The detailed analysis of the RFI responses will form the basis of the recommended next steps of an organics management strategy to be outlined in a staff report to Committee and Council in June 2018.

2. Background

2.1 Works Department Waste Management staff has been investigating organics processing technologies and potential waste supply requirements since a preliminary technical investigation of anaerobic digestion processing was completed in November, 2013. In 2011 and 2013, waste composition studies (currently being updated) also demonstrated that significant organics remain in the garbage waste stream currently going to DYEC. In 2014, processing technologies for highly contaminated organics from the mixed waste garbage stream were

- reviewed based on Request for Information 677-2014, which focused on gaining additional technical information on anaerobic and aerobic processing from existing reference facilities in both North America and Europe.
- 2.2 Subsequent to a preliminary technical feasibility and financial analysis conducted, in June 2017, staff were directed to prepare and release a RFI in an effort to gather the necessary information to provide the framework for investigation of viable options for implementation of a long term organics management plan.
- 2.3 As part of the RFI process, Respondents were asked to provide information on option(s) or approach(s) to meet the Region's objectives. The Respondents could provide information on one or more of the three components which included:
 - Mixed Waste Transfer and Pre-Sorting
 - Organics Processing
 - Beneficial Use of By-Products/End Products
- 2.4 A working group consisting of staff from the Works, Legal and Finance departments, assisted by GHD, are currently analysing the RFI-1158-2017 submissions to update the preliminary technical, financial, service delivery and regulatory analysis presented in June 2017.

3. General

- 3.1 RFI-1158-2017 closed on February 1, 2018, and nineteen (19) information responses were received from waste management service providers, technology providers, a construction company and byproduct/end product users. This level of response is considered very good in comparison to similar processes completed elsewhere in the province.
- 3.2 Of the 19 submissions received, 8 Respondents provided detailed responses to the technical and financial questions with the remaining providing various levels of response.
- 3.3 Of the 19 respondent companies, 16 are currently operating in Ontario, one in Quebec, one in the USA and one in Europe.

- 3.4 A total of 10 Respondents provided information on Mixed Waste Transfer and Pre-Sorting, Organics Processing and Beneficial Use of By-Products /End Products and/or a complete solution, including:
 - a) Information on Mixed Waste Transfer and Pre-Sorting only;
 - b) Information on Organics Processing and Beneficial Use of By-Products/End Products;
 - c) Information on the Beneficial Use of By-Products/End Products only; and
 - d) Interest in a potential partnership for the use of the By-Products/End Products, subject to appropriate contractual terms.
- 3.5 Responses received were related to the type of service delivery model the Respondents had experience in. The majority indicated that a Design-Build-Operate-Maintain (DBOM) model would be appropriate, although were open to whichever service delivery model the Region preferred, subject to appropriate contractual terms and risk balance. Respondents did indicate a willingness to provide a private sector service delivery contract including private sector infrastructure build. Any service delivery model (private service contract or public-private partnership), is anticipated to require a guaranteed waste organic feedstock commitment from the Region.
- 3.6 The timeframe that was identified by the respondents to have an operational facility was between 18 months and four year from notice to proceed.
- 3.7 The majority of the respondents indicated that they could provide up to a 20-year solution to the Region.
- 3.8 The majority of the respondents indicated that the waste projections provided in the RFI were reasonable for the purposes of the RFI and were used for the sizing of the facility in their response. Sizing was identified as an important consideration affecting the capital cost, economies of scale, excess capacity and requirements for organic waste feedstock commitments. Staff continue to conduct economic and financial analysis based on the RFI submissions and will provide a detailed analysis to Committee and Regional Council in June 2018.
- 3.9 The submissions did not include any merchant capacity (service contract) opportunities at existing facilities that would meet the Region's 20 year needs.

4. Discussion

Mixed Waste Transfer and Pre-sorting

- 4.1 Of the ten (10) Respondents that expressed interest in Mixed Waste Transfer and Pre-Sorting, six (6) provided detailed responses to the technical questions.
- 4.2 A number of respondents indicated that these types of facilities are expandable either physically or by adding shifts to operate.
- 4.3 In recent years, consideration has been given to the construction of a centralized Transfer Station in the Region. At the time Committee directed staff to look at options. Subsequently, as part of the 2015 Servicing and Financing Study, the scope was expanded to consider a transfer station that could incorporate mixed waste pre-sort technology.
- 4.4 The advancements of mixed waste pre-sort technology have been demonstrated at several existing facilities and would provide the Region with the ability to remove organics from the waste stream and increase its diversion rate potentially beyond 70 per cent.
- 4.5 A phased scenario is being considered whereby mixed waste transfer and pre-sort facility could occur in advance of securing an organics processing facility. Proceeding with such a facility could provide a solution for the Region's waste transfer issues, optimize the capacity at the DYEC and provide a solution for the diversion of multi-residential waste. A phased option will be considered within the business case analysis with appropriate recommendations made in the June Committee of the Whole report.

Organics Processing

- 4.6 Of the fourteen (14) Respondents that provided information on organics processing, eleven (11) provided detailed responses to technical questions. Thirteen (13) Respondents provided information on AD as a potential organics processing technology. Four (4) provided information on composting as a potential organics processing technology.
- 4.7 RFI responses reflect a waste industry moving towards Anaerobic Digestion (AD) as the preferred solution for a long-term organics management strategy. This anaerobic process also provides additional benefits associated with biofuel generation.

- 4.8 The majority of the respondents showed interest in a site located within the Region on land provided by the Region.
- 4.9 The preliminary business case in June 2017 indicated that the costs of AD and invessel (aerobic) organics processing are comparable. The updated preliminary business case, based on RFI responses, will be provided in the June 2018 report to Committee and Council.

By-Product/End Product Opportunities

- 4.10 All the Respondents providing information on AD indicated that biogas would be produced from the system. The potential use of the biogas ranged from being used for power and heat recovery and could be cleaned and upgraded to Renewable Natural Gas (RNG) for injection into the pipeline. Some respondents also indicated that Compressed Natural Gas (CNG) could be produced to power vehicles.
- 4.11 It was also noted that digestate from the AD process could be used as a liquid fertilizer, a nutrient rich soil amendment or compost.
- 4.12 The Aerobic system (in-vessel) produces compost only. However, the Organic Fraction of the Mixed Waste (OFMW) that is recovered by the Mixed Waste Pre-Sort would be more contaminated and a high quality compost product may not be produced.
- 4.13 Biogas is not produced by an in-vessel system and there may be more revenue options associated with AD which will be explored further in conjunction with regulatory requirements in the June COW report.

5. Business Partnerships

- 5.1 The Business Partnership interest was primarily from non-waste service entities and was associated with the value and benefit of producing bio-fuel. The interest that was highlighted by entities for a business partnership did not include any detail regarding capital contribution or the assignment of risk.
- 5.2 A business partnership may be beneficial in terms of shared financing, business case and/or economic development, depending upon details, shared objectives and the sharing of available benefits, obligations and risks.

5.3 Based on the review of Corporate Services - Legal Division's (Legal) advice, the Works/Legal/Finance working group will be evaluating the various selection processes and partnership principles and will be providing recommendations for a transparent process to pursue a viable business partnership to be included in the June report to Committee and Council.

6. Legislation Update

- 6.1 The proposed Food and Organic Waste Framework (Framework) was released by the Ministry of Environment and Climate Change (MOECC) on November 16, 2017. The Framework outlines a Ministry Action Plan to achieve the Provincial objectives for reducing food and organic waste, recovering resources from food and organic waste, supporting resource recovery infrastructure and promoting beneficial uses of recovered products.
- 6.2 The second half of the Framework includes a proposed Provincial Policy Statement on food and organic waste and outlines actions others must take. For municipalities like the Region, the requirement would be to increase food and organic waste diversion to 70 per cent. Other entities such as multi-residential building owners and IC&I sectors would be required to increase food and organic waste diversion. Finally, the Framework includes the MOECC plan to enact an organics disposal ban by 2022.
- 6.3 The final Framework is expected to be released at the end of April 2018.

7. Preliminary Findings

- 7.1 The RFI process generated significant interest. The information provided in the submissions is being assessed. The preliminary technical observations suggest that:
 - the waste industry is moving towards AD as the preferred technology to meet organics management needs and support the Province's goal of resource recovery;

- a business partnership may be beneficial in terms of shared financing, business case, and/or economic development, depending on details, shared objectives and the sharing of available benefits, obligations and risks;
- a phased scenario could be developed whereby a mixed waste transfer and pre-sort facility could be implemented in advance of securing an organics processing facility; and
- d) it will be necessary to proceed with the procurement of an interim solution for organics in advance of contracts expiring in 2019 and up to implementation of an approved longer-term solution.

8. Next Steps

- 8.1 More detailed reporting of RFI results and an updated preliminary business case, service delivery analysis and risk assessment will be provided in June including recommendations to move forward with this important initiative.
- 8.2 Staff are available to provide an education session for Regional Council. This session could occur either prior to the June 2018 report or after based on Regional Council direction.
- 8.3 This report has been reviewed by the Finance Department and Corporate Services Legal Division.

Respectfully submitted,

Original signed by

S. Siopis, P.Eng. Commissioner of Works

Recommended for Presentation to Committee

Original signed by

G.H. Cubitt, MSW 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: The Committee of the Whole From: Commissioner of Works

Report: #2018-COW-76 Date: #2018-COW-76

Subject:

Extension of Lease Agreement between the Regional Municipality of Durham and the Central Lake Ontario Conservation Authority for the use of the former Darlington Landfill Site

Recommendations:

That the Committee of the Whole recommends to Regional Council:

- A) That the Extension of Lease Agreement between the Regional Municipality of Durham and the Central Lake Ontario Conservation Authority be approved for a five year term commencing September 1, 2018 and ending August 31, 2023 for a nominal sum, with the Region having the option to terminate the lease at any time with six months prior written notice; and
- B) The Regional Chair and Clerk be authorized to execute all documents associated with this Lease Agreement.

Report:

1. Purpose

1.1 This report requests authorization for the Regional Municipality of Durham (Region) to enter into an Extension of Lease Agreement with Central Lake Ontario Conservation Authority (CLOCA) for the use of the former Darlington Landfill Site.

2. Background

- 2.1 The former Darlington Landfill site, which contains 8.095 hectares (20.005 acres) of land, is located on the north side of Regional Road 20, approximately 2.4 kilometres east of Regional Road 57. This site was officially closed as a landfill site on December 31, 1987.
- 2.2 The Region must continue to monitor its former landfill sites and as such is not permitted to transfer title of the property. In 1995, an agreement for the use of the site was entered into with CLOCA as it borders the Long Sault Conservation Area.

3. Financial Implications

- 3.1 The current Extension of Lease Agreement will terminate August 31, 2018 and CLOCA has advised that it wishes to extend the Agreement for a further five year term.
- 3.2 The new five year term will commence September 1, 2018 and end August 31, 2023, lease fees will be a nominal per annum amount, consistent with the existing agreement. The Region will have the option to terminate the lease at any time with six months prior written notice.
- 3.3 CLOCA will be responsible for all costs and expenses related to the ongoing maintenance and operation of the site. The Extension Agreement also provides CLOCA with the right to license part of the site to a model airplane club.
- 3.4 The Region continues to be responsible for all costs and expenses arising from the previous landfill activity on the site, with CLOCA indemnifying the Region against any claims which may arise as a result of their use of the lands.

4. Conclusion

4.1 Staff recommend that the Extension of Lease Agreement between the Regional Municipality of Durham and the Central Lake Ontario Conservation Authority for the use of the former Darlington Landfill Site for a further five year term commencing September 1, 2018 and ending August 31, 2023 be approved.

Respectfully submitted,

Original signed by

S. Siopis, P.Eng. Commissioner of Works

Recommended for Presentation to Committee

Original signed by

G.H. Cubitt, MSW 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: The Committee of the Whole From: Commissioner of Works

Report: #2018-COW-80 Date: #2018

Subject:

Declaration of Lands as Surplus Located at 175 Hunt Street in the Town of Ajax and Approval to Transfer the Surplus Land to the Town of Ajax

Recommendations:

That the Committee of the Whole recommends to Regional Council:

- A) That property, identified as Part 1 on Plan 40R-30014 in the Regional Municipality of Durham, Town of Ajax be declared surplus to Regional needs;
- B) That Regional staff be granted authority to transfer the lands described in Recommendation A to the Town of Ajax for a nominal sum; and
- C) That authority be granted to the Regional Clerk and Regional Chair to execute any documents necessary to complete the conveyance to the Town of Ajax.

Report:

1. Purpose

1.1 The purpose of this report is to declare a portion of land owned by the Regional Municipality of Durham (Region) surplus to the Region's requirements (Attachment #1) and to dispose of this land to the Town of Ajax (Ajax) in accordance with the recommendations contained in this report.

2. Background

- 2.1 The subject property located at 175 Hunt Street, Ajax is owned by the Region of Durham for the operation of a Region of Durham Paramedic Services Station.
- 2.2 Ajax has approached the Region with a request to transfer a portion of frontage from the property to accommodate a new sidewalk at the corner of Hunt Street and Monarch Avenue to be constructed by Ajax.
- 2.3 The nominal transfer of this land by the Region will also create a consistent right of way across Hunt Street.

3. Discussion

- 3.1 The Region's By-law No. 52-95 established the procedures governing the sale of real property. The initial step in the disposal process is a declaration that the real property is surplus to the Region's requirements. Staff in the Works Department has confirmed that the Region has no requirement for this land, and it should be declared surplus to the Region's needs.
- 3.2 The property will be transferred to Ajax directly for nominal sum.

4. Conclusion

- 4.1 Staff recommends that Part 1on Plan 40R-30014 be declared surplus to the Regions needs and this land be conveyed to the Town of Ajax for a nominal sum.
- 4.2 This report has been reviewed by the Legal Services Division of the Corporate Services Department.

5. Attachments

Attachment No. 1: Map of Subject Lands

Respectfully submitted,

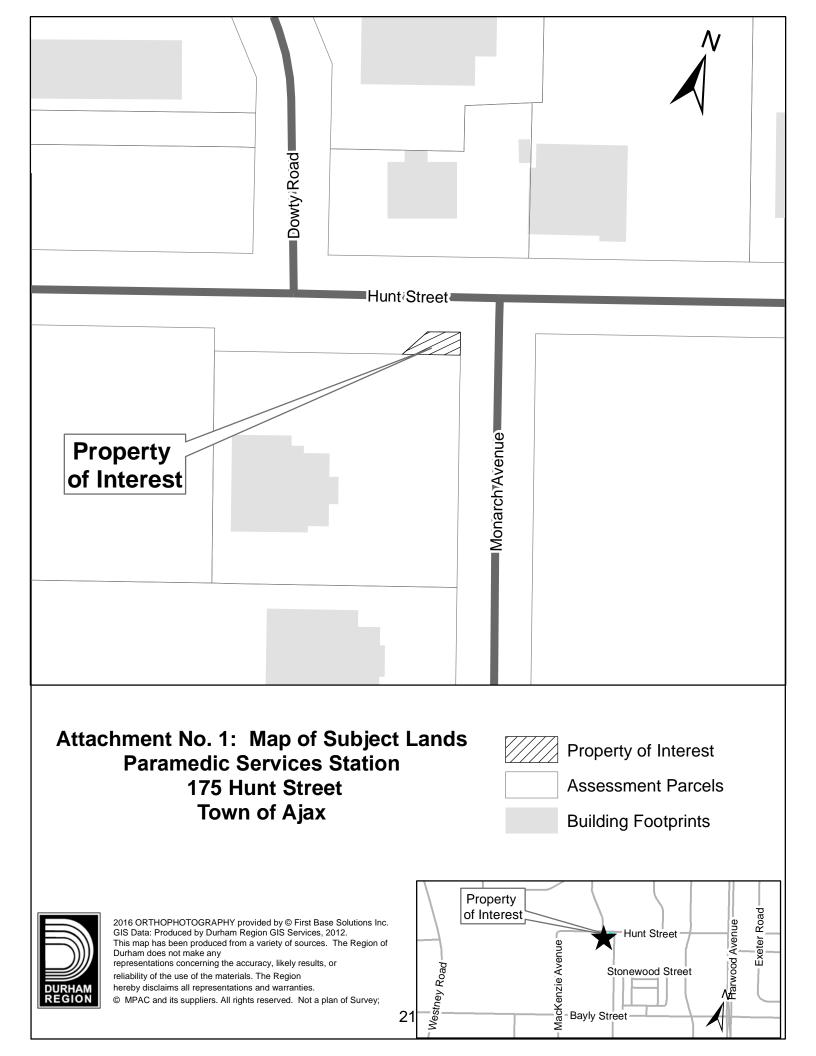
Original signed by

S. Siopis, P.Eng. Commissioner of Works

Recommended for Presentation to Committee

Original signed by

G.H. Cubitt, MSW 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: The Committee of the Whole From: Commissioner of Works

Report: #2018-COW-82 Date: #2018

Subject:

Approval to Negotiate and Award a Three Year Sole Source Agreement for Analytical Services with Maxxam for the York-Durham Regional Environmental Laboratory located at the Duffin Creek Water Pollution Control Plant, in the City of Pickering

Recommendations:

That the Committee of the Whole recommends to Regional Council:

- A) That a sole source agreement for analytical testing services be negotiated with Maxxam (A Bureau Veritas Group Company) for a three year term commencing June 2018 and ending May 2021 at an estimated total cost of \$225,000* (\$75,000* per annum) for the York-Durham Regional Environmental Laboratory, located at the Duffin Creek Water Pollution Control Plant, in the City of Pickering;
- B) Financing for the sole source of sub-contracting to Maxxam is available from the annual operating budget for the York-Durham Regional Environmental Laboratory included as part of the annual Sanitary Sewerage System Operating Budget; and
- C) That the Commissioner of Finance be authorized to execute the necessary documents related to this sole source agreement.

Report:

1. Purpose

1.1 The purpose of this report is to seek Regional Council authorization to negotiate and execute a sole source agreement for analytical testing with Maxxam (A Bureau Veritas Group Company) for the York-Durham Regional Environmental Laboratory (YDREL). Dollar amounts followed by an asterisk (*) are before applicable taxes.

2. Background

- 2.1 There are certain testing services that cannot be delivered by YDREL for a variety of reasons, including limited space for specialized equipment, limited capacity for testing and staff qualifications to administer particular tests.
- 2.2 YDREL relies on subcontracted analytical testing services to supplement its testing capabilities and in situations where business continuity may be jeopardized. The parameters for this testing are required by the Safe Drinking Water Act (SDWA) of Ontario, sewer-use by-laws from various jurisdictions, and the Ontario Ministry of the Environment and Climate Change (MOECC) compliance objectives and limits for wastewater discharges governing the operation of water pollution control plants.

3. Justification for Sole Source

- 3.1 Maxxam is CALA/SCC-accredited to the ISO 17025 quality standard and is also licensed by the MOECC for drinking water testing and is registered as the YDREL's backup laboratory with the MOECC.
- 3.2 A review of the registration of analytical scope was performed for all the labs in Ontario. Maxxam was the only laboratory in Ontario that was accredited and licensed to perform all tests required by the YDREL.
- 3.3 In addition, as a part of business continuity planning, a review was conducted of large accredited and licensed labs in Ontario. Maxxam was found to be the only laboratory capable of handling YDREL's current sample loading.

4. Financial Implications

- 4.1 The Regional Municipality of Durham's (Region) Purchasing By-law 68-2000 (Amended), Section 8, permits the acquisition of goods and services through sole source negotiations. The by-law also requires approval by the Committee of the Whole for the award of sole source contracts that exceed \$125,000 in value.
- 4.2 Financing for the sole source of sub-contracting to Maxxam is available from the annual operating budget for the YDREL, included as part of the annual Sanitary Sewerage System operating budget at a cost of \$75,000* annually. The three year total estimated cost is \$225,000*.

5. Conclusion

- 5.1 It is recommended that authorization be provided to negotiate and award the sole source agreement for analytical testing services for the York Durham Regional Environmental Laboratory to Maxxam (A Bureau Veritas Group Company) for a three year term commencing June 2018 and ending May 2021 at an estimated total cost of \$225,000 (\$75,000* per annum).
- 5.2 This report has been reviewed by the Finance Department and the Commissioner of Finance concurs with the financial recommendations.

Respectfully submitted,

Original signed by

S. Siopis, P.Eng. Commissioner of Works

Recommended for Presentation to Committee

Original signed by

G.H. Cubitt, MSW 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: The Committee of the Whole From: Commissioner of Works

Report: #2018-COW-83 Date: #2018

Subject:

Approval to Negotiate and Award the Sole Source Purchase for a Liquid Chromatograph Coupled to A Hybrid Triple Quadrupole/Linear Ion Trap Mass Spectrometer for the York-Durham Regional Environmental Laboratory, Located at the Duffin Creek Water Pollution Control Plant, in the City of Pickering

Recommendations:

That the Committee of the Whole recommends to Regional Council:

- A) That approval be granted to negotiate with AB SCIEX LP for an enhanced Liquid Chromatograph Coupled to A Hybrid Triple Quadrupole/Linear Ion Trap Mass Spectrometer instrument, with an estimated total cost of \$400,000*, for the analysis of disinfection by-products and pesticides as required by the Safe Drinking Water Act of Ontario; the unit is for the York-Durham Regional Environmental Laboratory, located at the Duffin Creek Water Pollution Control Plant, in the City of Pickering;
- B) That the Regional Municipality of Durham's share of the cost for the sole source equipment purchase from AB SCIEX LP be provided from the 2018 Sanitary Sewerage System Tangible Capital Asset budget for the York-Durham Regional Environmental Laboratory. The Regional Municipality of Durham and the Regional Municipality of York will share costs equally; and
- C) That the Commissioner of Finance be authorized to execute the necessary documents related to this sole source purchase.

Report:

1. Purpose

1.1 The purpose of this report is to seek approval to negotiate and execute a sole source purchase of one (1) enhanced high performance hybrid triple quadrupole/linear ion trap mass spectrometer (LC/MS-MS) instrument, with an estimated total cost of \$400,000*, for the analysis of disinfection by-products and pesticides as required by the Safe Drinking Water Act of Ontario; the unit is for the York-Durham Regional Environmental Laboratory (YDREL), located at the Duffin Creek Water Pollution Control Plant (WPCP), in the City of Pickering. Dollar amounts followed by an asterisk (*) are before applicable taxes.

2. Background

- 2.1 The LC/MS-MS is used to analyze for disinfection by-products and various pesticides under the Safe Drinking Water Act of Ontario. Drinking water samples are received from the Regional Municipality of Durham (Durham) and the Regional Municipality of York (York), neighboring municipalities, cities and private clients for regulated testing. Samples are also submitted for investigational/troubleshooting applications. The LC/MS-MS allows for the direct injection of the water sample, greatly reducing the sample processing effort. Time savings are reflected in the ability of the YDREL to provide results much faster compared with a full sample workup followed by analysis.
- 2.2 The need for the purchase of a new system has arisen because drinking water regulations in Ontario have recently been changed, requiring laboratories to achieve increasingly lower detection limits. The current LC/MS-MS system in-use at the YDREL has been stretched to its sensitivity limits, requiring the removal of a number of unregulated pesticides from our license given that the instrumentation could not meet the revised detection limit requirements.

3. Justification for Sole Source

- 3.1 The Organic Chemistry Section at the YDREL has been using an LC/MS-MS system, manufactured and supplied by AB SCIEX LP, since 2007. This AB SCIEX system has been found to be technically sound and reliable, with excellent ruggedness, after-sales product support, prompt and effective service. Operational continuity is maintained with both their hardware and software design, making the newer system an extension of those previously offered and allowing for reasonably simple upgrade training to bring the new system on-line.
- 3.2 A full re-training of staff is not required. There is a steep learning curve when moving to a different manufacturer's instrument, especially with a system as complex as an LC/MS-MS. At least one (1) year of hands-on experience is required by an analyst to become fully proficient with the new software and hardware. Current analysts have more than ten (10) years of experience using the AB SCIEX system. The extended timelines to transition to a different manufacturer's LC/MS-MS system would result in difficulties for the YDREL to meet its drinking water licensing obligations. With an updated AB SCIEX system, existing methods could be transferred from the old system to the new, and verification would be completed in a matter of weeks.
- 3.3 Replacing the current AB SCIEX system with a different vendor's offering would also require the YDREL to complete extensive method validation and instrument qualification of the new system. The validation can only start once the analysts are sufficiently proficient with the new system. The use of an updated AB SCIEX system is ideal as minimal method validation and instrument qualification would be required and the lab would have the system operational within 4-6 weeks of installation for samples.

- 3.4 Fresh accreditation from the Canadian Association for Laboratory Accreditation (CALA) and licensing from the Ontario Ministry of the Environment and Climate Change (MOECC) will be required if a different manufacturer's system is purchased, adding additional costs and time delays. The instrument could not be used for routine samples until accreditation and licensing is obtained. This approval process could take months, depending on CALA and MOECC availabilities. With the purchase of the AB SCIEX system, re-accreditation/re-licensing will not be required as the new system would simply be an extension of the instrument being used presently. The new AB SCIEX system would be ready for routine use shortly after installation.
- 3.5 Analysts are qualified to perform routine maintenance and troubleshooting, as well as some more advanced repairs on the existing AB SCIEX system; the new AB SCIEX system would be similarly maintained/serviced, reducing the down-time. The instrument would be available to analyze actual samples in support of providing safe drinking water a greater proportion of the time.
- 3.6 Programming allowing for connection between the YDREL's Laboratory Information Management System (LIMS) and the existing AB SCIEX system is already in-place. A different manufacturer's system would require considerable programming changes to allow connectivity, increasing the cost in both dollars and time.

4. Financial Implications

- 4.1 Durham's Purchasing By-law 68-2000 (Amended), Section 8, permits the acquisition of goods and services through sole source negotiations. The by-law also requires approval by the Committee of the Whole for the award of sole source contracts that exceed \$125,000 in value.
- 4.2 Financing for Durham's share of the sole source instrument purchase from AB SCIEX LP at estimated total cost of \$400,000*, for the analysis of disinfection by-products and pesticides is available from the approved 2018 Sanitary Sewage Tangible Capital Asset budget for the YDREL. Durham and York will share costs equally.

5. Conclusion

5.1 It is recommended that the approval be provided to negotiate and award the sole source purchase of the LC/MS-MS to AB SCIEX LP.

5.2 This report has been reviewed by the Finance Department and the Commissioner of Finance concurs with the financial recommendations.

Respectfully submitted,

Original signed by

S. Siopis, P.Eng. Commissioner of Works

Recommended for Presentation to Committee

Original signed by

G.H. Cubitt, MSW 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: The Committee of the Whole From: Commissioner of Works

Report: #2018-COW-84 Date: May 2, 2018

Subject:

Authorization to Execute Agreements for the Provision of Laboratory Consumables and Gases/Bulk Liquid Argon for the York-Durham Regional Environmental Laboratory located at the Duffin Creek Water Pollution Control Plant, in the City of Pickering

Recommendations:

That the Committee of the Whole recommends to Regional Council:

- A) That an agreement with Fisher Scientific Company be executed under the Province of Ontario's Ministry of Government and Consumer Services Vendor of Record Arrangement #OSS-00587875 for the provision of laboratory consumable supplies with an estimated annual cost of \$235,000* for an approximate two year term ending March 2020 with the option to renew for two additional one year terms. Financing for the agreement is provided from the annual Sanitary Sewerage System York-Durham Budget. The Regional Municipality of Durham and the Regional Municipality of York will share costs equally;
- B) That an agreement with Praxair Canada Inc. be executed under the Province of Ontario's Ministry of Government and Consumer Services Vendor of Record Arrangement #OSS-00554177 for the provision of laboratory gases/bulk liquid Argon with an estimated annual cost of \$100,000* for the period August 2018 to August 2019 with the option to renew for three additional one year terms. Financing for the agreement is provided from the annual Sanitary Sewerage System York-Durham Budget with the Regional Municipality of Durham and the Regional Municipality of York sharing costs equally; and
- C) That the Commissioner of Finance be authorized to execute the necessary documents related to these agreements.

Report:

1. Purpose

- 1.1 The purpose of this report is to seek the Regional Municipality of Durham (Durham) Council approval to execute an agreement for the provision of laboratory consumables with Fisher Scientific Company (Fisher) under the Province of Ontario's Ministry of Government and Consumer Services (MGCS) Vendor of Record (VOR) Arrangement #OSS-00587875.
- 1.2 This report also seeks Regional Council approval to execute an agreement for the provision of laboratory gases and bulk liquid Argon with Praxair Canada Inc. (Praxair) under the Province of Ontario's MGCS VOR Arrangement #OSS-00554177.
- 1.3 Both agreements are for the York-Durham Regional Environmental Laboratory (YDREL) located at the Duffin Creek Water Pollution Control Plant (WPCP), in the City of Pickering. Dollar amounts followed by an asterisk (*) are before applicable taxes.

2. Background and Discussion

- 2.1 Consumable supplies, gases and bulk liquid Argon are required by the YDREL to undertake sample processing activities and supply instrumentation with gases for Inorganic and Organic applications. Samples tested in the YDREL include regulated drinking water, well water, liquid sewage, treated sewage and incineration ash.
- 2.2 On an ongoing basis, the YDREL has been working with various vendors to obtain consumable supplies, and high quality gases and bulk liquid Argon for the laboratory at the lowest prices possible.
- 2.3 Fisher is one of the vendors the YDREL uses for consumable supplies. Praxair has been the sole gas vendor to service the YDREL over the past number of years. Pricing has been fair and representative of the volumes consumed at the laboratory.

VOR arrangements are competitively bid by the MGCS. By joining the MGCS VOR arrangements, price discounting will be based on much higher volumes. Staff have reviewed the pricing quoted on the VOR arrangement and note that there are savings when compared to the current pricing received for these items due to the larger volumes under the VOR arrangements.

3. Financial Implications

- 3.1 Section 13.1 of Durham's Purchasing By-law 68-2000 (as amended) permits the Region to enter into arrangements with area municipalities, local boards and other public bodies or authorities on a co-operative or joint basis where there are economic advantages in so doing, provided that under such arrangements:
 - A) The method of acquisition used is a competitive method similar to that described in Durham's Purchasing By-law; and
 - B) The awarding and reporting of such contracts is in accordance with the requirements of Durham's Purchasing By-law.
- 3.2 VOR Arrangement #OSS-00587875 for the provision of laboratory consumable supplies and VOR Arrangement #OSS-00554177 for the provision of laboratory gases and bulk liquid argon meet the above conditions.
- 3.3 Financing for the purchase of laboratory consumable supplies with an estimated annual cost of \$235,000*, and for laboratory gases and bulk liquid Argon with an estimated annual cost of \$100,000* will be provided from the annual operating budget for the YDREL included as part of the annual Sanitary Sewerage Operating System York-Durham Budget with the Regional Municipalities of Durham and York sharing costs equally.

4. Conclusion

- 4.1 It is recommended that an agreement for the provision of laboratory consumables with Fisher Scientific Company under the Province of Ontario's Ministry of Government and Consumer Services Vendor of Record Arrangement #OSS-00587875 be executed.
- 4.2 In addition, it is recommended that an agreement for the provision of laboratory gases and bulk liquid Argon with Praxair Canada Inc. (Praxair) under the Province of Ontario's Ministry of Government and Consumer Services Vendor of Record Arrangement #OSS-00554177 be executed.

4.3 This report has been reviewed by the Finance Department and the Commissioner of Finance agrees with the recommendations presented.

Respectfully submitted,

Original signed by

S. Siopis, P.Eng. Commissioner of Works

Recommended for Presentation to Committee

Original signed by

G.H. Cubitt, MSW 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: The Committee of the Whole From: Commissioner of Works

Report: #2018-COW-85 Date: #2018

Subject:

Report on Tenders and Additional Financing for Regional Municipality of Durham Contract T-1012-2018 for the Replacement of the Vehicle Hoist at the Works Department Maintenance Operations Depot located in the Town of Ajax

Recommendations:

That the Committee of the Whole recommends to Regional Council:

- A) That the low compliant bid from ONIT Construction Inc. in the amount of \$427,000*, be awarded Regional Municipality of Durham Tender T-1012-2018 for the replacement of the Vehicle Hoist at the Works Department Maintenance Operations Depot located in the Town of Ajax, resulting in a total estimated project cost of \$500,000;
- B) That the previously approved project budget of \$350,000 be increased by \$150,000 to a revised total project budget of \$500,000; and
- C) That the additional financing in the amount of \$150,000, be provided through a reallocation of funds from the following source:

Sunderland Depot Fuel System Replacement (Project F1550):

Sanitary Sewerage System Capital Budget (User Revenue) \$50,000
Water Supply System Capital Budget (User Revenue) 50,000
General Tax Capital Budget (Property Tax) 50,000

Total Reallocated Financing \$150,000

Report:

1. Purpose

1.1 The purpose of this report is to obtain approval for additional financing and the award of Tender T-1012-2018, for the replacement of the vehicle hoist at the Works Department Maintenance Operations Depot (Ajax Depot) located in the Town of Ajax (Ajax). Dollar amounts followed by an asterisk (*) are before applicable taxes.

2. Background

- 2.1 The existing hoist at the Ajax Depot is a Ford-Smith model rated for 36,000 pounds. It is approximately 35 years old, and is now beyond its serviceable life and in need of replacement. The hoist is used by the Works Department's Fleet Maintenance Division at the Ajax Depot to service regular fleet vehicles and the Region's heavy equipment (snow plows, trucks, back hoes etc.).
- 2.2 The hoist has required excessive maintenance related to worn pistons and leaking seals due primarily to the age of the unit. The cost of maintaining the hoist as well as costs associated with loss of productivity when the hoist is out of service is an ongoing concern for the Fleet Maintenance Division.
- 2.3 There is also safety concerns with the existing hoist in that, due to its age, the existing hoist is not equipped with a safety lock mechanism which is now standard on more modern hoist installations.
- 2.4 Funds to replace the hoist were approved in the 2017 Tangible Capital Asset Budget for the Ajax Depot, which is equally funded from the water and sewer user rates and property taxes.

3. Design and Tender of Replacement Hoist

- 3.1 The Works Department's Facilities Design, Construction and Asset Management Division retained a consultant to design the replacement of the existing hoist with a new, in-ground, 3 post, in-line hoist, rated at a capacity of 75,000 pounds. The larger capacity hoist will enable the Fleet Maintenance Division to service larger vehicles which are now a part of the modern fleet vehicle makeup.
- 3.2 As part of the scope of work, building shoring is required for the excavation necessary and adjacent to the existing office space, along with new underground concrete hoist pits and associated restoration of the concrete floor slab and drains within the garage bay.

4. Tender Information

4.1 Tenders were received for T-1012-2018 - Replacement of the Vehicle Hoist at the Ajax Depot on April 3, 2018 as follows:

| <u>Bidder</u> | Total Tender Amount* |
|--------------------------------|----------------------|
| ONIT Construction Inc. | \$427,000 |
| M.J.K. Construction Inc. | \$428,470 |
| Garage Supply Contracting Inc. | Non-Compliant |

- 4.2 It is recommended that the lowest compliant bid submitted by ONIT Construction Inc. be awarded Regional Tender T-1012-2018.
- 4.3 The lowest compliant bid received from ONIT Construction Inc. exceeds the available project funds. The higher cost is attributable to the current market conditions for the equipment and the extensive work required to accommodate the hoist installation and associated restoration.

5. Financial Implications

- 5.1 Section 9.4 of the Region's Budget Management Policy requires approval of the Committee of the Whole for the updated capital project approval prior to the award of a contract where additional financing is required.
- 5.2 Section 11.4 of the Region's Budget Management Policy requires approval from the Committee of the Whole for reallocations of current budget provisions in excess of \$100,000.
- 5.3 Financing for the additional project commitments related to the replacement of the vehicle hoist at the Ajax Depot can be reallocated as follows:

Sunderland Depot Fuel System Replacement (Project F1550):

| Sanitary Sewerage System Capital Budget | \$50,000 |
|---|------------------|
| Water Supply System Capital Budget | 50,000 |
| General Tax Capital Budget | 50,000 |
| Total Reallocated Financing | <u>\$150,000</u> |

5.4 The Sunderland Depot Fuel System Replacement project (F1550) is complete and the savings from that project can be reallocated to fund the construction of the replacement vehicle hoist at the Ajax Depot.

5.5 The proposed changes to the project costs are as follows:

| Project Component | Approved Project Budget | Proposed Changes | Revised Project Budget |
|--------------------------|----------------------------|---------------------|---------------------------|
| Tender (excluding taxes) | \$305,000 | \$122,000 | \$427,000 |
| Net HST | 5,369 | 2,148 | 7,517 |
| Engineering | 18,785 | | 18,785 |
| Contingencies | 20,846 | 25,852 | 46,698 |
| Total Costs (F1720) | <u>\$350,000</u> | <u>\$150,000</u> | <u>\$500,000</u> |

6. Conclusion

- 6.1 It is recommended that the lowest compliant bidder, ONIT Construction Inc., be awarded Regional Municipality of Durham Tender T-1012-2018 for the replacement of the Vehicle Hoist at the Works Department Maintenance Operations Depot located in the Town of Ajax.
- 6.2 This report has been reviewed by the Finance Department and the Commissioner of Finance concurs with the financial recommendations.

Respectfully submitted,

Original signed by

S. Siopis, P.Eng. Commissioner of Works

Recommended for Presentation to Committee

Original signed by

G.H. Cubitt, MSW 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: The Committee of the Whole From: Commissioner of Works

Report: #2018-COW-86 Date: May 2, 2018

Subject:

Municipal Class Environmental Assessment Reform Process

Recommendations:

That the Committee of the Whole recommends to Regional Council:

A) That the following resolution be endorsed by Regional Council in support of the Ontario Good Roads Association and the Municipal Engineers Association's efforts to amend the Municipal Class Environmental Assessment process for Part II Orders:

Whereas a coalition of the Municipal Engineers Association (MEA) and the Residential and Civil Construction Alliance of Ontario have successfully applied to have a review of the Municipal Class Environmental Assessment process conducted under Part IV (Section 61) of the Environmental Bill of Rights Act, 1993 (EBR Act);

And whereas impact studies and public meetings required by the MCEA process often take two years or more to complete before construction can commence:

And whereas the MCEA requirements to evaluate alternatives are often not well aligned with prior or municipal land use planning decisions;

And whereas analysis by the Residential and Civil Construction Alliance of Ontario (RCCAO) has demonstrated that the time to complete an EA rose from 19 months to 26.7 months and costs went from an average of \$113,000 to \$386,500;

And whereas the Auditor General of Ontario has tabled recommendations for modernizing the MCEA process;

And whereas, following its review, MOECC announced the following changes at the OGRA conference in February 2018:

- The release of a public guide related to filing a Part II Order Request (PIIOR)
 and the introduction of a mandatory PIIOR form
- That MOECC would commit to service standards for the review of PIIORs -Schedule B (90 business days) and C (180 business days)
- That decisions for PIIORs related to Schedule A and A+ projects would be delegated to the Director.

And whereas local projects that do not have the necessary approvals could lose out on the next intake of Build Canada Funding;

Therefore be it resolved that the Regional Municipality of Durham requests that the Minister of the Environment and Climate Change take immediate steps to expedite the response process for Part II Orders or Bump-Up requests, as part of the s.61 review to improve the MCEA process times and reduce study costs;

And further that the Minister of the Environment and Climate Change support changes to better integrate and harmonize the Municipal Class Environmental Assessment process with the processes defined under the Planning Act; and

And further that the Minister of the Environment and Climate Change amend the scope of the Municipal Class Environmental Assessment reports and studies to reduce duplication with existing public processes and decisions made under Municipal Official Plans and Provincial legislation; and

B) That a copy of this resolution be forwarded to the Ministry of Environment and Climate Change, the Ontario Good Roads Association and the Municipal Engineers Association.

Report:

1. Background

- 1.1 The Municipal Class Environmental Assessment (MCEA) process was developed by the Municipal Engineers Association (MEA) to provide municipalities with a risk-based approach to comply with the Environmental Assessment Act for both capital projects and infrastructure maintenance activities. The Regional Municipality of Durham (Region) was one of the proponent municipalities with the initial development of the MCEA process.
- 1.2 Over time, the MCEA process has become more complex, delaying projects and significantly increasing costs. In fact, a 2014 study by the Residential and Civil Construction Association of Ontario (RCCAO) showed that it was typically taking almost 27 months to complete the process for Schedule B and C projects, with study and consultant costs averaging \$386,500 (not including municipal staff time).
- 1.3 A coalition of stakeholders, such as MEA, RCCAO, Ontario Good Roads Association (OGRA) and many others, agree that MCEA reform is needed and have been advocating to the Ministry of the Environment and Climate Change (MOECC) to make changes.
- 1.4 In addition to the stakeholder efforts, the Auditor General of Ontario provided recommendations regarding the current MCEA process in the Value for Money audit released in November, 2016.
- 1.5 In February 2017, a joint application for review was submitted through the Environmental Commissioner of Ontario and forwarded to the MOECC. The Ministry responded positively to the application in mid-April 2017 and committed to completing a comprehensive review by December 2018. Although MOECC accepted the positions made both in the joint application and by the Auditor General, little progress was made in 2017.

2. Internal/External Consultation

- 2.1 With the provincial election scheduled for June 2018, there are limited opportunities for the Ontario government to implement legislative and policy changes. Realizing that this window is closing, MEA and RCCAO organized a workshop on November 29, 2017 where Regional staff attended along with 40 municipal practitioners who shared their frustrations regarding the Class EA process. During the discussion, the top priority for MCEA reform was identified as improving the Part II Order Request (PIIOR) process.
- 2.2 From this process, the MOECC put a team in place and ran a series of full day consultations from April 11 to May 2, 2018. Regional staff attended sessions along with staff from other Ontario municipalities. This initiative will contribute to the Ministry's efforts to improve the environmental assessment program, building on commitments made in response to the Auditor General's 2016 Value for Money Audit, the Development Approvals Roundtable, and Environmental Bill of Rights, 1993 Application for Review from the Municipal Engineers Association and the Residential and Civil Construction Alliance of Ontario.
- 2.3 In addition to improving the Part II Order Request Process, the November 29, 2017 workshop summarized three additional short term improvements and five key long term improvements to the MCEA process which is provided in Attachment #1.

3. Conclusion

3.1 Staff recommends that reflecting on experience related to Regional infrastructure projects, Regional Council endorse the resolution contained in the recommendations of this report, and forward a copy of this resolution to the Ministry of the Environment and Climate Change, the Ontario Good Roads Association and the Municipal Engineers Association in support of improvements to the Municipal Class Environmental Assessment process described within this report.

4. Attachments

4.1 Attachment #1: Key correspondence from the MEA summarizing the findings

of the November 29, 2017 workshop and current action plans

by the government.

Respectfully submitted,

Original signed by

S. Siopis, P.Eng. Commissioner of Works

Recommended for Presentation to Committee

Original signed by

G.H. Cubitt, MSW Chief Administrative Officer

Attachment #1 to Report #2018-COW-86

From: Paul Knowles

To: abotham@leamington.ca; andrew@actualmedia.ca; manahan@rccao.com; arif.khan@york.ca;

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steve.mota@york.ca; tcopelan@london.ca; Zeljko.Romic@ontario.ca

Subject: Nov 29th MCEA Workshop

Date: Thursday, December 07, 2017 12:05:20 PM

Attachments: MCEA Workshop - MOECC Update on EA Reform 11 28.pptx

RCCAO MEA Presentation Nov 29 2017 v3.pptx

MCEA PIIOR November 29, 2017.pptx DAR Action Plan - FINAL - clean.pdf RE Draft PIIO Smart Form.msq

Attachment#5 to November 29 2017 Meeting Notes - rr edits.docx

MCEA Workshop Nov 29 2017 Notes.docx

Thank you for attending the November 29th, MEA and RCCAO jointly hosted workshop to discuss reform to the Municipal Class EA (MCEA). The space available for this workshop filled very quickly demonstrating the keen interest in this topic. It was useful to hear about EA reform priorities first hand from the 40+ proponents. A copy of the presentations and notes from the meeting are attached.

To summarize the outcome the workshop - MEA strongly agrees with the Ministry's idea that a risk based approach should be incorporated into the EA process. Also, MEA will pursue both easy to implement short term EA improvements that can be implemented now and longer term improvements that will take some time to implement.

You will note in the government's Development Approval Roundtable Action Plan (attached) that the number two priority is to address delays in the PIIOR process, so we hope for prompt action.

To move forward, MEA proposes;

Short Term Improvements

PIIOR Form – On November 6th (attached), MEA suggested some minor revisions to the Ministry's proposed PIIOR form that we feel will improve the form. MEA is asking MOECC to provide the finalized version of this form so we can begin encouraging it's use. Alternatively, if finalizing the MOECC form is to be delayed, MEA will circulate our own form (that will be very similar to MOECC's proposed form) for use by MCEA proponents.

Table B – As explained in our email of November 6th, somehow, in recent years, MOECC expanded the scope of a PIIOR process to include issues not related to the reason for the PIIOR. This is a radical change that the Ministry introduced to the PIIOR process without any legislative change, without any

consultation with stakeholders and without any justification that explains the how the benefits outweigh the extra work. The use of this form is completely contrary to the idea that the EA process should follow a risk based approach – if nobody involved in the MCEA process has identified an issue why would proponent and MOECC resources be diverted to the issues contained in Table B? MEA is seeking confirmation from MOECC that the use of Table B will immediately be discontinued.

PIIOR Decisions – As per our email of November 6th, MEA will submit a major amendment to the MCEA that will replace section A.2.8 with wording that closely follows section 5.1 (water/sewer) and section 5.2 (road) of the original MCEA documents prepared in 1987. In summary, the amended section A.2.8 we propose would provide the Minister with 90 days (twice the 45 days included in the original MCEA) for the Minister to render a decision on any PIIOR. In the absence of a decision within the specified time, the proponent would be free to proceed with the project.

Companion Guide – MEA is just finalizing a Companion Guide to the MCEA. This guide offers proponents with practical advice to improve the MCEA process. In particular, this guide responds to high priority issues for proponents and offers guidance related to Climate Change and Indigenous Consultation. The guide will be available shortly.

Longer Term Improvements

MEA will be please to work with MOECC and other stakeholders to;

- Revise the project schedules to properly categorize projects using a risk base approach and include new projects such as pilot projects and repairs following a disaster.
- Ensure that PIIORs are not possible for Schedule A and A+ projects
- Provide clear guidance for proponents to coordinate/integrate with other
 Acts such as the Federal EA Act and the Planning Act
- Improve access to the MCEA document
- Clarify details required to be included in a MCEA process.

Paul Knowles P Eng CAO Town of Carleton Place 613-257-6207



Development Approval Roundtable

Action Plan

November 2017



Context

Ontario's housing market has seen very dynamic growth in recent years, with prices in the Greater Toronto Area and the Greater Golden Horseshoe rising significantly. Housing demand is being fueled by a robust Greater Toronto and Hamilton Area (GTHA) economy, growth in population, employment and incomes, combined with low interest rates. While these factors are indicative of the attractiveness of the region to both new residents and investors, it has raised concerns regarding housing affordability.

Ensuring residents can access housing that meets their needs is necessary to the sustained strength of the region. Housing is more than just where people live; it is social infrastructure that forms the building blocks of our communities and our economy.

The housing industry is also a critical economic driver in the region, contributing over \$14 billion to Ontario's economy. The construction of housing has significant economic spin-off effects and employs almost 200,000 people in the province. In addition, housing options that are both affordable and accessible are crucial to attracting and retaining the skilled workforce that our region needs to grow.

Recognizing the social and economic importance of a good supply of housing, Ontario introduced a 16 point plan¹ to make housing more affordable for homebuyers and renters. This Plan will help more people find an affordable place to call home, while bringing stability to the real estate market and protecting the investment of homeowners.

As part of the plan, the Ministry of Municipal Affairs (MMA), in partnership with other ministries involved in the residential development approval process, convened a Development Approvals Roundtable chaired by the Secretary of Cabinet, and vice-chaired by the Deputy Minister of the Ministry of Municipal Affairs and Ministry of Housing. The Roundtable includes provincial Deputy Ministers, senior municipal officials, and representatives from the development, construction and real estate industries. The objective of the Roundtable is to identify opportunities to streamline the development approval process to ensure there are not undue delays in bringing new housing supply to market, while maintaining the intent of policy and legislative requirements.

The work of the Roundtable is building on the ongoing efforts at both the provincial and municipal levels to streamline and improve the development approval process.



¹ Ontario's Fair Housing Plan: https://news.ontario.ca/mof/en/2017/04/ontarios-fair-housing-plan.html

Many municipalities within the GTHA have either already completed, or are in the process of undertaking, in-depth reviews of their approvals processes to identify opportunities for improvement. Members of the Roundtable recognize the importance of this work, and have sought to identify opportunities to build on it to further improve the approval process and bring more housing supply to market.

Recognizing the importance of ensuring housing can get to market efficiently, the Roundtable meetings have provided a unique opportunity to take stock of the existing processes and to have the relevant people around the table to look at whether we can do it better.

A dynamic and sustainable economy depends critically on efficient processes that ensure public safety, compliance with legislation and land use plans, and protection of our important environmental and natural assets. These processes need to recognize and take full advantage of our public infrastructure, now and well into the future. Also, they need to support appropriate development and not inadvertently delay or obstruct bringing product to market, especially housing that is affordable for low and middle income Ontarians.

The action items that have been identified focus on leveraging information technology, streamlining and modernizing approval processes, and providing additional support for applicants through the development of new guidance materials. The members of the Roundtable agree that these action items have the potential to move the yardsticks forward on improving the approval process and bring housing more quickly to market.

The Roundtable members believe these action items are appropriate to streamline the development approvals process, bring housing to market, and support provincial and municipal priorities for land use and infrastructure planning.

The Roundtable members are pleased to deliver these fourteen action items to the Ontario Government for consideration, and would ask that the government consider taking action on these items at the soonest opportunity.



ACTION ITEMS

Environment and Resources

1. Stormwater Management

- a) The Ministry of Natural Resources and Forestry (MNRF) will establish a Conservation Authorities (CAs) Service Delivery Review Committee by Fall 2017.
 - i. The Committee will, among other things, examine ways to streamline and improve the timelines for the approval of CA permits and the role of CAs in reviewing the local use of regional flood control facilities. This will include looking at opportunities to better integrate CA approvals with municipal approvals, or to undertake simultaneous review, as well as consider options of introducing timeframes for CA approvals.
 - ii. MNRF will distribute the Terms of Reference for the CA Service Delivery Review Committee in October 2017 to the members of the Roundtable, and will circulate the priorities identified by the Committee in late November, 2017.

2. Environmental Assessments and Modernization of Approvals

- a) The Ministry of Environment and Climate Change (MOECC) will report back in Fall 2017 on a timeline to address concerns on delays in the Municipal Class Environmental Assessment (EA) process related to Part II Order Requests.
 - i. The ministry committed to posting the Part II Order Guidance on the Environmental Bill of Rights (EBR) Registry in Fall 2017 as a commitment to the Auditor General.
 - ii. In response to the EBR Review by the Municipal Engineers Association (MEA) and Residential and Civil Construction Alliance of Ontario (RCCAO), MOECC committed to review requests made regarding the Part II Order process and municipal class EA schedules (risk based approach for requirements) by December 2018.
 - iii. MOECC will identify opportunities to deliver on components of the review in the short term, and will report back on the timelines for component deliverables by December 2017.
- b) Municipalities are encouraged to continue to undertake integrated planning to align the EA process with municipal planning and approvals.
- c) MOECC committed to the following actions and will report back on timing to address:



- Adding more environmental compliance processes to the Environmental Activity and Sector Registry (EASR) (e.g. permits by rule).
 - To ensure a common understanding of low-risk activities, MOECC will distribute the criteria used for determining low-risk activities in October 2017.
- ii. Reducing the Ministry's review time for the Transfer of Review Process, as well as expanding the number of municipalities that are participating and updating the program, subject to municipal consent.
- iii. Exploring whether the government review team process could be expanded to support applicants for Class EAs used in individual EAs such as municipal, transit and waterpower.
- iv. Providing guidance documents on Indigenous consultation for EAs.
- v. Reducing Environmental Compliance Approval (ECA) review timelines, in particular the approvals process for stormwater management works, and developing service standards.

3. Species at Risk

- a) MNRF will support proponent-led assessments of species at risk requirements early in the EA process to facilitate timely approvals.
- b) MNRF will continue to enhance the tools available on species at risk by developing guidance materials on best management practices and habitat identification on an ongoing basis.
- c) MNRF will investigate the use of the "Safe Harbour" tool, which is enabled under Endangered Species Act and encourages property owners to create or enhance species at risk habitat for a set period of time while having legal assurance that they can alter the land use at a later date.
- d) MNRF will continue to identify opportunities for using a risk-based approach to the implementation of the Endangered Species Act.

Planning

4. Certainty and Transition

- a) MMA will produce guidance on the implementation of the Growth Plan, 2017, including the application of new targets and transition provisions. The province will share a draft of this guidance with representatives of the development industry and municipal sector, prior to finalizing by the end of 2017.
- b) To support the implementation of the Growth Plan 2017 and Greenbelt Plan 2017, MMA, MNRF, OMAFRA and MOECC, with support from appropriate ministries, will produce the following implementation support material:
 - Guidance on Agricultural Impact Assessments by the end of 2017 (OMAFRA lead);



- ii. Mapping and guidance for identifying and supporting the Agriculture System by the end of 2017 (OMAFRA lead);
- iii. Mapping of the Natural Heritage System by Fall 2017 (MNRF lead);
- iv. Land-needs assessment methodology by the end of 2017 (MMA lead);
- v. Guidance on carrying out planning at the watershed level by the end of 2017 (MOECC and MNRF lead); and,
- vi. Guidance for developing Greenhouse Gas inventories, targets and emission-reduction strategies by the end of 2017 (MOECC lead).

5. Zoning

- a) MMA will enhance engagement with municipalities and develop new educational tools to support up-to-date and forward-looking zoning by-laws and/or community planning permit systems.
 - i. MMA to proactively engage with municipalities to support the implementation of up-to-date zoning by-laws, including promoting the objectives and benefits of the Community Planning Permit System (CPPS), to promote zoning (or CPPS) provisions and standards that align with provincial plans and policies, and municipal official plans.
 - ii. MMA to develop a guidebook of case studies and best practices that identify progressive zoning approaches, including the objectives and benefits of the CPPS. This will include looking at best practices for supporting forward-looking planning in major transit station areas in the Greater Golden Horseshoe.
 - iii. MMA will work with municipalities and the development sector to explore opportunities to advance forward-looking zoning.

6. Infrastructure Alignment to Incent Updated Zoning with Ministry of Transportation (MTO) and Other Capital Ministries

- a) The province will leverage infrastructure investments to support updated municipal planning documents and forward-looking zoning.
 - i. The Ministry of Infrastructure (MOI) will work with MMA and capital and planning ministries through the Long Term Infrastructure Plan and Plan Alignment process to continue to strengthen the alignment of provincial infrastructure investments with provincial and municipal plans and policies to support integrated infrastructure and land use planning. This will help provide for broader public service facilities, such as hospitals, long-term care facilities, libraries and schools, being located in such a way as to support the achievement of complete communities and protect employment areas, as articulated in the Growth Plan, 2017 and Provincial Policy Statement.



ii. Where infrastructure investments are made or funded by the province, MTO and other capital ministries will work with MMA and MOI to include provisions in infrastructure project agreements (Transfer Payment Agreements for municipally-owned or Master Agreements for provincially-owned projects) to require that municipal planning documents (official plans and zoning by-laws) be updated to align with provincial plans and policies, and to support forward-looking zoning.

7. Cultural Heritage Landscapes

- a) The Ministry of Tourism, Culture and Sport (MTCS) will produce guidance on cultural heritage resources in the land use planning process by Fall 2017. A Guide to Cultural Heritage Resources in the Land Use Planning Process is intended to help those involved in the land use planning process in Ontario to understand the cultural heritage policies in the Provincial Policy Statement, 2014. A draft will be shared with representatives of the development industry and municipal sector, prior to broader public consultation in early Fall.
- b) MTCS will produce guidance on the identification, evaluation and management of cultural heritage landscapes by May 2018. A draft will be shared with representatives of the development industry and municipal sector, prior to finalizing.
- c) MTCS, MMA and municipalities will explore opportunities to integrate consideration of cultural heritage landscapes into the municipal comprehensive review (MCR) process or subsequent major official plan amendments, enabling municipalities to consider and seek public input into heritage properties and landscapes in a broader context and across the entire municipality.

8. One Window

a) MMA will work with its one-window land use planning partners to increase accountability and transparency of decisions, particularly in light of the proposed Planning Act amendments that would make some provincial decisions sheltered from appeal to the Ontario Municipal Board/Tribunal. Any process changes would be in place in time for the implementation of the new Tribunal, should Bill 139 be passed in its current form.

9. Service Standards

a) MMA will work with other ministries that issue permits and approvals related to residential land development to make existing service standards, and the results in meeting those standards, publicly transparent. The province will report back to the Roundtable on progress made and next steps in Spring 2018.



10. Approvals Concierge

a) MMA to lead a "concierge" model of service delivery, leveraging the work of the Provincial Land and Development Facilitator and the Housing Delivery Group who are focused on removing barriers to housing projects that meet the needs of local communities. This will supplement the work of the existing one-window planning process connections across ministries to enhance provincial coordination of site-specific local approvals on high profile projects that would provide housing.

Data and Evidence

11. Data and Evidence

- a) With the collaboration of the federal government and the Canadian Mortgage and Housing Corporation (CMHC), the province will engage an external consultant in Fall 2017 to support the Data and Evidence Working Group to:
 - i. Establish common definitions and complementary approaches for collecting data on housing and land supply in the Greater Golden Horseshoe in order to allow for the development of a regional database. This will include recommending an approach for regular and frequent collection and assembly of housing and land supply data from municipalities and private sector sources as appropriate.
 - ii. Provide a recommendation on integrating resale housing data and new housing supply data, and a recommendation on key variables that need to be considered when undertaking housing need analysis.
 - iii. Recommend an approach, including addressing governance and funding requirements, for regular public reporting on housing supply and demand.
 - iv. Complete a report by early 2018.
 - v. The Terms of Reference for the Request for Proposals for the external consultant will be developed by the Data and Evidence Working Group and confirmed by the Roundtable.

<u>Infrastructure</u>

12. Transportation Corridor Planning

- a) MTO will proceed with the Highway Access Management Plan pilot project "QEW Prosperity Corridor" involving Burlington, Halton Region and other development stakeholders.
- b) MTO will start a dialogue with other municipalities on undertaking similar "pilot" projects elsewhere across the Greater Golden Horseshoe.
- c) When undertaking "pilot" projects MTO will develop a rural and urban lens to

Ontario

- highway access issues to ensure that varying contexts and priorities are considered.
- d) MTO will proceed with further development of its electronic permitting system to include a planning component to allow municipalities to submit, track and access ministry comments on a range of planning and development submissions. System requirements to be defined in 2018.
- e) MTO will announce next steps regarding the future of the GTA West Corridor as soon as possible.
- f) MTO will work with MMA and Metrolinx to assess whether and how new tools and policies (e.g. a Transportation Planning Policy Statement) could be used to support planning for transit-supportive development in major transit station areas.

Innovation and Technology

13. E-Permitting

a) The province will establish a Task Force, with appropriate representation from stakeholders and experts, to undertake an assessment and examine the feasibility of developing an e-permitting and tracking system for municipal and provincial land use and development approvals, including the identification of potential municipal pilot opportunities. The work of the Task Force will build on existing work done by provincial ministries and municipalities to move towards e-permitting systems, and link with the federal government and its support for Smart Cities Initiatives.

Monitoring and Evaluation

14. Monitoring and Evaluation

a) The province, in partnership with municipalities and the development sector, will monitor the progress of action items and report back regularly to the Roundtable members. The first report back will be prepared in Spring 2018.



ROUNDTABLE MEMBERS

| Organization | Name | Position |
|---|--------------------------------|---|
| Cabinet Office | Steve Orsini (Chair) | Secretary of Cabinet |
| Ministry of Municipal Affairs | Laurie LeBlanc (Vice-Chair) | Deputy Minister |
| Ministry of Transportation | Stephen Rhodes | Deputy Minister |
| Ministry of the Environment and Climate Change | Paul Evans | Deputy Minister |
| Ministry of Natural Resources and Forestry | Bill Thornton | Deputy Minister |
| Ministry of Agriculture, Food and Rural Affairs | Greg Meredith | Deputy Minister |
| Ministry of Tourism, Culture and Sport | Maureen Adamson | Deputy Minister |
| Ministry of Economic Development and Growth | Giles Gherson | Deputy Minister |
| Ministry of Municipal Affairs – Ontario Growth Secretariat | Larry Clay | Assistant Deputy Minister |
| Ministry of Economic Development and Growth | Kevin Perry | Assistant Deputy Minister |
| Ministry of Finance | Allan Doheny | Assistant Deputy Minister |
| Ministry of Infrastructure | Adam Redish | Assistant Deputy Minister |
| Durham Region | Brian Bridgeman | Commissioner of Planning and Economic Development |
| Halton Region | Ron Glenn | Chief Planning Official and Chair, Regional Planning Commissioners of Ontario |
| Peel Region | Arvin Prasad | Director of Planning Policy & Research |



| Organization | Name | Position |
|--|---------------------------------------|---|
| York Region | Valerie Shuttleworth | Chief Planner |
| City of Hamilton | Jason Thorne | General Manager of Planning and Economic Development |
| City of Toronto | Jennifer Keesmaat Kerri Voumvakis | Chief Planner Director, Strategic Initiatives, Policy & Analysis |
| Building Industry and Land Development Association | Darren Steedman Bryan Tuckey | Chair President and Chief Executive Officer |
| Ontario Home Builders' Association | Neil Rodgers Joe Vaccaro Susan Mammel | President Chief Executive Officer Executive Officer, Hamilton Halton Home Builders' Association |
| Residential Construction Council of Ontario | Richard Lyall | President |
| Ontario Real Estate Association (OREA) | Tim Hudak | Chief Executive Officer |
| Toronto Real Estate Board (TREB) | John DiMichele | Chief Executive Officer |



If this information is required in an accessible format, please contact 1-800-372-1102 ext. 2304



The Regional Municipality of Durham Report

To: Committee of the Whole From: Commissioner of Finance

Report: #2018-COW-81 Date: May 2, 2018

Subject:

Write-off of Arrears of Former Tenants of the Durham Regional Local Housing Corporation for the Year Ended December 31, 2017

Recommendation:

That the Committee of the Whole:

Approve the write-off totalling \$41,983.47 at December 31, 2017 of outstanding arrears of twenty-five (25) former tenants of the Durham Regional Local Housing Corporation, whose amounts owing are less than \$10,000 each.

Report:

1. Purpose

1.1 The purpose of this report is to obtain approval for the write-off of \$41,983.47 in former tenant arrears of the Durham Regional Local Housing Corporation (DRLHC) for the 2017 fiscal year.

2. Background

- 2.1 Regional policy for cancellation of accounts requires the approval of the Committee for accounts less than \$10,000. For accounts greater than \$10,000, approval of Regional Council is required, provided that all reasonable efforts have been made to collect the accounts or Legal Services is satisfied that the account is not legally enforceable.
- 2.2 Annually, outstanding accounts of former tenants who no longer occupy units at DRLHC sites and who have balances owing are recommended for write-off. The balances owing are a combination of rent arrears, charges for miscellaneous items (e.g. NSF payment charges), charges for repair of damages to the unit and additional housing charges owing due to misrepresentation of income or other circumstances.

3. Write-off of Arrears for 2017

- 3.1 This year, the total outstanding balance being recommended for write-off is \$41,983.47 representing twenty-five (25) former tenant accounts, of which all have amounts owing of less than the \$10,000 threshold for which approval by the Committee of the Whole for the write-off is required. Twenty-three (23) tenants vacated the DRLHC units between January 1, 2017 and December 31, 2017 and two (2) vacated between January 1, 2016 and December 31, 2016.
- 3.2 It is important to note that collection activity on the accounts will continue to be pursued despite being written-off. Durham Access to Social Housing (DASH) is also promptly notified when a household with arrears, damages or misrepresentation of income moves out. The amount of arrears is maintained on the DASH database and should the former tenant want to access the waiting list in the future, a repayment agreement between the housing provider and the household is required. This is a Regional requirement that applies to all social housing providers in Durham. Former tenant arrears are also uploaded to the Province-wide arrears database.
- 3.3 The write-off recommended for 2017 continues to represent a very small portion of rental revenues, as reflected in the table below:

Summary of Write-offs for Durham Regional Local Housing Corporation 2007 to 2017

| | Destal | | Recoveries | Net Write-off |
|----------|----------------|-----------|-------------|-----------------|
| | Rental | | of Previous | as % of |
| Year End | <u>Revenue</u> | Write-off | Write-offs | Rental Revenues |
| | \$ | \$ | \$ | |
| 2007 | 5,958,245 | 88,590 | 51,756 | 0.6% |
| 2008 | 6,089,492 | 62,400 | 43,056 | 0.3% |
| 2009 | 6,220,147 | 118,045 | 20,132 | 1.6% |
| 2010 | 6,193,127 | 71,115 | 14,358 | 0.9% |
| 2011 | 6,266,563 | 20,348 | 13,484 | 0.1% |
| 2012 | 6,487,017 | 59,764 | 12,341 | 0.7% |
| 2013 | 6,591,574 | 43,831 | 7,883 | 0.5% |
| 2014 | 6,665,408 | 37,211 | 7,792 | 0.4% |
| 2015 | 6,704,793 | 36,629 | 9,389 | 0.4% |
| 2016 | 6,820,371 | 28,026 | 6,326 | 0.3% |
| 2017 | 7,045,457 | 41,983 | 5,028 | 0.5% |

4. Conclusion

4.1 It is requested that the Committee of the Whole approve the write-off of accounts for these twenty-five (25) former tenants of the DRLHC, totaling \$41,983.47.

Respectfully submitted,

Original signed by R.J. Clapp

R.J. Clapp, CPA, CA Commissioner of Finance

Recommended for Presentation to Committee

Original signed by G.H. Cubitt

G.H. Cubitt, MSW Chief Administrative Officer



The Regional Municipality of Durham Report

To: Committee of the Whole From: Commissioner of Finance

Report: #2018-COW-87 Date: #2018

Subject:

The 2019 Regional Business Planning and Budget Process and the Preliminary 2019 Timetable

Recommendations:

That the Committee of the Whole recommends to Regional Council that:

- A) The preliminary 2019 Regional Business Plans and Budgets Timetable be approved (as outlined in Attachment #1 to this report) which includes the following key dates:
 - December 19, 2018 final Regional Council approval of the 2019 Water Supply and Sanitary Sewerage Business Plans and Budgets;
 - January 30, 2019 presentation of the Multi Year Economic and Financial Forecast, Ten Year Capital Forecast, and 2019 Property Tax Budget Guideline Report to Regional Council; and
 - February 27, 2019 final Regional Council approval of all 2019 Property Tax Funded Business Plans and Budgets.
- B) The Commissioner of Finance be authorized to initiate any changes for the 2019 Business Plans and Budgets format that may enhance and ensure that the Business Plans and Budgets continue to present business planning information in an informative and timely manner in accordance with Regional policies including:
 - Integration of consistent Performance Measurement disclosure for Regional Business Plans and Budgets that directly relates program performance, goals and achievements with fiscal resources required to attain the performance targets and/or desired levels of services; and

- Compliance with reporting provisions of the Municipal Act and standard municipal budgeting practices to ensure that the Region's Business Plans and Budgets meet public accountability and fiscal transparency requirements.
- C) A copy of this report be forwarded to all Outside Boards and Agencies including the Durham Regional Police Services Board, the five Conservation Authorities, Durham Region Transit Commission and Durham Regional Local Housing Corporation.

REPORT:

1. Introduction

- 1.1 The Region's annual Business Plans and Budgets and supplemental information are designed to provide informative and accurate Business Planning and Budget data to a range of different stakeholders including:
 - Standing Committees
 - Finance and Administration Committee
 - Regional Council
 - Outside Boards and Agencies
 - Regional Staff
 - Regional Taxpayers
 - Bond Rating Agencies
 - Investors
 - General Public
- 1.2 The purpose of this report is to provide Committee of the Whole and Regional Council with a summary of the key elements of the Region's Business Plans and Budgets and a preliminary timetable and outline for the Region's 2019 Business Planning and Budgets process.

2. Key Elements of the Region's 2019 Business Plans and Budgets

- 2.1 The Region's Business Plans and Budgets are a key component of the Region's business cycle.
- 2.2 The annual business planning process begins with the development of a multi year economic and financial forecast which includes a comprehensive review of the five year operating and ten year capital pressures, economic environment, risks, and available funding across the Region's major program areas. This forecast provides the foundation for setting the upcoming year's property tax budget guideline.

- 2.3 The Asset Management Plan provides key information and metrics on the Region's infrastructure assets to inform strategic and financial infrastructure planning throughout the annual business planning cycle.
- 2.4 Servicing and Financing Studies are prepared for each of the Region's major service delivery areas including Water and Sewer, Transportation, Transit, Solid Waste Management and Social Housing. These detailed studies provide information on the long-term operating and capital pressures, available financing, environmental scan, and risks in each of the service delivery areas and reflect sound asset management practices.
- 2.5 The annual Business Plans and Budgets incorporate the direction provided by the Region's Strategic Plan; the Multi Year Economic and Financial Forecast, Ten Year Capital Forecast, and Property Tax Budget Guideline; the Asset Management Plan; and Servicing and Financing Studies; and reflect the following best practice business principles:
 - Indicate clearly stated Regional goals, objectives and strategies and related plans to achieve these goals and objectives specifically disclosing desired outcomes with the funding requested.
 - Focus on long-term planning to achieve desired results and intended outcomes including growth related infrastructure programming and administrative needs.
 - Articulate the Region's priorities, issues and pressures for the upcoming year and describe any significant changes in priorities from the current year.
 - Address new financial or service level issues, as well as, changes in legislation, regulations and priorities from previous years.
 - Provide for the assessment of the condition of all major capital infrastructure and plans for the ongoing financial commitment to maintain, replace and improve these assets.
 - Support a financial planning process that assesses risks and long-term financial implications of the proposed current business plans and the capital asset forecasts for the upcoming year.
 - Support the Region's Corporate Climate Change and Business Continuity initiatives.
 - Incorporate performance measures to allow assessment of program effectiveness and efficiencies.
 - Provide for proper, accountable and transparent disclosure of all relevant financial information.

- 2.6 Any changes to the Region's Business Plans and Budgets would be implemented in time for the 2019 Business Planning and Budget process and could possibly include modifications to the format of the Business Plans and Budget forms, as well as changes to the presentation of information to the Standing Committees, the Finance and Administration Committee and/or Regional Council for their review and consideration.
- 3. Continued Focus on the Multi Year Economic and Financial Forecast, Ten Year Capital Forecast, and 2019 Property Tax Budget Guideline

"Annual user rate and property tax-supported service and financing studies drive Durham's well established long-term financial planning process to allow it meet fiscal challenges, which feed into annual budgets, which we view as detailed and realistic." – S&P Global Ratings, February 15, 2018

- 3.1 The purpose of the Region's Multi Year Economic and Financial Forecast, Ten Year Capital Forecast, and 2019 Property Tax Budget Guideline is multi-faceted and is intended to:
 - Provide Regional Departments and Regional Council with multi year financial and economic projections to enable the realistic development and prioritization of programs and services and the maximization of efficiencies and affordability for Regional taxpayers;
 - Ensure corporate business plans and the multi year forecast are consistent with approved policy documents;
 - Provide a foundation and starting point for the multi year business planning cycle, including an assessment of the economic and financial environment, risks, climate change, business continuity and performance measurement initiatives;
 - Identify future commitments and resource demands facing the Region, over the next five year period, to enable prudent and timely adjustments to Regional priorities where required;
 - Evaluate short and long-term risks and uncertainties and make recommendations to minimize their potential impact; and
 - Forecast available funding for Regional infrastructure and programs and assess the likelihood that services can be sustained or new investments made.
- 3.2 For the 2019 Regional Business Plans and Budgets, it is proposed that there be a continued focus to clearly identify multi year program plans, program cost estimates, and multi year capital requirements so that Committees and Regional Council can prioritize programs and allocate resources from available revenue sources based on the estimated multi year financial implications.

- 3.3 Generally, the Multi Year Economic and Financial Forecast, Ten Year Capital Forecast, and 2019 Property Tax Budget Guideline Report sets the stage for recommendations regarding property tax guidelines for the upcoming year's annual Business Plans and Budgets for Regional Departments and Outside Boards and Agencies.
- 3.4 The 2019 Multi Year Economic and Financial Forecast, Ten Year Capital Forecast, and 2019 Property Tax Budget Guideline Report is scheduled to be presented to Regional Council on January 30, 2019.

4. Overview of the 2019 Business Planning and Budget Timetable

- 4.1 The 2019 proposed timetable establishes December 19, 2018 and February 27, 2019 as target dates for Regional Council approval of the 2019 Water Supply and Sanitary Sewerage Business Plans and Budgets and all 2019 Property Tax Business Plans and Budgets respectively.
- 4.2 If the Finance and Administration Committee requests changes to the Standing Committee/Board/Agency's Budgets as submitted, the final Regional Council approval target dates of December 19, 2018 and February 27, 2019 could be delayed. If during their detailed business planning review, the Finance and Administration Committee requests changes to a Business Plan or Budget of a Department or Outside Agency/Board, then a further special meeting of the respective Standing Committee or Outside Board/Agency may have to be convened prior to the final Regional Council approval date.
- 4.3 It is important that Regional Council is aware of the financial implications and risks associated with the forecasted Regional programs and service levels for the five year operational planning period and a ten year capital planning horizon prior to setting property tax guidelines for the 2019 Regional Business Plans and Budgets. These issues will be discussed in the Region's Multi Year Economic and Financial Forecast, Ten Year Capital Forecast, and 2019 Property Tax Budget Guideline Report, which will be presented to Regional Council on January 30, 2019.

4.4 The key dates of the preliminary 2019 Business Plan and Budget Timetable as highlighted in the table below, as well as detailed in Attachment #1, may be subject to change based on the finalization of the 2018/2019 Standing Committee and Regional Council meeting schedule.

| Asset Management Plan | June 6, 2018 (Committee of the Whole) June 13, 2018 (Regional Council) |
|--|--|
| Departments and Outside Boards and Agencies (Durham Regional Police Services Board, Durham Region Transit Commission, Conservation Authorities, and Durham Regional Local Housing Corporation) Submit Multi Year Business Plans and Ten Year Capital Plan Estimates to Finance Department | July 18, 2018 |
| 2019 Water and Sewer Servicing and Financing Study 2019 Water and Sewer User Rates Report | December 13, 2018 (Committee of the Whole) December 19, 2018 (Regional Council) |
| 2019 Water and Sewer Business Plans and Budgets | December 12, 2018 (Works Committee) December 12, 2018 (F&A Committee) December 19, 2018 (Regional Council) |
| Multi Year Economic and Financial Forecast, Ten Year Capital Forecast, and 2019 Property Tax Budget Guideline Report | January 15, 2019 (F&A Committee) January 30, 2019 (Regional Council) |
| 2019 Servicing and Financing Studies: Transportation Solid Waste Management Social Housing | January 16, 2019 (Committee of the Whole) January 30, 2019 (Regional Council) |
| 2019 Durham Region Transit Servicing and Financing Study | January 2019 (Transit Executive Committee) January 15, 2019 (F&A Committee) January 30, 2019 (Regional Council) |
| 2019 Durham Region Transit Business Plans and Budget | February 2019 (Transit Executive Committee) February 12, 2019 (F&A Committee) February 27, 2019 (Regional Council) |

| 2019 Departmental Business Plans and Budgets | February 5-7, 2019 |
|--|---------------------------------|
| | (Standing Committees) |
| 2019 Property Tax Funded Business Plans and | February 12, 2019 |
| Budgets for Departments, Outside Boards and | February 13, 2019 (if required) |
| Agencies | (F&A Committee) |
| 2019 Strategic Property Tax Study | February 27, 2019 |
| | (Regional Council) |
| 2019 Property Tax Rates Approved by Regional | February 27, 2019 |
| Council | (Regional Council) |
| | |

5. Next Steps

5.1 The intent of this report is to provide Committee of the Whole and Regional Council with the preliminary timetable for the 2019 Regional Business Plans and Budgets.

Respectfully submitted,

Original Signed By

R.J. Clapp, CPA, CA Commissioner of Finance

Recommended for Presentation to Committee:

Original Signed By

G.H. Cubitt, M.S.W. Chief Administrative Officer

Attach.

TIMETABLE FOR 2019 REGIONAL BUSINESS PLANS AND BUDGETS

A) MULTI YEAR ECONOMIC AND FINANCIAL FORECAST, TEN YEAR CAPITAL FORECAST, AND 2019 PROPERTY TAX BUDGET GUIDELINE *

| 1. | Departments and Outside Boards and Agencies Submit Estimates to Finance Department | July 18, 2018 |
|----|--|-------------------------------------|
| 2. | Finance & Administration Committee Review and Approval of Multi Year Economic and Financial Forecast, Ten Year Capital Forecast, and 2019 Property Tax Budget Guideline Report | January 15, 2019 (F&A Committee) |
| 3. | Regional Council Review and Approval of Multi Year Economic and | January 30, 2019 |
| | Financial Forecast, Ten Year Capital Forecast, and 2019 Property Tax Budget Guideline Report | (Regional Council) |

B) 2019 DETAILED BUSINESS PLANS AND BUDGETS - WATER & SEWER *

| 1. | 2019 Detailed Initial Water and Sewer Business Plans and Budgets | September 4, 2018 |
|----|--|--------------------------|
| | Submitted to Finance Department | |
| | | |
| 2. | Works Committee Review and Approval of: | December 12, 2018 |
| | 2019 Detailed Water and Sewer Business Plans and Budgets | (Works Committee) |
| | | |
| 3. | Finance & Administration Committee Review and Approval of: | December 12, 2018 |
| | 2019 Detailed Water and Sewer Business Plans and Budgets | (F&A Committee) |
| | | |
| 4. | Committee of the Whole Review and Approval of: | December 13, 2018 |
| | 2019 Water and Sewer Servicing and Financing Study | (Committee of the Whole) |
| | 2019 Water and Sewer User Rates | |
| | | |
| 5. | Regional Council Review and Approval of: | December 19, 2018 |
| | 2019 Water and Sewer Servicing and Financing Study | (Regional Council) |
| | 2019 Water and Sewer User Rates | |
| | 2019 Detailed Water and Sewer Business Plans and Budgets | |

^{*} Dates are subject to change based on the finalization of the 2018/2019 Committee and Council meeting schedule

TIMETABLE FOR 2019 REGIONAL BUSINESS PLANS AND BUDGETS

C) 2019 DETAILED BUSINESS PLANS AND BUDGETS – PROPERTY TAX *

| 1. | Committee of the Whole and Regional Council Review and Approval of: | June 6, 2018 |
|----|--|---|
| | Asset Management Plan | (Committee of the Whole) |
| | | June 13, 2018 |
| | | (Regional Council) |
| 2. | Departments and Outside Boards and Agencies Submit Initial Detailed | September 4, 2018 |
| | Business Plans and Budgets to Finance Department | , 2010 |
| | · | |
| 3. | Committee of the Whole and Regional Council Review and Approval of: | January 16, 2019 |
| | 2019 Transportation Servicing and Financing Study | (Committee of the Whole) |
| | 2019 Solid Waste Management Servicing and Financing Study | January 30, 2019 (Regional Council) |
| | 2019 Social Housing Servicing and Financing Study | (Regional Council) |
| 4. | Durham Regional Local Housing Corporation (DRLHC) Review and | January 30, 2019 |
| | Approval of: | (DRLHC Board) |
| | 2019 Durham Regional Local Housing Corporation Business | , |
| | Plans and Budget | |
| 5. | Transit Executive Committee, Finance & Administration Committee and | January 2019 |
| 5. | Regional Council Review and Approval of: | (Transit Executive Committee) |
| | 2019 Durham Region Transit Servicing and Financing Study | January 15, 2019 |
| | 2010 Damain Region Transit Controlling and Timationing Classy | (F&A Committee) |
| | | January 30, 2019 |
| | | (Regional Council) |
| 6. | Standing Committee Review and Approval of 2019 Departmental | T |
| 0. | Business Plans and Budgets | |
| | Planning and Economic Development | February 5, 2019 (Planning) |
| | Works General Tax and Solid Waste Management | February 6, 2019 (Works) |
| | Health and Social Services | February 7, 2019 (H&SS) |
| | Durham Region Transit | February 2019 |
| | - | (Transit Executive Committee) |
| 7. | Finance & Administration Committee Review and Approval of: | February 12, 2019 |
| 1 | 2019 Departmental Business Plans and Budgets | February 13, 2019 (if required) |
| | 2019 Durham Region Transit Business Plans and Budget | (F&A Committee) |
| 1 | 2019 Durham Regional Police Service Business Plans and | , |
| | Budget | |
| | 2019 Conservation Authorities Business Plans and Budgets | |
| | 2019 Strategic Property Tax Study | |
| 0 | Degianal Council Davious and Approval of | Fohmung 27, 2040 |
| 8. | Regional Council Review and Approval of: • 2019 Property Tax Funded Business Plans and Budgets | February 27, 2019 (Regional Council) |
| | 2019 Property Tax Funded Business Plans and Budgets 2019 Strategic Property Tax Study | (Negional Council) |
| | 2019 Strategic Froperty Tax Study 2019 Property Tax Rates | |
| | - 2010 Flopolity Tax Nation | |

^{*} Dates are subject to change based on the finalization of the 2018/2019 Committee and Council meeting schedule

If this information is required in an accessible format, please contact 1-800-372-1102 ext. 2304



The Regional Municipality of Durham Report

To: Committee of the Whole From: Commissioner of Finance

Report: #2018-COW-88 Date: #2018-COW-88

Subject:

Brock Community Health Centre Request for Capital Funding

Recommendation:

That the Committee of the Whole recommends to Regional Council:

That Brock Community Health Centre's request for funding for their new build capital project be approved at a maximum of \$225,000 in accordance with the established funding guidelines; with the required financing to be provided from the Region's Hospital Reserve Fund; and further, that funds be released to the Brock Community Health Centre at the discretion of the Commissioner of Finance for the approved capital project subject to the accountability of final capital costs reported upon completion.

Report:

1. Purpose

1.1 The purpose of this report is to respond to the following referral from Committee of the Whole on April 4, 2018 regarding the presentation and request for Region of Durham funding for the Brock Community Health Centre (BCHC) capital project:

That the delegation from J. McPherson regarding the Brock Community Health Centre and comments from the committee be referred to staff for review and report to the May 2018 Committee of the Whole meeting.

2. Brock Community Health Centre's Request for Funding

2.1 On April 4, 2018, Janet McPherson, Executive Director of BCHC appeared before Committee of the Whole to seek support and funding for the BCHC's new build capital project.

- 2.2 BCHC is a charitable, non-profit organization that provides the following free and confidential services to Durham's northern community:
 - Primary care services
 - Diabetes Education Program
 - Brock Geriatric Assessment Services
 - Ontario Telemedicine Network
 - Community Development/Health Promotion
- 2.3 The capital project is for the construction of a 21,000 square foot facility at 39 Cameron Street West, Cannington, in the Township of Brock. The new facility will provide a community health hub for Durham's northern communities, increasing the number of clients served through more efficient service delivery resulting from an increased number of client rooms. The construction of the building is anticipated to take approximately 18 to 24 months.
- 2.4 The total estimated capital cost of the project including design/engineering, construction, furniture, fixtures and equipment (FF&E), and contingency allowance is \$9.68 million. The province has committed \$8.78 million in funding towards the capital project with \$0.9 million to be funded in the community.
- 2.5 The Rurality Index in Ontario is supported by both the Ontario Medical Association (OMA) and the Ministry of Health and Long-Term Care (MOHLTC) and is used in part to determine certain incentives or funding levels. The 100 point index consists of three main components namely, size of population, travel time to nearest basic medical referral centre and travel time to nearest advanced medical referral centre. The Township of Brock is unique in Durham Region with a rurality index of 40, significantly higher than the rest of the Durham Region, reflecting the more limited access to health care services in the Township of Brock.
- 2.6 Matthew Anderson, President and CEO of Lakeridge Health, has provided a letter of support for the BCHC's new build capital project indicating an opportunity to expand local access for acute care services as a result of this capital project. Mr. Anderson also indicates that the project would provide the opportunity for Lakeridge Health to provide in-person consultations as well as increased use of BCHC's Ontario Telemedicine Network (OTN) to provide support to patients so they may stay in their community while receiving the specialist care they need.

3. Background on Region's Funding of Hospital Projects

- 3.1 Through the previous funding of hospital projects, Regional Council has established a precedent for a set of guidelines or conditions upon which future requests for hospital funding would be considered by the Region. These general guidelines include:
 - The need for Provincial project approval;
 - The commitment of at least 70 per cent Provincial funding;
 - The necessity of financing including donations raised from the community;

- Region's contribution representing 25 per cent of the community component (7.5 per cent of the total costs assuming 70 per cent Provincial funding); and
- Proof of project benefits to residents of the entire Region.
- 3.2 The BCHC project meets the general guidelines listed above and as Provincial funding has been approved for approximately 90 per cent of the total project costs, it is recommended that the Region contribute the maximum amount provided under the Region's policy to the community component of the capital project (i.e. 25 per cent of the total community component).

4. Financial Implications

- 4.1 The BCHC has indicated that the total estimated capital budget including design/engineering, construction, FF&E and contingency allowance is \$9.68 million, of which the Province to date has committed \$8.78 million in funding, with \$0.9 million to be raised in the community.
- 4.2 Applying the Region's funding model of up to 25 per cent of the community component of the capital project, the contribution to the BCHC would be \$225,000.
- 4.3 Funding is available in the Region's Hospital Reserve Fund for this contribution. Consistent with previous contributions under the hospital funding program, the funds will be released to the BCHC at the discretion of the Commissioner of Finance subject to the accountability of final capital costs reported upon completion and in accordance with the Region's established funding guideline.
- 4.4 BCHC has indicated that the Region's support and financial commitment to the project will assist them in the launch of their capital campaign and the advancement of the project through the final implementation (construction) stage of the Provincial health capital project planning stages.

5. Conclusions

- 5.1 The BCHC has requested funding for the construction of a 21,000 square foot facility at 39 Cameron Street West, Cannington, in the Township of Brock. The Province has committed \$8.78 million towards the \$9.68 million project budget, with \$0.9 million to be raised in the community.
- 5.2 Given the limited access to health care services in the Township of Brock as evidenced by the high rurality index of 40 and consistent with the Region's funding of hospital projects, it is recommended that the Region fund 25 per cent of the community component of the BCHC capital project to a maximum of \$225,000, subject to the accountability of final capital costs. Funding is available in the Region's Hospital Reserve Fund for this contribution.

Respectfully submitted,

Original signed by R.J. Clapp

R. J. Clapp, CPA, CA Commissioner of Finance

Recommended for Presentation to Committee

Original signed by G.H. Cubitt

G.H. Cubitt, MSW Chief Administrative Officer If this information is required in an accessible format, please contact 1-800-372-1102 ext. 2304



The Regional Municipality of Durham Report

To: Committee of the Whole From: Commissioner of Finance

Report: #2018-COW-94 Date: May 2, 2018

Subject:

Public Transit Infrastructure Fund Phase II

Recommendation:

That Committee of the Whole recommend to Regional Council that this report be received for information.

Report:

1. Purpose

- 1.1 The purpose of this report is to provide information on the Public Transit Infrastructure Fund (PTIF) Phase II.
- 1.2 A similar report was presented to the Transit Executive Committee on April 26, 2018.

- 2.1 In March 2018, the Canadian and Ontario Governments released their Canada-Ontario Bilateral Infrastructure Agreement 2018, which included PTIF Phase II.
- 2.2 Under the agreement, the federal government commits to providing \$7.5 billion in funding for transit projects in Ontario, over the next ten years.
- 2.3 The terms of the bi-lateral agreement include:
 - The maximum funding from all federal sources to a PTIF Phase II project cannot exceed:

- Forty per cent of eligible expenditures for new construction and expansion of public transit and active transportation that connects citizens to their public transit systems; and,
- Fifty per cent of Eligible Expenditures for public transit rehabilitation Projects.
- A maximum of 15 per cent of federal public transit funding may be applied to public transit rehabilitation projects.
- The Provincial government has committed to provide 33.33 per cent of the total eligible PTIF Phase II project expenditures.
- The Province will submit for federal review and approval all projects to be considered for funding.
- All PTIF Phase II projects must be completed by October 2027.
- 2.4 Municipalities (including Durham) will be required to finance 26 per cent to 27 per cent of the eligible capital costs depending on the share of rehabilitation and new expansion transit capital projects that are undertaken.
- 2.5 Staff have not yet received a draft Transfer Payment Agreement (TPA) for PTIF
 Phase II from the Province, which is administering the funding program. A timeline
 for the receipt and execution of the TPA is not available.

3. Project Planning

- 3.1 An interdisciplinary team of staff of Durham Region Transit, the Works
 Department, and the Finance Department continue to develop plans and budgets
 for projects that can be implemented within the next nine years, would qualify for
 PTIF Phase II funding and reflect priorities of the recent Transportation Master
 Plan and DRT's service strategy. Projects under consideration include advancing
 Highway 2 BRT, a new central indoor bus storage facility, articulated buses, and
 preparatory activities for rapid transit on Simcoe Street in the City of Oshawa.
- 3.2 PTIF Phase II project submission procedures and submission deadlines are not yet available.

4. Financial Implications

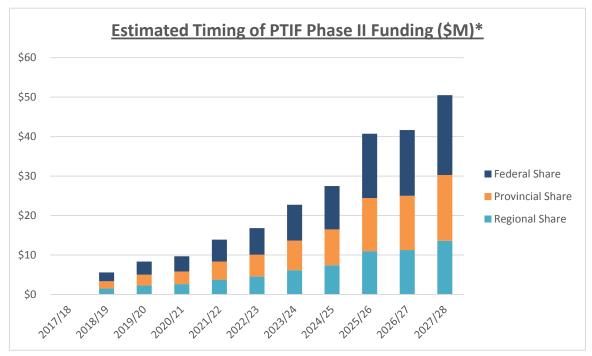
4.1 Durham Region is expected to receive up to \$95.0 million in federal funding and \$78.4 million in provincial funding under the PTIF Phase II program. Funding of \$59.3 to \$64.1 million will be required to cover the Region's share of the eligible

costs. In addition to the Region's share of eligible project costs, it is estimated the Region could incur \$40-\$50 million in ineligible property acquisition and staffing costs for project implementation. Implementation will also have implications for DRT's annual operating costs, primarily related to the new central bus facility.

Durham Region PTIF Phase II Funding

| | 15% Rehabilit 85% Expans | • • | 100% Expansion Capital | |
|-------------------------|-----------------------------|----------------|------------------------|----------------|
| | Amount (\$M) | Per Cent Share | Amount (\$M) | Per Cent Share |
| Federal Contribution | \$94.99 | 41 | \$94.99 | 40 |
| Provincial Contribution | \$76.01 | 33 | \$78.37 | 33 |
| Regional Contribution | \$59.34 | 26 | \$64.11 | 27 |
| Total Funding | \$230.35 | 100 | \$237.47 | 100 |

4.2 The Canada-Ontario bilateral agreement provides a schedule of cash flows for federal PTIF Phase II contributions to Ontario, over the next ten years. Assuming similar phasing of annual funding to municipalities, the following schedule of total PTIF Phase II program funding (including Federal, Provincial, and Regional funding) can been estimated for Durham Region:



^{*} These staff estimates have been derived from information available in the Canada-Ontario Bilateral Infrastructure Agreement 2018.

- 4.3 As all projects must be completed by October 2027, large scale roadwork and facility construction projects would need to commence within the next few years, prior to the final years of the 10-year program when the largest shares of funding become available. Meanwhile, depending on the terms of the Region's Transfer Payment Agreement (TPA), there may be a risk that grant allocation amounts could be modified by future senior governments.
- 4.4 The following table shows preliminary high level cost estimates for Durham's projects under consideration for PTIF Phase II funding:

Preliminary PTIF Phase II Project Cost Estimates (\$M)*

| | Eligible Costs | Ineligible Costs ** | Total |
|---|----------------|---------------------|-------|
| Advancement of Highway 2 BRT | 172.0 | 48.0 | 220.0 |
| A new central facility | 55.0 | - | 55.0 |
| Articulated buses | 8.0 | - | 8.0 |
| Preparatory activities for rapid transit on Simcoe Street | 2.5 | - | 2.5 |
| Total Cost Estimates | 237.5 | 48.0 | 285.5 |

^{*} Estimates are subject to change as plans are further developed and more information on ineligible costs becomes available.

- 4.5 PTIF Phase II project costs and a financing strategy will be recommended once a draft TPA is available and all terms of the funding agreement are known. The financing strategy will address:
 - The Region's share of eligible project costs;
 - Ineligible project costs, including land acquisition, and project delivery costs associated with planning, engineering, architecture, supervision, management and other activities normally carried out by Regional staff;
 - Additional operating and maintenance costs associated with growth capital;
 - Risks relating to grant cash flow timing and project cost timing (Region cash flow of federal and provincial funds); and
 - Measures to mitigate risks related to uncertainty around senior government grant funding over a ten year program.

5. Conclusion and Next Steps

5.1 Staff continue to work towards project plans and financing strategies for PTIF

^{**} Amounts shown do not include \$5 million that was provided in the 2018 transportation capital budget for property acquisition for BRT projects along Regional Highway 2, or \$4.25 million for property acquisition for a new facility that was provided in the DRT 2018 capital budget, in anticipation of potential funding opportunities from senior levels of government.

Phase II and will report back to the Committee of the Whole with proposed projects and financial implications, after further details of the program and project submission procedures are known. In addition, when the PTIF Phase II Transfer Payment Agreement is available, authorization will be sought from the Committee of the Whole to execute the agreement, and any other necessary documentation, including the necessary by-law.

Respectfully submitted,

Original Signed by R.J. Clapp

R.J. Clapp, CPA, CA Commissioner of Finance

Recommended for Presentation to Committee

Original Signed by G.H. Cubitt

G.H. Cubitt, MSW Chief Administrative Officer If this information is required in an accessible format, please contact 1-800-372-1102 ext. 2304



The Regional Municipality of Durham Report

To: Committee of the Whole From: Commissioner of Finance

Report: #2018-COW-95 Date: #2018

Subject:

Joint Bus Procurement Results

Recommendation:

That the Committee of the Whole recommends to Regional Council:

- 1) That the award of the 2017 Metrolinx-hosted RFP for 12-metre and 18-metre transit buses to Nova Bus be approved; and
- That the Commissioner of Finance be authorized to sign the related purchase agreements.

Report:

1. Purpose

- 1.1 The purpose of this report is to recommend the award of the 2017 Metrolinx-hosted RFP for buses to Nova Bus for 12-metre and 18-metre transit buses.
- 1.2 A similar report was presented to the Transit Executive Committee on April 26, 2018.

2. Discussion

- 2.1 Durham Region Transit participates in the Metrolinx-sponsored Joint Transit Procurement Initiative along with other Ontario transit agencies. DRT has been participating in the development of the successive Requests for Proposals (RFPs) and in the evaluation of proposals.
- 2.2 The latest RFP for twelve-metre and eighteen-metre buses was issued by Metrolinx on February 9, 2017 and closed April 24, 2017. Two proposals were

received: one from New Flyer Industries and one from Nova Bus. Both were deemed compliant and a technical evaluation was performed on each. Through the process, a Fairness Commissioner was retained by Metrolinx. Pricing submissions were opened on conclusion of the technical evaluation. Technical and price scoring were weighed equally. The proposal from Nova Bus scored higher and was deemed the successful bidder.

2.3 The base bus price is used as a starting point, with each of the participating transit agencies having the possibility of outfitting the bus with a limited number of features, options and configurations (with corresponding price adjustment) for compatibility with their respective existing fleet. The purchase of replacement and growth-related buses was approved in the DRT capital budget for 2018.

3. Next Steps

3.1 Upon execution of the necessary documents with Nova Bus, DRT will order buses as approved in the 2018 budget with delivery based on production line opportunities.

Respectfully submitted,

Original Signed by R.J. Clapp

R.J. Clapp, CPA, CA Commissioner of Finance

Recommended for Presentation to Committee

Original Signed by G.H. Cubitt

G.H. Cubitt, MSW Chief Administrative Officer If this information is required in an accessible format, please contact 1-800-372-1102 ext. 2097



The Regional Municipality of Durham Report

To: The Committee of the Whole

From: Commissioner of Corporate Services

Report: #2018-COW-77 Date: #2018

Subject:

Community Member Appointment to the Durham Regional Police Services Board

Recommendations:

That the Committee of the Whole recommends to Regional Council:

- A) That the following process for the appointment of a new community member to the Durham Regional Police Services Board be adopted, which includes
 - i) Corporate Services –Legislative Services placing advertisements for interested community members in the local newspaper(s);
 - ii) The review of all applicants by a Selection Committee comprised of the Regional Chair and the Chairs of the Standing Committees, as selected on December 5, 2018 at the first meeting of Council;
 - iii) Interviews of qualified applicants by the Selection Committee; and
 - iv) A recommendation by the Selection Committee for the consideration of Regional Council in early 2019.
- B) That the Corporate Services Legislative Services division be authorized to take all administrative steps necessary to give effect to this process; and
- C) That the term of appointment for the current community member on the Durham Regional Police Services Board be extended to no later than the date that a new community member is appointed by Regional Council.

Report:

1. Purpose

- 1.1 The purpose of this report is to initiate the process for the selection of a community member for appointment to the Durham Regional Police Services Board by Regional Council for the next term.
- 1.2 In preparation for the process of Committee/Board appointments after the municipal election in October 2018, the Corporate Services Legislative Services division wishes to seek approval to advertise in the local newspapers in September 2018 for individuals interested in serving as the community member on the Durham Regional Police Services Board, with the deadline for applications in November 2018. This will allow the opportunity for interested individuals to submit applications to the Regional Clerk in advance of the municipal election for the review and consideration by the Selection Committee in January 2019.

- 2.1 The Durham Regional Police Services Board is a seven member board made up of the following:
 - a) the head of the municipal council or, if the head chooses not to be a member of the board, another member of the council appointed by resolution of the council;
 - b) two members of the council appointed by resolution of the council;
 - one person appointed by resolution of the council, who is neither a member of the council nor an employee of the municipality; and
 - d) three persons appointed by the Lieutenant Governor in Council.
- 2.2 In 1997, Bill 105, the *Police Services Amendment Act 1997*, provided for a community member appointment to the Durham Regional Police Services Board and, at that time, the Ministry of the Solicitor General and Correctional Services, Policing Services Division, offered the following guidelines:
 - an advertisement be placed in local newspapers seeking a community member to serve on the Police Services Board, which would provide the Selection Committee with applications for review; and
 - candidates undergo an interview conducted by a panel to determine their understanding of the role of the Police Services Board in the community, especially as it relates to the aspect of civilian governance of a police service.
- 2.3 Although the *Police Services Act* does not specify that board members must reside in the municipality in which they serve, the Province has stated in the past that it prefers the board members have ties to the community either through residence or ownership of a business.

2.4 It is suggested by the Ministry that the interview include discussion of the time commitment involved in serving on a police services board. On average, approximately 20 hours per month are required to carry out the duties. In addition to the regular monthly board meetings, candidates should be made aware that there are training sessions, zone meetings, conferences and sub-committee meetings to attend. Often, applicants to police services boards are unaware of the considerable time commitment above and beyond one meeting per month that is required to perform this function.

3. Conclusion

- 3.1 The purpose of this report is to initiate the process for the selection of a community member to the Durham Regional Police Services Board.
- 3.2 An advertisement will be placed by Legislative Services in newspapers within each of the Area Municipalities in September 2018. Applications will be received by Legislative Services and forwarded to the Selection Committee for review and recommendation to Regional Council.
- 3.3 It is anticipated that the Selection Committee would submit their recommendation to Regional Council no later than the February 2019 Regional Council meeting.
- 3.4 Remuneration paid to the community member will be at the same rate paid to the Provincial appointees. The current amount of remuneration for 2018 is \$11,298.00 per annum.
- 3.5 The first meeting of the Durham Regional Police Services Board in 2019 is currently scheduled for January 14, 2019. It is recommended that the term of appointment for the current community member on the Durham Regional Police Services Board be extended to no later than the date that a new community member is appointed.

Respectfully submitted,

| Original signed by |
|---|
| D. Beaton, BCom, M.P.A. Commissioner of Corporate Services |
| Recommended for Presentation to Committee |
| Original signed by |
| G.H. Cubitt, MSW Chief Administrative Officer |



The Regional Municipality of Durham Report

To: Committee of the Whole

From: Commissioner of Corporate Services

Report: #2018-COW-78 Date: #2018

Subject:

Delegation of signing authority to the Regional Chair and Chief Administrative Officer for execution of Labour Relations/Employee Negotiations during Lame Duck Period

Recommendation:

That the Regional Chair and Chief Administrative Officer be authorized to execute ratified negotiation agreements for potentially up to six collective bargaining units during the Lame Duck Period of Council provided that the terms of such agreements do not deviate from existing approved direction.

Report:

- 1.1 The Region is currently a party to eight local collective agreements. These agreements are typically renewed every two to four years. It generally takes the Region three years to complete negotiations with all eight bargaining units. This period is often referred to as a "bargaining cycle".
- 1.2 At present the Region has completed bargaining with two of the eight bargaining units and has been served notice to bargain from the remaining six bargaining units.
- 1.3 With the potential of a Lame Duck Council this could delay ratification and potentially impede a timely bargaining cycle.
- 1.4 As such, staff are requesting that the Regional Chair and Chief Administrative Officer be authorized to execute collective bargaining agreements that have been ratified by the respective bargaining group.
- 1.5 Per confidential report 2016-A-7 approved by Regional Council which outlines the Region's direction with respect to bargaining, staff would ensure that Council direction is followed before reaching an agreement with the collective bargaining units.

1.6 The Commissioner of Corporate Services would report back to Council in January 2019 with confidential information reports as to the agreements that were finalized during the Lame Duck Council period.

2. Conclusion

2.1 That the Regional Chair and Chief Administrative Officer be authorized to execute ratified contract negotiations during the Lame Duck Council period and that the Commissioner of Corporate Services report back in January 2019 with a confidential information update report on such agreements.

Respectfully submitted,

Original signed by

D. Beaton, BCom, M.P.A. Commissioner of Corporate Services

Recommended for Presentation to Committee

Original signed by

G.H. Cubitt, MSW Chief Administrative Officer If this information is required in an accessible format, please contact 1-800-372-1102 ext. 3111



The Regional Municipality of Durham Information Report

From: Commissioner and Medical Officer of Health

Report: #2018-INFO-58 Date: #2018-INFO-58

Subject:

2017 Performance Report

Recommendation:

Receive for information

Report:

1. Purpose

- 1.1 To provide an update on the performance of Durham Region Health Department's (DRHD's) programs and services.
- 1.2 The 2017 Performance Report has been posted on durham.ca at:

 https://www.durham.ca/en/health-and-wellness/resources/Documents/HealthInformationServices/2017PerformanceReport.pdf

- 2.1 DRHD's Performance Report includes performance of its Chronic Diseases & Injuries Programs, Environmental Health & Emergency Preparedness Programs, Family Health Programs, Infectious Diseases Programs, Paramedic Services and Professional & Administrative Services.
- 2.2 The Performance Report is a key component of the Health Department's 'Accountability Framework' that also includes: the Health Plan; Program Reports; Health Information updates; Quality Enhancement Plans; Durham Health Check-Ups; business plans and budgets; provincial performance indicators and targets, monitoring, compliance audits and assessments; RDPS certification; and accreditation by Accreditation Canada.

3. Highlights

- 3.1 The first section measures the implementation of the 2017 Health Plan priorities. In summary, of the 102 priorities: 91 were completed (89%); 7 are in progress (7%); and 4 (4%) are incomplete. This section also lists the statutory or policy requirements for each program, and the estimated compliance with these requirements, where relevant. In 2017, all applicable requirements were addressed and compliance is estimated at 100%.
- 3.2 The second section lists DRHD's key accomplishments and quantifies the first section.
- 3.3 The third section of the Performance Report lists the major research & evaluation projects and student teaching activities by Division. In many instances, activities were carried out in collaboration with local and/or provincial partners. This section complements the periodic reports on ethics reviewed research & evaluation conducted by Health staff and their partners that are noted in the regular Program Reports.
- 3.4 The Appendix lists the *Ontario Public Health Organizational Standards* requirements and summarizes DRHD's corresponding level of compliance.

Respectfully submitted,

Original signed by

R.J. Kyle, BSc, MD, MHSc, CCFP, FRCPC, FACPM Commissioner & Medical Officer of Health



The Regional Municipality of Durham Information Report

From: Commissioner and Medical Officer of Health

Report: #2018-INFO-59 Date: April 13, 2018

Subject:

2018 Health Plan

Recommendation:

Receive for information

Report:

1. Purpose

- 1.1 To provide an update on Durham Region Health Department's (DRHD's) priorities for 2018.
- 1.2 The 2018 Health Plan has been posted on durham.ca at:
 https://www.durham.ca/en/health-and-wellness/resources/Documents/HealthInformationServices/2018HealthPlan.pdf

- 2.1 The aim of the Health Plan is to report DRHD's annual priorities, according to its families of programs and services. Priorities are based on DRHD's vision, mission, mandate and programs.
- 2.2 In an effort to streamline reporting and align with the modernized *Ontario Public Health Standards: Requirements for Programs, Services, and Accountability*, priorities are reported under the following program categories: Administration; Health Analytics, Research & Policy; Health Protection; Healthy Families; Healthy Living; Infectious Diseases; and Paramedic Services.
- 2.3 The Health Plan is a key component of the Health Department's 'Accountability Framework' that also includes: the Performance Report; Program Reports; Health Information updates; Quality Enhancement Plans; Durham Health Check-Ups; business plans and budgets; provincial performance indicators and targets, monitoring, compliance audits and assessments; RDPS certification; and

accreditation by Accreditation Canada.

3. Highlights

- 3.1 The first section of the 2018 Health Plan articulates program goals and 68 priorities which reflect rigorous program and evaluation plans and reviews.
- 3.2 The second section lists program managers and standing coordination committee leads.

Respectfully submitted,

Original signed by

R.J. Kyle, BSc, MD, MHSc, CCFP, FRCPC, FACPM Commissioner & Medical Officer of Health



Interoffice Memorandum

Date: April 13, 2018

To: Committee of the Whole

From: Dr. Robert Kyle

Health
Department

Subject: Health Information Update – April 6, 2018

Please find attached the latest links to health information from the Health Department and other key sources that you may find of interest. Links may need to be copied and pasted directly in your web browser to open, including the link below.

You may also wish to browse the online Health Department Reference Manual available at Board of Health Manual, which is continually updated.

Boards of health are required to "superintend, provide or ensure the provision of the health programs and services required by the [Health Protection and Promotion] Act and the regulations to the persons who reside in the health unit served by the board" (section 4, clause a, HPPA). In addition, medical officers of health are required to "[report] directly to the board of health on issues relating to public health concerns and to public health programs and services under this or any other Act" (sub-section 67.(1), HPPA).

Accordingly, the Health Information Update is a component of the Health Department's 'Accountability Framework', which also may include program and other reports, Health Plans, Quality Enhancement Plans, Durham Health Check-Ups, Performance Reports, business plans and budgets; provincial performance indicators and targets, monitoring, compliance audits and assessments; RDPS certification; and accreditation by Accreditation Canada.

Respectfully submitted,

Original signed by

R.J. Kyle, BSc, MD, MHSc, CCFP, FRCPC, FACPM Commissioner & Medical Officer of Health

"Service Excellence for our Communities

UPDATES FOR COMMITTEE OF THE WHOLE April 6, 2018

Health Department Media Releases/Publications

https://goo.gl/6wbsYK

• Vector-Borne Diseases Annual Report 2017 (Mar 21)

https://goo.gl/pDqH2y

• It's that time of year; Child care centre immunization notices are here! (Mar 26)

https://goo.gl/36zEhJ

 Listeriosis outbreak linked to Druxy's Famous Deli, Princess Margaret Cancer Centre (Mar 26)

https://goo.gl/ZqXAmd

 Health Department's "Brush Up on the Facts" campaign urges parents to keep their kids' teeth healthy during Oral Health Month (Apr 3)

GOVERNMENT OF CANADA

Canada Mortgage and Housing Corporation

https://goo.gl/1oPQjj

• Governments of Canada and Ontario celebrate affordable housing in Durham Region (Mar 23)

Canadian Food Inspection Agency

https://goo.gl/3Ac7ZC

• The Government of Canada is working with the poultry industry to reduce the risk of Salmonella illness from frozen raw breaded chicken products (Mar 13)

https://goo.gl/MXzHjb

 Food Recall Warning – Druxy's Fresh Deli Revolution brand Seasoned Cooked Roast Beef recalled due to Listeria monocytogenes (Mar 27)

Environment and Climate Change Canada

https://goo.al/RBxR4k

 Low Carbon Economy Challenge will leverage Canadian ingenuity to reduce carbon pollution and drive clean growth (Mar 14)

https://goo.gl/DtxS6v

• New report confirms Canada's air continues to get cleaner (Mar 20)

https://goo.gl/zdS81v

• The Governments of Canada and Ontario announce funding to help people in Ontario save energy and money in their homes and businesses (Apr 4)

https://goo.gl/cy8vgp

 The Government of Canada is helping Canadians understand and adapt to our changing climate (Apr 4)

Health Canada

https://goo.gl/3wUVBv

 Health Canada releases summary of comments from cannabis regulatory consultations (May 19)

https://goo.gl/cS5UkC

 Health Canada proposes to restrict the alcohol content of single-serve highly sweetened alcoholic beverages (Mar 19)

https://goo.gl/XbRXe1

 The Honourable Ginette Petitpas Taylor, Minister of Health announces new measures to reduce barriers to treatment and \$231 M to address the opioid crisis (Mar 26)

https://goo.gl/ycAZqv

 Health Canada releases report from external review of pan-Canadian health organizations (Mar 27)

Infrastructure Canada

https://goo.gl/tQiSk4

 New public transit funding available for transformative infrastructure projects in Durham Region (Mar 16)

Public Health Agency of Canada

https://goo.gl/fGMAsG

 Statement from the CPHO – The time is now – joining forces to eliminate tuberculosis in Canada (Mar 22)

https://goo.gl/izWhQe

 Statement from the Co-Chairs of the Special Advisory Committee on the Epidemic of Opioid Overdoses on Updates to Opioid-Related Mortality Data (Mar 27)

https://goo.gl/mfHgWo

 Public Health Agency of Canada Releases First-Ever National Autism Spectrum Disorder (ASD) Statistics (Mar 29)

Public Safety Canada

https://goo.gl/JiaXuY

Statement on the First National Impaired Driving Prevention Week (Mar 19)

https://goo.gl/z51fE2

Firearms Legislation to Make Communities Safer (Mar 20)

https://goo.gl/A28rri

• Government supports launch of emergency alerting capability on smartphones (Apr 6)

Transport Canada

https://goo.gl/dkBPoy

New safety powers granted to protect Canadians from vehicle defects (Mar 12)

https://goo.gl/nfLtQo

Transport Canada goes ghostbusting, targets 'phantom vehicles' (Mar 21)

GOVERNMENT OF ONTARIO

Office of the Premier

https://goo.gl/fi74kU

Making Life More Affordable in Ontario (Mar 12)

https://goo.gl/pfsuyj

 Climate Change Action Plan Helping Families and Businesses Save Money While Lowering Emissions (Mar 14)

https://goo.gl/95o9SH

Making Transit More Affordable (Apr 5)

https://goo.gl/83tR8p

Ontario Commits Over \$11 Billion to Build First Phase of High Speed Rail (Apr 6)

Ontario Ministry of Agriculture, Food and Rural Affairs

https://goo.gl/2QiZZc

 Ontario Growing More Opportunities for Local Food in Public Sector Organizations (Mar 19)

Ontario Ministry of Finance

https://goo.gl/FrHjJZ

Ontario Supporting Horse Racing, Strengthening Local Economies (Mar 23)

https://goo.gl/gfjm56

Delivering a Plan for Care and Opportunity (Mar 28)

Ontario Ministry of Labour

https://goo.gl/6gfMV9

 Ontario Expanding Job-Protected Leave for Survivors of Domestic or Sexual Violence (Mar 13)

https://goo.gl/Q1j4UX

 New Rules Mandating Equal Pay for Equal Work to Come Into Effect April 1 (Mar 15)

Ontario Ministry of Tourism, Culture and Sport

https://goo.gl/tphzvx

 Ontario Athletes Contribute to a Record-Breaking Performance at 2018 Winter Paralympics (Mar 20)

Ontario Ministry of Transportation

https://goo.gl/U7YadP

Ontario Adding More Service on GO Transit and UP Express (Mar 16)

https://goo.gl/ZaaPKo

 All-Day, Two-Way GO Train Service Coming to Communities Across GTHA (Mar 26)

Treasury Board Secretariat

https://goo.gl/7TESsd

• 2017 Ontario Public Sector Salaries Disclosed (Mar 23)

OTHER ORGANIZATIONS

Alzheimer Society of Canada

https://goo.gl/DXX4W9

 Too many Canadians face lack of understanding, support from others when caring for a family member with dementia (Apr 3)

Canada Health Infoway

https://goo.gl/R5J41e

 Connected Health Information Delivers Significant Value and the Health System (Apr 4)

Canada's Ecofiscal Commission

https://goo.gl/hgMSkT

 Ecofiscal Commission Urges Governments to Clearly Communicate how their Carbon Pricing Policies are Working (Apr 4)

Canada's Research Chairs

https://goo.gl/vfapKL

• Canada's Brain Gain. Round 2. (Mar 29)

Canadian Institute of Health Information

https://goo.gl/TDUrmo

 Measuring access to mental health and addiction services and to home and community health care (Mar 22)

Canadian Institutes of Health Research

https://goo.gl/A515Q2

 Government of Canada continues to invest in research to address global health threat of antimicrobial resistance (Mar 16)

Canadian Partnership Against Cancer

https://goo.gl/v5sQN9

 Canada's largest health research platform teams up with University of Toronto to accelerate cancer and chronic disease research (Mar 29)

Canadian Water Network

https://goo.gl/9EghrZ

 Canadians will need to spend more on water to maintain high quality systems (Mar 22)

Cancer Care Ontario

https://goo.gl/sXeHqZ

• Health inequities put many Ontarians at higher risk of certain cancers (Apr 4)

Central East LHIN

http://www.centraleastlhin.on.ca/

Opioid Strategy Presented to Central East LHIN Board (Mar 28)

Conference Board of Canada

https://goo.gl/ibc7Ew

 Canadian Employers Preparing for Increases in Employee Medical Leaves (Mar 22)

Conservation Ontario

https://goo.gl/1frq5B

 New Conservation Authority Watershed Report Cards Reveal Stressed Conditions in Our Watersheds (Mar 22)

Financial Accountability Office of Ontario

https://goo.gl/zzcdP1

Ontario continues to face health funding pressure (Mar 14)

Institute for Clinical Evaluative Sciences

https://goo.gl/Gei8Jk

 Study finds more people relying on government catastrophic drug plans and big increase in government spending (Mar 26)

Kidney Foundation of Canada

https://goo.gl/V7GUiW

Kidney failure comes at a high financial cost for many Canadians (Mar 28)

Mental Health Commission of Canada

https://goo.gl/FLCHeo

Caregivers are a critical part of a mental health care team (Apr 3)

https://goo.gl/AcXRro

 Access to publicly-funded psychotherapy is an essential step toward true universal health care (Apr 6)

National Research Council of Canada

https://goo.gl/kUNgMP

 Bright minds work together to develop new strategies for treating brain diseases (Mar 14)

https://goo.gl/EUKTmY

 National Research Council contribution plays key role in newly approved Ebola vaccine (Mar 20)

Office of the Auditor General of Canada

https://goo.gl/uUj1ZC

 Commissioner of the Environment and Sustainable Development releases Collaborative Climate Change Report (Mar 27)

Office of the French Language Services Commissioner

https://goo.gl/3U2guZ

 The Ontario College of Teachers and the Office of the French Language Services Commissioner of Ontario sign a memorandum of understanding on French language services (Mar 13)

Office of the Privacy Commissioner of Canada

https://goo.gl/udqJaP

Privacy Commissioner opens investigation into Loblaw's (Mar 15)

https://goo.gl/6xPnVm

Privacy Commissioner launches Facebook investigation (Mar 20)

Ontario Chamber of Commerce

https://goo.gl/MTgghA

 Pickering 2024 will support Ontario's economy and reduce energy costs: CANCEA analysis (Apr 3)

Ontario Power Generation

https://goo.gl/vsGch2

Hearing Begins for OPG's Pickering Nuclear Station (Apr 4)

Public Health Ontario

https://goo.gl/BgxYQg

PHO Connections (Mar 19)

Trillium Gift of Life Network

https://goo.gl/b8iwbX

This April Take Two Minutes to Help Save Lives (Apr 3)

If this information is required in an accessible format, please contact 1-800-372-1102 ext. 3111



The Regional Municipality of Durham Report

To: Committee of the Whole

From: Commissioner & Medical Officer of Health

Report: #2018-COW-92 Date: #2018

Subject:

The Association of Local Public Health Agencies (alPHa) Call for Board of Health Nominations

Recommendation:

That the Committee of the Whole recommends to Regional Council:

- A) That the nomination of Councillor David Pickles for election to the alPHa Board of Directors for a two-year term to represent the Central East region is endorsed.
- B) That two members of Regional Council are identified to sponsor the nomination and complete the nomination form.

Report:

1. Purpose

1.1. To seek Regional Council's endorsement of the nomination of Councillor David Pickles for election to the alPHa Board of Directors for 2018-2019 and 2019-2020.

- 2.1. The Association of Local Public Health Agencies (alPHa) is accepting nominations for a board of health representative from the Central East region for its Board of Directors for the two-year term of 2018-2019 and 2019-2020.
- 2.2. An election to determine the representatives will be held at the alPHa Board of Health Section meeting on June 12, 2018.
- 2.3. The qualifications for the board of health representative include:
 - a. Active member of an Ontario board of health or regional health committee
 - b. Background in committee and/or volunteer work

- c. Supportive of public health
- d. Able to commit time to the work of the alPHa Board of Directors and its committees
- e. Familiar with the Ontario Public Health Standards
- 2.4. Regional Councillor David Pickles has served on the alPHa Board of Directors as the Central East board of health representative since June 2016. Moreover, Councillor Pickles has expressed an interest in continuing to serve on alPHa's Board of Directors for another two-year term.

3. Conclusion

- 3.1. In order to secure the nomination of Regional Councillor David Pickles as the Central East board of health representative on the alPHa Board of Directors for 2018-2019 and 2019-2020, nomination forms must be submitted to alPHa by June 1, 2018.
- 3.2. A copy of Regional Council's motion to approve the nomination is required as well as identification of two members to sponsor the nomination.

Respectfully submitted,

Original signed by

R.J. Kyle, BSc, MD, MHSc, CCFP, FRCPC, FACPM Commissioner & Medical Officer of Health



The Regional Municipality of Durham Report

To: Committee of the Whole

From: Commissioner & Medical Officer of Health

Report: #2018-COW-96 Date: #2018

Subject:

Additional Information re: Mobile Health Unit

Recommendation:

That the Committee of the Whole recommends to Regional Council:

That this report be received for information.

Report:

1. Purpose

- 1.1. To provide further detail, as directed by Regional Council, on the funding and administration of mobile health services in other regions and the estimated cost of operating mobile health services for outreach services including addiction counselling.
- 1.2. To provide an alternate option and associated costs, for consideration by Regional Council utilizing a community paramedicine model for provision of outreach primary care services, including addiction counselling.

- 2.1. Fentanyl overdoses have been identified as a public health crisis. The Ontario Ministry of Health and Long-Term Care (MOHLTC) has announced that the Health Department will be responsible for new program requirements aligned with the following scope of work: Local Opioid Response; Naloxone Distribution and Training; and Opioid Overdose Early Warning and Surveillance.
- 2.2. Locally, a coordinated region-wide opioid response is under development by a local task force. Membership is comprised of several community stakeholders and planning is being facilitated by the Health Department.
- 2.3. On November 8, 2017, Regional Council approved a motion to:

- a. "determine the estimated cost of operating a mobile health unit staffed with outreach, addiction counselling, medical and health professionals operating in partnership with local health and social service agencies to support and care for at-risk populations across the Region, including those using opioids; and,
- b. "report back on the cost of a mobile health unit for consideration in the 2018 budget" (Delegations, Motions, Notice of Motions: November 8, 2017).
- 2.4. On February 6, 2018, Report #2018-COW-28 provided Committee of the Whole with background information on mobile health services and the estimated cost of purchasing a mobile health unit for outreach services, including addiction counselling. See Attachment #1.
- 2.5. On February 14, 2018, Regional Council approved a motion to refer the report back to staff to identify operating costs and determine how similar services in other regions are administered and funded to inform decisions for Region of Durham.
- 2.6. Mobile health services are transportable healthcare units that enable the provision of community-based care offsite from institutions and healthcare agencies to underserviced populations that may be hard to reach (Guruge et. al., 2009).
- 2.7. Results of an environmental scan indicate that mobile health services currently exist in York/South Simcoe, Peel, Toronto, Elgin St. Thomas, Hamilton, and Thunder Bay. The scope of services vary and may include needle exchange, harm reduction services, naloxone distribution, sexual health screening, hepatitis C outreach, treatment of sexually-transmitted infections (STIs), emergency contraception, vaccinations, oral health care, wound care, addiction services, crisis support, and referrals to other services in the community.
- 2.8. Organizations that administer the mobile health services also vary and include, but are not limited to, the Canadian Mental Health Association of York and South Simcoe, Sherbourne Health Centre, and local community agencies, such as Carea Community Health Centre.
- 2.9. In some cases, where there is a demonstrated need to service large geographical distances, such as communities within the jurisdiction of the Thunder Bay District Health Unit, public health units (PHUs) are the administrators of the mobile health services. Services provided are within the scope and mandate of public health, as outlined in the OPHS).
- 2.10. Funders of mobile services also vary. The Toronto Central LHIN and Central LHIN fund services in their regions, funding or resources may be provided by local community agencies, funding is sometimes secured through grants, or in cases where PHUs are administering public health services in accordance with the OPHS, funding is also provided by public health.
- 2.11. Where funders of the service are not the lead administrators of the service,

- organizations have Memorandums of Understanding (MOUs), contracts, or agreements in place for service provision. MOUs may also be required for other reasons. For example, the oral health bus operated by Toronto Public Health has MOUs in place with numerous community agencies allowing it to park the mobile unit and provide services where required in the community.
- 2.12. Results of a local stakeholder consultation concluded that downtown Oshawa is currently the priority area that needs to be addressed due to its demographics and concentration of those in need of harm reduction services.
- 2.13. Stakeholder feedback identified priority populations as follows: sex trade workers, street involved and marginalized individuals, Indigenous populations, those at risk for infectious diseases and individuals experiencing mental health and addictions issues.
- 2.14. Stakeholders identified current gaps and potential local mobile services as: medical triage for priority populations, abscess and foot care, nourishment, crisis interventions, HIV point of care testing, hepatitis C testing, needle exchange, health promotion and teaching, sexual health, as well as referrals to mental health and addictions treatment and other health or social services. Most of the services identified are primary care services and not within the scope or mandate of public health.
- 2.15. Currently, within Durham Region, needle exchange services and referrals to addictions treatment programs are provided by John Howard Society of Durham Region (JHSDR) through Project X-Change which is funded by the Health Department. Services are provided in offices located in Ajax, Clarington, Oshawa and Whitby.
- 2.16. The Health Department provides sexual health clinical services for diagnosis, treatment and management of STIs as well as birth control, emergency contraception and vaccinations at its sexual health clinic sites in Clarington, Oshawa and Pickering.
- 2.17. The Health Department has been in contact with AIDS Committee of Durham Region (ACDR), JHSDR, and the CE LHIN to identify opportunities for partnerships and in-kind support to deliver mobile health services.
- 2.18. To date, no organization has offered in-kind support or contributions, but rather has offered to provide staff if funding is provided by an external agency.
- 2.19. ACDR is willing to contribute services of 1.8 FTE at an annual cost of \$90,000, if funding is provided by an external agency. Services would include sexual health counselling and education (e.g. education about safe sex practices), harm reduction services including access to harm reduction supplies, rapid HIV and hepatitis C testing (depending on availability of appropriate training) and referrals to community services.

- 2.20. JHSDR is willing to contribute services of 1.0 FTE at an annual cost of \$53,800, if funding is provided by an external agency. Services would include harm reduction services including needle exchange and provision of safer inhalation equipment as well as education and counselling.
- 2.21. Current gaps identified through stakeholder consultation such as medical triage, abscess and foot care, nourishment and crisis intervention would not be addressed through mobile health services staffed only by ACDR and JHSDR.
- 2.22. Additional qualified primary health care providers (e.g. a nurse practitioner) would be required at significantly higher costs to meet the aforementioned services. No primary care service provider has been identified to provide mobile health services at this time but estimated costs have been outlined below for information. Additional discussions would be required with funder(s) and a potential administrator to identify interest in expanding the scope of services beyond those within the mandate of ACDR and JHSDR.
- 2.23. The CE LHIN is willing to work with Pinewood Centre of Lakeridge Health to develop an implementation plan for a mobile health unit that includes staffing plans, costs and clearly articulated roles for each partner.
- 2.24. It has come to the attention of the Health Department that Carea Community Health Centre is interested in supporting a mobile health services initiative by providing an outreach worker, if funding is available. This would expand the scope of services Carea provides through its mobile health services, which is currently limited to hepatitis C outreach.
- 2.25. Should mobile health services be established in the region, once the model of service delivery is determined, the Social Services Department would support the exploration of its appropriate role to contribute to the success of the initiative.
- 2.26. An administrator and/or lead agency needs to be identified to coordinate services, recruit stakeholders, develop service plans and service agreements and manage day to day operations including: safety concerns, unanticipated staffing shortages and/or absences as well as management of supplies and ongoing vehicle maintenance. The CE LHIN is only able to commit to a planning partnership at this time and has indicated that it is willing to work with the Health Department to identify an appropriate lead agency.
- 2.27. The administrator or lead agency will need to develop and implement a data collection/program monitoring system which can be utilized to complete an evaluation regarding effectiveness of the mobile health services.

3. Financial, Risk and Legal Implications

3.1. Based on expenditures reported by other regions, as well as current market value, a mobile health services vehicle ranges from **\$150,000** to **\$300,000**. This estimate is highly dependent upon the level of service being offered and the associated

retrofitting requirements.

- 3.2. Annual operating costs including insurance, staffing and supplies, as indicated by ACDR and JHSDR, as well as vehicle maintenance is summarized as follows:
 - a. Equipment and supplies are estimated at **\$14,950**: \$14,600 (ACDR) + \$350 (estimated cost of disposal of used needles).
 - b. Staff resources are estimated at **\$296,300**: \$115,500 (1.0 FTE nurse practitioner) + \$90,000 (1.8 FTE ACDR) + \$53,800 (1.0 FTE JHSDR) + \$37,000 (1.0 FTE driver as recommended through stakeholder consultation). Please note the cost of the driver is an estimate and excludes costs of benefits.
 - c. Vehicle and maintenance costs are estimated at **\$9,000**: \$4,000 (ACDR estimate for liability, insurability and vehicle insurance) + \$5,000 (vehicle maintenance).
 - d. Total annual operating costs for the organization funding the mobile health services are estimated at **\$320,250**: \$296,300 + \$14,950 + \$9,000.
- 3.3. The above costs do not include fuel costs, which would need to be estimated based on the service plan developed.
- 3.4. Based on these estimates, the total one-time costs for the purchase of a vehicle are estimated at \$300,000.
- 3.5. Annual operating costs for the agency providing ongoing funding are estimated at \$320,250. This estimate does not include the cost of benefits for a driver and also does not include potential equipment/supplies cost for the nurse practitioner.
- 3.6. No organization has offered in-kind contributions or any commitment to provide one-time or ongoing funding for this initiative at this time.
- 3.7. If the Region of Durham were to provide one-time or ongoing funding, a source for funding would need to be identified.
- 3.8. An alternate approach to mobile health services is to provide outreach primary care services through community paramedicine services, administered by the Health Department, and costs borne by the Region of Durham. Through a community paramedicine model, Community Paramedics (Advanced Care Paramedics) can provide primary care outreach services in priority neighbourhoods in order to assess and treat non-acute patients. Community Paramedics can also provide referral services to addictions, health and social services. The operational costs associated with this service are estimated at \$407,806 per year. This includes the salary and benefits for three Advanced Care Paramedics, five days per week, approximately 8 hours per day, at \$383,806 per year + annual vehicle maintenance costs of \$3,000 per year + annual education and training expenses at approximately \$21,000. The scope of community paramedicine services is broader than counselling, education and harm reduction.
- 3.9. Education and training would be required to ensure that the paramedics have the appropriate skills to provide services to target populations, such as basic addiction

counselling.

- 3.10. The advantages of a community paramedicine model are that it draws from existing assets such as dispatch services, a data collection system within the scope and mandate of Paramedic Services to support evaluation, appropriate job classifications, and there is potential to provide primary care outreach services that are beyond the scope and mandate of ACDR and JHSDR outreach workers.
- 3.11. The community paramedicine services could be offered through a Rapid Response Vehicle (RRV) at a purchase cost of approximately **\$42,000**. A vehicle for a community paramedicine program would not require additional features typical of an emergency response vehicle such as lights, siren, etc. If an older vehicle were to be used to provide services, annual maintenance costs would significantly increase to approximately \$12,000 annually.
- 3.12. Once the vehicle is operating, an annual budgeted cost of **\$450,000** would ensure sufficient funds for operating the services, ongoing education and training and required supplies.
- 3.13. A number of operational, people, governance, financial and strategic risks were identified. Key areas of risk include the use, operation and safety of the vehicles; and the safety, security and privacy of the staff providing mobile health services and the clients receiving them. These risks along with insurance requirements will need to be addressed by the administrator and service providers involved in the operation of mobile health services.
- 3.14. The CE LHIN suggested that MOUs or agreements would be required to identify funding responsibilities as well as between funders and service providers.
- 3.15. Legal Services has confirmed the above and advised that MOUs should be established between all service agencies participating in the mobile health services initiative to ensure that staffing issues, liability, and operational considerations are appropriately covered and to minimize exposure to liability.

4. Limitations of Mobile Health Services

- 4.1. Based on a review of the evidence and consultation with local community agencies, limitations of mobile health services are identified as follows:
 - a. Agency representatives report current staffing limitations and expressed concerns about providing in-kind contributions toward mobile health services.
 - b. Financial costs of maintaining and operating the mobile unit.
 - c. Increased exposure to liability if services are outside the scope of the administrator's mandate or core service delivery.
 - d. Increased risk of experiencing fragmentation of care (Yu et. al., 2017).
 - e. Limited evidence to indicate mobile health services will decrease rates of opioid use and overdose.
 - f. Spatial constraints and associated privacy and confidentiality issues if multiple

- clients are on board (Yu et. al., 2017).
- g. Staffing challenges and low retention rates (Morphew et. al., 2013).

5. Conclusion

- 5.1. Mobile health services can be considered to help address the health needs of hard to reach populations in Durham Region. To maximize the effectiveness, health benefits and reach, mobile health services should be broad, varied and relevant to the needs of Durham Region's target populations. The evidence that mobile health services decrease rates of opioid use and overdose is weak.
- 5.2. The services provided by the Health Department are heavily prescribed by statute, regulations, the <u>OPHS</u> and associated Protocols and Guidelines. There are very few primary care services within the public health mandate of the Health Department; for example, immunization and oral health services, which do not require mobile health services as they are primarily provided within school settings. Portable preventive oral health services are provided in high-risk schools, based on need and opportunities to provide oral health clinical services in rural communities are being explored.
- 5.3. The scope and mandate of the CE LHIN includes planning and implementation of primary care services, which are the main services proposed above for mobile health services. The CE LHIN recognizes the potential value of mobile health services but is unable to make a financial commitment at this time. A CE LHIN representative has stated that she is not aware of any new base or one-time funding that will be made available this fiscal year and that a detailed business case would need to be considered for funding requests. The CE LHIN can only commit to a planning partnership at this time.
- 5.4. ACDR and JHSDR are willing to provide mobile health services within their mandate and operate the vehicle if an external agency can provide sufficient ongoing funding.
- 5.5. The CE LHIN is willing to support the initiative by developing an implementation plan that includes staffing plans, costs and clearly articulated roles for each partner. Further discussions are required with the CE LHIN to identify commitment from a potential lead agency to provide ongoing oversight of operations of the mobile health services and develop an evaluation plan, in accordance with its standard operating practices. However, further discussions are pending funding availability.
- 5.6. To date, there has been no commitment from any agency to provide primary care services and/or ongoing or one-time funding for this initiative.
- 5.7. If the Region of Durham provides one-time costs for a mobile health services vehicle, total one-time costs for the Region are estimated at \$300,000. A funding source would need to be identified.

- 5.8. While the proposed mobile health services are not within the scope and mandate of public health services, the Health Department can support development of a business case, in partnership with interested community agencies, for future CE LHIN consideration.
- 5.9. Given the uncertainties and risks noted above, an alternate approach for the Region is the establishment of community paramedicine services with the purchase cost of a RRV at \$42,000 and annual budgeted operating costs at approximately \$450,000, to be borne by the Region.

Attachments

Attachment #1: #2018-COW-28 Mobile Health Unit for At-Risk Populations, Including Those Using Opioids

Respectfully submitted,

Original signed by

R.J. Kyle, BSc, MD, MHSc, CCFP, FRCPC, FACPM Commissioner & Medical Officer of Health

If this information is required in an accessible format, please contact 1-800-372-1102 ext. 3111



The Regional Municipality of Durham Report

To: Committee of the Whole

From: Commissioner & Medical Officer of

Report: #2018-COW-28 Date: February 7, 2018

Subject:

Mobile Health Unit for At-Risk Populations, Including Those Using Opioids

Recommendation:

That the Committee of the Whole recommends to Regional Council:

That this report be received for information.

Report:

1. Purpose

1.1 To identify the estimated cost of purchasing a mobile health unit for outreach services including, addiction counselling. Daily operating costs, including staffing costs, will need to be further explored if a health services plan is developed and a lead agency is identified. As per the motion set forth, the staffing model consists of community-based medical and health professionals operating in partnership through in-kind contributions by local health and social service agencies.

2. Background

- 2.1 Fentanyl overdoses have been identified as a public health crisis. The Ministry of Health and Long-Term Care (MOHLTC) has announced that the Health Department will be responsible for new program requirements aligned with the following scope of work: Local Opioid Response; Naloxone Distribution and Training; and Opioid Overdose Early Warning and Surveillance.
- 2.2 Locally, a coordinated Region-wide opioid response is under development by a local task force. Membership is comprised of several community stakeholders and planning is being facilitated by the Health Department.
- 2.3 On November 8, 2017, Regional Council approved a motion to:

- a. "determine the estimated cost of operating a mobile health unit staffed with outreach, addiction counselling, medical and health professionals operating in partnership with local health and social service agencies to support and care for at-risk populations across the Region, including those using opioids; and,
- b. "report back on the cost of a mobile health unit for consideration in the 2018 budget" (Delegations, Motions, Notice of Motions: November 8, 2017).
- 2.4 Mobile health services are transportable healthcare units that enable the provision of community-based care offsite from institutions and healthcare agencies to underserviced populations that may be hard to reach (Guruge et. al., 2009).
- 2.5 Mobile health services provide an alternative way of organizing healthcare resources for hard to reach populations such as the under-housed, individuals in rural communities, recent immigrants and low-income individuals. Barriers to accessing healthcare services among hard to reach populations include transportation or geographic barriers, linguistic and cultural barriers, lack of healthcare providers, and psychological barriers (Yu et. al., 2017).
- 2.6 Offering mobile health services could help to reduce health inequalities in hard to reach populations and connect clients to wider community resources (Yu et. al., 2017).
- 2.7 Mobile health services may yield a cost-benefit savings to healthcare systems by reducing emergency department (ED) visits, length of stay in hospital and improving the quality of life in later years.
- 2.8 As evidenced by research, mobile health units are most cost effective for chronic disease management. American based statistics report a return on investment ratio of 36:1, meaning for every dollar invested in funding, \$36 were returned in combined value of life years saved and ED costs avoided (Oriol et. al., 2009). Return on investment is higher for mobile health units that offer a broad range of services (Morphew et. al., 2013). Evidence also suggests that mobile health services are effective at screening high-risk populations for infectious diseases, such as HIV (Yu et. al., 2017).
- 2.9 Results of an environmental scan of Ontario indicate that mobile health services currently exist in York/South Simcoe, Peel, Toronto, Elgin St. Thomas, Hamilton, and Thunder Bay. These areas deliver varied services including chronic disease management as well as harm reduction services such as needle exchange, sexually-transmitted infection testing, HIV testing and crisis counselling.
- 2.10 Results of a stakeholder consultation concluded that while a mobile health service could be utilized across Durham Region, downtown Oshawa is currently the priority area that needs to be addressed due to its demographics and concentration of those in need of harm reduction services.
- 2.11 Stakeholder feedback identified priority populations as follows: sex trade workers, street involved and marginalized individuals, indigenous populations, those at risk

- for infectious diseases and individuals experiencing mental health and addictions issues.
- 2.12 Stakeholders identified current gaps and potential mobile services as: medical triage for priority populations, abscess and foot care, nourishment, crisis interventions, HIV point of care testing, hepatitis C testing, needle exchange, health promotion and teaching, sexual health, as well as referrals to mental health and addictions treatment and other health or social services.

3. Financial Implications

- 3.1 Based on expenditures reported by other regions, as well as current market value, a mobile health unit vehicle ranges from \$150,000 to \$300,000. This estimate is highly dependent upon the level of service being offered and the associated retrofitting requirements.
- 3.2 Daily operating costs including insurance, vehicle maintenance, and staffing as well as equipment and supplies will need to be identified and assumed by the agency coordinating the mobile health unit. Preliminary estimates indicate vehicle maintenance costs to be approximately \$5000 per year. Thus, in order for a mobile health unit to be feasible a funder to support ongoing costs will need to be investigated.

4. Limitations of a Mobile Health Unit

- 4.1 Based on a review of the evidence and consultation with local community agencies, limitations of a mobile health unit are identified as follows:
 - a. Financial costs of maintaining and operating the mobile unit;
 - b. Limited evidence to indicate mobile health units will decrease rates of opioid use and overdose:
 - c. A service delivery model that relies on in-kind contributions from local service agencies can result in limited or fragmented care. In Durham Region, various community agencies support a mobile health unit in principle, not withstanding, agency stakeholders identified concerns related to the ongoing costs and staffing expenses associated with operating a mobile unit;
 - d. Agency representatives report current staffing limitations and expressed concerns about providing in-kind contributions toward a mobile unit. To date, one agency has stated that they are in a position to offer in-kind staffing services, while all other agencies have stated that they may be unable to commit to providing in-kind staffing due to budget and staffing constraints. To address these concerns, stakeholders identified the need for a lead agency and/or mobile health services coordinator to recruit stakeholders, develop service plans and manage day to day operations including: safety concerns, unanticipated staffing shortages and/or absences as well as management of supplies and ongoing vehicle maintenance.

5. Conclusion

- 5.1 A mobile health unit is a type of health service that can be considered to help address the health needs of hard to reach populations in Durham Region. To maximize the reach, health benefits and effectiveness of a mobile health unit, services should be broad, varied and relevant to the needs of Durham Region's target populations. The evidence that mobile health units decrease rates of opioid use and overdose is weak.
- The cost of a mobile health unit vehicle ranges from \$150,000 to \$300,000. Annual vehicle maintenance costs are approximately \$5,000.
- 5.3 A lead agency to support ongoing operations of a mobile health unit, a funder to support ongoing operating costs and commitments to provide in-kind contributions will need to be identified.

Respectfully submitted,

Original signed by

R.J. Kyle, BSc, MD, MHSc, CCFP, FRCPC, FACPM Commissioner & Medical Officer of Health

If this information is required in an accessible format, please contact 1-800-372-1102 ext. 2681



The Regional Municipality of Durham Report

To: The Committee of the Whole From: Commissioner of Social Services

Report: #2018-COW-90 Date: #2018

Subject:

Special Needs Resourcing Collaborative Expansion Pilot

Recommendations:

That the Committee of the Whole recommends to Regional Council:

- a) That approval be granted for the Children's Services Division of the Social Services Department to partner with the Infant and Child Development Program of the Health Department to conduct a pilot project for the expansion of Special Needs Resourcing;
- b) That funding in the estimated amount of \$72,550 for the pilot project for the expansion of Special Needs Resourcing be transferred from the approved 2018 Provincial Child Care Expansion subsidy allocation of the Children's Services Division of the Social Services Department to the Infant and Child Development Program of the Health Department in accordance with the Region's Budget Management Policy for reallocations of current budget provisions between Departments; and,
- c) That authorization be granted to hire a temporary full-time Infant and Child Development Consultant effective June 1, 2018 at an estimated cost of \$72,550, including associated operating costs to administer the pilot project.

Report:

1. Purpose

1.1 The purpose of this report is to seek Council approval for the Children's Services Division to conduct a Special Needs Resourcing (SNR) pilot project. The project is proposed to be funded from 2018 approved Provincial Child Care Expansion program funding from the Children's Services Division and allocated to the Health Department for the hiring of one temporary full-time Infant and Child Development Consultant to provide service to support the licensed child care and early learning sector.

1.2 This pilot temporary position will support the transition of SNR services to in-scope practice, expansion of services and training and development of the child care and early learning sector in the Durham Region.

2. Background

- 2.1 SNR funding is to be used to support the inclusion of children with special needs in licensed child care settings, including home child care, camps and authorized recreation programs at no additional cost to parents / guardians. Under the Ontario Regulation 138/15, a "child with special needs" means a child whose cognitive, physical, social, emotional or communicative needs, or whose needs relating to overall development, are of such a nature that additional supports are required for the child.
- 2.2 Local special needs services and supports continue to evolve over time to meet the diverse and changing needs of children, their families, and communities. The funding approach for SNR established through the Ministry of Education child care funding formula enhances the ability of Consolidated Municipal Service Managers (CMSM) to respond to these needs. Any planned expansion of SNR-funded services and supports at the local level must comply with this guideline by supporting the inclusion of children with special needs in licensed child care settings, camps and authorized recreation programs.
- 2.3 The Children's Services Division functioning as the CMSM for child care and early years has the mandate to plan, fund and manage SNR funding. There are currently 4 funded agencies through SNR funding which provide service to support children with special needs in the licensed child care sector Durham Behaviour Management Services, Resources for Exceptional Children and Youth, Grandview's Preschool Outreach and the Blind-Low Vision Early Intervention Program. In the past, programs have had flexibility to provide support to families through a home consultation model. The Ministry of Education has now clarified that home consultation is "out of scope".
- 2.4 A collaborative service system is required to continue to provide seamless support to licensed child care and families of children with special needs as agencies transition to in scope practices. An Infant and Child Development Consultant who can work in the SNR sector will be essential to this collaborative system.

3. Special Needs Resourcing Pilot with Infant and Child Development (ICD) Program – Health Department

3.1 In order to support the transition to in scope practices and expansion of services, Children's Services staff propose that SNR funding will be provided to the ICD program of the Health Department to hire one additional temporary Consultant to

serve the Early Years Sector, as a pilot project.

- 3.2 ICD Consultants are typically the first service provider involved with the families and other agencies. They work with the families to provide early intervention in the critical years. ICD Consultant's scope of work includes the ability to work with clients in their homes and within the community (including licensed child care operations), and the consultants take on the role of service coordination. It is essential that there is a transition of knowledge and care of the client to ensure ongoing success for children with special needs in the Durham Region. The funded ICD position will work with families with children enrolled in the licensed child care sector.
- 3.3 Currently, ICD provides transition support to promote the inclusion of young children in licensed child care settings, reflecting the gaps in the system that are evident for children with special needs or developmental delays as they transition from one system of care and support to another system of support. Gaps and waitlists occur for young children with special needs at a time when supports are needed to ensure successful inclusion into licensed child care settings. ICD Consultants have the knowledge and expertise to support the transition from home to early learning centres.
- 3.4 The creation of this pilot position will alleviate some pressure on waitlisted services by providing another dedicated staff that will become an on-site resource to support the licensed child care programs. Currently both Durham Behaviour Management Services and Resources for Exceptional Children and Youth have waiting lists for licensed child care programs who are requesting their services.
- 3.5 The position will provide direct consultation to support a seamless transition of children with families into the Early Year System through:
 - Input in the development of Individual Service Plans for children with special needs within the licensed child care program
 - Consultation on child development to families who attend EarlyON programs
 - Capacity building of staff in the Early Learning Sector
 - Collaboration of services as part of the SNR services
- 3.6 The Managers of Children's Services and ICD will develop an evaluation matrix, in collaboration with the Data Analysis Coordinator to assess the benefits of this pilot project.
- 3.7 This project would be similar to the collaborative partnership between Durham Behaviour Management Services and Durham Children's Aid Society. In this proposal, ICD would hire and manage the staff to work within the child care sector, with funding for the staffing and associated operating costs to be allocated from the approved 2018 Provincial Child Care Expansion subsidy.

4. Financial Implications

4.1 The following table identifies the estimated 2018 salary and benefit costs for one full time temporary Senior ICD Consultant (effective June 1, 2018) and estimated associated operating costs.

2018 Funding for ICD-SNR Seven Month Pilot Project

| Salary and Benefits for Senior ICD Consultant (effective June 1, 2018) | \$67,750 |
|--|----------|
| Other Personnel Expenses (i.e. Mileage, cell phone usage) | \$3,300 |
| TCA Item – Laptop | \$1,500 |
| TOTAL ESTIMATED 2018 COST | \$72,550 |

- 4.2 Funding is available from the 2018 approved Children's Services Business Plan and Budget for the Provincial Child Care Expansion Program for this pilot project. Any future considerations regarding the continuation of this pilot beyond December 31, 2018 will be considered in subsequent year's Business Planning and Budget process, as appropriate.
- 4.3 Section 11.4 of the Region's Budget Management Policy requires Regional Council approval for reallocations of current budget provisions between Departments.
- 4.4 It is recommended that funding in the estimated amount of \$72,550 for the pilot project for the expansion of Special Needs Resourcing be provided from the approved 2018 Provincial Child Care Expansion subsidy allocation of the Children's Services Division of the Social Services Department to the Infant and Child Development Program of the Health Department.
- 4.5 Further, it is recommended that authorization be granted to hire a temporary full-time Infant and Child Development Consultant at an estimated cost of \$72,550 including associated operating costs effective June 1, 2018 to administer the pilot project.

5. Conclusion

- 5.1 This proposed pilot project promotes collaboration between the Health and Social Services Departments and helps to remove the unintended service silos and reduces fragmentation at a critical transition point for young children and families, while enabling your children with special needs and/or developmental delay to participate meaningfully in regulated early learning settings.
- 5.2 The Commissioner of Finance and Commissioner & Medical Officer of Health have reviewed this report and the Commissioner of Finance concurs with the financial recommendations.

Respectfully submitted,

Original signed by:

Dr. Hugh Drouin Commissioner of Social Services

Recommended for Presentation to Committee

Original signed by:

G. H. Cubitt, MSW Chief Administrative Officer If this information is required in an accessible format, please contact 1-800-372-1102 ext. 2681



The Regional Municipality of Durham Report

To: The Committee of the Whole From: Commissioner of Social Services

Report: #2018-COW-91 Date: May 2, 2018

Subject:

Durham's Early Learning and Child Care Service Plan 2018 - 2022

Recommendations:

That the Committee of the Whole recommends to Regional Council:

A) That Regional Council endorse and approve the Children's Services Division Early Learning and Child Care Service Plan 2018 – 2022.

Report:

1. Purpose

1.1 This report seeks Council's endorsement and approval of the multi-year service system plan; which has been developed with significant community input and is structured to align with legislative requirements.

2. Background

- 2.1 Children's Services Division was designated by the Province of Ontario in 2000 as the Consolidated Municipal Service Manager for child care and early year's programs. The Division is required to plan, fund and manage the system.
 - A) Over the years, staff have created several multi-year service plans for the sector, which Regional Council has approved.
 - When child care was transferred from the Ministry of Children and Youth Services to the Ministry of Education; there was no direction provided on submitting formalized service system plans. Given, that full day kindergarten was being rolled out; along with significant modernization activities; Children's Services staff followed the community developed service priorities and

reported back annually at Durham's Best Start Network.

- 2.2 In 2014, the Child Care and Early Years Act was passed. This legislation replaced the former Day Nurseries Act. It included clarification of the role and responsibilities for Consolidated Municipal Service Managers. It also outlined specific matters of Provincial Interest that should be included in the development of system plans. In 2017, the Ministry outlined its requirement for all CMSM's to create and submit a Child Care and Early Years' Service Plan approved by their local Council by June 2019. The plans are to be reviewed and updated at least every five years.
- 2.3 Throughout 2017, Children's Services staff worked on two significant transitional plans. These were the Journey Together report and Durham's Ontario Early Years Child and Family Centre transition plan. Given that staff were involved in many various community consultations, staff also incorporated questions to inform the child care service system plan.

3. Durham's Child Care and Early Learning Service Plan 2018 - 2022

- 3.1 The plan provided outlines five key service priorities:
 - A) Maximize financial support available to licensed child care
 - B) Develop and implement a strategy to support children with special needs
 - C) Increase and attract and retain quality Registered Early Childhood Educators
 - D) Support and expand the licensed home child care sector, and
 - E) Reduce the waitlist for child care fee subsidy
- 3.2 The plan is also structured to align with the provincial priorities: Responsive; Affordable; Accessible and High-Quality.
- 3.3 For each of the key service priorities, Children's Services staff have developed measurement indicators; actions and timelines. The report has been structured so that every year an annual report may be completed that outlines accomplishments. Should provincial direction change or funding levels change, staff will make adjustments to the plan accordingly.

4. Conclusions

4.1 Durham's Early Learning and Child Care Service Plan provides direction for staff that aligns with provincial directions and legislation, for the next five years. Upon Council approval, this plan will be submitted to the Ministry of Education.

5. Attachments

Attachment #1: Durham's Child Care and Early Learning Service Plan 2018 - 2022

Respectfully submitted,

Original signed by:

Dr. Hugh Drouin Commissioner of Social Services

Recommended for Presentation to Committee

Original signed by:

G. H. Cubitt, MSW Chief Administrative Officer



ng and

Early Learning and Child Care Service Plan

The Regional Municipality of Durham Children's Services Division

2018-2022



Contact information

The Children's Services Division Social Services Department The Regional Municipality of Durham 605 Rossland Road East Whitby, Ontario L1N 6A3 1-800-387-0642 durham.ca/childrensserivces

Acknowledgments

Early learning and child care services in Durham Region are funded by The Regional Municipality of Durham, the Province of Ontario Ministry of Education and the Canada-Ontario Early Learning and Child Care Agreement.







Government of Canada

Foreword

As the Director of Children's Services for the Region of Durham, I am very pleased to provide this comprehensive multi-year early learning and child care service plan for Durham Region. This plan focuses on system priorities that have been created by our early learning and child care community partners. It will become the pathway for moving forward the collective vision for children and families.

The past eight years have been filled with tremendous change for our sector, as we have worked collaboratively to advance the modernization of early learning and child care. Of key significance has been the establishment of the College of Early Childhood Educators and the professional responsibility for all Early Childhood Educators to adhere to the Code of Ethics and the Standards of Practice.

Durham Region is growing at a significant rate, and I am very pleased with the provincial and federal financial investments in early learning and child care. It is so very important to focus our attention and to invest in our children, to ensure a vibrant, healthy community.

I want to thank all the dedicated staff of the Children's Services Division and our many community partners across the sector that provided input into the development of this system plan. Your valuable contributions benefit children and families every day.

Thank you!

Roxanne Lambert, RECE

Director, Children's Services Division

Royanne Cambers



Executive summary

The 2018 to 2022 Early Learning and Child Care Service Plan reflects the strong commitment of The Regional Municipality of Durham to the children and families who live within its eight municipalities. The Plan sets out a commitment to the expansion of quality early learning and care programs and services to support children, families and the educators who work with them.

Recognizing the economic, social and educational importance of high quality early child care to the well-being to children, families and the community, this service plan describes how, as the Consolidated Municipal Services Manager, the Children's Services Division will collaborate with the early learning and care sector to expand and strengthen the child care system.

The Ministry of Education has identified four provincial priorities to guide the continued modernization and transformation of the early learning and care sector. It is the intent of the Ministry that early learning and child care be responsive, affordable, high quality and accessible.

The Children's Services Division, in collaboration with the broader early learning and care sector in Durham Region, has established five key priorities to drive the growth of a high quality child care system. The five priorities build on the Ministry priorities and, as they are implemented over the next five years in a planned, collaborative and transparent manner, will build a more responsive, affordable, high quality and accessible child care system. The five priorities include:

1. Maximize financial support available to licensed child care.

- a. Review and update the operator budget tool and fee request process.
- b. Incorporate rate and fee elements into the operating funding model.
- c. Annually review and include new legislation and community components into the community analysis tool and funding models.
- d. Monitor vacancy levels in licensed child care settings.

2. Develop and implement a strategy to support children with special needs.

- a. Establish a system vision.
- b. Implement a transition plan that meets community needs and reflects Ministry of Education (MEDU) requirements.
- c. Implement capacity building opportunities.
- d. Institute administrative and procedural modifications.
- e. Increase the support provided through the Enhanced Staffing program.

3. Increase and attract and retain quality Registered Early Childhood Educators.

- a. Raise public awareness of the Registered Early Childcare Educator (RECE) professional designation.
- b. Provide opportunities for new and existing Early Learning and Child Care (ELCC) educators (including RECEs) to improve their knowledge, understanding and use of ELCC best practices.

4. Support and expand the licensed home child care sector.

- a. Develop and implement a new funding model for the licensed home child care sector in Durham Region that simplifies the existing structure, compensates providers and agencies equitably and is transparent.
- b. Develop and implement a process to encourage providers in the unlicensed sector to join the licensed home child care sector by affiliating with a licensed home child care agency.
- c. Increase public awareness of licensed home child as a viable licensed home child care option especially for those families who require non-traditional hours of care or who need care for infants and toddlers.

5. Reduce the waitlist for child care fee subsidy.

- a. Enhance the information collected when parents/caregivers apply for fee subsidy. This will provide waitlist data to better predict the needs of the community.
- b. Develop a communication strategy to improve public understanding of the fee subsidy program.

The Service Plan establishes a number of strategies to support achievement of each priority. To further support implementation, an action plan with an accompanying timeline is described. Full implementation of the Early Learning and Child Care Service Plan is dependent on continued provincial and federal funding, as well as, collaboration between the Children's Services Division and an engaged, well resourced child care community. This Service Plan commits the CSD to this collaboration.

Provincial and Regional Priorities: 2018 to 2022

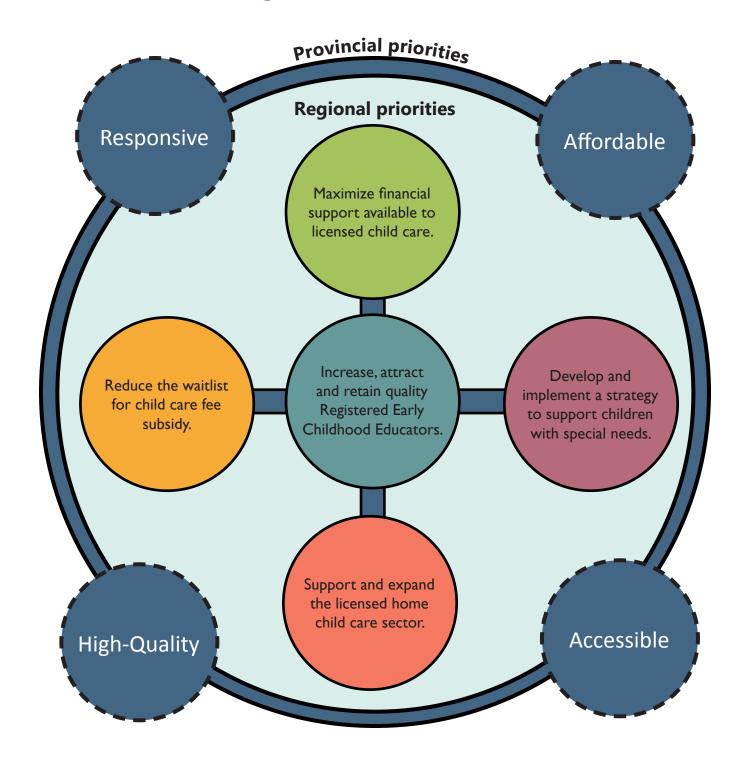




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Introduction

An evolving system

The Early Learning and Child Care (ELCC) system is undergoing a period of transformation, modernization and growth. During the past few years, the Region of Durham has experienced substantial expansion across the ELCC sector and engaged in provincially governed modernization initiatives. With the help of strong community partnerships, the Children's Services Division (CSD) has effectively contributed to the provincial vision of a system that is high quality, seamless and responsive to parents' needs.

Since the publication of the 2010 to 2011 ELCC Service Plan, modernization initiatives have included:

- The complete implementation of Full-Day Kindergarten.
- A new funding formula for child care, which increases the capacity of Consolidated Municipal Service Managers
 (CMSMs) and District Social Services Administration Boards (DSSABs), to use provincial funding to more effectively
 meet local community needs. This includes the capacity to provide core or base program funding directly to early
 learning programs.
- Ontario's Renewed Early Years and Child Care Policy Framework, which focuses on: Affordability, Accessibility, Quality and Responsiveness.
- The introduction of How Does Learning Happen? Ontario's Pedagogy for the Early Years, as the guiding pedagogical framework for early years programs and child care.
- The Child Care and Early Years Act, 2014 (CCEYA), which replaced the Day Nurseries Act.
- The introduction of CCEYA Regulation 137/2015 (General) and Regulation 138/2015 (Funding, Cost Sharing and Financial Assistance), which support the CCEYA and are continuing to be refined. These regulations provide specific direction about how the CCEYA, 2014 will be operationalized. They clarify expectations for agencies and organizations, and increase accountability for both the Ministry and the early learning and care sector.
- The provincial promise to create 100,000 new spaces for children birth to four years during a five-year period beginning in 2017, and the provision of Child Care Expansion funds to achieve this.
- The Canada-Ontario Early Learning and Child Care Agreement and the provision of ELCC funding, which provides funding during the next three years to expand licensed child care services.
- The transformation of family resources programs and Ontario Early Years Centres to EarlyON Child and Family Centres.
- The Journey Together: Ontario's Commitment to Reconciliation with Indigenous Peoples, and an investment of \$250 million during the next three years for programs and actions focused on reconciliation through early years programming.
- Clarification to the scope of practice for which special needs resourcing (SNR) agencies are funded and operate.
- Bill 148: Fair Workplaces, Better Jobs (2017) to raise minimum wage and equalize pay.
- Provincial Wage Enhancement funding for both licensed group and home child care.
- One-time Fee Stabilization funding to support licensed operators to meet increased minimum wage requirements as of January 2018.



Planning for transformation

The five identified Regional priorities outlined in this service plan are contingent on a number of factors:

- Emerging modernization strategies from the Ministry of Education.
- The provincial election in June 2018.
- A municipal election in October 2018.
- Potential changes to allocations of provincial and federal ELCC funds in the next five years.

This plan follows the expectations for CMSM and DSSAB service plans, as outlined in the Ontario Child Care and Early Years Service System Plan Resource (2017). However, the provincial deadline is June 2019, and the CSD administration has consciously submitted the report before an internal change to leadership. Therefore, changes may be required based upon requests made by the Ministry between 2018 and 2019.

To bolster transparency and accountability, the CSD will publish an annual progress report to describe changes and status of achieving the five Regional priorities. These reports will be widely circulated to the ELCC community and be available on the CSD website at durham.ca/childrensservices.

Child care as an economic driver

Public investment in licensed child care drives economic development in Durham Region.

"Economic development is about more than just jobs and income; it seeks to improve productivity of local resources, encourage business profitability and promote community sustainability and quality of life" (Poole, 1999 as reported by Warner et al., 2004).

In Durham Region, there are direct and indirect benefits of enrollment in licensed child care for families, children and the local economy.

Benefits to families: Women in the workforce

As a direct benefit to families, mothers, who are increasingly well-educated and skilled, are able to enter the workforce and earn wages to support their family. The ability to access affordable child care and return to full-time employment decreases reliance on government-funded program, such as Ontario Works, and contributes to a reduction in income inequality.

The rate of Canadian women in the workforce has risen from 21.6 per cent in 1950 to 82 per cent in 2015. Despite this increase, women's work experiences continue to be shaped by their role as a caregiver and a lack of affordable child care (Alexander et al., 2017; Moyer, 2017).

In Canada, Québec has the highest rates of mothers with young children in the workforce (Alexander et al., 2017), which is often attributed to universal access to low-fee child care throughout the province (Fortin, Godbout & St.Cerny, 2012). Because of this model, 70,000 mothers are able to sustain employment, which prompts an increase to Quebec's domestic income by \$5 billion (Fortin et al., 2012). Such investments in the economy have helped stabilize and sustain the funding for universal child care programs (Fortin et al., 2012).

The Organization for Economic Cooperation and Development (OECD) predicts that if enrollment in early childhood education were to increase to 93.5 per cent of all children ages two to five years, an additional 76,500 women would enter the Canadian workforce (Alexander, 2018). Statistics Canada estimates 43 per cent of households without a working mother had an average income of below \$36,000 (Alexander, 2018). By providing access to high quality, reliable care, women will be able to confidently enter the workforce and be able to financially support their families.

Benefits to children: Readiness to learn

As a direct impact to children, participation in high quality ELCC increase the likelihood of being ready to learn at school, having greater academic achievement, a higher rate of completion of high school, and being better connected to local community agencies for optimal health and development (Heckman et al., 2010; McCain, Mustard, McCuaig, 2011; The Regional Municipality of Durham, 2012). Best of all, these outcomes apply to all children regardless of household income and/or parent education level.

The Perry Preschool Study is a Amercian-based longitudinal research study observing short- and long-term outcomes of participation in a high-quality preschool program by low-income children (Heckman et al., 2010). Two groups were compared: children in preschool versus children not in preschool. Researchers learned that children enrolled in the preschool program had higher academic achievement, higher IQs, were more likely to graduate high school, and earned more money at age 40 compared to adults who had not attended the preschool as a child (Heckman et al., 2010).

Data from the Early Development Instrument (EDI) and Kindergarten Parent Survey (KPS) have shown children in Durham Region are better prepared to learn at school when they have participated in high-quality early learning programs, such as music, art and dance, recreation programs, library/literacy programs, and play-based learning activities (The Regional Municipality of Durham, 2013). Furthermore, when linked to EQAO (Education Quality and Accountability Office) scores for reading, writing and mathematics, children who are on track with their development according to the EDI in Senior Kindergarten have higher rates of achieving EQAO provincial standards in Grade 3 (Calman & Crawford, 2013).

Enrollment in licensed child care also provides a unique opportunity for children's health, well-being and development to be monitored by trained professionals on a daily basis. As the CMSM, the CSD allocates Ministry of Education dollars in support for four special needs resourcing agencies, which directly support children in the licensed system. Early interventions provided have a direct benefit for children experiencing difficulties with their behaviours or who have special needs related to speech and language, vision, cognition or physical abilities.

Benefits to Durham Region: Opportunities for business

Every dollar spent expanding the licensed child care system results in economic benefit of approximately \$6 (Alexander et al., 2017).

The most direct benefit of licensed child care on the local economy is the creation of jobs paying fair wages, with variable shifts meeting personal expectations (e.g., part-time, full-time, split-shift). This draws early childhood educators from outside of Durham to come to the region to work or future workers to attend local institutions to receive formal education in early childhood education. Furthermore, parents who are looking to access high-quality, affordable care in communities that are accessible to both home and work will relocate to Durham.

The greater economy supports licensed child care on a daily basis by providing sources of food or catering, leasing of commercial space, toys, equipment and opportunities for children's field trips. This further supports the broader workforce in multiple industries.

Overall, enrollment in high-quality early childhood education supports the next generation of Durham Region residents, and encourages a society of highly skilled and well-educated citizens.



The Social Services Department

The Region of Durham's Social Services Department aims to provide people-oriented services that respond to diverse community needs.

The Social Services Department has six divisions committed to delivering professional and high-quality services. Many residents across Durham Region will need one or more of these services at some point in their life. The department's vision of Care, Excellence, Learning and Leadership are the foundation of the people-focused programs and services offered.

Business Affairs and Financial Management offers administrative, financial and emergency programs. We aim for excellent customer service and responsible resource management. Social Services helps people reach their full potential.

Family Services improves the quality of life for residents living and working in Durham Region. Social Services provides timely and accessible counselling, education and other support services.

Housing Services supports social housing providers and manages properties directly owned by the Region. It also funds programs to prevent homelessness and encourages the creation of affordable housing.

Income and Employment Support delivers the Ontario Works Program. Ontario Works gives financial assistance to people in need. It also supplies basic health benefits. A wide range of employment services are also available to help people find jobs.

Long-Term Care and Services for Seniors provides programs and services in four homes. The Region owns and operates each accredited home. We also provide:

- Respite care.
- Caregiver relief.
- Meals on Wheels programs.

The Children's Services Division plans, manages and funds Durham's ELCC sector. More details about the services provided are given in this report. The CSD works with fellow Social Services divisions on a variety of projects, which all contribute to achieving the 2016 to 2019 strategic goals set by the department. The CSD staff participates in cross-divisional committees, including: Excellence Council, Citizen Engagement Committee, Financial Empowerment Framework Working Group, and iLabs led by the Innovation and Research Unit.

Financial empowerment

The Social Services Department's six divisions have come together to institute a Financial Empowerment Framework to assist residents in locating available funds, support and services to reduce poverty and improve quality of life. The framework includes ten areas of effort: banking, tax filing, realizing disability benefits, Canada Learning Bonds, piloting a benefits eligibility tool, piloting an expansion of Family Support workers, piloting a trusteed youth plan, exploring an Oshawa Community Development Plan, Connect for Success internet access project, and Social Investment Fund within the Income and Employment Support Division. The CSD has taken an active role in promoting and participating in actioning the framework and associated pilot projects.

Departmental strategic priorities: 2016 to 2019

The Social Services Department is committed to a continual improvement framework, which is strengthened by our partnership with Excellence Canada. Through this excellence lens, along with our four foundational principles of Care, Excellence, Learning and Leadership; our clients, residents and families receive the best-quality programs and services. The department's strategic priorities for 2016 to 2019 are presented below. The overarching theme of community is woven through the four priorities: living, preparing, promoting and building community.



Quality service delivery

The Framework for Excellence, as developed by Excellence Canada, guides the department's employees, services and programs. The Social Services administration aims to achieve the highest standards for Durham residents. In 2015, the department received the Gold Trophy and the Order of Excellence through the Canada Awards for Excellence (CAE). The Order of Excellence is recognition provided to organizations that significantly improve the quality of life of Canadians and is the most prestigious awards program in Canada.

The Children's Services Division

Consolidated Municipal Service Manager

In 2000, The Regional Municipality of Durham, Social Services Department, Children's Services Division (CSD) was designated as the Consolidated Municipal Service Manager (CMSM) to plan, manage and fund the early learning and child care system (ELCC).

In the role of CMSM, the CSD is responsible for managing a co-ordinated and responsive early learning and child care system that supports children and their families in reaching their best potential. Key activities of the CMSM include:

- 1. Creating and implementing a multi-year service system plan in collaboration with the ELCC community.
- 2. Managing the child care fee subsidy program by:
 - Managing a waitlist and testing eligibility of families.
- 3. Managing a co-ordinated, responsive high-quality licensed system by:
 - Maintaining Purchase of Service agreements with licensed child care programs and authorized recreation providers.
 - Facilitating funding streams to support licensed child care, including:
 - General Operating Funding (formerly wage subsidy).
 - One-time special purpose funding (e.g. Health and Safety funding, Transformation, Minor Capital, Play-based Toys and Equipment).
 - Small Water Works funding.
 - Wage Enhancement funding.
 - Fee Subsidy Stabilization funding.
 - Implementing, co-ordinating and funding Capacity Building initiatives that support professional learning for the ELCC system.
 - Managing special needs resourcing services to support licensed child care and authorized recreation programs in Durham.
 - Directly operating seven licensed ELCC programs and Durham Behaviour Management Services.
 - Responding to new or changing direction from the MEDU.
- 4. Managing EarlyON Child and Family Centres:
 - Effective 2018, maintaining Purchase of Service agreements with service providers to offer services for families with young children in Durham.
 - Responding to additional requirements or direction from the MEDU.
- 5. Managing the system through community collaboration, partnerships and evidence-based decision-making:
 - Early Learning Program funding supporting the Best Start Network.
 - Facilitating and support sub-committees and working groups.
 - Participating in community projects with partners (e.g. service providers, school boards, post-secondary institutions etc).
 - Engaging in data initiatives, such as the Early Development Instrument, Municipal Benchmarking Network Canada, Health Neighbourhoods projects, and performing statistically driven community analyses.
 - Participating in the "Journey Together" Indigenous ELCC planning process by supporting the needs and opinions provided by authentic voices in Durham.

Child Care Fee Subsidy Program

The Child Care Fee Subsidy Program helps families who qualify cover the cost of licensed child care for children up to the age of 12 years. As the CMSM, the CSD provides fee subsidy to eligible families across the region. To be eligible, parents or legal guardians must be working, attending school, receiving Ontario Works benefits while participating in an approved activity, or the parent/guardian or child must have a recognized special or social need. The graph below presents the number of children served through the Fee Subsidy program in 2017, by municipality.

Children served through fee subsidy

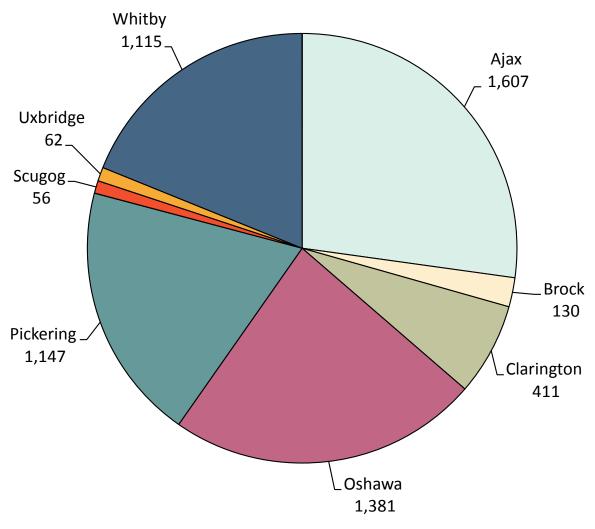


Figure 1: 2017 year end - number of children served by service location



Purchase of Service agreements

A goal of the CSD is to manage the system in a well-thought-out, planned manner. Purchase of Service (POS) agreements are implemented with licensed ELCC programs to support community need demonstrated through community analysis. This process supports parental choice to accessible, viable, high-quality programming in their neighbourhood. As of December 2017, there were 248 licensed child care centres and four licensed home child care agencies with a POS, equating to 23,511 spaces. In addition, there were service agreements with five approved Recreation Service providers.

Local school boards are highly engaged in the ELCC sector, and are actively incorporating child care into requests for capital-funded new builds. A POS will be requested from the child care operators contracted by the school boards.

Regional staff work collaboratively with designated school board early years leads to co-ordinate new and expanding licensed child care programs on site in schools. The CMSM is required to sign off approval on the school board submissions requesting capital funding to construct licensed child care spaces. As such, the CMSM is committed to providing financial supports to the child care operator when the program opens. Through this partnership of providing a POS to child care operators within school boards, the Region aligns with the MEDU Schools First Approach, ensuring all families have access to high-quality care where they live. Since 2013, local school boards have expanded licensed child care in schools by 200 infant spaces, 255 toddler spaces, 616 preschool spaces and four EarlyON Child and Family Centres. Expansion projects commencing in 2018 are highlighted below.

The CSD currently (2017) has a moratorium in place on the application process for operators to obtain a POS agreement. The moratorium allows the CSD to manage the system by ensuring growth is strategically planned and executed throughout the region. In 2017, the CSD began to provide feedback to the Ministry when a new license was

The expansion of child care in Durham Region: 2007 and beyond



| | Sites | Spaces | Infant spaces | Toddler spaces | Preschool spaces | Kindergarten spaces | School age spaces |
|--------|-------------|---------|---------------|-------------------|---------------------|------------------------|-------------------|
| 2007 | 177 | 9,402 | 307 | 1,206 | 4,194 | 681 | 3,014 |
| 2017 | 276 | 24,014 | 628 | 2,444 | 4,966 | 6,393 | 9,583 |
| Change | +9 9 | +14,612 | +321 | +1,238 | +772 | +5,712 | +6, 569 |

Beginning in 2018, school-based licensed child care will expand to include:

- 13 infant rooms (130 new spaces)
- 12 toddler rooms (180 new spaces)
- 18 preschool rooms (408 new spaces)
- 4 family grouping rooms (60 new spaces)



Number of child care spaces as of December 2017.

requested within one of Durham's municipalities.

Operators are expected to review the Durham Region Operating Criteria and fee subsidy payment policies prior to their application. To apply for a POS, operators must have had a valid license with the MEDU for a minimum of six months. The submitted application undergoes validation through a community analysis with the CSD. This analysis includes a review of licensed child care agencies within a two kilometre spatial buffer, plans for surrounding land use (e.g., new construction of neighbourhoods), Health Neighbourhood demographics (e.g., birth rate, low-income rate, low-income housing, unemployment rate, population growth), as well as indicators predicting community needs (e.g., fee subsidy wait list, vacancy rate, licensed capacity). Findings are compared to a series of cut-off scores and evidence-based recommendations for approval or denial are recorded. Following the review of the application, a budget review and site visit are completed to inspect program viability and quality of services offered.



The Durham Region Operating Criteria Assessment for Quality Improvement

In order to receive and maintain a POS with the CSD, operators must comply with Regional quality standards. The Durham Region Operating Criteria Assessment for Quality Improvement (DROC AQI) is based upon the Toronto Children's Services Early Learning and Care Assessment for Quality Improvement 2014 (ELAQI), including the 2016 Before and After School Update. The CSD Quality and Contract Compliance Advisors work in collaboration with child care operators to ensure information gathered is utilized to reflect on pedagogy and practice, set program goals and support continuous improvement. The CSD uses the DROC AQI to ensure the best use of public funds, aligning with validated research and meeting acceptable quality standards of care for children.

The measurement tool incorporates six sections: infant program, toddler program, preschool program, before and after school program, playground and nutrition. Additional sections refer to contract compliance requirements, including administration, attendance audit, finance, governance (not-for-profit or commercial), leadership and policy review. In 2017, 31 per cent exceeded expectations and 59 per cent of ELCC programs met expectations (Figure 2). Note that 'does not meet expectations' suggestions operators have multiple areas for improvement related to the pedagogy, and does not mean children are at risk.

Per cent of programs meeting DROC AQI expectations

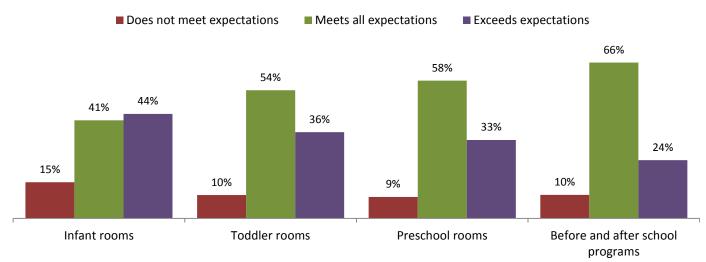
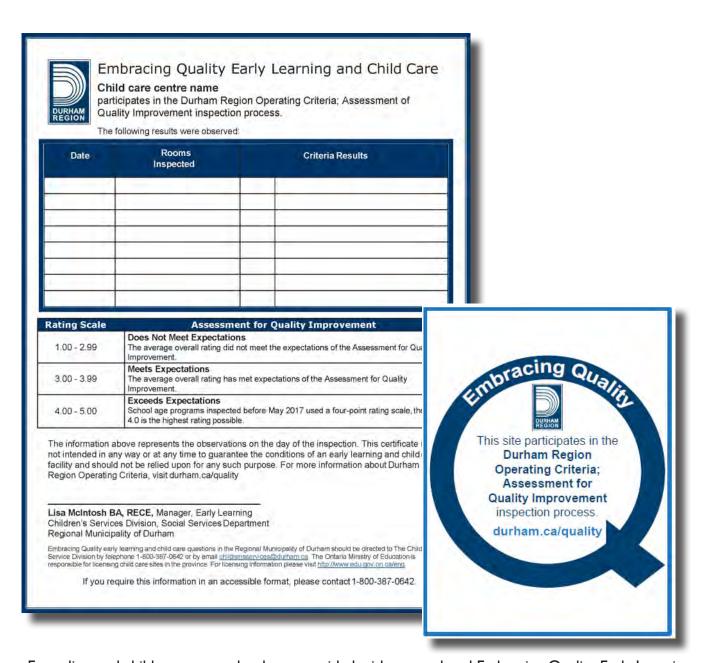


Figure 2: Per cent of programs meeting expectations outlined by the Durham Region Operating Criteria Assessment for Quality Improvement, 2017

When a room does not meet expectations, the site supervisor and educators in the room are charged with reviewing and reflecting on the assessment to determine where and how changes will be made to meet expectations. The CSD Quality and Contract Compliance Advisor assigned to the site discusses the DROC AQI report with the educators, and provides support through coaching and mentoring. Educators are expected to create a work plan to identify how improvements will be made. This report is usually sent to the Quality Advisor, who will return to the site for on-going monitoring, basing conversations and learning on How Does Learning Happen, Ontario's Pedagogy for the Early Years. In addition, the operator is able to apply for one-time funding supports if needed to help improve the quality measure.

In 2018, the DROC AQI scores will be posted on durham.ca/quality. Certificates listing DROC AQI scores per room are signed by the Manager of Early Learning (below). The certificates, along with a peel-and-stick window decal, are expected to be posted within all licensed child care centres with a POS.

By increasing public awareness of DROC AQI scores, operators will be publicly accountable for improving and/or maintaining quality care for all children.



Every licensed child care centre has been provided with a completed Embracing Quality Early Learning and Child Care certificate and window decal.

Special needs resourcing

The Regional Municipality of Durham currently directly operates one agency and has service agreements with three additional agencies to offer special needs resourcing (SNR) services to children with special needs (Table 1). Demand for SNR is increasing exponentially. As the MEDU has clarified the model of funding and expectations for service delivery for SNR agencies in 2017, each of the agencies will review their program delivery models in 2018. Further details about the SNR landscape are outlined in Regional Priority 2.

Table 1: Services provided by CMSM-managed SNR programs

| | Durham Behaviour Management Services* | Grandview Children's Centre Preschool Outreach Program | Resources for Exception Children and Youth – Durham Region* | Surrey Place Centre Blind-Low Vision Early Intervention Program |
|--|---|---|---|--|
| Services for Child Care | Consultations and capacity building | Physiotherapy Occupational therapy Speech-language pathology Audiology | Consultation program Enhanced staffing Capacity building | Early intervention program |
| Special needs focus | Children with behavioural challenges Early learning programs supporting children experiencing challenges | Children with a suspected or diagnosed developmental disability | Children with an identified need Early learning programs supporting children experiencing challenges | Children with a diagnosed visual impairment |
| Number of children served in 2017 | 848 | 331 | 6,824 | 24 |

^{*}Note: Durham Behaviour Management Services and Resource for Exceptional Children and Youth, Durham Region, receive additional funding from other Ministries for specific services not listed in this table.



Partnerships - Durham's Best Start Network

Best Start was initiated in 2005 by the Government of Ontario to support children and families from birth to Grade 1.

Durham's Best Start Network (BSN) was established when existing service providers came together to plan for the needs of the Durham community. The Regional Municipality of Durham, as the designated CMSM, assumes a lead role by developing and implementing an annual child care service management plan.

Initially, the Best Start funding was used to create and sustain increased licensed child care spaces, additional wage subsidies for staff and enhanced funding for SNR programs. Today, the network has dedicated funds to support programs for Indigenous children and families, as well as Francophone families. In addition, the BSN produces and circulates resources to the early learning community, hosts community meetings regarding current early learning issues, and submits position papers to both the MEDU and the Ministry of Children and Youth Services.

Durham's BSN is co-chaired by Roxanne Lambert, RECE, Director of CSD, and Denise Cashley, Executive Director of Resources for Exceptional Children and Youth, Durham Region. In 2017, there were more than 85 members from 45 organizations that regularly attended and participated in Durham's BSN.

Durham's BSN provides an opportunity for the region's six school boards, child care service providers, local academic institutions, and support agencies to meet and share information and ideas. Many partnerships have developed as a result of BSN activities. The Province of Ontario is in the process of modernizing the early learning and child care system. Durham's BSN is working hard to navigate through the transformation process.

With a diverse group of members at the table, Durham's BSN functions as an advisory board and platform for community agencies to provide regular updates.

Durham's Best Start Network Year in Review 2017

If you require this information in an accessible format, please call 1-800-387-0642.

Advisory committees:

- Grandview Children's Centre Preschool speech and language program
- Durham Region Health Department Healthy Babies, Health

Community updates:

- Durham Catholic District School Board
- Durham District School Board
- Peterborough Victoria Northumberland and Clarington Catholic District School Board
- · Durham's Special Needs Strategy
- Durham Children and Youth Planning Network
- Durham Regional Child Care Forum

Durham's BSN directly funds and supports three important subcommittees:

- Durham's BSN Child Care Subcommittee
- Research and Knowledge Mobilization Subcommittee
- Infant Mental Health Durham Community Table

Durham's ELCC community partners



Durham Region Children and Youth Charter

In 2009, Durham's BSN members, along with municipal politicians and local families, developed 12 rights for children and youth. When upheld, these rights would ensure all children have what they need to be healthy, prosperous citizens. The charter was widely disseminated and included a detailed adult version and a simplified child version. In 2018, the BSN aims to work with community partners and the public to revisit and update the charter.

Durham's Best Start Network Child Care Subcommittee

Durham's Best Start Network Child Care Subcommittee aims to provide members of the child care community with an avenue to:

- Receive updates on the current child care environment.
- Network and share strategies for responding to changes in the child care sector.
- Provide feedback to various legislative bodies on how to promote quality child care, and deliver services that reflect current research and best practices.

Committee membership and participation

The committee is co-chaired by Lisa McIntosh, RECE, Manager, Durham Region Children's Services Division, and Denise Gilbert, RECE, Executive Director, Schoolhouse Playcare Centres of Durham. Members are from a variety of child care organizations across Durham Region, representing non-profit, commercial, rural, licensed home child care, multi-site and single site providers. Attendance at meetings and participation is open, giving members the choice to join as many meetings as they prefer. Participants can attend with a goal of becoming informed, networking, and/or taking on a role in a task group. The subcommittee has achieved much in the past two years; some initiatives are described below.

In the Know:

The subcommittee created an In the Know banner to keep all licensed child care agencies up-to-date with information from the Ministry of Education, the Grow Newsletter and the Durham Early Learning Update.

Showcasing partnerships:

The subcommittee created a PowerPoint to show the benefits of a partnership between child care and education. The presentation was distributed to all school boards and agencies offering child care in schools.

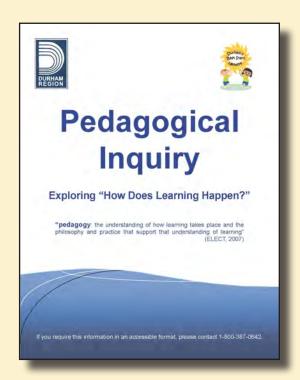
Responding to proposed regulatory changes:

The subcommittee submitted two written responses to the Ministry of Education in regards to the proposed regulated amendments under the Child Care and Early Years Act. Through collaboration, the subcommittee has put forth a united voice for early learning and child care agencies in Durham Region.

Pedagogical Inquiry Tool:

The subcommittee created a Pedagogical Inquiry Tool exploring How Does Learning Happen? The tool is used by:

- Algonquin College (Ottawa)
- Andrew Fleck (Ottawa)
- Simcoe County
- York Region
- Northumberland County



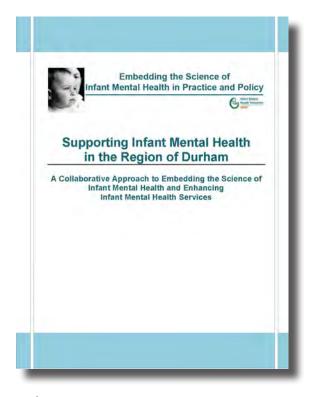
Infant Mental Health Durham Community Table

"Infant and early childhood mental health, sometimes referred to as social and emotional development, is the developing capacity of the child from birth to five years of age to form close and secure adult and peer relationships, experience, manage and express a full range of emotions, and explore the environment and learn - all in the context of family, community and culture."

(Cohen, Oser and Quigley, 2012, page 1).

In 2014, Durham Region was selected as one of six communities to participate in a federal project to better understand local infant mental health initiatives. Through community meetings, the Supporting Infant Mental Health in the Region of Durham report was developed. A community table was struck to embed the science of infant mental health into professional practice within Durham Region.

The community table is comprised of 23 organizations. All members share the goal of improving infant mental health experiences for children and families across Durham Region.



Research and Knowledge Mobilization Subcommittee

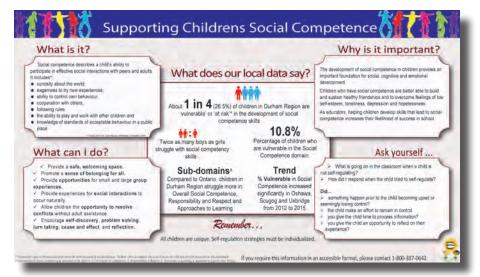
Results of the 2015 Early Development Instrument show that 10.8 per cent of Durham Region Senior Kindergarten students are vulnerable in Social Competence; a child's ability to participate in effective social interactions with peers and adults.

In 2016, the Research and Knowledge Mobilization Subcommittee developed two resources for early learning and child care professionals to address these vulnerabilities. A poster explained social competence and encouraged professionals to reflect on their practices to nurture this skill in children. The two-page handout provided strategies to practice self-regulation with children and strengthen social competence.

2017 focused on disseminating the poster and handout in a thoughtful way.

To date, these resources have been shared with more than 2,000 professionals in early learning and child care programs across the region, including: EarlyON Child and Family Centres, licensed child care centres, libraries, elementary schools and special needs resourcing agencies.

Looking ahead, the subcommittee is going to evaluate the effectiveness of the resources and begin to plan for additional ways to move early childhood development research into practice.



Durham's Indigenous community partners

Durham Region includes an exceptionally diverse network of Indigenous Nations and cultures with traditional territories, including Anishinaabeg, Haudenosaunee, and Métis Nations as well as Indigenous peoples who have more recently established families and communities in Durham Region, including Inuit, Mi'kmaq and Cree. The estimated Indigenous population in Durham Region projected for 2017 may be as high as 13,000 (Statistics Canada 2015).

Initial research conducted by the Durham Region Aboriginal Advisory Circle (DRAAC, 2011) indicates that existing services in Durham Region are failing to meet the needs of Indigenous peoples. In 2016, a newly incorporated Aboriginal agency in Durham Region called Bawaajigewin Aboriginal Community Circle (BACC) was initiated as an Indigenous community-driven organization to assess and implement the vision of the community. The BAAC has since produced a community needs assessment publication entitled Gathering Our Voices and has been an active partner in the Journey Together project, aimed at improving Aboriginal-led and focused early learning programs in Durham.

For 2018, the Journey Together received \$157,575 in funding from the Provincial Government for the creation of an Indigenous Early Years Program Support Co-ordinator, and to enhance two existing EarlyON Child and Family Centre sites that are to be designated as Indigenous culture-based centres.

During the next five years, the CSD will continue to partner with the BAAC and Aboriginal community partners to actively support the development and implementation of culturally-responsive early years programming. All initiatives will be guided by the Durham Region Indigenous Child Care and Early Years Model (Figure 3), which was co-created with Aboriginal service providers, families and children in Durham.

Durham's Aboriginal community (First Nations, Status, Non-Status, on and off reserve, Métis, and Inuit) often prefer the term "Aboriginal" while Durham's municipal services uses the term "Indigenous" to align with provincial and federal terminology.

As such, Indigenous and Aboriginal are used interchangeably throughout the report.



Figure 3: Durham Region Indigenous Early Years Model



Durham Region's Journey Together project aims to enhance access to culturally relevant, Indigenous-led early years programs and services off-reserve, including child care, and child and family programs.

Background

In February 2017, the Region of Durham Children's Services Division launched the Journey Together project as part of a provincial initiative led by the Ministry of Education's planning process for Service System Managers of Ontario Early Years Child and Family Centres. The Indigenous engagement component of the planning process is part of the government's commitment to responding to the Truth and Reconciliation Commission's final report and calls to action. Early years employees were also consulted to assist with determining the implementation priorities based on their knowledge of policies and procedures for Child Care and Early Years Centres. Four key themes emerged through the collaborative process, each with specific components for effective implementation. According to the community that contributed to the Journey Together report, all four areas must be fully realized, in order for the Durham Region Aboriginal Early Years Model to be actualized.

Project recommendations from the Journey Together report:

- A centrally-located, land-based Indigenous Child Care and Early Years Centre of Excellence. This
 includes an Indigenous Early Years Centre that offers hands-on learning with a balance of outdoor
 and indoor learning environments using culture-based approaches.
- Enhancing four existing early years sites to be designated as Indigenous Culture-based Centres.
 In order to provide accessible Indigenous culture-based early years programming across Durham Region, existing Child Care and Early Years Centres must be provided adequate resources and support.
- 3. **Indigenous Early Years program support co-ordination.** A focused co-ordination team is necessary for the careful planning, recruitment, support and promotion of the Durham Region Aboriginal Early Years Model. A central co-ordinator must be available to provide training and support to all early years services with Aboriginal families.
- 4. **Training and certification.** The Region of Durham must commit to supporting the development of, and access to, Indigenous Early Years Certification through close relationships with existing training and college programs across the province, including online Aboriginal Early Childhood Education Diploma Programs, in order to ensure staff is equipped with the skills and knowledge for implementation of the Durham Aboriginal Early Years Model.

Overall, the Journey Together project was a collaborative process with Indigenous people setting the priorities and designing the framework, while non-Indigenous staff worked to effectively operationalize their vision. In February 2018, funding was received to begin working on recommendations.

Community consortium and networks

Representatives from the CSD co-lead, alongside community partners, a number of committees targeted at building capacity with local early childhood educators, and strengthening the quality of child care and early years experiences. Each committee is guided by terms of reference, and projects are prioritized based upon the needs and the recommendations of the community, availability of funding and feasibility of time requirements. As of December 2017, CSD-led networks included:

- Durham's Best Start Network
- Durham's Early Learning Planning Table
- Durham's Ontario Early Years Child and Family Centre Planning Network
- Infant Network
- Toddler Network
- Preschool Network
- School Aged Network
- Supervisor's Network

The CSD is represented on a number of community consortium and networks. These commitments provide valued contributions to the early years sector and help build capacity of CSD staff to better meet the dynamic needs of our community. As of 2017, membership includes:

- ✓ Advancing Access to Affordable Recreation in Durham
- ✓ Ajax-Pickering Early Childhood Development Coalition
- ✓ Association for Applied Epidemiologists of Ontario
- ✓ Barrie Regional CMSM Network
- ✓ Community Capacity Building Network
- ✓ Community Data Program
- ✓ Directly Operated Network
- ✓ Durham's Children and Youth

- **Planning Network**
- ✓ Durham College Advisory Board
- ✓ Durham Region Aboriginal Advisory Circle
- ✓ Durham Region Child Care Forum
- ✓ Durham Special Needs Strategy – Coordinated Service Planning Table
- ✓ Excellence Canada –
 Enhancing the Client
 Experience at Durham Region
- Human Services Integration MCSS

- Municipal Benchmarking Network Canada
- ✓ OMSSA Children's Services Network
- ✓ Ontario Child Care
 Management System User
 Group
- ✓ Provincial Data Analysis
 Coordinators Group
- Professional Development Committee
- ✓ Provincial Special Needs Resourcing Network
- ✓ Ready, Set, Grow Clinics

The CSD is committed to growing and strengthening partnerships during the next five years with community agencies and institutions including, but not limited to:

- ✓ Licensed child care centres and home child care agencies
- ✓ EarlyON Child and Family Centres
- ✓ Licensed Francophone child care agencies and school boards
- ✓ Indigenous community
- ✓ School boards

- ✓ College of Early Childhood Education
- ✓ Ministry of Education
- ✓ Local colleges and universities



The College of Early Childhood Educators

The creation of the College of Early Childhood Educators (CECE) in September 2008 marked the beginning of a formalized structure to regulate the profession of Early Childhood Educators.

The Early Childhood Educators Act, 2007 is the legislation that established the CECE. The Act includes:

- A definition of what constitutes the practice of the profession.
- A requirement to be members, in order to practice the profession.
- The protection of the title "early childhood educators" or "registered early childhood educators," so that only members of the College may use this designation.
- Roles and responsibilities of the Registrar, as well as the Registration Appeals, Complaints, Discipline and Fitness to Practice Committees.

The College, under the leadership of a Transitional Council, began accepting applications for membership in September 2008. The Act was fully proclaimed on February 14, 2009 and the first elected Council took over the governance functions of this newly formed self-regulatory College.

Within the first six months, there were 20,000 members registered. In 2018, there are more than 55,000 registered members across the province.

Members are guided in their professional practice by the College's Code of Ethics and Standards of Practice. Members are also required to participate in ongoing professional learning.

The purpose of the College is to protect the public interest. Anyone can look on the Public Register to view the status of any Registered Early Childhood Educator.

It is important that parents understand that RECEs are held accountable for their professional practice. RECEs understand child development, attend to children's identified needs, interests and stages of development; plan programs for child to learn through play, maintain safe, healthy and simulating learning environments, and communicate regularly with parents and caregivers.

Registered Early Childhood Educators work in a variety of early learning settings, such as: licensed child care and home child care programs, Kindergarten classrooms, EarlyON programs, ministry and government services and Special Needs Resourcing agencies that support licensed child care.

Engaging the community

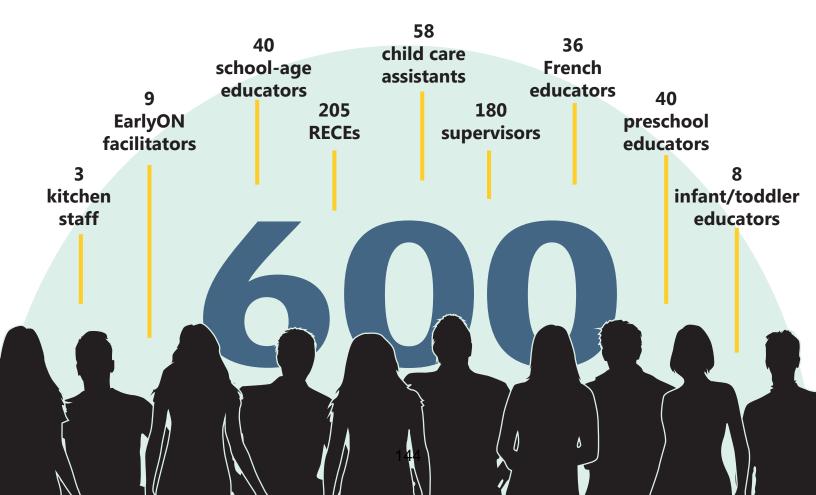
Beginning in 2015, consultations took place with the ELCC community to inform this report. These consultations were thoughtfully planned and executed with the help of an external consultant. Stakeholder groups consulted included:

- Licensed home child care agencies and centre-based providers and educators
- English and French district school boards
- Ontario Early Years (EarlyON) service providers
- Indigenous partners
- Francophone organizations and networks
- Families and caregivers
- Local public health unit
- Special needs resourcing agencies

A combination of activities drew feedback from more than 2,800 participants using surveys, focus groups, small group discussions, large group guided discussions, one-on-one conversations, brainstorming sessions and ranking activities.

"Educators"

There are many titles for those working on the frontlines. Durham Region recognizes the impact all these workers have on the health and development of children. Therefore, throughout this document you will see the word "educator," which encompasses Registered Early Childhood Educators, child care workers, assistants, program facilitators and operators.



Stakeholder Group

Participant Characteristics

Methods



56

Child Care Operators

- Owners
- Supervisors
- Executive directors
- Senior managers
- Directors

Online survey



Operator day event

Directors

Operat



1,815

Parents and caregivers

- Mothers
- Fathers
- Grandparents
- Parents with Indigenous heritage
- French-speaking families
- Representation from all age groups

Online and paper surveys

Focus groups completed in conjunction with the Transformation Planning of Ontario Early Years Centres in Durham.



Indigenous community members

Through the Journey Together planning process.

163

survey respondents identified as Aboriginal



85

Community partners

- Licensed home child care agencies
- Licensed child care centres
- Ontario Early Years Centres (EarlyON Child and Family Centres)
- Indigenous community partners
- Francophone organizations
- Local public health unit
- Specialized community service agencies

45

Organizations represented at

8

Best Start Network meetings



Special needs resourcing professionals

Through the special needs resourcing transformation planning process.

in-person planning sessions

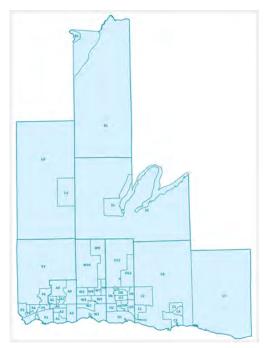
Durham's population

The population of Durham Region has grown rapidly during the past few years, and continues to increase. According to the 2016 census, there are 99,427 children birth to 12 years old in Durham Region.

Most residents (92.6 per cent) speak English in their homes, while less than one per cent (0.6 per cent) speak primarily French. Many residents (6.8 per cent) speak a non-official language; mostly Ajax residents. The most common non-official languages are Urdu and Tamil.

11,850 residents self-identified as Indigenous on the 2016 Census: 59 per cent as First Nations, 29 per cent as Métis and two per cent as Inuk (Inuit). The municipalities with the highest percentages of Aboriginal persons are Oshawa, Clarington, Scugog and Brock. Specifically, Aboriginal persons mostly reside in Downtown Oshawa, Central Park, Courtice South, Brock and Port Perry.

In 2015, 29.7 per cent of Durham Region Senior Kindergarten students were vulnerable in one or more aspects of their development according to the Early Development Instrument.





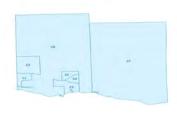
Ajax

- 20,039 children
- Primary non-official language: Tamil
- High population growth



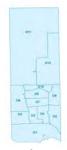
Brock

- 1,614 children
- Primary non-official languages: Korean and Cantonese
- Low population growth and birth rate



Clarington

- 14,065 children
- Primary non-official language: Spanish
- High rates of early learning vulnerability



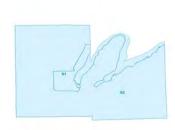
Oshawa

- 22,224 children
- Large proportion of Frenchspeaking families
- High rates of poverty



Pickering

- 13,016 children
- Primary non-official language: Urdu
- High population of immigrants



Scugog

- 2,897 children
- Primary non-official languages: German
- Home to the Mississaugas of Scugog Island First Nations

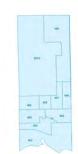


Uxbridge

- 3,010 children
- Primary non-official language: German

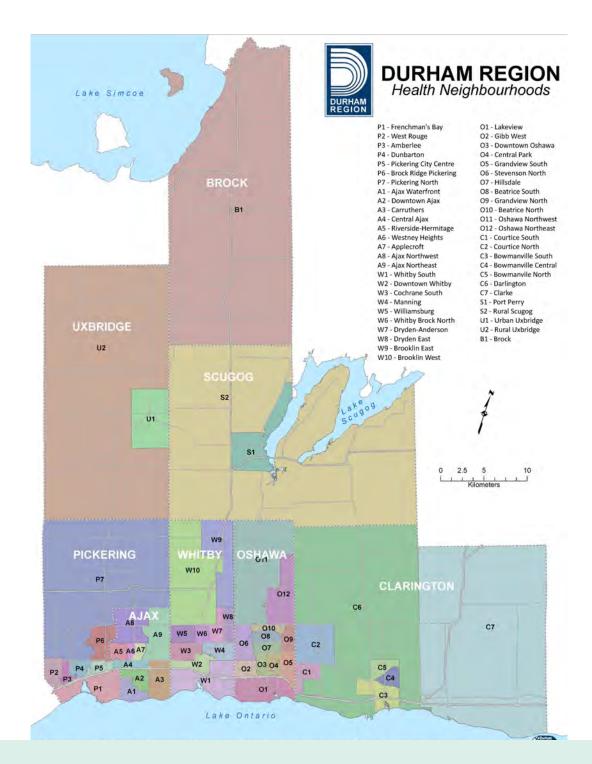
146

Lower rates of child poverty • indicators



Whitby

- 22,562 children
- Primary non-official language: Italian
 - High rate of births by older mothers (ages >35 years)



Durham's Health Neighbourhoods

The Health Neighbourhoods initiative examines information from 50 Health Neighbourhoods in Durham Region to better understand patterns of health in our communities. The ultimate goal is to support strong, safe and equitable neighbourhoods that improve the health and well-being of all residents.

Health Neighbourhood reports, including neighbourhood profiles, indicator summaries and an interactive Map Viewer are available at durham.ca/neighbourhoods.

Seven Health Neighbourhoods have been identified as Priority Neighbourhoods requiring focus to build health and well-being. The neighbourhoods are located in Ajax, Oshawa and Whitby and were selected based upon high rates of low income, children living in low-income houses and unemployment. While these neighbourhoods require attention, there are many positive attributes of these communities, including community connectedness.

of parents are lone mothers.

12.5%

of Durham Region children live in low-income households.

of the 2016 population was children (0 to 14 years).

3.6%

Between 2001 and 2011, 3.6 per cent of Durham's population immigrated to Canada.



of 2016 residences live with three or more people per household.

10.6

In 2011, Durham's birth rate was 10.6 per 1,000 live births. The highest rates in Ajax, Whitby, Oshawa, and Bowmanville are predicted areas of increased growth.

Connecting data across sources

The CSD works in collaboration with a number of internal and external groups to collect, analyze and share data. The partnership between Durham's Health Department and CSD allows for information sharing at the Health Neighbourhood level. Data linked to the social determinants of health are often referenced when identifying the priorities of Durham's families. The results help formulate evidence-informed decision making as the CMSM.

The CSD uses data derived from public consultations, internal operator reporting (e.g. budget submissions and Ontario Child Care Management System (OCCMS) reporting), Durham's Social Services Department, local school boards, contracted providers' service data, Ministry of Education, Statistics Canada, the Community Data Program, McMaster University Offord Centre for Child Studies and scientific research journals.

148

Measuring children's readiness to learn at school

The Early Development Instrument (EDI) is a validated questionnaire used to measure the population of Senior Kindergarten children and their abilities to meet age-appropriate developmental expectations at school entry. The Ministry of Education mandates the EDI be completed by Senior Kindergarten teachers on a three-year cycle. Durham Region has participated in all Ontario EDI cycles: 2006, 2009, 2012, 2015 and 2018. The EDI measures readiness to learn in five domains linked to child psychology and neuroscience.

The EDI identifies vulnerabilities within and across groups of children. To be vulnerable means that children fall within the lowest tenth percentile as compared to their peers. Research demonstrates that vulnerability during the early years can lead to long-term chronic health conditions, social isolation, and reduced academic and professional achievement.

In 2015, 29.7 per cent of Durham Region Senior Kindergarten children were vulnerable in one or more aspects of their development. This number was similar to the rate of vulnerability across Ontario.

The domains of Physical Health and Well-Being and Emotional Maturity have the most amount of vulnerable children in Durham (17.9 per cent, 12.3 per cent respectively).

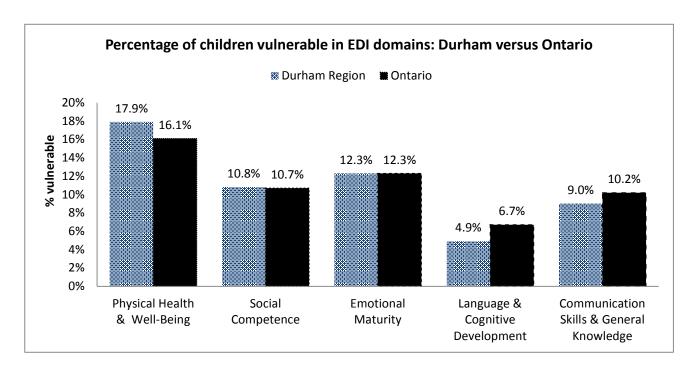


Figure 4: The percentage of children vulnerable in the Early Development Instrument domains (2015, N=6,863)

Across all Health Neighbourhoods, Downtown Oshawa (O3) had the most significant improvement in EDI scores between 2012 and 2015: a 30 per cent decrease in vulnerability. Conversely, Westney Heights (A6) in Ajax had the most significant increase in the number of children vulnerable between 2012 and 2015: a 24 per cent increase in vulnerability.

Data from the EDI Cycle 5 in 2018, in conjunction with results of the Kindergarten Parent Survey (2018), will help identify the needs of our community and allow for a better understanding of the environments Durham children are exposed during their formative early years.

Durham's CSD uses vulnerability data, along with other demographic and system-level information, to identify and prioritize expansion of ELCC programming. Data Analysis Co-ordinators work in partnership with local school boards, public health, child care, and early years partners to disseminate EDI findings to the community; and strategize ways to address vulnerabilities through new or existing supports.

The ELCC sector

The ELCC sector in Durham is responsive to the dynamic needs of the community. Consequently, there has been significant growth in the past decade. Since the implementation of Full-Day Kindergarten in 2010/11, the number of licensed child care centres in schools has risen 157 per cent in Durham, accounting for the addition of 11,725 new spaces. In 2017, there was enough licensed

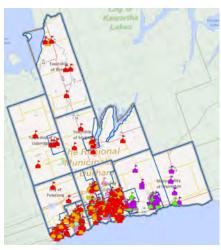
child care available to accommodate 24 per cent of the child population. As of December 2017, all elementary schools in Durham Region have a licensed child care centre within a two-kilometre radius. There are 188 non-profit agencies and 88 commercial sites across the region, together with four licensed home child care agencies regulating 101 homes.



52 EarlyON Child and Family Centres



35 after school recreation programs



179 elementary schools, 35 secondary schools, 54 private schools



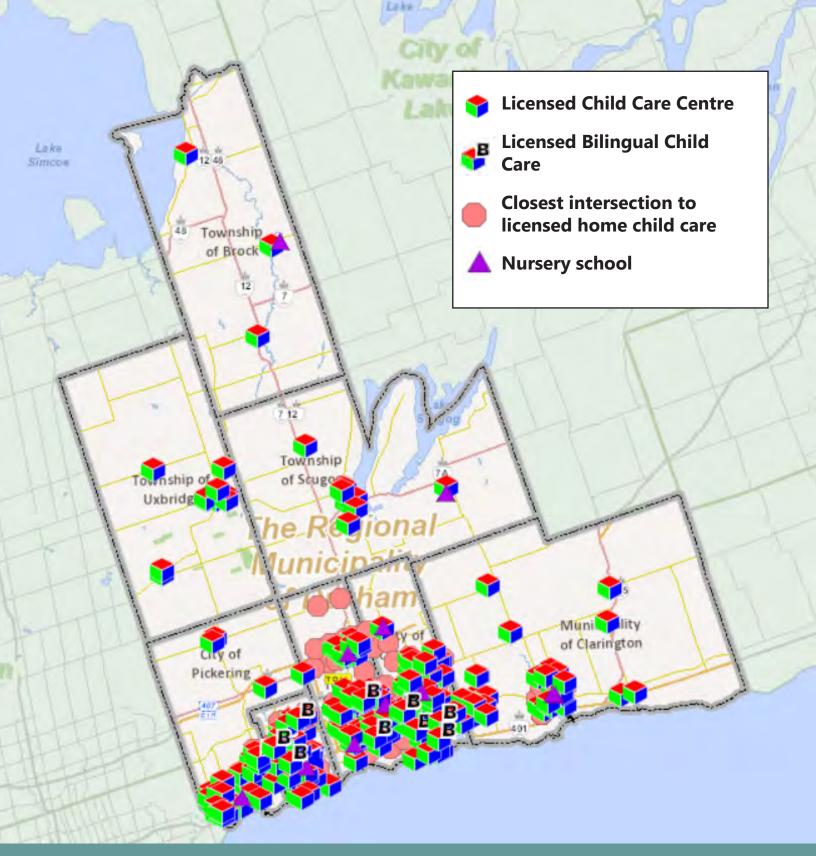
16 health and support program outreach sites



45 agencies and supports for children with special needs



23 libraries and 196 recreation facilities



Locating ELCC programs

Families, educators and service providers are able to locate early learning and child care programs in their local area by using the Children's Program Locator. This online, interactive map can be used on a computer, tablet or phone. By searching with a Durham address, users can identify licensed child care programs, health-related programming and family supports in their neighbourhood. The report feature of the tool allows parents to save, print and share their results with friends and family. Internally, CSD staff use the map, alongside licensed capacity, operating capacity, and vacancy rates to identify system pressures and analyze areas for system growth. The tool can be found at https://maps.durham.ca/Childcareprograms/.

The ELCC sector continued

The Regional Municipality of Durham receives funding, as the CMSM, from the Province of Ontario and the Canada-Ontario Early Learning and Child Care Agreement. In 2017, the Region received more than \$55 million from the Ministry of Education to fund the system, which has increased to more than \$65 million in 2018, based on preliminary allocations. This includes funding to support the transformation of Ontario Early Years Centres to EarlyON Child and Family Centres in 2018.

The Province has also committed to providing 100,000 new spaces during the next five years with its Child Care Expansion Plan funding in 2018, and Durham Region has received funding as a result of the Canada-Ontario Early Learning and Child Care Agreement.

The Region of Durham has a historical required municipal cost share that is also added into the available funding. In 2017, the Region allocated up to \$9.2 million. The Province continues to confirm that new early years and child care fundings does not require additional municipal cost share. The Region of Durham has consistently supported financial investment in child care.

Table 2: Children's Services Funded Programs (2018)

| Program | Purpose |
|----------------------------|--|
| Purchased fee subsidy | Provide eligible parents with subsidy for quality child care to support employment, education or a recognized need. Enter into Purchase of Service Agreements with licensed child care operators to facilitate placement of children, allowing for parental choice. |
| spaces | Reduce the financial impact on income support programs through effective financial management, encouraging employment and supporting educational upgrade. |
| | Provide quality ELCC programs, which support parents, including low-income earners and full-fee parents who are working and/or upgrading their education. |
| Directly operated programs | Be a leader within the child care community with regard to the provision of child care, including participating on community committees, to improve the image and increase public awareness of the Region's services. |
| | Model quality child care programming to be used as the benchmark for purchase of service. |
| Ontario Works child care | Provide subsidy for quality child care to eligible Ontario Works recipients to support their participation requirements. |
| | Purchase support, including services of resource teachers for children with special needs in licensed child care and licensed home child care programs. |
| Special needs resourcing | Flow program operating funds to the four SNR agencies, in order to provide services for children by qualified staff. |
| | Purchase specialized toys and equipment, in order to support an individual child's program plan. |
| Durham's Behaviour | Provide consultation and training to ELCC professionals and parents/guardians through licensed child care for children with developmental disabilities and/or for children with behavioural concerns. |
| Management Services | Work in co-operation with Regional and Provincial governments to provide consultation services to parents and caregivers regarding Intensive Behaviour Consultants. |

| Program | Purpose |
|--|---|
| General operating program subsidy | Support the costs of operating licensed child care programs in order to reduce wait times and fees for service levels, and where funds allow, improve access to high-quality affordable ELCC services for children and their families. |
| Administration | As the CMSM for child care, the principle role of the Children's Services Division is to manage all programs described in this report. |
| Special purpose projects | To provide funds to licensed child care operators to support daily operations: Non-profit pay equity Capacity building Provider transformation (Transformation expense) Small Water Works Play-based materials and equipment Repairs and maintenance (health and safety) Provider retrofit capital (capital retrofits expense) |
| Wage enhancement | To close the wage gap between RECEs working in school boards and those in licensed child care; to help further stabilize child care operators by supporting their ability to retain RECEs, Home Visitors or Home Providers. |
| Child and family supports | EarlyON Child and Family Centres: Supporting the transformation from Ontario Early Years Centres to EarlyONs. Data Analysis Coordinator: Supporting early years research, evaluation and knowledge mobilization. Early Learning Planning: Through the Early Years Community Development fund, support Durham's Best Start Network. |
| Canada-Ontario Early Learning and Child Care Agreement | Support access to non-profit licensed child care; for children ages birth to 6 years and birth to 12 years. |
| Child Care Expansion Plan | As part of the Provincial initiative to create 100,000 new child care spaces during the next five years: supports funding for children birth to 3.8 years with additional fee subsidies and/or increased access. |



Affordability of child care in Durham Region

Between 2014 and 2016, the cost of child care increased by eight per cent in Canada's largest cities – this was three times the rate of inflation at 2.5 per cent. The Canadian Centre for Policy Alternatives (CCPA) has conducted an evaluation of median monthly parent fees in 28 of Canada's largest cities (Macdonald & Friendly, 2016). A comparison of rates for infant, toddler and preschool between Canada's big cities and Durham Region are presented on the next page. The highest rates for all three age groups are reported by Toronto, which serves a similar clientele as families in Durham, although not at the same capacity. In comparison to Ontario-based cities, Durham has one of the lowest parental fees for infants (\$1,128), toddler (\$987) and preschool (\$868). The median monthly cost of school age, before and after school care was \$840 in Durham Region in 2017.

In Durham, the cost of child care is set by individual operators who are responsible for ensuring the CMSM has the current parent fees on file. The per diem rate for child care is driven primarily by the salaries and benefits paid to educators. These costs make up between 75 and 85 percentage of the cost of licensed child care. Rent, program supplies, food and administrative expenses comprise the remainder. This ELCC plan will work towards creating a system that maximizes the financial support for the licensed child care system, while working to improve affordability of care for families.

Of 1,700 parents surveyed in 2017, cost was reported as the biggest barrier to accessing quality child care in Durham Region. In focus groups and through the survey, parents commented that the cost of child care interfered with family planning, long-term saving and ability to access high quality programming for their children. These types of comments were repeated across all municipalities and income levels.

"Cost needs to be lowered.
Would love to have two
children, but can't afford \$1,800
per month in child care."

- Durham Region parent

"...since I don't qualify for a subsidy, and cannot afford to pay \$45 a day, I feel as though I settle for substandard care."

"Costs

have to go down.

Child care costs are almost
as much as a mortgage leading
to a lot of debt for new families."

am Region parent

- Durham Region parent

Impact of the increase of minimum wage on licensed child care

The Region is expecting fees to increase in 2018 as a result of Bill 148.

Bill 148, Fair Workplaces, Better Jobs Act, came into effect January 1, 2018. This new legislation raises the minimum wage to \$14 per hour, equalizes pay for casual, part-time, temporary and seasonal employees, and extends access to vacation time and personal emergency leave to specific groups of employees.

As a direct result of Bill 148, child care operators are reporting increased staffing costs, as well as increased indirect costs associated with leasing, food and utilities.

The Children's Services Division will be allocating Fee Stabilization Funds in early 2018 to eligible operators and is actively working with the licensed child care providers to stabilize fees.

Assistance with the daily cost of care is available to Durham families through the fee subsidy program. To qualify, parents must be meet one of the following qualifications: working, going to school, receiving Ontario Works or have a special or social need (parent or child). The current wait time for fee subsidy is less than six months. Parents can apply online at durham.ca/childrensservices.

Median rates for child care in Durham Region versus Canada's Big Cities

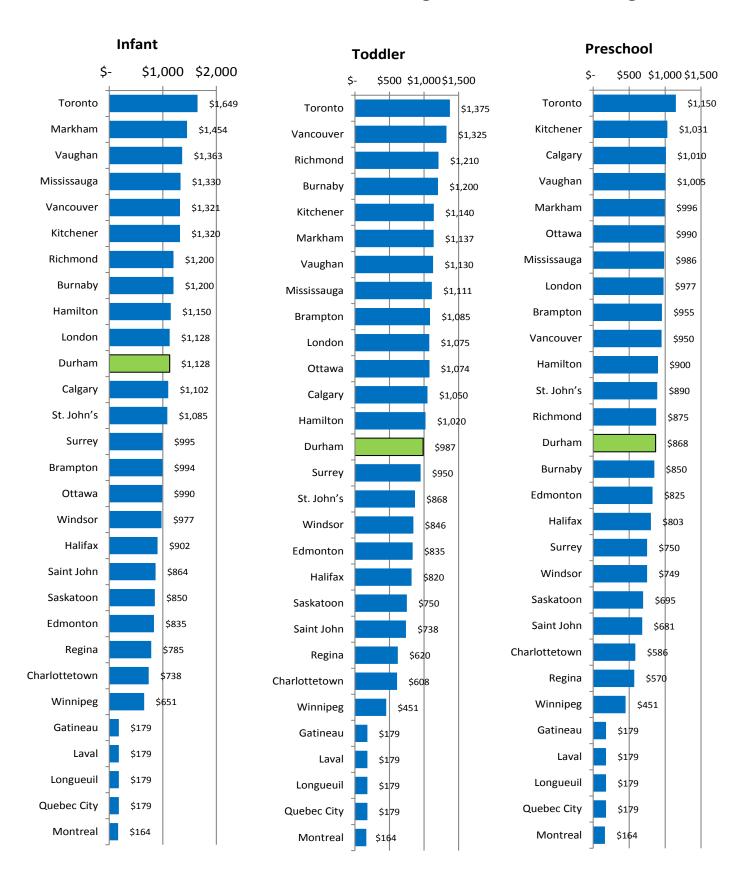


Figure 5: Median cost of child care for infants, toddlers and preschoolers: Durham Region (2017) versus Canada's Big Cities (2016)

Outcomes and implementation Plan

This section lists the proposed strategic priorities and intended outcomes that are responsive to community needs and align with Ontario's vision for child care and early years and provincial interests. This measurable and action-oriented implementation plan describes how the strategic priorities and outcomes will be met.

When developing outcomes for local indicators, the CSD referenced the following documents:

- Ontario's Renewed Early Years and Child Care Policy Framework
- Ontario Early Years Child and Family Centre Guidelines
- Before-and-After School Programs Kindergarten Grade 6 Policies and Guidelines for School Boards
- Ontario Child Care and Child and Family Program Service Management and Funding Guideline
- How Does Learning Happen? Ontario's Pedagogy for the Early Years
- 2016 Census data
- Our children, the future: A trends report of the Early Development Instrument in Durham Region
- Health Neighbourhoods Report

Provincial priorities

Ontario's vision for the early years sees all children and families having access to a range of high-quality, inclusive and affordable ELCC programs that are family-centred and contribute to children's learning, development and well-being. The impact of this transformation will ultimately be measured by the enhanced healthy development of children within the community and throughout the province. The four key components of a strong early years system - accessibility, responsiveness, affordability and quality form the basis for ongoing monitoring and assessment of the early years transformation.

Durham Region System Priorities

Building on the four key components, the Durham Region early learning and child care (ELCC) community has identified five priorities as the focus of the 2018 to 2023 strategic plan. The priorities are:

- 1. Maximize financial support available to licensed child care.
- 2. Develop and implement a strategy to build the capacity to support children with special needs from birth to 12 years.
- 3. Increase, attract and retain quality Registered Early Childhood Educators.
- 4. Support and expand the licensed home child care sector.
- 5. Reduce the waitlist for child care fee subsidy.

The forthcoming sections describe each priority, the context and justification as to why these priorities were selected, and measurable and attainable strategies used to accomplish specific sub-objectives within the five-year time period.

Provincial and Regional Priorities: 2018 to 2022

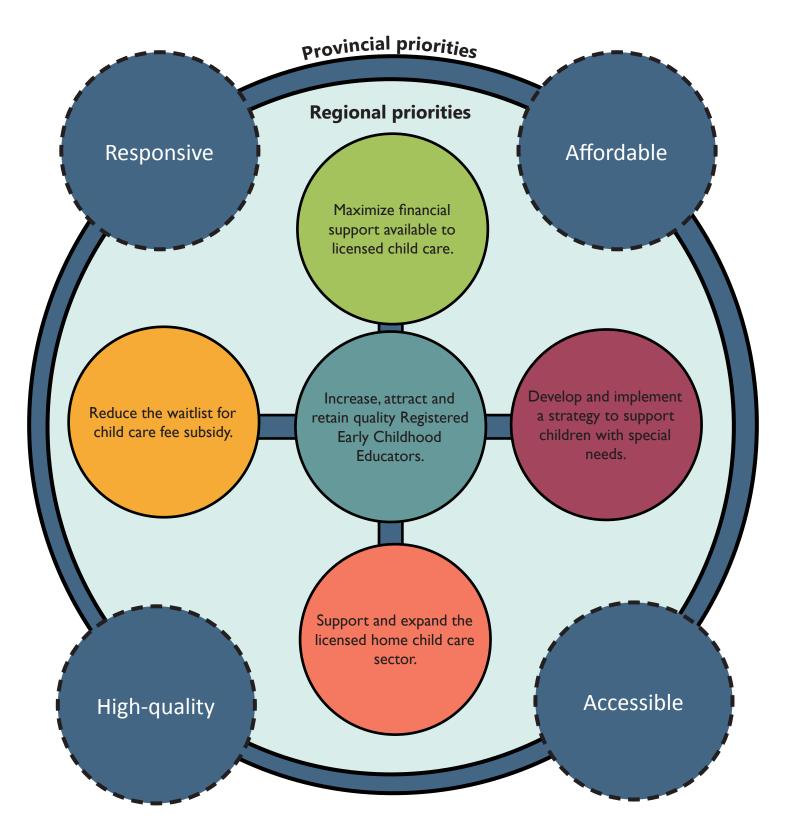


Figure 6: Durham Region Early Learning and Child Care Priorities for 2018 to 2022

1. Maximize financial support for licensed child care

Context

With an increase in provincial and federal funding for Durham Region's ELCC sector during the past few years, the CSD continues to maximize financial support for licensed child care by supporting the efficient distribution of various funding streams, promotion of fiscally responsible practices, and use of community needs to drive change. Recent achievements of the CSD include:

- Embedded a community analysis protocol for every POS application. This ensures data drives decision making
 for equitable distribution of child care that meets community needs, and minimizes unnecessary and prolonged
 vacancies.
- Hosted an in-depth financial education day for child care operators who may have had difficulties managing
 operations. Operators reported the information shared and skills learned helped build capacity to better manage
 centres/homes.
- Reviewed and amended the General Operating Program (GOP) funding model. By reformulating the GOP funding
 guidelines, the needs of both single and multi-site child care centres/homes were equitably met.
- Formulated a fee analysis strategy to gather data on the impact of the increase to minimum wage, Fee Stabilization Funding and operating costs on parent fees.
- Begun to redesign and reinstate a Child Care Operator Fee Increase Request Policy. The goal of this policy is to monitor and prevent spikes in parent fees.

There are currently a number of funding streams from all orders of government (Regional, Provincial and Federal) that are targeted to increasing the amount of support for licensed child care. Each of these streams (pages 27 to 28) have slightly different mandates, and varied requirements as to usage and reporting. The overall intent of all funding seems to be to increase child care funding to support salaries and program operational funding without a corresponding increase in parent fees, and to provide subsidy funding for eligible families.

The Region of Durham's CSD focuses on initiatives that meet the needs of families, children, educators and operators within Durham. It is important to recognize, monitor and implement strategies to address the impact cost drivers may have on quality within the licensed child care sector.

Supporting operators to ensure efficient, fiscally responsible programs located in areas where there is a demand is important to address access to services and maintain affordable fees. Programs that experience high vacancy rates where child/adult ratios do not reflect those regulated through the CCEYA and accompanying regulations drives up the cost of each space.

For example, the ratio for toddlers is one educator for every five toddlers with a maximum group size of 15 children. If a program is licensed for 12 toddlers (perhaps because the physical location is not large enough to accommodate fifteen, three educators will also be required. The cost per child in the second scenario will be significantly higher than the first. The more efficient option in this

scenario would be to license the space for ten toddlers.

Co-ordinating new programs to locations that support access and demand is also very important in order to allocate funds efficiently and maintain affordability. Families are supported when programs are located within their communities or on their convenient commuter routes as well funding is best used to support programs when programs vacancies are low. This occurs in programs strategically located within Durham.

"Provide funds to help the purchase of resources, materials and games."

- Durham Region educator

It is a real challenge to promote and support affordable child care simultaneously with increasing salaries and benefits for educators. While there has been a considerable increase in the level of government funding during the past several years, there remains a direct correlation between fees paid by parents (either through the subsidy system or by families paying full fees) and the ability of programs to attract and retain trained, experienced educators. In most programs, salaries, wages and benefits comprise 80 to 85 per cent of the overall operating costs.

The Region of Durham consistently considers research, stakeholder input and potential strategies to proactively support the community. The intent is to mitigate impacts due to legislative changes and community pressures by supporting operators. For example, currently due to the high demand for Registered Early Childhood Educators and the implementation of the Fair Workplace, Better Jobs Act, 2017, it is challenging for operators to recruit and retain educators. In 2018, the CSD will support initiatives to build relationships with post-secondary institutions to try to increase the number and/or the employable readiness of new graduates to support the need in Durham. Funding to support affordability initiatives was also included in the CSD Regionally approved budget.

Measurement indicators

Table 4: Measurement indicators for Objective 1

| Indicator | Source |
|---|--|
| Salaries and benefits | Operator annual submissions |
| Parent fees | Operator annual submissions |
| Allocations of special purpose funding to support high- quality programs | DROC AQI scores and special purpose funding tracking |
| Percentage of vacancies | OCCMS standard reports |
| Quality of licensed child care | DROC AQI scores |

Actions and timelines

Table 5: Timeline for Objective 1

| Action | 2018 | 2019 | 2020 | 2021 | 2022 |
|--|------|------|------|------|------|
| Review and update the operator budget tool and fee request process. | | | | | |
| Incorporate rate and fee elements into operating funding model. | | | | | |
| Annually review and include new legislation and community components to community analysis tool and funding models (e.g., General Operating, special purpose). | | | | | |
| Monitor vacancy levels in licensed child care settings. | | | | | |

Additional context

The CSD recognizes the pressures on the system to provide affordable, high-quality child care to all families. In this regard, the CSD recognizes the potential for funding sources and amounts to shift as a result of the Provincial election. We will continue to monitor the cost of care (e.g. parent fees) within the license child care sector as changes occur to minimum wage, availability of fee stabilization funding and other operational costs. In addition, we will begin to monitor the impact of these top-down policies have on the availability and accessibility to publicly-funded EarlyON Child and Family Centres. Monitoring of both licensed child care costs and availability of EarlyON centres will be documented in ELCC annual reports.

2. Develop and implement a strategy to build the capacity to support children with special needs from birth to age 12

Ontario has demonstrated a continuing commitment to supporting the varying needs of children with special needs through the introduction of a number of provincial initiatives, including, but not limited to:

- Moving on Mental Health (Child and Youth Mental Health)
- Ontario Autism Program
- Children's Rehabilitation Services
- Ontario's Special Needs Strategy for Children and Youth
- Developmental Surveillance Process
- Coordinated Service Planning
- Integrated Rehabilitation Services
- Transition Planning
- Fetal Alcohol Spectrum Disorder prevention, service coordination, and enhanced support
- Healthy Babies, Healthy Children
- Early Years Community Support

The Integrated Rehabilitation Services project is temporarily on hold while each of the other initiatives are at different stages of implementation. Notwithstanding this, there are several key messages to be taken from this provincial work:

- Working to address the needs of children, youth and their families is best done collaboratively with government, community agencies and stakeholders working together to make the best use of all available resources.
- Families deserve access to the programs and services that they need with a single point of entry wherever possible and the need to tell their story only once.

These are principles which the CSD supports and implements in all its work on behalf of children, families and the ELCC community. As demonstrated below, the Region of Durham is strongly committed to supporting inclusion of all children into the early learning and child care sector. The Children's Services Division contracted with a number of organizations to support community based service provision and support.

The four Special Needs Resourcing (SNR) agencies contracted to provide services to the licensed child care system in Durham Region include:

- Durham Behaviour Management Services
- Grandview Children's Treatment Centre Preschool Outreach Program
- Surrey Place Blind-low Vision Early Intervention Program
- Resources for Exceptional Children and Youth Durham Region

Historically, some SNR service providers have used SNR funding to offer out-of-scope services directly to families in the community (e.g. home-based consultation and observation to support children not enrolled in the licensed system). This was in part because the agencies had some designated funding to support families not enrolled in licensed child care. Many years ago the Province discontinued the 87/13 funding formula for children with special needs, which allowed for children with special needs to attend half day licensed child care programs. The CMSM funded 87 per cent of the cost of the child care and the parent provided the remaining 13 per cent. This change happened at a time when there were significant demands for child care fee subsidy and lengthy waiting lists. The lengthy waitlist did not enable children with special needs to quickly access services. The significant provincial increase in funding for subsidy placements, together with a review of SNR services, provides an opportunity to ensure that funding to support children with special needs is used as effectively as possible within the bounds of current policy and regulatory expectations. The Regional Municipality of Durham, Children's Services Division is required to allocate a minimum of 4.1 per cent of the provincially provided funding, exclusive of wage enhancement funding, to SNR services.

Currently, the Region allocates approximately 11 per cent of provincial funding to SNR services.* Supporting children and their families is a primary focus of the CMSM. The review of services and recommendations for modifications will focus on the needs expressed during the child care consultation. Strategies for the transformation of SNR services will be based on current funding levels and the scope of the program as described by the Ministry.

Table 6: New allocation of funds for SNR agencies

| | 2016 | 2017 |
|--|--------------|--------------|
| SNR funding | \$4,247,245 | \$4,944,960 |
| Total subsidy allocation by CMSM* | \$37,028,902 | \$45,353,970 |
| Per cent of CMSM subsidy allocation to SNR funding | 11.47% | 10.90% |

^{*}The per cent of spending represents the MEDU funding (exclusive of Wage Enhancement funding). The allocation does not include the Regional contribution of funds. CMSM's must commit 4.1 per cent to SNR supports.

In 2017, 54 of 56 child care operators surveyed had accessed one of the funded SNR agencies, with an average of more than 2,100 children (six years or younger) served per month. This year also marked the beginning of the transformation of SNR services in Ontario, with a more narrow focus on service provision. Through a series of community consultations, five objectives to develop the strategy to support children with special needs from birth to age 12 through licensed child care and EarlyON Centres were identified. These objectives include:

- a. Establish a system vision.
- b. Implement a transition plan that meets community needs and reflects MEDU requirements.
- c. Implement capacity building opportunities.
- d. Institute administrative and procedural modifications.
- e. Increase the support provided through the Enhanced Staffing program.



a. Establish a system vision

Context

The information collected during community consultations demonstrated a need to increase child care organizational leads' and educators' knowledge about SNR services and funding. Currently the Region supports SNR services with approximately 11 per cent of the operating budget. This amount far exceeds the minimum 4.1 per cent spending requirement set out by the MEDU, yet the feedback from the participants in consultation sessions showed participants think SNR services require more funding. A system vision, in-line with the vision of the MEDU, must be created and broadly disseminated.

Measurement indicators

Using proxy measures of enhanced awareness, the CSD, alongside community partners, will develop a communication plan beginning in 2018.

Table 7: Measurement indicators for Objective 2a

| Indicator | Source | | |
|-------------------------------------|--|--|--|
| Number of publications disseminated | Early Learning Secretary distribution list | | |

Actions and timeline

Table 8: Timeline for Objective 2a

| Action | 2018 | 2019 | 2020 | 2021 | 2022 |
|---|------|------|------|------|------|
| Develop and action a communications plan. | | | | | |

Additional context

Whenever possible, this system vision will be shared with parents and caregivers, as parents will require straightforward information of why specific programs have ended and how to access similar supports through the licensed child care system.

b. Implement a transition plan that meets both community and Ministry of Education needs

Context

The Region will develop a transition plan to shift the majority of out-of-scope services to in-scope services during 2018. The goal will be to support families that are currently receiving out-of-scope services to access services that are within the funded system (e.g. licensed child care and/or approved recreation programs). The majority of SNR funding will support the licensed child care and approved recreation programs beginning January 1, 2019.

Licensed child care programs and approved recreation programs will continue to receive consultation, access to specialized services, behaviour management, speech language pathology and Enhanced Staffing funding to support successful placements for children birth to 12 years of age.

Measurement indicators

The indicators below provide an overview of how success will be achieved.

Table 9: Measurement indicators for Objective 2b

| Indicator | Source |
|--|--|
| Reduction in out-of-scope services | Number of clients served through out-of-scope services in 2017 retrieved from the four funded SNR agencies. |
| Increase of in-scope services offered in licensed child care | Establish annual targets for each of the SNR funded agencies/services in collaboration with the agencies/services. Review the plans for increasing the direct connections between licensed child care operators and the numbers of clients who are in scope and evaluate success at year-end. |
| Review increase of in-scope services currently offered at EarlyON Child and Family Centres | Review the plans developed by each SNR agencies/ services to meet the needs of children and families attending EarlyON Child and Family Centres. |

Additional context

To strengthen the approach taken, the SNR agencies have agreed to:

- Assign child care sites to the caseload of a SNR agency professional to directly support successful placements of children with special needs.
- Help build the capacity of families and educators.
- Mentor educators.
- Support inclusive practice in the program rooms.
- Co-ordinate access to specialized services.
- Support the development of Individual Service Plans in collaboration with the child care team and families.
- Commit to being regularly present in sites in order to support access to specialized SNR services for room consultation and services for individual children with parental consent as required.

It is anticipated that as SNR professionals spend more time in licensed child care centres, with home child care agency staff and in EarlyON Centres, the capacity of educators in the ELCC sector to effectively support children with special needs will improve.

Through one-on-one training and support, classroom management support, parental engagement and professional development sessions covering topics, such as behaviour guidance, developmental milestones, supporting children with Autism Spectrum Disorder, and parent support agencies and organizations funded to provide SNR will use a range of strategies to support children with special needs

Actions and timeline

Table 10: Timeline for Objective 2b

| Action | 2018 | 2019 | 2020 | 2021 | 2022 |
|---|------|------|------|------|------|
| Services offered by the four current SNR agencies will continue to be part of Durham's SNR system. The CSD will consult with the Ministry about the role for other funded agencies that provide specialized supports to children under six years (e.g. Infant Development Services). | | | | | |
| SNR agencies will work with the CMSM to strategically modify service delivery to ensure that service provision is directed toward licensed child care and early learning programs. | | | | | |
| SNR funding will be prioritized to ensure a focus on in-scope spending. | | | | | |
| SNR service providers will establish intake and triage procedures that focus on providing families with information on licensed child care and early learning programs and community services to meet their needs. SNR funds will be prioritized to support the licensed child care system. | | | | | |
| The data collection process will be modified to gather information from SNR agencies to monitor out-of-scope services. | | | | | |
| Out-of-scope services may support short-term or specialized support for families who do not have any other services in place. The focus will be on supporting the families to receive interim support during crisis or while they gain access to community services to support their child's needs, as necessary. | | | | | |
| Licensed child care and approved recreation programs will have a direct communication link to SNR services. | | | | | |
| A review of the Licensed Home Child Care (LHCC) agencies and providers will occur. Strategies to ensure LHCC have a relationship with and access to SNR services to support inclusion will be implemented. | | | | | |

c. Implement capacity building opportunities

Context

Front-line educators and operators identified an increase in the number of children with behavioural concerns requiring behaviour management services, as well as an increase in the number of children with Autism Spectrum Disorder. Although the characteristics of these diagnoses are described to students in the college early childhood education program, recent graduates and non-trained educators have not had an opportunity to develop the skill set required to develop and implement a safe and inclusive program. To address this gap in knowledge, skills and training, professional learning opportunities must be implemented.

In addition to providing direct support to children with special needs attending ELCC programs and services, SNR funded agencies will also provide training and development support to the broader ELCC community. This training is beyond that which happens for individual or small groups of educators who are working directly with children who have been identified as requiring SNR supports.

Measurement indicators

Table 11: Measurement indicators for Objective 2c

| Indicator | Source |
|---|--|
| Number of SNR trainings offered | Training calendars provided by Funded Special Needs Resourcing agencies will provide training sessions to individual sites and on the Durham Professional Training Calendar as applicable. |
| Number of ELCC professionals participating in trainings | Training numbers provided by SNR agencies. |

Licensed child care educators and SNR professionals will participate in professional learning sessions together. Professional learning may include sessions on the general knowledge of children with special needs (e.g. The Angry Aggressive Child, ADHD strategies), leadership or mentoring skills sessions, and/or Pedagogy related sessions (e.g. How Does Learning Happen?, Pedagogical Documentation, legislation). Shared professional learning sessions will provide opportunities to network and collaborate. Participation in pedagogy and child care legislation sessions will increase the SNR professionals' understanding of the child care system, so future strategies are reflective of the context of licensed settings.

By offering such programming, families will have more confidence in the staff and ELCC programs: "Centres needs to be equipped and staffed to support children with special needs" (Durham Region parent).

Table 12: Timeline for Objective 2c

| Action | 2018 | 2019 | 2020 | 2021 | 2022 |
|---|------|------|------|------|------|
| Consult with SNR agencies to develop training calendars | | | | | |
| Conduct regular SNR-related trainings | | | | | |

d. Institute administrative and procedural modifications

Context

In 2017, the process by which referrals were made to SNR agencies resulted in a considerable number of referrals for work that was out-of-scope and did not meet the expectations for in-scope service provision. To encourage a system supportive of children with special needs (birth to 12 years), there is a need to streamline the process by which needs are identified, supports are requested and delivered in a timely manner. This requires open communication between families, child care providers and SNR agencies. The CSD will work collaboratively with the SNR funded agencies to develop and implement a streamlined referral and intake process.

"More education and training for staff around working with children with special needs. Do they understand what services are available in the community that they can access for their program?" (Durham Region parent).

Measurement indicators

Table 13: Measurement indicators for Objective 2d

| Indicator | Source |
|---|--------------------------------|
| Number of referrals to each SNR agency | SNR agency quarterly reporting |
| Number of children served in licensed child care sector for each SNR agency | SNR agency quarterly reporting |

Actions and timelines

Table 14: Timeline for Objective 2d

| Action | 2018 | 2019 | 2020 | 2021 | 2022 |
|--|------|------|------|------|------|
| Develop and action a communications plan. | | | | | |
| Develop a consent form for on-going information sharing and/or service request form for Durham Region. | | | | | |
| Share consent forms across the ELCC system. | | | | | |



e. Increase the support provided through the Enhanced Staffing **programming**

Context

All educators strive to promote inclusion in their programs, but recognize the need for the Enhanced Staffing program in order to engage all children, equitably.

The Enhanced Staffing program is one strategy to support the full inclusion of children with special needs into the licensed ELCC sector. The Enhanced Staffing program involves placing additional staffing into classrooms where the inclusion of children with identified special needs requires the support of additional staff beyond that which is legislated under the CCEYA, 2014.

"We want to do the best for [our children] but need extra hands in the rooms to provide the one on one attention needed" (Durham Region child care operator).

Consultation participants shared ideas to increase the effectiveness of the Enhanced Staffing program in Durham. It is evident that there are some misunderstandings about how the Enhanced Staffing program functions. It is important to clarify requirements to ensure that Enhanced Staffing resources are utilized as effectively as possible.

Measurement indicators

The demand for enhanced staffing is predicted to decrease, with regular participation and support of SNR consultants in programs and an increase in participation of front-line educators in capacity building opportunities.

Table 15: Measurement indicators for Objective 2e

| Indicator | Source |
|--|---|
| Hours of Enhanced Staffing funds paid to operators | Resources for Exceptional Children and Youth – Durham Region quarterly reporting |
| Unique number of children supported | Resources for Exceptional Children and Youth – Durham Region quarterly reporting |

Actions and timeline

Table 16: Timeline for Objective 2e

| Action | 2018 | 2019 | 2020 | 2021 | 2022 |
|---|------|------|------|------|------|
| A review of the current application process and approval process should take place in the last quarter of 2018. This timing will allow the effects of the SNR transition plan and opportunities for flexibility to be incorporated into the review. | | | | | |
| Update and implement an application process. | | | | | |
| Monitor demand for enhanced staffing. | | | | | |

3. Increase, attract, and retain quality RECEs

Provincial changes in legislation and regulations have caused a fast-paced increase in the demand for qualified RECEs. Durham Region operators are experiencing a staffing crisis. The lack of qualified RECEs available for employment is jeopardizing the expansion of the licensed child care system.

Durham Region early childhood educators are intrinsically motivated to enter and remain within the field. They are compassionate, dedicated and innovative thinkers, using creativity to plan programs and solve problems. When asked, "what is the best thing about being an early learning and child care professional?" Responses included helping children learn new things, being part of children's growth milestones, building relationships with families, making a difference in the lives of children, and having a career that is worthwhile and enjoyable.

This threat applies to ELCC programs including EarlyON Child and Family Centres, licensed home agencies and centre-based child care because there is a lack of quality RECEs. Furthermore, retention of RECEs is difficult for child care operators, as many RECEs leave the licensed sector to work for higher wages with other operators, the municipality or school boards.

In order to increase, attract and retain quality RECEs, the CSD will implement two strategies:

- a. Raise public awareness of the RECE professional designation.
- b. Provide opportunities for new and existing ELCC educators (including RECEs) to improve their knowledge, understanding and use of current ELCC best practices.

Which experiences led you to become an ELCC professional?

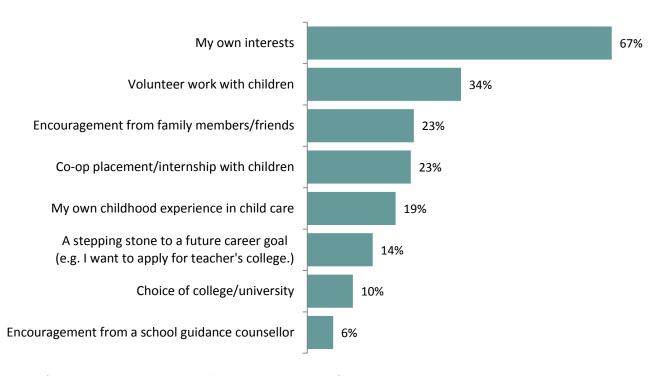


Figure 7: Reasons for selecting a career in early childhood education, ELCC Professional Survey 2017



a. Raise public awareness of the RECE professional designation

Context

Through community consultations, ELCC executive directors, operators, supervisors, and front-line educators identified that in the public realm, there is a shared perception that RECEs are babysitters. This is not the case. The title of "RECE" is not always viewed as a professional designation or recognized as a legitimate career choice.

There is a need to increase the knowledge of parents, teachers, secondary school counselors and potential RECE students about the importance of ELCC and the critical role of trained and experienced RECEs in the planning and delivery of high quality programs. This includes increasing the understanding of the diverse skill set required to effectively perform the RECE role. By raising the public awareness of RECEs, the hope is to build the public confidence to acknowledge RECE as a professional designation and further attract individuals into the role.

There is a need to increase parents' knowledge that RECEs are registered members of the College of Early Childhood Educators who are required to practice according to the Code of Ethics and Standards or Practice. RECEs must regularly fulfill their continuous professional learning requirements.

There is also emerging demand for French-language RECEs and for RECEs with Indigenous heritage to deliver ELCC programs.

"Il paraît avoir un grosse demande pour les services de garde en français. Il serait bon d'avoir plus de disponibilité pour combler les besoins."

"There seems to be a large demand for French child care. It would be good to have more availability to meet the needs."

- Durham Region parent

- Durham Region parent

Measurement indicators

Table 17: Measurement indicators for Objective 3a

| Indicator | Source |
|---|---|
| Number of RECEs in licensed child care centres (including before and after care) | Ontario Early Years Portal: Child Care Licensing |
| Number of RECEs in licensed home child care agencies (Home Visitors and Home Providers) | Durham Region Annual Child Care Operator Survey |
| Number of RECEs in EarlyON Child and Family Centres | Education Finance Information System |
| Number of French-speaking RECEs | Durham Region Child Care Operator Survey |
| Number of RECEs delivering Indigenous programming who identify as Indigenous | Durham Region Child Care Operator Survey |
| Number of RECEs as Resource Consultants offering SNR services | Special Needs Resource Agencies' annual reporting |

Actions

In consultation with community partners, the Region of Durham, CSD will develop and implement a comprehensive, multipronged media campaign targeted at attracting residents into the field of early childhood education, while raising public awareness of the role of RECEs in ELCC programs.

The campaign will be Durham-centric and focus on the skills required to be an effective early childhood professional. There will be multiple streams to outline how to enter the field from secondary school, having achieved some previous post-secondary education, and a shift from another career. Through the use of social media, web, print ad, newspaper, radio, television and formal presentations, the role of RECEs in fostering healthy growth and development of all age groups will be showcased. Further efforts will be placed to attract French-language RECEs, provide education to help RECEs deliver French-language programming, and attract individuals with Indigenous heritage to enter the early childhood sector.

The campaign will not promote admissions to specific institutions. Instead, those interested will be directed to the Region of Durham website, which will provide valuable links to Ontario-focused resources, such as the MEDU, College of Early Childhood Educators, Ontario Universities' Application Centre and Ontario Colleges.

Timeline

Table 18: Timeline for Objective 3a

| Action | 2018 | 2019 | 2020 | 2021 | 2022 |
|---|------|------|------|------|------|
| Establish a working group of community partners. | | | | | |
| Work with communications partners to design campaign. | | | | | |
| Develop campaign content. | | | | | |
| Publicly release campaign (in staged roll-out). | | | | | |
| Host public and targeted presentations. | | | | | |
| Create a sustainability plan for messages disseminated. | | | | | |

Additional context

The CSD would like to strengthen the relationship between the division and local secondary and post-secondary institutions. By engaging educational representatives in local communities of practice and strategic planning action groups, it is hoped the expectations of child care operators will be mirrored in the promotion of early childhood by secondary school counsellors, and in the skills taught by post-secondary educators through diploma and degree programs. There is existing support from Durham's Best Start Network Child Care Subcommittee to participate in developing and disseminating the campaign, and the opportunity to collaborate with the Durham Region Child Care Forum (DRCCF).

b. Provide opportunities for new and existing ELCC educators (including RECEs) to improve their knowledge, understanding and use of current ELCC best practices

Context

Of the 56 child care operators surveyed, only 58 per cent reported they were "extremely" familiar with How Does Learning Happen, Ontario's Pedagogy for the Early Years (HDLH); furthermore, operators perceived that 35 per cent of their front-line educators are "extremely" familiar with the pedagogy (Figure 8).

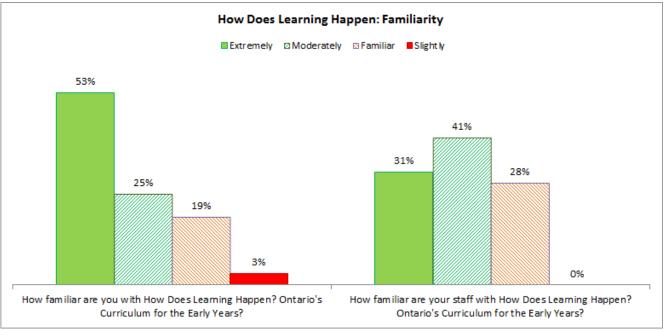


Figure 8: Level of familiarity with HDLH? Source: Durham Child Care Operator Survey 2017

In focus groups with educators, some acknowledged that they were familiar with HDLH, although very few were confident that they had fully implemented the pedagogy into daily practice. When asked to explain the barriers preventing implementation, several participants suggested there was not enough time to learn the pedagogy; the trickle-down from supervisor to staff style of dissemination did not allow for a clear understanding of how to enact the core foundations.

The CCEYA, Section 46 of Ontario Regulation 137/2015 (General) requires that "Every licensee shall have a program statement that is consistent with the Minister's policy statement on programming and pedagogy issued under subsection 55 (3) of the Act and shall review the program statement at least annually for this purpose." As the CMSM, the CSD plays a role in supporting all licensed child care programs to ensure program statements are based on HDLH and that the principles are embedded into program plans. This process will begin by addressing a gap in the understanding and application of HDLH with emerging and existing ELCC educators.

To further support the continued use of HDLH in practice, Durham's Best Start Network's Child Care Subcommittee developed a "Pedagogical Inquiry: Exploring How Does Learning Happen?" resource for early years educators. The package, which includes Ministry publications, 23 ready to use inquiry sessions, and additional media resources, has been distributed to all licensed child care centres in Durham Region. The documents are available online, in accessible formats, in English and French. Successful uptake of the Tool has been documented outside of Durham, with Algonquin College, Andrew Fleck Child Care Services (Ottawa), Simcoe County, York Region, and Northumberland County. The subcommittee is committed to the continuous promotion and uptake of the tool, and aims to conduct an evaluation of its use and develop content in 2018.

Measurement indicators

Using existing continuous professional learning (CPL) opportunities supported by CSD, the number of training sessions focused on HDLH will be increased and sessions will enhance methods of application in program.

Table 19: Measurement indicators for Objective 3b

| Indicator | Source |
|---|---------------------------|
| Number of HDLH trainings/workshops offered | DRCCF: Workshop lists |
| Number of ELCC professionals participating in trainings | DRCCF: Attendance records |
| Scores for quality child care programming and parent engagement versus staff attendance to HDLH workshops | DROC AQI scores |

Actions

Trainings and/or workshops will be developed in consultation with the DRCCF based upon the needs and preferences of educators. Opportunities will include offering formal presentations (top preference) during weekdays (Monday to Friday), with costs covered by Capacity Building funding. Cost coverage will include the provision of the training sessions and backfill coverage to enable educators to attend sessions during the day. Advertisements for trainings will be disseminated using existing media outlets: GROW newsletter, website, child care e-mail updates and Best Start Network meetings. Sessions will be held on a regular basis to reach the maximum number of ELCC professionals. It is anticipated that each professional development opportunity will comprise of more than one session in order to provide opportunities for participants to explore new ideas and theories, test them in their workplace, and to come back to review and refine their learning.

The CSD will work collaboratively with community partners to ensure that training is being provided by competent, experienced educators who:

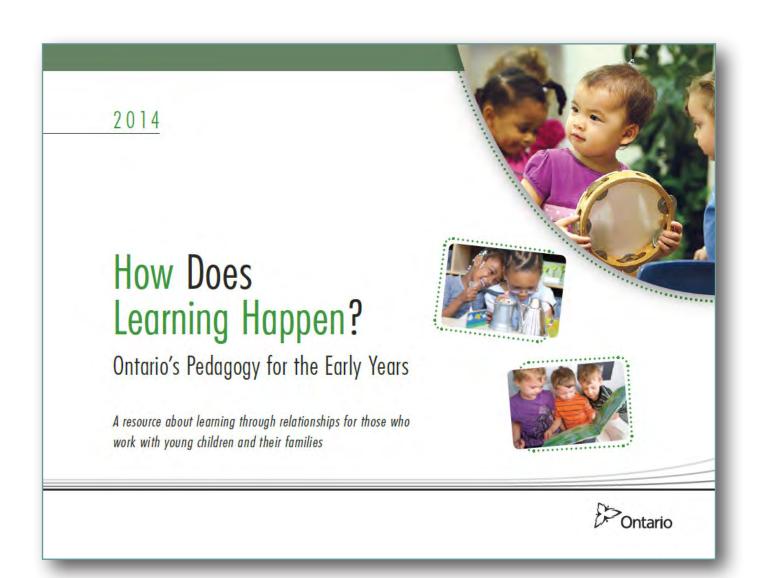
- 1. Understand the sector.
- 2. Have a solid understanding of HDLH and how to support the implementation of this pedagogical model across all age groups.
- 3. Understand and implement the principles of adult education.

Participants will be asked to complete a series of evaluations to measure: knowledge before training, knowledge immediately following training, knowledge six months after training. The results of these evaluations will help reevaluate the HDLH needs of the ELCC community and inform future directions. Furthermore, by linking demographic information provided by workshop participants (e.g. agency, room, age group) to outcomes of annual DROC AQI assessments, we will have a better understanding of the direct impact on children and families.

Timeline

Table 20: Timeline for Objective 3b

| Action | 2018 | 2019 | 2020 | 2021 | 2022 |
|---|------|------|------|------|------|
| Develop and/or identify a HDLH training plan | | | | | |
| Schedule and advertise trainings | | | | | |
| Develop a HDLH knowledge evaluation series of surveys | | | | | |
| Host trainings | | | | | |
| Evaluate HDLH knowledge | | | | | |
| Re-evaluate HDLH needs | | | | | |
| Compare outcomes of trainings on DROC AQI scores | | | | | |



Additional context

One-hundred front-line educators reported that pedagogical training was the most important type of training offered. Those who had received training previously requested refresher courses, to keep current and to learn new strategies for implementation. Trainings will be open to all ELCC professionals, and trainings offered in French will be explored. Furthermore, the CSD will explore offering HDLH training to current students and new graduates looking to enter the field of early childhood education.

As a deeper understanding of HDLH develops, the opportunity to offer focused trainings will continue with exploration of legislation, such as the EYCCA, ELCC Framework, as well as topics important to staff (e.g. opportunities for advancement, time management, and personal wellness).

In tandem with the development of HDLH training, the CSD has created, and will disseminate, 'How Does Learning Happen in Durham?' resource packages to all licensed child care centres and home agencies. Resource packages include:

- T-shirts for each educator
- Four How Does Learning Happen parent engagement posters
- Four How Does Learning Happen reflection cards
- Learning to Play and Playing to Learn: What Families Can Do
- Canadian 24-Hour Movement Guidelines for Children and Youth
- Resource and Reflection Guide
- Professional Advisory: Duty to Report
- Written consent for use of children's image in photographs

This campaign encourages educators to demonstrate how learning happens within their organizations, by submitting stories, photos, videos, displays or any media. All participating centres will be entered into a draw to win a customized gift basket, filled with play-based toys and equipment organized by the Quality Assurance Advisors. Entries will be displayed within CSD events throughout the year, including Week of the Child, and Registered Early Childhood Educator and Child Care Worker Appreciation Day. These events will be promoted in conjunction with information for parents using communications channels (e.g., web, newspaper, social media).



4. Support and expand the licensed home child care sector

Context

The anticipated expansion of the ELCC sector can only be successfully achieved by expanding and fully integrating a strong, high quality, licensed home child care sector as a key component of the licensed child care system in Durham Region. Licensed home child care (LHCC) offers an opportunity to meet the expansion targets without additional capital funding.

The ILHCC sector in the Region of Durham is currently comprised of four agencies. There is considerable scope for expansion, particularly in communities where access to licensed group child care is limited, either entirely or for certain age groups (such as infants). Expanding the existing home child care system requires a review and revamp of the current model to align with new legislation, the new provincial funding model, and to simplify an overly complex model.

A new model will be more transparent, simplifying the per diem rate paid to providers and providing agencies with core funding that is stable, consistent and based on the actual costs of supporting affiliated providers to meet or exceed all licensing and regulatory requirements.

One of the advantages of LHCC is flexibility; a major concern of parents on the survey was that child care has to be flexible, to meet the needs of families that do not traditionally work nine to five (157 requests). A solution for these situations would be accessing high-quality LHCC.

A significant challenge to expansion of the LHCC sector is the ability to attract providers. Existing home child care agencies have reached out to providers who are currently operating unlicensed home child care, and have indicated that there is strong resistance on the part of these providers to joining the licensed sector. Perceived barriers include: enhanced monitoring, increased requirements for documentation and financial reporting, a remuneration gap between providers affiliated with the licensed sector and those providing care outside the licensed sector, and the ability to set what the unlicensed providers perceive as competitive prices.

The existing model of home child care no longer reflects the needs of families. Providers must adapt to changing regulatory and licensing requirements. Any change in the model will require education, for both families and providers. Those providers who are currently operating outside of the licensed sector may be encouraged to affiliate with LHCC agencies if the benefits of such a connection are clearly delineated.



The Ministry of Education announced there will be an innovation fund to support the creation of inventive solutions to increase access to child care. This fund could be accessed to support the development and implementation of an innovative new model of licensed home child care for Durham Region.

Measurement indicators

Table 23: Measurement indicators for Objective 4

| Indicator | Source |
|---|---|
| Number of agencies supporting the provision of licensed home child care | CCLS |
| Number of providers affiliated with licensed agencies | CCLS (Provider Enhancement Utilization Forms) |
| The number of families utilizing LHCC | Annual home child care agency reporting |
| The quality of child care provided in the LHCC sector | Quality assessment tool for home child care |

Actions and Timeline

Table 24: Timeline for Objective 4

| Action | 2018 | 2019 | 2020 | 2021 | 2022 |
|---|------|------|------|------|------|
| Develop and implement a new funding model for the LHCC sector in Durham Region that simplifies the existing structure, compensates providers and agencies equitably and is transparent. | | | | | |
| Develop and implement a process to encourage providers in the unlicensed sector to join the LHCC sector by affiliating with a LHCC agency. | | | | | |
| Increase public awareness of LHCC as a viable option especially for families who require non-traditional hours of care and/or who need care for infants and toddlers. | | | | | |

5. Reduce the waitlist for fee subsidy

Context

In 2017, the wait time to receive fee subsidy was reduced from 12 to five months; the shortest wait time in a number of years. The CSD recognizes that it may be difficult to reduce the wait list, especially as more families become aware of the program; however, the CSD strives to reduce the length of time families have to wait to receive subsidy.

In 2017, financial reporting data were used to estimate the annual average cost of care for each age-group. The estimated cost to provide full-cost subsidy to all children on the waitlist is approximately \$22 million annually.

In order to eligible for the fee subsidy program in Durham, parents must meet one of the following qualifications:

- Be working.
- Be going to school.
- Receive Ontario Works (and be participating in an approved program).
- Have a special or social need (parent or child).

As of December 2017, there were 2,456 children on the fee subsidy waitlist: 1,148 have not been offered subsidy and 1,008 have been offered subsidy but were not in need of care at the time of offering. Families have always been encouraged to apply for subsidy support as soon as possible to increase the likelihood that funding will be available when the family needs to access licensed child care. However, they may not require care immediately for reasons including but not limited to:

- The parents are still on parental leave.
- A new employment position has not started.
- A parent attending school is on a break for some reason.

The discrepancy between the number of families on the list and the number of placements that could immediately be made following the release of additional funding, identifies the need to review how the waiting list is managed and what information that is collected at the time of application.

An increase in funding provided by the MEDU and federal government has resulted in significant improvements to the fee subsidy assistance program and a reduction of wait time to access a subsidy. However, in order to sustain affordable care for families, additional and on-going funding is required.

The waitlist for the Fee Subsidy Program is incredibly dynamic, and the needs of the community and demands on the system change on a daily basis. Furthermore, there are misconceptions out in the general public regarding the eligibility to the program and current waitlist times. To better manage the length of time on the fee subsidy waitlist and enhance public understanding of the program, two actions are proposed:

- a. Enhance the information collected when parents/caregivers apply for fee subsidy. This will provide waitlist data to better predict the needs of the community.
- b. Develop a communication strategy to improve public understanding of the fee subsidy program.

Durham's child population versus fee subsidy services

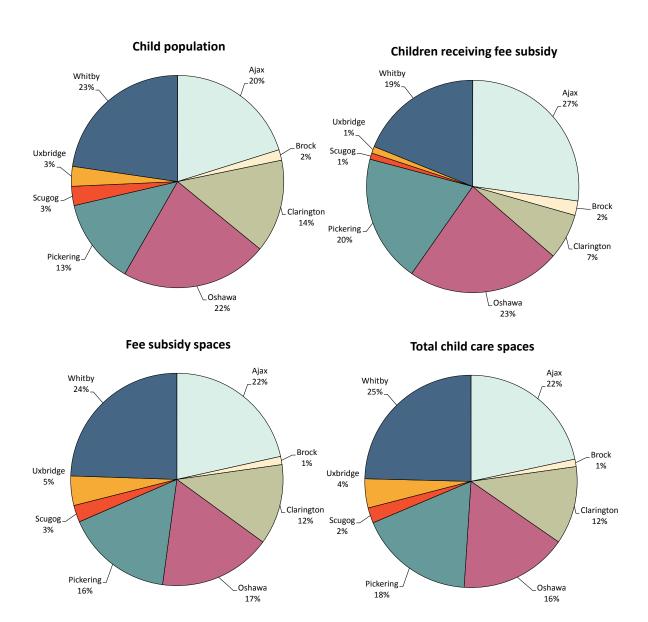


Figure 9: Series of pie charts outlining distributing of Fee Subsidy Service provision versus child population, 2017

The four graphs above demonstrate that the distribution of Durham's child population across the eight municipalities is reflected in the total number of children served through the Fee Subsidy Program, the number of Fee Subsidy spaces available, and the total number of child care spaces, overall. As the child population in Durham begins to grow, especially in Ajax, Pickering and Whitby, the child care system has been, and will continue to be, responsive to the needs of the community.



a. Enhance the information collected when applying to the fee subsidy waitlist to better predict the needs of the community

Context

As of 2017, information collected when parents apply for the fee subsidy waitlist include basic information for the applicant:

- Name
- Gender
- Date of birth
- Marital status
- Source of income
- Reason for child care
- Contact information

- Family's annual household income
- Spouse information (contact, date of birth, source of income, reason for child care)
- If there are other adults living in the home
- Board of education
- School name preference
- Interest in attending a Directly Operated Child Care Centre, owned and operated by the Region

In order to better forecast fee subsidy spending and match community need to ELCC vacancy and expansion, it would be helpful to extend data collection.

Measurement indicators

Table 25: Measurement indicators for Objective 5a

| Indicator | Source |
|---|--------------------------------------|
| Number of applicants on the fee subsidy waitlist with completed variables of interest | Ontario Child Care Management System |

Actions

This process will involve internal collaboration among the fee subsidy managers, clerical staff, caseworkers, and data analysts to identify variables of interest. This project will be view as a quality improvement project by the CSD.

Timeline

Table 26: Timeline for Objective 5a

| Action | 2018 | 2019 | 2020 | 2021 | 2022 |
|---|------|------|------|------|------|
| Identify technology to support new data collection. | | | | | |
| Update fee subsidy application process. | | | | | |
| Implement and monitor new application process. | | | | | |

b. Develop a communications strategy to improve public understanding of the fee subsidy program

Context

There appears to be a misconception of the eligibility criteria for fee subsidy. In parent and caregiver focus groups and surveys, participants believed that fee subsidy was only available to very low income and/or young families. Of the 1,558 parents that chose to respond, 20 per cent reported they were ineligible and several parents commented on the need for subsidy regardless of household income.

As fee subsidy funding becomes increasingly available, the CSD will work to broadly promote this service across the Region, using Health Neighbourhood data to create targeted promotions to populations that may benefit the most from subsidy.

"Decrease
the cost regardless of
the parent's income!!!! It is not right
that parents who have higher incomes are
"penalized". As it is, we pay more income tax, I
really don't think it is right that we don't receive any
"discount" on child care. It's almost as if we are being
penalized for getting a good education, getting
good job and working hard!!!"

- Durham Region parent





Measurement indicators

Table 27: Measurement indicators for Objective 5b

| Indicator | Source |
|---|--|
| Number of promotions disseminated to the general public | CSD communications tracking |
| Number of ELCC community partners promotions are shared with | CSD communications tracking |
| Correlation between promotions and number of applicants to the fee subsidy waitlist | CSD communications tracking and the Ontario Child Care Management System data |

Actions

Working with Corporate Communications, fee subsidy communications will be designed and disseminated to the members of the ELCC sector. Existing partnerships, such as those listed at the beginning of this document, will help diffuse information to the general public.

Timeline

Table 28: Timeline for Objective 5b

| Action | 2018 | 2019 | 2020 | 2021 | 2022 |
|--|------|------|------|------|------|
| Develop a communications strategy to promote the fee subsidy assistance program. | | | | | |
| Broadly promote the fee subsidy assistance program. | | | | | |
| Improve transparency of fee subsidy eligibility to the general public. | | | | | |

Additional context

The development of this communication strategy will also allow time for review of communications provided to families as they enter the waitlist. This may include: Health Department communications (e.g., immunizations schedules), CSD resources (e.g., Children's Program Locator) and materials outlining the shared vision of SNR agencies (e.g., in-scope services).

To promote transparency, the CSD will also launch a "Eligibility Calculator" on its website. This calculator will give a real-time response to families, to let them know if they are eligible to receive fee assistance. Information collected will include: number of children who require care and family income.

Assessment and evaluation

Priority and service outcomes

| | | F | Prio | ritie | es | | | Tir | neli | ne | | | | | | | | | | | |
|---------------------------------|---|---|--|------------|--------------|---|---|------|------|------|------|--|--|--|--|---|--|--|---|--|--|
| | Regional Priorities | Responsive | Affordable | Accessible | High-Quality | Actions | 2018 | 2019 | 2020 | 2021 | 2022 | | | | | | | | | | |
| Support for licensed | Maximize financial support for licensed child care. | | x | x | x | Review and update the operator budget tool and fee request process. Incorporate rate and fee elements into operating funding model. Annually review and include new legislation and community components to community analysis tool and funding models (e.g. General Operating, special purpose). Monitor vacancy levels in licensed child care settings. | | | | | | | | | | | | | | | |
| | Establish a system vision. | x | | X | | Develop and action a communications plan. | | | | | | | | | | | | | | | |
| s | | | | | | Services offered by the four current SNR agencies will continue to be part of Durham's SNR system. The CSD will consult with the Ministry about the role for other funded agencies that provide specialized supports to children under six years (e.g.Infant Development Services). SNR agencies will work with the CMSM to strategically modify service delivery to ensure that service provision is directed | | | | | | | | | | | | | | | |
| irth to 12 year | Implement a transition plan that meets both community and MEDU needs. | | | | | toward licensed child care and early learning programs. SNR funding will be prioritized to ensure a focus on in-scope spending. SNR service providers will establish intake and triage procedures that focus on providing families with information on licensed child | | | | | | | | | | | | | | | |
| ial needs, b | | x | x | | x | X | care and early learning programs and community services to meet their needs. SNR funds will be prioritized to support the licensed child care system. The data collection process will be modified to gather information from SNR agencies to monitor out-of-scope services. | | | | | | | | | | | | | | |
| dren with spec | | | | | | | | | | | • | | | | | - | | | Out-of-scope services may support short-term or specialized support for families who do not have any other services in place. The focus will be to support the families to receive interim support during crisis or while they gain access to community services to support their child's needs as necessary. | | |
| Build capacity to support child | | | | | | Licensed child care and approved recreation programs will have a direct communication link to SNR services. A review of the Licensed Home Child Care (LHCC) agencies and providers will occur. Strategies to ensure LHCC have a relationship with and access to SNR services to support inclusion will be implemented. | | | | | | | | | | | | | | | |
| oacity 1 | Implement capacity building opportunities. | x | | x | x | Consult with SNR agencies to develop training calendars. Conduct regular SNR-related trainings. | | | | | | | | | | | | | | | |
| ild cap | la estitute | | | | | Develop and action a communications plan. | | | | | | | | | | | | | | | |
| Bu | Institute administrative/procedural modifications. | X | X | | | Develop a consent form for on-going information sharing and/or service request form for Durham Region. | | | | | | | | | | | | | | | |
| | | | | | | Share consent forms across the ELCC system. | | | | | | | | | | | | | | | |
| | Increase the support provided through the Enhanced Staffing | rease the support vided through the nanced Staffing gram. | | x | x | | | | | | | | | | | | | | | | |
| program. | | | Update and implement an application process. | | | | | | | | | | | | | | | | | | |
| | | | | | | Monitor demand for enhanced staffing. | | | | | | | | | | | | | | | |

| | | | Provincial Priorities | | | | Timeline | | | | | |
|--|---|------------|--------------------------|------------|--------------|---|----------|------|------|------|------|--|
| | Regional Priorities | Responsive | Affordable | Accessible | High-Quality | Actions | 2018 | 2019 | 2020 | 2021 | 2022 | |
| | | | | | | Establish a working group of community partners. | | | | | | |
| В | | | | | | Work with communication partners to design campaign. | | | | | | |
| REC | Raise public awareness of the RECEs | CEs X | | | x | Develop campaign content. | | | | | | |
| ılity | professional designation | | | | ^ | Publicly release campaign (in staged roll-out). | | | | | | |
| dna | | | | | | Host public and targeted presentations. | | | | | | |
| tain | | | | | | Create a sustainability plan for messages disseminated. | | | | | | |
| nd re | | | | | | Develop and/or identify a HDLH training plan | | | | | | |
| ct ar | Raise public awareness of the RECEs professional designation Provide opportunities fo new and existing ELCC educators (including RECEs) to im knowledge, understanding and use of current ELCC best practices. | | | | | Schedule and advertise trainings | | | | | | |
| ıttra | | | | | | Develop a HDLH knowledge evaluation series of surveys | | | | | | |
| se, a | | | | | X | Host trainings | | | | | | |
| crea | | | | | | Evaluate HDLH knowledge | | | | | | |
| Ē | | | | | | Re-evaluate HDLH needs | | | | | | |
| | | | | | | Compare outcomes of trainings on DROC scores | | | | | | |
| ne licensed sector | | | | | | Develop and implement a new funding model for the licensed home child care sector in Durham Region that simplifies the existing structure, compensates providers and agencies equitably, and is transparent. | | | | | | |
| Support and expand the licensed home child care sector | Support and expand the licensed home child car sector. | x | (| x | x | Develop and implement a process to encourage providers in the unlicensed sector to join the licensed home child care sector by affiliating with a licensed home child care agency. | | | | | | |
| Support ar home | Support an home | | | | | Increase public awareness of licensed home child as a viable licensed home child care option especially for those families who require non-traditional hours of care or who need care for infants and toddlers. | | | | | | |
| ee | Enhance the informatio | | | | | Identify technology to support new data collection. | | | | | | |
| st for f | collected when applying to the fee subsidy waitli to better predict the | | X | x | | Update fee subsidy application process. | | | | | | |
| aitlis sidy | needs of the community | | | | | Implement and monitor new application process. | | | | | | |
| Reduce the waitlist for fee subsidy | Develop a communications strateg | | | | | Develop a communications strategy to promote the fee subsidy assistance program. | | | | | | |
| quce | to improve public | X | X | X | | Broadly promote the fee subsidy assistance program. | | | | | | |
| Red | understanding of the fee subsidy program. | | | | | Improve transparency of fee subsidy eligibility to the general public. | | | | | | |

Implementation supports

The CSD acknowledges that the macro and micro goals outlined in this service plan are lofty to achieve in a five-year period, however, through the existence of strong internal and external partnerships, solid buy-in from community partners and CSD managers, it is believed all five key priorities will come to fruition. It is important to note that this plan provides a starting point, for which work plans will be created to achieve each subgoal within each priority. A new internal Program Manager of Policy and Strategic Initiatives will oversee the implementation of the strategies outlined in this plan. The funding provided by the Ministry of Education and the Government of Canada will maintain momentum towards achieving most goals, and accountability reporting to Regional Council, community partners, and the general public will ensure achievement towards these goals are transparent.

This service plan, however, was prepared in winter 2017/18 based upon information available at the time. There will be a provincial election in June 2018. While the outcome of the election cannot be predicted at the time of plan development, it is important to recognize that the election results may affect funding and policy commitments made within this service plan. If this should happen, the CSD will review the plan and make adjustments accordingly.

On-going community engagement

The CSD is committed to continuous engagement with community members and service providers throughout the implementation of this service system plan. Continued engagement will help:

- Enhance service accessibility for all children and families, particularly isolated, newcomer, and low-income families.
- Actively engage Francophone and Indigenous partners in the planning, management and delivery of responsive programs and services.
- Support local decision-making to enrich programs, facilitate smooth transitions and enhance integration between child care and early years services, schools and specialized community services.
- Regularly collect insights from parents, caregivers and children to inform local programs and services and modes of communication.

Accountability

In accordance with the EYCCA, this service system plan will be presented to the Regional Council for approval in early 2018. Following approval, a copy of the plan will be disseminated to the Ministry of Education and the regional child care Advisor within 60 days following approval. Additionally, the broader community will be updated about the approved plan by publicly posting the plan on the CSD website in conjunction with a comprehensive communication strategy targeting licensed child care operators, early years professionals and students, and families.

Conclusion

This plan is not meant to be definitive, but flexible, allowing for changes to timelines or priorities dependent on the dynamic needs of the children and families and those who care for them in Durham Region. As the CMSM, the CSD will voluntarily submit updates to the Ministry regarding the implementation of the plan as changes or updates arise throughout the lifespan of the service system plan. It is hoped that this information will provide the Ministry with valuable information regarding the status of system planning, achieving provincial outcomes, and changes to local priorities.

The CSD strives to provide children and families with high-quality early learning and child care programs that meet the individual needs of families, while recognizing the diversity of our community. The introduction of the five priorities detailed in this report will strengthen the CSD's role, as the CMSM, to ensure an ELCC system that is affordable, accessible, high-quality and responsive to the dynamic needs of our growing region.



Acronyms

BACC Bawaajigewin Aboriginal Community Circle

CCPA Canadian Centre for Policy Alternatives

CECE College of Early Childhood Educators

CPL Continuous Professional Learning

CSD Children's Services Division

DROC AQI Durham Region Operating Criteria Assessment for Quality Improvement

ELAQI Early Learning Assessment for Quality Improvement

ELCC Early Learning and Child Care

EYCCA Early Years and Child Care Act

HDLH How Does Learning Happen

LHCC Licensed Home Child Care

MEDU Ministry of Education

OCCMS Ontario Child Care Management System

POS Purchase of Service

RECE Registered Early Chidlhood Educator

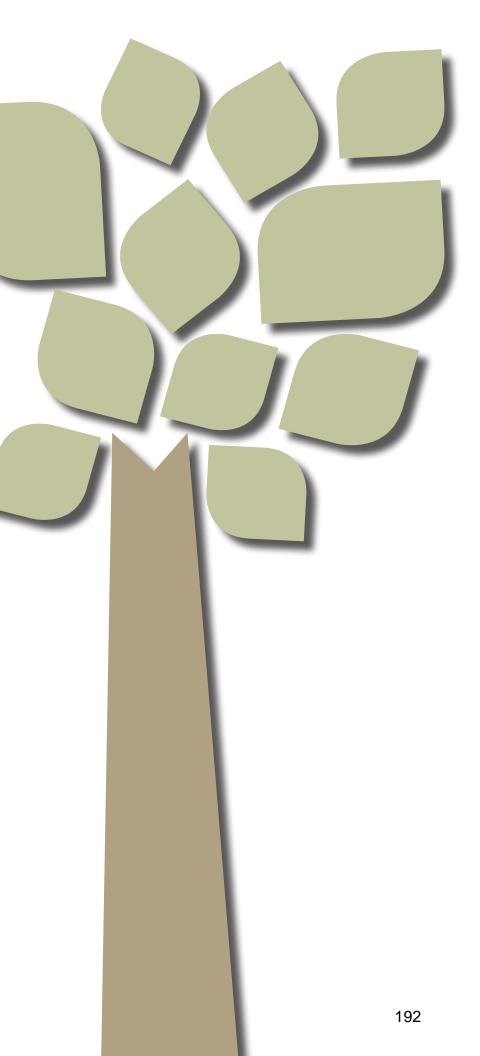
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References and resources

Alexander, C. (January 2018). Income inequality & the role of ECE in closing the gap. Webinar by the Conference Board of Canada.

Alexander, C., Beckman, K., Macdonald, A., Renner, C., & Stewart, M. (2017). Ready for life: A socio-economic analysis of early childhood education and care. The Conference Board of Canada

Calman, R.C., & Crawford, P.J. (2013). Starting early: Teaching learning and assessment. Linking early-childhood development with academic outcomes – a detailed look. Education Quality and Accountability Office.

Cohen, J., Oser, C., & Quigley, K. (2012). Making it happen: Overcoming barriers to providing infant-early childhood mental health. Zero To Three. Available at http://www.zerotothree.org/public-policy/federal-policy/early-child-mental-health-final-singles.pdfw

Fortin, P., Godbout, L., & St-Cerny, S. (2008). Impact of Quebec's universal low-fee childcare program on female labour force participation, domestic income, and government budgets. Chaire de recherche en fiscalité et en finances publiques.

Heckman, J.J., Hyeok Moon, S., Pinto, R., Savelyev, P.A., & Yavitz, A. (2010). The rate of return to the High Scope Perry Preschool Program. Journal of Public Economics, 94(1-2)114-128.

Macdonald, D. & Friendly, M. (December 2016). A growing concern: 2016 child care fees in Canada's big cities. Canadian Centre for Policy Alternatives.

McCain, M.N., Mustard, J.F., & McCuaig, K. (2011). Early years study 3: Making decisions and taking actions. Toronto: Margaret & Wallace McCain Family Foundation.

Moyer, M. (2017). Women in Canada: A gender-based statistical report. Women and paid work. Statistics Canada, Catalogue no. 89-503-X. ISSN: 1719-4407.

The Regional Municipality of Durham. (2013). Durham Region's EDI and KPS Report, 2012. Children's Services Division, Social Services Department.

Warner, M., Adriance, S., Barai, N., Hallas, J., Markeson, B., Morrissey, T., & Soref, W. (2004). Economic development strategies to promote quality child care: 2004 - Linking Economic Development & Child Care Research Project. Department of City and Regional Planning, Cornell Cooperative Extension. Ithaca, NY. 14850-6701.





Children's Services Division Social Services Department The Regional Municipality of Durham durham.ca/childrensservices If this information is required in an accessible format, please contact 1-800-372-1102 ext. 2564



The Regional Municipality of Durham Information Report

From: Commissioner of Planning and Economic Development

Report: #2018-INFO-46 Date: March 23, 2018

Subject:

Golden Horseshoe Food and Farming Alliance Update

Recommendation:

Receive for information

Report:

1. Purpose

- 1.1 The purpose of this report is to provide an update on the activities of the Golden Horseshoe Food and Farming Alliance (GHFFA).
- 1.2 Bill Hodgson, GHFFA Chair, and Janet Horner, GHFFA Executive Director, will attend the April 4, 2018 Committee of the Whole meeting to present an overview of the GHFFA workplan.

2. Background

2.1 The GHFFA is comprised of representatives from the Regional Municipalities of Durham, Halton, Peel, York, Niagara, the City of Toronto, the City of Hamilton, the Federations of Agriculture, Province of Ontario, Federal Department of Agriculture and Agri-Food, and industry stakeholders. Regional Councillor Jack Ballinger is Durham's representative on the GHFFA.

- 2.2 In 2013, the GHFFA developed an Action Plan to support food and farming across the Golden Horseshoe. The Action Plan provides a blueprint for a more integrated and coordinated approach to food and farming viability to ensure the Golden Horseshoe retains, enhances and expands its role as a leading food and farming cluster in North America.
- 2.3 The Action Plan also focuses on removing barriers and enhancing opportunities to promote a competitive and sustainable food and farming sector in the Golden Horseshoe. Regional Council endorsed the Action Plan in February 2013.
- 2.4 In order to create a sustainable funding model for the continued implementation of the Action Plan, a financial commitment in the amount of \$30,000 per year over five years, was made from each municipal partner. In 2014, the Region of Durham began providing this funding support. This five-year funding commitment will conclude in 2018, as such the GHFFA will be seeking similar commitment for the next five year period.

3. GHFFA Project Updates

- 3.1 Common Database for AgriFood and Manufacturing Asset Mapping: Building on the successful Asset Mapping in AgriFood, economic developers from the Golden Horseshoe identified synergies that would be realized if manufacturing data were to be collected and added to the database. Rural Economic Development (RED) funding of \$100,000 was obtained and matched with \$50,000 from the GHFFA, and \$50,000 from the Economic Developers Council of Ontario. The project is currently underway and new data will be uploaded in the summer of 2018. This desktop tool will help economic development staff identify opportunities and resources within the Region.
- 3.2 Municipal Local Food Procurement: Building on a 2015 project that examined readiness for local food procurement, four municipally-operated long-term care homes in Durham Region (Fairview Lodge, Hillsdale Estates, Hillsdale Terraces and Lakeview Manor) participated in a program called "Serving Up Local Increasing Local Food in Long-Term Care Facilities". In spite of restrictive food contracts, strict nutritional requirements and budget constraints, Durham Region long-term care homes were able to exceed the target and increase their local food procurement by 6.5%. GHFFA staff assisted the Food Leadership Team to increase locally grown and produced fresh and frozen products in their menu planning, and encouraged staff to use the retherm ovens in the kitchens in new and creative ways. New items have been well received by residents and their families.

- 3.3 Canada 150 Farm Family Recognition: During Ontario's 150 year celebrations, the GHFFA initiated a program to recognize families that had been farming for 150 years or more in Canada. Durham Region enthusiastically supported this program through Durham Farm Connections and awarded 150 signs to the farm families who have created agricultural economic impact for the residents of Durham Region for 150 years or more.
- 3.4 **Taste Your Future:** In 2017, the GHFFA collaborated with Food and Beverage Ontario to create an awareness program about the careers available in the food industry. The program was geared to high school, college and university students who were asked to submit videos of their product or process innovations. Scholarships were awarded to the winners.
- 3.5 Research Project with University of Guelph Economic Impact of Local Food in Long Term Care Facilities (proposed): This project, if launched, would bring hard data to what, at present, is fragmented, anecdotal information about the impact of using local food in long-term care institutions. This would be a three year project supported by \$100,000 per year funding from University of Guelph. Project participants, including the Region of Durham, are keen to continue work in this area.
- 3.6 The GHFFA's ongoing activities include:
 - Workshop Series co-sponsored by Friends of the Greenbelt Foundation and the GHFFA - The 2018 workshop will be held in York Region on May 2, 2018 and will feature the new "Guidelines for Agricultural System".
 - Public Health working group meetings.
 - Significant amounts of time are spent formulating and drafting responses to various government land use plans and initiatives, e.g. 4 Plan Review, Greenbelt Expansion, Agricultural System mapping, etc.
 - Presentations to Agricultural Advisory Committees, farmers' weeks and other forums.

4. Conclusion

- 4.1 The GHFFA Action Plan provides a strategy that supports a thriving food and farming sector in the Golden Horseshoe. It responds to the common challenges and opportunities that the partners in the Golden Horseshoe share, and are working to address.
- 4.2 The Region's continued participation and support of the GHFFA are essential in fostering a positive environment for farming in the Golden Horseshoe.
- 4.3 A copy of this report will be circulated to the GHFFA and its members, the Durham Agricultural Advisory Committee, and Durham's area municipalities.

Respectfully submitted,

Original signed by

B.E. Bridgeman, MCIP, RPP Commissioner of Planning and Economic Development If this information is required in an accessible format, please contact 1-800-372-1102 ext. 2564



The Regional Municipality of Durham Information Report

From: Commissioner of Planning and Economic Development

Report: #2018-INFO-54 Date: April 13, 2018

Subject:

Carruthers Creek Watershed Plan Update, File: D07-17-10

Recommendation:

Receive for information

Report:

1. Purpose

1.1 The purpose of this report is to provide Committee with an outline of the Work Plan and Communications and Consultation Strategy to be implemented as part of Phase 2 of the Carruthers Creek Watershed Plan update.

2. Background

- 2.1 On April 1, 2015, Regional Council authorized staff to engage the Toronto and Region Conservation Authority (TRCA) in a consulting capacity to update the Carruthers Creek Watershed Plan on the Region's behalf. In June of 2015, the TRCA received Board authorization to enter into a servicing agreement with the Region and to initiate the project.
- 2.2 The Watershed Plan update is being completed in two Phases over a four year period. Phase 1 of the project, which culminated in the preparation of seven technical reports characterizing the watershed's existing conditions, was completed in the fall of 2017, as described in Commissioner's Report #2017-COW-218. In keeping with Council's direction, the technical reports were circulated to staff at the City of Pickering and the Town of Ajax for review and comment.

- 2.3 In December of 2017 TRCA hosted a meeting with staff from the Town of Ajax, City of Pickering and Region of Durham. The purpose of the meeting was to provide an overview of the completed technical studies, outline the major components and consultation approach for Phase 2, and have a facilitated discussion on the vision and management philosophy for the watershed.
- 2.4 Town of Ajax and City of Pickering staff provided comments on the Phase 1 technical studies in February and March of 2018. TRCA staff have received the comments and provided written responses.
- 2.5 Phase 2 of the Carruthers Creek Watershed Plan update has been initiated. This report outlines the Work Plan and the Communications and Consultation Strategy that will be implemented as part of Phase 2 of the project.

3. Phase 2 Work Plan

- 3.1 In accordance with the approved work plan, Phase 2 of the Watershed Plan update consists of seven steps that will be completed over a two-year period. A full breakdown of the seven steps is provided in Attachment #1, and can also be summarized as follows:
 - Step 1: Establish updated goals and objectives for the watershed;
 - Step 2: Based on the conditions observed through Phase 1 and other watershed health assessments, develop targets for the watershed and identify the actions required to achieve the goals and objectives;
 - Step 3: Establish watershed response methodologies / assessments that will be used to measure how the watershed could be expected to respond to changes in land use and other factors, such as climate change;
 - Step 4: Develop, model and evaluate five scenarios for the watershed, consisting of historic conditions, existing conditions, approved development (as per current Official Plan designations), enhanced natural heritage system, and a development scenario with an enhanced natural heritage system;
 - Step 5: Formulate and evaluate candidate management actions to achieve the desired state of watershed health;
 - Step 6: Develop management recommendations; and
 - Step 7: Deliver the completed Watershed Plan.
- 3.2 The Carruthers Creek Watershed Plan update is scheduled to be completed by late 2019. Similar to the work completed to date, Phase 2 will be subject to a peer review process.

4. Communications and Consultation Strategy

- 4.1 As part of Phase 2, TRCA will undertake extensive stakeholder and public consultation. A Communications and Consultation Strategy has been prepared, outlining the proposed consultation activities, which include the following:
 - a. Maintain and update a website dedicated to the Carruthers Creek Watershed Plan update containing information on the project scope, timeline, and key milestone outcomes:
 - b. Utilize a project specific email address to receive and respond to inquiries;
 - c. Conduct online survey(s) related to the project;
 - d. Create and distribute outreach and communication tools, including information cards at public locations / events;
 - e. Conduct in-person outreach through the use of pop-up workshops and Public Information Centres:
 - f. Conduct stakeholder outreach through small group meetings, including presentations to various advisory committees;
 - g. Continue to report to the Region of Durham Committee of the Whole at key milestones:
 - h. Conduct staff to staff meetings with representatives from the Region of Durham, the Town of Ajax and the City of Pickering; and
 - i. Utilize media and social media communications to provide updates on the project and study deliverables.
- 4.2 Consultation will occur in stages throughout Phase 2 of the Watershed Plan update. The first stage of consultation will engage stakeholders and the public on the goals and objectives of the Watershed Plan. The next stage of consultation will solicit feedback on the draft management recommendations, with the final stage of consultation focusing on the draft final Watershed Plan. The Communications and Consultation Strategy can be found in Attachment #2.

5. Conclusion

- 5.1 Committee will be kept apprised of the study progress through Phase 2 of the project, including an update report in early 2019.
- 5.2 A copy of this report will be forward to the Toronto and Region Conservation Authority, the Town of Ajax and the City of Pickering.

6. Attachments

Attachment #1: Correspondence dated March 27, 2018 from Gary S. Bowen,

TRCA, outlining the Phase 2 Work Plan

Attachment #2: Correspondence dated March 27, 2018 from Gary S. Bowen,

TRCA, outlining the Communication and Consultation Strategy

Respectfully submitted,

Original signed by

B.E. Bridgeman, MCIP, RPP Commissioner of Planning and Economic Development



27 March 2018

Brad Anderson,
Principal Planner, Policy Planning and Special Studies
Planning and Economic Development
Regional Municipality of Durham
PO Box 623
605 Rossland Road East
Whitby, Ontario
L1N 6A3

Sent via email: brad.anderson@durham.ca

RE: Carruthers Creek Watershed Plan Phase 2 Work Plan

Dear Mr. Anderson:

I am pleased to provide the following overview of Phase 2 work planned for the Carruthers Creek Watershed Plan for 2018 and 2019. Our consultation plans for Phase 2 are under separate cover.

Phase 2 of the study has begun. In this phase of the Watershed Plan, TRCA scientists and Planners will evaluate current land use and management practices in all areas of the watershed, assess the ecological integrity of the Greenbelt lands in the mid-reaches, and assess the need for retrofits and improvements to storm water management, water quality, flood risk, and the natural heritage system in the urbanised southern portion of the watershed.

The approach for Phase 2 builds on advancements in science, monitoring, collective knowledge, and experience gained by TRCA based on more than five decades of completing Watershed Plans across our jurisdiction. At the same time, our team of professionals will incorporate new insights from innovative Watershed Planning methodologies to ensure the best recommendations are made to manage Carruthers Creek watershed.

TRCA consulted the wide array of governments and others who use our Watershed Plans as part of our "Next Generation" of Watershed Planning. As a result of this feedback, and an extensive literature review to document emerging science in studying watersheds, we created a framework to guide the development of new Watershed Plans to better facilitate their implementation and better serve our partners. This framework guides our development of the Carruthers Creek Watershed Plan.

Further, TRCA staff are involved in the Province's process to develop new guidance for mandatory Watershed Planning for municipalities. TRCA will ensure that the Carruthers Creek Watershed Plan meets and exceeds the newly released provincial guidance and will provide more details on our compliance later in 2018.

Phase 2 of the Watershed Plan will be completed over a two-year period. The work to be undertaken is complex, is expected to be iterative and adapt to insights gained as the study evolves, it is therefore not a linear process. Staff are confident that our process is state of the art. To be certain, TRCA has retained John Kinkead to review the study design and work plan for Phase 2 to ensure they are comprehensive, and to confirm that the Carruthers Creek Watershed Plan will meet and exceed emerging Provincial directives for Watershed Planning. Mr. Kinkead will provide his initial assessment of the work plan directly to the Region. TRCA further proposes that Mr. Kinkead serve a broader independent peer review role in this phase, as he did in Phase 1, to assure the Region that TRCA's technical work continues to be objective and based on the best available science.

TRCA's overall four-year work plan for the Carruthers Creek Watershed Plan process is outlined in our submission approved by the Region in April 2015. The steps to be completed in Phase 2 are attached (Attachment 1).

As TRCA progresses through Phase 2 of the Carruthers Creek Watershed Plan update, we look forward to continuing the collaborative working relationship established with Durham Region in Phase 1, and to growing our working relationship with the City of Pickering and Town of Ajax. Cooperation and collaboration will be essential to build a strong foundation for implementation following completion of the Watershed Plan.

Please do not hesitate to contact me if I may be of further assistance or you have questions.

Sincerely.

Gary S. Bowen Watershed Specialist

Attachment (1)



Carruthers Creek Watershed Plan Phase 2

STEP 1: Establish Goals and Objectives for the Watershed

TIMING

January to June 2018

PURPOSE

Review the fundamental building blocks provided in the 2003 Watershed Plan and supporting documents in the context of advancements in scientific approaches and language since the last Watershed Plan was completed. The goals and objectives will be revisited throughout the plan development process to ensure implementation of the new management actions can meet these goals.

WORK TO BE DONE

TECHNICAL

 Review Goals, Objectives, Management Actions from 2003 Watershed Plan, 2004 Fisheries Management Plan, other supporting documents: assess gaps, add new information, update/remove elements which are no longer relevant

CONSULTATION

Consult public and stakeholders on vision and management philosophy from 2003 Watershed
 Plan which will form the principles of the new plan

STEP 2: Current Watershed Conditions

TIMING

January to June 2018

PURPOSE

Protocols for watershed health assessment follow a similar process to that of the 2003 Watershed Plan, with appropriate scientific and engineering knowledge of the evolving state of best practice. Based on the biophysical conditions observed from 2015 and 2016 field studies and previous watershed health assessment ratings and targets, develop current targets for the watershed which will identify the actions required to achieve the goals and objectives. Begin integration of the seven Phase 1 technical reports to derive a holistic view of the watershed based on the separate studies.

WORK TO BE DONE

TECHNICAL

• The various subject matter experts (SMEs) on the staff technical team will assess the targets from 2003 Watershed Health Ratings Report for relevance, updating, gaps, and set new targets

• Begin the integration exercise based on the Phase 1 technical reports and management recommendations, a comprehensive exercise which requires a multi-disciplinary approach.

STEP 3: Watershed Response "Tool Box"

TIMING

January to December 2018

PURPOSE

The "tool box" is a collection of models and evaluation methodologies which assess various criteria from the land use scenarios. The modelling results and findings from the terrestrial and aquatic response methodologies illustrate how the watershed can reasonably be expected to respond to land use changes, and other factors such as climate change, based on the best available science. TRCA scientists and planners will interpret the outcomes in order to develop recommended management actions which protect, restore, and enhance Carruthers Creek watershed.

WORK TO BE DONE

TECHNICAL

- SWAT (Soil and Water Assessment Tool) model which assesses surface water quality set up and calibrated (initial data from Phase 1)
- · Groundwater model set up and calibrated
- Hydrology model set up and calibrated (initial data from Phase 1)
- Assess options/tools to evaluate watershed's terrestrial response
- Assess options/tools to evaluate watershed's aquatic response
- · Surface water quantity report based on stream flow gauges completed and peer reviewed

CONSULTATION

Review Hydrology model results with Ajax and Pickering staff

STEP 4: Watershed Scenario Evaluation

TIMING

January to September 2018

PURPOSE

Develop five scenarios for the watershed, evaluating past, current, future, and potential future watershed conditions to be analysed using state-of-the-art modelling and watershed response tools. Knowledge garnered will be shared amongst the technical experts, allowing for integration of outputs and best outcomes for the overall health of the watershed.

WORK TO BE DONE

TECHNICAL

Finalise mapping for each of the five scenarios, each subsequent scenario builds on the previous, ranging from historic conditions (1999) to development as per current approved Official Plans to 2031 and an enhanced Natural Heritage System, plus prospective development post-2031.

- Using various inputs such as Official Plans, existing natural cover, older TRCA Terrestrial Natural Heritage System plans, etc., delineate an enhanced Natural Heritage System for use in the future scenarios
- Evaluate opportunities for urban forestry enhancement
- Complete Ecosystem Services Valuation study and identify Green Infrastructure features/ practices which could be incorporated into existing urban areas and in new urban development

Complete a storm water management retrofit study

CONSULTATION

· Review scenario criteria/conditions with Ajax and Pickering staff

STEP 5: Evaluate Management Actions

TIMING

July 2018 to June 2019

PURPOSE

Formulate candidate management actions which will be evaluated when recommendations are developed, to ensure that the overall conditions in the watershed will sustain the desired state of health once the plan is adopted and implemented.

WORK TO BE DONE

TECHNICAL

Management actions will be derived as the modelling is carried out and the terrestrial and
aquatic response tools are applied. Actions tend to be specific and are expected to arise
through non-linear, multi-disciplinary analysis, as all SMEs integrate their findings. Actions will
be evaluated against the plan's draft recommendations, goals, and objectives.

STEP 6: Draft Management Recommendations

TIMING

July 2018 to September 2019

PURPOSE

Develop draft recommendations for the optimal management of the watershed based on the most advanced scientific knowledge available. They will be practical and make the best use of partnerships and available resources, and anticipate the challenges ahead. The recommendations inform the management actions and guide the implementation of the Watershed Plan.

WORK TO BE DONE

TECHNICAL

 Management recommendations will be evaluated against meeting the vision, management philosophy, goals, and objectives established earlier in the process. This is a non-linear, multidisciplinary exercise which involves all SMEs and is integrated with other steps throughout the process.

CONSULTATION

- Review draft management recommendations with Ajax and Pickering staff
- Consult public and stakeholders about draft management recommendations

STEP 7: Final Watershed Plan

TIMING

October to December 2019

PURPOSE

Complete the process to develop the Carruthers Creek Watershed Plan.

WORK TO BE DONE

TECHNICAL

· Finalise the Watershed Plan document.

CONSULTATION

 Once received by Durham Council, TRCA will post the final Watershed Plan for stakeholder and public comment, dates to be determined.

| # | Key Tasks | Schedule |
|---|---|-----------|
| 1 | Complete scenario evaluation | 2018 – Q4 |
| 2 | Peer Review of 2018 technical work | 2019 – Q1 |
| 3 | Recommendations and implementation schedule | 2019 – Q2 |
| 4 | Peer Review of 2019 technical work | 2019 – Q3 |
| 5 | Study complete | 2019 – Q4 |

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3 April 2018

Brad Anderson,
Principal Planner, Policy Planning and Special Studies
Planning and Economic Development
Regional Municipality of Durham
PO Box 623
605 Rossland Road East
Whitby, Ontario
L1N 6A3

Sent via email: <u>brad.anderson@durham.ca</u>

RE: Carruthers Creek Watershed Plan Phase 2 Communications and Consultation

Dear Mr. Anderson:

I am pleased to provide an outline of TRCA's stakeholder and public consultation plans for Phase 2 of the Carruthers Creek Watershed Plan.

As you are aware, TRCA is developing the Carruthers Creek Watershed Plan as an update to an earlier plan completed in 2003 with extensive input from stakeholders, watershed municipalities, and the public. Public and stakeholder consultation are a key part of the Watershed Planning process and TRCA's objective is to reach a wide audience which includes but is not limited to watershed residents, stakeholders, and neighbours. To that end, we have developed a communications and consultation strategy which is multi-pronged and intended to reach not only with those who are familiar with the watershed, but also new audiences who may have limited knowledge of Carruthers Creek watershed. We feel this is a sound approach to engaging a broad segment of the public and receiving balanced feedback throughout the process.

We have outlined the general communications and consultation strategy in Attachment 1. To further explain our comprehensive approach to community outreach, we have provided detail on the key audiences and how we propose to interact with each of these groups in Attachment 2.

At our December 2017 meeting with staff from the City of Pickering and Town of Ajax, we discussed how cooperation and collaboration at the political, staff, stakeholder, and neighbourhood levels will be essential for successful community outreach and the overall success of the Watershed Plan. Through consultation, we will share our knowledge and the recommended approaches to manage this watershed, and we will listen to watershed residents,

local decision makers, and neighbouring stakeholders who are equally interested in the watershed's health.

We look forward to continuing to work with Durham Region staff as we develop this watershed plan update, and to growing our working relationship with staff from Ajax and Pickering throughout the process.

Please do not hesitate to contact me if I may be of further assistance or you have questions.

Sincerely,

Gary S. Bowen Watershed Specialist

Attachments (2)



Carruthers Creek Watershed Plan Communications and Consultation Strategy

1.0 GOAL OF THE COMMUNICATION AND CONSULTATION

The goal is to inform and consult with the public and stakeholders in and neighbouring the watershed to create awareness about the new Watershed Plan, and to review and consider input on the vision and management philosophy, draft management recommendations, and finally the draft Carruthers Creek Watershed Plan.

2.0 OBJECTIVES FOR THE REVIEW AND WATERSHED PLAN UPDATE

The primary objectives of the Carruthers Creek Watershed Plan are:

- To update the understanding of existing conditions in the watershed through scientific research and analysis of the physical characteristics of the watershed.
- To identify important watershed management priorities and action in urban and rural areas of the watershed for the present and into the future.
- To continuously build on and refine, sustain, and reinforce the 2003 implementation framework. The
 vision and management philosophy for the watershed will be updated and supported with new goals
 and objectives based on the study findings.
- To ensure that Durham Region has the right information and knowledge base to make decisions which affect the watershed.
- To ensure that this Watershed Plan meets or exceeds new provincial guidance for mandatory Watershed Plans to municipal land use planning.
- To showcase leading edge scientific methodology and analyses demonstrating TRCA's Watershed Plan development process as state-of-the-art, and exemplify our "next generation" of Watershed Plans.

3.0 KEY AUDIENCES

The focus of the communications is informing the general public, and consulting residents and stakeholders in and neighbouring the watershed. Stakeholders expected to be affected by, and who will have an interest in, this Watershed Plan will be identified as consultation progresses. A summary table on communication and consultation methods categorised by audience accompanies this strategy.

4.0 HIGH LEVEL CONSIDERATIONS FOR DEVELOPING THE WATERSHED PLAN

Phase 1: Completion of extensive scientific studies to update Carruthers Creek watershed's baseline physical conditions and establish the technical foundation for the Watershed Plan.

Phase 2: Build on the work completed in Phase 1, review potential land use scenarios, and short and long-term watershed management actions.

The starting point for this update is the Watershed Plan for Duffins Creek and Carruthers Creek (2003).





The management philosophy and past objectives and management actions will be the basis for developing the updated Watershed Plan. Key considerations for developing the new Watershed Plan include the following:

- Build an understanding amongst the public and stakeholders of what the Watershed Plan is, how it
 is being developed, the process and timelines.
- Explain how this Watershed Plan meets and exceeds the provincial requirements for Watershed Plans which serve municipal interests.
- Address the status of the 2003 Watershed Plan (i.e., goals, objectives, and management actions, progress to date).
- Identify sensitivities of Carruthers Creek watershed's natural heritage.
- Communicate how the Watershed Plan's development will benefit from new information and studies completed since the 2003 plan.
- Demonstrate how the Watershed Plan will be used to guide and direct activities in the watershed in the future including public and private use.

5.0 KEY MESSAGES ABOUT THE WATERSHED PLAN

An important aim is to provide clear information about the purpose of the Carruthers Creek Watershed Plan. Key messages will be used to develop website material, responses to frequently asked questions (FAQs), stakeholder materials, and information for online consultation and the news media. Key messages will focus on the anticipated needs of different audiences and be updated as necessary. Clear, consistent and direct communication on what the study is about, and what it is not, will contribute to greater public understanding about the watershed and the Watershed Plan.

Content for key messages to be used in the consultation materials will be prepared by TRCA in collaboration with the Region of Durham. The following key messages communicate the purpose, scope, and expected outcomes for the Carruthers Creek Watershed Plan:

- The purpose of the Watershed Plan update is to undertake a review of the watershed considering the 2003 management actions, existing conditions, new information and studies since 2003, as well as current scientific thinking, in order to develop a comprehensive plan to protect, restore, and enhance the whole watershed – lower, middle, and upper reaches.
- The 2003 Watershed Plan included a set of eight goals and twenty-five objectives which made up
 the overall management strategy. There has been significant progress in implementing these
 recommendations. This plan is a unique investment by the Region of Durham in original work to
 understand the environmental conditions in the watershed that have evolved since 2003.
- The work is being undertaken by the TRCA on a fee-for-service basis on behalf of the Region of Durham. TRCA's role is to provide professional, scientific, and evidence based recommendations for the protection, restoration, and enhancement of Carruthers Creek watershed. This involves providing information, analysis, and management recommendations to assist the Region with its consideration of planning and infrastructure decisions, as well as protection of Durham's natural heritage and water resources.
- TRCA will ensure the final Plan meets and exceeds the provincial guidance for Watershed Plans.





- The recommendations from this update will be based on peer reviewed scientific research and analysis. Peer review is being undertaken by an independent third party to ensure impartiality and rigour in the review and findings.
- Land use planning decisions are outside the scope of the Watershed Plan. This plan is not about making land use recommendations or commenting on development proposals or Greenbelt designation in Carruthers Creek watershed.
- The update will examine alternative land use scenarios in order to analyse the potential implications associated with land use changes and identify measures for protection, restoration, and enhancement. The analysis will not recommend a preferred scenario but rather identify recommendations which are important to ensure the sustainability of the watershed regardless of land use changes. This will ensure that the Region of Durham has the best knowledge base in order to make decisions about planning policy.

6.0 PROPOSED CONSULTATION ACTIVITIES

The communications and consultation strategy for the Watershed Plan focuses on interrelated streams of stakeholder and public consultation. Specific deliverables include the following:

Phase 2 Consultation Methods and Deliverables

- Project Website with notice that Phase 2 is underway, scope of work, timelines; Frequently Asked Questions (FAQs); mailing list for updates at key milestones; revisit 2003 vision statement and management philosophy with feedback mechanism for public comments.
- 2. Use a **dedicated email address** on the project website as a one-window approach for receiving emails pertaining to the plan: carruthers@trca.on.ca. Respond to inquiries where appropriate.
- 3. Conduct online survey(s) to receive input on the 2003 Carruthers Creek Vision and Management Philosophy and input on issues and opportunities (2018) and feedback on draft management recommendations (2019).
- 4. **Create outreach/communication tools** *i.e.*, postcards for distribution by TRCA, area municipalities, and other groups, at public events over 2018/2019 to raise awareness of Watershed Plan (drive people to website for more info).
- 5. **In-person outreach** to reach a wide array of audiences through "pop-ups" throughout the watershed (2018 2019). Potential Public Information Centre (2019) to receive feedback on draft management recommendations.
- 6. Stakeholder outreach through small group meetings to provide information and discuss watershed management objectives and recommendations: TRCA Regional Watershed Alliance, Durham Environmental Advisory Committee, Durham Agricultural Advisory Committee, Ajax Environmental Advisory Committee, golf courses, former Task Force members, ENGOs, other stakeholder groups.
- 7. Reports to Region of Durham Council at key milestones at the direction of Durham staff.
- 8. **Staff to Staff meetings**: Interactive coordination meetings with Durham, Pickering, and Ajax at key milestones.
- 9. **Media and Social Media Communications** through the preparation of content for social media, news releases, and updates on study deliverables.





7.0 CONTINUOUS IMPROVEMENT AND RISK MANAGEMENT

As the communications and consultation strategy is delivered, it will be adapted to meet project needs. The following actions have been identified upfront to minimise and manage risk:

- Establish principal point of contact at Region of Durham and at TRCA for inquiries about the Carruthers Creek Watershed Plan and issues management.
- Use a dedicated email address as a one-window approach for receiving emails pertaining to the Watershed Plan.
- Monitor and adapt communications and consultation approach as needed. Undertake continuous improvement based on the response to issues.
- Review media coverage and outreach.





Carruthers Creek Watershed Plan Update - Communication and Consultation Methods and Audiences

stakeholders, landowners, farmers, golf course operators, businesses, and land developers. As such, various audiences will have different recommendations for the watershed plan. Our consultation efforts will utilise a variety of formats and tools to share information and gather The Carruthers Creek Watershed Plan has the potential to be of interest to residents across Pickering and Ajax, to environmental levels of knowledge of and interest in the watershed itself, and the scientific research, vision, management philosophy and draft input. Opportunities for consultation throughout Phase 2 are focused on stages of watershed plan development:

- 2003 Vision and Management Philosophy (Goals and Key Elements): Q1 to Q3 2018
 - Draft Management Recommendations: Q1 to Q2 2019
 - . Final Draft Watershed Plan: Q3 to Q4 2019

the project. Preliminary Audiences and Stakeholders are listed in the table below. Where specific groups are known at this time, these have array of potential audiences, background work has been undertaken to research audiences who may have an interest in or be affected by To understand the best methods for sharing information and type of consultation activities which may be successful in reaching a wide been identified and the list will be updated regularly. The project website will be a primary consultation tool to enable ongoing feedback throughout the Watershed Plan process.

As the communications and consultation strategy is delivered, it will be adapted to meet project needs.

| Key Audiences Identified | Methods of contact and consultation throughout 2018 to 2019 |
|---------------------------------|--|
| Region of Durham | Staff to staff meetings, communications and staff presentations to Council |
| DEAC | Present to DEAC x 3 (on vision, on draft management recommendations, on draft plan) |
| DAAC | Present to DAAC x 3 (on vision, on draft management recommendations, on draft plan) |
| Town of Ajax, City of Pickering | Staff to staff meetings: interactive coordination meetings at key milestones Direct contact with Councillors/Authority Members at each stage of Phase 2 Present to Councils at key milestones. Present to Ajax EAC on draft management |
| | recommendations. |
| Residents across the watershed | News Media - Initial media release to direct residents to the website and survey Social Media via project website, main TRCA website, TRCA Facebook, TRCA email lists, TRCA twitter; Durham, Ajax, and Pickering social media channels Google ads - Pending cost review Post-cards distributed via Durham, Pickering, Ajax municipal facilities (municipal offices, libraries, community centres, etc.) driving people to website. First postcard to align with online |
| | survey. Subsequent postcards to inform on where to review draft recommendations. |





| Key Audiences Identified | Methods of contact and consultation throughout 2018 to 2019 |
|--|---|
| | On-line Survey via project website to garner input on vision and management philosophy. Promoted through media release and postcards. Pop-Ups – go to where people gather across the watershed to provide information and seek input on the vision and draft management recommendations. Number and timing to be determined pending cost review. Sharing information through: TRCA events/venues/outlets: notice at Claremont FC, media release; share with partner groups; distribute at TRCA Durham stewardship and other events; present to TRCA Regional Watershed Alliance and other TRCA citizen committees for Durham projects (e.g., Greenwood Conservation Lands, Goodwood Conservation Area) Durham potential events/venues: Durham Cycling Coalition email notice, other events TBD. Ajax potential events/venues: Green Living Days, Doors Open Ajax, GLSLCI conference, Trail Fest, Audley Rec Centre, Carruthers Marsh Pavilion, Paradise Park, Main Library, farmers/ market, operations/works open house, Councillors' newsletters/communications Pickering potential events/venues: ESP Forum, Pickering Town Centre, Main Library, recreation centres depending on events, Artfest/Ribfest/Big Give/Seniors fest, Canada Day celebration, farmers' market, operations/works open house; OPG Pickering CAC; Councillors' newsletters/communications Public Information Centre at Durham Region HQ: To be determined |
| 2003 Individual Task Force Members | Email notice with media release and invitation to participate in survey and meet in person Small group meeting at Claremont x1 |
| ENGOs | Small group x 1 (Q2 – 2018) Purpose of meeting to share information on the work plan, overview of scientific work completed and to respond to issues and concerns |
| Golf courses | Small group meeting x 1, potential 2 nd meeting on draft management recommendations |
| Developers, businesses | Mail/email notice to Durham BILD, Durham Home Builders Association, reach through news media and Council presentations |
| Post-secondary, Secondary, Elementary Schools | Post card to schools attending Claremont Outdoor Ed Centre; other outreach pending cost review |



The Regional Municipality of Durham Information Report

From: Commissioner of Planning and Economic Development

Report: #2018-INFO-55 Date: April 13, 2018

Subject:

Durham Region Broadband Strategy: Phase One, File: D24-12

Recommendation:

Receive for information

Report:

1. Purpose

- 1.1 The purpose of this report is to provide a status update on the Durham Region Broadband Strategy, and to provide a copy of the Phase One report.
- 1.2 At the January 18th, 2017 Regional Council Meeting, staff were directed to undertake the preparation of a Regional Broadband Strategy. The Broadband Strategy is being undertaken in order to understand the current conditions within the Region, identify the needs of businesses, residents and government agencies, and to provide recommendations to achieve increased Internet connectivity.

2. Background

2.1 In December of 2016, the Federal Government launched the Connect to Innovate (CTI) program. The focus of the CTI program was to provide funding for projects that build new backbone broadband¹ infrastructure or provide last mile infrastructure to eligible areas that are currently underserved.

¹ Broadband generally refers to Internet service that is always on and available at higher speeds than traditional dial up Internet services. There are several forms of broadband Internet service including Digital Subscriber Line, Cable, Satellite and Fiber-Optic.

- 2.2 The CTI program identified 20 rural locations within Durham Region that were eligible under the program for the development of new backbone infrastructure. The Region's southern urbanized areas were not eligible for funding.
- 2.3 In order to be considered, applicants were required to identify who would build, own and operate the network, as well as who would manage the project. In addition, applicants were required to have a track record in operating Internet infrastructure, or demonstrate that the appropriate resources with experience in deploying and operating Internet infrastructure were part of the project team.
- 2.4 During the application process, there was a desire by some stakeholders and members of Council for Regional staff to coordinate and submit a Region-wide application. The CTI program allows various entities (private sector, provincial, municipal and not-for-profit) or groups of entities to apply, provided the criteria outlined above have been demonstrated. Accordingly, the Region would have been required to partner with an Internet service provider (ISP) in order to make an application. The Region was approached by an ISP about submitting an application; however, Durham was not positioned at the time with the necessary administrative and legal instruments to facilitate partnering with an ISP within the application deadline. As an alternative, the Commissioner of Planning and Economic Development provided letters of support to applicants pursuing funding under the CTI program.
- 2.5 At the time of writing this report, there have been no announcements regarding successful CTI projects within the Greater Toronto Area.
- 2.6 It is anticipated that there will be future funding opportunities made available. In advance of any program details being announced at this time, staff are investigating how the Region can be administratively prepared to participate in future funding opportunities. Should a funding program be released in advance of the Region completing the Broadband Strategy, staff will report to Committee on a recommended approach based on the program details.

3. Context

3.1 The availability of broadband Internet is a priority for Canadian communities.

Broadband infrastructure plays a crucial role in supporting economic competitiveness and quality of life by enabling an ever-increasing reliance on Internet based applications. In recognition of the important role that broadband Internet plays, the Canadian Radio-television and Telecommunications Commission

- (CRTC) ruled in 2016 that access to broadband Internet is a basic service that should be available to all Canadians.
- 3.2 Regional Council, through the Durham Region Strategic Plan: 2015-2019, has recognized and prioritized the importance of technological innovation. This is reflected in following the Strategic goals and objectives:
 - A.1: Propel the business and investment climate forward in Durham Region to enable more local employment;
 - A.3: Promote and actively capitalize on opportunities to make Durham Region a primer destination that attracts and retains entrepreneurs, innovators, visitors and residents;
 - A.4: Renew our commitment to enhance the economic viability of Durham's agricultural sector to advance sustainable and innovative agricultural production practices and promote food system security; and
 - A.5: Find new ways to work with our partners to revitalize and grow Durham Region's position as a renowned centre of technological excellence.
- 3.3 The Durham Region Economic Development Strategy and Action Plan (2017-2021) was endorsed by Council on May 10, 2017, setting a bold vision that "Durham Region will be the most prosperous and innovative region in North America". This will be accomplished by being:
 - A supporter of business;
 - A builder of jobs and the economy;
 - A highly effective collaborator and facilitator; and
 - The choice location for business, investment and labour.
- 3.4 There is a strong focus in the Economic Development Strategy and Action Plan on the evolution of Durham's Economic Sectors into modern, hi-tech and innovative industries. Reliable broadband, particularly in north Durham, has been identified as a key challenge that must be overcome in order to support business. To achieve this goal and to support the vision of Durham Region as the "high-tech innovation eastern gateway along the 401 tech corridor", the Economic Development Strategy and Action Plan identifies the Region and its area municipalities as facilitators of high-speed broadband.
- 3.5 Durham Region has historically supported the deployment of broadband infrastructure by successfully coordinating applications under the "Rural

Connections" broadband programs offered by the Province of Ontario. These programs focus on funding for projects that provide increased connectivity in rural areas.

4. Project Update

- 4.1 In March of 2017, an internal Steering Committee was established to provide oversight on the Regional Broadband Strategy. The Steering Committee includes representation from the Works Department, Finance Department, Corporate Services Department, Planning and Economic Development Department, and the Office of the CAO.
- 4.2 Phase One of the Region's Broadband Strategy was undertaken in order to better understand the current conditions within the Region and to identify the needs of businesses, residents, and government agencies. Phase Two will be undertaken over the coming months and will provide recommendations on the Region's role in the delivery of broadband and appropriate actions to support increased connectivity. Phase Two will result in the preparation of a final Broadband Strategy.
- 4.3 Actionable Intelligence Inc. was retained in late August of 2017 to assist the Region in the development of the Strategy. Consultation with internal departments and external stakeholders was conducted during the fall of 2017. Following the completion of consultation and secondary research, the attached report, entitled "Durham Region Broadband Strategy Development: Phase One Summary" (see Attachment #1) was completed. The Phase One Summary:
 - Identifies of the needs and trends of various broadband users within Durham Region;
 - b. Establishes the preliminary connectivity targets, based on the needs of users (based on historical bandwidth demand and growth);
 - c. Describes the current connectivity conditions within the Region, including service gaps where needs are not currently being met or are unlikely to be met in the future:
 - d. Discusses technology options to achieve connectivity; and
 - e. Identifies potential roles and projects the Region (and other stakeholders) may undertake to achieve increased connectivity.

5. Durham Region's Current Connectivity Conditions

5.1 A critical aspect of the Broadband Strategy was to assess the current connectivity conditions across Durham Region. By understanding the location and type of

broadband infrastructure and locations where service is lacking, priority areas could be determined.

- 5.2 Under ideal circumstances, ISPs would have provided detailed mapping and information regarding their broadband networks. However, since ISPs consider this information confidential and proprietary, the network information was not shared with the Region. In the absence of this proprietary network information, alternative methods were developed to assess connectivity conditions across the Region.
- 5.3 Actionable Intelligence undertook stakeholder consultation and data analysis to assess the current state of broadband connectivity. The data analysis consisted of assessing the highest level of Internet service offered by ISPs at over 600 residential properties and some small businesses. This analysis reveals that broadband services are generally available from at least one ISP within Durham's urban residential areas at speeds that meet or exceed the target for households and small businesses set by the CRTC (download speeds of 50 Mbps and upload speeds of 10 Mbps)². Within Durham's rural areas, services are generally not available at the target speed. In the case of the Township of Brock, there were no locations that met the CRTC's target speeds.
- 5.4 Through consultation, stakeholders confirmed lower levels of service in rural areas. In addition, there was a strong focus on the challenges for businesses in achieving desired service levels at an acceptable cost. In particular, businesses described the ISP model that requires a business to pay for the extension of broadband service to their buildings as cost-prohibitive. Examples were provided of businesses that chose not to locate within particular employment/business areas in Durham due to limited broadband connectivity. Further details related to service gaps are outlined in Section 6.0 of the Phase One Report.
- 5.5 In addition to the gap analysis provided by Actionable Intelligence Inc., research conducted by other sources was considered. As part of Phase One, staff reviewed existing studies that characterize broadband connectivity within Southern Ontario. In this regard, Dr. Reza Rajabiun, a Research Fellow with the Ted Rodgers School of Information Technology Management at Ryerson University, has provided a separate memo entitled "Preliminary Analysis of the State of Broadband Internet

² Download speed is the rate at which data is transferred from the Internet to the user's device. Upload speed is the rate at which data is transferred from the user's device to the Internet. Download speeds are typically higher than upload speeds, as most users download more data than they upload. A common measurement of download and upload speeds is megabits per second (Mbps).

Connectivity in the Durham Region" (see Attachment #2). Generally speaking, the findings, which are based on Internet speed measurements confirm that broadband connectivity is better in the urban areas, while the rural areas (and in particular Brock Township) have among the lowest levels of connectivity in the Greater Toronto Area.

6. Determining and Achieving Connectivity Targets

6.1 The Phase One Report describes emerging trends and needs of various sectors of broadband users. Based on these needs and trends, connectivity targets have been established for residential, business, and institutional / government users. These targets are based on five year intervals and reflect the general trend towards increasing connectivity across all sectors. The proposed connectivity targets are provided in the table below.

| Timeframe | Residential | Micro & Small Business | Medium & Large Business, Institutional, Government and Post- Secondary Institutions |
|-------------------|-------------|---------------------------|--|
| Current - 2022 | 50/10 Mbps | Up to 100/100 Mbps | Up to 1 /1 Gbps ³ |
| 2023-2028 | 100/25 Mbps | Up to 500/500 Mbps | Up to 10 /10 Gbps |
| 2029- 2034 | 150/50 Mbps | Up to 1 / 1 Gbps | Up to 50/50 Gbps |

- 6.2 In order to achieve the proposed connectivity targets, the Phase One Report describes the range of potential roles that the Region could play in the delivery of broadband. These roles generally fall into one of the following three categories:
- a. **Limiting the Region's role** by leaving the provision of broadband services solely to the private market;
- b. **Providing a Supportive Role** by creating a collaborative environment, streamlining government processes, creating and maintaining a broadband information database, promoting communication between various levels of government and

³ A common measurement for download and upload speed is megabytes per second (Mbps). Higher speeds may be expressed as gigabytes per second (Gbps). 1 gigabyte is equal to 1,000 megabytes.

- Internet service providers, and developing policies that support broadband deployment; and
- c. **Establishing a Direct Role in Broadband Deployment** by acting as an anchor tenant in key locations, providing direct municipal funding, and/or deploying a municipal broadband network including the potential for leasing excess capacity.
- 6.3 A more thorough description of the potential roles is provided in Section 8.0 of the Phase One Report. An evaluation of each of the roles and a recommendation on the preferred roles for the Region will be addressed as part of Phase Two.

7. Conclusions and Next Steps

- 7.1 Phase One of the Broadband Strategy is complete. The Phase One Summary report will be circulated to the Area Municipalities and electronically provided to all stakeholders that participated in consultation (e.g. representatives from public utility corporations, post-secondary institutions, health care, etc.). Comments on the Phase One Report will be taken into consideration as part of the next phase of the project.
- 7.2 Phase Two of the Regional Broadband Strategy has been initiated. Phase Two focuses on evaluating and scoping the various roles and actions for the Region identified through Phase One, developing an implementation plan, finalizing connectivity goals, and delivery of the final Broadband Strategy in the fall of 2018.

8. Attachments

Attachment #1: Durham Region Broadband Strategy Development: Phase One

Summary, Actionable Intelligence Inc., February 21, 2018

Attachment #2: Memorandum: Preliminary Analysis of the State of Broadband

Internet Connectivity in the Durham Region, Reza Rajabiun,

LLM, PhD, March 19, 2018

Attachment #3: Glossary of Technical Terms

Respectfully submitted,

Original signed by

B.E. Bridgeman, MCIP, RPP Commissioner of Planning and Economic Development



Durham Region Broadband Strategy Development Phase One Summary

Actionable Intelligence Inc.

Laura Bradley

Maureen O'Higgins

Date: February 21, 2018

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Appendix #2: Regional Facilities
Appendix #3: Durham Region's Fibre-Optic Infrastructure
Appendix #4: Regional Facilities located in proximity to Fibre-Optic Infrastructure

1.0: Executive Summary

Phase One of the Broadband Strategy for the Regional Municipality of Durham was to assess the current conditions of broadband internet across the Region and to review current user and technology trends. During Phase One, over 100 individuals were engaged through stakeholder consultation and over 600 residential properties were surveyed to assess Internet service availability. Through this work, Durham Region's current connectivity conditions can be described as follows:

- Most urban residential areas have access to broadband service that meet or exceed the current target set by the Canadian Radio-television and Telecommunications Commission (CRTC).
- Rural Durham, as a result of the broadband technology deployed in these areas, generally do not have service available that meet the CRTC target.
- Many businesses indicated that the cost of paying for the capital build to their building/premise was too expensive for them to take advantage of new broadband technology (i.e. fibre). Smaller businesses often have to complete a cost benefit to determine if the capital cost can be justified. Due to the high capital cost of building such infrastructure, ISPs often do not build the infrastructure before a business requests the service.

Based on a review of the current and future needs of broadband users and industry trends, preliminary connectivity targets have been established. In order to achieve these targets, a range of roles, projects and programs have been identified that the Region, and partner municipalities, may undertake in order to support broadband deployment. These roles range in scope, commitment, and cost.

Phase Two of this project will culminate in the preparation of a Regional Broadband Strategy. The Strategy will outline an implementation plan and scope the roles and actions required by stakeholders in order to enhance connectivity in support the Region's connectivity targets.

2.0: Introduction

The global economy, and society as a whole, is becoming increasingly digital and online. Government services, business functions, and entertainment options are continuing to evolve into online digital formats. As a result, access to high speed broadband¹ Internet is increasingly being recognized as a crucial driver in the quality of life for citizens and the economic competitiveness of communities.

¹ Broadband generally refers to Internet service that is always on and available at higher speeds than traditional dial up Internet services. There are several forms of broadband Internet service including Digital Subscriber Line (DSL), Cable, Satellite and Fibre-Optic. A review of the various technology options for broadband services is provided in Section 7.0 of this report.

In December 2016, the Canadian Radio-television and Telecommunications Commission (CRTC) ruled that access to broadband Internet is a basic service that should be available to all Canadians. In addition, CRTC has established a 2021 broadband service target that 90% of all Canadian households and small businesses of have access to 50 mbps download² and 10 mbps upload speeds with an unlimited data cap.

In early 2017, Durham Regional Council directed staff to undertake the preparation of a Regional Broadband Strategy. The purpose of the Broadband Strategy is to understand the current conditions within the Region, identify the needs of businesses, residents and government agencies, and provide recommendations on necessary actions in order to achieve increased connectivity.

The following objectives were established to guide the project:

- Identify broadband needs of government entities, businesses and residents and ensure there is affordable, equitable connectivity throughout the region.
- Identify the broadband infrastructure required to ensure businesses, students and all residents in Durham can remain competitive and grow in an increasingly connected world.
- Identify the types of projects that are of interest to the private and public sectors.
 Include justification for investments in broadband infrastructure that improves service delivery and enhances the Region's economic competitiveness.
- Foster a culture of collaboration among Regional, area municipal, and private sector broadband initiatives.
- Identify current trends and future scenarios of connectivity in order to ensure the Region is future-focused.
- Develop a business model that emphasizes a collaborative approach to encouraging private and public investments in connectivity.
- Consolidate information and data to ensure the Region and area municipalities are 'application ready' for funding opportunities similar to the Government of Canada's Connect to Innovate program.

3.0: Overview of Phase One of Strategy Development

The development of Durham's Broadband Strategy is being carried out in two phases. The focus of Phase One was to undertake the necessary consultation and secondary research in order to understand the current conditions and the needs of broadband users within Durham Region. By understanding the current and future needs of users as well as the availability of broadband and any associated service gaps, strategic directions and priorities can be identified.

² Download speed is the rate at which data is transferred from the Internet to the user's device. Upload speed is the rate at which data is transferred from the user's device to the Internet. Download speeds are typically higher than upload speeds, as most users download more data than they upload. A common measurement of download and upload speeds is megabits per second (mbps).

The following was undertaken as part of Phase One:

- A Needs Analysis identifying the needs and interests of public and private sector stakeholders, as well as current trends in residential, business, and institutional sectors. The Needs Analysis primarily relies on the results from stakeholder consultation and secondary research.
- A Gap Analysis identifying current broadband services and various gaps in service delivery within the Region. Service availability and associated gaps were identified through consultation sessions and Internet service data analysis.
- An Assessment of the Appropriate Roles and Scope that should be taken by
 the Region and area municipalities to enhance and support the delivery of
 broadband services. Stakeholder consultation and secondary research was
 used to identify a range of potential roles the Region and area municipalities
 could undertake to assist in the deployment of broadband infrastructure.
- An Analysis of "Intelligent / Smart Community" initiatives and awards, and the associated potential benefits and economic impacts. This analysis primarily relies upon secondary research.

Stakeholder consultation played an important role in Phase One of the project. A series of stakeholder consultation sessions were held during September and October of 2017. There was broad representation from the following groups that attended one or more of the stakeholder sessions:

- Various departmental staff from the Regional Municipality of Durham
- All area municipalities
- Libraries
- Emergency services (Police, Fire, Emergency Medical Services)
- Post-secondary institutions
- · Healthcare organizations
- Public utility corporations
- The business community (through economic development organizations, boards of trade, chambers of commerce, business improvement area associations as well as business owners and operators and the Durham Agricultural Advisory Committee)

These stakeholder groups were selected because they were able to provide a profile of government, institutional and business user needs for broadband Internet services across the Region. Internet Service Providers (ISPs) were also consulted on an individual basis, recognizing that their business plans and infrastructure may be confidential. The major ISPs that operate in Durham were contacted several times, but chose not to participate. While residents were not directly consulted, the needs and gaps within the residential market were assessed through secondary research and data analysis, which is discussed later in the document.

Over 100 individuals were engaged through in person or telephone-based consultation. In addition, during the first three weeks of November 2017, a comment sheet was made available for stakeholders that were unable to attend a consultation session, or for those wishing to provide additional comments. Over 100 completed comment sheets were received.

4.0: Identifying User Needs

A needs analysis was conducted in Phase One to identify user expectations of broadband services within Durham Region. This analysis was developed through stakeholder consultation and secondary research on industry trends, with the goal of identifying current and future needs.

Four sectors were examined to identify market trends and user needs, as follows:

- Government
- Institutions
- Business
- Residential

A Durham Region context map is provided in Appendix #1.

4.1: Trends Affecting All Sectors

Across all sectors, video is the largest component of internet bandwidth³ use. Video use is commonly associated with entertainment, but is also increasingly used for functions such as educational/instructional, medical, conferencing, training and security.

Other drivers of bandwidth demand across all sectors include cloud computing and the Internet of things⁴ (IoT). Cloud computing is an emerging information technology that allows computer functions that are hosted elsewhere to be accessed over the Internet. Examples of cloud computing include retrieving data or using computer applications (programs) that are hosted at a central location, which are accessed remotely using an Internet connection. Cloud computing relies on Internet connectivity and is a driver of increased broadband requirements.

The Internet of things (IoT) is a general term used to describe a broad range of devices that are constructed with embedded electronics, software, and sensors that connect to a network in order to exchange data. IoT is used in a vast range of applications across

³ In computer networks, bandwidth is used to describe the amount of data that can be carried from one point to another in a given period of time. A common measurement is megabits per second (Mbps).

⁴ The Internet of Things (IoT) uses sensors to collect data from a variety of devices (for example, street lights, parking spots, water systems). The data is then used to manage the assets that the sensors are attached to. The data is transmitted over the Internet to another location where it is received and processed.

many sectors, but can generally be divided between consumer, business, and infrastructure. The implementation of IoT technologies requires Internet access to transmit the continuous exchange between individual devices and the servers / computers in the network.

4.2: Regional and Area Municipal Governments

Regional and area municipal governments are evolving their business models to continually adopt information technology into their services and operations. There is an increasing reliance on broadband connectivity to optimize government's core business operations as well as to offer e-government services to residents and business.

A 2015 report on e-government for the European Parliament indicates that Information and Communications Technologies (ICT) can improve processing efficiency and result in cost savings for municipalities. This document also indicates a reduction in administrative burden, by making it faster and less expensive for citizens to interact with government. E-government can also increase transparency which is considered an advantage of this model. The Association of Municipalities Ontario (AMO) also released a paper in August of 2017, entitled "#OnMuniOnline Towards Digital Transformation and Opportunities for Ontario's Municipal Governments", outlining trends and the adoption of technology and e-government by Ontario municipalities. Municipal governments in Ontario are in varying stages of the shift toward digital transformation and e-government services. Initiatives and experiences of other municipalities will be considered in Phase Two when developing proposed recommended approaches for Durham Region.

4.2.1: Connectivity Required for Municipal Operations

Most government operations and facilities require broadband connectivity in order to provide the services for which they are responsible. Municipal governments are constantly reviewing the needs of various facilities and assessing required enhancements to ICT infrastructure in order to support their operations. Broadband connectivity is necessary to support ICT, including the increasing trend towards centralizing municipal service centres.

In many cases, the storage of information at centralized data centers requires constant communications between multiple locations. This type of Internet traffic and connectivity is driving the need for greater speeds and capacity in municipal networks. The following municipal applications are increasing the need for broadband connectivity:

 Traffic Management: traffic signals programmed and managed remotely from an operations centre, requiring real-time connectivity.

⁵ E-Government, Using Technology to Improve Public Services and Democratic Participation, European Parliamentary Services Research, 2015.

- Transit Stops and Stations: connectivity may be provided along transit stops and stations to provide real-time travel data.
- Geographic Information Systems: visual, data intensive systems that provide mapping and data analysis tools to inform decision making, requiring highspeeds of connectivity to be useful in the field.
- Smart City Platforms: the increasing adoption of sensors, information technologies and applications including Internet of things (IoT) for real-time monitoring and management of municipal infrastructure and service systems by municipal departments. Services such as water, traffic lights, road salting, and others, are moving towards IoT technologies.
- Web-Based Applications: web-based applications and backups, including cloud services, are allowing municipalities to increase collaboration opportunities while managing costs.⁶
- Field Operations: increasingly, municipal staff need real-time access to data in the field to access, update, or create information. These requirements range from public health staff requiring access to client records, to public works staff updating infrastructure related information.
- Public Works Facilities and Depots: access to online repair manuals and online parts catalogs are now required. They use software tools to schedule road maintenance and snow and ice management. These facilities may use software as a service (SaaS), backup their data offsite, and access systems located at a central administrative site. Operating systems and software must also be updated regularly. All of this requires broadband connectivity, sometimes to rural locations.
- Video Surveillance: cameras at major intersections and municipal facilities generate very large volumes of data and contribute to connectivity requirements.
- Pervasive Video: municipalities are increasing their use of video for collaboration, communications, training, citizen interaction, security management, and entertainment. Increasing video quality and pervasiveness contribute significantly to data capacity requirements.

4.2.2: Connectivity required for e-government Services

Municipal and regional governments are deploying e-government services to provide enhanced service access for their citizens. E-government services that are available from "anywhere at any time" have the ability to increase citizen involvement and may solve certain accessibility constraints. In jurisdictions where there is less service capacity or where there is unequal access to e-government services, there will be an expectation that government at all levels should be working towards correcting the problem.

The following list includes examples of e-government services that contribute towards increasing broadband requirements⁷:

⁶ York Region Broadband Strategy

- Web sites and social media presence: provides a high volume of information on government services and programs while managing cost. Government websites that host consistent up to date information can result in reduced telephone inquiries, optimizing staff resources.
- Self-service tools: allows access to government services online. Typically
 results in lower processing cost per transaction. Self-service tools can be
 provided over the municipal website or with mobile apps.
- Online recruiting: online recruiting applications are frequently used by municipal governments and can be linked to external recruitment sites such as Ontario Municipal Jobs, Glassdoor or Workopolis, specific trades recruiting sites, and to social media (most commonly LinkedIn).
- Electronic tendering: E-tendering is frequently contracted out to suppliers such as eSolutions, Bravo Solutions, Bidingo or others. As proposal documents may be received in electronic form, appropriate connectivity is important.
- Electronic invoicing and payment: these services require reliable Internet connections to ensure that interruptions do not occur while a transaction is in process. Providing electronic invoicing and payment reduces administrative costs per transaction.
- Internet voting: municipalities normally partner with voting service providers for Internet voting. Residents must have Internet access to cast a vote. Normally public voting locations are also established. Either paper or electronic voting systems can be deployed at these locations. Electronic voting sites will need a reliable Internet connection.
- Open data: open data provides access to specified municipal data. The
 information accessed through municipal open data portals includes mapping,
 traffic and transit information, and land use and planning data. Mapping and GIS
 data files can be quite large. Adequate bandwidth is required to support open
 data. The Region, as well as certain area municipalities, are currently providing
 open data programs.
- Video recording and live streaming of Council meetings: these practices
 enhance transparency and accessibility of Council proceedings. Adequate
 upload capacity is required at municipal site and adequate download capacity at
 the location of the citizen accessing the video.
- Remote participation at Council meetings: this is two-way video activity, allowing participation to be conducted remotely. Adequate capacity must be available to support good quality video transmission. As of January 1, 2018, the Modernizing Ontario's Municipal Legislation Act, 2017 will allow municipal Councils and certain local boards to provide for electronic participation by members at council, local board and committee meetings that are open to the

⁷ EORN E-Government Toolkit

- public, provided that electronic participants are not counted for quorum purposes.⁸
- Public Wi-Fi at municipal sites: many municipalities provide Wi-Fi at all
 municipal sites (administration buildings, recreation facilities, works facilities,
 health facilities, and others). Some also provide public Wi-Fi in outdoor public
 spaces. With the proliferation of devices and increasing use of video, the amount
 of traffic to be supported on public Wi-Fi is growing rapidly. It is important to
 ensure sufficient backhaul capacity to support high quality service. Public Wi-Fi
 was recently launched at Regional Headquarters.
- Libraries: libraries provide pubic Internet access (fixed and Wi-Fi) and Internet connectivity for their own operations as well as web services (account management, library catalog, eBooks, etc.). Libraries are very large data users.

E-government has the potential to help build better relationships between government and the public by making interaction with citizens smoother, easier, and more efficient. Mass adoption of social media has facilitated promotion of citizen engagement and participation through e-government. Access to information, legislation and open data requires that government facilities have adequate broadband capacity to transfer data in a reasonable time frame. The provision of e-government services is also dependent on residents and businesses having suitable broadband Internet capabilities to access the services.

4.2.3: Additional Considerations for Regional Government

Consultation was conducted with the Region of Durham's various departments including representatives from Corporate Services, Finance, Health, Planning and Economic Development, Social Services, Works and the Office of the CAO. Consultation included discussions about current and future service needs and expectations.

Indications are that most of the Regional facilities (see Appendix #2), particularly those in the urban area, have good connectivity. Currently, 75 of the Region's facilities are served by a wide area network (WAN) service from Bell with another 65 locations served by wireless infrastructure. There are some rural locations that do not have access to the same high capacity services as urban facilities. Currently, this does not appear to be creating significant issues in service delivery or systems implementations. However, in future, consistent low bandwidth at rural facilities may inhibit full deployment of some business services that the Region may want to implement.

It was suggested that a comprehensive assessment of the Region's facilities, broadband assets, needs, and current Internet service agreements would beneficial. A thorough inventory of each department's needs is necessary, given that the Region's

http://www.ontla.on.ca/web/bills/bills_detail.do?locale=en&BillID=4374 http://www.noma.on.ca/upload/documents/6-2017-nworc.pdf, Government-Toolkit/EORN eGovernmentToolKit2017 3.pdf

requirements for high capacity connectivity at most locations are expected to increase. Emerging projects such as implementing Office 365, video court proceedings, the deployment of police body-worn cameras, and the increase in Regional government eservices (including the move towards open data) will increase broadband service needs. As part of this assessment, the Region should consider opportunities where strategic investments in infrastructure may also help support the needs of area municipalities as well as increasing the availability of broadband infrastructure for businesses and residents.

The Region of Durham owns and operates a fibre optic network along major arterial roads with plans for further deployment (Appendix #3). This fibre infrastructure is used for traffic management purposes (including transit and traffic signals and cameras) and communication to the central traffic management centre. In new fibre installations and certain road projects, the Region has also installed a spare conduit, in anticipation of future needs. The current network does not currently provide connections or services to other Regional facilities.

Through consultation, there was a desire expressed by some representatives of the area municipalities for the Region to share its existing fibre and conduit infrastructure. Area municipal staff felt that this infrastructure should be leveraged to support municipal connectivity needs and economic development. Discussions with Regional staff indicated that this infrastructure was designed and constructed for traffic management purposes, with planned capacity to accommodate future Regional needs. As part of a comprehensive review of the Region's broadband assets and needs, an assessment should be undertaken to determine whether or not there is sufficient capacity to accommodate all anticipated future Regional needs, and consider the potential of sharing the infrastructure with other parties. The evaluation should also address the legal, technical, financial and administrative considerations for establishing such an arrangement.

4.3: Libraries

Libraries have evolved from book lenders to multimedia resource centers. In addition to traditional book lending and program offerings, they are a place where people can access and learn about technology that they may not have at home. Many libraries offer digital literacy training for seniors, coding programs for children and other programs that use information technology. Internet access is available on library computers and/or devices as well as client's devices accessing library supplied Wi-Fi. Some libraries also lend communications equipment such as Wi-Fi routers or tablets.

A growing trend in libraries is to provide "Maker Spaces", a workspace where people gather to make, learn, tinker and explore. These spaces can be very basic, or can offer tools and technologies like 3D printers/scanners, sewing machines, robotics, sound

rooms or laser cutters. Other services dependent on the Internet such as Qello (streamed concerts) or Skype interviews with authors are sometimes provided.

Libraries play a key role in enabling municipalities to help bridge the digital divide - they provide Internet access and communications tools to residents who may not have Internet services at home for reasons of cost or availability and for residents who want to meet and use the Internet together (students, friends, book clubs or business startups in their initial stages). Library users may access the Internet on multiple devices, often for data intensive activities such as video or gaming. As a result, modern library use is very bandwidth intensive. To provide the level of service that their clients need, libraries generally require high-speed, high capacity broadband service.

Within Durham Region, libraries are operated by the area municipalities. Representatives of six municipal libraries participated in the stakeholder consultation process. Broadband demand at libraries has been growing significantly year-over-year and it is expected to increase rapidly. Several libraries indicated broadband Internet use is increasing by roughly 30% per year. Representatives from rural libraries noted that the lack of suitable broadband services can limit the applications and programming that they are able to provide to customers. It was suggested that services to rural libraries should be improved in order to enable similar programming to what is available in Durham's southern urban areas.

4.4: Healthcare Organizations

Primary care physicians, specialists, community care access centres, long-term care facilities and pharmacies require broadband Internet access to fulfil their service delivery requirements. Hospitals have heavy data connectivity requirements, which are expected to continue to grow rapidly. Management and the communication of electronic medical records is data intensive. In particular, medical images are large data files that must be transmitted to various parties. Broadband is also used for research, voice over Internet protocol (VoIP)¹⁰, and in-hospital Wi-Fi for staff, patient and visitor access.

Picture Archive and Communication Systems (PACS) are used for management of medical images and require high capacity bandwidth connections. Dark fibre is the preferred connectivity option for connecting PACS to a hospital network. Ontario hospitals typically use fibre broadband connections through provincial facilities such as the e-health Ontario ONE Network but may also buy connections from commercial providers. As they are large purchasers of bandwidth and predictable customers, commercial providers are typically willing to provide service to the health care sector.

Medical providers are increasingly interested in the potential of providing medical services remotely, allowing health care to be provided from a distance through the use

⁹ https://blog.learningbird.com/future-public-libraries-emerging-trends/

¹⁰ VoIP is technology that enables telephone calls over the Internet. It can provide cost savings over other telephone systems.

of telecommunication and information technology. Internet based health care services are data intensive and require broadband connectivity, both at the health care facility as well as at the residence of practitioners working from home. In addition, patients require access to broadband in order to access health care e-services from their home.

Representatives from Lakeridge Hospital and the Regional Health Department participated in stakeholder consultation. Many of the broadband trends in medical care across Ontario are present in Durham Region. All five Lakeridge hospital sites are currently connected through the e-Health Ontario ONE Network at sufficient connectivity levels. Practitioners are interested in working from home, but connectivity to residential locations varies significantly, and may present challenges. It was also noted that residential connectivity, particularly in northern Durham, may be a hindrance to the deployment of Internet assisted health care services.

4.5: Emergency Services

Emergency service providers have a strong demand for broadband especially with new applications and services to support their operations. Call volumes are large and growing. Communication with hospitals and emergency medical service (EMS) stations will become more data intensive as the use of video on service calls grows. Video is also being used in stations for training.

Secondary research indicates that emergency services are evolving toward applications that include real time medical file access, intense video and imaging to hospitals and specialists for incidents in the field. Emergency services are a bit of unique situation as they need high capacity services to buildings, but they will also require mobile services. The Federal government has allocated a specific spectrum of frequencies to serve emergency service providers, with the Provincial government being tasked with building the network infrastructure for Ontario. A dedicated fixed radio channel will ensure that first responders have a network to meet their mobility needs while in the field.

In Durham Region, police and paramedic services are provided by the Region of Durham, with fire service provided by the area municipalities. Representatives of the Region of Durham Paramedic Services, Police, and Emergency Management Office, as well as representatives from the fire departments of two area municipalities, participated in consultations. The following input was gathered:

- Paramedic call volume is 130,000 per year. Each form has to be electronically pushed to the recipient hospital. The speed of data transfer affects patient care.
- Fire halls and paramedic services use video for training. There can be many simultaneous users viewing high-resolution video, requiring high bandwidth.
- Larger facilities require fibre services to deliver reliable high bandwidth connection. The new EMS station in Sunderland was specifically referenced as lacking adequate fibre services.
- There is a desire for staff to be able to bring their own devices to work, but there
 is generally not enough capacity to provide Wi-Fi.

- Expectation that EMS wired/land facilities and mobile facilities can complete a transfer of service (from mobile terminals to terminals at stations / buildings).
 The Federal Public Safety Broadband Network Task Team is working on a potential solution for Canada¹¹.
- In vehicle cameras are on the horizon and will be required to transfer video.

4.6: Post-Secondary Institutions

Universities and colleges are extremely heavy Internet users and require high capacity, high speed Internet connections. Research activities, many involving big data analytics and other data intense methods, the proliferation of devices on campus (many students use 3 or 4 devices at a time), video viewing (the largest component of traffic on most university and residential networks) and gaming all contribute to data usage. There is also extensive use of cloud services by post-secondary institutions for staff and students.

In Ontario, universities have access to the ORION¹² and CANARIE¹³ research networks. They also use commercial networks for some applications. Based on consultation, Post-secondary institutions in Durham appear to be able to meet their broadband requirements through their existing providers and service agreements.

Representatives from the University of Ontario Institute of Technology (UOIT), Durham College and Trent University Durham Campus participated in the stakeholder consultations. As places of research, higher learning and with large numbers of users, educational institutions have high bandwidth needs and are currently having those needs satisfied by providers and they expect that ISPs will be able to continue to meet their needs. It was noted, however, that students require adequate connectivity from their home in order to complete their work (access to material for in-person courses and online courses). Students understand the need for connectivity and do not typically register without adequate connectivity or find solutions such as moving to the urban area or utilizing on-campus services.

4.7: Public Utility Corporations

Local Distribution Companies and Ontario Hydro provide electricity distribution to users in Durham Region. Local Distribution Companies operate hydro networks that use substations to control the distribution of power, and may also build fibre networks to support their operations. For example, fibre networks are often used to monitor substations. In some jurisdictions, Local Distribution Companies have built fibre optic

¹² ORION is a non-profit high-speed, fibre-optic network dedicated to supporting research, education and innovation in Ontario. https://www.orion.on.ca/about-us/

¹¹https://www.publicsafety.gc.ca/cnt/mrgnc-mngmnt/psbn-en.aspx

¹³ CANARIE along with twelve provincial and territorial network partners form Canada's National Research and Education Network (NREN). This digital infrastructure connects Canadians to national and global data, tools, colleagues, and classrooms that fuel the engine of innovation in today's digital economy. https://www.canarie.ca/network/

networks that provide broadband/telecommunication services beyond their own needs and are providing services to other users.

Representatives from Veridian Connections (which serves Ajax, Pickering, and the urban areas of Clarington, Uxbridge, Brock and Scugog), Oshawa PUC and Whitby Hydro participated in consultations. Veridian owns fibre infrastructure, but does not sell or lease fibre services to other users. Veridian uses cellular-based monitoring for their smart metres, but will require additional fibre services for a planned substation in Seaton in 2019 and would be interested in partnering with others. Oshawa PUC owns a fibre network consisting of 95km of fibre with a dark fibre backbone. This backbone extends into portions of Whitby's employment areas, serving the PUC's needs and supporting municipal services. Whitby Hydro does not operate fibre, instead relying on cellular-based smart metres.

The general direction indicated by the consulted public utilities corporations is that there will be a requirement for them to have connectivity to support their substation controls and other operating activities. In addition, the utilities recognize an imminent impact from the Internet of Things and the move to connect more assets and utility functions. Utilities are already using sensors to monitor some assets in their networks and this practice is expected to grow significantly.

Utility staff indicated there may be a need to be working more co-operatively with municipalities and ISPs. As owners of poles and underground infrastructure, utilities can play an important role in many different scenarios for broadband deployment. Opportunities for partnerships and collaboration with public utility corporations should be given further consideration as well as opportunities for coordination between electrical, gas, and water services.

4.8: Businesses

There are few businesses that do not use the Internet in some manner to support their activities. In the 21st century, the most basic tasks are being driven online. Many businesses are pressured by customers and suppliers to use certain systems or software for inter-operability¹⁴ and to process transactions online. Everything from messaging, advertising, ordering, fulfillment, banking, funds transfers, training, customer management (as well as other functions) can now be done online. Video use is also increasing for businesses through teleconferencing, security, customer support for operations and creative activities.

Broadband requirements correspond with the industry sector and business size, however, most businesses are requiring higher speed and higher capacity Internet services as time goes on. Businesses of all sizes and types are establishing and expanding their online presence as well as incorporating new technologies and

¹⁴ For example, to work with a vendor that only processes online orders, a buyer needs Internet access and needs to use software that works with the vendor's software.

applications into their operations. Interruptions caused by a slow connection or lack of connection is costly, and can be measured in lost productivity, lost revenue, inefficiencies and an external perception of lack of professionalism.

There are multiple factors that drive the need for increased broadband capacity for businesses. A report from Spectrum Enterprise, a large American Internet service provider, indicates "more than three out of four midsize companies describe their business as being "network dependent," which is a strong indication of the reliance businesses place on connectivity and associated services/applications. The report goes on to list the following ten areas as the drivers of additional bandwidth for businesses:

- 1. Cloud computing: Storage, customer relations management, collaboration, email, sales force automation, etc.
- 2. Bring your own device (BYOD): employees bring their personal devices to work which use workplace Wi-Fi for Internet connectivity.
- 3. Remote workers: workers in the field, working from home or offsite.
- 4. Unified communications: integration of phone, voicemail, email, text messaging and fax.
- 5. Video: conferencing and streaming.
- 6. Social Media: platform for engaging customers and influences decision making
- 7. Big data: marketing and operating data.
- 8. Backup and Recovery: offsite storage and alternate backups.
- 9. Security: including denial of service attacks which consume large bandwidth
- 10. Desktop Virtualization: enabling access to employee desktop from any device, anywhere.

For small businesses¹⁶, bandwidth needs depend on the number of employees, the types of applications they use, and the connectivity needs of equipment and devices that the business implements. The more data transmitted by each employee/device, the higher bandwidth connection the business will require. Typically, small business usage will be slightly higher than residential usage, but in most cases, the need for a reliable Internet connection with limited interruptions and downtime will be greater than residential users.

Broadband requirements typically increase as businesses grow. The broadband requirements for medium to large businesses are usually much higher than residential requirements, given that each employee may require Internet access. While there can be differences between industry sectors, the lines are becoming blurred and in most cases, any business that has multiple employees with computers has increasing capacity needs.

¹⁵ Planning for the New Network, Spectrum Enterprise, https://enterprise.spectrum.com

¹⁶ Industry Canada defines micro-enterprises as 1 to 4 employees; small business as 5 to 100 employees; medium business as 101 to 499 employees and Large business as 500-plus employees.

Two consultation sessions were held with the business community. Representatives from economic development organizations, business improvement areas (BIA's), chambers of commerce and individual business owners and operators participated in consultation. The following input and general themes emerged from the consultation process:

- Broadband services including fibre based services for businesses are available in parts of the Region's urban areas.
- There are service gaps in or near urban areas where infrastructure is old and has not been upgraded by ISPs.
- Poor connectivity can result in lost business, additional cost, and an unprofessional image to clients / consumers.
- Consistent, high capacity broadband service is required to attract investment to the Region. Potential business investments have been lost because of the inability to obtain the required broadband connectivity at an acceptable cost.
- Businesses would like access to a source of data on where broadband service is available. Currently, finding this information can require considerable research.
- Some businesses have high-speed services but believe that the monthly service price is too high.
- Many micro-enterprises (1-4 employees) and small/medium businesses find the price and practice of having to pay for the initial connection of fibre to their building (the capital cost) excessive and unfair.
- Pricing appears to be reasonably consistent across ISPs in a given area.
- Business broadband can be expensive. As broadband is essential to operating a business, the cost of not subscribing can be even higher.
- Businesses felt that including fibre as part of new development would result in the reduction in future cost and the time required for retrofits to install services at a later date.

4.8.1: Rural Businesses

Durham Region includes a prosperous rural and agricultural economic base, sustained by a substantial amount of prime agricultural lands. Durham's rural areas house a number of businesses, which includes:

- Agricultural and agri-businesses such as farm operations, farm equipment sales, farm produce direct market, crop inputs and processing facilities;
- Home-based businesses;
- Businesses operating in rural employment areas, such light manufacturing, prestige industry, product warehousing and distribution;
- Businesses operating in hamlets, which typically includes retail, commercial and serviced based industries.

Rural businesses appear to have unique broadband connectivity challenges. Generally speaking, rural areas have limited service provider choices as well as lower service speeds that are often at higher prices. This is largely the result of an insufficient

business case for ISPs to extend or upgrade broadband infrastructure to these areas, due to lower customer densities and thus less revenue potential.

Rural businesses are also predominately small businesses, with 10 employees or less¹⁷. In many cases, this makes the cost for the business to extend broadband services prohibitive. The following additional themes emerged through consultation with rural businesses, including the Durham Agricultural Advisory Committee:

- Rural businesses including farms and agri-businesses need access to high speed, reliable service. Some rural businesses and telecommuters cannot access adequate broadband services.
- Agriculture is becoming increasingly high-tech and farmers in Durham need better broadband and mobile service.
- High capacity services are generally not available in rural areas.
- · Prices are often higher in rural areas than in urban areas.

4.9: Residential

Residential data usage has been rapidly increasing over the last decade. Video, social media, smart home requirements and the increasing number of devices that utilize an Internet connection all contribute to this growth in traffic. Broadband connectivity has become central to many Canadian's lives and for many people is important to economic activity, education, healthcare and social interaction. Figure 1 below illustrates the primary drivers of Internet use within the residential market.

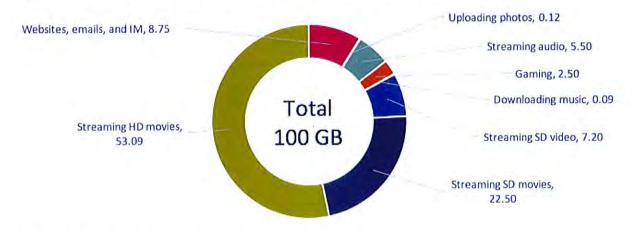


Figure 1: GB used per service per month (Source: CRTC Communications Monitoring Report, 2017)

Vibrant North Durham Economic Development Plan 2013-2018, from: https://www.durham.ca/en/doing-business/resources/Documents/EconomicDevelopment/VibrantNorthDurhamPlan.pdf.

According to Canada's Internet Factbook 2017, 46% of Canadians had 5 or more Internet connected devices in their homes, as shown in Figure 2 below. As the number of devices accessing the Internet continues to increase, there is a corresponding requirement for higher household network capacity and speed.

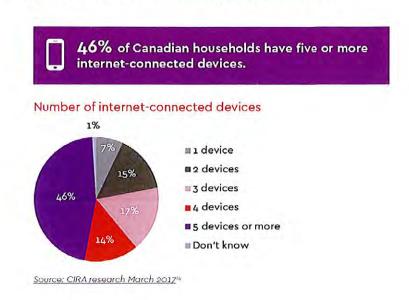


Figure 2: Number of Internet connected devices in Canadian households (2017)

As of December 2016, 84% of Canadian households had access to Internet service that meets the CRTC's target speed of 50Mbps download and 10 Mbps upload, including the availability of unlimited monthly data usage¹⁸. The availability of service at the target service speed is highly divided between urban and rural locations. Within urban areas, 96% of Canadian households are able to access service that meets the targeted service level. Conversely, only 39% of rural households have access to such services.

Despite the availability of high speed Internet service to the majority of Canadian households, relatively few subscribe at the CRTC's target service level. According to the CRTC Communications Monitoring Report (2017), only 11% of Canadian households subscribe to this level of service. Although it is the CRTC's objective to have 50/10 Mbps service available, many individuals choose to subscribe to a lower service level.

Across Canada, households located in rural areas generally have fewer options related to service levels and service providers. On a national average, rural subscribers have a choice of 3.1 providers, while urban subscribers may choose form 5.3 providers. ¹⁹ It is

¹⁹ http://www.crtc.gc.ca/eng/publications/reports/policymonitoring/2016/cmr5.htm#a53ix

https://crtc.gc.ca/eng/publications/reports/policymonitoring/2017/cmr5.htm#f5512

evident that rural areas are in some ways disadvantaged as they have less competition, slower speeds (and in some cases older networks) and often higher prices.

4.10: Internet Service Providers (ISPs)

Four Internet Service Providers (ISPs) participated in consultation, however, the two dominant providers did not agree to participate and have not expressed a willingness to share information on their network infrastructure. Communications with service providers was confidential; however, general conclusions about how ISPs deploy broadband infrastructure emerged from these discussions. ISPs have difficulty ensuring consistency across large geographic areas. Further, networks are not constructed around municipal boundaries and it is therefore complicated and costly for a provider to upgrade service to an entire municipality.

Providers who own, invest and operate broadband infrastructure have to make decisions every year related to their constrained capital budgets. Often the locations that receive the newest technology are those that have sufficient demand and customer densities to warrant investment. This is generally not coordinated and the provider makes an assessment based on the information they have (calls from customers, anchor tenant requests such as government facilities and sometimes from road reconstruction or new build areas).

When the potential revenue is limited to a single customer or even a small handful of customers the decision to install upgraded services may not be justifiable from a business case perspective. When extending new fibre to a customer does not promise to provide sufficient revenue to justify the cost of installing the infrastructure, the customer is sometimes asked to pay for some or all of the cost. These costs can be high (tens of thousands of dollars is not uncommon) and often out of reach for an individual residence or business. This is particularly challenging in rural areas, where customer densities are low.

New providers are looking at areas of Durham and assessing their opportunities and how they may be able to deliver competitive services at lower prices. Some of the providers indicated they are willing to continue discussions with the Region and municipalities on future collaborative opportunities.

5.0: Preliminary Connectivity Targets for Durham Region

It is recommended that the Region of Durham adopt the CRTC established baseline service level target of 50/10 Mbps with an unlimited data cap for residential users. As documented in the needs assessment, business, educational and institutional users have broadband requirements that exceed the residential baseline targets. For these users, higher broadband connectivity targets are recommended.

Realizing that user needs are anticipated to increase rapidly, modelling based on industry standards was applied to project future needs over the next five and ten year

periods. Actionable Intelligence is recommending the following connectivity targets be considered:

| Timeframe | Residential | Micro & Small Business | Medium & Large Business, Institutional ²⁰ , Government and Post-Secondary Institutions |
|-------------------|-------------|---------------------------|--|
| Current - 2022 | 50/10 Mbps | Up to 100/100 Mbps | Up to 1 /1 Gbps ²¹ |
| 2023-2028 | 100/25 Mbps | Up to 500/500 Mbps | Up to 10 /10 Gbps |
| 2029- 2034 | 150/50 Mbps | Up to 1 / 1 Gbps | Up to 50/50 Gbps |

Table 1: Preliminary Connectivity Targets

The needs of businesses and institutional users can be difficult to predict and are often dependent on the number of employees and industry sector. The proposed targets have been selected based on what is considered reasonable industry expectations and what users expressed as their needs through consultation. Consideration was also given for the evolution of technology and the length of time newer technologies take to be widely deployed within the Canadian market.

As part of Phase Two and the development of the Broadband Strategy, the Phase One Report will be circulated to stakeholders for feedback in order to ensure that the recommended targets are adequate to meet the current and growing needs of users. Consideration will also be given for whether or not the targets should be established by geographic area in order align with the Region's land use structure (rural areas, urban residential, centres, corridors, employment areas, etc.).

6.0: Gap Analysis

The Region of Durham has a diverse geography and terrain which creates unique areas and broadband servicing challenges. In addition, the population and housing density varies across the Region, with the availability and capacity of broadband services being directly correlated with population densities. Generally speaking, the higher the population density, the better the service levels and availability of the latest broadband technologies.

²⁰ Institutional users includes Libraries, Post-Secondary Campuses, Health Care Facilities

A common measurement for download and upload speed is megabits per second (Mbps). Higher speeds may be expressed as gigabits per second (Gbps). 1 gigabits is equal to 1,000 megabits.

A Gap Analysis was conducted in order to determine where user needs are not currently being met and to predict areas where future needs are not likely to be met. During the Gap Analysis, it was revealed that ISPs were unwilling to share information on the location and capacity of their broadband infrastructure specifically their fibre infrastructure, which they consider confidential and proprietary. This has created a challenge for determining the service levels available across a jurisdiction as large as the Region of Durham.

The Gap Analysis conducted as part of Phase One primarily relies on information collected during stakeholder consultations and the results of data analysis. The data analysis consisted of submitting inquiries to ISPs requesting the highest service availability (speed, capacity and cost) at various addresses across the Region. By obtaining information about the highest service level available at a particular address, an inference can be made about the type of network technology that exists to the property and the surrounding area.

Mobility services were not evaluated as part of this gap analysis. Mobility service availability can vary depending on number of users on an antenna and the technology being used. Both major carriers (Bell and Rogers) indicate that they use mobile broadband technology in Durham Region that can provide higher speeds, but this service tends to be a considerably more expensive broadband option when compared to the other broadband technologies.

6.1: Gaps Identified through Stakeholder Consultation

As part of the stakeholder consultation sessions and submitted comment sheets, participants were asked to identify situations where their broadband needs were being met, as well as situations where there are gaps and their needs were not being fulfilled in an acceptable manner. The following summarizes the key points from stakeholder consultation:

| Strengths | Gaps / Weaknesses |
|--|---|
| Municipal and Regional Governments are generally able to meet their Corporate service needs. (Some facilities were reported as reaching service capacity and experiencing lagging/slow Internet speeds). Urban residential areas and City Centres, particularly in south Durham have good Internet service levels. ISPs are deploying services in areas where customer densities support a business case for the | Rural government facilities (works depots, libraries, paramedic stations, etc.) have needs that are not being met. Service discrepancies exist in rural and northern communities. Stakeholders felt services should be comparable for areas in both north and south Durham. Rural Internet is generally slower and lower quality, with fewer ISP options to choose from. Rural networks dependent on wireless services can have |

- service upgrades.
- High quality services are typically being provided to new residential construction.
- significant line of sight issues and service quality degradation.
- Extending broadband services to rural areas can be expensive for any user group.
- Telecommuters require connectivity. Home office workers and small businesses face difficulties establishing home occupations in rural areas due to poor broadband availability.
- Farmers are increasingly requiring broadband connectivity as part of their operation/business.
- Service gaps exist in urban or near urban areas with low customer densities.
- Service gaps exist in employment and commercial areas. Areas along the 401 were specifically referenced.
- Small businesses find the extension of broadband services to their premises cost prohibitive (the average cost can be \$30,000 per kilometer).
- Several examples were provided where businesses chose not to locate within particular employment areas due to limited broadband connectivity.
- Many felt monthly service costs are too high.
- Service affordability is an issue for low income households. Service may be available, but some cannot afford it. Those without connectivity cannot access e-services from home. Children may be at a disadvantage academically.

6.2: Gap Analysis -Data Analysis of Service Levels

A data testing analysis of broadband service level availability was conducted for over 600 residential properties across Durham Region. The analysis sampled various addresses which were then checked for service level availability from two Internet

service providers using ISP online tools, or by placing telephone calls to ISPs. Where possible, the analysis included properties within Employment Areas. However, checking broadband availability within Employment Areas is not straightforward, often requiring a detailed discussion with the service provider. This has limited the ability of the analysis to assess Employment Area broadband connectivity.

The purpose of this analysis was to determine the highest service level available at multiple locations in order to draw generalized conclusions about broadband connectivity. The majority of test sites were within the Urban Areas, however, 85 Rural and Hamlet locations were also tested. The results of the data testing are provided in Table 2 below.

| Municipality | Comments on Tested Service Levels | Potential Service Gaps based on consultation / testing results |
|--------------|---|--|
| Ajax | Analysis focused on Urban Residential Areas. High service level availability was reported (including 1000 Mbps). | Employment Areas and areas with lower customer densities on the periphery. |
| Brock | Analysis included test sites in Beaverton, Sunderland, Cannington as well as Rural and Hamlet locations. Overall, Brock Township has poor service availability, with no test sites reporting service availability above 25 Mbps. | Rural Areas, Hamlets |
| Clarington | Analysis included Urban Residential Areas as well as some Rural, Hamlet and Employment Areas. High service level availability was reported in Urban Residential Areas in Courtice and Bowmanville (including 1000 Mbps). Lower service levels were report in Rural areas and Employment Areas, below the CRTC target. | Employment Areas, Hamlets, and Rural Areas. |
| Oshawa | Analysis focused on Urban Residential Areas. High service level availability was reported (including 1000 | Employment Areas, Rural Areas, Downtown Oshawa |

| | Mbps) | |
|-----------|---|---|
| Pickering | Analysis focused on Urban Residential Areas and also included some Rural and Hamlet locations. High service level availability was reported for most areas (including 1000 Mbps at most locations), with lower services at the urban fringe. | Employment Areas, Rural Areas, Downtown Pickering |
| Scugog | Analysis included test sites in the Port Perry Urban Area as well as some Rural and Hamlet locations. High service levels were reported in the Port Perry Urban Area and Utica (500 Mbps) and Scugog Island (250 Mbps). Other Areas did not meet CRTC target. | Employment Areas, Hamlets, and Rural Areas. |
| Uxbridge | Analysis included test sites in the Uxbridge Urban Area as well as some Rural and Hamlet locations. High services level availability was reported in the Uxrbidge Urban Area (500 Mbps). Other areas did not meet CRTC target | Hamlets, Rural Areas. |
| Whitby | Analysis focused on Urban Residential Areas. High service level availability was reported (including 1000 Mbps at most locations). | Employment Areas, Rural Areas |

Table 2: Data Testing Analysis Results

Overall, Durham's urban residential areas reported high broadband service level availability, meeting or exceeding the CRTCs target of 50/10 mbps. However, the general trends that exist across Ontario are also present in Durham, with lower and slower service availability within rural areas. This is largely the result of different technology solutions for rural areas (fixed wireless) reflecting the reality that fibre services are not financially feasible in areas with low customer densities. This trend is discussed in more detail in section 7.0 of the report.

6.3: Gap Analysis - Focusing Priorities

The following themes emerged from the Gap Analysis:

- The testing analysis indicates that urban residential areas in Durham have substantial broadband service availability that meets or exceeds the CRTC target.
- Service levels fall as customer densities dissipate. Northern Durham and most rural areas have lower service levels which are generally below the CRTC Service Target. The Township of Brock has the lowest service availability within Durham Region.
- Consultation indicates that service gaps exist within Employment Areas. This
 was substantiated in some areas where service availability could be checked
 with ISPs.

7.0: Broadband Technologies - Evolution and Future Solutions

There is a growing need for broadband capacity and speed across all sectors. To keep pace with increasing demand, telecommunication infrastructure and technologies have continued to evolve. There are multiple ways to provide broadband Internet services. Among the various options, the following four technologies are the most common:

- Telephone networks (copper wire/DSL)
- · Cable networks (coax cable)
- Fibre network; and,
- Wireless technologies (fixed and mobile).

7.1: Telephone Networks

Telephone based networks utilize the existing cables, typically copper, that were constructed to provide phone line connections to households and businesses over the past 65 years. Through the use of digital subscriber loop (DSL) technology, these existing lines can be used for Internet services.

Over time, technological advances allowed existing telephone based networks to achieve increasing Internet speeds and capacities. The latest technologies can offer speeds of up to 150 Mbps under ideal circumstances. It is noted, however, that data transmission decreases rapidly due to factors such as the travel distance, condition and gauge of the wire. This may lead to situations where one side of a residential street has a significant difference in service speeds than the other side.

In most new construction projects, service providers are moving away from installing telephone based networks, and are instead placing fibre optic networks. Notwithstanding this recent change in practice, there are still millions of households and businesses across Canada that are serviced by existing telephone based networks.

7.2: Cable Networks

Cable networks consist of coaxial cable and were traditionally used to deliver TV services. Cable networks required new electronics (while different components from DSL, the concept is similar) to alter their networks to be capable of delivering broadband services.

Coax cable is a shared medium, meaning that multiple homes share the same capacity. As a result, the Internet speed available at any given time can be highly dependent on the number of other simultaneous users located on the same line. Generally speaking, coax cable networks can achieve Internet speeds of up to 1000 mbps. Similar to phone based broadband services, IPS are moving away from cable/coax based networks.

7.3: Fibre Networks

Fibre networks are the latest and fastest technology available for the delivery of high speed broadband Internet service. Fibre networks consist of fibre optic cables (strands of glass fibres) that transmit data through the use of light.

Fibre cable itself does not determine the capacity or speed of services that are delivered to a building. The actual speed is determined by the electronics attached to the fibre cable. Fibre cable has an almost infinite capacity, and newer electronics are constantly under development to increase the capacity that any specific fibre can provide.

Fibre to the home is considered to be the only cable required for future developments. However, to place fibre to all existing homes presents a significant financial challenge. The cost of trenching new wire (or pole attaching) to existing homes is not always viable.

There is fibre running along many routes today and while in some cases it is active (which means there are electronics attached to it and it is carrying signals), it generally runs from point to point. That means it runs from one major hub location to another — between network locations for a carrier. The impact is that individual homes and businesses may not (and usually cannot) access the fibre for services to their location.

In some cases, a business may require the bandwidth that a fibre connection provides and they will pay a provider to extend a fibre from the closest hub to their location. The standard process in Ontario is for the end user/business to pay for the cost to install the cable infrastructure from the main line to the building. The provider may offer a discount if a longer service contract is selected. However, the ultimate cost determining factor is the distance from main line to the building.

7.4: Wireless Technologies

Wireless technologies use antennas to transmit signals through the air to households and businesses. Fixed networks use antennas mounted to buildings to receive Internet

signals from the base transmission tower. Similarly, mobile networks use portable devices (cell phones or USB²² based sticks/boxes) to receive Internet signals. The typical model for wireless networks is to run a fibre optic network to a hub (referred to as a backbone), which is then transmitted to households and businesses from a tower.

All wireless based networks suffer from limitations due to signal interference (or signal blocking). This is the result of wireless networks reliance on line of sight between the base station and the subscriber. In cases where the terrain or natural features obstruct the line of sight, there will be a loss of signal strength and a resulting decrease in connectivity. In addition, signal strength will become weaker as the distance between the subscriber and the base station increases.

The cost to deploy towers can be substantial, requiring a customer density threshold in order to justify the investment. In addition, area residents may be opposed to tower construction within their area. Despite these limitations, fixed wireless broadband will continue to be a viable solution for rural areas, where the cost to deploy fibre optic networks is cost prohibitive.

Cellular wireless networks (mobile networks) use similar concepts and infrastructure as fixed wireless. The key difference is the ability of mobile networks to "handoff" the connection to different towers as the user moves from one transmission zone to another. This makes the network implementation and technology more complicated than fixed wireless but the same concepts exist – signals through the air are dependent upon weather conditions and degrade over a distance. The amount of degradation (or quality of signal) per km is dependent on the frequency of the transmission. Currently, cell phone technology uses different spectrums – as an example 3G is different than LTE radio frequency. Each frequency transmits over a different range and this creates differences in reception and loading of customers on antennas.

The newest/next generation (5G) of cellular wireless networks uses smaller sized antennae. This results in more antennas being required in order to achieve similar geographic coverage. Also, similar to coax cable, cellular wireless networks are a shared medium. The number of users accessing a single antenna at any given time will impact the overall capacity and speed of the service, as well as the transmission distance of the signal. As the number of simultaneous users increases, signal transmission will degrade.

A potential limiting factor mobile broadband services is that they tend to be substantially more expensive than other broadband services. Mobile broadband services tend to charge higher rates with subscription services based on lower data limits.

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²² USB: Universal Serial Bus. These are portable memory sticks.

7.5: Technology Options Comparison

Table 3 below summarizes the key attributes of the various broadband technology options.

| Technology Network Option | Highest Service Speed | Advantages | Disadvantages | Required Customer density (per square km) |
|----------------------------------|--|---|--|--|
| Telephone | 150Mbps | Utilizes a component of existing infrastructure combined with new broadband infrastructure. | Service degrades rapidly with distance. | 35-50 homes |
| Cable | 1000Mbps | Utilizes a component of existing infrastructure combined with new broadband infrastructure. | Shared medium, speed is dependent/can vary on number of users. | 25-50 homes |
| Fibre | Can transmit data at the speed of light. Limited by the electronics that connect at either end of the fibre cable. | The newest, highest speed technology. | Requires deployment of new fibre optic infrastructure, resulting in high capital costs. | 1000 homes |
| Fixed Mobile | 25Mbps | Able to service rural areas at an effective cost. | Line of sight issues. | 10 homes |
| ²³ Cellular Mobile | 3G = 21 Mbps 4G = 42 Mbps 5G = 100 Mbps | Able to service rural areas at CRTC target service level. | Line of sight issues. Cellular Mobile tends to be a relatively expensive service. | Not as dependent on customer density. However, service levels are highest in urban settings. |

 $^{^{23}}$ The Internet speeds shown for cellular mobile networks are based on actual and/or likely future speeds. Theoretical speeds under ideal circumstances may be higher.

Telephone and cable based networks will continue to be used as long as they can meet customer demand. However, these are older technologies that have met or are nearing the upper limits of their capabilities. Going forward, there is little question that fibre and fixed / cellular wireless networks will be the future solutions for broadband connectivity in Durham Region.

It is likely that advances in electronics and the overall decreasing cost of fibre optic technologies will result in the increased deployment of fibre networks over the next 10 years. This, however, is a long time horizon and leaves users struggling for services in the interim. In addition, it is likely that fibre will not be a viable solution for rural areas where customer densities are too low to justify the capital investment to deploy new fibre optic infrastructure. For rural areas, fixed or mobile wireless networks are likely to remain the only feasible solution over the next 10 years.

In Durham Region, both fibre and mobile solutions are already in varying degrees of deployment and will continue to evolve and proliferate. Where possible, upgrades to existing infrastructure or expansion are implemented by providers where they can justify moving to newer technologies in their business case. Consultation found that ISPs tend to provide infrastructure upgrades to urban/suburban residential areas, but the business case doesn't appear to be as strong for extending services to other areas such as business parks, commercial areas, or rural areas where there are lower customer densities.

8.0: Region's Role in Enabling Broadband Deployment

As part of stakeholder consultations, participants were asked what would be the most appropriate role for the Region and area municipalities to address broadband user needs and service gaps. Secondary research was also conducted to identify and understand projects and programs being undertaken to enhance broadband connectivity in other jurisdictions within Ontario. The following overarching themes about government roles were identified during consultation:

- Organizations such as government, hospitals and post-secondary education may be able to meet their own broadband needs; but access to these essential eservices from home by residents is an issue that will become increasingly apparent as societal and industry trends toward digital services.
- There is a perspective that broadband connectivity is a collective responsibility ISPs, local, regional, provincial and federal levels of government all play have a role in ensuring adequate connectivity.
- There needs to be creative solutions at all levels of government to support industry in providing broadband service to rural areas where the private sector is not meeting customer needs (due to insufficient business cases to extend / enhance services). Specifically, there should be support for telecommuters, small business operators and farmers.

- The Region should facilitate improved connectivity as a means to support economic development in areas where insufficient broadband has been identified as an issue.
- Government does not need to reinvent the wheel and should instead adopt existing models that are working elsewhere.
- Government should assist to fill gaps that the private market will not address.

8.1: Identifying Potential Roles, Programs and Projects

Through consultation, stakeholders identified specific roles, project and programs that could be undertaken. Opinions on the appropriate role of government ranged from "government should have no role" to "government should build networks and provide Internet service". Many different options were identified which can be categorized by the level of involvement and financial implication, as summarized below:

| Limited Roles | Supportive Roles | Direct Roles |
|--|---|---|
| The Region should not have a role in deploying broadband infrastructure. Government money should not be spent to support private enterprise. Decisions on how and where to expand broadband services should be made by the ISPs. | Municipal governments (and potentially other partners) should coordinate and cooperate to negotiate better broadband pricing with ISPs based on their combined service volume. Municipal governments should support and expedite the deployment of broadband by ISPs through policy (including Dig Once), streamlined permitting (consistent municipal right of way access agreements), and access to planning information on where new development is likely to occur. Municipal governments should play a role in lobbying and advocating for ISPs to spur broadband deployment in Durham Region Municipal governments | Municipal governments should make a financial commitment to support rural ISPs. Municipal government should provide funding support to ISPs to close gaps. The Region should deploy and operate a network to primarily serve municipal needs (regional and/or area municipal) with potential for access by ISPs in order to enable broader connectivity and subsidize connectivity. Regional government should run fibre to all homes and businesses in order to ensure affordable connectivity. The Region should make its existing broadband infrastructure available for shared use by other levels of government and private sector ISPs. |

- should support applications by ISPs for provincial or federal grant applications to help private industry meet broadband needs.
- Municipal governments should lobby the provincial and federal government to assist in the provision of broadband.
- Municipal governments should play a coordinating role, including the facilitation of communications and discussion between ISPs and the broader community on broadband needs and gaps.
- The Region should create a dedicated staff position to oversee and work with municipal economic development offices for the coordination and support of broadband projects.

Municipal government should act as an anchor tenant, purchasing service in strategic locations. By spurring the deployment of infrastructure to strategic locations, surrounding businesses and residents will also benefit and be able to connect to the service upgrade.

The following subsections identify the potential roles, programs and projects for Regional and municipal governments. Through Phase Two of the project, further analysis of these roles, including identifying the appropriate body to implement the project/program and associate timeframes, will be provided.

8.2: Limited Role (Do Nothing Scenario)

Some stakeholders felt that Internet services and the deployment of broadband infrastructure should be left to the private sector ISPs. These stakeholders also felt that subsidizing the provision of broadband should not be at any added cost to taxpayers. Instead, private market factors should determine where and how quickly broadband infrastructure upgrades are deployed.

Discussions also arose regarding how to equitably assist rural and remote areas that may be expensive and difficult. Some stakeholders felt that the provision of broadband services to these areas should not become the responsibility of tax payers.

8.3: Supportive Role

Most stakeholders felt that the appropriate role for Regional and municipal governments was to provide support to ISPs to ensure adequate and equitable broadband connectivity. Many of these options have the potential to advance and promote broadband deployment at relatively low capital and/or operational costs. As part of the Phase Two strategy development, the following roles, projects and programs will be further investigated and detailed:

Create a Supportive and Collaborative Environment

- Reconvene and formalize a Broadband Working Group where participants can discuss issues, share successes, and work towards common goals.
- Recognize that the area municipalities are pursuing broadband initiatives at varying scales with differing priorities. The Region should support these initiatives where requested.
- Provide a venue for the sharing of information and establishing and strengthening partnerships where priorities and interests align.

Streamline government processes and permitting in order to expedite service delivery by ISPs

- Complete standardized Municipal right-of-way access agreement (MAA) templates for use across the Region, reducing the administrative burden for ISPs when deploying broadband infrastructure.
- Explore the development of conduit guidelines that meets the requirements of government and ISPs in order to enable the future sharing of infrastructure, where it is desired.

Create and maintain broadband information databases

- Develop and maintain regional mapping of Internet coverage. Engage with ISPs to identify priority areas where service is lacking.
- Investigate the potential of adding a survey question to the annual business count that collects information on broadband service levels to more accurately determine connectivity conditions within business and employment areas.
- Expand and build upon the results of the Data Testing Analysis, creating an inventory of broadband service levels across the Region.

Promote communication and coordination among Regional and Area Municipal levels of government, the business community and ISPs and Public Utility Corporations.

- Investigate the feasibility of aggregating Internet service requirements of the Region and area municipalities in order to negotiate better service contracts and prices from a single ISP.
- Hold regular meetings with ISPs to communicate growth areas, capital
 infrastructure planning, and service needs. Increase the awareness of utility
 projects, allowing for the efficient placement of broadband conduit while the
 trench is open and accessible.
- Investigate the creation of a Regional broadband co-ordinator position to:
 - Assist with the coordination of cost sharing among property owners for the extension of broadband services to underserved areas, particularly for employment / business locations.
 - Coordinate future funding applications.
 - Maintain ongoing communication with ISPs and businesses/economic development offices/chambers of commerce to understand broadband needs and requirements.
 - o Build and maintain a broadband database.
 - Research and build a business case for other creative broadband initiatives.
 - Assist rural residents/businesses when negotiating private arrangements for broadband services.
 - Advocate to other levels of government to ensure Regional broadband needs are conveyed and solutions are being investigated.
 - Formalize and coordinate the Regional Smart/Intelligent Cities Committee.

Develop Policies that support broadband deployment

- Provide direction for the development of policies as appropriate for the Regional Official Plan, Strategic Plan, Economic Development Strategy and Action Plan and/or other corporate policy to support connectivity and ongoing deployment of broadband infrastructure.
- Investigate the feasibility of policies that require broadband infrastructure to be incorporated as part of new developments.
- Investigate the feasibility of a "Dig Once" policy that provides opportunity for the Region, area municipalities and ISPs to place infrastructure (conduit, fibre) when roads are dug up for other purposes. Identify potential barriers or areas where a "Dig Once" approach may be impractical, such as already crowded rights-ofways, the resistance from ISPs to share conduit due to potential liabilities such as cross damage and maintenance conflicts as well as the difficulty with aligning timelines and budgets.

8.4: Direct Roles / Municipal Broadband Network Models

Some stakeholders felt that municipal governments should be playing a substantial role in enhancing and deploying broadband Internet services, including the financing and building of a broadband network as well as sharing the Region's existing broadband infrastructure. These options may require substantial capital and ongoing financial investments, as well as the appropriate legal and administrative assessments and considerations.

Anchor Tenant

Municipal governments, as a large customer buying services, can often be a stimulus for ISP investment that can then be used to service other customers (business, schools, residents, etc.) in the area. If the Region/municipalities were to purchase / prompt the extension of services in underserved areas, then an ISP can justify deploying infrastructure to other nearby users to further their revenue. Typically, governments sign longer-term contracts making them predictable anchor tenants from which ISPs can expand their networks and services.

Under this approach, municipal governments would strategically locate new municipal facilities or connect existing facilities in areas that would benefit from broadband service upgrades. This approach could require considerable capital investment, but may achieve multiple objectives by providing service upgrades to municipal facilities as well as adjacent users.

Providing Municipal Funding

Through consultation, some stakeholders suggested that municipal government should fund providers in some manner in order to assist with broadband deployment. Such approaches have been used in other jurisdictions at varying scales. For example, member municipalities made financial contributions towards the creation of the Eastern Ontario Regional Network. At a more granular scale, a collaborative funding arrangement between the City of London, the London Economic Development Corporation and MainStreet London offered a pilot project grant for businesses attempting to construct last mile connections to fibre optic services.

Deploying a Municipal Network - Models used in other Jurisdictions

There are several successful models of municipal broadband networks in Ontario, several of which were examined through Phase One of the project. In many of these examples, the municipal broadband network began as a utility to serve municipal government's own connectivity needs and grew over time to include service provision to other organizations such as other municipal governments, universities, schools and health care (often referred to as the MUSH sector). In some cases, access to the networks have been opened to additional users, including ISPs, industrial, commercial

and residential customers. A profile of various municipal network options is provided below:

Peel Public Section Network (PSN)

The PSN is a shared municipal fibre network. Its role is to enhance the ability of the public sector to meet the needs of residents of the Peel Region by providing municipal government access to the fibre network in support of other municipal programs.²⁴

| Network Description | Established in 1996, the PSN is an integrated fibre optic network providing municipalities, hospitals and educational institutions in the Peel Region with access to high speed telecommunications service. | |
|----------------------------------|--|--|
| | PSN consists of 801 kilometers of primarily 96 - strand fibre and 684 connected facilities, with the majority of the network being aerial construction (i.e. fibre strung on hydro poles). | |
| Network Ownership | 4 Partners: Region of Peel, City of Brampton, City of Mississauga, Town of Caledon ²⁵ | |
| Network Cost and Financing | Each partner makes the capital investment in their geography of the network and retains ownership of that segment. A business case showed a 6-year payback period, with savings in telecom costs and avoidance of future infrastructure investment, offsetting initial capital cost. | |
| Governance | Partner responsibilities: Own and maintain what they build Contribute staff resources Pay share of common costs Comply with common design, construction, operation and maintenance standards Grant access to all other partners and subscribers | |
| Customers | Partners and subscribers (Credit Valley Hospital, William Osler Health Centre, Trillium Health Centre, Sheridan College, University of Toronto, Mississauga Campus). Customers are all public-sector organizations. | |
| Data Services | PSN provides dark fibre and does not offer data services. | |

²⁴ KPMG, Sharing Municipal Services in Ontario, 2013, http://ryersontownship.ca/wp-content/uploads/2016/09/Shared_service_case_studies.pdfa

²⁵ Region of Peel, Public Sector Network update and budget, April 17, 2017, http://www.peelregion.ca/council/agendas/2017/2017-04-27-rc-agenda.pdf

Niagara Region Broadband Network (NRBN)

The NRBN is a municipally owned network that provides service to both public sector and private sector customers.

| Network Description | The NRBN fibre optic network serves more than 600 customers with 750 kilometers of fibre in the Niagara Region. | |
|----------------------------------|--|--|
| | NRBN is a full-service provider, offering data services, voice, managed services and professional services. | |
| | At deployment, NRBN placed as much fibre as possible. This has paid off, as spare fibre is valuable for swapping and meeting future demand. NRBN is licensed by the CRTC as a non-dominant carrier. | |
| Network Ownership | NRBN is a private for-profit company, municipally owned by Niagara Falls and Niagara on the Lake. | |
| Network Cost and Financing | The network was built for \$13M in 2004. Partners contributed \$1.5M each and the balance was financed through an \$11.5M bank loan, paid off in 2014. | |
| | MUSH sector customers signed a 10-year service contract. This was a factor in securing the loan. Municipalities backed the loan (6.5% interest). | |
| | The corporation pays dividends when they have excess cash and most shareholders have seen a full return on their investment. | |
| Initial Business Model | MUSH customers were not sufficient to support the network so the partners brought on Cygnal Technologies to serve private sector customers on the network, with 30% of revenue this revenue being directed to NRBN. Points of interest in this model include: • Cygnal provides network management, sales, etc. • There was now requirement for NRBN staff for up to 7 years. • NRBN bought their network– 1.3 million to purchase. • NRBN swapped fibre in order to build out the network – 50 and 60 km with Cogeco. | |
| Governance | NRBN is a private sector for-profit company owned by two shareholders who oversee the management of the company. | |
| Customers | The Niagara Region MUSH sector, including schools, the majority of government sites, financial institutions and large enterprise within The Region. NRBN offers commercial services, including services for small and medium business. | |

| | Residential Broadband to select residential communities in the Niagara Region is also provided. |
|------------------|--|
| Data Services | Dedicated Internet Service, 10Mbps to 10Gbps Direct connections to top tier ISPs in Canada and US Ethernet, MPLS, Optical Wavelength Solutions VOIP (white boxed) Custom Network Solutions NRBN does not sell dark fibre. |

Eastern Ontario Regional Network (EORN)

EORN is the result of a P3 agreement between the public sector and private sector that was established by the Eastern Ontario Warden's Caucus (EOWC), which represents 13 County and Single Tier governments in Eastern Ontario. The role of the EORN is to facilitate delivery of broadband service to residents of Eastern Ontario, by providing financial incentives to the private sector. The network serves an area where low population density is a hindrance to a positive business case for the network.

Through a municipal procurement process, EORN contracted with Bell and Bell Aliant to build the 10 Gigabit Ethernet backbone network. The capital costs were shared by the partners. Bell/Bell Aliant are the service vendors and revenue collectors. EORN also received some in-kind contributions from Bell, some of which extend to 2024.

For the access networks, initial cost is shared between the ISPs and EORN. EORN owns 51% of the new assets until 2017. During that period and afterwards for 7 years, there are contractual obligations that the providers must meet related to scaling and growing components of the network and renewing capital.

The objective of the EORN is to provide high speed service to 95% of homes and businesses in Eastern Ontario.

| Network Description | EORN is a network made up of a Gigabit Ethernet backbone supporting private ISP connectivity for residential, institutional and business subscribers in rural eastern Ontario communities. | |
|----------------------------------|--|--|
| Network Ownership | The network assets were shared (49% by the carriers/51% by EORN) until 2017. In 2017, the assets were transferred to the ISPs. There are contractual obligations that the ISPs must meet related to scaling and growing components of the network and renewing capital. The service providers assume a level of financial, technical and operational risk. | |
| Network Cost and Financing | The network cost an estimated \$240M to deploy. Funding was provided by the Federal and Ontario governments (\$110M), the Eastern Ontario Warden's Caucus (\$10M) and private sector carriers (\$120M), including in-kind contributions. | |
| Governance | The EOWC has responsibility for strategic goals of the network | |

| | and accountability for the use of public funds. |
|--------------------|---|
| | The EORN has responsibility for network construction and operations in accordance with specified requirements, and must ensure that specified economic and social outcomes are achieved. |
| Customers | EORN customers are the individual carriers, institutional, business and residential customers. |
| Data Services | EORN carriers provide Internet connectivity of 10 Mbps or more to their customers. They may offer lower bandwidth options, but must be able to provide a minimum of 10 Mbps per subscriber. |
| Service Pricing | Service pricing must be competitive with the rates available in urban areas. |

York Telecom Network (YTN)

York Region started building their fibre network in 2002 as a means to link two municipal buildings. Today the network has grown to over 200 km of fibre infrastructure. Over this time, the network has grown to connect other municipal assets (such as traffic lights) as well as facilities. The network also offers connectivity to its MUSH partners.

In 2017, after a thorough review, Council approved the creation of a separate corporation to operate and maintain the network. Part of the mandate is to allow leasing of excess dark fibre capacity to MUSH and ISPs who may want access.

| Network Description | A 200 Km fibre network connecting municipal infrastructure such as traffic signals and municipal facilities. | |
|------------------------|--|--|
| Network Cost | \$16 M | |
| Network Ownership | The Region owns the network, which will be transferred to the new corporation. | |
| Governance | As a corporation, the new entity has a Board of Directors that is made up of Council members. The Board reports to Council, given that the Region is the sole shareholder. | |
| Customers | MUSH and Private sector ISPs. | |
| Data Services | Dark Fibre only. No data services are provided. | |

Stratford Rhyzome Network

The Rhyzome Network is a municipal network that serves Stratford, Ontario. It has enabled extensive high-quality broadband service throughout the city as well as free public Wi-Fi.

The network was launched in 1992 by the city-owned electric utility, Festival Hydro, as a backhaul for Stratford's utility data and to service large commercial operations in the with fibre connections. In 2010, Stratford established an ISP, Rhyzome Networks, with the primary focus of providing business connectivity. The network was expanded to 70 km of optical fibre. At the same time the City deployed a wireless Wi-Fi network that offered free public service and home-based Internet for a fee. The fee services are offered by partner ISPs, who use the infrastructure, but manage the service delivery function themselves.

Stratford has 100% broadband coverage via Wi-Fi. Furthermore, between Rhyzome's fibre and that of the other telecomm carriers, an estimated 90-95% of businesses and homes are "passed" by fibre.

| Network Description | Fibre Optic and Wi-Fi networks serving Stratford and six rural communities in southwest Ontario: St. Marys, Brussels, Dashwood, Hensall, Seaforth and Zurich. | |
|------------------------|--|--|
| | The fibre network consists of 50 km grid of optical fibre. The Wi-Fi network consists of nodes mounted on utility poles throughout the city and backhauled over the fibre network. | |
| Network Cost | Festival Hydro invested \$1.2M to deploy the first 40 km of fibre | |
| Network Ownership | After the initial \$1.2M investment in the network by Festival Hydro, the network was established as a separate entity, owned by Rhyzome. Rhyzome Networks is fully owned by the City of Stratford. | |
| Governance | Rhyzome Networks owns and operates fibre optic and WiFi data networks. Building the wireless network was a joint effort between Rhyzome and Festival Hydro | |
| Customers | Festival Hydro uses the WiFi network to collect hourly time of-use data from 18,000 residential and commercial electricity meters. Municipal mobile workforce Healthcare Education Industrial/ Commercial ISP (Rhyzome wholesales connectivity) | |
| Data Services | Dark Fibre, wholesale fibre connectivity, Rhyzome is exploring future opportunities related to data storage and cloud | |

computing services.

As outlined above, there are varying options and models for owning and operating a public sector broadband network. Networks may be deployed to serve municipal needs, or expanded to serve partner organizations in the MUSH sector. There are also networks that partner with ISPs to share infrastructure and to provide services to residential and business consumers.

Durham's Current Broadband Infrastructure

Durham Region currently owns fibre optic network infrastructure, as illustrated in Appendix #3. Currently, this fibre optic network is used solely for traffic management purposes. A preliminary analysis indicates that there are a number of Regional facilities located along the existing and future deployment areas of the network, as shown on Appendix #4. It is possible that the Region could move towards connecting its own facilities and investigate the option of providing service to other MUSH facilities.

Developing and operating a municipal network is a significant undertaking. There may be a business case that shows a net benefit for providing connectivity to Regional facilities, as opposed to leasing services from an ISP. However, there are likely to be considerable capital and operating costs associated with establishing a municipal network that must be taken into consideration. A thorough inventory of facility needs, existing service costs, operating expenses, and an assessment of the current and future capacity of the Region's network would be required. In addition, partner MUSH sector facilities should be consulted to determine if there is an opportunity for the Region to lease any excess services to these users to offset operating costs.

Phase Two of the broadband strategy will outline the various steps and sub assessments that should be undertaken should the Region decide to pursue establishing a municipal network.

8.5: Smart City / Intelligent Community Designations

Intelligent Community and Smart City designations are public indications that a community is embracing digital technologies and capabilities to support their citizens and businesses. Smart/Intelligent communities understand the challenges and opportunities of the broadband economy, and have taken conscious steps to ensure that their community can prosper in it. They focus on improving quality of life of their citizens and encouraging or enabling additional value to be derived from a given infrastructure investment.

Smart Cities apply the information, communications and technology tools available in an Intelligent Community to municipal operations. They monitor, measure and control city processes, including the water supply, traffic management and city vehicles. They use technology to make their processes more efficient, to provide better service and to reduce cost.

There are programs that honour, support and benchmark communities against Smart City/Intelligent Community criteria. These designations help communicate that the regional or area municipality embraces broadband connectivity and the progressive capabilities it enables. The Intelligent Community Forum (ICF), the most prominent organization providing Intelligent Community designations, has well defined criteria for their awards. Since 1999, this global, non-profit organization has recognized four Canadian cities as Intelligent Community of the Year, and many cities among their Top7 and Smart21.

Intelligent Community Forum (ICF)

The Intelligent Community Forum (ICF) is a global organization that presents annual awards to Smart Cities and Intelligent Communities. Intelligent Community projects aim to improve how cities function and operate. They apply information, communications and technology to improve city operations and allow citizens and employers to benefit from the broadband economy. The ICF awards have two goals: to recognize accomplishments in developing inclusive prosperity through the use of information and technology and to gather data for ICF research programs.

Data gathered through ICF is shared with other Intelligent Community applicants, allowing for benchmarking and comparison among communities. This exercise can provide access and insight to what others are doing, identifying best practices and effective approaches.

Communities apply for an award by filling out a nomination form²⁷. The twenty-one semi-finalists for the Intelligent Community of the year are acknowledged as the Smart21 Communities of that Year. The Smart21 can then complete a more detailed questionnaire describing their opportunities, challenges, and results in order to qualify and compete for the Top7 Intelligent Communities of the Year, who can also further compete for Intelligent Community of the Year. All award recipients receive local and international media coverage.

In 2002, Calgary won Intelligent Community of the Year. Since then, many Canadian cities and regions have qualified as Smart21, Top7 or Intelligent Community of the Year. Within Durham Region, Pickering, and Oshawa have won ICF awards, while other municipalities are currently considering applications. York Region, which is geographically and structurally similar to Durham Region has also won ICF awards. The City of Stratford has received three awards. Publicity resulting from the ICF designation promotes the infrastructure and capacity that the municipalities have implemented and assists with promoting the communities as innovative ecosystems to attract local and

²⁶ http://www.intelligentcommunity.org/from smart cities to intelligent communities

²⁷ Intelligent Communities Forum Nomination Form, http://www.intelligentcommunity.org/nominations_form

foreign direct investment and talent. These awards have preceded corporate investments and economic development that depend on this type of capacity.

During the award process, applicant communities are evaluated against six criteria: broadband, knowledge workforce, innovation, digital equity, sustainability and advocacy. ²⁸ Consideration is given to communities that undertake programs to strengthen their performance against these indicators if they have not been strong in the past. Broadband is an essential component of Intelligent Communities, given that it plays a central role in supporting communities across all other indicators.



Figure 3: The Indicators of an Intelligent Community

The cost of applying for Intelligent Community Forum awards generally relate to developing capacity and strength in the six Intelligent Community indicators. As awards are normally based on established projects with clear metrics of success, this could involve multi-year undertakings, depending on a community's current measurement within these indicators. For a community that is already very strong in the various indicators, there will be less work required in order to qualify for an award.

There is no fee associated with submitting an application, however, the ICF evaluation process is very thorough and requires applicant resources. A visit from ICF for stakeholder interviews must be arranged, managed and paid for. Travel to the award ceremony for community / political representatives are another expense. There is a fee of about \$1000 for the benchmarking report and a fee for attending the award ceremonies. Funding must be approved and available for the cost associated with the program.

²⁸ The indicators of an Intelligent Community are from the Intelligent Community Forum Application Form. IC-S21

The main benefits of the ICF program are the economic activity attracted through ICF advertising and branding and from adopting ideology and processes that help ensure that technology is used to improve quality of life. The ICF provides award winners the right to identify as an ICF-recognized Smart21, Top7 or Intelligent Community of the Year and to use the ICF logo for municipal publicity. Award winners also benefit from publicity through ICF media channels. Intelligent Community Award winners are invited to join the Intelligent Community Forum Foundation, the association of smart and intelligent communities, with the benefits of networking, building city-to-city connections, being part of visiting smart city tours and promotion as unique ecosystems to attract and retain talent.

Smart Cities Challenge (Infrastructure Canada)

In November of 2017, Infrastructure Canada announced the Smart Cities Challenge. The challenge encourages communities to adopt smart city approaches to improve the lives of residents through innovation, data and connected technology. Three rounds are planned, with applications for the first-round due in April 2018. Municipal and Regional governments and Indigenous groups are eligible to apply.²⁹

Applicant communities must establish a goal for themselves and express it clearly through a challenge statement. Examples of challenge statements provided by Infrastructure Canada include "Feel safe and secure" and "Earn a good living".

A set of 20 questions about the Challenge must be answered. These questions explore the problem definition, community involvement and details of the proposal to solve the problem. In addition, extensive community engagement is a required activity and must be demonstrated in the application. The goals must relate to issues the community describes. Prizes range from up to \$5 million to up to \$50 million, as follows:

- One prize of up to \$50 million open to all communities, regardless of population;
- Two prizes of up to \$10 million open to all communities with populations under 500,000 people; and
- One prize of up to \$5 million open to all communities with populations under 30,000 people.

Under the Smart Cities Challenge, individual municipalities or the Region (representing all municipalities) may submit an application, but not both. The Region is currently supporting the City of Oshawa in its Smart Cities Challenge application and as a result is not permitted to submit an application of its own. Through a subsequent round of the competition, the Region intends to pursue an application, and has struck an internal working group to work towards this goal.

²⁹ Infrastructure Canada, http://www.infrastructure.gc.ca/plan/cities-villes-eng.html

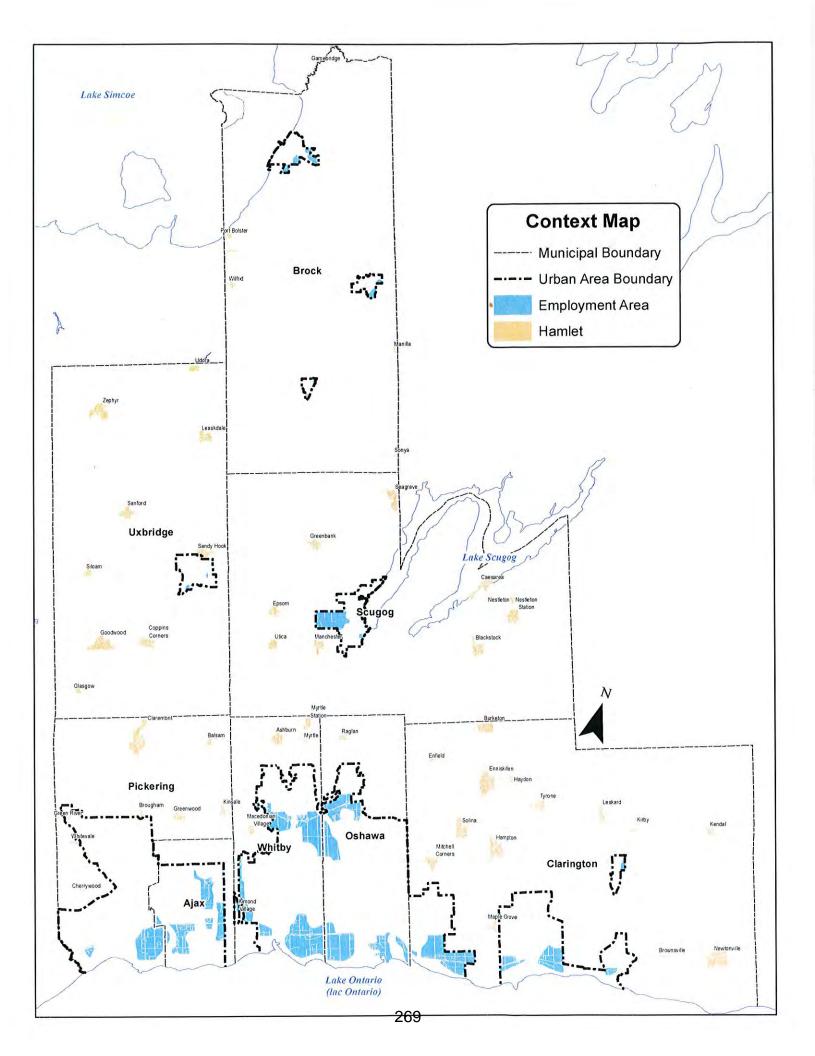
9.0: Conclusions and Next Steps in Developing the Broadband Strategy (Phase Two)

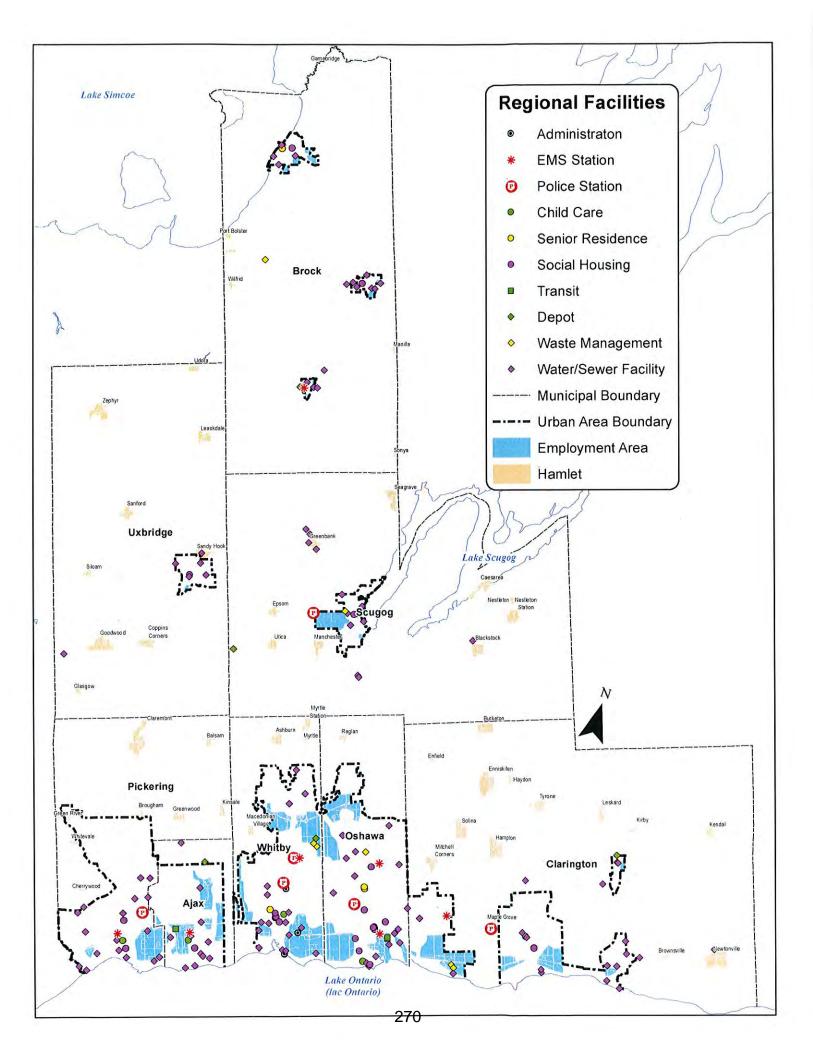
This report documents the findings from Phase One of the Durham Region Broadband Strategy. Consultation and secondary research indicates that deployment of broadband infrastructure is occurring within Durham's urban residential areas, with service gaps existing within certain employment areas and rural areas. As part of Phase One, preliminary connectivity targets have been established and various roles and projects that the Region and area municipalities may undertake to support broadband deployment have been identified.

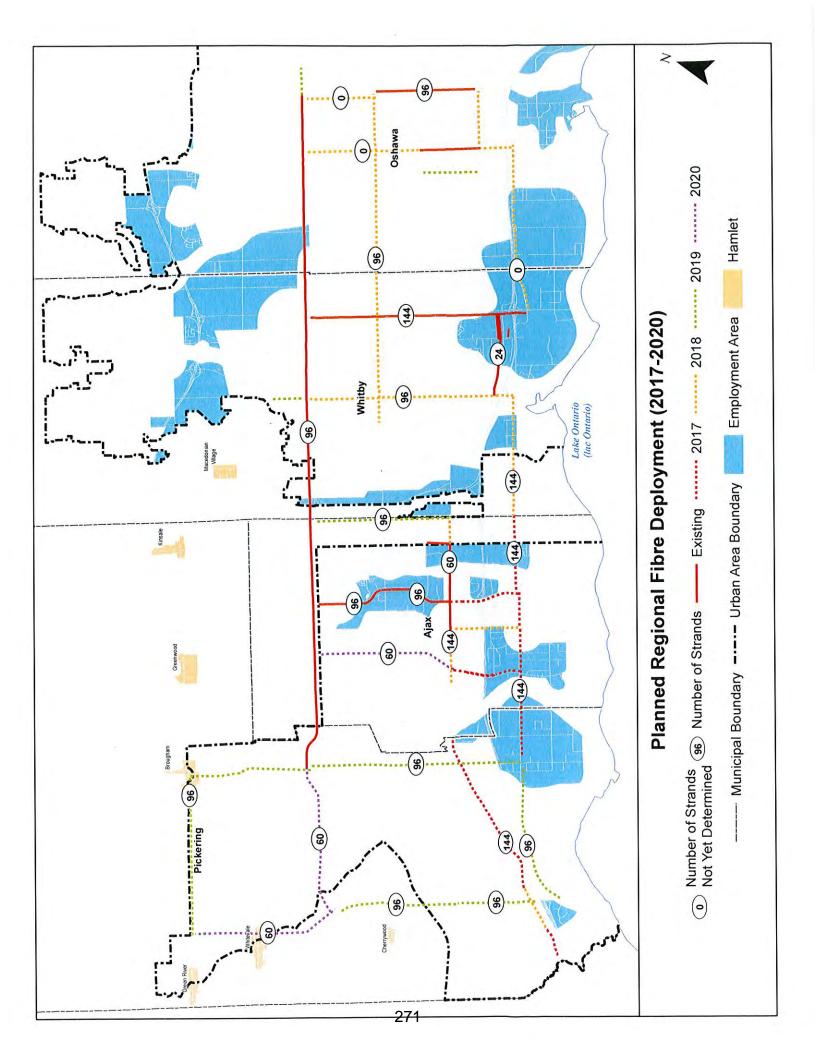
Phase Two of the project will focus on the preparation of the Final Broadband Strategy. As part of this process, the following key components will be completed:

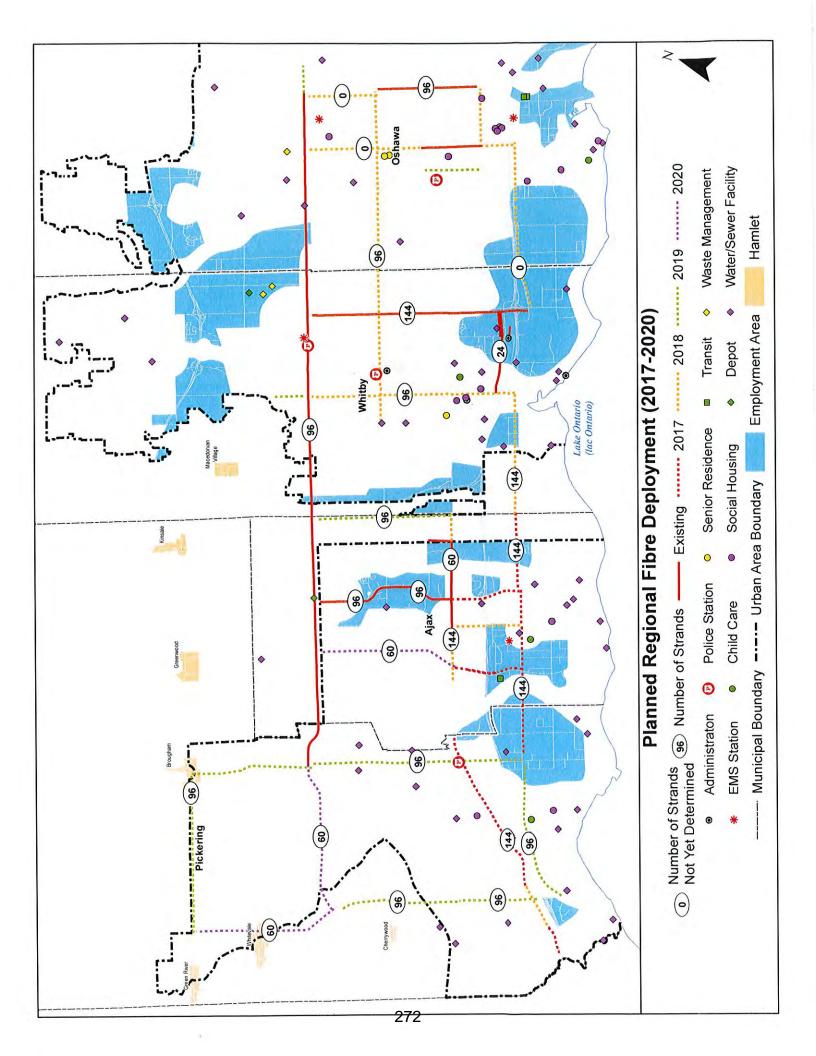
- · Confirming the connectivity goals and targets;
- Determining the appropriate implementing body and timelines for the final recommended roles, project and programs to support broadband deployment;
- Developing an Implementation Plan that provides Durham and the area municipal partners with the necessary actions to move forward to obtaining the connectivity goals and targets; and,
- An outline of necessary steps, assessments, business models and phasing options in support the preferred option.

Further input will be sought from stakeholders on the proposed target service levels as well as the roles, project and programs that the Region and area municipalities may undertake to support broadband connectivity and to confirm the findings contained in the Phase One analysis.









Memorandum

To: Regional Municipality of Durham

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Date: March 19, 2018

Subject: Preliminary Analysis of the State of Broadband Internet Connectivity in the

Durham Region

Preliminary Analysis of the State of Broadband Internet Connectivity in the Durham Region

By Reza Rajabiun, LLM, PhD

Executive Summary

The Regional Municipality of Durham is in the process of evaluating the state of broadband Internet connectivity available to its residents, businesses, and public-sector organizations, with the objective of using this knowledge to develop a broadband strategy. Based on measurements from a large-scale standards-based network testing platform, this report provides a high-level overview of the state of Internet connectivity and quality of broadband services service providers deliver in the Durham Region. We also benchmark the state of the network in the Durham Region relative to other parts of the Greater Toronto and Hamilton Area (GTHA).

The analysis documents that connection speeds and user quality of experience indicators in some of the urban parts of the Durham Region are among the highest in the GTHA. There are however areas with particularly low service quality both in rural and some urban parts of the Region. Gaps are particularly pronounced in northern and eastern parts of Durham, where average measured connection speeds users experience are about half of those users experience in some of the newer urban areas in the southeast of the Region.

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Acknowledgement: This research has been supported, in part, by the Ontario Ministry of Infrastructure (MOI) and the Social Sciences and Humanities Research Council of Canada (SSHRC). The author is grateful to Fenwick McKelvey and Trevor James Smith for their contribution to data collection and mapping. The views expressed herein are the author's alone and should not be interpreted to reflect those of any affiliated organizations. All rights reserved.

Preliminary Analysis of the State of Broadband Internet Connectivity in the Durham Region

I. Context, Methodology, and Data:

- 1. Motivation: While Ontario and Canada were recognized as early international leaders in expanding access to high-speed Internet connectivity, over the past decade it has become increasingly clear that Canada is falling behind many other advanced economies in terms of measured broadband speeds, private sector incentives to deploy next generation fiber-to-the-premises (FTTP) technologies, and affordability of high-speed data services. Recognizing these trends, municipal and business stakeholder in the Greater Toronto and Hamilton Area (GTHA) have identified broadband Internet connectivity as a major concern and called on the province to ensure the region develops broadband infrastructure that is at least equal to other globally competitive jurisdictions. At the same time, some communities and regional governments around the GTHA are studying the state of connectivity in their communities to identify and validate gaps with the aim of developing effective strategies for encouraging investments in ultra-high speed next generation fiber-to-the-premises (FTTP) broadband technologies to businesses and residents. Durham Region is currently engaged in a broadband infrastructure mapping and strategy development process.
- 2. Scope: This report provides a high-level overview of the state of broadband connectivity in the Durham Region using data from the large-scale standards-based Internet measurement testing platform developed by Measurement Lab (M-Lab)/Google.³ Building on previous research conducted by this author on the state of Internet connectivity in Ontario and the GTHA,⁴ the analysis of measured/actual connection speeds and service quality levels in Durham complements ongoing efforts by the Region to research and map advertised speeds that Internet service providers claim are available to residents and businesses in particular areas. While likely to be correlated, effective bandwidth and service quality levels that users experience on congestion prone infrastructure tends to vary substantially from advertised maximum speeds that might be theoretically available in a particular area (e.g. due various factors including capacity under-provisioning, distance from the node, availability of legacy copper and fixed wireless/satellite v. faster cable or FTTP "last mile" technologies, etc.). In this report we document measured connection speeds and service quality levels based on user-initiated tests,

¹ Rajabiun, R., & Middleton, C. (2017). Regulatory Federalism and Broadband Divergence: Implications of Invoking Europe in the Making of Canadian Telecom Policy. *Intereconomics*, 52(4), 217-225. https://www.ceps.eu/system/files/IEForum42017_5.pdf

² See e.g. http://www.occ.ca/wp-content/uploads/OCC-Broadband-Letter-07-18-161.pdf; http://www.newmarket.ca/TownGovernment/Documents/Mayor%27s%20Speeches%20and%20Presentations/Newmarket%20Chamber%20-%20Mayor%27s%20Speech%20-%20April%2022%202016%20-%20Website.pdf

³ https://www.measurementlab.net/

⁴ Rajabiun, R. (2017) State of Broadband Internet Infrastructure and Strategies for Improving Connectivity In The Greater Toronto and Hamilton Area (GTHA). Government of Ontario, Ministry of Infrastructure.

which allows us to benchmark and map the state of connectivity as experienced by Durham residents.

- 3. Limitations: Ideally, to develop an empirically driven approach to broadband infrastructure development policy a combination of indicators capturing inputs (e.g. capital expenditures, distribution and capacity of physical assets) and market outcomes (e.g. quality and affordability) would be required. These indicators can then be mapped in a fine-grained manner in order to identify and address existing and emerging concerns about outcomes, either by operators themselves or through some form of public sector initiative when market forces appear inadequate for delivering the socially desirable outcomes (e.g. targeted supply or demand side subsidies, direct public investment in essential transport and access facilities, structural measures, etc.). In practice, however, disaggregated information about investment inputs, physical assets, and service pricing and quality of service is extremely valuable to operators and considered confidential. This creates an information asymmetry that limits the scope for empirically driven policy decisions, particularly by lower levels of government with limited legal capacity to compel disclosure of material information from private entities regulated under central government jurisdiction.
- 4. One way of addressing this problem with respect to physical infrastructure is for local authorities to conduct surveys around their communities to be able to benchmark what they have, identify gaps, and plan for the future. While necessary in the design and implementation of broadband initiatives, such surveys are resource intensive and only what can be seen can be mapped independently in the absence of cooperation by operators. As in the case of capital expenditures, maps of physical assets would at best offer an indicator of inputs into the determinants of connectivity and not a reliable measure of market outcomes experienced by users.
- 5. "Big data" Internet measurements: Development of tools and large scale broadband network performance testbeds increasingly allow users, technology companies, and policymakers to overcome this information asymmetry. There is a wide range of such tools available with distinct methodologies, capabilities, and uses. In contrast to financial or technical indicators of inputs that are hard to construct at a disaggregated level due to confidentiality considerations, Internet measurements tests allow those who do not control networks to gain a window into their operations. Users can employ these tools to evaluate speeds their operator is delivering and to compare their options in the market. For telecom investors, network performance indicators offer a method for identifying under-served markets, undervalued/overvalued assets, and to optimize their entry/exit strategies accordingly. This type of information is also highly valuable to technology companies that require high-quality connectivity in order to be able to deliver Internet applications and services from the so-called "cloud" to their customers. For economic policymakers trying to ensure broadband infrastructure of sufficient quality and affordability is available to support the digital economy and information technology intensification, "big data" on the operations of the infrastructure offers a unique window into the evolution of connectivity.

- 6. Different testing methodologies tend to generate substantially different results in terms of speed measurements across jurisdictions and operators.⁵ From an analytical perspective, this is valuable because it suggests they offer distinctive and potentially complementary information about a multilayered and fast evolving world of broadband connectivity. In terms of measured speeds, results from Speedtest/Ookla tend to be substantially higher than those generated by two other commonly cited sources of global speed measurements, Akamai Technologies State of the Internet Report and the Measurement Lab (M-Lab) Network Diagnostic Test (NDT), which is sponsored by Google and various independent research institutions.⁶ There are a number of well-known methodological reasons for these differences, which are beyond the scope of this report to discuss in detail.⁷
- 7. Open data and multilevel coordination: In this report, we use data from the M-Lab/NDT test to benchmark and map the state of connectivity in the Durham Region. There are a number of reasons for this, including its standards-based open data approach to the problem of Internet measurements, its widespread use in research and policy debates, and its relatively large sample size for Canada (e.g. approximately 400,000 tests in the GTHA in 2016). The Canadian Internet Registration Authority (CIRA) has adopted the M-Lab testing platform and operates servers that run the NDT tests, data from which is then compiled in the open data repository maintained by M-Lab.8 Consequently, the open and standardized approach to M-Lab data collection makes it particularly relevant as a basis for policy development that requires mapping and coordination across multiple levels of government.
- 8. Potential sources of error: In terms of absolute measures of average and median speeds, results from M-Lab/NDT tend to be broadly consistent with those from Akamai, a large content and application delivery (CDN) company with a global system of servers. Since Akamai's business is to optimize and accelerate connectivity between its clients and their customers, this suggest the NDT test might be somewhat overestimating speeds. One reason for this might be that crowdsourced measurements such as M-Lab NDT have the potential for a sampling bias as people likely to test their connections tend to be those that care more about the quality of their connections than average users. This sub-group is likely to purchase relatively higher speed packages than the general population. On the other hand, both Akamai and M-Lab approaches represent "off net" measurements that capture connection from users to servers outside of the providers' networks. Consequently, they might be underestimating connection quality for accessing content and applications from within these networks or those the operators are prioritizing. Sample sizes of tests from less densely populated areas can be relatively small, which may create material errors in estimates for these areas. Geolocation of tests is also challenging and adds another source of potential error to the estimates. Combining the data

⁵ Bauer, S. (2016). Improving the Measurement and Analysis of Gigabit Broadband Networks. Research Conference on Communications, Information and Internet Policy 2016 (TPRC 44).

⁶ See: https://www.akamai.com/; https://www.measurementlab.net/

⁷Bauer, S., Clark, D. D., & Lehr, W. (2010, August). Understanding broadband speed measurements. TPRC. http://people.csail.mit.edu/wlehr/Lehr-Papers files/bauer clark lehr 2010.pdf

⁸ https://www.measurementlab.net/data/

provided in this analysis with those the Region is collecting from service providers may offer valuable insights and assist in developing a richer picture of the state of the network and its potential development paths within Durham.

- 9. Aggregation and local variation: In this report we look at connection quality at a relatively high-level of aggregation, which may hide significant local differences in what users actually experience (i.e. we only look at municipal and Industry Canada hexagons, which have an approximately 5 km diameter). For example, service quality/speeds tend to degrade significantly due to distance on legacy copper networks, which means users that are further away from the local fiber node in their area may have a much poorer experience than those residing close to that fiber node. This is one of the key reason why indicators based on maximum theoretical speeds (i.e. up to xMbps) that are available in a particular area are not necessarily very informative as users that are far away from fiber nodes in that area or have to rely on wireless/satellite may be experiencing service quality levels that are far below the theoretical maximum speed that might be "available" to some users in that area. While the level of analysis here should be sufficient for informing the Durham stakeholders as the Region develops a broadband strategy, more finegrained mapping using network measurements would help pinpoint areas where connectivity is particularly poor, as well that those in which private service providers are investing more to keep up with growing demand for network resources and deploying advanced fiber technologies closer to end user/customer premises.
- 10. Aggregation and service provider variation: Unless otherwise stated, in the analysis that follows we estimate connection quality in aggregating all M-Lab/NDT tests taken by users in Durham Region in 2016. As documented in Figure 1 however, it is important to note that are significant differences in effective speeds large operators deliver, which depends on various factors including their technological endowments, financial, and service provisioning strategies.9 In Ontario for example, Figure 1 documents a growing gap between median speeds delivered by the two largest fixed infrastructure operators that dominate retail residential markets, with Rogers scaling its network infrastructure capacity to deliver higher speed services compared to its main rival Bell over the past few years. In neighbourhoods where users can access higher capacity/speed cable or FTTP networks, service quality/speed levels that are available to users with demand for higher speed connections are likely to be higher than the average rates analyzed in this report. Where there is limited access upgraded cable networks and FTTP "last mile", residents and businesses may have little option but to rely on long loop DSL services on old copper networks, fixed wireless, or high-latency/low speed satellite services (e.g. those offered by Xplornet). Speed/service quality levels available to users living in relatively remote locations within municipal and hexagonal areas analyzed here are likely be substantially lower than average speeds/latency rates documented in the subsequent section. We abstract away from firm level differences in service/infrastructure quality in Durham in the discussion that follows to focus on geographic variations within the Region and compared to the rest of GTHA.

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⁹ Rajabiun, R., & Middleton, C. (2018). Strategic choice and broadband divergence in the transition to next generation networks: Evidence from Canada and the US. *Telecommunications Policy*, 42, 1, 37-50. https://www.sciencedirect.com/science/article/pii/S0308596117301143

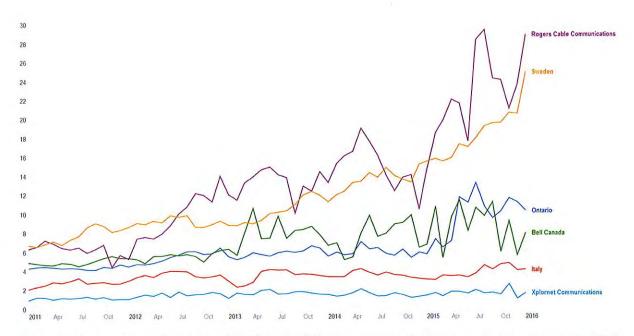
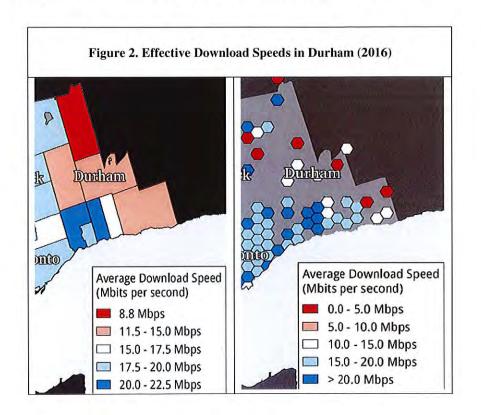


Figure 1: Measured Broadband Speeds in Ontario, differences among dominant service providers, and global benchmarks: Median download speeds 2011-2016 (Mbps); Source Google/M-Lab

II. State of Network Infrastructure in Durham: 2016

11. **Download speeds:** Figure 2 documents the range of average download speeds within Durham Region municipalities and lower level hexagons in 2016. Some of the urban parts in the southwest of the Region had average downstream speeds that lead GTHA, while measured speeds in some of the rural communities in the north and east of Durham Region are relatively poor (below 5 Mbps). However, it is also evident that download speeds in some rural communities in Durham tend to be higher than in some of the more urban hexagons in the southwest of the Region (as well as in the GTA and York Regions). This suggests broadband infrastructure quality concerns tend to cross the urban-rural digital divide as incentives of private sector providers to scale their network capacity in response to demand growth can vary across communities and neighbourhoods. More fine-grained mapping of network infrastructure quality would be needed to identify exactly which areas are falling behind, and where private sector incentives to keep up with demand for high-speed connectivity appear adequate.

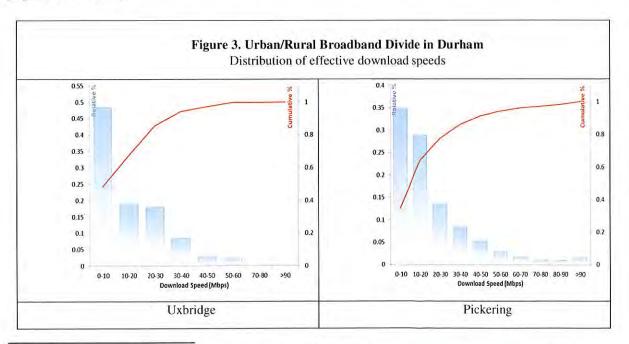


12. **Note on CRTC basic service standards:** In 2016, the federal telecom regulator reclassified high-speed access as a basic telecommunications service and established:

"the following criterion to assess whether the broadband portion of the universal service objective is achieved: Canadian residential and business fixed broadband Internet access service subscribers can access speeds of at least 50 Mbps download and 10 Mbps upload. These speeds

are to be the actual speeds delivered, not merely those advertised. That stated, the Commission recognizes that the broadband Internet access service speeds actually experienced by users are affected by a wide range of factors, some of which are outside the control of the network provider."¹⁰

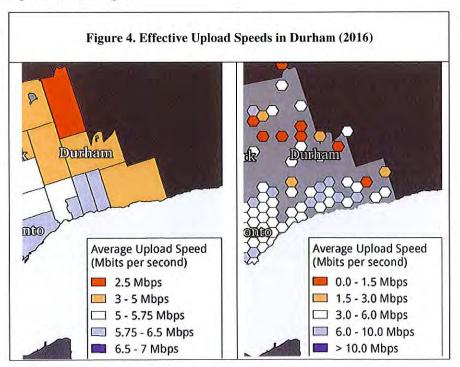
13. The CRTC further estimated that "82% of Canadians currently have access to fixed broadband Internet access services at speeds of at least 50 Mbps download and 10 Mbps upload."11 This estimate is based on data from service providers on maximum advertised speeds they claim are available in particular areas of the country (i.e. the hexagons). For various reasons, some of which were noted above, actual measured speeds can vary substantially from these maximum advertised rates that might be theoretically be available sometimes (e.g. low traffic periods late at night/early morning) and to only some users in a particular area (e.g. those close to local fiber nodes/central offices). To help explain the difference between CRTC's approach based on advertised rates that are theoretically "available" and the one used here based on measurements of actual speed/service quality levels service providers deliver, Figure 2 documents the distribution of measured connection speeds in two municipalities representative of urban and rural parts of Durham. Despite significant differences in average service quality, services with speeds higher than CRTC's 50 Mbps basic service standard are theoretically available in certain areas in both communities (e.g. close to the fiber node/central office, in buildings where FTTP last mile networks have been deployed). While effective downstream bandwidth that is available to the large majority of users is below 20 Mbps, in newer/more urban Pickering the proportion of users that can achieve speeds higher than 10 Mbps is substantially higher than in the less densely populated Uxbridge.



¹⁰ Paragraphs 80 & 81. Telecom Regulatory Policy CRTC 2016-496. https://crtc.gc.ca/eng/archive/2016/2016-496.htm

¹¹ Ibid. Para 79. Emphasis added.

14. **Upload speeds:** Although effective/measured download speeds are important as an indicator of broadband infrastructure quality, various advanced Internet applications require reliable symmetric connectivity (e.g. voice/video communications, multimedia, applications requiring processing and backup in the "cloud", etc.). ¹² Effective bandwidth service providers allocate to upstream capacity can be critical to the ability of users to deploy applications that require more symmetric connections than is needed for media applications that push downstream to end users (e.g. video content, advertising). Figure 3 maps the distribution of average measured upload speeds in Durham in 2016. In terms of the geographic gaps in Durham, this measure broadly confirms insights noted above bases on measured download speeds. The geographic extent of the gaps between the northeast and southwest of the Region in terms of upload speeds appear to be wider than in terms of download speeds noted above. This likely reflects higher access to cable (and potentially some FTTP) access networks in the southwestern parts of the Region which can offer more symmetric connections compared to relatively more rural areas in the north and the east. Notably however, average upload speeds in some rural parts of Durham are on par with the some of urban parts of the Region.

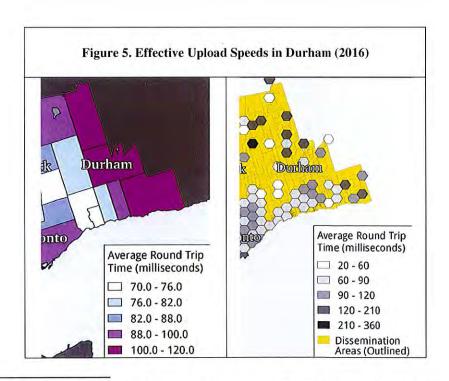


15. Latency: In addition to connection speeds and their symmetry, a key measure of broadband infrastructure quality from the perspective of both user experience and network management is the latency/delay in the transmission of data packages. For the usability of some applications latency doesn't really matter (e.g. email), but it can be critical for other basic Internet services

¹² For examples see eBusiness Toolkit for Small and Medium Size Enterprises (SMEs). Eastern Ontario Wardens' Caucus/Eastern Ontario Regional Network; by eFilters Inc. & RDM Management Group (2016). Available at: https://www.edco.on.ca/resources/Documents/EORN_eBusinessToolKit2016 Web%20FINAL.pdf

such as web browsing, voice/video communications, and various latency sensitive applications in the "cloud". As a relevant basic service benchmark, previous research documents that with latency (commonly measured as round-trip-time, RTT) rates over 80-100 milliseconds, delays in simple web browsing become increasingly challenging to the majority of users. ¹³ Even in areas with relatively high effective measured speeds, when network demand is outpacing supply latency rates can increase exponentially as bandwidth reaches capacity during high-traffic periods, which can substantially degrade service quality (i.e. "congestive collapse" making high speed connections "feel slow"). In terms of network management, latency is usually viewed as a key indicator of emergent congestion on shared links and routers due to growing demand that outpaces capacity supply (i.e. trigger for provisioning more network resources/capacity).

16. Figure 4 presents estimated latency rates in Durham based on 2016 M-Lab data at the two levels of aggregated as above with speeds. While we see some correlation between speeds and latency (which we discuss further below), latency rates appear to offer a richer picture of the complexity of network development across the urban-rural digital divide. Although latency is unacceptably high in some rural parts of the Region, there are rural communities with relatively low latency rates. At the same time, measured average latency rates in some urban parts of Durham (and GTHA more broadly) tend to be higher that most users might find acceptable when engaging in basic Internet applications such as web browsing (i.e. "off-net" websites outside of their service providers network).



Rajabiun, Reza and McKelvey, Fenwick (2017). Complementary Realities: Public Domain Internet Measurements in the Development of Canada's Universal Access Policies. TPRC 45. Available at SSRN: https://ssrn.com/abstract=2943054

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- 17. Local variation: Aggregation of individual network diagnostic tests as above provides an intuitive picture of the state of broadband connectivity, but also may hide substantive diversity at the local level. For example, higher performing municipalities in the southwest of Durham may have newer neighbourhoods and buildings with upgraded networks, but they also contain older and low-income communities where private sector incentives to invest in network resources can be weak (i.e. lower expected return on capacity upgrades). A large number of tests from the newer and more affluent neighbourhoods in the sample is likely obfuscating such local differences. Lower level analysis is therefore required in design and evaluation of particular broadband infrastructure improvement initiatives.
- 18. Summary and benchmarking: To summarize and provide a basis for benchmarking the state of connectivity in Durham, Figures 6 plots the empirical relationship between effective download speeds and latency among GTHA municipalities. Figure 7 plots the same variables, but at the lower Industry Canada hexagonal level of aggregation. Some of the municipalities in the southwest of Durham Region (Pickering and Whitby) are among the leaders in the GTHA in terms of broadband infrastructure quality, but speed/service quality levels in Oshawa and Ajax are substantially below their counterparts in the southwest of Durham. Connection speeds in rural Brock and Scugog were about half of those in the leading municipalities. Somewhat surprisingly, measured network speeds in relatively urban Oshawa where about the same as in rural Uxbridge. This observation documents that some urban areas are also prone to underinvestment and have poor broadband infrastructure quality. As documented in Figure 7 using lower level data, the magnitude of the gaps between leading and lagging areas tend to be substantially higher that is suggested by aggregating the data at the municipal level. An effective broadband infrastructure strategy would recognize that barriers to access and use of the Internet associated with less than adequate service quality levels can be extensive and crosses the urbanrural divide. 14

¹⁴ Ontario's 2017 Long Term Infrastructure Plan (LTIP) has incorporated this empirical insight to some extent, stating that "The Province is committed to expanding broadband infrastructure and improving connectivity in **both rural and urban communities**, including First Nations...". Page 39; emphasis added. https://www.ontario.ca/document/building-better-lives-ontarios-long-term-infrastructure-plan-2017

Reza Rajabiun-Durham Region

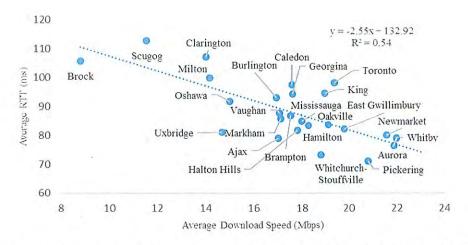


Figure 6: Effective Bandwidth and Connection Quality in GTHA Municipalities (2016)

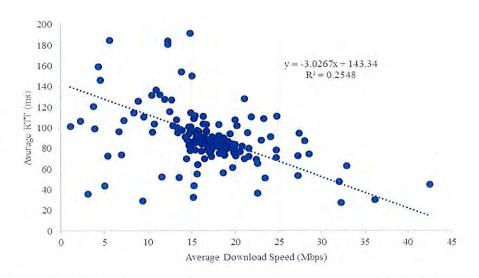


Figure 7: Effective Bandwidth and Connection Quality in GTHA Hexagons (2016)

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Glossary of Terms

Backbone: a major high-speed transmission network between large transmission aggregation points.

Backhaul: portion of an Internet network that comprises of intermediate links between the backbone network and smaller subnetworks.

Bandwidth: in computer networks, bandwidth is used to describe the rate of data that can be carried from one point to another in a given period of time.

Broadband: generally refers to internet service that is always on and available at higher speeds than traditional dial up internet services. There are several forms of broadband internet service including Digital Subscriber Line, Cable, Satellite and Fiber-Optic.

Dark Fibre: refers to fibre optic infrastructure (cable) that has been installed but that is not currently in use.

Download and Upload Speed: download speed is the rate at which data is transferred from the Internet to the user's device. Upload speed is the rate at which data is transferred from the user's device to the Internet. Download speeds are typically higher than upload speeds, as most users download more data than they upload. A common measurement of download and upload speeds is megabits per second (Mbps).

Fibre: A flexible hair-thin glass or plastic strand that is capable of transmitting large amounts of data at high transfer rates as pulses or waves of light.

Gigabits per second (Gbps): a measurement of Internet speed. 1 Gbps is equivalent to 1,000 mbps or 1 billion bits per second (bits are the smallest unit of digital information.

Internet Service Provider (ISP): a company that provides users (individuals or businesses) with access (a connection) to the Internet and related services

Last Mile: refers to the technology and process of connecting the end customers (home or business) to the first network interface point.

Lit Fibre: refers to active fibre optic cable with attached electronics that is capable of transmitting data.

Megabits per second (Mbps): a common measurement of Internet speed. 1 Mbps is equivalent to the transfer of 1 million bits of data per second (bits are the smallest unit of digital information

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The Regional Municipality of Durham Report

To: Committee of the Whole

From: Commissioner of Planning and Economic Development

Report: #2018-COW-75 Date: May 2, 2018

Subject:

Durham Environmental Advisory Committee (DEAC) Environmental Achievement

Awards; File: A01-37-03

Recommendations:

That the Committee of the Whole recommends to Regional Council:

- A) That the Durham Environmental Advisory Committee's nominations for the 2018 Environmental Achievement Awards be endorsed; and
- B) That a copy of Commissioner's Report #2018-COW-75 be forwarded to the Durham Environmental Advisory Committee.

Report:

1. Purpose

1.1 The purpose of this report is to recommend the recipients of the 2018 Durham Environmental Advisory Committee (DEAC) Environmental Achievement Awards.

2. Background

2.1 The DEAC Environmental Achievement Awards Program recognizes environmental achievements of individuals and organizations in the public, private and non-profit sectors within Durham Region. The Awards program recognizes efforts to promote, preserve and enhance the Region's environment.

- 2.2 The Awards Program has six categories. Each category is named in honour of one of Durham's past environmental leaders. The awards categories are as follows:
 - **George A. Scott Stewardship Award:** for helping maintain, protect and preserve the natural and/or agricultural environment;
 - Dr. J. Murray Speirs Restoration Award: for helping restore and/or steward the natural environment;
 - Irene Kock Education/Communication Award: for fostering effective communications, sharing knowledge, and exhibiting leadership in helping others to learn about the natural environment;
 - Eric Krause Innovative Plans/Policies/Initiatives Award: for forwardthinking and innovative efforts to encourage positive change with respect to the environment;
 - Jessica Markland Partnerships Award: for cooperative efforts to enhance the environment by building partnerships with public, community and private interests; and
 - Evylin Stroud Lifetime Achievement Award: for individuals who continually promote the protection of the environment, through small, but meaningful ways.
- 2.3 Eighteen nominations were received from a variety of sources across the Region this year. The nominees were of a high-calibre and recognize the extraordinary efforts of citizens and organizations to preserve and enhance the Region's environment (See Attachment 1 for a summary of all nominations).
- 2.4 All of the nominations were reviewed by the Awards Subcommittee, which either confirmed nominees for the category as nominated or recommended nominees for another category. The process ensures that the nominees fall within the most appropriate category and that all categories are awarded each year. DEAC considered and recommended the nominations of the Subcommittee at its March 22nd meeting.
- 2.5 The following nominees were selected to receive this year's awards:
 - George A. Scott Stewardship Award:
 Scugog Lake Stewards Inc. for its Lake Simcoe stewardship activities and research. Incorporated as a charitable organization in 2003, Scugog Lake Stewards Inc. advocated for the establishment of the Healthy Lake Scugog Steering Committee of Scugog Council. Scugog Lake Stewards Inc. fundraises and applies for grants in order to support graduate student

research, complete monitoring patrols around the lake, and facilitate community outreach. Their recent project includes the creation of an engineered wetland in Port Perry Bay through the use of dredged material from the lakebed. Planning is well underway for this project which is expected to be constructed in the Fall 2018.

• Dr. J. Murray Speirs Restoration Award:

Ontario Federation of Anglers and Hunters for restoration work related to the "Bring Back the Salmon" Program. Bring Back the Salmon is a four part strategy including: fish production and stocking; habitat restoration and water quality enhancement; research and monitoring; and education and outreach. Through the Program, 100 habitat restoration projects have been completed and three million fish have been stocked in tributaries, including locally in Duffins Creek. Four years after the Program's inception, the first wild-born Atlantic Salmon in over 150 years were recorded in Lake Ontario.

Irene Kock Education/Communication Award:

Durham Farm Connections (DFC) for its work to enhance knowledge, understanding, and appreciation of agriculture and the agri-food industry within Durham Region. DFC is a volunteer organization that targets students, the general public, the farming community, and elected officials with various hands on activities that foster a connection to agriculture and local food production. In 2017, DFC reached over 1,200 students and teachers and over 800 members of the public (15,000 since inception).

• Eric Krause Innovative Plans/Policies/Initiatives Award:

Municipality of Clarington for the Priority Green Clarington (PGC) initiative. PGC is based on Council support for the establishment of a framework to promote the development of environmentally responsible, compact and complete new neighbourhoods. PGC was considered through the most recent amendments to the Clarington Official Plan, and is now being implemented as part of its secondary planning and land development review processes.

Jessica Markland Partnerships Award:

Oshawa Environmental Advisory Committee for partnering with various organizations and community groups to deliver and participate in activities that foster greater awareness of environmental issues facing the community. For example, the Committee has: partnered with Oshawa PUC to host an

annual Energy Conservation Challenge; worked with G.L. Roberts to grow and distribute milkweed plants; partnered with GM and Friends of the Second Marsh to host the annual Feathered Friends Festival; and established a seed library with Oshawa Libraries.

• Evylin Stroud Lifetime Achievement Award:

Joanne Dies for the impact that she has made both locally and provincially over 30 years of environmentalism. As the Town of Ajax Council representative on the Ajax Environmental Advisory Committee, Councillor Dies has been volunteering with Concerned Citizens of Durham since the early 1990's. She was integral in the establishment of the St. Andrews Community Garden, Co-chairs the Pickering Ajax Citizens Together to Protect Our Water, and works with the PineRidge Arts Council on encouraging high school students to create art from litter.

3. Conclusion

3.1 It is recommended that DEAC's nominations for the 2018 Durham Environmental Achievement Awards Program be endorsed and that a copy of this report be forwarded to DEAC. The awards ceremony will take place on May 30th at Regional Headquarters.

4. Attachments

Attachment #1: Summary of Nominations

Respectfully submitted,

Original signed by

B.E. Bridgeman, MCIP, RPP Commissioner of Planning and Economic Development

Recommended for Presentation to Committee

Original signed by

G.H. Cubitt, MSW Chief Administrative Officer

SUMMARY OF NOMINATIONS AS CATEGORIZED BY DEAC

George A. Scott Stewardship Award (5 nominations)

Nominee: Scugog Lake Stewards Inc.

Nominator: Richard Gauder Supported by: Bobbie Drew

- Recommended award recipient.
- Nominated for their Lake Simcoe stewardship and research activities, including the Lake Simcoe Enhancement Project.
- Advocated for the creation of the Healthy Lake Scugog Steering Committee of Scugog Council, which brings all the government agencies that regulate the lake together.
- Work with the Township of Scugog and other partners on the development of an engineered wetland to help with phosphorus load/stormwater runoff into the lake.
- Built the project website that keeps the public informed of the project and provides regular social media updates.
- Raise funds in support of various research projects tied to the lake.
- Work with community stakeholders, government agencies, and municipalities in an advisory capacity on various projects.

Nominee: St. Andrews Community Garden Nominator: Ajax Environmental Advisory Committee Supported by: Jade Schofield

- Established in the fall of 2010 with 30 plots and has grown to 82 plots.
- Designed to be self-sustaining with produce going to the gardeners and the remaining plant matter being composted on site.
- Orchard featuring 18 apple and cherry trees and a 200 foot pollinator garden.
- Operates a children's garden club and various community programming, including beekeeper talks, vermicomposting, canning, and trips to Black Dog Wild Rice.
- Addresses the need for food security within our urban environments in a sustainable fashion.
- In 2017, successfully harvested almost one tonne of food for three local food banks, conducted four workshops and brought the community together to celebrate their harvest with a pot-luck event.
- Leading low impact garden approaches including rain barrels, composting, native plant selection and pollinator gardens.

Nominee: Dr. Andrea Kirkwood Nominator: L'naya Russell

Supported by: Dr. Greg Crawford

- Professor at UOIT, responsible for developing her own research program focused on freshwater science.
- Considered a national expert in freshwater science.
- Appointed to the International Joint Commission's Science Advisory Board, ensuring Durham's issues are heard at a binational level.
- Collaborative research projects focused on aquatic ecosystems across Durham Region including, urban wetlands/stormwater ponds, Lake Ontario tributaries, land Ontario nearshore, McLaughlin Bay, Lake Scugog, Lake Simcoe.
- Common research theme is the assessment of aquatic ecosystem diversity and function as it relates to water quality in human-modified landscapes.
- Her research provides community stakeholders scientific data and also evidencebased recommendations for aquatic ecosystem management in their jurisdictions.

Nominee: Aiden Brushett

Nominator: Ajax Environmental Advisory Committee Supported by: Cameron Richardson

- High school student at Anderson Collegiate CVI.
- Advocated for Anderson to be the first high school in Canada to be designated as a Bee School.
- Advocated for the designation of Whitby as the 10th Bee City in Canada.
- Founded the Durham Environmental Youth Coalition.
- Led a pollinator habitat event, where volunteers planted over 200 pollinator plants.
- Participated in the Regional Envirothon.
- Ontario Nature Youth Council member.

Nominee: Mary Drummond Nominator: Melissa Beynon Supported by: Janet Stephenson

- Leads Durham Integrated Growers (DIG).
- Incorporated in 2013, DIG is a collaborative that brings together individuals and organizations who are involved in community gardens and/or food related projects
- Supports local food production and food security through shared resources, mentoring, technical and developmental assistance, fostering partnerships, and promoting and educating about sustainable and local food production.
- Funded through corporate and membership donations.
- Fighting hard to convince municipalities to include food security in their strategic plans.

Dr. J. Murray Speirs Restoration Award (2 nominations)

Nominee: Ontario Federation of Anglers and Hunters Nominator: Ajax Environmental Advisory Committee Supported by: Jade Schofield

- Recommended award recipient.
- Working to bring Atlantic Salmon back to Lake Ontario through the Bring Back the Salmon program.
- Four part strategy that includes fish production and stocking, habitat restoration and water quality enhancement, research and monitoring, and education and outreach.
- Four years after the program's inception the first wild-born Atlantic Salmon in more than 150 years were recorded
- Three million fish have been stocked in tributaries at Credit River, Duffins Creek and Cobourg Brook, and approximately 100 habitat restoration projects have been completed.

Nominee: Mahnoor Hussain Nominator: Sumaira Munir Supported by: Omar McDadi

- Grade 12 student, Dunbarton High School.
- Participated in planting trees and community cleanups and has been volunteering with conservation organizations since childhood.
- Volunteered in many community outreach education and environmental stewardship events with TRCA and Parks Canada.
- Active member of the Environmental Council at Dunbarton High School.
- Developed the South Campus Woodlands Garden Project (using native plant species
 of different types and colours, helped to develop Canada 150 themed garden design
 with a focus on pollinator attraction).
- Active member of the Altona Forest Stewardship Committee in Pickering.
- Launched "Plant a Celebration," a project that encourages community members to plan a tree to commemorate special occasions, promoting aftercare and maintenance of the tree.
- Plant a Celebration has gained the attention and support of community groups and local and federal agencies, including Parks Canada.

Irene Kock Education/Communication Award (5 nominations)

Nominee: Durham Farm Connections Nominator: Carolyn Puterbough Supported by: Eric Bowman

- Recommended award recipient.
- Volunteer run organization that works to enhance knowledge, understanding and appreciation of agriculture and the agri-food industry within Durham.
- Programs targeted to students, the general public, farming community and elected officials.
- Primary Program invites grade 3 students to take part in interactive activities throughout a morning or afternoon.
- Students learn from volunteer farmers about how to operate a farm.
- Hands on activities, such as planting their own lettuce or simulating how rain travels over land.
- 15,000 students and teachers have participated, since inception.
- Teachers are provided with curriculum materials to take back to class.
- Annual public open house with demonstrations on how cows are milked, sheep sheared, cheese making, wool spinning, and how to use local products for recipes.
- Annual high school education program that includes, open discussions on GMOs, bioenergy, technology, animal, organic agriculture, and food labelling.
- Partnered with Durham Region Federation of Agriculture, Durham Farm Fresh, and Junior Farmers Association of Ontario to open a mobile education exhibit.

Nominee: Brian Reid

Nominator: Samuel Wilmont Natural Area Committee Supported by: Peter Windolf

- Appointed to the Samuel Wilmont Natural Area Management Advisory Committee in 2006 and served as chair since 2011.
- Oversees the planning and activities at the 77 hectare nature area adjacent to Lake Ontario along Wilmont Creek.
- Driving force behind the committee and its activities, which include tree and shrub planting, educational talks, outreach to the community, garbage clean up, etc.
- As a part of the Monarch Pledge, collected milkweed seed from plans at the SWNA, grew them into seedlings and oversaw the planting of the mature plants at the SWNA with the help of kindergarten students.
- Hosted "come fly with me" a community event to educate the public about monarch biology, issues, migration and presence in Newcastle.
- Initiated contact with OPG and obtained funding to plant 1000 nectar plants along the shoreline of Lake Ontario.

Nominee: Cara Gregory

Nominator: Pete Johnson and Sandra Churchill

Supported by: Mike Whitmarsh

Strong advocate for outdoor education and environmental causes and issues.

- Environmental Education Instructor at Nonquon and Duffin's Creek Environmental Education Centres.
- Vice President, North Durham Nature.

Board Member, Friends of Nonguon.

Regional Supervisor Lake Ontario North, Ontario Nature.

Vice-Chair, Scugog Environmental Advisory Committee.

- Focus is on the dissemination of knowledge and information between various environmental groups.
- Creates and implements new programs for Nonquon and Duffin's Creek Centres.

Nominee: Mary Beerman Nominator: Kate Hasselink

Supported by: Suzanne Catty, John Montague, and Anne Hardy

- Valuable member of the horticultural and environmental scene in Brock Township.
- Passionate about educating people on the interconnectedness of humans and the environment.
- Strong promoter of our native plants and their critical role in habitat and ecosystem restoration.
- Participates in many community events, sharing information through her company "Mary Living Outside," whose mission is to develop landscapes into resilient ecosystems through professional gardening services, soil biology analysis, consulting, and education.
- Professor of Soil Science and Horticultural Principles & Sustainable Practices at Durham College (2013-2016).
- Led many workshops across Ontario in soil ecology, food gardening and organic practices.

Nominee: Invading Species Awareness

Nominator: Central Lake Ontario Conservation Authority

- Supported by: Ken Towle
 - Partnership between the Ontario Federation of Anglers and Hunters and the Ministry of Natural Resources and Forestry.
 - Created to address the increasing threats posed by invasive species on Ontario.
 - Delivered the Invasive Species Hit Squad program for over 19 years.
 - Partnership with community based organizations to hire summer students that deliver on the ground, community based invasive species education, awareness and monitoring initiatives.

- Hire 30 summer students in partnership with conservation authorities, nongovernmental agencies, stewardship councils and other local organizations.
- Organized awareness days at several conservation authorities, hosted bicycle cleaning stations to reduce the spread of invasive species.
- Developed a number of useful tools, such as EDDMapS (Early Detection Distribution Mapping System) to let the general public and practitioners map invasive species easily.
- Best management practices for specific species, fact sheets, curriculum base resources, and a number of other educational resources.

Eric Krause Innovative Plans/Policies/Initiatives Award (2 nominations)

Nominee: Municipality of Clarington, Priority Green Clarington Initiative Nominator: Glen Pleasance Supported by: William Humber

- Recommended award recipient.
- Establishment of a framework to promote the development of environmentally responsible, compact and complete new neighbourhoods throughout the community.
- Began in 2012 and has been considered through the most recent amendments to the Official Plan
- Being implemented as part of the Secondary Planning and land development review process.
- Sets out to identify policies, criteria, a process and incentives to encourage "green development."
- Clarington Council adopted a sustainable "green lens" approach to development throughout the Official Plan.

Nominee: University of Ontario Institute of Technology – Office of Campus Infrastructure of Sustainability
Nominator: Nadia Harduar
Supported by: Dr. Peter Stoett

- Focused on strengthening green initiatives to help protect the environment both on campus and in the community through active student, staff, faculty, and community member engagement.
- Developed the Pollinator Project, which strives to protect and preserve pollinator populations and habitats for bees, bats, birds, butterflies, and other insects.
- Hosted bee information talks and held pollinator workshops.
- Tree nursery created on-site, which now encompasses 450 trees
- Initiatives include 2.8 hectares of hydro-seeded wildflower gardens, expansion of the campuses' bee hives.

Jessica Markland Partnerships Award (3 nominations)

Nominee: Oshawa Environmental Advisory Committee (OEAC)

Nominator: City of Oshawa

Supported by: Meaghan Harrington

- Recommended award recipient.
- Committee of volunteers, established in 2007 to assist, advise, and educate City Council, staff and the community on issues related to the environment.
- Committed to fostering a greater awareness of the various environmental issues facing our community.
- Hosts an annual Climate Change Event that includes displays by local environmental groups, speakers and a documentary film.
- Partnered with Oshawa PUC to host an annual Energy Conservation Challenge.
- Organizes annual tree planting initiatives at local parks and participates in clean-up activities across the community.
- Grown and distributed milkweed plants to support the creation of new pollinator plant habitat throughout Oshawa.
- Judging the Ontario Envirothon.
- Partner with GM and Friends of the Second Marsh to host the Feathered Friends Festival.
- Helped the city establish its first seed library and partners with GL Roberts CVI to hold a plant sale.
- Volunteered and attended We Grown Food south patch gardening event.

Nominee: Township of Scugog Nominator: Kawartha Conservation Supported by: Kristie Virgoe

- Partnered with Kawartha Conservation to support stormwater low impact development in a shoreline parking lot in downtown Port Perry.
- Partnered with local, provincial, and federal partners to lead the Lake Scugog Enhancement Project.
- The Township's Environmental Advisory Committee helped secure funding and coordinate restoration of a part of a degraded stream in a downtown park.
- The Township's Environmental Advisory Committee has developed a Phragmites management strategy.

Nominee: Local Enhancement and Appreciation of Forests (LEAF) Nominator: Ajax Environmental Advisory Committee Supported by: Jade Schofield

- Not-for-profit organization dedicated to the protection and improvement of urban forests.
- Developed a number of programs including, Adopt a Park, Adopt a Street Tree,
 Backyard Tree Planting, Bees Love Trees, and the Young Urban Forest Leaders.
- Responsible for a series of urban forest demonstration gardens and the co-ordination of wood recovery from urban forests.
- Focus of award nomination is the Backyard Tree Planting Program that resulted in 30 trees and 29 shrubs planted in Ajax in 2017.
- Website has a tree benefits estimator that quantifies the environmental benefits of a tree to a property owner.
- The Program is an effective way to promote the replanting of suitable species of trees and shrubs in our communities
- Strong impact in regenerating the urban canopy as well as fostering greater awareness of the role of trees in our urban environments.

Evylin Stroud Lifetime Achievement Award (1 nomination)

Nominee: Joanne Dies

Nominator: Ajax Environmental Advisory Committee Supported by: Paul Wealleans

- Recommended award recipient.
- Councillor in the Town of Ajax with 30 years of environmentalism.
- Council representative on the Ajax Environmental Advisory Committee.
- Dedication to fighting for environmental causes and standardizing an environmental ethic throughout the Durham Region.
- Early 1990's, she began volunteering with Concerned Citizens of Durham on projects that make an environmental difference.
- Worked to educate the Ajax Environmental Advisory Committee on relevant environmental issues and actively promotes environmentally friendly plans and policies for the Town.
- Helping the Ajax Environmental Advisory Committee take on the Adopt a Park Program and participates in scheduled clean ups.
- Worked to lobby for and helped to establish the St. Andrews Community Garden that has grown to 5,000 square feet of public space (including orchard, pollinator garden and 37 public plots).
- Co-Chair of Pickering Ajax Citizens Together to Protect Our Water (PACT POW).
- Worked with PineRidge Arts Council encouraging high school students to create art from artifacts found when picking up litter.

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

Report: #2018-COW-79 Date: May 2, 2018

Subject:

Smart Commute Durham 2017-2018 Progress Report, 2018-2019 Workplan, and Service Delivery Agreement

Recommendation:

That the Committee of the Whole recommends to Regional Council:

That the Regional Chair and Clerk be authorized to execute the Agreement with Metrolinx for the Service Delivery of the Smart Commute Program, and any extension thereof.

Report:

1. Purpose

1.1 The purpose of this report is to provide a summary of Smart Commute Durham's activities in 2017-2018 and an overview of the 2018-2019 Workplan. The report also seeks authorization to execute a Service Delivery Agreement with Metrolinx for the Smart Commute Durham program for the period ending March 31, 2021, and for any subsequent extension thereof, subject to annual budget approval.

2. Background

2.1 Smart Commute Durham (SCD) is an initiative of Metrolinx and the Cities and Regions of the Greater Toronto and Hamilton Area (GTHA) to reduce traffic congestion and take action on climate change through the promotion of sustainable modes of transportation. This initiative involves the support of local Transportation Management Associations (TMAs) across the GTHA that work directly with employers to improve commuting options for their employees. SCD was created in

2007 as part of this program and is now in its eleventh year.

2.2 An important part of the SCD program is attracting and maintaining employer members and employee participants. The operating model for the program involves working with employees to promote sustainable commuter options, such as carpooling, transit, cycling, walking, telework, and flexible work arrangements. As a partner of this GTHA-wide program, Metrolinx provides financial support, unified programming of campaigns, and access to online resources such as its online multi-modal trip planning tool (www.explore.smartcommute.ca).

3. 2017-2018 Progress Report

- 3.1 SCD's operating model involves the creation and implementation of an annual workplan in accordance with the guidelines set out by Metrolinx. This workplan includes various milestones that must be achieved to ensure eligibility of reimbursement up to a maximum of 50%. The 2017-2018 maximum partnership amount was \$106,100.
- 3.2 In 2017-2018, SCD facilitated a number of commuter activities, including the successful implementation of sustainable commuter programs, events and campaigns, such as:
 - a. Outreach & Education:
 - Conducting annual travel surveys with all participating employers to gauge commuter patterns and opportunities for program improvements;
 - Providing campaign-ready promotional materials to support annual events such as: Carpool Week (February 5 to 11), and Bike Month (June); and
 - Working in partnership with Metrolinx and other single and upper tier municipalities in the GTHA to create a series of consistent resources and education materials for workplace champions.
 - b. Communication & Marketing:
 - Quarterly distribution of SCD's TravelSmart electronic newsletter;
 - Monthly targeted emails to SCD's "active" commuter audience through the www.activeswitch.ca website;
 - Recognizing employer successes through Smart Commute's Workplace Designation Program. Members can be recognized by a bronze, silver, gold, or platinum award, with increasing investments in transportation

demand management programming and infrastructure that reduce reliance on single occupancy vehicles. In 2017, SCD awarded four employers with "bronze", nine employers with "silver", and six with "gold" workplace designation awards.

c. Monitoring & Evaluation

- Developing a monitoring and evaluation program to continuously measure the success of the employer members and the Smart Commute Durham program.
- 3.3 SCD achieved all of its milestones set out in its 2017-2018 Workplan including the behaviour change target and successfully transitioning Smart Commute Durham's programming into a project-based structure. Future monitoring and evaluation plans will seek to measure the effectiveness of SCD's programming.
- 3.4 In 2017, a new service delivery agreement with Metrolinx provided greater flexibility in program implementation. As a result, key enhancements were made to SCD programming in partnership with Metrolinx and other Regions to streamline events and campaigns through the development of online resources such as:
 - The Smart Commute Hub, an online file sharing system; and
 - The Smart Commute Essentials Toolbox, a step by step guide to implementing a workplace Transportation Demand Management (TDM) program.

4. 2018-2019 Workplan

- 4.1 In partnership with Metrolinx and other Regions, SCD will continue to promote sustainable modes of transportation through ongoing annual events and campaigns, such as:
 - Carpool Week;
 - Bike to Work Day and Bike Month;
 - Active Switch Challenge;
 - Smart Commute Week; and
 - Walktober Month.
- 4.2 Enhancements to the program will include specific Transportation Demand Management strategies and custom programs catering to SCD's most active and highly motivated employer members. The custom programs will help SCD provide

- better value for services, and will allow these employer members to achieve better overall sustainable commuter behaviour.
- 4.3 SCD will implement a monitoring and evaluation program through quarterly surveys to participating workplaces to measure success, and to customize SCD's services in response to workplace needs.
- 4.4 SCD will continue its partnership with Durham Region Transit as part of its customized approach to program delivery as opportunities arise. SCD will also continue to leverage the awareness and benefits of cycling to work through ongoing activities of Cycle Durham, including cycling education and other important resources.

5. Smart Commute Durham Service Delivery Agreement

5.1 The current agreement with Metrolinx lapsed on March 31, 2018. To maintain the partnership, Metrolinx has requested that a new service delivery agreement be executed for the period from April 1, 2018 to March 31, 2021(refer to Attachment 1).

6. Program Delivery and Financial Implications

- 6.1 The funding arrangement in the Service Delivery Agreement requires an annual contribution from the Region of \$108,622 (as approved in the 2018 budget), and a matching annual contribution from Metrolinx for the term of the Agreement.
- 6.2 Program delivery in this new Agreement is divided into member level services and custom projects. Member level services will account for 40% of the allocated budget (\$44,962), custom projects will account for 55% (\$58,355). The remaining 5% (\$5,305) is to be dedicated to modal shift and behavioural change based on the results of an annual survey conducted with employers in September.

6.3 Member level services include:

- a. The promotion of sustainable modes of transportation through ongoing annual events and campaigns in partnership with other TMAs, including:
 - Carpool Week;
 - Bike to Work Day and Bike Month;
 - Active Switch Challenge;
 - Smart Commute Week; and
 - Walktober Month.

- Providing guidance on programs and services that member organizations may undertake to support alternatives to the use of single occupancy vehicles (SOV), including:
 - carpool/vanpools/shuttle services;
 - public transit;
 - active transportation;
 - telework, and flexible work arrangements; and
 - measures to collect travel data to assess program effectiveness.
- 6.4 Custom projects refer to unique, site-specific, workplace-based projects aimed at achieving individual transportation demand management goals at the employer level. The goals will be determined based on survey results that will assess the workplace needs. These projects will extend beyond the general annual events, campaigns, and promotions outlined in the member level services.

7. Conclusion and Next Steps

- 7.1 Smart Commute Durham is a key aspect of the Region's Transportation Demand Management (TDM) efforts. It provides employers with programming and support for alternative modes of transportation such as carpooling, transit, walking, and cycling, as well as alternative work arrangements such as telework and flexible work hours.
- 7.2 With ongoing support from Metrolinx and other partners, SCD will continue to provide sustainable mobility options for people across the Region.
- 7.3 It is recommended that Regional Council authorize the Regional Chair and Clerk to execute the Agreement with Metrolinx for the Service Delivery of the Smart Commute Program, and for any future extension thereof.

8. Attachments

Attachment #1: Smart Commute Durham Service Delivery Agreement

Respectfully submitted,

Original signed by

B.E. Bridgeman, MCIP, RPP Commissioner of Planning and Economic Development

Recommended for Presentation to Committee

Original signed by

G.H. Cubitt, MSW Chief Administrative Officer

SERVICE DELIVERY OF THE SMART COMMUTE PROGRAM

THIS AGREEMENT is effective as of the 1st day of April, 2018.

BETWEEN:

METROLINX,

a corporation established under the laws of the Province of Ontario ("Metrolinx")

OF THE FIRST PART

AND:

[REGION/MUNICIPALITY] (the "Service Provider")

OF THE SECOND PART

WHEREAS the cities and regions of the Greater Toronto and Hamilton Area (the "GTHA") have indicated a commitment to reduce traffic congestion through increased transportation efficiency, the promotion of transportation demand management and the promotion of active transportation and have implemented a program in respect of the foregoing known as the "Smart Commute Program".

AND WHEREAS the cities and regions of the GTHA have developed a positive working arrangement and structure in respect of the Smart Commute Program through collaboration and cooperation amongst themselves;

AND WHEREAS Metrolinx is committed to delivering transportation demand management strategies to improve the efficiency of transportation and change commuting behaviour away from driving vehicles alone in the GTHA. The Smart Commute Program is an important initiative within Metrolinx's transportation demand management work;

AND WHEREAS the purpose of the Smart Commute Program is to co-ordinate, develop, and implement management strategies and programs relating to transit and transportation demand within a multi-modal transportation network. Specifically, to increase the sustained use of modes of transportation other than the use of single occupancy vehicles, such as carpooling, walking, cycling, work shifting, and public transit with the goal to increase the optimal use of transportation infrastructure directly

related to employers within the GTHA as well as commuter travel to and from Rapid Transit Stations in the GTHA and other linear infrastructure being built by Metrolinx (the "Purpose").

AND WHEREAS Metrolinx has a history of engaging with the Service Provider to provide the Smart Commute Program to employers within its region;

AND WHEREAS this Agreement defines each party's obligations to the other and the greater obligations of the Service Provider, for which it will receive payment from Metrolinx;

AND WHEREAS Metrolinx acknowledges that the priorities and focus of the Custom Projects will be determined through consultations;

AND WHEREAS Metrolinx desires to modify the Smart Commute Program to reallocate resources toward better alignment with municipal, regional and Metrolinx objectives, including re-orienting the Smart Commute Program to focus on providing transportation demand management solutions to Member Companies;

AND WHEREAS the Service Provider desires to provide the Smart Commute Program, as modified by this Agreement, to employers within its region and Metrolinx desires to engage the Service Provider to provide such initiative;

NOW THEREFORE, in consideration of the mutual covenants and agreements contained herein and for other good and valuable consideration, the receipt and sufficiency of which is hereby expressly acknowledged, the parties hereto agree as follows:

ARTICLE 1 DEFINITIONS

- 1.1 In this Agreement the following words shall have the following meanings:
 - (a) "Agencies" means all advisory, adjudicative, regulatory (including those with governing boards), and operational service agencies of the Province of Ontario;
 - (b) "Agreement" means this Agreement entered into between Metrolinx and the Service Provider and all schedules and attachments to this Agreement and any instrument amending this Agreement;
 - (c) "Applicable Laws" means: (a) applicable federal, provincial or municipal laws, whether in Canada or any other jurisdiction that may be applicable to this Agreement and the Program, including orders-in-council, by-laws, codes, rules, policies, regulations or statutes; (b) applicable orders, decisions, judgments, injunctions, decrees, awards or writs of any court, tribunal, arbitrator, governmental authority or other person having

- jurisdiction; and (c) any requirements under or prescribed by applicable common law, in all cases as any of the foregoing maybe in effect or amended from time to time;
- (d) "Arbitration Act" means the Arbitration Act, 1991, S.O. 1991, Chapter 17:
- (e) "Awards Points" has the meaning ascribed thereto in Schedule "A" Member Level Services;
- (f) "Behavioural Change Payment" has the meaning ascribed thereto in Section 4.3;
 - (g) "Business Day" means any day which is not a Saturday or Sunday or a day observed as a holiday under the laws of the Province of Ontario or the federal laws applicable to the Province of Ontario, or a day observed as a holiday for the Government of Ontario;
 - (h) "Commuting" means travel between one's home and one's work or postsecondary institution on a regular basis;
 - (i) "Confidential Information" means (i) all confidential and proprietary information directly or indirectly provided, disclosed or made available (orally, electronically or in writing or by any other media) to one party (the "Recipient"), by the other party (the "Disclosing Party") or its representatives in connection with this Agreement or the Program that is specifically identified or marked as "Confidential" or "Proprietary", (ii) all information relating to a Member Company that is of a confidential and proprietary nature, (iii) all copies or reproductions of the information specified in sub-clauses (i) to (ii) inclusive, and (iv) Schedule "D" Payment Details;
 - (j) "Contract Year" means April 1st of one year to March 31st of the succeeding year;
 - (k) "Custom Intellectual Property" means any Intellectual Property created, developed or produced by the Service Provider or any of its personnel or contractors under this Agreement specifically for use in connection with the Program, and all Intellectual Property Rights therein, but does not include any Survey Data;
 - (l) "Custom Project" means a workplace-based transportation demand management project that is designed for one Member Company or a group of Member Companies that have an agreement to implement the project or a transportation demand management project relating to a Rapid Transit Station or other linear infrastructure being built by Metrolinx;

- (m) "Custom Project Cap" has the meaning ascribed thereto in Schedule "B"

 Custom Projects;
- (n) "Custom Project Eligible Costs" means the operating expenses incurred by the Service Provider, which are directly related to the design and implementation of an approved Custom Project. "Custom Project Eligible Costs" includes and excludes those costs identified in Schedule "B" Custom Projects;
- (o) "Custom Project Report" has the meaning ascribed thereto in Schedule "B" Custom Projects;
- (p) "Custom Project SOW" means the statement of work in respect of a Custom Project, the form of which is set forth in Exhibit 1 to Schedule "B" Custom Projects;
- (q) "Disclosing Party" has the meaning ascribed thereto in Section 1.1(i);
- (r) "Dispute Notices" has the meaning ascribed thereto in Section 16.4;
- (s) "Electronic Funds Transfer" means the electronic transfer of money from one bank account to another, either within a single financial institution or across multiple institutions, through computer-based systems and without the direct intervention of bank staff;
- (t) "External Audience" means any individual or group of individuals outside the parameters of an internal audience, including but not limited to the general public, political officials, community organizations and/or stakeholders. For purposes of this definition, an internal audience is a Member Company, a Service Delivery Agent and a Service Provider and any of their respective employees or students;
- (u) "FIPPA" means the Freedom of Information and Protection of Privacy Act, R.S.O. 1990, c. F.31;
- (v) "FOI Records" means all information, data, records and materials, however recorded relating to this Agreement, including Confidential Information and Personal Information and Records;
- (w) "FOI Statute" means, in the case of Metrolinx, FIPPA, and in the case of the Service Provider, MFIPPA;
- (x) "GTHA" has the meaning ascribed thereto in the recitals;
- (y) "Intellectual Property" means all intellectual and industrial property, including: (a) materials, images, reports, software, applications, audio or video recordings, specifications, performance requirements, software development tools, technologies, content, data, technical information,

interfaces, web portals, components, computer programs, services, information, databases, and documentation; and (b) patents, patent application rights, rights to file patents, inventions, trade-marks (whether registered or not), trade-mark applications, rights to file trade-marks, trade names, copyrights (whether registered or not), design registrations, trade secrets, confidential information, industrial and similar designs, rights to file for industrial and similar designs, processes, methodologies, techniques and know-how; and (c) all Intellectual Property Rights therein;

- (z) "Intellectual Property Rights" means any Intellectual Property right recognized by law, including any Intellectual Property right protected by legislation or arising from protection of information as a trade secret or as confidential information;
- (aa) "Materials" has the meaning ascribed thereto in Section 11.1;
- (bb) "Member Company" means an entity that has signed the Smart Commute Program Terms and Conditions and enters into the Program;
- (cc) "Member Level Services" has the meaning ascribed thereto in Section 3.1;
- (dd) "Metrolinx" has the meaning ascribed thereto in the preamble;
- (ee) "Metrolinx IP" has the meaning ascribed thereto in Section 7.1;
- (ff) "MFIPPA" means the Municipal Freedom of Information and Protection of Privacy Act, R.S.O. 1990, c. M.56;
- (gg) "Minimum Number of Respondents" is the amount set out in Schedule "D" Payment Details;
- (hh) "Notices" has the meaning ascribed thereto in Section 21.1;
- (ii) "Ontario Public Service" means the ministries and other administrative units of the Government of Ontario over which Ministers of the Crown preside, and for the purposes of the Agreement includes the Agencies;
- (jj) "Personal Information" means information about an identifiable individual, as further defined in FIPPA, and clarified through applicable Provincial rules, decisions, policies and directives, including the decisions of the Information and Privacy Commissioner of Ontario;
- (kk) "Program" means the activities associated with the Smart Commute Program as continued by Metrolinx and as further described in Schedule "A" – Member Level Services and the activities associated with any Custom Project that Metrolinx has approved in writing;

- (II) "Program Products and Services" has the meaning ascribed thereto in Section 9.3;
- (mm) "Purpose" has the meaning ascribed thereto in the recitals;
- (nn) "Rapid Transit Stations" means GO Transit train stations, bus rapid transit stations, light rail transit and streetcar stations and subway stations in the GTHA:
- (oo) "Recipient" has the meaning ascribed thereto in Section 1.1(i);
- (pp) "Records" has the meaning ascribed thereto in Section 5.4;
- (qq) "Service Delivery Agent" means a person, company or other entity contracted by the Service Provider to perform any part of the Work;
- (rr) "Service Provider" has the meaning ascribed thereto in the preamble;
- (ss) "Service Provider Background IP" has the meaning ascribed thereto in Section 7.3;
- (tt) "Service Provider's Upset Limit" is the amount set out in Schedule "D"Payment Details;
- (uu) "Smart Commute Program Terms and Conditions" means the Smart Commute program terms and conditions, which are to be signed by employers or post-secondary institutions;
- (vv) "Survey Data" means all information and data obtained through the surveys that Metrolinx prepares that are solicited in connection with the Program;
- (ww) "Term" has the meaning ascribed to it in Section 2.1;
- (xx) "Trademarks" has the meaning ascribed thereto in Section 7.2; and
 - "Work" includes all of the tangible and intangible activities, services, goods, equipment, matters and things required to be done, delivered or performed by the Service Provider under this Agreement, including all of the Member Level Services and all work relating to Custom Projects.

ARTICLE 2 TERM OF THE AGREEMENT

2.1 This Agreement shall commence on April 1, 2018, and shall expire on March 31, 2021 unless otherwise terminated in accordance with its terms (the "Term").

ARTICLE 3 PERFORMANCE OF THE SERVICES

- 3.1 The Service Provider shall carry out and complete those activities, and provide those services, set forth in Schedule "A" Member Services (the "Member Level Services") in accordance with the terms of this Agreement, for at least the minimum number of Member Companies specified in Schedule "D" Payment Details.
- 3.2 The Service Provider shall carry out and complete Custom Projects for which there is an approved Custom Project SOW. Schedule "B" Custom Projects sets out additional terms and conditions that shall apply specifically to the Custom Projects.
- 3.3 For each Custom Project that the Service Provider completes it shall prepare and deliver to Metrolinx a Custom Project Report.
- 3.4 Metrolinx shall perform the covenants contained in Schedule "C" Metrolinx Obligations.
- In its performance of the Work, the Service Provider agrees to comply with all Applicable Laws, including the *Accessibility for Ontarians with Disabilities Act*, 2005, S.O. 2005, c. 11.
- 3.6 Notwithstanding anything in this Agreement to the contrary, the Service Provider shall provide the basic Member Level Services as described in Schedule "A", Article 2.2 to Ontario Public Service entities within its jurisdiction, as and when required or requested by such entities and at no fee or other charge or cost to that entity. For the avoidance of doubt, the Service Provider shall be entitled to charge a fee to Ontario Public Service entities for Custom Projects.
- 3.7 The Service Provider shall not provide any Member Level Services or Custom Projects for any employer or post-secondary institution outside its political boundaries without first obtaining the approval from the Service Provider in the respective municipality. The respective Service Provider shall have the initial option to deliver Member Level Services or Custom Projects to any employer or post-secondary institution within its political boundaries. If that Service Provider chooses to provide the service, it should coordinate program delivery and any applicable fees in good faith with the other Service Provider(s) who are already providing services to the employer or post-secondary institution. If that Service Provider chooses not to provide the service, an outside Service Provider with an

existing relationship with the employer or post-secondary institution will have the right to provide Member Level Services or Custom Projects to that employer or post-secondary institution.

ARTICLE 4 GENERAL FINANCIAL TERMS AND CONDITIONS

4.1 General Payment Terms

- (a) Metrolinx does not guarantee any minimum amount of work.
- (b) Metrolinx and the Service Provider acknowledge and agree that the Service Provider's Upset Limit is the maximum amount payable by Metrolinx in respect of the performance of the Work; provided, however, that the foregoing is not an entitlement to, nor a guarantee that the Service Provider will be paid the full amount of, the Service Provider's Upset Limit.
- (c) The Service Provider shall not perform any work under this Agreement which would cause the total cost to Metrolinx to exceed the Service Provider's Upset Limit, unless an increase is so authorized by Metrolinx and effected by a written document that has been executed by both parties.
- (d) The Service Provider's Upset Limit shall not be increased or decreased by reason of any increase or decrease in the cost of labor, materials, tools or equipment required by the Service Provider to complete the Work.
- (e) The Service Provider represents and warrants that the fees for the Member Level Services set out in Schedule "D" Payment Details are inclusive of:
 - all labour and materials, professional development costs, promotional expenses, insurance costs, licensing fees, disbursements, out-of-pocket expenses, overhead and other amounts incurred in connection with the performance of the Member Level Services; and
 - (ii) all costs for the coordination, administration and management of the Member Level Services necessary to achieve compliance with Applicable Laws.
- (f) Metrolinx shall not reimburse the Service Provider for any costs related to travel, meals or hospitality, food or incidental expenses incurred, except (i) for 50% of the cost of travel on public transit to a meeting in the GTHA where Metrolinx requests the Service Provider's presence, and (ii) where such cost or expense has been pre-approved in writing by Metrolinx (which pre-approval Metrolinx may decline to provide in its sole discretion) and is required to be incurred directly in connection with the

performance of the Work. Any such reimbursement shall be made in accordance with and subject to the Government of Ontario's Travel, Meal and Hospitality Expenses Directive (as amended from time to time), upon receipt of documentation (including original receipts and other proof of payment) suitable to Metrolinx.

- (g) The Service Provider shall accept any payments made by Metrolinx by way of Electronic Funds Transfer, and shall, if requested by Metrolinx, provide the account information required to complete an Electronic Funds Transfer; provided, however, if the Service Provider notifies Metrolinx that it cannot process Electronic Funds Transfer, Metrolinx shall make any payments to the Service Provider by way of a cheque.
- (h) The Service Provider acknowledges that other than the Member Level Services, the allocation, amount, availability and distribution of any Work shall be subject to the approval of Custom Project SOWs. The Service Provider further acknowledges that if it does not receive approval for any of the Custom Projects that it proposes, it will receive \$0 pursuant to Section 4.4.
- (i) The Service Provider further acknowledges that the term of this Agreement is three years and that Metrolinx makes no representation, warranty or other guarantee as to the availability or amount of any future work or that Metrolinx will enter into any agreements with the Service Provider following the expiration of this Agreement.
- (j) Notwithstanding anything in this Agreement to the contrary it is understood that this Agreement is based on reimbursement for actual services performed by the Service Provider and accepted by Metrolinx in accordance with this Agreement.

4.2 Fees for Member Level Services

- (a) In respect of the Member Level Services, Metrolinx agrees to pay the Service Provider the amount set out in Schedule "D" Payment Details. For the avoidance of doubt, all expenses to provide the Member Level Services in excess of the amount specified in Schedule "D" Payment Details are the responsibility of the Service Provider. The Service Provider shall provide invoices evidencing the amount that it has paid to provide the Member Level Services and details, at a high-level, on the time spent by the employees of the Service Provider and the Service Delivery Agent, if applicable, to deliver the Member Level Services, promptly upon Metrolinx's request.
- (b) The Service Provider shall invoice Metrolinx for the Member Level Services on a quarterly basis or at the end of the Contract Year, at the Service Provider's option.

- (c) Within five (5) Business Days of receipt Metrolinx shall review the invoice provided by the Service Provider for accuracy and completeness. If the invoice is not accurate or complete Metrolinx shall identify the deficiencies to the Service Provider. Within twenty (20) Business Days of its receipt of such complete and accurate invoice, as determined by Metrolinx, Metrolinx shall pay the Service Provider.
- (d) Unless otherwise agreed by Metrolinx, any payments made in respect of the Member Level Services shall only be used to support transportation demand management activities that are connected to the Purpose. The use of any payments made in respect of the Member Level Services for any other purpose, including the promotion of health unrelated to transportation demand management, and the promotion of active leisure activities, shall be prohibited.
- (e) The Service Provider shall use any monies paid by Metrolinx in respect of the Member Level Services solely for the purpose of carrying out the Member Level Services in accordance with the terms of this Agreement. The Service Provider shall not use any payments in respect of the Member Level Services to fund any other business, operations, activities, projects or programs in which it may be, directly or indirectly, involved.

4.3 Payments Resulting from Behavioural Changes

Metrolinx agrees to pay the Service Provider an amount, on an annual basis, that is based on the results of the annual survey given to all employees of the Member Companies (the "Behavioural Change Payments"), as specified in Schedule "A" — Member Level Services.

4.4 Fees for Custom Projects

In respect of Custom Projects, Metrolinx agrees to pay the Service Provider the amount, and at the times, specified in Schedule "B" – Custom Projects.

4.5 Return of Funds/General Right of Set Off

Ouring the Term and notwithstanding the completion or other termination of this Agreement, in the event that Metrolinx becomes aware of an overpayment, misapplication or misuse (which includes payment for non-eligible expenses and the use of funds for activities that are not connected to the Purpose) of funds previously paid to the Service Provider, Metrolinx shall provide notice to the Service Provider of such overpayment, misapplication or misuse of funds and the Service Provider shall forthwith reimburse Metrolinx the full quantum of such overpayment, misapplication or misuse of funds within ten (10) Business Days of having been provided notice by Metrolinx hereunder unless the Service Provider disputes, in good faith, Metrolinx's characterization of the use of the funds, in which case the dispute resolution process described in Article 16

shall apply. In the event that payment is not remitted to Metrolinx in accordance with the terms of such notice, Metrolinx reserves the right to demand interest on any overpayment, misapplication or misuse of funds owing by the Service Provider under the terms of this Agreement at the post-judgment interest rate established under section 127(2) of the *Courts of Justice Act*, R.S.O., 1990, c.C45, in effect on the date the payment went into arrears. The Service Provider shall pay the amount of interest owing upon receipt of a written demand and within the period specified by Metrolinx.

(b) In addition to Metrolinx's rights under Section 4.5(a), in the event that Metrolinx incurs reasonable costs such as cancellation fees or penalties on account of the Service Provider's actions under this Agreement or in the Program, or the Service Provider otherwise fails or refuses to pay any amount(s) due and owing to Metrolinx in accordance with this Agreement, in addition to its other rights in contract, at law or in equity, Metrolinx shall, upon ten (10) Business Days prior notice, be entitled to hold back, deduct or set-off that amount from any amount otherwise payable by Metrolinx to the Service Provider under this Agreement or any other agreement, either current or future, and such amount of financial assistance shall be deemed to be a debt due to the Crown and owing to Metrolinx under the *Financial Administration Act*, R.S.O. 1990, c.F.12.

ARTICLE 5 CONFIDENTIAL INFORMATION, PERSONAL INFORMATION, FREEDOM OF INFORMATION AND AUDIT RIGHTS

- 5.1 Confidential Information.
 - (a) Restrictions on the Use of Confidential Information. The Recipient shall keep all Confidential Information confidential. Without limiting the generality of the foregoing, the Recipient shall:
 - (i) not disclose, reveal, publish, or disseminate any Confidential Information to anyone, except as permitted pursuant to this Agreement;
 - (ii) shall use Confidential Information only in connection with this Contract;
 - (iii) shall take all reasonable steps required to prevent any unauthorized reproduction, use, disclosure, publication, or dissemination of the Confidential Information; and
 - (iv) shall immediately notify the Disclosing Party in the event that it becomes aware of any unauthorized disclosure of Confidential

Information, including any actual or attempted unauthorized collection, access, use or disclosure of Personal Information.

(b) Permitted Disclosure. Notwithstanding the obligations set out in Section 5.1(a), a party may disclose Confidential Information to those of its personnel who need to know such Confidential Information, to its governing bodies and, in the case of the Service Provider, to its Service Delivery Agents in connection with this Agreement, provided that such persons are subject to obligations of confidentiality substantially similar to those contained in this Article 5.

(c) <u>Exceptions</u>.

- (i) The obligations of confidentiality set out in Section 5.1(a) shall not apply to Confidential Information (other than Personal Information) which:
 - (A) becomes generally available to the public through no fault of the Recipient;
 - (B) prior to receipt from the Disclosing Party, whether such receipt was before or after the effective date of this Agreement, was known to the Recipient on a non-confidential basis and is not subject to another obligation of secrecy and non-use, as documented by written records possessed by the Recipient;
 - (C) was independently developed by the Recipient outside of this Agreement and any predecessor agreements to this Agreement, as documented by written records possessed by the Recipient;
 - (D) becomes available to the Recipient on a non-confidential basis from a source other than the Disclosing Party or through this Agreement or any predecessor agreements to this Agreement, that is not under other obligations of confidence; or
 - (E) the Disclosing Party has provided written authorization for disclosure to the Recipient.
- (ii) If the Recipient receives a request for the disclosure of any Confidential Information or becomes compelled to disclose any Confidential Information pursuant to Applicable Law, including FIPPA and MFIPPA, the Recipient will provide the Disclosing Party with prompt notice to that effect in order to allow the Disclosing Party to seek one or more protective orders or other appropriate remedies to prevent or limit such disclosure, and it

shall reasonably co-operate with the Disclosing Party and its legal counsel. If such protective orders or other remedies are not obtained, the Recipient will disclose only that portion of the Confidential Information which the Recipient is legally compelled to disclose, only to such person or persons to which the Recipient is legally compelled to disclose.

- (d) Security Measures. Each party shall select, implement, use and maintain the most appropriate products, tools, measures and procedures to ensure the security of all Confidential Information, as determined with reference to and generally in compliance with Applicable Laws, industry standards and best practices. Without limiting the generality of the foregoing, such practices shall include:
 - (i) privacy due diligence safeguards; and
 - (ii) physical and electronic security measures and confidentiality enhancing technologies to guard against unauthorized disclosures, access and use, such as firewalls, encryption, the use of user identification and passwords, software or other automated systems to control and track the addition and deletion of users, and software or other automated systems to control and track user access to areas and features of information systems.

Metrolinx reserves the right to prohibit the use of certain technologies, which, in Metrolinx's discretion, acting reasonably, does not ensure the security of the Confidential Information, such as the use of web-based email account.

- (e) Return or Destruction of Confidential Information. Immediately upon expiration or termination of this Agreement or at any other time upon the request of the Disclosing party, and subject to Section 5.4, the Recipient agrees to:
 - (i) promptly return all Confidential Information (other than the Records) to the Disclosing Party; or
 - (ii) promptly delete or destroy the Confidential Information (other than the Records) and all copies thereof in any form whatsoever under its power or control and provide the Disclosing Party with a destruction certificate signed by an appropriate person of the Recipient certifying such destruction.

5.2 FIPPA/MFIPPA and Personal Information.

Each party shall ensure that all collection, access, use, retention and disclosure of Personal Information under this Agreement complies with FIPPA, in the case of Metrolinx, and MFIPPA, in the case of the Service Provider, and applicable requirements

to collect, record and retain relevant consents pertaining to the collection, access, use, retention and disclosure of Personal Information in respect of delivering the Program.

5.3 FIPPA/MFIPPA and Freedom of Information.

Each party acknowledges that the other party is subject to freedom of information legislation, FIPPA, in the case of Metrolinx and MFIPPA, in the case of the Service Provider. Each party acknowledges and agrees as follows:

- (a) All FOI Records are subject to, and the collection, use, retention and treatment thereof is governed by the applicable FOI Statute. Each party agrees to keep all FOI Records secure and available, in accordance with the requirements of the applicable FOI Statute. Each party acknowledges that all information, data, records and materials, however recorded, that are held by it and/or created by it in the course of performing its obligations under this Agreement are considered to be FOI Records and subject to the FOI Statutes.
- (b) Section 5.1(e) shall apply to all FOI Records (other than the Records), which shall be returned and/or destroyed in accordance with that section.
- (c) In the event of a conflict between the requirements of this Agreement and the requirements of an FOI Statute, the requirements of the applicable FOI Statute shall take precedence.
- (d) Each party shall provide any and all FOI Records on demand for the purposes of responding to an access request under an FOI Statute or if a privacy issue arises. In these circumstances, the party who possesses the FOI Records shall provide all FOI Records requested by the requesting party to the requesting party's Freedom of Information Coordinator (or equivalent) within seven (7) Business Days of receipt of the request from the requesting party. Notwithstanding anything to the contrary in this Agreement and subject to the rights of appeal pursuant to section 28(9) of FIPPA, and section 21(9) of MIFPPA, the party receiving the access request shall determine what FOI Records will be disclosed in connection with any such request, in accordance with the requirements of the applicable FOI Statute (including, without limitation, the requirements with respect to affected persons set out in section 28 of FIPPA, and section 21 of MFIPPA).
- (e) The Service Provider shall include within its agreements with any Service Delivery Agents an explicit obligation that the Service Delivery Agents comply with FIPPA as part of the general requirement to comply with all applicable laws, to the degree that FIPPA would apply.
- (f) Storage of FOI Records (including the Records) at a location outside of Canada shall only be permitted by written agreement duly executed by the parties.

5.4 Audit Rights.

- During the Term and for a period of seven (7) years thereafter, the Service Provider shall, at its cost and expense, retain and maintain, in an organized, accurate and accessible mode and manner, all financial and other books, records and documentation relating or pertaining to this Agreement, the Program, and any payments hereunder, including (i) original invoices and accounts; (ii) documentation evidencing expenditures (such as invoices and receipts), including but not limited to the cost to the Service Provider of performing its obligations under this Agreement; and (iii) records related to matters of security and privacy (collectively, the "Records").
- (b) The Records shall be retained and maintained in accordance with all generally acceptable accounting principles and Applicable Laws and industry standards, or as otherwise may be required to substantiate compliance with this Agreement and/or any payment to be made to the Service Provider under this Agreement.
- During the Term and for a period of seven (7) years thereafter, Metrolinx (c) or any third party acting on behalf of Metrolinx, shall have the right, upon no less than fifteen (15) Business Days' notice in writing to the Service Provider and during normal office hours, to inspect and audit, and to have access to, all Records maintained by the Service Provider, reasonably required to confirm the Service Provider's compliance with the terms of this Agreement and Applicable Laws, and to make copies thereof. The Service Provider shall make available or cause to be made available the Records that are requested by Metrolinx or that may be required given the scope of the audit (provided such scope is disclosed to the Service Provider), and shall otherwise reasonably cooperate with Metrolinx and any third party acting on Metrolinx's behalf, including by providing reasonable access to the Service Provider's employees. Where access is needed to a Service Delivery Agent's employees or to Records that are maintained by a Service Delivery Agent, the Service Provider shall use commercially reasonable efforts to arrange for such access on a timely basis.
- (d) The Service Provider shall maintain a competent and independent audit function to assess the internal controls over its environment and its compliance with Applicable Laws and industry standards. The Service Provider shall provide Metrolinx, upon request, the results of all internal controls and security audits performed by the Service Provider's auditors.
- (e) Following the delivery of an unsatisfactory audit report, Metrolinx or any third party acting on behalf of Metrolinx, shall have the right, upon no less than forty-eight (48) hours' notice in writing to the Service Provider, to

- conduct a validation test (at its cost) to verify that the Service Provider's controls meet or exceed industry standards.
- (f) The Service Provider and Metrolinx shall meet to review each audit report promptly after the issuance thereof and to mutually agree upon the appropriate manner, if any, in which to respond to the changes suggested or issued identified by the audit report. Without limiting any remedies which may be available to Metrolinx, the Service Provider shall promptly remedy any violations of this Agreement of which it becomes aware, pursuant to any audit or otherwise.
- (g) For greater certainty Metrolinx's rights under this Article 5 are in addition to any other rights provided to the Auditor General pursuant to section 9.1 of the *Auditor General Act* (Ontario).
- 5.5 Service Provider Compliance.
 - (a) The Service Provider shall advise all of its employees and Service Delivery Agents of the requirements of this Article 5, and associated requirements set out elsewhere in this Agreement, and take appropriate action to ensure compliance by such persons with the terms of this Article 5. In addition to any other liabilities of the Service Provider pursuant to this Agreement or otherwise at law or in equity, the Service Provider shall be liable for all claims arising from any non-compliance with this Article 5 by the Service Provider or Service Delivery Agents or any of its or their respective employees.
 - (b) The Service Provider warrants that each of its Service Delivery Agents engaged by it to provide the services pursuant to this Agreement is under a written obligation to the Service Provider requiring such person to comply with the terms of this Article 5.
- 5.6 The Service Provider acknowledges and agrees that any breach or threatened breach of this Article 5 or the obligations set out herein shall cause immediate and irreparable harm to Metrolinx for which damages alone are not an adequate remedy. The Service Provider hereby acknowledges and agrees that Metrolinx shall be entitled to seek, in addition to any other legal remedies which may be available to it, such equitable relief as may be necessary and available to protect Metrolinx against such breach or threatened breach for the Term. No failure or delay by Metrolinx in exercising any right hereunder shall operate as a waiver hereof, or shall estop Metrolinx from obtaining permanent injunctive relief.

ARTICLE 6 SERVICE PROVIDER REPRESENTATIONS AND WARRANTIES

6.1 The Service Provider represents and warrants that it is a validly existing legal entity under the laws of its relevant jurisdiction, that it has taken all necessary or

desirable actions, steps and legislative, corporate and other proceedings to approve or authorize, validly and effectively, the entering into of, and the execution, delivery and performance of, this Agreement and accordingly has the requisite power and authority to enter into this Agreement and to perform its obligations hereunder, and that it shall carry out the Program in compliance with this Agreement and all Applicable Laws. This Agreement is a legal, valid and binding obligation of the Service Provider, enforceable against it in accordance with its terms.

6.2 The Service Provider represents and warrants that it is entering into this Agreement and performance of the terms hereof will not result in a breach of its constituting documents, by-laws, or any other agreements, ordinances, or laws to which it is a party.

ARTICLE 7 INTELLECTUAL PROPERTY

- 7.1 The Service Provider agrees that all Intellectual Property provided by Metrolinx to the Service Provider (the "Metrolinx IP") shall remain the sole property of Metrolinx at all times. With the exception of Metrolinx's trademarks, Metrolinx hereby grants to the Service Provider a limited, non-transferable, non-assignable, non-sublicenseable (other than to Service Delivery Agents for use in connection with the Program), non-exclusive, royalty-free right and license during the Term to use the Metrolinx IP solely in connection with the Program or as otherwise approved by Metrolinx from time to time. Except for the limited rights granted in this section, nothing herein is intended to give to the Service Provider any right, title or interest in the Metrolinx IP.
- 7.2 The Service Provider is hereby granted a limited, non-transferable, nonassignable, non-sublicenseable (other than to Service Delivery Agents for use in connection with the Program), non-exclusive, royalty-free right and license, during the Term to use only the trademarks, logos, and other intellectual property provided to the Service Provider by Metrolinx from time to time (the "Trademarks"), including the right to use the trademarks and names "Smart Commute," "Emergency Ride Home," "Smart Commute Workplace Designations" or any variation thereof solely in connection with the Program. In its use of the Trademarks, the Service Provider shall at all times comply with the branding guidelines and procedures provided to the Service Provider. The Service Provider shall promptly effect and implement any changes which Metrolinx may require respecting the Service Provider's display and usage of the Trademarks upon receipt of written notification from Metrolinx. The Service Provider agrees that it shall not do anything which, in the opinion of Metrolinx in its sole discretion, might adversely affect the goodwill attaching to and symbolized by the Trademarks, and the Service Provider will not use any other trade-mark, trade name, domain name or corporate name that would, in the opinion of Metrolinx, be confusing with the Trademarks. Except for the limited rights granted in this section, nothing herein is intended to give to the Service Provider any right, title

- or interest in the Trademarks, and this section is not intended to extend to any other trademarks of Metrolinx.
- 7.3 Metrolinx agrees that all Intellectual Property used by the Service Provider in connection with this Agreement but created prior to or independently of this Agreement and any predecessor agreements to this Agreement (the "Service Provider Background IP") shall remain the sole property of the Service Provider or its licensors, as applicable.
- 7.4 The Service Provider shall own all right, title and interest in and to the Custom Intellectual Property. The Service Provider, to the extent it has the right to do so, hereby grants to Metrolinx a non-exclusive, irrevocable, perpetual, fully paid-up, royalty-free and worldwide right and license to access, use, sublicense (through multiple tiers), copy, support, maintain and modify (including create derivative works from) the Custom Intellectual Property.
- 7.5 As between Metrolinx and the Service Provider, Metrolinx shall own all right, title and interest in and to the Survey Data. Metrolinx hereby grants to the Service Provider a limited, non-transferable, non-assignable, non-sublicenseable (other than to Service Delivery Agents for use in connection with the Program), nonexclusive, royalty-free right and license during the Term to use, access, process, retain, and reproduce the Survey Data only in conjunction with the performance of its obligations under this Agreement, for municipal/regional planning purposes and for reporting purposes, including the establishment and reporting of internal key performance indicators, which could include greenhouse gas emissions reporting, provided that in all cases such use and license shall be subject to the Service Provider's compliance with the requirements of this Agreement with respect the privacy and security of Personal Information (including Article 5). Metrolinx grants no rights other than explicitly granted herein, and the Service Provider shall not exceed the scope of this license. Except for the limited right to use such Survey Data as set forth in this section, the Service Provider shall not have or acquire any rights in or to the Survey Data.

ARTICLE 8 CONFLICT OF INTEREST

- 8.1 The Service Provider shall ensure that the Program is carried out in all its aspects without a conflict of interest by any person associated with the Program in whatever capacity and in compliance with all Applicable Laws.
- 8.2 For these purposes, a "conflict of interest" means a situation or potential situation in which private business or personal interests may affect, or may be perceived by others to affect, the judgment of the Service Provider and/or any of its employees, officers, directors, or agents. It includes using that person's position, confidential information or corporate time, material or facilities for private gain or advancement or the expectation of private gain or advancement. Nothing in this section shall prevent the Service Provider if it so chooses from reimbursing its

- volunteers for their reasonable out of pocket expenses incurred in connection with the Program.
- 8.3 The Service Provider shall disclose to Metrolinx without delay any actual or potential situation that may be reasonably interpreted as either a conflict of interest or a potential conflict of interest.

ARTICLE 9 LIMITATION OF LIABILITY

- 9.1 Subject to Section 9.2, in no event whatsoever will a party, its directors, officers, employees, agents, contractors or affiliates, be liable for any claim under this Agreement for:
 - (a) punitive, exemplary or aggravated damages;
 - (b) damages for loss of profits or revenue, failure to realize expected savings, loss of use or lack of availability of resources or any data; or
 - (c) indirect, consequential or special damages of any kind, even if such party has been advised of the possibility of such damages in advance.
- 9.2 The limitations set forth in Section 9.1 shall not apply with respect to:
 - (a) damages occasioned by a party's negligence or willful misconduct;
 - (b) claims that are the subject of indemnification pursuant to Article 10; or
 - (c) damages occasioned by a breach of Article 5.
- Metrolinx, together with its directors, officers, employees, successors and assigns, 9.3 makes no representations or warranties of any kind whatsoever and the parties agree that the Program, including any and all Program activities, components, services, information, advice, recommendations and any other Program-related matters facilitated through or provided by Metrolinx to the Service Provider under this Agreement from time to time (collectively the "Program Products and Services") are made available on an "as is" basis, without any other warranties, representations or conditions of merchantable quality, fitness for a particular purpose, or those arising by law or by statute, or by usage of trade or course of dealing. Subject to Section 10.2, the entire risk as to the implementation, delivery, results and performance of the Program and Program Products and Services as delivered by the Service Provider is assumed by the Service Provider. Subject to Section 10.2, Metrolinx shall not be liable to the Service Provider for any damages howsoever classified relating to the Program or Program Products and Services even if advised of the possibility of such damages.

ARTICLE 10 INDEMNITY

- 10.1 The Service Provider herein agrees to fully indemnify and hold harmless Metrolinx, its directors, officers, employees, agents and contractors from and against all suits, judgments, claims, demands, damages, expenses, actions, causes of action, losses and/or costs (including reasonable legal expenses) and for any and all liability for damages to property and injury to persons (including death) caused by the Service Provider's negligence or willful misconduct arising within any, claim, demand, action or proceeding brought by a third party and arising out of the Service Provider's implementation and delivery of the Program. The Service Provider hereby agrees to avail itself of whatever insurance coverage may be available or may otherwise be necessary and advisable, acting reasonably, in order for the Service Provider to be able to fully comply with the terms of the indemnity set out in this provision.
- 10.2 Metrolinx herein agrees to fully indemnify and hold harmless the Service Provider, its directors, officers, employees, agents and contractors from and against all suits, judgments, claims, demands, damages, expenses, actions, causes of action, losses and/or costs (including reasonable legal expenses) and for any and all liability for damages to property and injury to persons (including death) caused by Metrolinx's negligence or willful misconduct arising within any, claim, demand, action or proceeding brought by a third party (which for the purposes of this Section 10.2, does not include Service Delivery Agents) and arising out of the Program Products and Services. Metrolinx hereby agrees to avail itself of whatever insurance coverage may be available or may otherwise be necessary and advisable, acting reasonably, in order for Metrolinx to be able to fully comply with the terms of the indemnity set out in this provision.

ARTICLE 11 MATERIALS, CREDIT AND PUBLIC ANNOUNCEMENTS

- 11.1 The Service Provider shall provide Metrolinx for review an electronic reference of any proposed materials, displays, brochures, reports and other published (whether electronically or otherwise) materials prepared by the Service Provider in respect of the Program that includes or incorporates a Trademark(s) or carries the Program's likeness or branding (collectively, the "Materials") and intended for an External Audience, at least five (5) Business Days prior to its disclosure or release. If the Service Provider is unsure as to whether the Materials are for an External Audience, the Service Provider shall verify the categorization of the audience with the persons specified in Section 11.5. Metrolinx reserves the right to make any reasonable amendments, changes or modifications to all or any submitted Materials, which amendment, changes or modifications the Service Provider shall be required to incorporate into the Materials.
- 11.2 The Service Provider shall ensure that any Materials that it prepares and intends to disclose or share that includes or incorporates a Trademark(s), shall contain

- content that is truthful, accurate, factual, not misleading in any manner, and sourced from credible sources.
- 11.3 The Service Provider shall acknowledge the support of Metrolinx over all other organizations or brands (except for the Service Provider, in which case the acknowledgement shall be equal) in all reports, contracts and materials (electronic or hard copy) and in all advertising and publicity relating to the Program, in a format previously approved by Metrolinx in writing excepting such reports and materials existing prior to January 1, 2008.
- 11.4 Any news release, announcement, public speaking engagement, advertisement, official ceremony or other communications activity regarding the Program, when planned by the Service Provider, shall be arranged in collaboration with Metrolinx, with initial notice of such communication provided to Metrolinx at least five (5) Business Days in advance where practicable.
- 11.5 For purposes of this Article 11, when the Service Provider is required to provide Materials to Metrolinx or otherwise communicate with Metrolinx, the Service Provider shall contact the Metrolinx Corporate Communications, Strategic Communications person with a copy to the Program Coordinator, Mobility Management.

ARTICLE 12 SERVICE DELIVERY AGENTS

- 12.1 The Service Provider shall be permitted to subcontract its obligations under this Agreement to a Service Delivery Agent. No subcontracting by the Service Provider shall relieve the Service Provider of any responsibility for the full performance of all obligations of the Service Provider under this Agreement. The Service Provider shall be fully responsible for every Service Delivery Agent's activities, works, services and acts or omissions.
- 12.2 The Service Provider shall be solely responsible for the payment of every Service Delivery Agent.
- 12.3 The Service Provider shall co-ordinate the services of all Service Delivery Agents employed, engaged or retained by the Service Provider. It shall be the Service Provider's responsibility to control and review all its Service Delivery Agents and to ascertain that all activities required or permitted by this Agreement are performed in accordance with this Agreement and all Applicable Laws.
- 12.4 In any subcontract with a Service Delivery Agent, the Service Provider shall ensure that the Service Delivery Agent is bound by conditions compatible with, and no less favorable to Metrolinx than, the conditions of this Agreement. Without limiting the foregoing, subcontracts with a Service Delivery Agent shall contain a covenant, in favour of Metrolinx, giving Metrolinx, or any third party acting on behalf of Metrolinx, the right to inspect and audit the Service Delivery

Agent's operations and expenditures as they relate to the Program. The Service Provider agrees to enforce this covenant upon Metrolinx's request, including by commencing an action or proceeding against the Service Delivery Agent in a court of competent jurisdiction.

ARTICLE 13 TERMINATION FOR CONVENIENCE

- 13.1 Metrolinx may, in its sole discretion, without liability, cost or penalty, and without prejudice to any other rights or remedies of Metrolinx under this Agreement or at law or in equity, terminate this Agreement at any time, for any reason, upon giving at least ninety (90) days' notice to the Service Provider. Where notice to terminate is given under this Section 13.1, Metrolinx may assess the state of the Program and allow the Service Provider to wind down the Program by the end of the aforenoted notice period.
- 13.2 Service Provider may, in its sole discretion, without liability, cost or penalty, and without prejudice to any other rights or remedies of Metrolinx under this Agreement or at law or in equity, terminate this Agreement at any time, for any reason, upon giving at least ninety (90) days' notice to Metrolinx. Where notice to terminate is given under this Section 13.2, Service Provider agrees to:
 - (a) wind down the Program by the end of the aforenoted notice period in the manner directed by Metrolinx, including effecting a transfer of the Program;
 - (b) execute such documentation as may be required by Metrolinx to give effect to the termination of this Agreement or otherwise the wind down or transfer of its obligations to implement and deliver the Program; and
 - (c) no later than fifteen (15) Business Days following the end of the aforenoted notice period, submit all outstanding claims for Custom Project Eligible Costs incurred prior to the end of the aforenoted notice period in accordance with the procedures set out in this Agreement.

ARTICLE 14 TERMINATION FOR CAUSE

- 14.1 Metrolinx may, in its sole discretion, without liability, cost or penalty, and without prejudice to any other rights or remedies of Metrolinx under this Agreement or at law or in equity, terminate this Agreement immediately upon giving notice (which notice shall include the particulars of the breach) to the Service Provider if in the opinion of Metrolinx, acting reasonably:
 - (a) the Service Provider has knowingly provided false or misleading information to Metrolinx;

- (b) the Service Provider materially breaches any term or condition of this Agreement, including the Service Provider's use of funds for purposes not consistent with the terms of this Agreement or otherwise not agreed to by Metrolinx; or
- (c) the Service Provider is unable to perform the Work or the Service Provider has communicated to Metrolinx that it is likely to discontinue the Program.
- 14.2 Notwithstanding anything herein contained to the contrary, if Metrolinx, acting reasonably, considers the nature of a breach described in Section 14.1 to be such that it can be remedied and that it is appropriate to allow the Service Provider the opportunity to remedy the breach, Metrolinx may give the Service Provider an opportunity to remedy the breach by giving the Service Provider written notice:
 - (a) of the particulars of the breach; and
 - (b) of the period of time within which the Service Provider is required to remedy the breach, such period to be at least twenty (20) Business Days.
- 14.3 If Metrolinx has provided the Service Provider with an opportunity to remedy the breach in accordance with Section 14.2, and
 - (a) the Service Provider does not remedy the breach within the time period specified in the notice provided under Section 14.2; or
 - (b) it becomes apparent to Metrolinx that the Service Provider cannot completely remedy the breach within the time specified in the notice provided under Section 14.2 or such further period of time as Metrolinx considers reasonable; or
 - (c) the Service Provider is not proceeding to remedy the breach in a way that is satisfactory to Metrolinx;

Metrolinx shall have the right to immediately terminate this Agreement by giving written notice of termination to the Service Provider.

14.4 In the event of termination pursuant to this Section 14 the effective date of termination shall be the last day of the notice period, the last day of any subsequent notice period or immediately, which ever shall be applicable in accordance with the terms hereof.

ARTICLE 15 CONSEQUENCES OF TERMINATION

15.1 If this Agreement is terminated pursuant to Section 13 or Section 14:

- (a) Metrolinx shall be liable to the Service Provider for payment for Work properly performed up to and including the effective date of the termination;
- (b) Metrolinx shall be liable to the Service Provider for payment of any reasonable, documented expenses which the Service Provider is not able to mitigate, only if this Agreement is terminated pursuant to Section 13.1;
- (c) Metrolinx shall demand the repayment of any amounts paid in respect of a Custom Project remaining in the possession or under the control of the Service Provider; and
- (d) the Service Provider shall, on or before the date of termination, turn over to Metrolinx all deliverables, documentation, reports, materials and work in progress relating to and generated during the performance of this Agreement.
- 15.2 If this Agreement is terminated by Metrolinx pursuant to Section 14.1(a) or (b), Metrolinx may in addition to the rights conferred upon it under this Agreement or in law or in equity, demand from the Service Provider the repayment of amounts paid equal to the misused funds.
- 15.3 If Metrolinx demands the repayment of any part of the monies paid to the Service Provider pursuant to this Agreement the amount demanded shall be deemed to be a debt due to the Crown and owing to Metrolinx under the *Financial Administration Act*, R.S.O. 1990, c.F.12, and the Service Provider shall pay the amount to Metrolinx immediately unless Metrolinx in writing directs otherwise. For the avoidance of doubt, the remedies set forth in Section 4.5 shall apply to the failure or refusal to pay any amounts owing to Metrolinx under this Article 15.

ARTICLE 16 DISPUTE RESOLUTION

- 16.1 Any dispute between the parties arising out of or relating to this Agreement, including with respect to the interpretation of any provision of this Agreement and with respect to the performance of this Agreement, shall be resolved as provided in this Article 16.
- 16.2 The parties shall at all times make bona fide efforts to resolve any and all disputes arising between them by amicable negotiations and to have all disputes resolved at the lowest level of management before engaging the dispute resolution processes described in the balance of this Article 16.
- 16.3 Notwithstanding that a matter has been referred to dispute resolution under Article 16, the parties shall throughout the period of the dispute resolution endeavour to perform their respective obligations under the terms of this Agreement.

- 16.4 The parties agree that any dispute which cannot be resolved to the satisfaction of both parties by direct discussions between staff members of the parties, may be referred for negotiation between senior management of both parties by delivery from one party to the other party of notice in writing requesting dispute resolution, which notice shall set out the dispute in reasonably sufficient detail (a "Dispute Notice").
- 16.5 In the event a party issues a Dispute Notice to the other party, the Chief Planning Officer of Metrolinx (or if that position no longer exists at the time the Dispute Notice is issued, the person performing an equivalent function) and an authorized representative of the Service Provider, of equivalent seniority and duly appointed to represent the Service Provider in this regard, shall meet and make a good faith effort, on a without prejudice basis, to resolve the dispute as set out in the Dispute Notice in a prompt manner and, for the purpose of same, each party shall provide its representative with full and timely disclosure of all relevant facts information and documents as may be reasonably required or may be reasonably requested by the other party, on a without prejudice basis, to facilitate such negotiation.
- 16.6 Negotiations under Section 16.5 shall be commenced within ten (10) Business Days of delivery of a Dispute Notice and shall, unless otherwise agreed by the parties, be concluded within fifteen (15) Business Days of their commencement. In the event that a resolution satisfactory to all parties is achieved through such negotiations, a statement detailing the manner in which the dispute has been resolved will be issued and the content of such statement shall be agreed to by both parties.
- 16.7 If a dispute has not been resolved through high-level negotiation as contemplated in Section 16.5, either party may refer the dispute to be resolved through mediation.
- 16.8 Unless the parties otherwise agree, the mediation shall proceed in accordance with the following procedures:
 - (a) A party may be represented at the mediation by counsel or another representative at the sole cost of such party.
 - (b) The mediator, the parties and their counsel or representatives shall keep confidential all matters relating to the mediation, except where disclosure of a settlement agreement is necessary to implement or enforce that agreement and except as otherwise required by Applicable Law.
 - (c) In all respects, the mediation is deemed to be a "without prejudice" proceeding.
 - (d) The costs of the mediator shall be apportioned equally between the parties unless otherwise agreed.
- 16.9 Subject to Section 16.10, upon the earlier to occur of the following:

- (a) the parties conclude in good faith that amicable resolution through continued mediation of the matter does not appear likely; or
- (b) sixty (60) days have elapsed from the initial submission of the dispute to mediation pursuant to Section 16.7 (this period shall be deemed to run notwithstanding any claim that the process described in this Section was not followed or completed),

any dispute that remains unresolved may be submitted by a party to the courts in accordance with Section 16.11.

- 16.10 This Article 16 shall not be construed to prevent a party from instituting, and a party is authorized to institute, litigation earlier, but only if required to avoid the expiration of any applicable limitations period or to preserve a superior position with respect to other creditors, or where a party makes a good faith determination that a breach of the terms of this Agreement by the other party is such that the damages to such party resulting from the breach shall be so immediate, so large or severe, and so incapable of adequate redress after the fact that a temporary restraining order or other immediate injunctive relief is the only adequate remedy.
- 16.11 The Parties consent to venue in the City of Toronto, Ontario and to the exclusive jurisdiction of the Ontario Superior Court of Justice and all courts competent to hear appeals therefrom, for all litigation which may be brought, with respect to the terms of, and the transactions and relationships contemplated by, this Agreement. The parties further consent to the jurisdiction of any provincial superior court located within a province which encompasses assets of a party against which a judgment has been rendered for the enforcement of such judgment or award against the assets of such Party.

ARTICLE 17 RECITALS AND HEADINGS

17.1 The parties hereto agree and acknowledge that the recitals stated herein are true both in substance and in fact. The inclusion in this Agreement of headings and subheadings is for convenience of reference only and shall not affect the construction or interpretation of this Agreement.

ARTICLE 18 CURRENCY

18.1 In this Agreement, all amounts are stated and payable in Canadian currency.

ARTICLE 19 INTERPRETATION

19.1 In this Agreement, unless the context requires otherwise:

- (a) words importing the singular include the plural and vice versa and words importing gender include the male, female and neuter genders;
- (b) the use of the word "including" shall in all cases mean "including without limitation"; and
- (c) any reference to a statute is to such a statute and to the regulations made pursuant to such statute as such statute and regulations may at any time be amended or modified and in effect, and to any statute or regulations that may be passed that has the effect supplementing or superseding such original statute or regulations.

ARTICLE 20 COUNTERPARTS & TRANSMISSION

- 20.1 This Agreement may be executed in any number of counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.
- 20.2 The parties hereto agree that this Agreement may be transmitted by electronic mail or such similar device and that the reproduction of signatures in electronic mail, or such similar device will be treated as binding as if originals, and each party hereto undertakes to provide the other party hereto with a copy of the Agreement bearing original signatures forthwith upon demand.

ARTICLE 21 NOTICES

- 21.1 Any notice, consent, approvals, statements, authorizations, documents or other communications (collectively "Notices") required or permitted to be given under this Agreement shall be in writing and shall be delivered personally, delivered by courier or sent by certified or registered mail, postage prepaid with return receipt requested, or sent by facsimile correspondence, email or similar form of transmitted message addressed to the party for which it is intended at the address provided below or at such other address as either party shall later designate to the other in writing.
- 21.2 All Notices or communications shall be addressed as follows:

To Metrolinx:

97 Front Street West, 4th Floor Toronto, Ontario M5J 1E6 **Attention**: Doug Spooner Manager, Mobility Management

Fax: 416-214-0678

Telephone: 416-202-5590

Email: doug.spooner@metrolinx.com

To the Service Provider:

Address

Attention: [Name] [Title, phone, email]

All Notices shall be effective:

- (a) at the time the delivery is made when the notice is delivered personally, by fax, by email or by similar form of transmitted message; and
- (b) three (3) Business Days after courier or deposit in the mail when the notice is sent by certified, registered or postage prepaid mail.

ARTICLE 22 SEVERABILITY OF PROVISIONS

22.1 The invalidity or unenforceability of any provision of this Agreement shall not affect the validity or enforceability of any other provision of this Agreement and any invalid or unenforceable provision shall be deemed to be severed.

ARTICLE 23 WAIVER

A waiver of any failure to comply with any term of this Agreement must be written and signed by the party providing the waiver. Each waiver must refer to a specific failure to comply and shall not have the effect of waiving any subsequent failures to comply.

ARTICLE 24 INDEPENDENT PARTIES

24.1 The parties are and shall at all times remain independent of each other and are not and shall not represent themselves to be the agent, joint venturer, partner or employee of the other. No representations shall be made or acts taken by either party which could establish or imply any apparent relationship of agency, joint venture, partnership or employment and neither party shall be bound in any manner whatsoever by any agreements, warranties or representations made by the other party to any other person nor with respect to any other action of the other party. Nothing in this Agreement shall be deemed to constitute the Service

Provider nor any of its Service Delivery Agents as an employee, servant, agent, partner of or in a joint venture with Metrolinx for any purpose whatsoever.

ARTICLE 25 ASSIGNMENT OF AGREEMENT

25.1 The Service Provider shall not assign this Agreement or any part thereof without the prior written consent of Metrolinx. The rights and obligations of the parties to this Agreement shall enure to the benefit of, and be binding upon, the parties hereto and their respective executors, personal representatives, successors, affiliates and permitted assigns.

ARTICLE 26 GOVERNING LAW

26.1 This Agreement and the rights, obligations and relations of the parties hereto shall be governed by and construed in accordance with the laws of the Province of Ontario.

ARTICLE 27 FURTHER ASSURANCES

27.1 The parties agree to do or cause to be done all acts or things necessary to implement and carry into effect this Agreement to its full extent.

ARTICLE 28 CIRCUMSTANCES BEYOND THE CONTROL OF EITHER PARTY

28.1 Neither party shall be responsible for damage caused by delay or failure to perform under the terms of this Agreement resulting from matters beyond the control of the parties including strike, lockout or any other action arising from a labour dispute, fire, flood, act of God, war, riot or other insurrection, lawful act of public authority, or delay or default caused by a common carrier which cannot be reasonably foreseen or provided against.

ARTICLE 29 SURVIVAL

29.1 The provisions in Section 4.5 and Articles 5 (Confidential Information, Personal Information, Freedom of Information and Audit Rights), 9 (Limitation of Liability), 10 (Indemnity), 12 (Service Delivery Agents); 16 (Consequences of Termination), and any other provision of this Agreement which contemplates performance or observance subsequent to any termination or expiration of this Agreement shall survive termination or expiry of this Agreement and continue in full force and effect.

ARTICLE 30 SCHEDULES AND EXHIBITS

- 30.1 The following are the schedules and exhibits attached to and forming part of this Agreement.
 - (a) Schedule "A" (Member Level Services)
 - (b) Exhibit 1 to Schedule "A" (Year-End Report Template)
 - (c) Schedule "A-1" (Scoring Grid)
 - (d) Schedule "B" (Custom Projects)
 - (e) Exhibit 1 to Schedule "B" (Form of Custom Project SOW)
 - (f) Exhibit 2 to Schedule "B" (Project Reporting Template)
 - (g) Exhibit 3 to Schedule "B" High Level Budget Template
 - (h) Schedule "C" (Metrolinx Obligations)
 - (i) Schedule "D" (Payment Details)

ARTICLE 31 ENTIRE AGREEMENT

- 31.1 This Agreement together with the attached schedules listed in Section 30.1 of this Agreement constitutes the entire Agreement between the parties with respect to the subject matter contained in the Agreement and supersedes all prior oral or written representations and agreements.
- This Agreement may only be modified by a written agreement duly executed by the parties; provided, however, Metrolinx may amend any of the exhibits at any time, and from time to time, on written notice to the Service Provider.

THE BALANCE OF THIS PAGE IS INTENTIONALLY LEFT BLANK

| IN WITNESS WHEREOF the parties first written above. | have executed this Agreement made as of the date |
|---|--|
| METROLINX | |
| Name: | |
| Title: | |
| Date: | |
| [MUNICIPAL BUSINESS NAME] | |
| Name: | |
| Title: | |
| Date: | |

SCHEDULE "A" MEMBER LEVEL SERVICES

ARTICLE 1 DESCRIPTION OF SMART COMMUTE PROGRAM

- 1.1 Smart Commute is an initiative of Metrolinx and the cities and regions of the GTHA, working through Member Companies, to reduce traffic congestion through increased transportation efficiency. The collaboration involves the support of the regions of the GTHA, who work, directly or with third party contractors, with employers and post-secondary institutions in their area to improve Commuting options for their employees or students, as well as rapid transit passengers, as applicable. Metrolinx provides to the regional and municipal participants of the Program support for on-going services, funding of specific projects, and programming resources. The regional and municipal participants of the Program also provide Program support for on-going services, funding of specific projects, and programming resources.
- 1.2 The Program helps Member Companies, and their employees, explore and try out smart travel options such as walking, cycling, transit, carpooling and teleworking through:
 - (a) Raising awareness of available Commuting options through events and campaigns;
 - (b) Providing tools to facilitate behaviour change; and
 - (c) Providing guidance on programs and services Member Companies may undertake to support alternatives to the use of single occupancy vehicles, including:
 - (i) Carpool / Vanpools / Shuttle services;
 - (ii) Public Transit;
 - (iii) Active Transportation;
 - (iv) Tele and flexible work arrangements; and
 - (v) Measures to collect travel data to assess program effectiveness.
- 1.3 As part of the Program, Metrolinx provides the following services:
 - (a) Smart Commute Online Services:
 - (i) Smartcommute.ca commuter and program information website
 - (ii) Online ride matching service

- (iii) Client / Champion Intranet (the Resource Hub)
- (iv) Service Provider and Service Delivery Agent Dropbox / Intranet
- (v) Emergency Ride Home online administration
- (vi) Online Trip Diary/Calendar
- (vii) @smartcommute.ca email addresses when pre-approved
- (viii) PRESTO Voucher project planning and management when this functionality becomes available.
- (b) Special events and theme weeks, where/if applicable:
 - (i) Bike to Work Day (May) and Bike Month (June)
 - (ii) Smart Commute Week or Month (September/October)
 - (iii) Smart Commute Awards (November)
 - (iv) Carpool Week (February)
- (c) Workplace Recognition Programs:
 - (i) Smart Commute Workplace Designation Program and supports
 - (ii) Annual Smart Commute Awards
- (d) No fewer than two (2) forums each Contract Year for the purpose of sharing Program best-practices amongst all regional and municipal participants of the Program.

ARTICLE 2 SERVICE DELIVERY OBLIGATIONS

- 2.1 The Service Provider shall implement and deliver the Program within its region, including by supporting a Member Company's participation in any of the services, events or programs specified in Section 1.3 of this Schedule "A", if the Member Company expresses interest in such service, event or program.
- 2.2 Without limiting the generality of Section 2.1 of this Schedule "A", the Service Provider shall deliver the Program (other than the Custom Project component of the Program, which is addressed in Schedule "B" Custom Project) to all interested Member Companies, which entails, but is not limited to:
 - (a) Familiarizing Member Companies with the Program and establishing a Smart Commute champion within the Member Company;

- (b) Providing access to Smart Commute information and resources via the online portal provided by Metrolinx;
- (c) Responding to inquiries and providing guidance to Member Companies through the Smart Commute champion;
- (d) Providing and managing member networks on the Smart Commute tool;
- (e) Pushing out regular communications and key messages to Member Companies through the Smart Commute champion;
- (f) Online promotion of Smart Commute events and campaigns;
- (g) On-boarding new member companies into the Program that had not been targeted strategically through local/governmental priority-setting; and
- (h) Delivering one Smart Commute webinar or an alternative public forum as approved by Metrolinx to all interested regional and municipal participants of the Program as well as all interested Smart Commute champions, on a transportation demand management topic, which Metrolinx will assist by coordinating such webinar to a potential audience of all Regions and champions and providing the necessary technology as needed.
- 2.3 In March of each Contract Year, the Service Provider shall deliver to Metrolinx a report containing, inter alia, the following information: detailed description of the Member Level Services provided by the Service Provider during that Contract Year as per the Year-End Report Template, the form of which is set forth in Exhibit 1 to Schedule "A".
- 2.4 Subject to the terms of this Agreement, the Service Provider shall:
 - (a) obtain access to Program information, products and services as described in Schedule "C" Metrolinx Obligations through Metrolinx;
 - (b) deliver the Program in accordance with this Agreement;
 - (c) collaborate with other regions and municipalities to share best practices and materials, as well as to seek program efficiencies through sponsorship, funding and purchasing opportunities;
 - (d) use best efforts to obtain non-Metrolinx funding to support Program service delivery and activities where applicable;
 - (e) abide by the most current branding guidelines and procedures;
 - (f) participate in forums organized by Metrolinx from time to time to develop and improve the Program;

- (g) obtain its own professional advice, including its own independent legal advice, in respect to its execution of this Agreement, its participation hereunder, and its implementation and delivery of any and all aspects of the Program whether provided by or facilitated through Metrolinx or otherwise;
- (h) be responsible for the obligations set forth in this Agreement, including legal obligations, related to its implementation and delivery of the Program; and
- (i) collect information in respect of the Service Provider's Program delivery to assist with Program retention, growth and development where possible.
- 2.5 The Service Provider, when implementing and delivering the Program, shall exclusively use:
 - (a) the Emergency Ride Home online registration system as provided by Metrolinx at no cost to the Service Provider for all internet-based emergency ride home administration;
 - (b) the Smart Commute TMA websites and content management system as provided by Metrolinx at no cost to the Service Provider for all public online communication as they relate to the Program; and
 - (c) should Metrolinx provide a trip tracking tool, that tool for commute tracking.
- 2.6 The Service Provider shall ensure that its delivery of the Program and its provision of the Program Products and Services to Member Companies is documented by executed Smart Commute Program Terms and Conditions, the form of which must be approved by Metrolinx in writing. The Service Provider shall provide a copy of each executed acknowledgement of the Smart Commute Program Terms and Conditions to Metrolinx promptly following its execution. The Service Provider shall not alter, revise, amend or modify the Smart Commute Program Terms and Conditions without Metrolinx's prior written consent.
- 2.7 Metrolinx may, from time to time, develop and implement additional Program products and services. The Service Providers use of or access to such additional Program products or services may be conditional upon its agreement to comply with certain terms and conditions.
- 2.8 In cross-border situations the implementation and delivery of the Program shall be agreed to between each regional municipality without the involvement of Metrolinx.

ARTICLE 3 ANNUAL REGIONAL BEHAVIOURAL CHANGE

3.1 Annual Behavioural Change Payments

- (a) Metrolinx will prepare a survey, the objective of which is to measure changes in commuter behavior at the regional level as a result of the transportation demand management work contemplated in this Agreement. At the beginning of the annual "Smart Commute Week" or "Smart Commute Month", the Service Provider shall send the survey to each Member Company's "champion" and shall use commercially reasonable efforts to ensure that the "champion" sends the survey to all employees of its Member Company. The Service Provider shall not change, alter or modify any of the questions contained in the survey provided to it by Metrolinx but may add additional questions to the survey upon Metrolinx approval.
- (b) In order to receive any Behavioural Change Payments the Service Provider must: (i) obtain complete surveys from no less than the Minimum Number of Respondents, and (ii) must obtain at least one completed survey from at least one-third (1/3) of the Service Provider's Member Companies. The Service Provider shall not receive any Behavioural Change Payments if this minimum response rate is not satisfied.
- (c) Metrolinx shall analyse the results of the surveys and award the Service Provider points using the scoring grid attached as Schedule "A-1" Scoring Grid (such points, the "Award Points").
- (d) Subject to Section 3.1(b) of this Schedule "A", the amount of Behavioural Change Payments provided to the Service Provider each Contract Year shall be based on the number of Award Points awarded to the Service Provider, as set out in Schedule "D" Payment Details.
- (e) Metrolinx shall provide the Service Provider with notification of the amount of Behavioural Change Payments it is entitled to receive after it is calculated and validated. Metrolinx shall provide the Service Provider with the raw survey data and the validation process upon request.
- (f) Following the Service Provider's receipt of the notification required under Section 3.1(e) of this Schedule "A", the Service Provider may deliver to Metrolinx an invoice for the Behavioural Change Payments it is entitled to receive pursuant to Section 3.1(d) of this Schedule "A". The Service Provider shall deliver the foregoing information electronically to Metrolinx in accordance with the terms hereof. Within thirty (30) Business Days of Metrolinx's receipt of such complete and accurate invoice, as determined by Metrolinx, Metrolinx shall provide the Service Provider with the Behavioural Change Payments specified in the invoice.

EXHIBIT 1 TO SCHEDULE "A" YEAR-END REPORT TEMPLATE

| | | Page 1 of 2 | | | | | | |
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| Annual Survey Results | | | | | | | | |
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| responses | | | | | | | | 1 |
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| Modal split "to work" (%) | | | | | | | |] |
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| Percent survey participants rep | orting non-SQX used due | toworkplace inf | ormation | · | | | | |
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| Identified priorities for next ye | ar | | | | | <u> </u> | | |

Page 2 of 2

| Workplace Name | Commuter Population | Champion email address | Workplace Address | Workplace Designation | Custom Project participant? | Annual Survey participant? | Member level type (if applicable) | Additional Comments |
|----------------|------------------------|---------------------------|----------------------|--------------------------|--------------------------------|-------------------------------|--------------------------------------|---------------------|
| [Mx to insert] | | | | | | | _ | |
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SCHEDULE "A-1" SCORING GRID

The Behavioural Change Payment rewards results from a year of Smart Commute programming, specifically: Part A) the conversion of commuters to a more sustainable primary mode and; Part B) a greater diversity in transportation modes used.

The Behavioural Change Payment from Metrolinx to the Service Provider will be scaled from a maximum payment as determined in Schedule D to zero (0) based on the performance indicated by the Survey Data.

Scoring is dependent on two parts, each awarding points independently: primary mode change from the previous year and an annual reflection of the volume of the modes taken to work by the survey respondents. Both parts are assigned points and compared to the table in Schedule D to determine the eligible Behavioural Change Payment. Part A: Primary Mode

To calculate primary mode points the mode share reported in Survey Data will be compared to a baseline dataset to identify the difference. The Survey Data mode share per Region will be compared to the previous year Survey Data mode share to determine percentage difference which will be scored points based on the Part A Scoring Grid.

Note 1: Awarding points for percentage difference in SOV travel as well as percentage difference in non-SOV modes may result in some double counting to the benefit of the Service Provider.

A. Percentage change primary mode share

Note: Example results shown as highlight

| Primary Mode Shift | 0% | % > -0.5 | -0.5 ≥ % ≥ -1 | -1 > % ≥ -2 | % < -2 |
|-------------------------|----|----------|--------------------|-------------|--------|
| SOV | 1 | 5 | 10 | 15 | 20 |
| Primary Mode Shift | 0% | % < 0.5% | $0.5 \le \% \le 1$ | 1≤%≤2 | % > 2 |
| Car/Vanpool | 1 | 5 | 10 | 15 | 20 |
| Transit | 1 | 5 | 10 | 15 | 20 |
| Bicycle | 1 | 5 | 10 | 15 | 20 |
| Walk | 1 | 5 | 10 | 15 | 20 |
| Total Points (max. 100) | 1 | 15 | | 15 | |

Part B: Volume of non-SOV modes

The volume of various modes used to get to and from work is part of the Survey Data. Respondents were encouraged to check all modes that they took over the past year to get to and from work. To reward a diversity of modes utilized in a year, points are awarded by dividing the number of modes reported to and from work by the number of responses to the primary mode question. This result is multiplied by ten (10) points.

Note 2: The number of points will be rounded up to the closest integer to benefit the Service Provider. Also, the analysis performed by Metrolinx will not double-count for the mode to and from work if they are reported as the same mode option, the modes for to and from work that are reported as the same mode will be counted as one mode in Part B.

B. Volume of modes

Note: Example results shown

| Mode | Occasional | |
|-------------------------|------------|-----------------|
| SOV | 1000 | 1 |
| Car/Vanpool | 540 | 1 |
| Transit | 400 | |
| Bicycle | 138 | |
| <mark>Wal</mark> k | 10 | 1 |
| Telework | 200 | |
| Other | 2 | |
| Total | 2290 | |
| ÷ survey responses | 1737 | |
| Total Points (max. 50): | 1.318365 | ×10 = 14 Points |

Behavioural Change Payments will be made by adding all points from Part A and Part B together and compared to the table in Schedule D.

SCHEDULE "B" CUSTOM PROJECTS

ARTICLE 1 CUSTOM PROJECT

1.1 Custom Project

- (a) All Work performed under a Custom Project SOW shall be performed in accordance with the terms and conditions of this Agreement. Each individual Custom Project SOW shall be incorporated into this Agreement by reference. In the event of any conflict or inconsistency between this Agreement and any Custom Project SOW, the terms contained in this Agreement shall take precedence.
- (b) Metrolinx will pay one-half (1/2) of the Custom Project Eligible Costs incurred for a Custom Project to the Service Provider that Metrolinx has approved in writing; provided that in no event shall Metrolinx's payment for all such Custom Project Eligible Costs incurred exceed the Custom Project Cap unless approved by Metrolinx in writing. The other one-half of the Custom Project Eligible Costs may be contributed by either the Service Provider, the municipality or the Member Company(ies) who will benefit from the Custom Project.
- (c) The total amount paid by Metrolinx to the Service Provider shall in no event be greater than amount set out in Schedule "D" Payment Details (the "Custom Project Cap").
- (d) In order for the Service Provider to receive any payments for a Custom Project, the Service Provider must be in receipt of an approved Custom Project SOW. Metrolinx will not make any payments with respect to a Custom Project unless and until the Custom Project SOW has been approved by Metrolinx, in its sole discretion (such approval to be evidenced by Metrolinx's signature on the Custom Project SOW). Metrolinx shall notify the Service Provider if the proposed Custom Project SOW has been approved or rejected within five (5) Business Days of receipt.
- (e) The Service Provider may elect to discuss its project ideas with the Metrolinx Senior Advisor in advance of the submission of a Custom Project SOW. Any such meeting shall take place at least five (5) Business Days following the date of the request.
- (f) In order for Metrolinx to approve a Custom Project SOW, the Custom Project must meet the following requirements:
 - (i) it must be linked to the Purpose;

- (ii) it must not negatively impact Metrolinx as an organization or its brand image/reputation; and
- (iii) it must be completed prior to the end of that Contract Year.

Satisfaction of these requirements is a necessary but not sufficient condition for the approval of a Custom Project SOW. Metrolinx reserves the right to add additional requirements for a Custom Project in the Custom Project SOW template, which additional requirements would also be necessary but not sufficient conditions for the approval of a Custom Project SOW.

- (g) The Service Provider acknowledges that Metrolinx makes no representation, warranty or other guarantee as to the approval of any Custom Project SOW, regardless of planned phasing of projects into two or more parts. Metrolinx reserves the right not to approve any Custom Project SOW.
- (h) Following the approval of a Custom Project, the Service Provider may deliver to Metrolinx an invoice for 12.5% of the Custom Project Eligible Costs it is seeking funds for, in respect of such Custom Project. The Service Provider shall deliver the foregoing information electronically to Metrolinx in accordance with the terms hereof.
- (i) Within five (5) Business Days of receipt Metrolinx shall review the invoice provided by the Service Provider pursuant to Section 1.1(h) above for accuracy and completeness and for compliance with Section 1.2 of this Schedule "B". Within twenty (20) Business Days of its receipt of such complete and accurate invoice, as determined by Metrolinx, Metrolinx shall pay the Service Provider the amount invoiced, to the Custom Project Cap.
- (j) For Custom Projects with an expected duration of more than four (4) months, 17.5% of the Custom Project Eligible Costs of the Custom Project SOW shall be payable in accordance with the milestone payment schedule set out in the Custom Project SOW. Upon completion and Metrolinx acceptance (which acceptance shall be evidenced in writing) of an applicable milestone, which will be set out in the payment schedule, the Service Provider may deliver to Metrolinx an invoice for the percentage of the Custom Project Eligible Costs payable by Metrolinx at the completion of such milestone.
- (k) Within five (5) Business Days of receipt Metrolinx shall review the invoice provided by the Service Provider pursuant to Section 1.1(j) above for accuracy and completeness and for compliance with Section 1.2 of this Schedule "B". Within twenty (20) Business Days of its receipt of such

- complete and accurate invoice, as determined by Metrolinx, Metrolinx shall pay the Service Provider the amount invoiced.
- (l) Following completion of a Custom Project, the Service Provider shall deliver to Metrolinx:
 - (i) a report on each Custom Project containing, inter alia, the following information: detailed description of the Custom Project, as implemented, the results of the Custom Project, lessons learned, and the information required by the Project Reporting Template, the form of which is set forth in Exhibit 2 to Schedule "B" (each such report, the "Custom Project Report");
 - (ii) an expense report which report shall set out all Custom Project Eligible Costs relating to such Custom Project that are actually incurred, the sum of such costs, and the dates of expenditure, together with copies of documentation evidencing such expenditures (such as invoices and receipts) and will include the completed High Level Budget, the form of which is set forth in Exhibit 3 to Schedule "B"; and
 - (iii) an invoice for the total Custom Project Eligible Costs relating to such Custom Project that are actually incurred by the Service Provider divided by two minus the amounts paid pursuant to Section 1.1(i) and Section 1.1(k); provided, however, the total amount invoiced to Metrolinx for a certain Custom Project shall not exceed the amount requested by the Service Provider for that Custom Project in the applicable Custom Project SOW, unless Metrolinx has provided written approval for such excess.
- (m) Within five (5) Business Days of receipt of all of the documentation specified in Section 1.1(l) of this Schedule "B" Metrolinx shall review the documentation provided by the Service Provider for accuracy and completeness and for compliance with Section 1.2 of this Schedule "B". Within twenty (20) Business Days of its receipt of such complete and accurate documentation, as determined by Metrolinx, Metrolinx shall pay the Service Provider the amount invoiced pursuant to Section 1.1(l)(iii) of this Schedule "B", to the Custom Project Cap.
- 1.2 Determination of Custom Project Eligible Costs
 - (a) Custom Project Eligible Costs shall include any costs directly connected to the design and implementation of the approved Custom Project providing the following requirements are met:
 - (i) any expenses must be operating expenses in nature, for example, marketing, promotion, and education;

- (ii) any office overhead expenses is limited to a maximum of 30% of the total budget for the specific Custom Project;
- (iii) if any expense / cost, or series of expenses / costs, is related to an item which could be used for other projects the maximum allowable amount for that cost for the specific Custom Project is 20% of the expense; and
- (iv) fifty percent (50%) of in-kind contributions provided by the Service Provider, and only the Service Provider, for any of the above expenses and approved by Metrolinx. For all in-kind contributions the Service Provider must, upon request, provide supporting documentation evidencing the fair market value of the in-kind contribution.
- (b) The following expenses are not eligible to be included in Custom Project Eligible Costs:
 - (i) any capital expenditures;
 - (ii) promotional items, give-aways or prize values that are in excess of 10% of the total budget for the specific Custom Project, unless otherwise approved by Metrolinx;
 - (iii) the purchase of any asset of any kind;
 - (iv) the subsidization of a regular expense for the Member Company;
 - (v) membership or service fees related to the Custom Project outside of the approved timeline of the Custom Project;
 - (vi) transit fare payments or PRESTO incentives in excess of \$20 per Custom Project participant, unless otherwise approved by Metrolinx;
 - (vii) any expense which is paid for, or provided by, an in-kind contribution by a Member Company or any third party; and
 - (viii) anything which a reasonable person residing in the GTHA would consider to be inappropriate for a government body to pay for.

EXHIBIT 1 TO SCHEDULE "B" FORM OF CUSTOM PROJECT SOW



Smart Commute Workplace Program – Statement of Work Last Updated: 2018-01

Instructions for Completion

This statement of work and supporting documentation must be submitted to access the funds available from Metrolinx for Custom Projects. These funds are available to each of the Service Providers within the Greater Toronto and Hamilton area.

Service Providers have until March 31st to complete all Custom Projects and submit their Custom Project Reports to receive the final project payment.

Once completed and signed by the Service Provider, the Service Provider may submit this statement of work and the supporting documentation to the Senior Advisor, Smart Commute. The Senior Advisor will respond within five (5) business days with either the project approval, further questions or rejection of the project.

PART I:

Project Name – Briefly identify the project with a name. If the project is based around a Metrolinx capital investment (e.g., GO Station) please identify.

Employer Name – State the name of the Member Company for whom this statement of work benefits. If multiple Member Companies are included, you may reference the BIA, business park or entity (organizational, geographic or otherwise) which groups them. If multiple Member Companies are included, the Member Companies must have an agreement with the Service Provider or Service Delivery Agent to implement the project.

Project Address – Indicate whether the project involves a single site or multiple sites, and state the address of the primary project location. Additional locations may be described in Part II of this statement.

Service Delivery Agent – State the Service Delivery Agent that will be responsible for delivering the project, if any.

Service Provider – State the Service Provider for the area in which the project is located. The Service Provider will be responsible for project approval and oversite.

Service Provider P.O. # — Enter the P.O. # that Metrolinx has issued the Service Provider relating to the Program.

Project # — Please add a unique project number for identification. This may be used as the invoice number for payment.

Estimated Project Timeline – Enter the estimated start and end date of the project.

PART II:

Please provide a summary of the proposed project and work to be completed. The summary must include, but is not limited to:

- Project Type or Category
- Project background
- Project goals
- Project deliverables (this may include the assessment completed prior to the project's development)
- Anticipated resource requirements

PART III:

Please provide the rationale behind the project and plan of action. The rationale should include, but is not limited to:

- How the project aligns with the Member Company's, Service Provider's and/or Metrolinx' goals
- How the project aligns with the Purpose of the Smart Commute Workplace Program
- Alternative actions considered (if any)

PART IV:

Please describe the expected project value and provide a summary of the anticipated project outcomes. The description must include anticipated behaviour change impacts as well as the number of people who are impacted as an integer, and may include other benefits as well.

PART V:

Employer Contribution – State the dollar amount, in cash, that the employer is contributing to the project. Where a contribution will not be made please enter \$"0".

Contribution by the Service Provider – State the dollar amount, in cash and/or in-kind, that the Service Provider is contributing to the project, including preparatory and administrative staff time. Where a contribution will not be made please enter \$"0".

Lower-tier Municipal Contribution – State the dollar amount, in cash, that the lower tier municipality or municipalities is contributing to the project. Where a contribution will not be made please enter \$"0".

Requested Metrolinx Contribution – State the dollar amount required from Metrolinx to complete the project in the current fiscal year. In requesting Metrolinx funds, several conditions apply:

- Metrolinx funds must be spent within the fiscal year in which they are granted
- Metrolinx funding is only available for transportation demand management solutions
- Metrolinx funding is only available for projects which apply to a Member Company or a group of Member Companies
- Metrolinx funding may only be used towards operational expenses; it cannot be used to purchase assets
- Metrolinx funding cannot be used towards staff training and development
- Where a Service Delivery Agent must purchase a tool or service to complete the project in question they may claim up to a maximum of \$2,500 in Metrolinx funds
- Where a Service Provider must incur an expense / cost, or series of expenses / costs, related to an item which could be used for other projects the maximum allowable amount for that cost for the specific Custom Project is 20% of the expense;
- Metrolinx reserves the right to decline funding to any project which may negatively impact Metrolinx as an organization or its brand image

% Total of Custom Project Cap – State how much, as a percentage, of the Service Provider's Custom Projects Cap has been allocated towards the project.

Total Expected Project Cost – State, in dollars, the total cost expected to deliver the project as described.

In-kind – Please, briefly, describe what in-kind will be provided by the Service Provider or lower-tier municipalities, if any.

PART VI:

Please indicate if you have attached a high level project budget and Workplace Travel Plan by checking off the boxes provided. If in-kind has been provided, please indicate that proper documentation is attached.

PART VII:

Please indicate that each of the parties to the project have reviewed this statement of work and attachments and endorses the project. The Service Delivery Agent and Service Provider who are party to this statement of work are required to sign.

PART VIII:

Upon receipt of the statement of work, the Senior Advisor will review the proposed project and provide comments, if appropriate.



Smart Commute Workplace Program – Statement of Work

Last Updated: 2018-01

PART I: Please fill out the applicant information below

| Project Name and Member Company N | ame(s) | |
|---|---------------------------|--|
| Project Address 🗆 Single Site 🗀 Multip | ole Sites | |
| Service Delivery Agent | | Service Provider |
| Service Provider P.O.# | Project # | |
| Estimated Project Timeline YYYY-MM-D | D to YYYY- | MM-DD |
| PART II: Project Description and details about project milestones requal payment. | Deliverabl quiring com | es including identification of and apletion in advance of a milestone |
| | | |
| PART III: Project Rationale (the "Str | ategic Cas | e") |
| | | |
| | | |
| | | |
| | | |
| | | |
| PART IV: Expected Value and Resu | ılts (the "Ed | conomic Case") |
| | | |
| | | |

| PART V: Proje | ct Costs (the | "Financia | I Ca | ase") | | |
|--|-------------------|-----------|------|--------------------------|---------------------|--|
| Member Compa | nny Contribution | ☐ Cash | \$ | □ Ir | n-kind \$ | |
| Service Provide | r Contribution | ☐ Cash | \$ | □lr | -kind \$ | |
| Municipal Contr (Lower-tier) | ibution | □ Cash | \$ | □ Ir | -kind \$ | |
| Other funding s | ources (describ | e): 🗆 Cas | sh S | \$ □ In | -kind \$ | |
| Requested Met Cap: | rolinx Contributi | on | \$ | % 7 | Total of Cus | stom Project |
| Total Expected | Project Cost | | \$ | | | |
| Please describe Provider contrib | | provided, | if a | ny. Note, Metrolinx | will only m | atch Service |
| Milestone Payı | ment Schedul | e: | | | T . | |
| Description of d | eliverable | | | Expected completion date | | Payable as a of Total Expected ost |
| | | | | | | 9 |
| | | | | | | 9, |
| | | | | | | 9, |
| | | | | | Total | 35% |
| PART VI: Attac | chments | | | | | |
| ☐ High Level 6 | Budget | | | ☐ In-kind (if applica | d document able) | ation |
| PART VII: Sigi | natures | | | | | |
| As a | Service Delive | ery Agent | | | | |
| signatory, I have | Name: | | | Signature: | | Date: |
| reviewed this statement of | Service Provid | der | | | | |
| work and attachments and endorse | Name: | | | Signature: | | Date: |

| this project. | | | |
|---------------|--|--|--|
| | | | |

PART VIII: Metrolinx Review and Approval

| Signature: | Date: |
|-------------|------------|
| | |
| Signature: | Date: |
| applicable) | |
| Signature: | Date: |
| | Signature: |

EXHIBIT 2 TO SCHEDULE "B" PROJECT REPORTING TEMPLATE



Smart Commute Workplace Program – Custom Project Report Last Updated: 2018-01

Instructions for Completion

This report must be submitted to receive final payment from Metrolinx for Custom Projects.

Service Providers have until March 31st to complete all Custom Projects and submit their Custom Project Reports.

Once completed and signed, you may submit this report to the Senior Advisor, Smart Commute. The Senior Advisor will respond within five (5) business days with either the report approval or further questions.

PART I:

Project Name

Member Company Name(s) – State the name of the Member Company considered within this application. If multiple Member Companies are included within the Custom Project you may reference the BIA, business park or entity (organizational, geographic or otherwise) which groups them.

Project Address – Indicate whether the project involves a single site or multiple sites, and state the address of the primary project location. Additional locations may be described in Part II of the application.

Service Delivery Agent – State the Service Delivery Agent that will be responsible for delivering the project, if any.

Service Provider – State the Service Provider for the area in which the project is located.

Service Provider P.O. # — Enter the P.O. # that Metrolinx has issued the Service Provider relating to the Program.

Project # — Please enter the project number as defined on the applicable statement of work. This may also be used as the project Invoice Number,

Project Timeline – Enter the start and end date of the project.

PART II:

Please describe the project as implemented. The summary should include, but is not limited to:

- Project background
- Project goals
- Project activities and deliverables
- Resources utilized

PART III:

Please provide the project outcomes and results, including the pre- and post- mode share as an integer of the participants and a description of any additional project outcomes not captured within the mode share data, as an integer.

PART IV:

Total Project Cost – State, in dollars, the total amount, from all sources, spent delivering the project as described in the applicable statement of work

Metrolinx Contribution to Date – State, in dollars, the amount of Metrolinx funds provided upon approval of the applicable statement of work. This amount is expected to equal 1/8 of the total project cost as estimated within the applicable statement of work.

Metrolinx Contribution Remaining – State, in dollars, the amount of Metrolinx funds owed upon approval of this report. The amount remaining will be equal to half the actual, eligible project costs, minus the amount already contributed.

Comments – Please provide any additional comments regarding project funding and dollars spent.

PART V:

Please attach the updated, final High Level Budget outlining variance against the approved, estimated expenditures and the final, actual project expenditures.

PART VI:

Please provide a summary of the lessons you have learned throughout the delivery of this project. The summary should include, but is not limited to:

• What you feel was key to the project's success or failure

- The elements of this project you would reproduce in the future
- The elements of this project you would not reproduce in the future

PART VII:

Please indicate that each of the parties to the project have reviewed this report. The Service Delivery Agent and Service Provider who are party to this application are required to sign.

PART VIII:

Upon approval of the report, the Senior Advisor will sign and date the report and provide comments, if appropriate.



Smart Commute Workplace Program – Custom Project Report Last Updated: 2018-01

PART I: Please fill out the project information below

| Project Name Member Compar | ny Name(s) | | |
|-------------------------------------|------------------------|---------------------|--|
| Project Address ☐ Single Site | □ Multiple S | ites | |
| Service Delivery Agent | Service Delivery Agent | | |
| Service Provider P.O.# | Projec | t # | |
| Project Timeline YYYY-MM-I | DD to YYYY-M | MM-DD | |
| PART II: Project Description | | | |
| PART III: Results | | | |
| Please indicate all project results | s or qualitative | mode share results. | |
| | | | |
| | | | |

PART IV: Project Costs

| Total Project Cost \$ | |
|--|------------------------|
| Metrolinx Contribution to Date \$ Remaining \$ | Metrolinx Contribution |
| Comments, if any: | |
| PART V: Attachments | |
| ☐ Final High Level Budget | |
| PART VI: Lessons Learned | |
| | |
| | |
| | |
| | |
| | |

PART VIII: Signatures

| Service Delivery Agent | | |
|------------------------|------------------------|-----------------------------------|
| Name: | Signature: | Date: |
| Service Provider | | |
| Name: | Signature: | Date: |
| | Name: Service Provider | Name: Signature: Service Provider |

PART IX: Metrolinx Review and Approval

| Signature: | Date: |
|------------|------------|
| | |
| Signature: | Date: |
| licable) | |
| Signature: | Date: |
| | |
| | Signature: |

EXHIBIT 3 TO SCHEDULE "B" HIGH LEVEL BUDGET TEMPLATE



Smart Commute Workplace Program – High Level Budget Template Last Updated: 2018-01

| Project Name | | |
|------------------------|------------------|--|
| Service Delivery Agent | Service Provider | |
| Service Provider P.O.# | Project # | |

| | Estima | Estimated Cost | | Actual Cost | | Variance ^t | |
|------------------------------------|--------|----------------|-------|-------------|-------|-----------------------|--|
| Project Cost Category [†] | Total | MX Funds | Total | MX Funds | Total | MX Funds | |
| Labour [¥] | | | | | | | |
| Description: | | | | | | | |
| Overhead | | | | | | | |
| Description: | | | | | | | |
| Professional Services | | | | | | | |
| Description: | | | | | | | |
| Promotional items | | | | | | | |
| Description: | | | | | | | |
| Marketing | | | | | | | |
| Description: | | | | | | | |
| Capital Expenses/Assets | | N/A | | N/A | | N/A | |
| Description: | | N/A | - | N/A | | IN/A | |
| Software/Equipment | | | | | | | |
| Description: | | | | | | | |

| Other | | 1.0 | |
|--------------|--|-----|--|
| Description: | | | |
| TOTALS | | | |

[†]All costs included within this budget must specifically relate to the project. Clearly indicate if an item has been provided in-kind and the source.

[‡]Any increases from the estimated costs must be approved by Metrolinx prior to the release of the final project payment

*Labour costs include staff salaries and benefits to carry out the program and includes Service Delivery Agent salaries

| Notes |
|-------|
| |
| |

SCHEDULE "C" METROLINX OBLIGATIONS

Subject to the terms of this Agreement, Metrolinx shall oversee and facilitate the Program by:

- (a) centralizing and providing access to Program information, products and services as described below;
- (b) coordinating and facilitating Program improvement and development through information sharing and meeting participation of regional, municipal and Metrolinx stakeholders;
- (c) identifying and fostering appropriate synergies between Smart Commute and the Metrolinx divisions, such as GO Transit route and service planning and PRESTO;
- (d) monitoring Program results and effectiveness;
- (e) providing, no later than six (6) weeks before the start of the promotional period, promotional materials for special events and theme weeks/months;
- (f) effecting cost-efficiencies in the acquisition and dissemination of Program-related information, products and services through the consolidation and centralization of such efforts, where appropriate;
- (g) where appropriate, ensuring consistency in Program delivery including establishing and monitoring Program standards;
- (h) providing a recognizable Program brand that is consistent throughout the GTHA with mandatory branding guidelines and procedures;
- (i) establishing, retaining and developing Program goodwill through control of Program-related brands; and
- (j) bringing municipalities, Service Delivery Agents, related professionals and regions together to support networking, best practices sharing and innovation.

As part of the Program, Metrolinx shall provide the services specified in Schedule A, Section 1.3.

SCHEDULE "D" PAYMENT DETAILS FOR APRIL 1, 2018 to MARCH 31, 2019

Service Provider's Upset Limit (annual): \$108,622

Payment for Member Level Services (annual): \$44,962

Member Level Services – minimum Member Companies served 1: 27

Custom Project Cap (annual): \$58,355

Behavioural Change Payment (annual): up to \$5,305

| Total Award Points (A+B) | 5-10 | 11-24 | 25-34 | 35-44 | 45-150 |
|-----------------------------------|-----------|-----------|-----------|-----------|--------|
| Payment to Service Provider | \$2652.50 | \$3978.75 | \$4774.50 | \$5058.75 | \$5305 |

Minimum Number of Respondents: 382

Schedule "D" shall be updated by Metrolinx (and provided to the Service Provider) for the succeeding Contract Year by January 31 of the existing Contract Year.

¹ If the Service Provider does not anticipate meeting this number by the end of the Contract Year a meeting with Metrolinx Senior Advisor, Smart Commute will be required to discuss the deficit.

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

Report: #2018-COW-93 Date: #2018

Subject:

"Envision Durham". The Municipal Comprehensive Review of the Durham Regional Official Plan, File D12-01

Recommendations:

That the Committee of the Whole recommends to Regional Council:

- A) That authorization to proceed with the Municipal Comprehensive Review of the Durham Regional Official Plan, outlined in Report #2018-COW-93, be provided; and
- B) That a copy of Report #2018-COW-93 be forwarded to Durham's area municipalities, conservation authorities and the Ministry of Municipal Affairs

Report:

1. Purpose

- 1.1 The purpose of this report is to introduce Council to the proposed Municipal Comprehensive Review (MCR) of the Regional Official Plan (ROP), and to request authorization to proceed. "Envision Durham, 2041 Our Region. Our Plan. Our Future" (or "Envision Durham") is a key strategic opportunity to plan for fundamental change, by replacing the current ROP and establishing a progressive and forward-looking planning vision for the Region to 2041.
- 1.2 The ROP is Council's core planning document that guides Regional decision-making on long term growth and development. The ROP provides policies to ensure an improved quality of life and secure the health, safety, convenience and well-being of the present and future residents of the Region. It establishes the Region's goals and

directions for land use planning and development based on a well-defined structure of urban areas and rural settlements, a system of connected environmental features, extensive and productive agricultural areas, a variety of major open spaces and a comprehensive, integrated and multi-modal transportation network. The document includes policies that support a growing and diversifying Regional economy, intensification based on an urban structure of vibrant centres and corridors, and seeks to protect and enhance important natural heritage features.

- 1.3 The Region is entering a period of significant growth and change. By 2041, the Region is forecast to accommodate a population of 1.19 million residents, and 430,000 jobs. This represents nearly a doubling of the Region's 2016 population of nearly 650,000, and a more than doubling of the Region's nearly 196,700 jobs. In addition, there will be:
 - an increasing need to accommodate an aging population;
 - a heightened expectation to address climate change;
 - a growing demand to improve mobility options;
 - a focus on intensification within existing communities;
 - a need for measures to improve the viability of rural settlements;
 - planning approaches that further support the agricultural sector; and,
 - a need to further facilitate the development of high quality job opportunities through various measures across the Region.

2. Background

- 2.1 Durham has a long history of sound land use planning. The Region's first ROP was adopted by Regional Council in July 1976, and approved by the Province in March 1978. The original ROP was replaced in June 1991, and subsequently approved by the Province in November 1993. The basic framework of the ROP has not changed in 25 years.
- 2.2 The last MCR culminated in Regional Official Plan Amendments #114 (ROPA 114) and #128 (ROPA 128), which implemented the Greenbelt Plan, 2005 and the Growth Plan, 2006 respectively, amongst other key policy initiatives. ROPA 114 was adopted by Regional Council in November 2006. The majority of ROPA 114 was approved by the Ontario Municipal Board (OMB) in June 2008. ROPA 128 was adopted by Regional Council in June 2009, and was subsequently approved by the OMB in January 2013.
- 2.3 Under the Planning Act, there is a legislative requirement to review the existing ROP

- every five years (i.e. in 2018).
- 2.4 On July 1, 2016, Bill 73, the Smart Growth for Our Communities Act, 2015, came into force and effect. Key changes to the Planning Act which will have an impact on the conduct of the MCR include:
 - New official plans must be reviewed and revised, as necessary, within 10 years of coming into effect;
 - A new two-year prohibition on applications seeking an amendment to a new official plan, from the date that any part of the new plan coming into effect.
 Exceptions to this two-year prohibition period will be permitted only by Council resolution;
 - Requirement for official plans to contain policies related to the built environment;
 - Appeals of official plans/OPAs that implement certain provincially-approved matters are not allowed, including for the following matters:
 - Boundary of a vulnerable area as defined in Clean Water Act, 2006;
 - Boundary of Lake Simcoe watershed;
 - Boundary of the Greenbelt Area, Protected Countryside or a specialty crop area as designated by the Greenbelt Plan;
 - Boundary of the Oak Ridges Moraine Conservation Plan Area;
 - Forecasted population and employment growth in accordance with the Growth Plan for the Greater Golden Horseshoe;
 - Forecasted population and employment growth in lower-tier official plan in accordance with an allocation in the upper-tier municipality's official plan that has been approved by the Minister;
 - Boundary of an area of settlement in lower-tier official plan to reflect the boundary set out in the upper-tier municipality's official plan that has been approved by the Minister;
 - Removal of the ability to appeal second unit policies at time of an Official Plan update; and
 - Removal of the ability for an appellant to appeal an entire Official Plan.
- 2.5 On December 12, 2017, Bill 139, the Building Better Communities and Conserving Watersheds Act, 2017, came into force and effect. Bill 139 changed the provincial land use planning appeals system through, amongst other matters: establishing a new two-stage appeals process for Official Plans and amendments; creating a new Local Planning Appeals Tribunal (LPAT) and new statutory rules for the conduct of hearings; sheltering municipally initiated Official Plans and Amendments that require

the Minister's approval.

- 2.6 Since the approval of ROPA 128, there have also been a number of significant Provincial policy initiatives that will directly affect the MCR exercise, including:
 - An updated Provincial Policy Statement, 2014 (PPS);
 - The enactment of Amendment #2 to the Growth Plan, 2006 which provided population and employment forecasts to 2041;
 - Significant amendments to the Planning Act through Bill 73 and Bill 139;
 - New Source Water Protection Plans; and
 - The completion of the coordinated Provincial review and updating of Ontario's Provincial Plans:
 - Growth Plan for the Greater Golden Horseshoe, 2017 (Growth Plan);
 - Greenbelt Plan, 2017; and
 - Oak Ridges Moraine Conservation Plan, 2017 (ORMCP).
- 2.7 The completion of various provincial mapping amendments, including changes to the Agricultural System mapping, Natural Heritage System mapping and changes to the Greenbelt Plan boundaries that will need to be incorporated through this process into the ROP.
- 2.8 The Planning Act requires the Region to undertake a Provincial Plan conformity exercise to amend the ROP to ensure that it:
 - Conforms with Provincial Plans or does not conflict with them;
 - Has regard to matters of Provincial interest; and
 - Is consistent with Provincial Policy Statements.

This MCR will constitute a Provincial Plan conformity exercise and five-year review of the ROP, satisfying these legislative requirements.

2.9 The Minister of Municipal Affairs is the approval authority for the MCR. Once a draft of the ROP is completed, the Province requires that it be forwarded to the Province not less than 90 days prior to Notice being given for the statutory public meeting. Once a new ROP is adopted by Council, the Province will have 210 days to render its decision.

3. Components of Envision Durham

3.1 Envision Durham will represent a comprehensive review of the ROP, addressing a variety of strategic land use planning and development matters, including:

- Achieving conformity with the updated Provincial Plans and policies, including:
 - Allocation of the Region's population and employment forecasts to each area municipality to 2041;
 - A Regional urban land budget in accordance with the standardized Land Needs Methodology;
 - Planning that achieves the prescribed increased density requirements within Strategic Growth Areas, including Urban Growth Centres and Major Transit Station Areas;
 - Planning for employment growth within community areas and employment areas to the Growth Plan horizon;
 - Planning that achieves the prescribed higher Designated Greenfield Area density targets;
- Responding to climate change and incorporating sustainability provisions;
- Implementing key policy directions of the Transportation Master Plan 2017, including policies supporting transit supportive development and active transportation;
- Supporting rural communities, including an examination of agricultural land use permissions;
- Policies to further support the provision of affordable housing, including various planning policy recommendations from At Home in Durham, the Region's Housing Plan; and
- Addressing other ROP policies and initiatives to shape orderly growth and development in the Region, including an examination of relevant existing and emerging land use planning and development issues.

Provincial Studies and Guidance Documents

- 3.2 In order to demonstrate conformity with provincial policies, the Growth Plan requires upper- and single-tier municipalities to undertake background studies through the MCR process. The MCR must therefore include the following major studies and strategies:
 - Urban Land Needs Assessment;
 - Intensification Strategy;
 - · Employment Strategy; and
 - Housing Strategy.

Existing Watershed Plans may also need to be updated.

- 3.3 The Province has produced a suite of draft guidance documents to assist municipalities with meeting Provincial requirements. The following guidance documents have been released for public review and comment:
 - Land Needs Assessment methodology;
 - Low Impact Development stormwater management;
 - · Community emissions reduction planning;
 - Watershed Planning in Ontario;
 - Natural Heritage System implementation;
 - · Agricultural System implementation;
 - Agricultural Impact Assessment;
 - Application of the Intensification and Density Targets; and
 - The MCR Process.

Of these support materials, only guidance on the implementation of the Natural Heritage System and Agricultural System have been finalized at this time.

- 3.4 The draft technical guidance on the application of the intensification and density targets is intended to support municipalities with the implementation of the new targets for planning under the Growth Plan, including:
 - Planning for increased intensification of 50 per cent of all residential development occurring annually within the designated built boundary, until 2031; increasing to 60 per cent post 2031;
 - Planning for increased density in the Designated Greenfield Area (i.e. urban lands outside of the built boundary) of 60 residents and jobs per hectare, until 2031; increasing to 80 residents and jobs combined per hectare for any new lands designated in the ROP after July 1, 2017;
 - Planning for increased densities in Employment Areas, to be determined through a Regional Employment Strategy, in consultation with the area municipalities;
 - Planning for an Urban Growth Centre density of 200 residents and jobs combined per hectare, for each of Downtown Oshawa and Pickering City Centre; and
 - Planning for Major Transit Station Area (MTSA) densities of 150 residents and jobs combined per hectare along priority transit corridors, e.g. existing GO Train station areas in Pickering, Ajax, Whitby and Oshawa.
- 3.5 The draft technical guidance on the MCR process is intended to support municipalities with implementing the policies of the Growth Plan through a MCR. It

provides some guidance on some of the more iterative components of the Growth Plan conformity, such as the sequencing of analysis related to the land needs assessment, and allocating updated forecasts and establishing targets for lower-tier municipalities.

3.6 The information, technical criteria, and approaches presented in both draft guidance documents support, and in many cases reiterate, the Growth Plan policies as they exist. The documentation serves to confirm the work planning for the MCR that is already underway, and in this regard Regional staff are informed by these additional guidance materials, but do not have any specific comments on these documents.

Regional Initiatives

- 3.7 There are numerous Regional strategies and plans that have been endorsed by Council since the last ROP. These strategies and plans will help to inform the MCR, and are expected to contribute to the development of supportive planning policies. These strategies and plans include:
 - Durham Region Strategic Plan 2015-2019;
 - Durham Community Climate Change Local Action Plan (2012);
 - Durham Community Climate Adaptation Plan (2016);
 - At Home in Durham, Durham Region Housing Plan 2014-2024;
 - The Affordable and Seniors' Housing Task Force (2017);
 - Health Neighbourhoods initiative (updated July 2016);
 - Transportation Master Plan (2017);
 - Economic Development Strategy and Action Plan 2017-2021;
 - Development Charge Background Study and By-law (2018); and
 - Water and Wastewater Master Planning (ongoing).

The MCR process will seek to incorporate the relevant policies and directions from these documents from the standpoint of Regional land use planning and development policy.

4. Initial Preparation

- 4.1 In preparation for the MCR, the Planning Division held an internal staff workshop in November 2017 to highlight potential themes, issues and approaches for the MCR. A project framework was subsequently developed based on the following themes:
 - Agriculture/Rural System;

- Environment/Greenlands System;
- Climate Change/Healthy Neighbourhoods;
- Transportation System;
- Housing;
- Growth Management; and
- Communication and Outreach.

Initial Stakeholder Engagement

- 4.2 Envision Durham will rely upon early, extensive and meaningful consultation with both internal and external stakeholders. The following describes the initial discussions that have taken place in preparation for the MCR. It also highlights the need to ensure that an engaging public and stakeholder consultation process takes place through this MCR process.
- 4.3 The Region hosted a workshop in January 2018 with the Durham Region and area municipal Planning Commissioners/Directors to begin the conversation. The workshop identified some high level issues that may be anticipated in each of the area municipalities, and articulated the desire for early and frequent consultation. As a result of this workshop, the group committed to meet regularly; and that an area municipal working group be established as an early component of the MCR work program.
- 4.4 Since January 2018, Planning staff met with Regional staff from other internal departments to provide an introduction to the scope of the MCR. The purpose of these meetings was to seek opportunities for alignment with other related corporate plans and initiatives, and to highlight potential issues.
- 4.5 Since this project will deal with the Regional implementation of updated Provincial Plans and policies, the Region will require timely and meaningful input from the Province at key points in the review process. In this regard, Regional Planning staff met with Provincial staff in March 2018 with regard to their participation in the MCR, and to confirm their commitment to timely and continuous involvement and feedback.
- 4.6 These discussions have served to build enthusiasm for the project, and identify alignments with other complementary Regional initiatives anticipated over the timeframe of the MCR process.

5. Engaging Consultation Process

5.1 A coordinated approach consisting of early and regular consultation with the area

municipalities will be integral to planning for Growth Plan conformity. For example, population and employment growth forecasts and allocations, identifying Strategic Growth Areas, delineating Major Transit Station Areas, and input into the Employment Strategy will be needed.

- 5.2 A robust and comprehensive community consultation program will be integral to this MCR process, and the use of digital engagement tools, including a project website, social media and surveys, and attendance at in-person community events will form part of the MCR engagement strategy.
- 5.3 The following groups are among those who will be consulted as part of the planned outreach program:
 - Area municipal staff;
 - Provincial staff;
 - Conservation Authorities;
 - Staff from other Regional departments;
 - Area municipal councils;
 - Public;
 - Regional Advisory Committees, including but not limited to the Durham Agricultural Advisory Committee (DAAC), Environmental Advisory Committee (DEAC), Active Transportation Committee (DATC), and Regional Roundtable on Climate Change (DRRCC);
 - School boards;
 - First Nations and Metis:
 - Durham Economic Development Partnership, Business Advisory Council Durham (BACD), Spark Centre, etc.;
 - Stakeholders, i.e. landowners, Building Industry and Land Development Association (BILD), and others as required; and
 - Business community, i.e. local Boards of Trade and Chambers of Commerce.
- 5.4 Where appropriate, relevant portions of the MCR public consultation program may be coordinated with other anticipated corporate public consultation initiatives, including future updates to the Water and Wastewater Master Plan, Housing Plan, and the Corporate Strategic Plan.
- 6. Timing for Envision Durham

Legislated Timeframe

- 6.1 The Places to Grow Act, 2005 indicates that official plans must be amended to conform to an applicable growth plan (in this case, the Growth Plan for the Greater Golden Horseshoe, 2017) within three years of the effective date. The Act also provides that the Minister of Municipal Affairs can establish an alternative timeframe for conformity.
- 6.2 To coordinate the timeframe for municipal implementation of the Growth Plan, 2017 with legislated timeframes for implementation of the updated Greenbelt Plan (2017) and ORMCP (2017), the Minister has established July 1, 2022 as the alternative date for upper and single-tier official plans to be brought into conformity with the Growth Plan.
- 6.3 Lower-tier official plans will rely on the direction provided through upper-tier official plans. As a result, the Minister established an alternative date for lower-tier municipal conformity to be within one year of the applicable upper-tier official plan taking effect (i.e. July 1, 2023).

Targeted Timelines

- 6.4 In order to meet the legislated timeframes, it is recommended that Council authorize the commencement the Regional MCR process at this time. Due to the scope of work, the MCR process is anticipated to be completed by early 2022 (refer to Attachment 1 for a schematic timeline of the MCR).
- 6.5 Background technical work, including initial data collection and study preparation, is underway. Consulting assignments, studies and data analysis will take place over the next two years (2018 2019) that will result in the release of Discussion Papers to help inform and solicit public and stakeholder feedback.
- 6.6 Reporting on policy proposals is anticipated by 2020 and, following additional consultations and feedback, a draft ROP is expected to be presented to Council by early 2021. Council adoption and Provincial approval would follow, in advance of the July 2022 conformity target.
- 6.7 The MCR will result in a new ROP with a planning horizon to 2041. A "repeal and replace" approach is planned, given the age of the existing plan, the scope of the update and the suite of policy matters that must be examined. By taking this approach, the Planning Act would not require another statutory review until 10 years after the new ROP comes into effect (i.e. by 2032).

7. Consulting Services and Budgetary Considerations

- 7.1 The majority of the work required to complete the MCR will be undertaken by Regional staff. However, due to the scope of work required for this exercise, consulting services will also be required for specific components including facilitation and online presence services; growth management related studies required to satisfy increased intensification and greenfield density requirements; an employment strategy; and related elements visualization and case studies to demonstrate optimization of the urban land supply.
- 7.2 Through previous Business Planning and Budget processes, funding has been set aside for commencement of the MCR. At present, there is approximately \$500,000 in non-departmental funds available. Additional costs associated with the MCR exercise will be included in future Business Planning and Budget processes.
- 7.3 Any contracts for consultant services will follow the Consultant, Professional and Architectural Services Consulting Procedure, and be the subject of future reports, as required.

8. Conclusion and Next Steps

- 8.1 Initiating "Envision Durham, 2041" will begin the MCR process to replace the existing ROP with a progressive and forward-looking planning vision for the Region to 2041.
- 8.2 The MCR process will update existing ROP policies and initiatives, review relevant emerging land use planning and development issues, and will constitute the Region's Provincial Plan conformity exercise. The Region is expected to review and update the ROP to conform to the amended Provincial Plans by July 2022.
- 8.3 It is recommended that authorization to proceed with the MCR be provided. A copy of this report will also be forwarded to Durham's area municipalities, conservation authorities and the Ministry of Municipal Affairs for their information.

9. Attachments

Attachment #1: Schematic Timeline

Respectfully submitted,

Original signed by

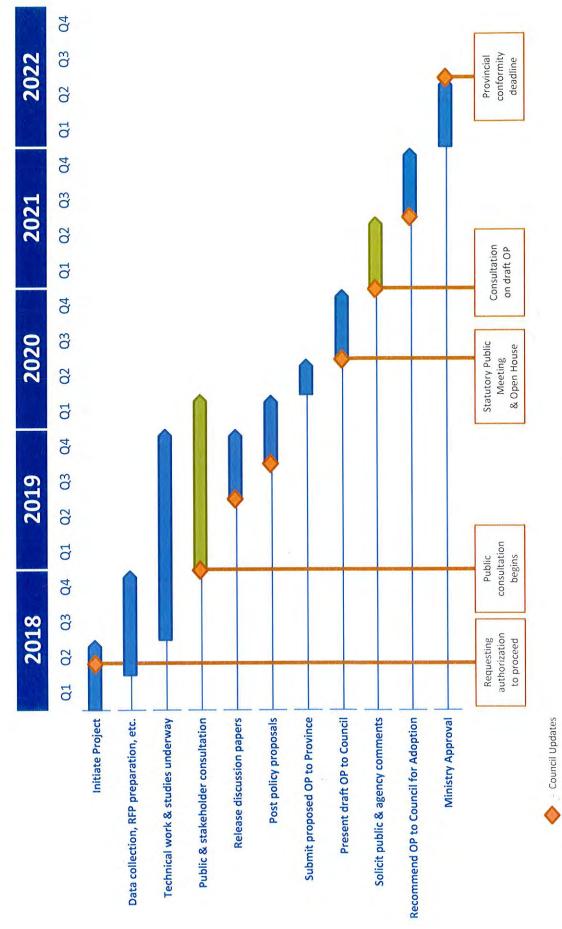
B.E. Bridgeman, MCIP, RPP Commissioner of Planning and Economic Development

Recommended for Presentation to Committee

Original signed by

G.H. Cubitt, MSW Chief Administrative Officer

Fryson Durham - VCR Timeine





Corporate Services Department Legislative Services

C.S. - LA GOLD

Original To:

Copy

April 12, 2018

Ralph Walton, Regional Clerk Region of Durham 605 Rossland Road East Whitby, ON L1N 6A3

Subject: Notice of Motion

Ontario Gaming GTA LP Revenue Sharing

File: A-1400-18

C.C. S.C.C. File The Council of the Corporation of the City of Pickering considered the above matter at a meeting held on April 10, 2018 and adopted the following Notice of Wolfon: Action

Whereas Ontario Gaming GTA LP has now announced that it will proceed with development of the Durham Live entertainment complex and casino in the City of Pickering:

Whereas Durham Live will be a significant tourist destination, will create thousands of jobs in Pickering and will generate significant revenues for the City of Pickering;

Whereas The City of Pickering, by resolution No. 158/12 dated December 10, 2012, committed to revenue sharing regardless of which municipality is selected as the gaming site for the C3 zone;

Whereas The City of Pickering remains committed to an equitable and reasonable arrangement for sharing gaming revenues for the benefit of all Durham Region residents;

Whereas The City of Pickering has publicly proposed that 30 percent of gaming revenues at full build-out of the gaming facility be directed to the Region of Durham, and further proposes that a portion of the said revenue share be directed to Social Housing and/or other Social programs:

Now Therefore The Council of the City of Pickering directs City staff to consult with staff at the Region of Durham and to make recommendations to City Council regarding the terms of a revenue sharing agreement; and

Now Therefore City staff are directed to send a copy of this motion to the Region of Durham and to all Durham Region municipalities.

Should you require further information, please do not hesitate to contact the undersigned at 905.420.4660 extension 2097.

Yours truly

Renée Michaud

(Acting) Deputy Clerk

Copy: Nicole Wellsbury

Director, Legislative & Info Services/Town Clerk

Town of Ajax

65 Harwood Avenue South

Ajax, ON L1S 2H9

Anne Greentree, Municipal Clerk Municipality of Clarington 40 Temperance Street Bowmanville, ON L1C 3A6

Andrew Brouwer, City Clerk City of Oshawa 50 Centre Street South, 5th Floor Rundle Tower Oshawa, ON L1H 3Z7

Christopher Harris, Clerk Town of Whitby 575 Rossland Road East Whitby, ON L1N 2M8

Thom Gettinby, CAO – Clerk Township of Brock P.O. Box 10 1 Cameron Street East Cannington, ON L0E 1E0

Debbie Leroux, Director of Legislative Services/Clerk Township of Uxbridge P.O. Box 190 51 Toronto Street South Uxbridge, ON L9P 1T1

John Paul Newman Township of Scugog P.O. Box 780, 181 Perry Street Port Perry, ON L9L 1A7 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

Report: #2018-COW-89 Date: May 2, 2018

Subject:

Quarter Horse Racing Industry in Durham Region

Recommendation:

That the Committee of the Whole recommends to Regional Council:

- A) That this report be received for information; and
- B) That a letter supporting the quarter horse industry and related businesses be sent to Mr. Bob Broadstock, President of Quarter Racing Owners of Ontario Inc. (QROOI), signed by the Regional Chair, and provided to the Durham Agricultural Advisory Committee (DAAC), for its information.

Report:

1. Purpose

- 1.1 The purpose of this report is to provide further information on the equine and quarter horse racing industries in Durham, as requested by Regional Council at its meeting on April 11, 2018.
- 1.2 This report relates to:
 - i) Council Correspondence CC 06 from the Town of Ajax to the Region of Durham regarding casino revenue sharing;
 - ii) Council Correspondence CC 07 from the Town of Ajax to the Premier of Ontario requesting that any decision with respect to a casino location in the

- C3 Gaming Zone be postponed until after the June 7th provincial election;
- iii) Item 15 of Report #5 of the Committee of the Whole for consideration by Regional Council on April 11, 2018 being the Durham Agricultural Advisory Committee's resolution asking that a letter be provided to support the quarter horse racing industry and related businesses in Durham Region; and
- iv) Item 1 of Unfinished Business being Council Correspondence CC 05, resolution from Clarington Council that supports keeping the slots at Ajax to ensure the continued viability of Ajax Downs and the quarter horse racing industry in Clarington and Durham Region.

2. Background

- 2.1 Quarter horse is the term used to describe a breed that excels at sprinting short distances. The name "quarter horse" comes from the breed's ability to outrun other breeds of race horses in distances of a quarter mile or less.
- 2.2 Picov Downs quarter horse track opened in Ajax in 1969. The facility was renamed Ajax Downs in 2006 with the establishment of the gaming facility and construction of a new state-of-the-art six-furlong racetrack. At present, Ajax Downs is the only facility in Ontario to host quarter horse racing.
- 2.3 The equine industry plays an important role in the Region's economy from both a tourism and economic development perspective. The equine industry enables many secondary businesses that support the infrastructure, such as machinery, crop production, and building materials.
- 2.4 At the 2017 Annual Durham Agricultural Advisory Committee Farm Tour held at Ajax Downs, Mr. Bob Broadstock, President of Quarter Racing Owners of Ontario Inc. (QROOI) provided information regarding the importance of the equine and quarter horse racing industries to the Durham area. Attendees were advised there are over 3,300 horses in Durham Region, on over 330 farms. There are over 10,000 ha (25,000 ac.) of land in production that support the equine industry (oats, hay, and other grains). Mr. Broadstock estimated there is \$56 million in revenue generated from horse racing in Durham, and upwards of 800 jobs tied to the industry. He stated there are 300 farm families in the area that directly depend on the quarter horse racing industry as their main line of business.

3. Ontario Racing Board

- 3.1 Effective December 2017, the former "Board of Ontario Racing" and the "Standardbred Alliance" merged to become the "Ontario Racing Board" (ORB). ORB is an independent, not-for-profit industry organization that will represent all Ontario racetracks and horse racing industry associations in the province with one unified voice. Representation on the ORB from the quarter horse racing industry was a requirement of the Province.
- 3.2 The ORB was created to ensure the sustainability of all three breeds of horse racing in Ontario, i.e. thoroughbred, standardbred, and quarter horse.

4. Provincial Funding for the Horse Racing Industry

- 4.1 On March 23, 2018, the Province through the Ontario Lottery and Gaming Corporation committed to a new short-term transition fund (1-3 years), and a long-term funding agreement with the horse racing sector to support jobs in rural Ontario, and strengthen local economies across the province.
- 4.2 Beginning April 1, 2018 through to March 2020, the Province has committed to assisting all Ontario horse racetracks, including those tracks financially dependent on gaming operations, while they transition from a business model that involves support from gaming operations. Ajax Downs will be eligible for this funding.
- 4.3 Commencing on April 1, 2019, the new long-term funding agreement will provide the horse race industry (all types) with up to \$105 million a year for 19 years. Again, Ajax Downs would be eligible for this funding.
- 4.4 Beginning in the summer of 2018, the Ontario Ministry of Agriculture Food and Rural Affairs (OMAFRA) is providing \$2 million annually over three years to support race track operators, and encourage sustainability in their operations, through education and business planning programs, (the Racetrack Innovation Sustainability Fund).
- 4.5 OMAFRA is also providing \$1 million annually, on an ongoing basis, in support of the Quarter Racing Owners of Ontario Inc. through the Enhanced Horse Improvement Program. This funding supports the breeding of Ontario quarter racehorses.
- 4.6 Through these funding programs, the Province has signaled a commitment to maintain the horse racing industry in Ontario. It is understood that Ajax Downs could benefit from this financial support.

5. Ontario Gaming GTA LP

- 5.1 Ontario Gaming GTA LP (a partnership between the Great Canadian Gaming Corporation and Brookfield Business Partners) is the casino and hospitality operator that was awarded the contract to operate a gaming facility within the C3 Gaming Zone that encompasses Pickering and Ajax. A decision on where to establish a new casino in this zone is understood to be that of the operator, not the Province. Should Ontario Gaming GTA LP establish a new casino in Pickering, horse racing is not included in the overall proposal at present.
- 5.2 As Mr. Broadstock stated at the March 21, 2018 Regional Council meeting, quarter horse racing at Ajax Downs could continue without the slots provided funding comes from another source.

6. Conclusion

6.1 For nearly 50 years, the quarter horse racing industry and related businesses have been significant contributors to the rural and agricultural economy of Durham Region. At its meeting on March 20, 2018, the Durham Agricultural Advisory Committee passed a resolution requesting that the Region send a letter of support to the quarter horse racing industry. If directed by Council by the approval of Recommendation B to this report, staff will prepare a letter to Mr. Broadstock expressing Council's support for the quarter horse racing industry and related businesses in Durham, for signature by the Regional Chair.

Respectfully submitted,

Original signed by

B.E. Bridgeman, MCIP, RPP Commissioner of Planning and Economic Development

Recommended for Presentation to Committee

Original signed by

G.H. Cubitt, MSW Chief Administrative Officer