

Town of Newmarket Council Information Package

Index of Attachments

Circulation Date: May 25, 2018

Note: If a Member of Council wishes to include any of the enclosed documents on a future Council or Committee of the Whole agenda, please email Legislative Services at clerks@newmarket.ca.

General Correspondence Items

1. Notice of Passing of an Amendment to the Official Plan Town of East Gwillimbury May 2, 2018

2. CN Intermodal Update

Town of Oakville May 11, 2018

- 3. Overview and Implications of the Province's "Protecting Water for Future Generations: Growing the Greenbelt in the Outer Ring" Policy Proposal Town of Halton Hills
 May 15, 2018
- 4. Central Lake Ontario, Toronto Region and Credit Valley Source Protection Plan and Toronto & Region Assessment Report Amendments
 Region of York
 May 18, 2018
- 5. Corporate Asset Management Plan Region of York May 18, 2018
- 6. Resolution re: Bill 16, Respecting Municipal Authority over Landfilling Sites

Municipality of Killarney May 23, 2018

Proclamations and Lighting Requests

Request Name	Type of Request	Proclamation Date	Lighting Date
Cycle Month in Newmarket Link: Additional Information	Proclamation	June 2018	N/A
National Deafblind Awareness Month	Proclamation	June 2018	N/A
Pollinator Week	Proclamation and Lighting	June 18 – 24, 2018	Friday, June 22, 2018
York Region Pride Week	Proclamation and Lighting	June 8 – 17, 2018	Saturday, June 16, 2018



NOTICE OF THE PASSING

OF A BY-LAW TO ADOPT AMENDMENT NO. 4-2018 TO THE OFFICIAL PLAN FOR THE TOWN OF EAST GWILLIMBURY

TAKE NOTICE that the Council of the Corporation of the Town of East Gwillimbury passed By-law No. **2018-035** on the **17**th **day of April, 2018** under Section 17 and 21 of The Planning Act.

By-law No. 2018-035 is a by-law to adopt Amendment No. 4-2018 to the Official Plan for the Town of East Gwillimbury Planning Area. The purpose of this Amendment to the Town of East Gwillimbury Official Plan is to amend the Town's Official Plan as it pertains to the subject lands in order to facilitate the development of a community along the Green Lane Corridor.

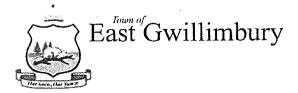
A complete copy of the by-law is attached. To view the complete copy of Amendment No. 4-2018 please visit www.eastgwillimbury.ca/greenlane

TAKE NOTICE THAT ANY PERSON OR PUBLIC BODY WILL BE ENTITLED TO RECEIVE NOTICE OF THE DECISION OF THE APPROVAL AUTHORITY IF A WRITTEN REQUEST TO BE NOTIFIED OF THE DECISION (INCLUDING THE PERSON'S OR PUBLIC BODY'S ADDRESS) IS MADE TO THE APPROVAL AUTHORITY. REQUESTS SHOULD BE SENT TO THE REGIONAL MUNICIPALITY OF YORK, COMMISSIONER OF PLANNING, 17250 YONGE STREET, BOX 147, NEWMARKET, ONTARIO, L3Y 6ZI.

Dated at the Town of East Gwillimbury this 2nd day of May, 2018.

"Original signed by"

Fernando Lamanna, Municipal Clerk



THE CORPORATION OF THE TOWN OF EAST GWILLIMBURY

BY-LAW NUMBER 2018-035

A By-law to Adopt Amendment No. 4-2018 to the Official Plan of the East Gwillimbury Planning Area [Green Lane Secondary Plan]

The Council of the Corporation of the Town of East Gwillimbury, in accordance with the provisions of the <u>Planning Act</u>, R.S.O. 1990, hereby enacts as follows:

- 1. Amendment No. 4-2018 to the Official Plan of the East Gwillimbury Planning Area, consisting of the attached Part Three is hereby adopted.
- 2. The Clerk is hereby authorized and directed to inform The Regional Municipality of York of the aforementioned Amendment No. 4-2018 to the Official Plan of the East Gwillimbury Planning Area.
- 3. This By-law shall come into force and take effect on the day of the final passing thereof.

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ENACTED AND PASSED THIS 17th DAY OF April, 2018.

INCOMING MAIL

MAY 0 3 2018



May 11, 2018

Subject: CN Intermodal Update

At its meeting on April 30, 2018, Oakville Town Council approved the following motion:

WHEREAS under the Municipal Act, Ontario municipalities have the authority and responsibility to advance and protect the "economic, social and environmental well-being of the municipality" and the "health, safety and well-being of persons";

WHEREAS the Provincial Government has designated Ontario municipalities to have responsibility to establish official plans that meet or exceed provincial standards for managing and directing physical change and effects on the social, economic, built and natural environment;

WHEREAS CN Rail has declared that the Province of Ontario and the Halton Municipalities (the City of Burlington, the Town of Halton Hills, the Town of Milton and the Town of Oakville) and Conservation Halton have no regulatory role whatsoever with respect to a proposed truck/rail development that will have a direct impact on the economic, social and environmental well-being of the municipality and health, safety and well-being of residents;

WHEREAS the Halton Municipalities and Conservation Halton recognize that railways are a matter of federal jurisdiction, but assert that truck-rail developments have non-rail aspects that engage multiple areas of provincial and municipal government regulatory responsibility;

WHEREAS the Halton Municipalities and Conservation Halton have commenced a Court Application to confirm their legitimate regulatory role in respect of the CN development;

WHEREAS CN's position that its proposed truck-rail development falls exclusively under federal jurisdiction, if upheld, would create a regulatory gap that would prevent the Province of Ontario, the Halton Municipalities and Conservation Halton from discharging their statutory responsibilities, and leave CN Rail, a for-profit company, to self-regulate on matters that engage provincial and municipal responsibilities; and

May 11, 2018

Subject: CN Intermodal Update

WHEREAS irrespective of the merits of CN's proposed development, CN's interpretation of jurisdiction over this development, if upheld, would be detrimental to all provinces and municipalities that contain existing or proposed developments that engage matters of federal, provincial and municipal regulatory interest;

NOW THEREFORE BE IT RESOLVED:

- 1. THAT the Town of Oakville endorses the principles that:
 - a. there must be a cooperative approach to all developments that engage federal, provincial and municipal regulatory matters.
 - b. the existence of federal regulation over a development does not preclude and may require provincial and municipal regulation of the proposed development to avoid regulatory gaps.
- 2. THAT the Town of Oakville calls on the Government of Ontario to join the court Application of the Halton Municipalities.

Should you have any questions regarding this matter or should you require any additional information, please contact me at 905-845-6601, extension 2003, or email vicki.tytaneck@oakville.ca.

Yours truly,

Vicki Tytaneck Town Clerk

c. The Honourable Kathleen Wynne

The Honourable Bill Mauro, Minister of Municipal Affairs

The Honourable Yasir Naqvi, Attorney General of Ontario

The Honourable Karina Gould, MP, Burlington

The Honourable Lisa Raitt, MP, Halton

The Honourable John Oliver, MP, Oakville

The Honourable Pam Damoff, MP, Oakville-North Burlington

The Honourable Michael Chong, MP, Wellington-Halton Hills

The Honourable Eleanor McMahon, MPP Burlington

Bill Mauro, Minister of Municipal Affairs

The Honourable Indira Naidoo-Harris, MPP, Halton

The Honourable Kevin Flynn, MPP, Oakville

Ted Arnott, MPP, Wellington-Halton Hills

Association of Municipalities of Ontario

Andrea Horwath, Leader, Ontario New Democratic Party Doug Ford, Leader, Ontario Progressive Conservative Party

Mike Schreiner, Leader, Green Party of Ontario

May 11, 2018

Subject: CN Intermodal Update

Federation of Canadian Municipalities (FCM)
Association of Municipalities of Ontario (AMO)
Large Urban Municipal Caucus of Ontario (LUMCO)
Mayors and Regional Chairs Caucus of Ontario (MARCO)
Rural Ontario Municipal Association (ROMA)
Northwestern Ontario Municipal Association (NOMA)
Federation of Northern Ontario Municipalities (FNOM)
Conservation Authority of Ontario
All Ontario Municipalities



May 15, 2018

Premier Kathleen Wynne Legislative Building Queen's Park Toronto, ON M7A 1A1

Dear Premier Kathleen Wynne;

Re: Report No. ADMIN-2018-0017 – Overview and Implications of the Province's "Protecting Water for Future Generations: Growing the Greenbelt in the Outer Ring" Policy Proposal

Please be advised that Council for the Town of Halton Hills at its meeting of Monday, My 7, 2018, adopted the following Recommendation:

Recommendation No. GC-2018-0036 (Resolution No. 2018-0081)

THAT Report No. ADMIN-2018-0017, dated April 20, 2018, regarding the province's "Protecting Water for Future Generations: Growing the Greenbelt in the Outer Ring" policy proposal, and potential implications on the Town of Halton Hills, be received;

AND FURTHER THAT the Province be informed that the Town of Halton Hills supports the potential Greenbelt expansion within the outer ring of the study area as defined by the Province;

AND FURTHER THAT the Province be requested not to expand the study area for Greenbelt expansion to include the whitebelt lands within the inner ring, nor grow the Greenbelt by incorporating any whitebelt lands located within the Town of Halton Hills as doing so would significantly restrict and undermine the Town of Halton Hills' ability to carry out local community planning, growth management and economic development initiatives, and be premature in light of the recently initiated Regional Official Plan Review (ROPR);

AND FURTHER THAT the Province be informed that the Town of Halton Hills' Council does not support the Region of Halton motion that was passed on February 21, 2018 requesting an extension of the Greenbelt study area to include the whitebelt lands;

AND FURTHER THAT, in keeping with the requirements of the Greenbelt Act (2005), the Province consult with the Town of Halton Hills, public and other stakeholders, on any proposed amendments to the Greenbelt Plan and its boundary, including any potential addition of the whitebelt lands into the Greenbelt, prior to any such changes being made;

AND FURTHER THAT a copy of this report and associated recommendation be forwarded to the Premier of Ontario, Minister of Municipal Affairs, Minister of Economic Development and Growth, Halton Region, Halton Hills Chamber of Commerce, Building Industry and Land Development Association, Greater Golden Horseshoe municipalities, Association of Municipalities of Ontario, Environmental Defense, Friends of the Greenbelt Foundation, Ontario Greenbelt Association, Ontario Nature, Earth Roots, Eco Spark and Save the Oak Rides Moraine (STORM).

CARRIED

As per the above recommendation enclosed is a copy of Report No. ADMIN-2018-0017.

If you have any questions, please contact Damian Szybalski, Manager of Economic Development, Innovation and Culture for the Town of Halton Hills at 905-873-2601 ext. 2289 or damians@haltonhills.ca.

Yours truly,

Renée Brown

Deputy Clerk - Legislation & Elections

c. Ontario Minister of Municipal Affairs

Ontario Minister of Economic Development and Growth

Building Industry and Land Development Association

Association of Municipalities of Ontario (AMO)

Environmental Defense

Friends of the Greenbelt Foundation

Ontario Greenbelt Association

Ontario Nature

Earth Roots

Eco Spark

Save the Oak Ridges Moraine (STORM)

Halton Region (via email)

Halton Hills Chamber of Commerce (via email)

City of Burlington (via email)

Town of Milton (via email)

Town of Oakville (via email)

Town of Ajax (via email)

Town of Aurora (via email)

City of Brampton (via email)

City of Barrie (via email)

Brant County (via email)

Township of Brock (via email)

Town of Caledon (via email)

Municipality of Clarington (via email)

Durham Region (via email)

Town of East Gwillimbury (via email)

Town of Georgina (via email)

Township of King (via email)

City of Markham (via email)

City of Mississauga (via email)

Town of Newmarket (via email)

City of Oshawa (via email)

Peel Region (via email)

City of Pickering (via email)

Town of Richmond Hill (via email)

Township of Scugog (via email)

City of Toronto (via email)

Township of Uxbridge (via email)

York Region (via email)

City of Vaughan (via email)

Town of Whitchurch-Stouffville (via email)

Town of Whitby (via email)

Brantford (via email)

Dufferin County (via email)

Guelph (via email)

Haldimand County (via email)

Kawartha Lakes (via email)

Niagara Region (via email)

Northumberland County (via email)

Orillia (via email)

Peterborough County (via email)

Simcoe County (via email)

Waterloo Region (via email)

Wellington County (via email)



REPORT

REPORT TO: Mayor Bonnette and Members of Council

REPORT FROM: John Linhardt, Commissioner, Planning and Sustainability

Damian Szybalski, Manager of Economic Development.

Innovation and Culture

DATE: April 20, 2018

REPORT NO.: ADMIN-2018-0017

RE: Overview and Implications of the Province's "Protecting Water for

Future Generations: Growing the Greenbelt in the Outer Ring"

Policy Proposal

RECOMMENDATION:

THAT Report No. ADMIN-2018-0017, dated April 20, 2018, regarding the province's "Protecting Water for Future Generations: Growing the Greenbelt in the Outer Ring" policy proposal, and potential implications on the Town of Halton Hills, be received;

AND FURTHER THAT the Province be informed that the Town of Halton Hills supports the potential Greenbelt expansion within the outer ring of the study area as defined by the Province;

AND FURTHER THAT the Province be requested not to expand the study area for Greenbelt expansion to include the whitebelt lands within the inner ring, nor grow the Greenbelt by incorporating any whitebelt lands located within the Town of Halton Hills as doing so would significantly restrict and undermine the Town of Halton Hills' ability to carry out local community planning, growth management and economic development initiatives, and be premature in light of the recently initiated Regional Official Plan Review (ROPR);

AND FURTHER THAT the Province be informed that the Town of Halton Hills' Council does not support the Region of Halton motion that was passed on February 21, 2018 requesting an extension of the Greenbelt study area to include the whitebelt lands;

AND FURTHER THAT, in keeping with the requirements of the Greenbelt Act (2005), the Province consult with the Town of Halton Hills, public and other stakeholders, on any proposed amendments to the Greenbelt Plan and its boundary, including any potential addition of the whitebelt lands into the Greenbelt, prior to any such changes being made;

AND FURTHER THAT a copy of this report and associated recommendation be forwarded to the Premier of Ontario, Minister of Municipal Affairs, Minister of Economic Development and Growth, Halton Region, Halton Hills Chamber of Commerce, Building Industry and Land Development Association, Greater Golden Horseshoe municipalities, Association of Municipalities of Ontario, Environmental Defense, Friends of the Greenbelt Foundation, Ontario Greenbelt Association, Ontario Nature, Earth Roots, Eco Spark and Save the Oak Rides Moraine (STORM).

BACKGROUND:

The purpose of this report is to advise Council of the potential impacts of the Province's "Protecting Water for Future Generations: Growing the Greenbelt in the Outer Ring" policy proposal, as well as the recently passed motion at Halton Region related to this matter.

On December 7, 2017, the Province posted the "Protecting Water for Future Generations: Growing the Greenbelt in the Outer Ring" policy proposal on the Environmental Registry for a 90 day comment period, ending March 7, 2018.

The Ministry of Municipal Affairs was seeking input on a study area for a potential Greenbelt expansion to protect water resources in the outer ring of the Greater Golden Horseshoe (Appendix 1). The study area is based on locations that have a high concentration of important water features that are under pressure from current or forecasted urban development. The consultation sought input on the (i) Province's approach to identifying important water features; (ii) the process followed for mapping the study area; and (iii) other factors that should be considered for mapping a proposed Greenbelt boundary (e.g. accommodating growth).

The study area for potential future Greenbelt expansion is made up of seven features and areas focused in Waterloo Region, Brant County, Wellington County, Dufferin County and Simcoe County. Importantly, the study area does not include Halton Region. The study area is not to be interpreted as a proposed Greenbelt boundary. The consultation did not include determining a proposed Greenbelt boundary. Consideration of the study area builds on the recently completed Coordinated Land Use Planning Review. The latter led to updates of the Growth Plan, Oak Ridges Moraine Conservation Plan, Greenbelt Plan and the Niagara Escarpment Plan (released in May 2017). The importance of protecting water resources and the expansion of the Greenbelt to achieve this was a key recommendation of the Advisory Panel for the Review.

A map of the study area for the potential expansion of the Greenbelt is attached as Appendix 1. More information is available at: www.ontario.ca/greenbelt

In February 2018, Halton Region's Planning and Public Works Committee considered report LPS20-18 (dated February 14, 2018) regarding "Protecting Water for Future Generations and Growing the Greenbelt in the Outer Ring". Among other things, the report noted that "Halton Region is not planning on providing comments on this initiative given its geographic location...This initiative does not apply to Halton Region." The report also noted that while the Greenbelt Plan allows for the consideration of municipal requests to grow the Greenbelt, such requests must be accompanied by a Council resolution which is based on consultation with key stakeholders, indigenous groups, municipalities and the public.

On February 21, 2018, Halton Region Council passed a motion urging the Province to extend the study area for Greenbelt expansion to include the whitebelt lands (lands located between the existing Greenbelt Plan Protected Countryside boundary and Halton's settlement area boundaries) within the inner ring (Appendix 2). The motion also called on the Province to incorporate appropriate whitebelt lands within the inner ring to protect freshwater and natural heritage features. The motion noted that the current study area for Geenbelt expansion had omitted the whitebelt lands (lands outside of the Greenbelt and urban settlement areas) and that these lands are subject to development pressures. As outlined below, due to significant concerns with the motion, the Region's motion was not supported by representatives of Town Council. In a letter to Premier Kathleen Wynne, dated March 5, 2018, Mayor Bonnette expressed the Town's concerns with the Region's motion and requested that the whitebelt area not be considered for any potential Greenbelt expansion (Appendix 3).

Halton Region has begun the next Regional Official Plan Review (ROPR) to evaluate current Official Plan policies, meet current provincial policies, and achieve Regional Council and community goals. Among other matters, the review will include an in-depth study of growth management, and urban, rural, agricultural and natural heritage systems. A comprehensive Public Engagement Strategy is to be implemented. The project is to be completed by spring 2020. Regarding urban systems and growth management, the ROPR will consider ways of accommodating 220,000 additional residents and 80,000 jobs between 2031 and 2041.

COMMENTS:

Implications for the Town of Halton Hills

Although the Town supports a potential Greenbelt expansion within the original study area (outer ring), as defined by the Province, the Town does not support the Regional motion requesting the inclusion of whitebelt lands within the inner ring, as doing so would have significant negative impacts on the Town, including:

(i) Lack of Public Engagement

Public engagement is a key priority for Town Council. Recognizing this, a citizen taskforce was established to create the Public Engagement Charter highlighting the Town's commitment to community engagement. Halton Region's motion and any potential decision to expand the Greenbelt into the whitebelt area does not conform to the Town's Public Engagement Charter as no resident engagement, nor appropriate notification, has occurred.

(ii) Premature Request

The Region's motion is premature as it preempts the Region's own Municipal Comprehensive Review which will include a growth management strategy up to 2041. Expanding the Greenbelt into the whitebelt lands would place significant limitations, undermine the direction of the recently initiated Halton Region Official Plan Review Process, by altering the review's potential outcomes and do so in the absence of public engagement and the requisite studies, including demographic and economic factors. The ability to expand urban boundaries if necessary to accommodate future growth and economic development opportunities would be severely restricted by precluding a large area for potential future development.

(ii) Undermine Municipal Growth Management

Although it is too early to determine the amount of population and employment growth that will be allocated to Halton Hills, including the whitebelt lands in any Greenbelt expansion would severely restrict the Town's long-term planning options and development patterns for any future population and employment beyond 2031, thereby undermining Halton Hills' financial and economic health. As part of Town Council's Strategic Plan process which identifies Council's priorities for the current term and drives subsequent departmental business plans and workplans, Council confirmed planning for growth on the basis of a moderate scale and pace of growth.

(iv) Economic Prosperity

The Premier Gateway, generally located between Steeles Avenue and Highway 401 and in proximity to the 401/407 interchange along the Town's southern boundary, is Halton Hills' strategic employment area, offering easy access to major markets. The Premier Gateway continues to attract significant investment in new industrial and commercial development, including about \$230 million in private sector investment within the past 12-16 months. These investments are generating employment and contributing to economic prosperity, benefiting Halton Hills as well as the broader GTA.

The Town is also commencing an Employment Land Needs Study to determine if any additional employment lands to 2041 are required in order to support the Town's assessment base and generate local employment. Results of this study will be incorporated into Halton Region's Municipal Comprehensive Review. In addition, with

the view to protect lands for future employment, the Town's and Halton Region's Official Plans identify "Future Strategic Employment Areas" which would be adversely impacted if the whitebelt were included in the Greenbelt.

(v) Duplication

Lands within the whitebelt are already protected from development and subject to more restrictive planning policies. Adding these lands to the Greenbelt would add an unnecessary additional layer of policy complexity.

RELATIONSHIP TO STRATEGIC PLAN:

The Strategic Plan sets out Council's strategic priorities for the current term. The potential expansion of the Greenbelt into the whitebelt lands would have significant implications on several Council priorities, which need to be assessed through detailed planning and public engagement, including:

- Municipal Service Delivery: Effective, efficient and economical delivery of the Town's existing services.
- Financial Sustainability: Determine the fiscal impacts of potential future growth to 2041.
- Planning for Growth: Actively participate in the Regional Official Plan review on the basis of a moderate scale and pace of growth to 2041 for Halton Hills.
- Communications: Continue to provide timely, transparent communications with residents and businesses owners.

FINANCIAL IMPACT:

An in-depth financial and economic analysis is required to assess and fully understand the short and long-term financial and economic development impacts associated with any potential inclusion of the whitebelt lands in the Greenbelt. These impacts have not been considered in passing the Regional motion.

CONSULTATION:

This report has been prepared jointly between the Economic Development, Innovation and Culture division and the Planning and Sustainability Department

PUBLIC ENGAGEMENT:

There has been no public engagement by the Town or Halton Region respecting expansion of the Greenbelt within Halton Hills.

SUSTAINABILITY IMPLICATIONS:

The Town is committed to implementing our Community Sustainability Strategy, Imagine Halton Hills. Doing so will lead to a higher quality of life.

The recommendation outlined in this report advances the Strategy's implementation.

This report supports all four pillars of Sustainability and in summary the alignment of this report with the Community Sustainability Strategy is Excellent.

COMMUNICATIONS:

A copy of this report and associated recommendation will be forwarded to key stakeholders as per the recommendation of this report, including to the Premier of Ontario, Minister of Municipal Affairs, Minister of Economic Development and Growth, Halton Hills Chamber of Commerce and Halton Region.

CONCLUSION:

The Town supports provincial efforts to protect water resources. However, any potential expansion of the Greenbelt into the whitebelt lands within the Town of Halton Hills will have significant adverse impacts on the Town's ability to determine long-term planning and economic development opportunities for these lands. Precluding development within these lands at this time by placing them within the Greenbelt is premature in light of the recently initiated ROPR process as it would cause a fundamental change in the consideration of where any future growth could be allocated to Halton Hills, and if any such growth could be allocated to the Town.

Reviewed and Approved by,

John Linhardt, Commissioner of Planning and Sustainability

Damian Szybalski, Manager of Economic Development, Innovation & Culture

Brent Marshall, CAO

Appendix 1 to Report ADMIN-2018-0017 Study Area for Potential Greenbelt Expansion

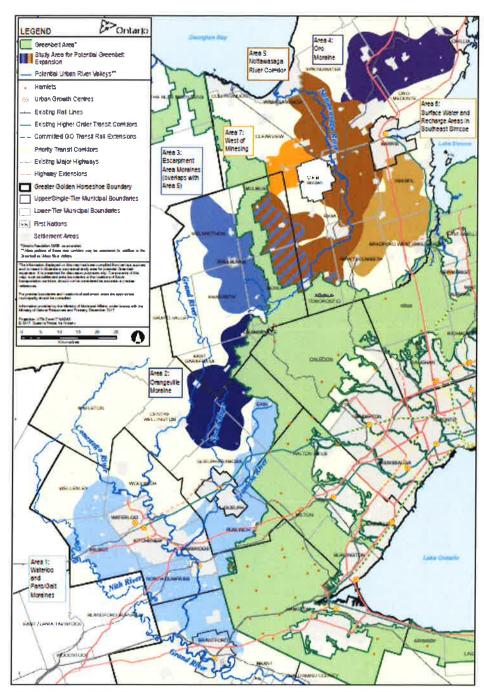


Figure 4: Study Area for Potential Greenbelt Expansion

Source: www.ontario.ca/greenbelt

Appendix 2 to Report ADMIN-2018-0017 Halton Region Council Resolution – February 21, 2018

Planning and Public Works Committee Report No. 02-18

Motion to Amend – Item No. 2

Moved by: Rob Burton Seconded by: Allan Elgar

THAT Item No. 2 appearing in Planning and Public Works Committee Report No. 02-18, Report No. LPS20-18 - Protecting Water for Future Generations: Growing the Greenbelt in the Outer Ring, be amended as follows:

WHEREAS the Greenbelt is an integral component of land use planning in the Greater Golden Horseshoe, complementing the Growth Plan to encourage smart planning, the reduction of sprawl, protection of natural and hydrological features and agricultural lands; and

WHEREAS the Province's Advisory Panel chaired by David Crombie recommended that the Greenbelt grow to address the protection of areas of critical hydrological significance, such as key headwaters; and

WHEREAS the Province's current study area for Greenbelt expansion has prematurely omitted areas under the most direct threat of development, known as the 'whitebelt' which is neither in the Greenbelt nor in the urban settlement area that contain such critical areas; and

WHEREAS a fulsome study of all potential Greenbelt expansion areas should be undertaken as part of this review in order to make the best, most consistent land use planning decisions across the Greater Golden Horseshoe:

THEREFORE BE IT RESOLVED.

THAT the Region of Halton commend the province for continued action toward growing the Greenbelt through the current consultation process; and

THAT the province be strongly urged to extend the study area for Greenbelt expansion to include the whitebelt lands within the inner ring, lands that are the most immediately vulnerable to development in the province; and

THAT that the province expeditiously grow the Greenbelt by incorporating appropriate whitebelt lands within the inner ring to protect our limited freshwater and natural heritage features; and

THAT this resolution be distributed to the Premier of Ontario, the Minister of

Municipal Affairs, all Greater Golden Horseshoe municipalities, the Association of Municipalities of Ontario, Environmental Defence, Friends of the Greenbelt Foundation, the Ontario Greenbelt Association, Ontario Nature, Earth Roots, Eco Spark, and Save the Oak Ridges Moraine (STORM).

Appendix 3 to Report ADMIN-2018-0017 Letter to the Premier of Ontario, Kathleen Wynne

March 5, 2018



Town of Haiton Hills Office of the Mayor Rick Bonnette

Kathleen Wynne, Premier Legislative Building Queen's Park Toronto, Ontario M7A 1A1

Re: Protection of Municipally-Designated 'Whitebelt' Areas

Dear Premier Wynne:

I am writing to express my concern about a recent motion that was passed by Halton Regional Council concerning designation of lands within the Halton Hills boundary. As you can appreciate, upholding a municipality's rights to plan and develop for the purposes of managing growth in a responsible, sustainable and strategic manner that best meets the needs of its communities is a fundamental role of the local planning authority.

Further, please know that public engagement is a tenet of Halton Hills Council and to this end I have led a citizen task force that resulted in the creation of a Public Engagement Charter. This document was approved by Council and speaks to the municipality's commitment to engaging its citizens in a transparent and participatory manner with appropriate notification to residents and specific vested interest parties on issues as appropriate. I would ask that any consideration by your government of the motion passed by Halton Regional Council would allow such time for a proper and thorough consultation with our Halton Hills residents.

To be clear, the Town of Halton Hills (the Town) supports the potential greenbelt expansion study area as currently defined by the Province. The Town does not support the Regional resolution and the request to extend the study area for Greenbelt expansion to include the 'whitebelt' lands within the inner ring until the appropriate analysis and review is completed. Further, the Region's resolution pre-empts its own Municipal Comprehensive Review which will include the growth management strategy up to 2041.



Premier Kathleen Wynne

Page 2

Your consideration in denying the request for Greenbelt expansion into Halton Hills lands is appreciated and failing this direction, I respectfully request that the municipality be allowed the time to consult with its residents and that these findings be included in the Province's consideration of this matter.

Sincerely,

Rick Bonnette, Mayor

C.

Eco Spark

Minister of Municipal Affairs
Minister of Economic Development and Growth
Members of Halton Hills Council
Greater Golden Horseshoe Municipalities
Association of Municipalities of Ontario
Halton Hills Chamber of Commerce
Environmental Defence
Friends of the Greenbelt Foundation
Ontario Greenbelt Association
Ontario Mature
Earth Roots

Save the Oaks Ridges Moraine (STORM)
Building industry and Land Development Association



Regional Clerk's Office Corporate Services

May 18, 2018

Ms. Lisa Lyons
Director of Legislative Services/Town Clerk
Town of Newmarket
395 Mulock Drive, P.O. Box 328
Newmarket, ON L3Y 4X7

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Dear Ms. Lyons:

Re: Central Lake Ontario, Toronto Region and Credit Valley Source Protection Plan and Toronto & Region Assessment Report Amendments

Regional Council, at its meeting held on May 17, 2018, adopted the following recommendations of Committee of the Whole regarding "Central Lake Ontario, Toronto Region and Credit Valley Source Protection Plan and Toronto & Region Assessment Report Amendments":

- 1. Council endorse the proposed amendments to the Central Lake Ontario, Toronto Region and Credit Valley Source Protection Plan and Toronto & Region Assessment Report provided in Attachment 1.
- 2. Council approve the appointment of Colleen Barfoot as a Risk Management Inspector under Part IV of the *Clean Water Act, 2006*.
- 3. The Regional Clerk issue a certificate of appointment bearing the clerk's signature to the Risk Management Inspector.
- 4. The necessary bylaw be presented to Council in May 2018 to bring the appointment into effect.
- 5. The Regional Clerk circulate this report and attachment to Clerks of the local municipalities, Chair, South Georgian Bay Lake Simcoe Source Protection Committee, Chair, Credit Valley, Toronto Region and Central Lake Ontario Source Protection Committee, and Director Source Protection Programs Branch, Ministry of the Environment and Climate Change.

A copy of Clause 9 of Committee of the Whole Report No. 8 is enclosed for your information.

Please contact Laura McDowell, Director, Environmental Promotion and Protection, Environmental Services at 1-877-464-9675 ext. 75077 if you have any questions with respect to this matter.

Sincerely,

Christopher Raynor Regional Clerk

/C. Clark Attachments



Clause 9 in Report No. 8 of Committee of the Whole was adopted, without amendment, by the Council of The Regional Municipality of York at its meeting held on May 17, 2018.

9

Central Lake Ontario, Toronto Region and Credit Valley Source Protection Plan and Toronto & Region Assessment Report Amendments

Committee of the Whole recommends adoption of the following recommendations contained in the report dated April 18, 2018 from the Commissioner of Environmental Services:

- 1. Council endorse the proposed amendments to the Central Lake Ontario, Toronto Region and Credit Valley Source Protection Plan and Toronto & Region Assessment Report provided in Attachment 1.
- 2. Council approve the appointment of Colleen Barfoot as a Risk Management Inspector under Part IV of the *Clean Water Act, 2006*.
- 3. The Regional Clerk issue a certificate of appointment bearing the Clerk's signature to the Risk Management Inspector.
- 4. The necessary bylaw be presented to Council in May 2018 to bring the appointment into effect.
- 5. The Regional Clerk circulate this report and attachment to Clerks of the local municipalities, Chair, South Georgian Bay Lake Simcoe Source Protection Committee, Chair, Credit Valley, Toronto Region and Central Lake Ontario Source Protection Committee, and Director Source Protection Programs Branch, Ministry of the Environment and Climate Change.

Report dated April 18, 2018 from the Commissioner of Environmental Services now follows:

1. Recommendations

It is recommended that:

- Council endorse the proposed amendments to the Central Lake Ontario, Toronto Region and Credit Valley Source Protection Plan and Toronto & Region Assessment Report provided in Attachment 1.
- 2. Council approve the appointment of Colleen Barfoot as a Risk Management Inspector under Part IV of the *Clean Water Act, 2006*.
- 3. The Regional Clerk issue a certificate of appointment bearing the clerk's signature to the Risk Management Inspector.
- 4. The necessary bylaw be presented to Council in May 2018 to bring the appointment into effect.
- 5. The Regional Clerk circulate this report and attachment to Clerks of the local municipalities, Chair, South Georgian Bay Lake Simcoe Source Protection Committee, Chair, Credit Valley, Toronto Region and Central Lake Ontario Source Protection Committee, and Director Source Protection Programs Branch, Ministry of the Environment and Climate Change.

2. Purpose

This report seeks Council endorsement of the proposed changes to the Central Lake Ontario, Toronto Region and Credit Valley (CTC) Source Protection Plan and Toronto & Region Assessment Report to simplify policy implementation for both York Region and local municipalities. The Toronto Region Source Protection Authority will include council endorsements from the Region and local municipalities in their submission package to the Ministry of the Environment and Climate Change (Ministry).

This report also seeks approval of appointment of Colleen Barfoot as Risk Management Inspector.

3. Background and Previous Council Direction

Source Water Protection program protects drinking water

Source Water Protection is a key component of the multi-barrier approach used by York Region to ensure clean and safe drinking water. York Region is located within the jurisdiction (or the area) of two Source Protection Authorities as shown in Figure 1. Assessment reports completed by the Source Protection Authorities identified:

- Vulnerable areas including wellhead protection areas, intake protection zones, significant groundwater recharge areas and highly vulnerable aguifers.
- Potential threats to drinking water, ranked as low, moderate or significant.

Source Protection Plan policies require action by municipalities

The South Georgian Bay Lake Simcoe Source Protection Plan came into effect on July 1, 2015, and the CTC Source Protection Plan came into effect on December 31, 2015. Both plans contain policies that must be implemented by the Region and local municipalities to manage existing and future threats to protect drinking water quality and quantity.

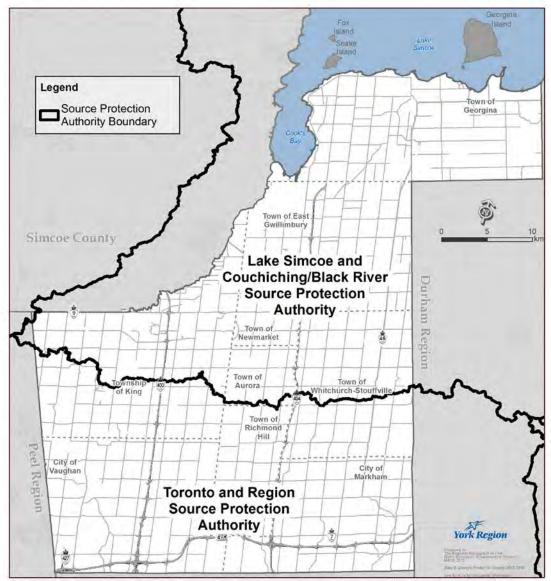
Source Protection Plan implementation on track in York Region

As detailed in the sixth annual Source Protection Annual Report (2017 Report on Source Water Protection Implementation) provided to Council in January, York Region is among the leading agencies in the province for Source Protection implementation.

Central Lake Ontario, Toronto Region and Credit Valley Source Protection

Plan and Toronto & Region Assessment Report Amendments
Figure 1

Figure 1
York Region's Two Source Protection Authorities



Good environmental stewardship has resulted in decreased incentive program costs

To address current potential threats to drinking water, Risk Management Plans are being negotiated with business owners and farmers who have land use activities that may pose a risk to drinking water. The businesses and farmers engaged to date in Risk Management Plan negotiations are good stewards of their land/business. Most of the required risk management measures have been in place. As a result, Risk Management Plans are requiring minor additional

measures, and the cost to implement them is less than forecast when the incentive program was developed. The budget for the program has been reduced from \$250,000 a year in 2014 to \$75,000 a year in 2018. Due to delays in provincial approval of the Source Protection Plans the incentive funding program is expected to be required for two more years (to 2020) to match the deadlines in the Plans. The resource requirements for the program will be included in the 2019 and 2020 budget process.

Policy to maintain groundwater quantity implemented in partnership with Conservation Authorities and local municipalities

Changes in land use associated with development may limit the amount of water that seeps into the ground (i.e. paving a large greenspace) and could affect the quantity of water available from a municipal well. Both Source Protection Plans affecting York Region contain policies to manage this risk by requiring large development proposals to demonstrate that components of the water cycle, including groundwater recharge, will not be altered. This requirement is complementary to similar policies to maintain post-development water balance elements such as those in the Provincial Policy Statement, Oak Ridges Moraine Conservation Plan, and Lake Simcoe Protection Plan.

Local municipal planning staff work with development proponents to address maintaining components of the water cycle, and Conservation Authority staff provide technical review of the submitted water balance assessments.

Source Protection policies reviewed on a regular basis and updated as necessary

The Ministry stated in their approval letters that Source Protection Plans be reviewed regularly. The Source Protection Plans came into effect in 2015 and an update is expected in 2021. The *Clean Water Act, 2006* also allows for the Source Protection Authority to request specific updates outside of that cycle if drinking water systems have been added or removed, implementation challenges have been encountered, or significant new technical work has been completed.

Consultation with affected stakeholders and municipalities mandated

The Clean Water Act, 2006 requires that stakeholders potentially affected by the proposed amendments be consulted for both required cyclical updates and amendments requested by the Source Protection Authority. The Act also requires Council endorsement of any proposed changes by affected upper and lower tier municipalities. The Council resolutions will be included in the submission package to the Ministry.

Clean Water Act specifies authority of Risk Management Inspectors and appointment process

The Clean Water Act, 2006 provides authority for Risk Management Inspectors to conduct inspections to ensure compliance with Risk Management Plans and issue orders to address non-compliance. The Region's source protection program currently has two Risk Management Inspectors appointed by Council who inspect a total of 84 Risk Management Plans, with over 150 Risk Management Plans expected by end of 2020.

The legislation also specifies that municipal Council resolutions and certificates of appointment issued by the clerk are required to formalize the appointment of a Risk Management Inspector.

4. Analysis and Implications

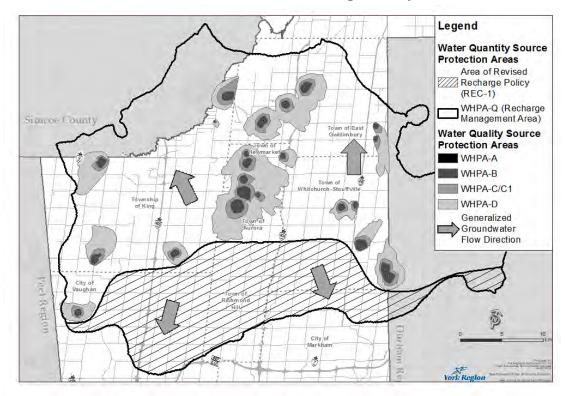
Technical updates and implementation challenges triggered need for Source Protection Plan and Assessment Report amendments

The Toronto and Region Source Protection Authority has requested an amendment to the CTC Source Protection Plan and Toronto & Region Assessment Report to improve implementation and reflect recently completed technical work. Policy changes most relevant to York Region include: proposed policy revisions to improve planning implementation for protecting groundwater quantity (Policy REC-1, Attachment 1), and a timeline revision for Official Plan updates (Policy T-8, Attachment 1).

Extent of recharge management area and nature of development in southern York Region posed implementation challenges

The current Source Protection Plan policy requires that large developments in the Recharge Management Area (WHPA-Q, Figure 2) maintain the amount of pre-development water that enters the ground, or find off-site compensating enhancement projects. Local municipalities are concerned that future developments on small lots with challenging site characteristics will not be able to maintain 100 percent of the pre-development water balance after the site is developed.

Figure 2
Area of Revised Recharge Policy



Simplification of policy provides implementation flexibility while maintaining drinking water protection

Changes to the amount of water entering the ground in the southern part of York Region has little impact on Region municipal supply wells. Groundwater in the southern part of the Region generally flows to the south, away from Region wells. In recognition of implementation challenges and limited impact to Region drinking water supplies, a revised recharge policy is proposed (Policy REC-1, Attachment 1). Within the area of revised recharge policy (Figure 2), development would require implementation of best management practices to maintain the amount of water that seeps into the ground post-development. This flexibility in policy will reduce effort required for planning staff to process applications for large developments in this area.

The proposed policy will be implemented through the Source Protection Plan conformity exercise associated with the York Region Official Plan 2010, update. The current Official Plan recharge management policies will be reviewed and updated to reflect this proposed policy direction.

Timeline policy change provides more time for municipalities to update Official Plans to conform to Source Protection Plan

The Region and local municipalities have been working together to ensure land use planning decisions protect drinking water quality and quantity. Local municipalities within northern York Region are on track to achieve official plan updates within the timeline prescribed in the Source Protection Plan (i.e. regularly scheduled updates per *Planning Act* requirements).

The timeline in southern York Region is less flexible, with a fixed deadline of December 31, 2020. A proposed revision to the CTC Plan will provide the needed flexibility for the Region and local municipalities to update their official plans in accordance with *Planning Act* requirements (Policy T-8, Attachment 1).

Other minor policy changes related to snow storage, application of road salt and septic systems will occur

The proposed amendments also include minor administrative changes. For example, the map in the Assessment Report for Nobleton Well #5 was incorrectly labelled as Well #4. Updated mapping will be provided to the Province.

Other minor policy changes included in Attachment 1:

- Revisions to policies that clarify implementation requirements and exempts minor residential uses (i.e. building permits for decks) ("Transition Provision", and Policy GEN-1).
- Reducing the areas where new snow storage facilities would be prohibited and instead managing these sites through Risk Management Plans (Policy SNO-1).
- Updating mapping of Significant Groundwater Recharge Areas to reflect revisions to technical work by Toronto Region Conservation Authority. The update will increase the extent of the mapped areas in the southern part of the Region by approximately 20 per cent.
- Updating policies related to best management practices for road salt, such as parking lot design that minimizes the need for repeat application of road salt (Policy SAL-10, 11, 12, and 13).
- Allowing septic systems where approval by the municipality was granted prior to the Source Protection Plan going into effect (Policy SWG-3).

Colleen Barfoot recommended as Risk Management Inspector

Council has appointed a Risk Management Official, alternate Risk Management Official, and three Risk Management Inspectors to implement Source Protection Plans in York Region. Due to staffing changes in the Water Resources group, Colleen Barfoot will be completing Risk Management Inspector duties as part of her role. Colleen Barfoot has completed the required training and is a Ministry certified Risk Management Inspector. The *Clean Water Act, 2006* requires that Risk Management Inspectors be formally appointed by Council.

5. Financial Considerations

The Toronto and Region Source Protection Authority will manage all public consultation required for the Source Protection Plan and Assessment Report amendments. The Ministry source protection program will provide the estimated \$3,000 of funding required for the consultation.

The Region's source protection program 2018 operating budget is \$1.1 million and funded through the water rate.

6. Local Municipal Impact

Infusion of flexibility in the proposed policies will reduce the effort required for planning staff to process applications for large developments in the area of revised recharge policy (Figure 2). The *Clean Water Act, 2006* requires local municipalities within Toronto and Region Source Protection Authority to endorse the proposed changes to the Source Protection Plan and Assessment Report as part of the Ministry's approval process. York Region staff have assisted local municipal planning staff with their council reports.

7. Conclusion

Proposed amendments to Source Protection Plan will improve implementation of related land use planning policies

Planning approval authorities must comply with the policies included in the Source Protection Plan. Simplification of the policy makes implementation more efficient and less costly for all stakeholders in the process. Extending the CTC Source Protection Plan deadline will allow local municipalities to bring their Official Plans into conformity with the Source Protection Plans.

Appointing Colleen Barfoot as Risk Management Inspector required to continue addressing existing potential threats

Implementation of Source Protection policies is progressing well across York Region. The business owners and farmers with activities posing potential threats to municipal drinking water have been cooperative in working with Regional staff to develop Risk Management Plans to address those activities. Many of the measures required to manage potential threats were already in place, and inspection efforts have shown a commitment to implement the additional required measures. Risk Management Inspectors coordinate these efforts, and appointing Colleen Barfoot will ensure sufficient resources are available to maintain momentum.

For more information on this report, please contact Laura McDowell, Director, Environmental Promotion and Protection at 1-877-464-9675 ext. 75077.

The Senior Management Group has reviewed this report.

April 18, 2018

Attachment

8380015

Attachment 1

TEXT HIGHLIGHTED IN GREY INDICATES A REMOVAL (STRIKETHROUGH) OR ADDITION (BOLD) FROM APPROVED CTC SOURCE PROTECTION PLAN (JULY 2015)

TRANSITION PROVISION

Under the Clean Water Act, 2006, there is consideration for source protection plans (SPPs) to have a Transition Provision that outlines the circumstances under which a "future" drinking water threat activity, that would otherwise be prohibited, may be considered as "existing", even if the activity has not yet commenced. The intent is to allow applications in transition to proceed while drinking water threats are managed under the "existing threat" policies.

The CTC Source Protection Committee included a Transition Provision to recognize situations where an approval-in-principle to proceed with a development application had already been obtained, or where a complete application was made prior to the date the SPP came into effect, but requires further planning approvals to implement the application in progress.

The CTC SPP was approved by the Minister of Environment and Climate Change on July 28, 2015 and became effective on December 31, 2015. Applications submitted after the effective date of the CTC SPP may only be transitioned if they are helping to implement an application in process prior to the date the CTC SPP took effect.

"Existing Threat" policies apply to prescribed drinking water threat activities under the following circumstances:

- 1) A drinking water threat activity that is part of a development proposal where a Complete Application (as determined by the municipality or Niagara Escarpment Commission) was made under the *Planning Act, Condominium Act* or *Niagara Escarpment Planning and Development Act* (NEPDA) prior to the day the Source Protection Plan comes into effect. The policy for "existing" drinking water threats also applies to any further applications required under the *Planning Act, Condominium Act*, Prescribed Instruments, or a development permit under the NEPDA, to implement the development proposal.
- 2) A drinking water threat activity that is part of an application accepted for a Building Permit, which has been submitted in compliance with Division C 1.3.1.13 (5) of the Ontario Building Code under the Building Code Act, 1992 as amended, prior to the day the Source Protection Plan comes into effect.
- 3) A drinking water threat activity that is part of an application accepted for the issuance or amendment of a Prescribed Instrument prior to the day the Source Protection Plan comes into effect.

Explanatory Document Text

The Transition Provision outlines the circumstances under which a future significant drinking water threat activity may be considered an existing significant drinking water threat activity.

The Clean Water Act, 2006 requires source protection plans to contain policies to address both existing and future threat activities. The Clean Water Act, 2006 further specifies that all policies will come into effect upon the plan approval date or an effective date specified by the Minister of the Environment and Climate Change. Transition provisions have been developed to recognize those situations where an applicant has either obtained an approval-in-principle to proceed with a development application, or where a complete application has already been made to a planning approval authority that are "in process" on the date the Source Protection Plan comes into effect. They are not designed to allow proponents to ignore or circumvent the provision contained in this Plan. They will allow the applications to proceed subject to existing significant drinking water threat policies.

The CTC Source Protection Committee concluded a transition provision should be included in the Source Protection Plan to be fair to those with applications in progress or that have received an approval-in-principle to proceed with works. The policy will allow those with complete applications made under the *Planning Act* or *Condominium Act*, building permits submitted in compliance with Division C.1.3.1.13 (5) of the *Ontario Building Code Act*, 1992 as amended, development permits under the *Niagara Escarpment Planning and Development Act*, or an application for the issuance or amendment of a Prescribed Instrument prior to the day the Source Protection Plan comes into effect to be treated as existing threat activities.

Transition Provision and Policy REC-1

Policy REC-1 is intended to apply to "future threats" in a WHPA-Q2 with a significant or moderate risk level. However, if an application subject to REC-1 Parts 2a) and 2b) is submitted after the date the source protection plan came into effect (December 31, 2015), but is required to implement a development proposal in progress (as per the Transition Provision), the threat (reducing aquifer recharge) is to be managed as "existing".

Through the plan review process, the Planning Approval Authority will decide what is required to ensure the "existing" threat does not become significant. This is generally to be determined through water balance assessments, or their equivalent (e.g. addendums or amendments to previous stormwater management reports undertaken on site). The Planning Approval Authority may, however, determine that an application submitted after the Transition Provision deadline to implement an application in progress would not increase impervious cover and a water balance assessment (or equivalent) is not required.

The CTC Source Protection Committee intended to allow the Planning Approval Authority the flexibility to require the appropriate level of detail in a specific water balance assessment (or equivalent) that is commensurate with the scale and location of the proposed development. Some areas of the WHPA-Q2 are particularly important for recharge (i.e. Significant Groundwater Recharge Areas) and should be given specific protection, while others may not be as important and/or cannot provide the required level of infiltration. Therefore, the water balance assessment (or equivalent) should include a site specific assessment, acknowledgement of previous planning approvals obtained or in progress that could impact infiltration, and an identification of recharge characteristics.

Ultimately, the intent of the water balance assessment is to demonstrate, to the satisfaction of the Planning Approval Authority, that pre-development recharge will be maintained to the greatest extent feasible through best management practices such as low impact development (LID), minimizing impervious surfaces, and lot level infiltration.

Policy ID	Timelines for Policy Implementation									
	Land Use Planning									
T-8	Official plans shall be amended for conformity with the Source Protection Plan within 5 years from the date the Source Protection Plan takes effect, or at the time of the next review in accordance with s.26 of the <i>Planning Act</i> , whichever occurs first. Zoning by-laws shall be amended within 3 years after the approval of the official plan.									

Explanatory Document Text

Section 40(1) of the Clean Water Act, 2006 requires that the Council of a municipality or a municipal planning authority that has jurisdiction in an area to which the source protection plan applies shall amend its Official plan to conform with significant threat policies and designated Great Lakes policies set out in the source protection plan. In part 2 of Section 40, the Council or municipal planning authority are required to make these amendments before the date specified in the source protection plan. Timeline T-8 in the CTC Source Protection Plan required that Official Plans be amended for conformity within 5 years from the date the Plan took effect (i.e., December 2020).

Several upper tier municipalities within the CTC Source Protection Region have communicated the difficulty with achieving the December 2020 timeline as outlined in the CTC Source Protection Plan which also impacts the ability of those lower tier municipalities dependent on the completion of the conformity exercise by their upper tier counterparts in meeting the same timeline. Further, the Government of Ontario released the Growth Plan for the Greater Golden Horseshoe ('Growth Plan') in May 2017. The Growth Plan was prepared and approved under the *Places to Grow Act, 2005* and took effect on July 1, 2017. Upper Tier municipalities are expected to review and update their Official Plans to conform with the updated Growth Plan by July 2022; lower tier municipalities must conform within 1 year of their upper tier counterparts. CTC Source Protection Region municipalities have communicated that completing conformity with the CTC Source Protection Plan and the Growth Plan, 2017, in unison, would be more time and cost effective.

Policy ID	Implementing Body	Legal Effect	Policy	When Policy Applies	Monitoring Policy
GEN-1	Municipality RMO	A	that a site specific land use designation is, or is not, designated for the purposes of Section 59. Where such direction has been issued, a site specific land use that is the subject of an application for approval under the <i>Planning Act</i> or for a permit under the <i>Building Code Act</i> is not designated for the purposes of Section 59, provided that the planning authority or Chief Building Official, as applicable, is satisfied that:	Immediately (T-9) Amend OPs for conformity within 5 years and ZBLs within 3 years of OP approval (T-8)	MON-1 MON-2
			 a. The application complies with the written direction issued by the Risk Management Official; and, b. The applicant has demonstrated that a significant drinking water threat activity designated for the purposes of Section 57 or 58 will not be engaged in, or will not be affected by the application. c. Where the Risk Management Official has provided written direction designating a land use for the purpose of section 59, a written Notice from the Risk Management Official shall be required prior to approval of any Building Permit under the Building Code Act, 1992 as amended, in addition to Planning Act and Condominium Act applications in accordance with Section 59 of the Clean Water Act, 2006. 		

Policy GEN-1 manages existing and future activities within vulnerable areas where the activity is or would be a significant drinking water threat as designated under section 59 of the *Clean Water Act, 2006*, by requiring Risk Management Officials to screen applications for works proposed under the *Planning Act,* the *Condominium Act,* and the *Building Code Act, 1992* as amended, excluding residential uses.

Where the activities are or would be a significant drinking water threat, this policy requires municipalities to designate land uses within their Official Plans and Zoning By-Laws. This will allow for the pre-screening by the Risk Management Official, via using section 59 of the Clean Water Act, 2006. Section 59 policies require that municipalities put a process in place to "flag" for the Chief Building Official and the Planning Department applications made under the Planning Act and er the Condominium Act, as well as er an application for a building permit under the Building Code Act, 1992, as amended, that is within a vulnerable area where a threat could be significant and where Part IV authorities are being used to prohibit or manage activities. The "flag" would indicate to the Chief Building Official or the Planning Department that the proposal needs to be reviewed by the Risk Management Official. Once the Risk Management Official is satisfied that the applicable Part IV policies are addressed, he/she would issue a "Notice to Proceed". This Notice is used to let the Chief Building Official or Planning Department know they can proceed with in processing the proposal.

Risk Management Officials in the CTC Source Protection Region have communicated that Policy GEN-1, as originally written, had ambiguity regarding their ability to determine when site-specific land uses, activities, or building projects are or are not subject to Section 59 Notice requirements under the Clean Water Act, 2006. The revised policy text now has clear policy direction allowing Risk Management Officials the autonomy to determine the site specific land uses that both are and are not subject to Section 59 Notices.

Policy ID	Threat Description	Implementing Body	Legal Effect	Policy	Where Policy Applies	When Policy Applies	Monitoring Policy
SWG-3	Septic Systems Governed under the Building Code Act, 1992 as amended	Planning Approval Authority	А	Where septic systems, including holding tanks, governed under the Building Code Act (vacant existing lot of record) would be a significant drinking water threat, vacant lots of record shall be subject to site plan control so that the location of the individual on-site sewage systems and replacement beds only be permitted if they are sited to ensure they do not become a significant drinking water threat in any of the following areas: Municipalities shall adopt Official Plan policies that require the enactment or amendment of Site Plan Control By-laws containing provisions for the siting and design of septic systems, including holding tanks, governed under the Building Code Act, 1992 as amended, as follows: Site Plan Control is required for existing vacant lots of record to ensure that the siting and design of on-site septic systems, including the siting of future reserve bed locations, is optimized in relation to significant drinking water threats in any of the following areas: • WHPA-A (future); or • WHPA-B (VS = 10) (future); or	See Maps 1.1 - 1.21	Future: Immediately (T-9) Amend OPs for conformity within 5 years and ZBLs within 3 years of OP approval (T-8)	MON-1

Policy ID	Threat Description	Implementing Body	Legal Effect	Policy		When Policy Applies	Monitoring Policy
				• the remainder of an Issue Contributing Area for Nitrates or Pathogens (future).			

Policy SWG-3 is a land use planning policy for future septic systems, including holding tanks, governed under the *Building Code Act*, **1992**, as amended-ensuring that vacant lots of record be subject to site plan control so that the location of individual on-site sewage systems and replacement beds are only permitted if they are sited to ensure they do not become a significant drinking water threat. The intent of this policy is to ensure that site plan control, as a planning and development control tool, is used to optimize the location and design of septic systems when existing vacant lots of record are proposed to be developed within certain designated vulnerable areas identified in the policy.

The CTC Source Protection Committee recognizes that prohibiting a septic system on a vacant lot where there is no municipal sewer connection available may make it impossible to build on such a lot which has received prior approval for such a use from the municipality. to obtain a building permit for the lot and thereby void previous planning decisions to create and zone the lot for development. This was deemed considered to be a significant hardship for the landowner. For this reason, the Source Protection Committee has provided through this policy for the municipality to subject vacant lots of record to site plan control to ensure sewage systems and replacement beds are only permitted if they can be appropriately sited and constructed to protect the municipal well. chosen to require the enactment or amendment of municipal site plan control by-laws to allow for the detailed review of on-site sewage systems for vacant lots in order to optimize their location and design relative to the designated vulnerable areas present.

The verb "optimize" means "to make as effective as possible" or "to make the best of" and was chosen to allow municipal planning authorities the flexibility to use sound professional judgement in the review and approval of the siting and design of on-site sewage systems proposed to facilitate the development of existing vacant lots as part of the municipal site plan control process.

The policy directs municipalities to "adopt Official Plan policies that require the enactment or amendment of Site Plan Control By-laws" for the purposes of the policy. This structure is introduced for the following reasons. First, the Clean Water Act, 2006 provides in s. 40 and s. 42 that a municipality shall amend its Official Plan and Zoning By-laws to conform to the significant threat policies set out in the source protection plan. There is no authority for the source protection plan to direct that site plan control by-laws conform to the source protection plan outside of the Official Plan conformity process. Second, the Planning Act requires municipalities to have enabling policy in their Official Plans in order to use the site plan control power. Requiring an Official Plan to contain specific site plan control by-law policies is therefore consistent with the provisions of the Clean Water Act, 2006 and current practice under the Planning Act.

Municipalities affected by the SWG-3 policy are encouraged to amend their site plan control by-law and associated application review processes in order to conform with this policy in advance of future Official Plan conformity policy direction on a voluntary basis in order to advance the implementation of the source protection plan in as timely a manner as possible. Municipalities are also required to continue to monitor the aquifer and report on the results (see GEN-7). Should the contaminant levels continue to increase, it may be necessary to review this policy and others associated with the Issue.

Policy ID	Threat Description	Implementing Body	Legal Effect	Policy		When Policy Applies	Monitoring Policy
SAL-10	Moderate/ Low Threats Application of Road Salt	Planning Approval Authority	В	Where the application of road salt would be a moderate or low drinking water threat, the planning approval authority is encouraged to require a salt management plan, which includes a reduction in the future use of salt, as part of a complete application for development which includes new roads and parking lots in any of the following areas: • WHPA-A (VS = 10) (existing, future); or • WHPA-B (VS ≤ 10) (existing, future); or • WHPA-C (future); or • WHPA-D (future); or • WHPA-E (VS ≥ 4.5 and <9) (future); or • HVA (future); or • SGRA (VS ≥ 6) (future). Such plans should include, but not be limited to, mitigation measures regarding design of parking lots, roadways and sidewalks to minimize the need for repeat application of road salt such as reducing ponding in parking areas, directing stormwater discharge outside of vulnerable areas where possible, and provisions to hire certified contractors. Specify Action		Future: Immediately (T-9) Amend OPs for conformity within 5 years and ZBLs within 3 years of OP approval (T-8)	N/A
SAL-11	Moderate/ Low Threats Application of Road Salt	MOECC	J	Where the application of road salt is, or would be, a moderate or low drinking water threat, the Ministry of the Environment and Climate Change in consultation with other provincial ministries and municipal associations should promote best management practices for the application of road salt, to protect sources of municipal drinking water in any of the following areas: • WHPA-A (VS = 10) (existing, future); or • WHPA-B (VS ≤ 10) (existing, future); or • WHPA-C (existing, future); or • WHPA-D (existing, future); or • WHPA-E (VS ≥ 4.5 and <9) (existing, future); or • SGRA (VS ≥ 6) (existing, future).	See Chapter 5 of the respective Assessment Report	Existing & Future: Consider within 2 years (T-15)	N/A

Policy ID	Threat Description	Implementing Body	Legal Effect	POLICY	Where Policy Applies	When Policy Applies	Monitoring Policy
SAL-12	Moderate/ Low Threats Application of Road Salt	Municipality	J	Where the application of road salt on unassumed roads and private parking lots with greater than 200 square metres is, or would be, a moderate or low drinking water threat in any of the following areas: • WHPA-A (VS = 10) (existing, future); or • WHPA-B (VS ≤ 10) (existing, future); or • WHPA-C (existing, future); or • WHPA-C (existing, future); or • WHPA-E (VS ≥ 4.5 and <9) (existing, future); or • HVA (existing, future); or • SGRA (VS ≥ 6) (existing, future); the municipality is encouraged to: a) require implementation of a salt management plan which includes the goal to minimize salt usage through alternative measures, while maintaining public safety; and b) require the use of trained individuals in the application of road salt (could include technicians and technologists and others responsible for salt management plans, winter maintenance supervisors, patrollers, equipment operators, mechanics, and contract employees).	See Chapter 5 of the respective Assessment Report	Existing & Future: Consider within 2 years (T-15)	N/A

				Specify Action			
SAL-13	Moderate/ Low Threats Application of Road Salt Handling and Storage of Road Salt	Municipality	J	Where the application, handling and storage of road salt is, or would be, a moderate or low drinking water threat, the municipality is requested to report the results of its sodium and chloride monitoring conducted under the <i>Safe Drinking Water Act</i> and any other monitoring programs annually to the Source Protection Authority. The Source Protection Authority shall assess the information for any increasing trends and advise the Source Protection Committee on the need for new source protection plan policies to be developed to prevent future drinking water Issues, in any of the following areas: ■ WHPA-A (VS = 10) (existing, future); or ■ WHPA-B (VS ≤ 10) (existing, future); or ■ WHPA-C (existing, future); or ■ WHPA-E (VS ≥ 4.5 and <9) (existing, future); or ■ HVA (existing, future); or ■ SGRA (VS ≥ 6) (existing, future).	See Chapter 5	Existing & Future: Consider within 2 years (T-15)	N/A

Policies SAL-10 through SAL-13 apply to low and moderate threat areas.

The CTC Source Protection Committee has chosen to include a land use planning policy using *Planning Act* tools and a number of Specify Action policies where the threat is low or moderate in recognition that road salt application and storage activities are carried out throughout all source protection areas the source protection region; chloride and sodium are very mobile chemicals that move easily and rapidly into and through aquifers; and that there are many other sources of drinking water that may be protected as well through implementation practices to reduce the threat.

All of these low and moderate threat policies are non-legally binding. Each specific implementer must have regard for the policy in making decisions, but has the flexibility of determining what action(s) will be taken. While an implementer is not required to provide a report on their actions on implementing low or moderate threat policies, the CTC Source Protection Committee encourages them to provide information that will help in future review and revision of policies.

Policy ID	Threat Description	Implementing Body	Legal Effect	Policy	Where Policy Applies	When Policy Applies	Monitoring Policy
SNO-1	Storage of Snow	RMO	G	equiring risk management plans, where the threat is significant in any of the following areas: • WHPA-B (VS = 10) (existing, future); or • WHPA-E (VS ≥ 9) (existing, future); or	See Maps 1.1 - 1.21	Future: Immediately (T-5) Existing: 180 days (T-4)	MON-2
			Н	 2) The storage of snow is designated for the purpose of s.58 under the Clean Water Act, requiring risk management plans, where the threat is significant in any of the following areas: WHPA-B (VS = 10) (existing, future); or WHPA-E (VS ≥ 9) (existing, future); or The remainder of an Issue Contributing Area for Sodium or Chloride (existing, future). Without limiting other requirements, risk management plans shall include appropriate terms and conditions to ensure the storage of snow, and associated runoff, ceases to be a significant drinking water threat. Notwithstanding the above, emergency snow storage may be permitted outside of WHPA-A as determined by the risk management official and the municipality responsible for snow storage in the absence of a Risk Management Plan. 		Existing: 1 year/ 5 years (T-6)	MON-2

Policy SNO-1 prohibits existing and future snow storage in WHPA-A and future snow storage in WHPA-B (VS = 10), WHPA-E (VS = 9) and in the remainder of an Issue Contributing Area for Sodium or Chloride. In the WHPA-B (VS = 10), WHPA-E (VS = 9) and in the remainder of an Issue Contributing Area for sodium and chloride, existing and future significant drinking water threats are managed using a Risk Management Plan. In-Emergency snow storage may be permitted outside of WHPA-A as determined by the Risk Management Official and the municipality responsible for snow storage in the absence of a Risk Management Plan. Situations, future snow storage may be permitted outside of WHPA-A as determined by the Risk Management Official. Existing snow storage is otherwise managed outside of WHPA-A requiring a Risk Management Plan.

Storage of snow can pose a significant drinking water threat depending on the geographic location of the storage area and whether the snow is stored above or below grade. In general, the greater the snow storage area, the greater the risk to drinking water. Generally, snow storage is a seasonal activity that takes place on along roadsides, parking lots, and vacant land without the construction of permanent facilities. When originally developing this policy the CTC Source Protection Committee encouraged, where possible, the existing storage of snow (which often contains road salts and other contaminants) be located outside of vulnerable areas where possible. The policy as currently written prohibits the existing and future storage of snow in the WHPA-A, the most vulnerable area to a municipal well, as well as future occurrences of the activity where it would be a significant drinking water threat in the WHPA-B (VS=10), WHPA-E (VS≥9), and the remainder of the Issues Contributing Area for sodium and chloride. Given the large surface areas in the Credit Valley Source Protection Area covered by Issues Contributing Areas for sodium and chloride, municipalities have communicated the difficulty implementing a prohibition of a potential future activity. A number of provisions could be included in a Risk Management Plan to ensure that the storage of snow does not become a significant drinking water threat, therefore, the CTC Source Protection Committee has opted to manage any future instances of the activity outside of the WHPA-A.

Policy ID	Threat Description	Implementing Body	Legal Effect	Policy	Where Policy Applies	When Policy Applies	Monitorin g Policy
REC-1	An activity that reduces recharge to an aquifer	Planning Approval Authority	A	Land Use Planning (Planning Policies for Protecting Groundwater Recharge) For applications under the Planning Act within the Tier 3 Water Budget WHPA-Q2 identified as having significant water quantity threats, the relevant Planning Approval Authority shall ensure recharge reduction does not become a significant drinking water threat by: 1) Requiring new development and site alteration under the Planning Act for lands zoned Low Density Residential (excluding subdivisions) or zoned Agricultural to implement best management practices such as Low impact Development (LID) with the goal to maintain predevelopment recharge. Implementation of best management practices is encouraged, but voluntary, for Agricultural Uses, Agriculture-related Uses, or On-farm Diversified Uses where the total impervious surface does not exceed 10 per cent of the lot. 2) Requiring that all site plan (excluding an application for one single family dwelling) and subdivision applications to facilitate major development (excluding development on lands down-gradient of municipal wells in the Toronto & Region Source Protection Area [Figure X]) for new residential, commercial, industrial and institutional uses provide a water balance assessment for the proposed development to the satisfaction of the Planning Approval Authority which addresses each of the following requirements: a) maintain pre-development recharge to the greatest extent feasible through best management practices such as LID, minimizing impervious surfaces, and lot level infiltration; b) where pre-development recharge cannot be maintained on site, implement and maximize off-site recharge enhancement (within the same WHPA-Q2) to compensate for any predicted loss of recharge from the development; and c) for new development (excluding a minor variance) within the WHPA-Q2 and within an Issue Contributing Area (for sodium, chloride or nitrates), the water balance assessment shall consider water quality when recommending best management practices and address how recharge will be ma	Future: WHPA-Q2 with a significant risk level See Maps 3.1 3.2 Future: WHPA-Q2 with a moderate risk level See Maps 3.3 3.4	Future: Immediately (T-9) Amend OPs for conformity within 5 years and ZBLs within	MON-1

EXPLANATORY DOCUMENT TEXT

Policy REC-1 is a land use planning policy that manages activities that reduce recharge to an aquifer. This policy applies to future threats in a WHPA-Q2 with a significant or moderate risk level.

The intent of the policy is to ensure that the Planning Approval Authority makes decisions that do not result in recharge reduction from new development becoming a significant drinking water threat within a WHPA-Q2. The Planning Approval Authority, through the plan review process (i.e., *Planning Act* applications) will determine what is required, and determine the acceptability of the proposed actions, in the water balance assessments.

The CTC Source Protection Committee wants the Planning Approval Authority to have the flexibility to require the appropriate level of detail in a specific water balance assessment commensurate with the scale and location of a proposed development. For example, within the WHPA-Q2 are areas that have been identified as Significant Groundwater Recharge Areas which are particularly important due to the nature of the soils and slope that permit higher than average infiltration of precipitation to replenish the groundwater. These areas should be given particular protection. Other areas within the Tier 3 WHPA-Q2, may not be important for recharge and/or cannot provide the required infiltration due to the local soil and slope conditions. Site specific assessment and identification of the recharge characteristics of the site should be part of such water balance assessments or equivalent. Where a detailed assessment is warranted, using the current version of the Tier 3 Water Budget model and updated information should ensure that the results are technically robust and comparable to the original analysis. The local source protection authority has the model files and information to support this analysis, but it is envisioned that an applicant will have to retain qualified expertise to do the analysis.

The Source Protection Committee encourages the "complete application" check list be updated to include the Water Balance Assessment.

The intent of Part 1) of the policy is to avoid the burden on individual residential owners or agricultural operations by requiring that they undertake expensive hydrogeological assessments, but to protect recharge by requiring instead that they implement best management practices that will reduce or eliminate any impact from their building or development activities that are subject to planning approvals. provide an appropriate level of policy direction to maintain recharge for development and site alteration associated with smaller-scale or agriculture-related development not covered by Part 2 of this policy. In lieu of providing hydrogeological assessments, applicants are required, or in the case of agriculture-related development where the total lot impervious surface is beneath a threshold of 10 per cent, encouraged to voluntarily implement best management practices, that will reduce or eliminate any impact from their building, or development, or site alteration activities that are subject to planning approvals

With respect to the voluntary implementation of Part 1) of this policy for Agricultural Uses, Agricultural-Related Uses, and On-farm Diversified Uses these terms have the same meaning as defined in the Provincial Policy Statement, 2014 and as further articulated in the Guidelines on Permitted Uses in Ontario's Prime Agricultural Areas, 2016. The 10 percent impervious threshold for agricultural-related uses is adapted from Policy 3.2.4.2 of the Greenbelt Plan, 2017 for the purposes of this policy.

In general, on low density and agriculturally zoned lands, it is possible to ensure that roof and impermeable surface run-off can be directed to on-site infiltration and thus maintain recharge without requiring technical assessments.

The intent of Part 2) of this policy is to ensure **certain** *Planning Act* applications (excluding an application for one single family dwelling and on lands zoned agricultural) include an assessment of the potential reduction in recharge so that specific measures are identified and implemented to ensure the proposal does

CTC Source Protection Plan Policies for Section 34 Amendment

not result in recharge reduction becoming a significant drinking water threat within a WHPA-Q2. This requirement applies to *major development* on lands with the greatest potential for reducing recharge, such as commercial, employment, institutional, industrial uses and includes residential subdivisions. but excludes an application for one single family dwelling. Planning Act applications applicable to Parts 2 (a) and (b) include site plan applications, draft plan of subdivision applications, and any associated implementing official plan or zoning by-law amendment applications, however, applications for development on lands zoned agricultural, which do not meet the criteria for major development, and any development on lands down-gradient of municipal wells in the Toronto and Region Source Protection Area [See Figure X], are exempt from Part 2).

The intent of Part 2 (b) is to allow the municipality the option where it meets local requirements to require the applicant to locate compensating recharge on another site within the WHPA-Q2 where it is not feasible to protect pre-development recharge within the development site. The CTC Source Protection Committee concluded that the local municipality is best placed to determine the optimal actions to protect recharge and this provides them some local flexibility in their decision-making.

Part 2 (c) of this policy applies ONLY to those parts of a WHPA-Q2 which are also within an Issue Contributing Area for Sodium, Chloride or Nitrate. These areas are shown on the maps in the appendices in of the CTC Source Protection Plan and also will be provided by the Source Protection Authority in other formats upon request to municipalities or other planning approval authorities. This requirement is intended to ensure that any risk management measure that is implemented to maintain recharge does not create a threat to source water quality. For example, infiltration of stormwater containing road salt in an Issue Contributing Area for Sodium or Chloride is a significant drinking water threat and subject to policies SWG-11 and SWG-12. The CTC Source Protection Committee has included Part 2 (c) of this policy for clarity to ensure that an implementing body does not inadvertently approve an activity to protect water quantity that is a threat to water quality.

The intent of Part 3) is to ensure municipalities evaluate planned growth against recharge reduction at a large scale and only proceed if the planned growth will not result in new significant drinking water threats. Once feasibility of the growth is confirmed, development proponents are subject to Parts 1) and 2) of this policy which are site-specific.



Regional Clerk's Office Corporate Services

May 18, 2018

Ms. Lisa Lyons Director of Legislative Services/Town Clerk Town of Newmarket 395 Mulock Drive, P.O. Box 328 Newmarket, ON L3Y 4X7

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Dear Ms. Lyons:

Re: Corporate Asset Management Plan

Regional Council, at its meeting held on May 17, 2018, adopted the following recommendations of Committee of the Whole regarding "Corporate Asset Management Plan":

- 1. Council approve the Corporate Asset Management Plan provided in Attachment 1.
- 2. The Regional Clerk circulate this report to the local municipalities.

A copy of Clause 7 of Committee of the Whole Report No. 8 is enclosed for your information.

Please contact James Steele, Director, Infrastructure Asset Management, Environmental Services at 1-877-464-9675 ext. 75901 if you have any questions with respect to this matter.

Sincerely,

Christopher Raynor Regional Clerk

/C. Clark Attachments



Clause 7 in Report No. 8 of Committee of the Whole was adopted, without amendment, by the Council of The Regional Municipality of York at its meeting held on May 17, 2018.

7 Corporate Asset Management Plan

Committee of the Whole recommends:

- 1. Receipt of the presentation by James Steele, Director, Infrastructure Asset Management, Environmental Services and Brian Titherington, Director, Transportation and Infrastructure Planning, Transportation Services.
- Adoption of the following recommendations contained in the report dated April 18, 2018 from the Commissioner of Environmental Services and the Commissioner of Transportation Services:
 - 1. Council approve the Corporate Asset Management Plan provided in Attachment 1.
 - 2. The Regional Clerk circulate this report to the local municipalities.

Report dated April 18, 2018 from the Commissioner of Environmental Services and the Commissioner of Transportation Services now follows:

1. Recommendations

It is recommended that:

- 1. Council approve the Corporate Asset Management Plan provided in Attachment 1.
- 2. The Regional Clerk circulate this report to the local municipalities.

2. Purpose

This report requests Council approval of the Region's first Corporate Asset Management Plan, formalizing asset management planning practices across Regional Departments. Council approval is a legislated requirement of Ontario

Regulation 588/17: Asset Management Planning for Municipal Infrastructure (the Regulation) enacted by the Province, which recently came into effect in January 2018.

3. Background and Previous Council Direction

York Region's asset base is steadily growing to accommodate population growth and effectively manage levels of service

York Region is one of Canada's largest municipalities and is forecast to reach 1,790,000 residents and 900,000 jobs by 2041. As population increases, so does the need for essential services and the assets required to deliver those services. The Region's Corporate Asset Management Policy and Plan support a coordinated approach to managing assets that ensures financial sustainability following recognized asset management principles guided by the Region's Strategic Plan and Vision 2051.

The Region's first Corporate Asset Management Plan builds upon current asset management practices

Asset management involves balancing asset cost, performance and risk. The goal is to deliver required performance at the best possible cost over an asset's life cycle within an acceptable level of risk. The need to achieve this balance informed the updated Corporate Asset Management Policy, which was approved by Regional Council in February 2018. Guided by the Region's Vision 2051 and its four-year Strategic Plan, the policy also sets out a coordinated approach to asset management processes and practices and drives continuous improvement.

The Region's Corporate Asset Management Policy was updated to ensure compliance with the Regulation, satisfying the first step required by the Regulation more than a year in advance. The Region's first Corporate Asset Management Plan builds upon the Region's asset management practices implemented over the past five years. By adopting the Corporate Asset Management Plan, Council will satisfy the next step required under the Regulation more than three years in advance.

In the past, Council has been informed on the state of Regional assets through the bi-annual Corporate State of the Infrastructure Report, most recently brought before Council in October 2016. Going forward, Council will be updated on the state of the Region's infrastructure and funding requirements for asset management through the annual budget process as well as through periodic updates to the Region's Corporate Asset Management Plan. The next update to the Corporate Asset Management Plan is planned to be brought before Council in 2022.

Corporate Asset Management Plan consolidates asset management practices across 13 service areas

The Region's first Corporate Asset Management Plan includes 13 service areas within four Departments and York Regional Police as shown in Table 1.

The Corporate Asset Management Plan documents information on the state of infrastructure, including asset inventory, average asset life, asset condition and replacement values for both core and non-core assets (Attachment 1). More details are included in the plan for core infrastructure assets (roads, water and wastewater assets) to comply with requirements of the Regulation.

Table 1
Summary of Department and Service Areas included in the Corporate Asset Management Plan

Service Group	Service Area
Community & Health Services	Housing Services
	Paramedic Services
	Senior Services
Corporate Management	Information Technology
(includes Finance & Corporate Services)	Property Services
Environmental Services	Energy Management
	Forestry
	Waste Management
	Wastewater (Core Asset)
	Water (Core Asset)
Transportation Services	Roads (Core Asset)
	Transit
York Regional Police	Police Services

Council approval of the Corporate Asset Management Plan will support compliance with newly adopted Regulation

O. Reg. 588/17: Asset Management Planning for Municipal Infrastructure came into effect on January 1, 2018, and requires municipalities to have a Council approved Asset Management Plan for core infrastructure assets by July 1, 2021. Core infrastructure assets represent more than 75 per cent of all Regional physical assets and include roads, bridges, culverts; and assets, including facilities, used in the collection, conveyance/distribution, treatment or disposal of wastewater/water and stormwater management systems. Regulatory compliance status for the Region's core assets is shown in Table 2 (Current Levels of Service) and Table 3 (Proposed Levels of Service).

Table 2
Regulatory Compliance Status for Core Assets

- Current Levels of Service

Service Area	State of Infrastructure	Current Levels of Service	Asset Management Strategies	Financing Strategy
Roads	Compliant	Compliant	Compliant	Compliant
Wastewater	Compliant	Compliant	Compliant	Compliant
Water	Compliant	Compliant	Compliant	Compliant

Table 3
Regulatory Compliance Status for Core Assets –
Proposed Levels of Service

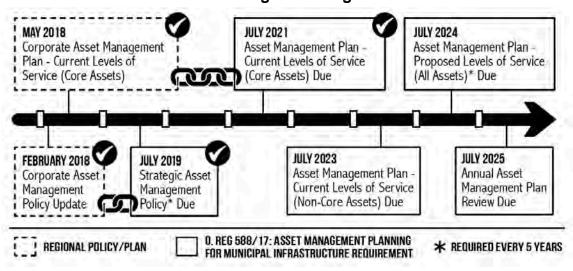
Service Area	State of Infrastructure	Proposed Levels of Service	Asset Management Strategies	Financing Strategy	
Roads	Compliant	In Progress	In Progress	In Progress	
Wastewater	Compliant	In Progress	Compliant	Compliant	
Water	Compliant	In Progress	Compliant	Compliant	

The Executive Summary of the Plan is provided as Attachment 1 to this report with the full document posted online for viewing and download. Council approval of the plan will comply with the Regulation, well in advance of the 2021 deadline set by the Province. Asset management planning timelines to meet the Asset Management Regulation are shown in Figure 1.

The Region has already satisfied the first two steps in the Regulation well in advance of regulatory deadlines

The Regulation is intended to provide certainty around future asset management planning requirements, supporting resiliency and sustainability as key aspects of municipal asset management planning. The Region is well positioned to meet the Regulation and has already updated the Corporate Asset Management Policy to meet legislated requirements in advance of the July 2019 deadline. Furthermore, approval of the Region's first Corporate Asset Management Plan will comply with legislated requirements to report on current levels of service for core assets well in advance of the July 2021 deadline. Meeting the requirements of the Regulation in advance, in particular for core assets, provides a more formal structure to inform infrastructure and fiscal planning.

Figure 1
Asset Management Planning Timelines to meet
Asset Management Regulation



Future updates to the Asset Management Plan will incorporate current and future levels of service for all assets. These updates are scheduled to be ready in advance of the regulatory deadlines of July 2023 and July 2024, respectively. Work is currently underway with the departments responsible for each non-core service area, to define their current levels of service for their assets.

4. Analysis and Implications

Asset inventories and replacement values further refined through Asset Management Plan development

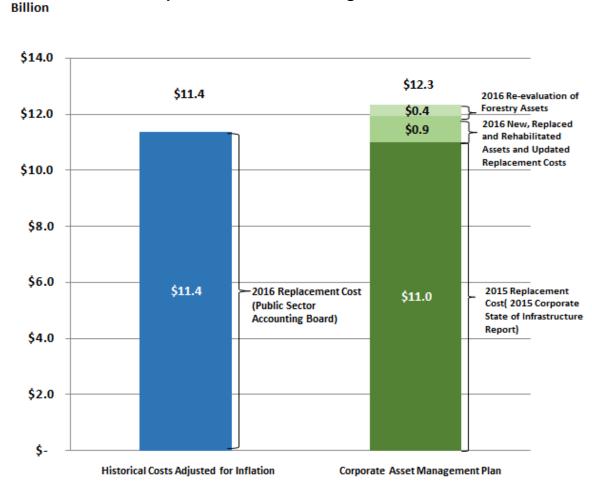
The Corporate Asset Management Plan provides an inventory of Regional assets within each service area and their replacement costs. Asset replacement values have been refined over the past year, through development of both the Corporate Asset Management Plan and Departmental Asset Management Plans. The estimated current replacement value of Regional assets as of December 31, 2016, is \$12.3 billion as shown in Figure 2. Annual updates to asset valuation will continue to occur to inform regulatory reporting requirements.

In the past, replacement values of Regional assets were calculated by applying inflation to the historical cost of tangible capital assets. The Public Sector Accounting Board (PSAB) requires that assets be reported at their historical cost, which is the original cost of the asset at the time it was acquired, developed or constructed. This approach was previously used to provide a high-level estimate of asset management needs and resulted in a replacement value of Regional assets totalling \$11.4 billion.

Through development of asset management plans, additional cost considerations are taken into account to refine these replacement values such as updated construction costs, current regulatory climate and design best practices. This approach provides more accurate information to support asset management decision making and reserve contributions, resulting in a more appropriate replacement value of Regional assets totalling \$12.3 billion (at year end 2016).

The Corporate Asset Management Plan provides a total replacement value which is the sum of the 2015 State of Infrastructure valuation (at year end 2015) of \$11 billion, plus new, replaced and rehabilitated assets in 2016, updated replacement costs of \$0.9 billion, and a re-evaluation of forestry assets of \$0.4 billion. The Plan ensures that assets are valued consistently across the Corporation, providing a baseline for future updates.

Figure 2
Historical Costs compared to
Replacement Values of Regional Assets



Sustainable asset management planning uses asset values based on the current cost to replace them

Corporate Asset Management Plan replacement values are calculated based on the cost required to replace an asset today. Replacement costs are typically more expensive in today's built urban settings than historic green-field settings, since construction occurs within a more complex environment (e.g. congestion and conflict between Regional infrastructure and utilities within the right-of-way), while maintaining levels of service.

Asset management practices continue to evolve, resulting in refinement of asset replacement values

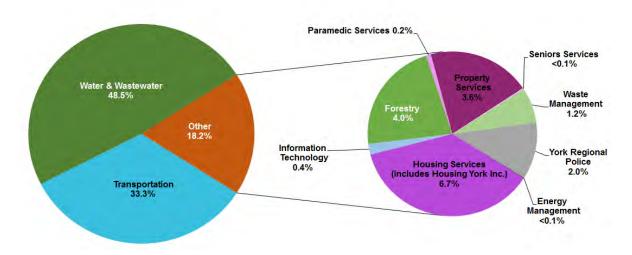
As asset management practices improve, new ways to value assets emerge. For example, the Corporate Asset Management Plan replacement values include biological assets such as York Regional Forests and street trees, which are not considered tangible capital assets in the Region's Tangible Capital Asset Policy. The development of the Green Infrastructure Asset Management Plan is one of the first of its kind, evaluating and integrating the replacement value of the Region's green assets.

The replacement value of Regional assets by service area is shown in Figure 3.

Figure 3

Replacement Value of Regional Assets based on

Corporate Asset Management Plan (2018) – \$12.3 billion*



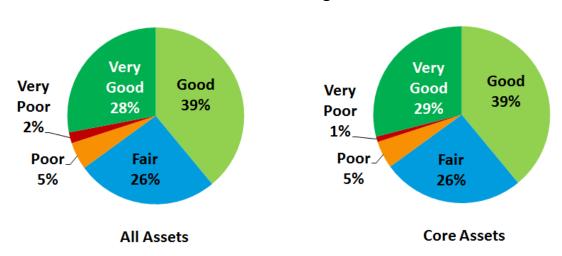
^{*} Information is based on the development of the Corporate Asset Management Plan to reflect best available asset replacement values as of December 31, 2016.

93% of Regional assets are in fair or better condition, mainly requiring maintenance or preservation treatments

Understanding the useful life of an asset and its remaining life provides insight into the potential risk of asset failure impacting both levels of service and renewal need. Asset condition generally refers to the degree of physical deterioration of an asset, which is evaluated through condition assessment programs. For assets with no condition data, the condition is estimated based on the percentage of age to useful life. To adequately meet service levels and manage risk while minimizing life cycle costs, most assets should be preserved in fair or better condition.

While 93 per cent of the Region's assets are in fair or better condition, some are reaching the middle stages of their useful lives and will require rehabilitation or replacement in the coming years. A breakdown by condition grade is shown for all Regional assets and core assets in Figure 4.

Figure 4
Condition Grade of Regional Assets



Assets in poor and very poor condition are planned for renewal

Assets in poor or very poor condition require increased attention and renewal investment to avoid increased maintenance costs and/or unexpected failure. The assets that are currently in poor or very poor condition are typically those that are included in the 10-year capital renewal program and budget forecasts, such as replacement of #1 District Headquarters for York Regional Police, constructed in 1950 and scheduled for replacement and expansion in 2019 and 2020. Other assets falling into this condition grade include those where renewal is not feasible or practical to extend useful life. For example, technology assets, where replacement is based on age, ensuring that assets are kept current and performing at optimal levels. Exceptions to this are roads assets, as current funding amounts are insufficient to meet the renewal needs of all roads in poor and very poor condition.

Reserves have been built up to help fund asset management requirements in a financially sustainable way

The Corporate Asset Management Plan identifies a renewal requirement for roads infrastructure of \$1.15 billion and the 10-year Capital Plan for roads renewal is \$260 million, identifying a significant shortfall. Through the Fiscal Strategy, reserves have been built up in anticipation of these additional asset management requirements. A plan to use asset management reserves to help fund these requirements in a financially sustainable way will be established

through the next multi-year budget process beginning in 2018. While contributions to asset management reserves have been increasing over the past several years, further contributions will be required to fully address future asset management needs.

Both community and technical levels of service illustrate what can be expected by those receiving the service

Community levels of service are outlined at a corporate level through strategic objectives and key performance measures outlined in the Region's 2015 to 2019 Strategic Plan. Optimizing critical infrastructure systems capacity is one of several strategic objectives outlined in the 2015 to 2019 Strategic Plan and includes a number of key performance measures, including reducing the quantity of inflow and infiltration in Regional and local wastewater systems. The Strategic Plan outlines the tactical and practical means for the Region to deliver the community vision outlined in Vision 2051 and levels of service demonstrate whether the strategic objectives are being met.

Legislated levels of service, required by the Regulation for core services, include community levels of service and technical levels of service.

Community levels of service illustrate the services that are available to the Region's customers

Community levels of service describe the services delivered by an asset category. As outlined in the Regulation, examples of community levels of service include a map showing areas of the municipality that are serviced by the Regional water and wastewater system or images that illustrate the different levels of pavement condition of Regional roads, both of which can be found in Section 7 of the Corporate Asset Management Plan. In this example, maps provide an illustrative view of the extent of the services provided through the infrastructure assets.

Technical levels of service use specific parameters, like pavement condition index, to track performance

Technical levels of services use metrics to measure the scope or quality of the services being delivered by an asset category. As outlined in the Regulation, examples of technical levels of service include the percentage of urban properties serviced by the municipal water and wastewater system (95%), the percentage of the municipal stormwater management system resilient to a 5-year storm (100%) or the average pavement condition index (PCI) value for Regional roads (70).

The Region is working to develop proposed levels of service for all service areas and, along with public consultation, these will be a key aspect of the next update to the Asset Management Plan.

Departmental asset management strategies incorporate all life cycle activities to sustain affordable service delivery

An effective asset management strategy outlines the need to build new infrastructure to meet growth needs and manage existing assets to meet reliability needs all while balancing cost, performance and risk. Population growth impacts the scale of services required to support service delivery. Service area Master Plans propose new or expanded assets to address current and future capacity requirements.

For example, climate change may have a direct impact on cost of service delivery and has been considered in the assessment of risk. Further development of advanced weather projections is currently taking place, when available, these will provide additional insight into infrastructure plans. Furthermore, a Regional Climate Change Action Plan is expected to be complete in 2019, providing an additional input to the risk evaluation of assets.

All assets, (with the exception of biological assets, like trees, which don't depreciate), physically deteriorate at different rates and lose the ability to deliver the required levels of service. Asset renewal strategies are developed for Regional assets to identify the frequency and cost of activities that provide defined levels of service, at the best life cycle cost. For some asset types, the renewal strategy is very simple, such as information technology assets, where assets are replaced at the end of their useful life. For other asset types, such as facilities, the renewal strategy is much more complicated since there are many thousands of components, some of which may be rehabilitated or replaced numerous times throughout the life of the facility.

Maintenance strategies are also in place to ensure assets continue to deliver defined levels of services. Renewals and maintenance are strongly linked; maintenance strategies can hasten or delay the need for renewals, and if renewals are deferred, maintenance needs will often increase. For Regional roads, renewal planning is supported by the Region's pavement management system, which helps to forecast short and medium-term needs and priorities based on road inspection data collected every two years.

Corporate Asset Management Plan highlights growth, renewal and operating needs for core assets over the next ten years

The Regulation requires growth, renewal and operating needs be included in the asset management plan. This ensures that life cycle requirements to deliver a demand for expanded services are incorporated into asset management planning, including an increase in the asset portfolio.

Capital growth and renewal needs for core assets total over \$4 billion over the next ten years

Annual capital growth needs over the next ten years for core assets are outlined in the Corporate Asset Management Plan and are based on the Transportation 10-Year Capital Plan and the 2016 Water and Wastewater Master Plan. Annual capital renewal needs over the next ten years for core assets are also outlined based on industry standard physical condition assessments, risk and best life cycle cost analysis. In addition, annual operating needs to sustain current levels of service for Regional core assets over the next ten years are outlined based on the 2015 Water and Wastewater Financial Sustainability Plan and for roads, current annual operating costs increased proportionately with forecast road network growth. Total value for growth, renewal and operating needs for core assets (roads, water and wastewater assets, as per the Regulation) over the next ten years are shown in Table 4.

Table 4

Total Value (\$ billion) of Growth, Renewal and Operating Needs
for Core Assets (2017-2026)

Life Cycle Needs	Roads	Water & Wastewater	Total Value	
Capital Growth Needs	\$1.33	\$1.25	\$2.58	
Capital Renewal Needs	\$1.15	\$0.95	\$2.10	
Subtotal	\$2.48	\$2.20	\$4.68	
Operating Needs	\$1.05	\$6.19	\$7.24	
Total	\$3.53	\$8.39	\$11.92	

Region's Fiscal Strategy considers short-term and long-term need to mitigate risks to asset failure

Risks relating to asset failure are mitigated through condition and risk assessments, proactive maintenance programs and capital renewal programs to ensure work required to achieve defined levels of service is identified and implemented. The Region's Fiscal Strategy considers the inter-relationship and integration needed between the capital plan, debt management plan and reserve

management plan to address the long-term stewardship of Regional assets, striking a balance between current and near-term investments and saving for the future.

Corporate Asset Management Plan supports the Region's fiscal responsibility outlined in 2015 to 2019 Strategic Plan and Vision 2051

Both the 2015 to 2019 Strategic Plan and Vision 2051 outline actions to support the Region's fiscal responsibility, including responsible stewardship of the Region's assets while continuing to provide sustainable service delivery. The Corporate Asset Management Plan outlines a plan to effectively manage Regional assets over time to deliver defined levels of service in a sustainable manner.

Approval of the Region's Corporate Asset Management Plan will complete the next step required under the Regulation

The Regulation requires the approval of an asset management plan, including specific requirements, such as current levels of service, for core assets by July 1, 2021. By approving the Region's first Corporate Asset Management Plan, Council will satisfy the next step required by the Regulation more than three years in advance. Early completion of the plan ensures that better information is used to develop and identify financial needs to provide sustainable levels of service, informing future budgetary processes and fiscal strategies.

Gap analysis provides a framework to complete next steps to meet future Regulation requirements

As part of the Corporate Asset Management Plan development, a regulatory gap analysis was completed to identify additional work required to meet future regulatory requirements.

The gap analysis confirmed that the Corporate Asset Management Plan, attached to this report, meets the regulatory requirements with the July 2021 deadline (documenting current levels of service for core assets). The analysis also identified areas requiring further development to meet the requirements with 2023 (documenting current levels of service for non-core assets) and 2024 (setting proposed levels of service for all assets) deadlines.

This information will help staff develop a roadmap to inform asset management plan updates to meet the requirements of the Regulation.

5. Financial Considerations

Council has invested an average of half a billion dollars, annually, to grow and manage core assets over the last ten years

Over the last ten years, Council has invested \$5 billion to effectively manage the growth, rehabilitation and replacement of Regional core assets. The Region's Corporate Asset Management Plan outlines capital growth and renewal needs of \$4.68 billion over the next ten years to expand, sustain and maintain core assets (roads, water and wastewater), which account for over 75 percent of the Regions' asset base. Furthermore, the operation of current and growth assets will require funding of more than \$7 billion dollars over the same period.

Multi-year budget process will account for growth, renewal and operating needs to move toward full life cycle cost recovery for all Regional assets

In 2018, the Region will be developing its next multi-year budget where it will consider the full life cycle cost recovery needs for all Regional assets, beyond just the core assets, over the forecast period. Full cost recovery pricing for water and wastewater assets by 2021 is being achieved through Council's approval of the 2015 Water and Wastewater Financial Sustainability Plan.

The 10-year Transportation Capital Plan has identified future growth and renewal needs for the Regional road network and the current committed funding is \$1.6 billion. The approved 10-year budget allocated to rehabilitate and renew existing road infrastructure is \$0.9 billion short of estimated needs as identified by the recently completed Transportation Asset Management Plans. The use of reserves will help fund these needs.

Various funding sources will be considered through multi-year budget to address asset management needs

The next multi-year budget will consider the viability of various funding sources available to address asset management capital and operating needs and determine whether additional funding sources will be required and/or available. Current revenue sources include tax levy, user rates, development charges, grants and other third-party funds. The Region may need additional revenue-raising powers, similar to those available to the City of Toronto (e.g. land transfer tax revenue), to fully fund all of the needs identified. Managing debt and building reserves will continue to be pillars of the Region's long-term fiscal strategy which aims to ensure financial sustainability over time.

6. Local Municipal Impact

The Region's Corporate Asset Management Plan formalizes existing levels of service, for core service areas (roads, water and wastewater), which are delivered to residents and local municipalities, who are both customers and municipal partners in service delivery. Consultation on existing levels of service has been achieved through an integrated master planning process to develop the 2016 Water and Wastewater Master Plan and 2016 Transportation Master Plan. Additional workshops and initiatives involving local municipalities and stakeholders also help to advance best practices on asset management planning.

Public engagement will help inform updates to the Asset Management Plan

Continued public engagement will help inform updates to the Asset Management Plan, including the identification of current levels of service for all Regional assets, and will be defined through the development of a communication and engagement plan. Public engagement, including input from residents, will help provide an additional lens to consider how the Region can best manage its assets and inform the next incremental update to the Corporate Asset Management Plan, planned to be brought before Council in 2022.

7. Conclusion

Region's first Corporate Asset Management Plan meets the next steps in Asset Management Planning Regulation and formalizes asset management planning practices

The Region's Corporate Asset Management Plan meets legislated requirements of O. Reg. 588/17 to define current levels of service for core infrastructure assets. Thirteen service areas are presented within the plan, three of which are core service areas (roads, water and wastewater). Asset information on inventories, condition and valuation has also been included for remaining noncore service areas and provides a strong foundation to build upon to complete the next asset management plan legislated requirements within regulatory deadlines.

Approval of the Region's first Corporate Asset Management Plan will align with the Region's asset management practices and ensures responsible stewardship of the Region's assets while continuing to provide ongoing financially-sustainable service delivery.

For more information on this report, please contact James Steele, Director, Infrastructure Asset Management at 1-877-464-9675 ext. 73018 or Brian Titherington, Director, Transportation and Infrastructure Planning at 1-877-464-9675 ext. 75901.

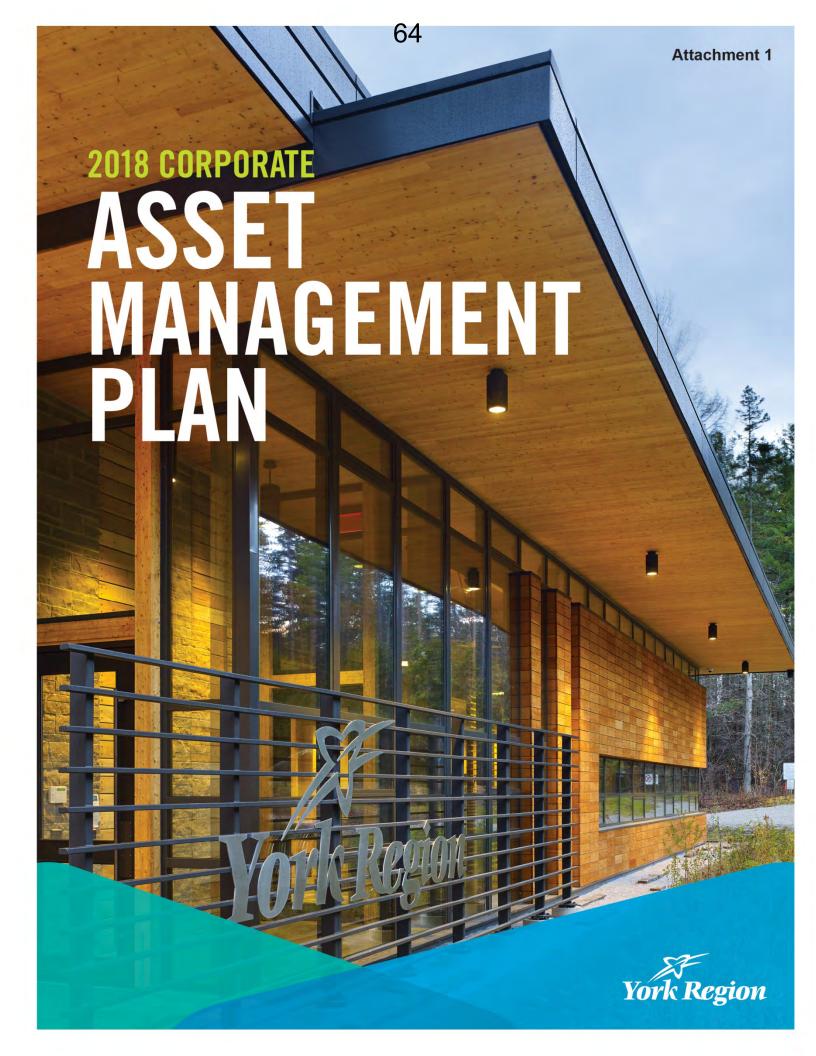
The Senior Management Group has reviewed this report.

April 18, 2018

Attachment

8379719

Accessible formats or communication supports are available upon request.





Frank Scarpitti City of Markham

Mayor Maurizio Bevilacqua

City of Vaughan

Regional Councillor

Mario Ferri

City of Vaughan



Regional Councillor Jack Heath City of Markham



Regional Councillor Jim Jones City of Markham



Regional Councillor Joe Li City of Markham



Regional Councillor Nirmala Armstrong City of Markham



Mayor David Barrow Town of Richmond Hill



Chairman & CEO Wayne Emmerson



Regional Councillor Vito Spatafora Town of Richmond Hill



Regional Councillor Brenda Hogg



Town of Richmond Hill



Mayor Tony Van Bynen



Regional Councillor John Taylor



Mayor Justin Altmann Town of Whitchurch-Stouffville

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

The Regional Municipality of York provides a variety of programs and services to 1.2 million residents and 51,000 businesses. Regional assets, such as roads, bridges and water treatment infrastructure, are essential to providing these services and contribute to the high quality of life enjoyed by our residents.

York Region owns and manages over \$12 billion worth of infrastructure assets vital to support the range of services delivered to our communities. As our population increases, so does the need for essential services and the assets required to deliver those services.

While many Regional assets are relatively new and in good condition, others will require rehabilitation or replacement in the coming years. Understanding the replacement value, condition and proportion of remaining life of the Region's assets provides insight into potential risk and the potential need for renewal.

The Corporate Asset Management Plan outlines assets currently owned and managed on behalf of the community and how they support the services delivered by the Region. The plan identifies what assets will be needed in the future, the strategy to sustain them throughout their lives, and how to financially manage the planned assets throughout all life cycle phases.

This plan is well aligned with the Region's Corporate Asset Management Policy to ensure responsible stewardship while continuing to provide services to our communities in a sustainable way.



Regional Councillor

Gino Rosati

City of Vaughan

Regional Councillor Sunder Singh City of Vaughan



Regional Councillor Naomi Davison Town of Georgina



Mayor Geoffrey Dawe Town of Aurora



Mayor Virginia Hackson Town of East Gwillimbury



Mayor Steve Pellegrini Township of King



Margaret Quirk Town of Georgina

Executive Summary

York Region owns and manages physical assets such as roads, traffic signs and signals, buses and related facilities, watermains, elevated tanks and sewers, treatment plants, administrative buildings and community housing that together total billions of dollars in value.

The Region relies on these assets to deliver important services, often in partnership with nine local municipalities, to 1.2 million residents and more than 50,000 businesses. Caring properly for its assets – which is often referred to as "stewardship" – helps to ensure the Region can deliver services safely, reliably and at the best possible cost now and into the future.

This Corporate Asset Management Plan supports stewardship of Regional assets

The purpose of this Corporate Asset Management Plan is to support the Region's stewardship of its assets. It summarizes:

- The assets the Region relies on to support service delivery to the community;
- The current level of service provided by core assets (water, wastewater, stormwater, roads, bridges and culvert assets);
- The core assets that will be needed in the future to deliver services safely and reliably;
- The activities to sustain all core assets throughout their life cycles at the best possible cost;
- An outline of funding needs and how they might be met; and
- The steps to improve future versions of the Corporate Asset Management Plan.

The plan was created through workshops and input on assets and their condition with participation of staff from across the organization, and the Finance Department provided input on financial implications.

Expected growth drives the scale of Regional services and, in turn, the assets needed to support them. The provincial Growth Plan for the Greater Golden Horseshoe (referred to in this document as Growth Plan 2017) sets out population and employment forecasts, and the provincial government mandates the Region to plan for them. Figure ES-1 shows current and expected population, using recent Census data and Growth Plan 2017 forecasts.

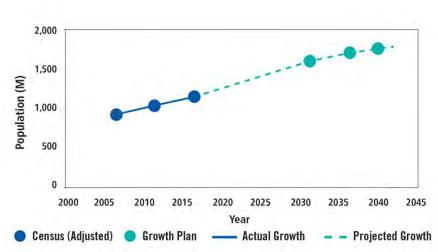


Figure ES-1 Regional Population Growth

Asset management involves balancing asset cost, performance and risk. The goal is to deliver required performance at the best possible cost over an asset's life cycle within an acceptable level of risk. The need to achieve this balance informed the updated Corporate Asset Management Policy, which was approved by Regional Council in February 2018 and appears in the Appendix. Guided by the Region's Vision 2051 and its four-year Strategic Plan, the policy also sets out a coordinated approach to asset management processes and practices and drives continuous improvement.

Developing estimates of the replacement value, condition and remaining life of assets are core activities in asset management planning. This information helps to show when renewals will likely need to happen to keep assets working properly and reduce the risk of service disruption. It is especially helpful in identifying previously unknown risks to asset performance in the near term. Climate change, for example has been considered in the past for assessing risks to delivering service with more advanced work taking place to informing proposed levels of service, which will be included in future updates.

Different departments within Regional government are responsible for delivering specific services and managing the assets used to deliver them, as **Figure ES-2** shows.

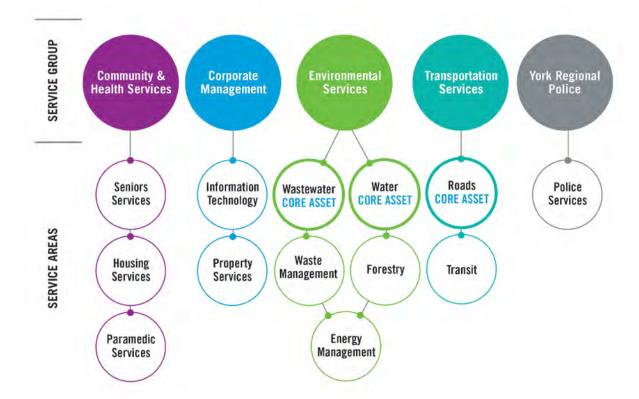


Figure ES-2 Service Groups and Associated Service Areas within the Region

Some departments, in particular those responsible for core assets, have already developed asset management plans. Core assets – those that provide wastewater, water and roads services – together account for over 75 per cent of the Region's total asset portfolio. These assets are highlighted as a priority in provincial regulatory guidance on asset management planning.

Figure ES-3 gives information on asset condition by service area. It shows the value of assets that fall within each of the five condition grades, with red representing very poor condition and dark green, very good to the best condition.

The total replacement value of Regional assets at the end of 2016 was \$12.3 billion, and 93 per cent were considered to be in fair or better condition. The body of this document explains in more detail how replacement values for different types of assets were developed.

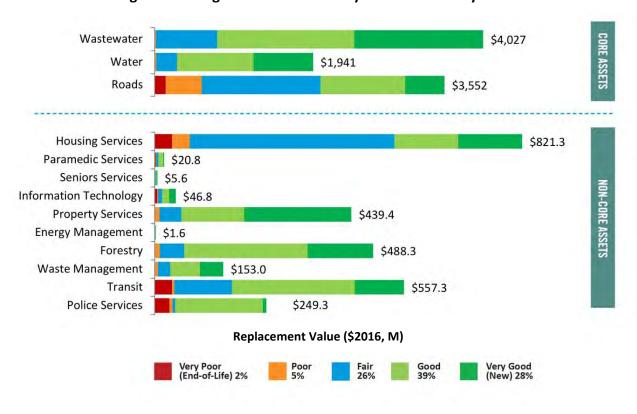


Figure ES-3 Regional Asset Inventory and Condition by Service Area

Notes:

- The figure at the right of each bar represents the total replacement value of assets in that service area
- Because of their large relative size, the bars for roads, wastewater and water are plotted against a horizontal axis scale five times larger than the scale used for other assets
- "Roads" includes stormwater, bridges and culvert infrastructure

The high proportion of assets in fair or better condition reflects that major capital investments were made to meet the rapid growth of recent decades, and many of those assets – especially those expected to give decades of service – are not far into their service life.

Nonetheless, about \$810 million worth of assets, or 7 per cent of the portfolio's value, is in poor or very poor physical condition. The reasons are varied. In some cases, such as with a relatively inexpensive information technology device, the lowest-cost decision is often to replace it at the end of its useful life. Rehabilitation is neither possible nor practical. In others, needed work may have been put off because of other pressing needs.

In each of the last 10 years, Council invested an average of more than half a billion dollars to sustain core assets

Existing Regional asset management strategies for core assets informed Council's average annual investment, through capital and operating budgets and approval of water and wastewater rates, of more than half a billion dollars over the last decade. Building on Council's prior commitment, this plan will help to consolidate asset management practices throughout the Region, developing consistency across the service areas. This consistent approach will define our needs and provide evidence-based recommendations on spending and resource requirements for asset management.

This Corporate Asset Management Plan addresses the need to have all assets in an acceptable condition while maintaining defined levels of service. Current community levels of service and technical levels of service are included in this Corporate Asset Management Plan for core assets as required by Ontario Regulation (O. Reg.) 588/17. Furthermore, key performance measures on the management of the Region's assets are set out in the 2015 to 2019 Strategic Plan and tracked annually to indicate results and trends.

York Region's asset management planning and implementation is ahead of provincial requirements

In 2017, under the authority of the *Infrastructure for Jobs and Prosperity Act, 2015*, the Province enacted O. Reg. 588/17 outlining how Ontario municipalities should address aging infrastructure challenges.

The regulation, which went into effect in January 2018, sets out the following requirements and timeline:

- By July 1, 2019: Develop a strategic asset management policy;
- By July 1, 2021: Develop an initial asset management plan for core assets showing current level
 of service;
- By July 1, 2023: Develop an initial asset management plan for all other assets showing current level of service; and
- By July 1, 2024: Add information to asset management plans on the proposed level of service that assets should provide and their long-term financial sustainability.

York Region has already integrated asset management into its plans and operations, hence meets the regulation's near-term requirements well within the timelines. Specifically:

- Regional Council approved a strategic asset management policy in February 2018; and
- This Corporate Asset Management plan shows current levels of service for core assets, provides base information for the balance of assets, and discusses the financial implications of asset management over the next 10 years.

With these steps in place, the Region is more than three years ahead of legislated deadlines, and expects to continue to meet future requirements well before the legislated dates.

Table ES -1 outlines the status of asset management planning for the Region's core assets, with page numbers referring to the portion of the document which demonstrates compliance with the respective portion of the regulation.

Table ES-1 Regulatory Compliance Status for Core Assets

	Phase 1 (Current Levels of Service) by July 1, 2021				Phase 2 (Proposed Levels of Service) by July 1, 2024			
Service Area	State of Infrastructure	Current Levels of Service	Asset Management Strategy	Financing Strategy	State of Infrastructure	Proposed Levels of Service	Asset Management Strategy	Financing Strategy
Wastewater	Compliant	Compliant	Compliant	Compliant	Compliant	In	Compliant	Compliant
	(pg. 64)	(pg. 65)	(pg. 66)	(pg. 67)	(pg. 64)	Progress	(pg. 66)	(pg. 67)
Water	Compliant	Compliant	Compliant	Compliant	Compliant	In	Compliant	Compliant
	(pg. 70)	(pg. 71)	(pg. 73)	(pg. 74)	(pg. 70)	Progress	(pg. 73)	(pg. 74)
Roads	Compliant	Compliant	Compliant	Compliant	Compliant	In	In	In
	(pg. 77)	(pg. 78)	(pg. 79)	(pg. 79)	(pg. 77)	Progress	Progress	Progress

Financial plans will reflect both growth and ongoing spending needs

The need to invest in assets typically arises from two factors: growth in population and/or economic activity, and the aging of existing assets. Investment needs in either areas may be reduced through innovative approaches to delivering service, which can reduce or eliminate the need for major investment.

The Regional Official Plan, which describes the Region's approach to accommodating growth, forms the basis of the Transportation Master Plan as well as, the Water and Wastewater Master Plan. Organized by service area, these master plans provide direction and approaches to meeting growth needs, which then inform the 10-Year Capital Plans.

The aging of existing assets is reflected in departmental asset management plans. These plans describe how the department manages asset condition on an ongoing basis and plans to meet the need for rehabilitation and replacement. (In this document, rehabilitation and replacement are collectively referred to as "renewal".)

Figure ES-4 shows the spending required for core assets to continue to deliver current levels of service. The green bars, which show the growth-related need for new/expanded assets, are derived from the master plans and capital plans discussed above. The blue bars, which indicate the costs of renewing existing assets as they age, are based on departmental plans and work carried out for this plan.

Figure ES-4 outlines core asset needs only. While limited information on non-core assets (e.g. administrative and housing facilities, vehicles and information technology) and their needs is included in this plan, this is based on current practices within the service areas and information may not be complete or consistent across the organization. Work is underway to improve asset management planning for all assets. This work will be completed for all non-core assets by the applicable regulatory deadlines; for current levels of service by July 2023 and for proposed levels of service by July 2024.

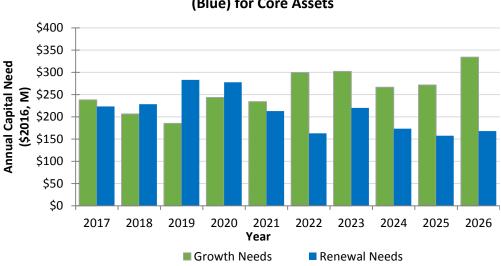


Figure ES-4 10-Year Capital Growth (Green) and Renewal (Blue) for Core Assets

As the asset portfolio ages over time, the focus will gradually shift from growth-related needs to spending on ongoing operations and maintenance, as well as, periodic capital investment in renewal. This affects financial planning, because growth investments generally rely on charges on new development, while renewal must generally be funded by the tax levy and user rates.

To address how to fund the needed investments, the Region will develop an Asset Management Financing Plan. This will align with the Regional Fiscal Strategy, which Regional Council approved in 2014 tying together capital management, debt management, intergenerational equity, and reserve management as shown in **Figure ES-5**.

Service areas, such as Transportation-Roads, have identified a funding gap which requires attention. The fiscal strategy has built up reserves that can be used for major asset renewals, which includes the use of reserves to fund these requirements in a financially sustainable way and will be established through the next multi-year budget process beginning in 2019.

Continuous improvement activities now and into the future

Developing this plan provided valuable information about the current state of asset management planning in the Region and will help to inform future activities:

- Assessing current asset management information and practices against the requirements
 of the new provincial regulation identified key areas of focus to achieve full compliance; and
- The work also showed opportunities to improve current practices and information.

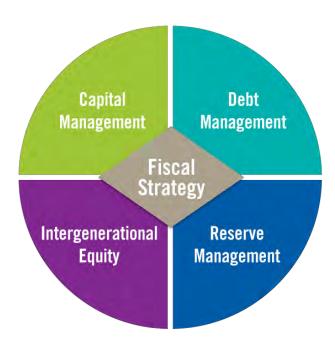


Figure ES-5 Regional Fiscal Strategy

Together, this gave rise to 19 action items, such as developing proposed levels of service for core and non-core assets and improving the Corporate Asset Management Strategy, as shown in Table ES-2. Service areas will develop work plans by the end of 2018 to achieve these actions.

A key activity will be to continue to refine asset-related information so that it is gathered and analyzed consistently across the organization. To help support that work, the Region is convening organization-wide asset management committees to ensure that both existing and new plans integrate smoothly into the Corporate Asset Management Plan.

Having more complete information about assets is also critical to developing a comprehensive financing plan. The Region is currently working on an asset management financing plan to be finalized in late 2018. This will coincide with the start of the next multi-year budget process, covering 2019 to 2022 inclusive, and will ensure the plan informs operating and capital budgets put forward for Regional Council approval.

The Region expects to review and if necessary update the Corporate Asset Management Plan every four years, with results informing the next multi-year budget cycle.

The format and contents of this Corporate Asset Management Plan are consistent with the Province's Building Together: Guide for Municipal Asset Management Plans and meet requirements of the July 1, 2021 milestone set out in the regulation. Staff will continue to improve asset management information and practices to develop an asset management plan that outlines current levels of service for all noncore assets by July 1, 2023 and proposed levels of service for both core and non-core assets by July 1, 2024 to meet future milestones set out in the regulation.

Table ES-2 Planned Timelines for Action Items to Address Gaps in Asset Management Plans

	Action	Action		Completion By	
	Item Number			2022	
	1	Improve asset inventories for non-core assets	Х		
	2	Develop current levels of service for non-core assets	Х		
	3	Develop a life cycle strategy for non-core assets	Χ		
	4	Document a financing strategy for non-core assets	X		
588/17	5	Create or finalize Asset Management Plans for service areas that currently do not have them		X	
Reg.	6	Ongoing update of asset inventories	Х		
Meeting O. Reg. 588/17	7	Document proposed levels of service for core and non-core assets	X		
Mee	8	Document life cycle strategies for core and non-core assets			
	9	Document financing strategy for lifecycle activities, core and non-core assets			
	10	Update Corporate and Departmental Asset Management Plans		X	
	11	Improve Corporate Asset Management Strategy	Χ		
sno	12	Improve coordinated effort across the organization in asset management	Ongoing		
tinuc	13	Develop and improve asset management processes		oing	
nt Con ment	14	Evaluate cost, risk and performance			
nent vem	15	Further develop and implement the fiscal strategy	Ong	oing	
nageme Improve	16	Strengthen corporate data management capabilities		Χ	
Man	17	Lead Region wide asset management collaboration	Х		
Asset Management Continuous Improvement	18	Include business software in the next Corporate Asset Management Plan update		Х	
	19	Include data in the next Corporate Asset Management Plan update		Х	

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1. Introduction

1.1 York Region Responsibilities and Goals

York Region provides important services to the community, often partnering with its nine local municipalities: Aurora, East Gwillimbury, Georgina, King, Markham, Newmarket, Richmond Hill, Vaughan and Whitchurch-Stouffville. The Region is directly responsible for policing, public health, paramedic, social and community services, arterial roads and bridges, and public transit. It delivers drinking water to local municipal systems and conveys wastewater from them, and shares in the responsibility for solid waste, forestry management, and community planning.

The Region relies on physical assets to deliver important services. Assets must be in good condition to deliver these services safely and reliably at the best possible life cycle cost for today and as the population and economy grow. Asset management planning aims to ensure these goals are met.

The Region has developed plans, strategies and frameworks to guide its decisions, including decisions on how it manages assets. This Corporate Asset Management Plan aligns with this guidance.

Regional Official Plan

The Regional Official Plan 2010 describes how York Region will accommodate future growth and development while meeting the needs of existing residents and businesses in the Region. It sets out directions and policies that guide economic, environmental and community planning decisions.

Vision 2051

Vision 2051 is York Region's current long-term strategy. It describes the Region's ideal vision of the next 40 years and how it will be achieved. Vision 2051 describes York Region that:

- Is a place where everyone can thrive;
- Is made up of livable cities and complete communities;
- Has a resilient natural environment and agricultural system;
- Has appropriate housing for all ages and stages;
- Has an innovation economy;
- Has interconnected systems for mobility;
- Promotes living sustainably; and
- Has open and responsive governance.

Each of these eight goal areas gives rise to priorities that help guide York Region's decision-makers.

2015 to 2019 Strategic Plan

At the start of each term, Regional Council endorses a four-year strategic plan that aims to turn the long-term objectives of the Region's Vision 2051 into day-to-day activities and goals. The 2015 to 2019 Strategic Plan, which was approved in February 2015, focuses on four priority areas for the Region as shown in **Figure 1-1**.

Figure 1-1 Strategic Priority Areas and Regional Services



Economic Vitality focuses on what is needed to encourage and sustain economic growth and vitality of the Region.



COMMUNITIES

Healthy Communities focuses on livability, health, and social well-being of our residents



Sustainable Environment focuses on the need to protect and sustain the natural and built environment and reduce our ecological impact.



Good Government focuses on the financial sustainability, openness, accessibility, transparency, accountability and reliability of Regional government and its related programs and services.

Services

Court Services **Economic Development** Family and Children's Services Forestry Housing Long Term Care Paramedic Services Planning Police Services Public Health Regional Roads Social Assistance Transit Waste Management Wastewater Water

Regional Fiscal Strategy

The Regional Fiscal Strategy brings together four distinct components: managing the capital plan, reducing reliance on debt, saving for the future, and recognizing the need for fairness between current and future generations. Its overarching goal is achieving long-term financial sustainability by understanding the linkages among these components. In particular, it recognizes that stewardship of capital assets involves striking a balance between making investments today and saving for future needs.

York Regional Council has a long-established policy of putting money into reserves for future rehabilitation and replacement of major assets. Before 2013, the annual increase in the Region's contribution to asset replacement reserves was 1 per cent of the prior year's tax levy. That year, Council approved a new contribution rate increase of 2 per cent to be phased in by 2017. In 2018, the contribution is to increase by 4.2 per cent from the previous year. As well, 100 per cent of the Region's supplementary tax revenues may be added to these reserves each year. The current policy aligns asset specific replacement reserves and full cost recovery rates, in the case of Water and Wastewater, to reflect the amounts needed for each asset category. Figure 1-2 illustrates the components of the Region's Fiscal Strategy.

Figure 1-2 Regional Fiscal Strategy



Corporate Asset Management Policy and Framework

Aligning with the Region's strategic plan, the Corporate Asset Management Policy provides clear objectives for asset management practices across all Regional departments to enable a consistent, coordinated and affordable approach to providing services.



It sets out the following objectives:

- Adopt and advance industry leading asset management practices that align with established standards and legislation;
- Provide defined levels of service which are balanced against considerations of costs and risks;
- Align Asset Management Plans with the Regional Fiscal Strategy;
- Demonstrate financially sustainable life cycle management by appropriately balancing cost, risk and performance to achieve full value from assets;
- Improve evidence-based decision-making from in-service asset data related to expenditures, operations and maintenance; and
- Ensure organizational accountability and transparency by engaging customers to provide input into asset management planning.

Regional Council approved the updated Corporate Asset Management Policy in February 2018. To meet the objectives of the Corporate Asset Management Policy, the Region follows the Corporate Asset Management Framework, as outlined in the Corporate Asset Management Policy in the Appendix. The framework is built on understanding the expectations of customers of the services and the Region itself, as well as, provincial government legislation on asset management. It is also shaped by the Regional Strategic Plan and Fiscal Strategy.

At the departmental level, information about assets, risk and expectations helps to shape more detailed plans, with the goal of delivering appropriate levels of service to individual customers, local municipalities and the Region.

Service Area Master Plans

Based on the Regional Official Plan, the Region develops specific master plans for transportation and water and wastewater infrastructure. Updated periodically through a process that includes extensive consultation, these master plans propose new or expanded assets and non-infrastructure solutions to address current and forecast future capacity needs and potential performance gaps.

Other Regional Objectives

The Region is currently developing a Climate Change Action Plan, with expected completion in 2019. The information and actions will inform future asset management planning.

In addition the Corporate Asset Management Coordinating Committee, comprised of representatives across all Departments, is working on the following projects and objectives:

- Corporate Asset Management Risk Framework to improve overall decision making related to risk in the context of cost and performance. Project is aligning with the existing Controllership office, corporate risk framework and registry; and
- Data Governance project to look at treating data and information as an asset and the added objective to ensure all data being used for asset management is consistent, accurate and defendable at the best possible life cycle cost.

1.2 Provincial Asset Management Planning Requirements

To address the challenges of underfunded municipal infrastructure needs across Ontario, the Province published the document Building Together: Guide for Municipal Asset Management Plans in 2012. This document outlines the information and analysis that municipal asset management plans are to include and was published to provide consistency across the province for asset management.

Under authority of the Infrastructure for Jobs and Prosperity Act, 2015, the Province enacted O. Reg. 588/17, Asset Management Planning for Municipal Infrastructure, effective January 1, 2018. This regulation identifies water, wastewater, stormwater, roads, bridges and culvert assets as "core infrastructure assets" (or "core assets"). Core assets represent more than 75 per cent of all Regional physical assets and are mainly the responsibility of two departments, Transportation Services and **Environmental Services.**

The regulation requires that municipalities must have:

- By July 1, 2021, an approved asset management plan for core assets that discusses current levels of service and the cost of maintaining those services; and
- By July 1, 2023, a similar plan for all municipal infrastructure assets.

A third milestone is July 1, 2024. Building on previous requirements, by this date plans must also include a discussion of proposed levels of service, what activities will be required to meet proposed levels of service, and a strategy to fund the activities.

The July 1, 2021 requirements include reporting on:

- The state of infrastructure summary including replacement cost, average age and condition;
- Performance on current community and technical levels of service;
- The life cycle activities, estimated capital costs, and any significant operating costs to service growth forecast for the next 10 years; and
- The life cycle activities, estimated capital costs, and any significant operating costs to sustain current levels of service for the next 10 years.

The format and contents of this Corporate Asset Management Plan are consistent with the Province's Building Together: Guide for Municipal Asset Management Plans. The format in the guide has specific Table of Content headings and suggested content for each section. This Corporate Asset Management Plan follows the guide and meets the requirements of the July 1, 2021 milestone set out in the regulation.

1.3 Asset Ownership

Table 1-1 describes the assets that support the Region's goals in 13 service areas. This list outlines essentially all physical assets the Region owns, as well as, leasehold improvements it has made in facilities it does not own.

The assets are organized into five "service groups" (which, except in the case of Corporate Management and York Regional Police, are departments of the Region). In some cases, more than one service group shares ownership of assets, such as Paramedic Stations, which are budgeted, planned and operated by Paramedic Services but constructed and maintained by Property Services. As well, the Region co-owns some assets with other municipalities. In these cases, the replacement value in this plan reflects the percentage owned by the Region.

Table 1-1 Assets included in the Corporate Asset Management Plan

Service Group	Service Area	Assets		
	Housing Services	Social housing units including low, mid and high rise apartment complexes, townhouse complexes, emergency housing shelters, and community centres.		
Community & Health Services	Paramedic Services	Ambulance and emergency response equipment, and support vehicles. Paramedic Response Stations are included under Property Services.		
	Seniors Services	Land improvements and leasehold improvements to long-term care facilities, program machinery and equipment. Long-term care facilities are included under Property Services.		
Corporate	Information Technology	Computer information technology hardware including a data centre, voice and data technologies, end-user devices, and a telecommunications network. Software and data is not currently included.		
Management	Property Services	Corporate facilities including administration offices, mixed-use facilities, and improvements to leased office space. Also included are provincial offences court facilities, public health facilities, long-term care facilities, and Paramedic Response Stations.		
	Energy Management	Solar arrays and associated equipment.		
	Forestry	The urban forest including street trees, growing medium and planters, the York Regional Forest including trails and structures ponds and drainage, and a forestry stewardship centre including outbuildings.		
Environmental Services	Waste Management	A materials recovery facility including process equipment, transfer stations, household hazardous waste depots, community environmental centres, facilities, and co-ownership of an energy from waste facility.		
	Wastewater CORE ASSET	Water resource recovery facilities, a wastewater treatment lagoon, equalization tanks, odour control facilities, wastewater pumping stations, sanitary forcemains, trunk sewers, maintenace holes and chambers.		
	Water CORE ASSET	Water treatment plants, groundwater wells, elevated tanks, pumping stations, storage reservoirs, transmission mains, water chambers and maintenance holes.		
Transportation	Roads CORE ASSET	Paved roads in urban and rural environments including stormwater infrastructure, bridges, culverts, traffic signals, roadside assets, road maintenance facilities, vehicles and equipment. Also includes service area support vehicles.		
Services	Transit	Fleet for local, rapid and mobility plus transit, facilities for terminals and garages including machinery and equipment, transit stops including platforms and shelters, rapidway assets, and technology systems for dispatch, customer relationship management and maintenance.		
York Regional Police	Police Services	Facilities, a fleet of motor vehicles, marine vessels and other equipment, information technology and telecommunications assets and specialized equipment.		

Land is generally not included in the current replacement costs of the asset inventory, except where integrated with the assets, as in the York Regional Forest, and where acquisition is required to provide new or expanded services such as Police Services, Paramedic Services, Public Health and Social Housing capital programs.

Data and information are important assets, especially in decision-making. Examples include:

- Digital aerial images, parcels, addresses, easements, rights-of-way, growth and development plans; and
- Data collected by staff on all Regional assets including roads, water and wastewater facilities and equipment, and vehicle assets.

Despite their value and the Region's investment in them, data and information as an asset are not included in this Corporate Asset Management Plan because they are not physical in nature. The Region will nonetheless explore ways of ensuring that these assets are properly managed and maintained. Asset data is relied on extensively to manage assets in the Region, as well as, in the development and finalization of this Corporate Asset Management Plan.

Business software applications are currently not included in this plan, however, steps are being taken to assess inventory of these assets, and will be included in the next version of the Corporate Asset Management Plan.

1.4 Purpose of the Corporate Asset Management Plan

The purpose of this Corporate Asset Management Plan is to support the Region's stewardship of its assets. It summarizes:

- The assets the Region relies on to support service delivery to the community;
- The current level of service provided by the Region's core asset supported services;
- The assets that will be needed in the future to support core asset service delivery objectives and mitigate vulnerabilities;
- The planned activities to sustain current and future core assets throughout their life cycles at minimal cost, while mitigating vulnerabilities;
- The status of determining funding sources for planned life cycle activities; and
- The steps to improve future iterations of the Corporate Asset Management Plan.

1.5 Developing the Asset Management Plan

The corporate asset management project team worked with Regional staff to develop this plan. This involved:

- Reviewing background materials, including existing asset management plans;
- Holding consultation meetings with internal stakeholders to collect data for each service areas group of assets;
- Assessing received data and information and filling gaps to complete analysis;
- Conducting internal stakeholder review meetings throughout development of the Corporate Asset Management Plan to confirm outline, objectives and scope; and
- Sharing interim outputs with stakeholders and incorporating their feedback.

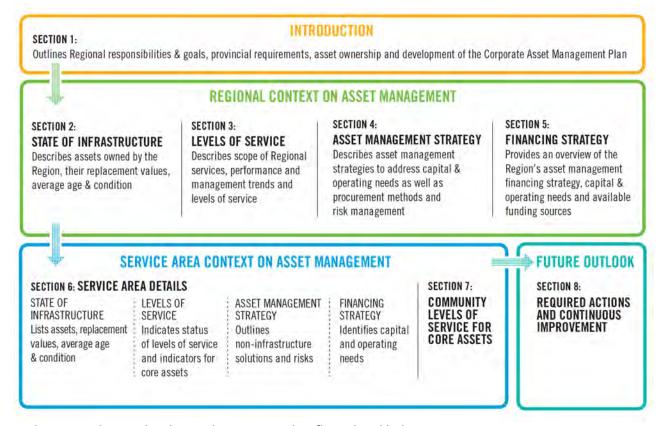
Table 1-2 outlines, for each service area, sources of existing information and data that were used in preparing this plan. While every service area has information on the state of its assets, to date the focus of more detailed asset management planning has been on core assets.

Table 1-2 Asset Management Plan Data Sources

Service Area	State of Infrastructure	Asset Growth Strategies	Asset Renewal Strategies
Housing Services	 Inventory from Asset Planner (December 8th, 2017) which includes replacement values from insurance valuation Condition based on 10-yr Facility Condition Index, provided in 2015 State of Infrastructure Report Data Model File 	In Progress	In Progress
Paramedic Services	 Logistics Asset List 2017 (e.g. Vehicles, Stretchers, Defibrillators) with replacement costs (reassigned install year if 2017) 	In Progress	In Progress
Seniors Services	Long-Term Care Asset Planner 2017	In Progress	In Progress
Information Technology	 Provance Personal Computer, peripherals & Printer Printers Inventory Raw Check Provance Cisco IP Phones Provance Data Center (7 year life) Provance Data Center (5 year life) Life Cycle Submissions 	In Progress	In Progress
Property Services	Asset Management Plan – Life Cycle Submissions	In Progress	In Progress
Energy Management	2017 Energy Asset Management Plan	Energy Conservation and Demand Management Plan	2017 Energy Asset Management Plan
Forestry	2017 Green Infrastructure Asset Management Plan	Forest Management Plan	2017 Green Infrastructure Management Plan
Waste Management	2017 Solid Waste Asset Management Plan	SM4RT Living Master Plan	2017 Solid Waste Asset Management Plan
Wastewater	2017 Water and Wastewater Asset Management Plan	2016 Water and Wastewater Master Plan	2017 Water and Wastewater Asset Management Plan
Water	2017 Water and Wastewater Asset Management Plan	2016 Water and Wastewater Master Plan	2017 Water and Wastewater Asset Management Plan
Roads	 Pavement Asset Management Plan Bridges and Structures Asset Management Plan York Region South-West Asset Management Plan 	10-Year Capital Plan	2015 State of Infrastructure
Transit	2017 Transit Asset Management Plan2017 draft Bus Rapidway Asset Management Plan	In Progress	In Progress
Police Services	 2015 State of Infrastructure Report 2015 Net Book Value of Fleet and IT file Life cycle Submissions 	In Progress	In Progress

Figure 1-3 depicts how the balance of this Corporate Asset Management Plan is organized.

Figure 1-3 Corporate Asset Management Plan Organization



The steps taken to develop each section are briefly outlined below:

Section 1: Introduction

Reviewed Regional responsibilities and goals, provincial requirements, asset ownership and provided overview of development of the Corporate Asset Management Plan

Section 2: State of Infrastructure

- Reviewed the asset inventory included in the most current service area state of infrastructure reports, asset management plans, associated data files, and inventory data included in a longterm capital forecast summary prepared by the Region's Office of the Budget in mid-2017 based on data provided by the various service areas;
- Collected asset inventory, useful life, and condition data from various data sources, organized around service area asset hierarchies. (A hierarchy is created by subdividing broad groups of assets by more specific criteria. For example, within the Environmental Services service group, the Service Area called "Water" is further subdivided into Water Treatment Plants, Groundwater Wells, Elevated Tanks, Reservoirs, Pumping Stations, Transmission Mains, Chambers and Maintenance Holes. Service areas break these classifications down even further as needed to track and manage work processes and feed into software applications); and
- Summarized the asset inventory across service areas including quantities or counts, replacement value, average service life and average age, and percentage of assets by replacement value in each of the five condition states based on service area reported physical condition or based on age, where reported physical condition was not available.

Section 3: Levels of Service

- Reviewed the existing performance indicators and levels of service reported in the most current corporate strategic and service area plans and reports, including the 2015 Corporate State of Infrastructure Report; and
- Collected and reported performance data and conclusions from the service areas for core assets.

Section 4: Asset Management Strategy

- Reported population and employment forecasts as set out in the Growth Plan 2017;
- Summarized the anticipated growth of the asset inventory for core assets until 2026 based on service area master plans and other data; and
- Summarized the life cycle renewal strategies by asset type based on service area specific asset management plans for core assets.

Section 5: Financing Strategy

- Summarized the estimated 10-Year capital expenditures and significant operating costs for core assets to accommodate projected increases in demand caused by growth as set out in the Growth Plan 2017; and
- Summarized the estimated 10-Year capital expenditures and significant operating costs to undertake the life cycle activities for core assets to maintain the current levels of service.

Section 6: Service Area Details

- For core assets, gathered and summarized information as described above in Sections 2 through 5; and
- For non-core assets, gathered and summarized information as described above for Section 2: State of Infrastructure.

Section 7: Community Levels of Service for Core Assets

- Reviewed O. Reg. 588/17 requirements for community levels of service for core assets; and
- Prepared descriptions, data, maps and images of core assets to meet scope, reliability, and quality regulatory requirements.

Section 8: Required Actions and Continuous Improvement

- Reviewed available service area data, processes and documentation related to asset management planning used to compile the Corporate Asset Management Plan;
- Compared the Region's current asset management planning practice and the Corporate Asset Management Plan to O. Reg. 588/17: Asset Management Planning for Municipal Infrastructure, and identified any gaps; and
- Developed and finalized action items to meet regulatory requirements and identified asset management continuous improvement actions.

1.6 Availability of Information

This Corporate Asset Management Plan and the Corporate Asset Management Policy are posted on the Region's website and available in hard copy format upon request. All background information and reports upon which this Plan is based are also available upon request.

2. State of Infrastructure

2.1 Overview

Understanding the value, age, useful life, and condition of the Region's assets is important to evaluate the efficacy of infrastructure investments and provide a basis to analyze future renewal requirements. These parameters were reported for all Regional assets in State of Infrastructure Reports in 2013 and 2015.

This Corporate Asset Management Plan takes into account current industry practices and incorporates innovative approaches to evaluating the state of the Region's assets, providing a firm foundation to build the balance of the Plan components. This section provides information on the current state of Regional Assets.

2.2 Asset Valuation

The estimated replacement values in this Corporate Asset Management Plan, as shown in Table 2-1, are based on engineering approaches as of December 31, 2016. The table shows that replacing all Regional assets would cost \$12.3 billion in 2016 dollars while maintaining current service levels.

Table 2-1 Regional Service Area Assets and Replacement Values

Service Group	Service Area	Current Replacement Value (\$M)	Current Replacement Value (%)
	Housing Services	\$821.3	6.7%
Community & Health Services	Paramedic Services	\$20.8	0.2%
	Seniors Services	\$5.6	<0.1%
Corporate	Information Technology	\$46.8	0.4%
Management	Property Services	\$439.4	3.6%
	Energy Management	\$1.6	<0.1%
Fundamental .	Forestry	\$488.3	4.0%
Environmental Services	Waste Management	\$153.0	1.2%
	Wastewater CORE ASSET	\$4,026.9	32.7%
	Water CORE ASSET	\$1,941.1	15.8%
Transportation	Roads CORE ASSET	\$3,552.2	28.8%
Services	Transit	\$557.3	4.5%
York Regional Police	Police Services	\$249.3	2.0%
Total		\$12,303.6	100%

Replacement values for asset management purposes are generally higher than the value of assets used in financial accounting. Accounting value – known as "book value" – shown in financial reporting is the historical cost of an asset less an amount representing the decline in its value over time.

In the past, the starting point for replacement values was the historical cost of an asset, which was then increased by the rate of inflation since the asset was built or acquired. This approach provided a highlevel estimate only. This Corporate Asset Management Plan takes an engineering-based approach that considers cost factors in addition to inflation. For example, replacement values now incorporate current regulatory and design standards, as well as, technological advances since the asset was originally put in place. As well, it typically costs significantly more to replace an asset than to put it in place for the first time because service has to be maintained during the replacement period.

Another factor underlying the higher portfolio value is the inclusion of such assets as the York Regional Forest and Regionally-owned street trees, which accounting rules do not always recognize as assets. The more refined approach used in this Plan has increased the replacement value of the asset portfolio compared to previous estimates. The balance of this chapter explains how replacement values were estimated.

2.3 Asset Age and Remaining Life

Knowing the expected life of an asset and how much of it has already been used up gives some guidance on when it might fail and need to be renewed. As the next section notes, age by itself generally does not provide the same quality of information as assessing physical condition. Figure 2-1 shows the average age of assets in each service area against the average total expected useful life. This gives a sense of how far into their service life each group of assets is.

The graph shows that many of the Region's assets are relatively new. This is because a large share of infrastructure was put in place to serve recent population and economic growth. Some assets, however, are reaching the middle or even final stages of their estimated useful lives, for example in Paramedic Services, Roads, and Seniors Services.

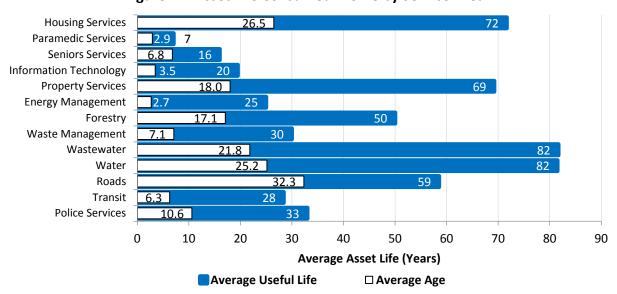


Figure 2-1 Asset Life Consumed Profile by Service Area

2.4 Asset Condition

In this Corporate Asset Management Plan, the term "condition" refers to the degree to which an asset has physically deteriorated. "Performance" is a more general term that typically describes an asset's ability to deliver levels of service; it depends on capacity and reliability, as well as, condition.

In addition to evaluating current condition, condition assessment programs determine the rate of deterioration over time, enable forecasts of future condition, and inform the most beneficial type and timing of treatment. Condition assessment methods and rating systems vary depending on the type of asset and, for some types of assets, have become relatively standard.

The Region inspects assets on schedules that are appropriate to the asset group, with more critical assets, for example bridges and structural culverts, being inspected more frequently than less critical ones. The Region does not have condition data on every asset. It is not needed for assets like vehicles, where renewal is based on age or mileage, or for assets like street lights that are normally run to failure.

In many cases, however, recent condition data would be useful, but is unavailable. This is the case for about 20 per cent of the assets in this Corporate Asset Management Plan. Collection of this information is underway, however, estimated age provides a general indication of the expected useful life. This approach is common among municipalities, but should be verified through condition assessment, as it does not always directly reflect condition or remaining life.

The Region is working to increase the percentage of assets with industry standard condition assessment data. This is a stewardship goal in the 2015 to 2019 Strategic Plan. A grading scale is useful to present detailed engineering data about asset condition in a way that allows comparisons over time and across different asset types. The Region uses a five-point condition grading system, summarized in **Table 2-2** below, which is consistent with the general condition grading system included in the International Infrastructure Management Manual (IIMM).

Table 2-2 Five-Point Condition Grading System

Grade	Description	Condition Criteria	Criteria Description
VG	Very Good	Fit for the future	Well maintained, good condition, new or recently rehabilitated.
G	Good	Adequate for now	Acceptable, generally approaching mid-stage of expected service life
F	Fair	Requires attention	Signs of deterioration, some elements exhibit deficiencies.
Р	Poor	Increasing potential of affecting service	Approaching end of service life, below standard, significant deterioration.
VP	Very Poor	Unfit for sustained service	Near or past service life, advanced deterioration, assets may be unusable.

Table 2-3 shows how the Region translates information from industry standard condition rating systems and age-based assets into the grading system above.

Table 2-3 Conversion of Industry Condition to Five-Point Condition Grade

Regional Condition Grade	Pavement Condition Index (PCI)	Bridge Condition Index (BCI)	Facility Condition Index (FCI)	% Life Remaining for Age-Based "Condition"
Very Good (New)	90 to 100	-	0 to 5%	90 to 100%
Good	80 to < 90	> 70 to 100	5 to 10%	50 to 90%
Fair	60 to < 80	> 60 to 70	10 to 20%	25 to 50%
Poor	50 to < 60	0 to 60	20 to 30%	10 to 25%
Very Poor (End-Of-Life)	0 to < 50	-	Over 30%	0 to 10%

Figure 2-2 shows the value of the assets by condition grade and service area. The replacement value for each service area appears to the right of the condition grade bar.

Wastewater \$4,027 Water \$1,941 Roads \$3,552 **Housing Services** \$821.3 Paramedic Services \$20.8 **Seniors Services** \$5.6 **NON-CORE ASSETS** Information Technology \$46.8 **Property Services** \$439.4 **Energy Management** \$1.6 Forestry \$488.3 Waste Management \$153.0 Transit \$557.3 \$249.3 **Police Services** Replacement Value (\$2016, M) Very Poor (End-of-Life) 2% Very Good (New) 28%

Figure 2-2 Regional Asset Inventory and Condition by Service Area

Notes:

- The figure at the right of each bar represents the total replacement value of assets in that service area
- Because of their large relative size, the bars for core assets are plotted against a horizontal axis scale five times larger than the scale used for non-core assets
- "Roads" includes stormwater, bridges and culvert infrastructure

As the detail for some of the smaller valued asset portfolios is lost in Figure 2-2, those asset portfolios with less than \$500 million replacement value are shown in more detail in Figure 2-3.

Paramedic Services \$20.8 Seniors Services \$5.6 Information Technology **Property Services** \$439.4 **Energy Management** \$1.6 **Forestry** \$488.3 Waste Management \$153.0 **Police Services** \$249.3 \$0 \$100 \$200 \$300 \$400 \$500 Replacement Value (\$2016, M) Very Poor Very Good **Poor** Fair Good (End-of-Life) 3% 3% 11% 50% (New) 33%

Figure 2-3 Regional Asset Inventory and Condition by Service Area - Smaller Portfolios

To meet service levels and manage risk while minimizing life cycle costs, assets should generally be kept in fair or better condition. The above figures show that some 93 per cent of the Region's assets meet this threshold.

In theory, it might seem that no assets should be allowed to fall into poor or very poor condition. In practice, however, this is not always the case. Where the asset is not critical, the risk when it fails is small and it can be easily replaced after failure – for example, an individual street light – letting it run down is both reasonable and cost-effective. In many cases, as well, a replacement for the asset is in development, and the old asset is being used as long as possible in the meantime.

Critical assets in poor or very poor condition need increased attention and renewal investment to avoid higher maintenance costs and/or unexpected failure. These assets are a priority for inclusion in 10-Year capital renewal programs and budgets.

2.5 Asset Information Updates

The information that supports this Corporate Asset Management Plan is continuously updated. The Region intends to review and update, if necessary, the Corporate Asset Management Plan itself every four years, once for each term of Council.

3. Levels of Service

3.1 Overview

One of the first steps in asset management is to define the levels of service the assets are to provide. The goal is then to determine how to deliver those at the best life cycle cost. This requires understanding what the community wants, what regulators require, and what is technically and financially feasible.



Performance management is central to this process. It involves identifying goals, measuring progress, reporting the results in a meaningful way, and using results to drive improvement. When these activities are carried out systematically and on a regular basis, performance management helps the organization to focus on priorities and address under-performance.

3.2 Current Levels of Service and Performance

The Region provides the following scope of services to the community as outlined in **Table 3-1**.

Table 3-1 Regional Scope of Services provided to the Community

Service Group Service Area **HOUSING SERVICES** The Region, as shareholder of Housing York Inc., owns and operates approximately 2,600 social and affordable housing units for seniors, singles and families. PARAMEDIC SERVICES Provides emergency and non-emergency medical response for the municipalities within York Region, including patient assessment, lifesaving treatment and monitoring, safe and timely transport to appropriate facilities for continuing medical care. SENIORS SERVICES Provides safe and reliable long-term care facilities, nursing and personal care services for adults no longer able to live on their own. INFORMATION TECHNOLOGY Supports the Region's organization by developing, operating and maintaining the Region's technology networks, and distributing and maintaining end-user devices. **PROPERTY SERVICES** Supports the Region's organization by developing, operating and maintaining corporate administration offices, leased office space, mixed-use facilities, long-term care facilities and Paramedic Response Stations.

Service Group Environmental Services ork Region

Service Area

ENERGY MANAGEMENT

Tracks the environmental impacts of Regional energy use and works to mitigate those impacts through better energy management and promotion of sustainable practices.

FORESTRY

Builds, protects and enhances green infrastructure, including trees and other vegetation in both urban and rural landscapes.

WASTE MANAGEMENT

Works in partnership with the local municipalities, who manage curbside collection of blue box, green bin, yard waste and residual waste, and deliver the materials to York Region for processing, energy recovery and/or disposal.

WATER

Secures and protects drinking water and delivers it in bulk to the local municipalities, which in turn distribute it to residents and businesses.

WASTEWATER

Collects wastewater from the local municipalities and conveys it to water resource recovery facilities for treatment.

Service Group Service Area ROADS Assists in the safe and efficient transport of people and goods through **Transportation Services** interconnecting roads between urban and rural areas. Maintains the road network in a state of good repair. TRANSIT Provides reliable, convenient and seamless travel across the local municipalities, and easy access to the Toronto Transit Commission and provincial GO Transit systems. **POLICE SERVICES** York Regional Police provides crime prevention and law enforcement to the Region's nearly 1.2 million citizens. There are just over 2,200 dedicated sworn and civilian members who serve the region's diverse communities, ensuring that our neighbourhoods, roads and schools are safe for all residents.

To track progress toward goals, performance management uses indicators and measures like the "Key Performance Measures" set out in the 2015 to 2019 Strategic Plan. Reported annually, these show results and trends. Measures on the management of the Region's physical assets based on the 2016 Community Report are shown in Table 3-2, with the coloured circles indicating current trends.

Table 3-2 Key Performance Measure Trends, 2016

Strategic Priority Area	Strategic Objectives	Key Performance Measures	Current Trend
	Focusing on networks and systems that connect people, goods and services	Increase number of road lane kilometres new and rehabilitated	
ECONOMIC VITALITY		Increase number of rapidway lane kilometres	
~	Increasing the range of available and affordable	Increase percentage of total housing stock medium/high density residential housing	
	housing choices	Increase number of shelter beds	
COMMUNITIES	Protecting public health	Maintain percentage of samples that meet Ontario drinking water standards	
	Making our communities more welcoming and inclusive	Increase number of bike lane and paved shoulder kilometres	
^_	Managing traffic congestion	Increase number of road lane kilometres new and rehabilitated	
SUSTAINABLE		Increase number of traffic signals reviewed and optimized annually	
ENVIRONMENT		Increase transit ridership per capita	
		Increase number of rapidway lane kilometres	
	Optimizing critical infrastructure systems capacity	Maintain percentage of treated water returned to environment with regulated standards	
		Reduce quantity of inflow and infiltration in Regional and local wastewater systems	
		Measure percentage of capital budget spent on renewal/asset management	
		Increase percentage of solid waste diverted from landfill	
		Decrease average residential water demand	
	Preserving green spaces	Increase number of trees and shrubs planted annually through the Regional Greening Strategy programs	•
	Stewardship of the Region's assets	Increase contribution to asset replacement and rehabilitation as percentage of replacement value	
GOOD GOVERNMENT		Increase percentage of assets with real condition assessment data	

LEGEND: - Trending in the desired direction - Annual variation not in the desired direction

Community Levels of Service

O. Reg. 588/17 requires legislated community levels of service for core assets. Community levels of service use qualitative descriptions to describe the scope or quality of service delivered by an asset category. Examples of legislated community levels of service include a map showing areas of the municipality that are serviced by the Regional water and wastewater system or images that illustrate the different levels of pavement condition grade of Regional roads, both of which can be found in Section 7: Community Levels of Service for Core Assets. In this example, maps provide an illustrative view of the extent of the services provided through the infrastructure assets.

Technical Levels of Service and Performance

O. Reg. 588/17 also requires legislated technical levels of service for core assets. Technical levels of service use metrics to measure the scope or quality of service being delivered by an asset category. Examples of technical levels of service include the percentage of urban properties serviced by the municipal water and wastewater system for Regional water and wastewater assets or the average pavement condition index (PCI) value for Regional roads. Technical levels of service for core assets are provided in Section 6: Service Area Details and have been informed by State of Infrastructure Reports in 2013 and 2015.

Legislation and regulations set standards, many relating to safety and reliability, which the Region is legally obligated to meet. These feed into defining the Region's levels of service. The Region keeps information on regulatory inspections and compliance. Typically, the details are maintained at the operational level and confirmation of compliance is reported at a higher level.

3.3 Proposed Levels of Service and Performance

External trends and issues affecting the Region's ability to meet defined levels of service include:

- Infrastructure failing prematurely due to environmental factors and/or construction practices;
- Availability of external funding (such as federal and provincial infrastructure programs);
- Unexpected downloading of services by more senior levels of government;
- Integrating innovative approaches into existing infrastructure by piloting new technologies on a regular basis (such as Living Building Challenge's features in the Bill Fisch Forest Stewardship and Education Centre); and
- Potential changes in federal or provincial legislation that must be incorporated as part of ongoing service delivery.

Additionally, the following trends and issues have been considered in setting defined levels of service for core assets in the transportation and water and wastewater master plans:

- Population and employment growth and demographic changes;
- Changes in public expectations or patterns of use;
- New technology or methods that might replace obsolete equipment, provide longer asset life, and/or achieve higher quality and greater efficiencies; and
- Increases in the cost of inputs (such as fuel) that would raise service delivery costs.

The Region is working to develop defined levels of service for all service areas and, along with public consultation these will be a key aspect of the next update to the Corporate Asset Management Plan.

4. Asset Management Strategy

4.1 Overview

The Region has limited funds available to build new infrastructure for growth and care for existing assets. To make its resources go as far as possible, it relies on asset life cycle management strategies. These strategies enable an asset to provide a defined level of service at the best possible cost over its entire life cycle with manageable risk.

Life cycle management strategies typically take into consideration:

- Non-infrastructure solutions policies and coordinated initiatives that can lower costs, increase an asset's performance, better balance the risk or extend asset life. Examples include integrated infrastructure and land use planning through the Municipal Comprehensive Review process and Infrastructure Master Plans, demand management through the Transportation Demand Management and Long Term Water Conservation Strategy, purchase of insurance to reduce risk of premature asset failure, optimization through Energy Management Plans and condition assessments;
- Expansion activities planning, design and construction of new assets or modification to existing assets to meet growth demands;
- Renewal activities significant rehabilitation designed to improve asset life cycle costs (e.g. the lining of ductile iron watermains can defer the need for replacement) and activities that are expected to occur once an asset has reached the end of its useful life and rehabilitation is no longer a viable option;
- Maintenance activities activities required to ensure assets are operated as intended and meet designed service life. Activities include regularly scheduled inspection, preventative maintenance, and more significant repair and activities associated with unexpected events; and
- Disposal activities –activities associated with disposing assets that are declared surplus or no longer needed by the municipality.

The Region assesses the costs of potential life cycle activities to determine the best life cycle cost strategy to manage each asset type. The sum of all asset life cycle management strategies informs the minimum cost to sustain each asset type, for each service area. Failing to take care of assets can increase an asset's life cycle cost and also have other impacts such as causing damage to other infrastructure or causing interruption to service delivery.

4.2 Asset Management Strategies

The Region uses its understanding of current service delivery gaps and potential future gaps to inform the timing, location and amount of needed investment in infrastructure assets. The Region aims to provide sufficient service capacity to meet demand and manages the condition and renewal of assets to sustain defined service levels, including meeting legislated and other Regional requirements.

Growth Planning

Growth, especially in population, has major impacts on infrastructure. It generally requires significant investment, and its geographical distribution affects costs and ability to deliver service. The Region is mandated to plan for the population and employment forecasts outlined in the Growth Plan 2017.

Table 4-1 shows expected population and employment growth for the Region.

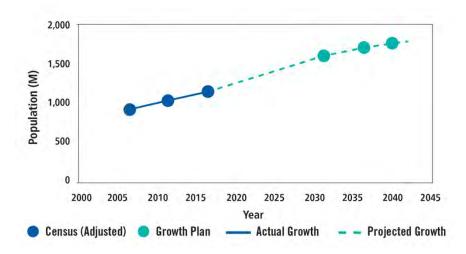
Table 4-1 Growth Plan 2017 Forecasts for York Region

	Census Data	Growth Plan 2017 Projections			
	2016	2031	2036	2041	
Population	1,148,000*	1,590,000	1,700,000	1,790,000	
Employment	600,800	790,000	840,000	900,000	

^{*}Figure may change subject to release of the undercount value

Figure 4-1 brings together previous and current census data with the Growth Plan 2017 forecasts to show a longer-term trend.

Figure 4-1 Regional Population: Census and Growth Plan 2017 Forecasts



As discussed in Section 1: Introduction, the Regional Official Plan and master plans for transportation and water and wastewater infrastructure outline how the Region proposes to accommodate growth and deliver defined levels of service. A key question addressed by asset growth planning is typically, what infrastructure is required to service future growth? This planning is required many years in advance of the expected growth to ensure the adequate delivery of services. Section 6: Service Area Details summarizes the core asset strategies to accommodate growth.

Renewal Planning

All assets deteriorate physically, eventually failing altogether. As they deteriorate, their ability to deliver the defined level of service may decline, which can contribute to a performance gap. The Region assesses condition to understand where assets are in their life cycles and identify potential performance gaps.

Asset management plans and capital programs specific to various service areas set out approaches to addressing performance gaps and rehabilitating or replacing ageing assets. Asset management plans are based on identifying the needed activities, and their frequency and cost, that should enable an asset to

provide the defined level of service at the best life cycle cost. Over time, assets may be rehabilitated to extend their useful life. Ultimately, most assets must be replaced.

For some assets, such as a relatively inexpensive information technology device, the lowest-cost decision is often to replace it at the end of its useful life. Rehabilitation is neither possible nor practical. For other asset types, the issue is much more complex. A facility may include many thousands of components, some of which may be rehabilitated or replaced numerous times through the life of the facility. For pavement on a roadway, there are numerous treatment types and each may be applied a limited number of times only, and only under certain conditions, through the life of the pavement.

Because major asset renewals and replacements can be costly, they must be phased over time and across the entire asset portfolio. As the Region refines asset management planning through optimization analysis, it will be better able to track asset condition, compare this to targets, and use the information to make more effective decisions about renewing or replacing assets.

Operations and Maintenance

How an asset is operated and maintained on a day-to-day basis affects both its condition and its useful life. Poor operating and maintenance practices can shorten an asset's service life, while well-designed ones – which should include predictive, preventative and corrective actions – support the delivery of defined levels of service and maximize the service life. Conversely, if needed renewal of an asset is deferred, maintenance and renewal needs will often both increase.

Standard operating procedures reflect accounting practice. It makes a distinction between asset renewal, which is capital spending, and maintenance, which is operational. Renewals and maintenance are nonetheless strongly linked.

Operations and maintenance plans and budget forecasts reflect:

- Legislated and regulatory requirements;
- The need for routine preventative maintenance activities;
- Cost drivers, some of which (for example, energy) have increased much faster than the overall rate of inflation;
- Impacts of deferred renewal; and
- Needs that will arise as planned new infrastructure comes into operation.

The final bullet point underscores that growth in the asset portfolio, which tends to mirror population growth, will put significant pressure on existing operations and maintenance capacity. A bigger asset portfolio generally means higher ongoing operating costs.

4.3 Procurement Methods

The Region aims to ensure that it acquires all goods and services on a competitive, fair and open basis. Procurement activities include sourcing products and services, issuing bids and monitoring the bid process, conducting public tender openings, awarding contracts and issuing purchase orders, working to resolve vendor disputes, and disposing of surplus goods. The Region's Purchasing Bylaw guides all procurement practices and is supported by internal policies and procedures.

The Region works closely with the nine local municipalities, the Province, utility companies, and the private sector to coordinate procurement of service delivery and asset management.

This includes joint planning and scheduling of programs and capital projects, such as:

- Joint purchasing /contract delivery for capital projects where Regional, local, and other work can be undertaken together;
- Joint program delivery between the Region and local municipalities for programs such as snow clearing, traffic signal maintenance, road works and water and wastewater buried infrastructure renewal, including relining; and
- Purchase of goods and services.

In addition to being cost-effective, coordination also helps to achieve economies of scale and minimize disruption in service to residents.

4.4 Risk Management

The Region manages the risks around infrastructure – which include poor performance, high costs and premature failure – through well-developed maintenance and capital renewal programs based on assessment of assets' age and/or condition and performance testing.

These activities, however, require resources. As this section has shown, meeting the needs of a growing Region and keeping existing assets in a state of good repair can be costly. Adding assets increases operating costs on a long-term basis, putting pressure on operations and maintenance resources. A gradual shift toward more asset renewal, which must be funded from the tax levy or user rates, also has serious long-term financial implications.

York Region is currently developing a Climate Change Action Plan with expected completion in 2019 that will result in a methodology for considering climate change for the management of assets related to risk. In parallel, the Region has developed regional climate projections that can be used to assess infrastructure vulnerability and inform future updates to asset management plans. Currently, the Region uses various methods for managing risk across the 13 service areas.

Risk management, related to physical assets is being reviewed for each service being delivered. Some examples of risk management at the Region are:

- Risk is generally being managed across all service areas through a combination of age based prioritization methods for replacement, condition assessments and performance testing to better manage investment decisions, in turn, to better manage the consequences of asset failure from both an asset performance and life cycle cost perspective;
- Examples of some condition inspections range from roads, tanks, sewers, facility, plant and station condition inspections;
- Pump testing on large capacity potable water pumps is used as an example of asset performance testing to better manage the risk of service delivery;
- 2016 Water and Wastewater Master Plan assessed future infrastructure system needs, risks of changing rainfall events were considered by making adjustments to design storms; and
- Financial considerations for storm sewers assume existing infrastructure will be replaced to accommodate anticipated climate change projections.

Without the required resources, infrastructure risks will increase. The demands of infrastructure development and care, however, can bring financial risks. The next section looks at these issues in more detail.

5. Financing Strategy

5.1 Overview

Organizations with large asset portfolios need to address significant costs to build, acquire, operate, maintain, renew and replace assets. This section therefore looks at the links between asset management planning and financial planning.

York Region introduced a Regional Fiscal Strategy, which Council approved in 2014, to enhance its longterm ability to meet its asset needs without unduly adding to its debt. The Fiscal Strategy, shown in Figure 5-1, has put in place measures to manage debt, build up reserves, align capital needs with fiscal capacity and consider fairness between current and future residents.



Figure 5-1 Regional Fiscal Strategy

As well, in 2015 Regional Council approved a new water and wastewater rate structure that is designed to yield, by the end of 2021, the revenue needed to cover all costs of providing water and wastewater services. These measures are helping to ensure more funding is available from reserves for major rehabilitations and replacements.

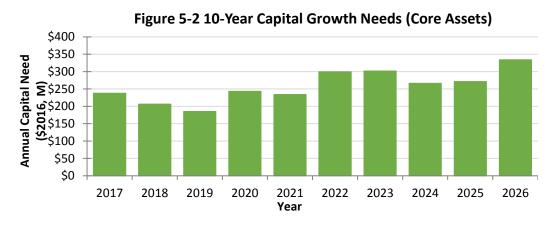
Existing Regional asset management strategies for core assets informed Council's average annual investment, through capital and operating budgets, of more than half a billion dollars over the last decade. Building on Council's prior commitment, this plan will help to consolidate asset management practices throughout the Region, developing consistency across the service areas. This consistent approach will define our needs and provide evidence-based informing recommendations on spending and resource requirements for asset management.

Preparing this plan, however, showed that there are still gaps in sustainable funding across the asset portfolio. To address these, the Region will develop an asset management financing plan based on the principles of the fiscal strategy, to be finalized in late 2018 as the next multi-year budget takes shape.

The Region then expects to review and if necessary update the asset management financing plan every four years, with results informing the next multi-year budget cycle.

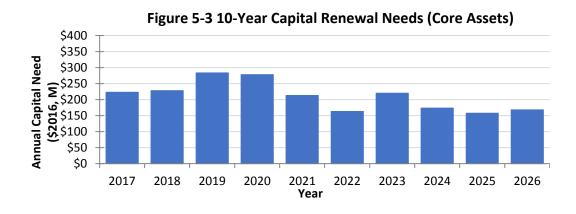
5.2 Capital Needs for Core Assets

Figure 5-2 shows the 10-Year of growth-related capital needs for core assets. The forecast is based on the 10-Year Transportation Capital Plan and 2016 Water and Wastewater Master Plan.



Capital Needs for Renewal of Core Assets

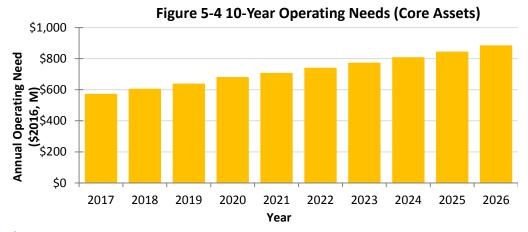
Renewal of the asset portfolio is an ongoing activity for the Region. Figure 5-3 shows the 10-Year capital renewal needs to sustain current levels of service for Regional core assets. The need is generally based on the work underlying this plan, including industry standard physical condition assessments, risk and best life cycle cost analysis.



These needs include a backlog of renewal needs that is overdue from before 2017. This is also referred to as "now needs." Most of the backlog is for the roads service area and has been distributed over a period of 25 years. The projects required to eliminate the asset renewal backlog have been spread-out over a 25 year period to avoid causing undue short term pressures on budget and staffing. Core asset growth needs total \$2.58 billion, against \$2.10 billion for renewal needs, over the 10-Year period from 2017 to 2026 inclusive.

5.3 Operating Needs for Core Assets

Expected growth in population and assets was used to develop the operating cost needs in Figure 5-4. More specifically, the water and wastewater needs reflect the outlook in the Water and Wastewater Financial Sustainability Plan and the road needs reflect a proportionate increase in current operating costs with projected road network growth.



5.4 Funding Sources

A number of revenue sources are available to fund the capital needs of assets throughout their life cycles:

- Development Charges pay for most growth-related capital spending;
- The tax levy, water and wastewater user rates and other fees:
 - Contribute to annual operating and maintenance costs;
 - Pay for minor rehabilitation and a portion of growth through a "flow through" pay-as-yougo renewal capital fund; and
 - Contribute to reserve funds for major rehabilitations and replacements.
- Grants from senior levels of government are available, but unpredictable levels and timing, and conditions often placed on their use, make many grants unsuitable as a funding source for longterm asset management.

Debt is a source of funds, but not a source of true revenue because it has to be repaid from other revenue sources, such as taxes and user rates. As well, interest must be paid on debt, which reduces financial flexibility and can impair a borrower's credit rating. The provincial government constrains the amount of debt that Ontario municipalities may issue, and limits the use of long-term debt to capital projects. The Region's policy is to reduce reliance on debt.

The Region also considers how costs and benefits are spread between current and future residents. The concept is referred to as intergenerational equity. It recognizes that future generations should not be unduly burdened with debt or other obligations that result from the decisions of the current generation. Conversely, taxes and other burdens on the current generation should not be incurred for benefits that will accrue mainly to those who come after them.

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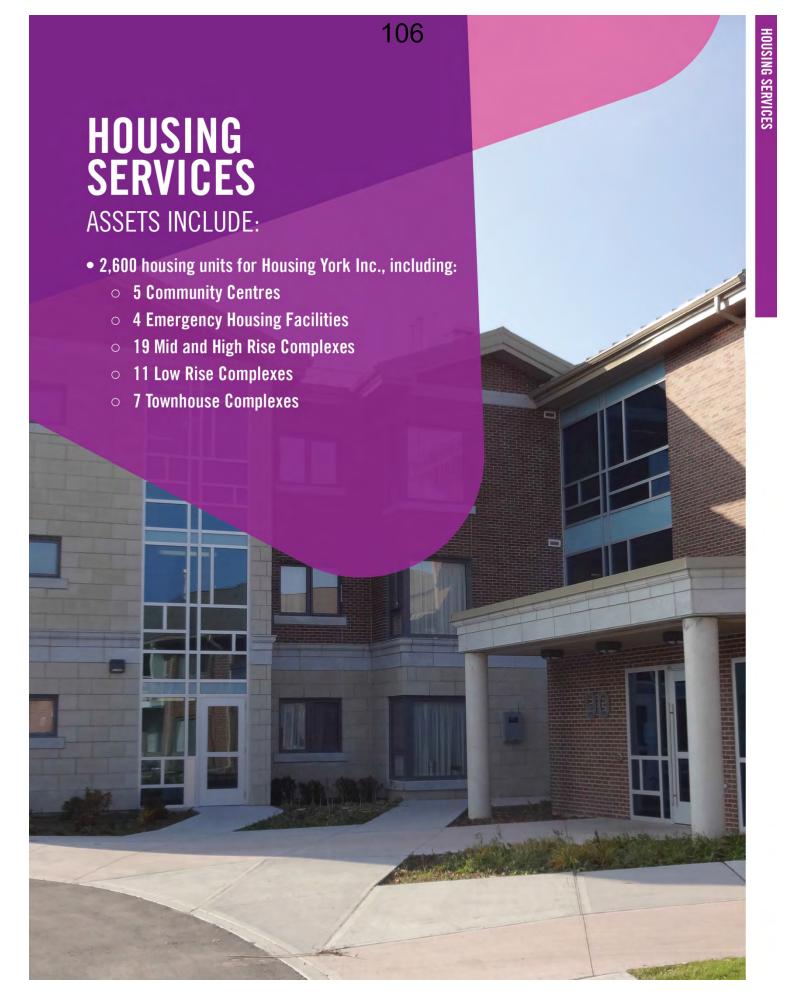
The Region is currently determining how best to manage capital needs across service areas. As previously discussed, this includes looking at ways to reduce life cycle costs and finding non-infrastructure or less infrastructure-intensive solutions. For the funding need that remains, the Region is developing an asset management financing plan. Aligning with the Regional Fiscal Strategy, it will take into consideration:

- Expected timing of periodic needs (new assets and major rehabilitations);
- Ongoing annual spending needs (operations, maintenance and minor capital);
- Existing and potential revenue sources and their expected levels;
- Debt capacity and debt service costs;
- Balancing current and future costs and benefits;
- Advocating to obtain new revenue generating tools; and
- Increasing the portion of costs paid by user fees (e.g. the ratio of transit costs that are paid through fares).

6. SERVICE AREA DETAILS

This section provides details, by service area, for each of the following:

- State of Infrastructure
- **Levels of Service**
- **Asset Management Strategy**
- **Financing Strategy**



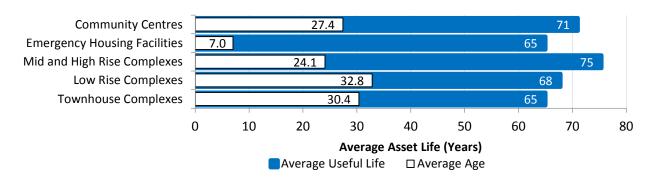
HOUSING SERVICES - Community and Health Services

State of Infrastructure (\$821.3 million)

Housing York Inc., York Region's municipal non-profit housing corporation, owns and manages approximately 2,600 housing units and related assets.

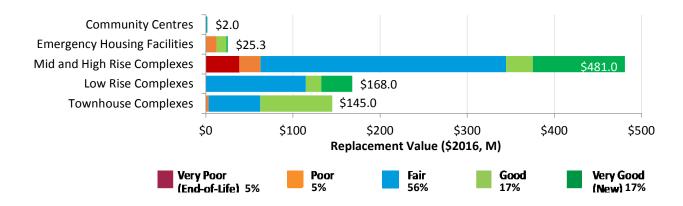
Key business drivers are forecast population and associated asset growth, and aging infrastructure.

Although many of the assets are relatively new due to recent growth, others are reaching the middle of their useful lives and will require renewal in the upcoming years.



The Region's housing assets are generally in fair to good condition, as assessed based on age, however, comprehensive building condition assessments (BCAs) are being performed to better understand the condition of all building systems and their components.

Housing Services undertakes all required accessibility, building code, fire code and other safety and security system compliance monitoring.



Capacity of Housing Services facilities is measured by the occupancy rate and vacant suite turnover time. Reliability is measured by compliance with safety and security requirements, availability of standby power, facility amenities and aesthetics, and customer satisfaction.

Renewal needs are determined by industry standard condition assessments of facility systems which are undertaken on 20 per cent of the portfolio each year.

Levels of service will be developed and documented as outlined in Section 8: Required Actions and Continuous Improvement.

Asset Management Strategy

The strategies associated with this service area include:

- Expansion of the asset portfolio is based on the 10-Year Social Housing Capital Program and includes:
 - Redevelopment projects in Unionville and Woodbridge; and
 - Pre-development costs, land acquisitions and a regeneration expansion program.
- Renewal of the asset portfolio is based on minimizing life cycle cost while maintaining levels of service. The asset management strategies are based on typical facility renewal treatment schedules and renewal rates;
- Non-infrastructure solutions are developed through operational improvements such as reduction in suite turnover times resulting in increased occupancy of existing units, bulk purchasing, and tenant management. The Conservation & Demand Management Plan includes components for Housing Services facilities as they account for a significant portion of the Region's energy use and associated greenhouse gas emissions; and
- Operations and maintenance of the asset portfolio is based on industry standards which dictate that the Region must:
 - Continue maintenance to ensure safety and preservation of assets; and
 - Assess consequential operational and maintenance requirements of significant new infrastructure planned to be added to the asset portfolio.

Risks Associated with the Strategy

Risks relating to asset failure are mitigated through investment planning, inspection and maintenance programs which provide the necessary data to identify the work required to achieve levels of service. Annual capital and maintenance programs and associated budgets ensure that funding to undertake the necessary work is provided.



Financing Strategy

This Corporate Asset Management Plan is the first step in identifying non-core asset funding requirements for asset management needs going forward. Currently, the Region is developing a strategy how best to finance these needs through the multi-year budget process 2019-2022 inclusive.

Capital Forecast – New Infrastructure Required to Service Growth

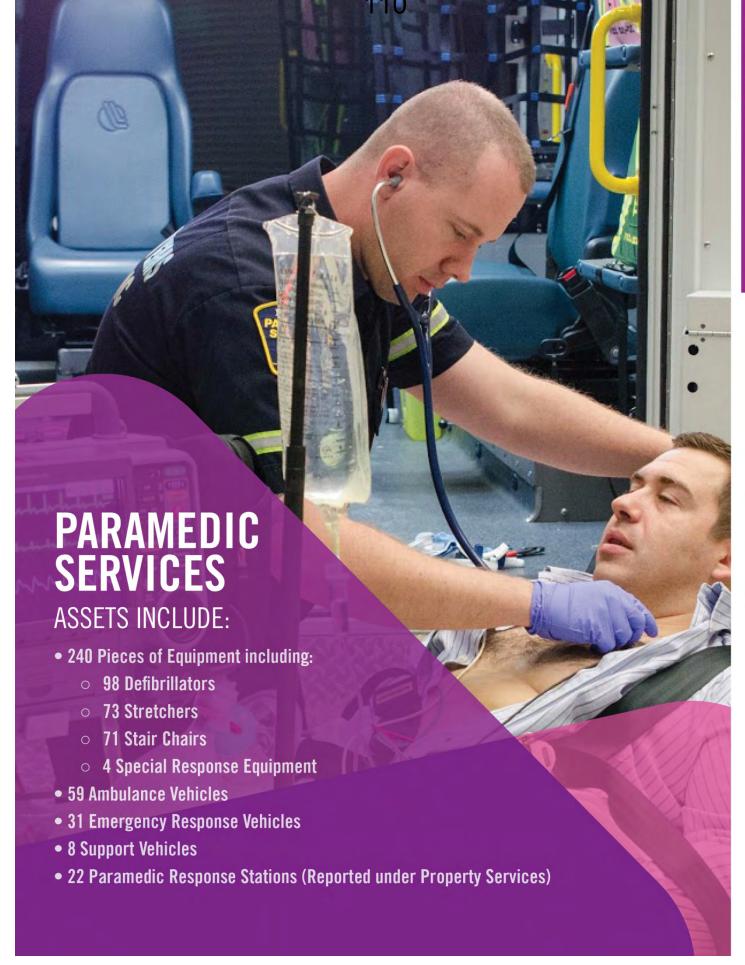
To meet the demand for expanded services, the Region constructs new assets and extends the capacity of the asset portfolio, in addition to implementing non-infrastructure strategies. The 10-Year 2017 Growth Capital Program totals \$185 million for an estimated service area asset portfolio replacement value of \$1,027 million in 2016 dollars by the end of 2026. The estimated costs to service asset growth from 2026 to 2041 are based on an approved 20-Year Capital Development Plan (2017 to 2036).

Capital Forecast - Asset Renewal of Existing Infrastructure

The funding required to renew existing assets over the long term, at current levels of service, is determined by applying the asset management renewal strategy to the asset portfolio. Future average annual renewal needs including growth are calculated proportional to the increased size of the asset portfolio based on what is outlined in the planning documents. Renewal needs are currently being evaluated and this work will help inform the next multi-year budget.

Operating Forecast – Operations and Maintenance Needs

The 2016 operating budget included a gross amount of \$76.8 million for public housing operations and maintenance needs. Annual operating costs are expected to increase proportional to the increased size of the housing portfolio.



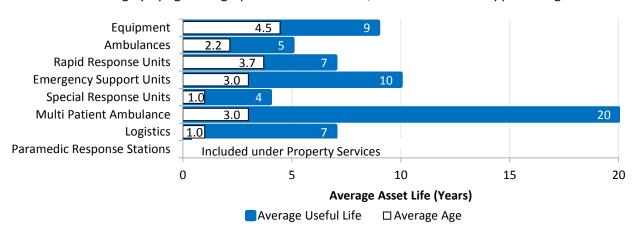
PARAMEDIC SERVICES - Community and Health Services

State of Infrastructure (\$20.8 million)

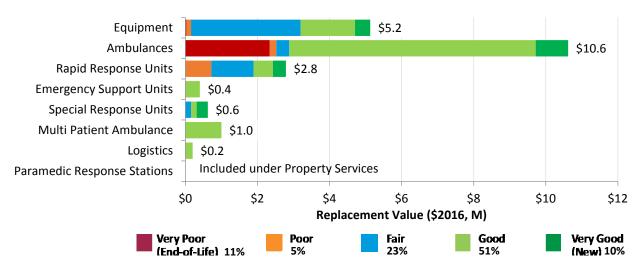
This service area provides emergency and non-emergency medical response for the municipalities within York Region, including patient assessment, lifesaving treatment and monitoring, and safe and timely transport to appropriate facilities for continuing medical care. It also maintains the Paramedic Services assets in a state of good repair.

Key business drivers at this time are a growing and aging population that have had the effect of increasing the consumption of emergency health services, in addition to associated asset growth and aging infrastructure.

The Region's paramedic services equipment and vehicles are relatively short lived and replaced on a schedule driven largely by age. The graph below reflects this, as most assets are approaching mid-life.



The Region's Paramedic Services assets are generally in fair to very good condition, based on age, with the exception of ambulances. Those assets that are shown in poor or very poor condition are approaching the end of useful life and have been inspected to ensure functionality. The ambulances that have reached end-of-life were replaced in 2017.



The capacity of Paramedic Services assets is measured by the EMS response rate which indicates sufficient fleet size and adequate operations as of 2017. The reliability of Paramedic Services assets is measured by the size of standby fleet and percentage of assets beyond replacement year indicator. The standby fleet ratio to total fleet is currently being reviewed to ensure an appropriate balance of cost and performance risk. The condition of Paramedic Services assets is a measure of the physical condition of the infrastructure, its age and the maintenance performance.

Levels of service will be developed and documented as per the actions noted in Section 8: Required Actions and Continuous Improvement.

Asset Management Strategy

The strategies associated with this service area include:

- Expansion of the asset portfolio is based on the 10-Year Paramedic Services Capital Program and the Paramedic Services Consumption Forecast, which includes the procurement of new ambulances;
- Renewal of the asset portfolio is based on minimizing life cycle cost while maintaining levels of service. The asset management strategies for Paramedic Services are based on typical renewal treatment schedules and renewal rates, while the other assets are replaced at the end of useful
- Non-infrastructure solutions are developed through the Conservation and Demand Management Plan which includes components for the Paramedic Services vehicles as they account for a portion of the Region's energy use and associated greenhouse gas emissions;
- Operations and maintenance of the asset portfolio is based on industry standards which dictate that the Region:
 - Continue to carry out maintenance of the Region's assets to ensure safety and preservation of assets; and
 - Assess consequential operational and maintenance requirements of significant new infrastructure planned to be added to the asset portfolio.

Risks Associated with the Strategy

Risks relating to asset failure are mitigated through investment planning, inspection and maintenance programs which provide the necessary data to ensure that the work required to achieve the established levels of service is identified. Annual capital and maintenance programs and associated budgets ensure that funding to undertake the necessary work is provided. Currently the Region is developing a Corporate Risk Framework for Asset Management as per Section 8: Required Actions and Continuous Improvement.



Financing Strategy

This Corporate Asset Management Plan is the first step in identifying non-core asset funding requirements for asset management needs going forward. Currently, the Region is developing a strategy how best to finance these needs through the multi-year budget process 2019-2022 inclusive.

Capital Forecast – New Infrastructure Required to Service Growth

To meet the demand for expanded services, the Region constructs new assets and extends the capacity of the asset portfolio, in addition to implementing non-infrastructure strategies. The consumption forecast results in an estimated service area asset portfolio replacement value at the end of 2026 of \$37.4 million in 2016 dollars.

Capital Forecast - Asset Renewal of Existing Infrastructure

The funding required to renew existing assets over the long term, at current levels of service, is determined by applying the asset management renewal strategy to the asset portfolio. Future average annual renewal needs including growth are calculated proportional to the increased size of the asset portfolio based on what is outlined in the planning documents. Renewal needs are currently being evaluated and this work will help inform the next multi-year budget.

Operating Forecast – Operations and Maintenance Needs

The 2016 operating budget included a gross amount of \$72.0 million for Paramedic Services operations and maintenance need. Annual operating costs are expected to increase proportional to the increased size of the Paramedic Services asset portfolio.





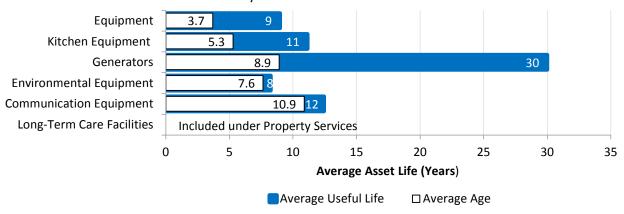
SENIORS SERVICES - Community and Health Services

State of Infrastructure (\$5.6 million)

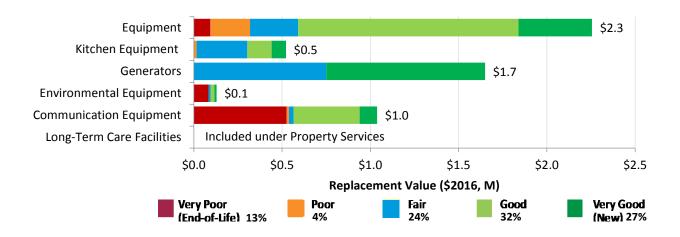
This service area assists to provide safe and reliable long-term care facilities, and nursing and personal care services for adults no longer able to live on their own. It also maintains the long-term care assets in a state of good repair.

Key business drivers at this time are future increases in demand due to future population growth, an aging population and aging infrastructure.

The Region's Seniors Services equipment is relatively short lived and replaced on a schedule driven largely by age. The graph below reflects this, as most assets are approaching mid-life. The exceptions are environmental equipment (used for cleaning) and communications equipment, both of which are scheduled for renewal over the next two years.



The Region's Seniors Services assets are generally in good condition, based on age. Those assets that are shown in poor or very poor condition are approaching the end of useful life and have been inspected to ensure functionality. The nurse call system is nearing the end of life and is scheduled for replacement in 2018.



Levels of Service

The capacity of Seniors Services' assets is measured by four indicators that are directly tied to Province of Ontario reporting requirements related to occupancy rates. The reliability of Seniors Services assets is measured by compliance with safety and security requirements, availability of standby power, facility amenities and aesthetics, and customer satisfaction.

Levels of service as currently provided will be further developed and documented as Section 8: Required Actions and Continuous Improvement.

Asset Management Strategy

The strategies associated with this service area include:

- Expansion of the Seniors Services asset portfolio is uncertain pending further development of initiatives under the Seniors Strategy. The Region is working with the provincial government to improve policy planning and decision-making for long-term care beds by developing a forecast for York Region, including identification of required number, type and location;
- Renewal of the Seniors Services asset portfolio is based on minimizing life cycle cost while maintaining levels of service;
- Non-infrastructure solutions are developed through the master planning process. In November 2016, Regional Council approved a Seniors Strategy that sets out how the Region will respond to seniors' needs over the next 10 to 20 years. This means ensuring that communities offer appropriate housing options and more accessible, convenient transportation;
- Operations and maintenance of the asset portfolio is based on industry standards, such as:
 - Continuing to carry out maintenance of the Region's assets to ensure safety and preservation of assets; and
 - Assessing consequential operational and maintenance requirements of significant new infrastructure planned to be added to the asset portfolio.

Risks Associated with the Strategy

Risks relating to asset failure are mitigated through investment planning, inspection and maintenance programs which provide the necessary data to ensure that the work required to achieve the established levels of service is identified. Annual capital and maintenance programs and associated budgets ensure that funding to undertake the necessary work is provided. Currently the Region is developing a Corporate Risk Framework for asset management as per Section 8: Required Actions and Continuous Improvement.



Financing Strategy

This Corporate Asset Management Plan is the first step in identifying non-core asset funding requirements for asset management needs going forward. Currently, the Region is developing a strategy how best to finance these needs through the multi-year budget process 2019-2022 inclusive.

Capital Forecast – New Infrastructure Required to Service Growth

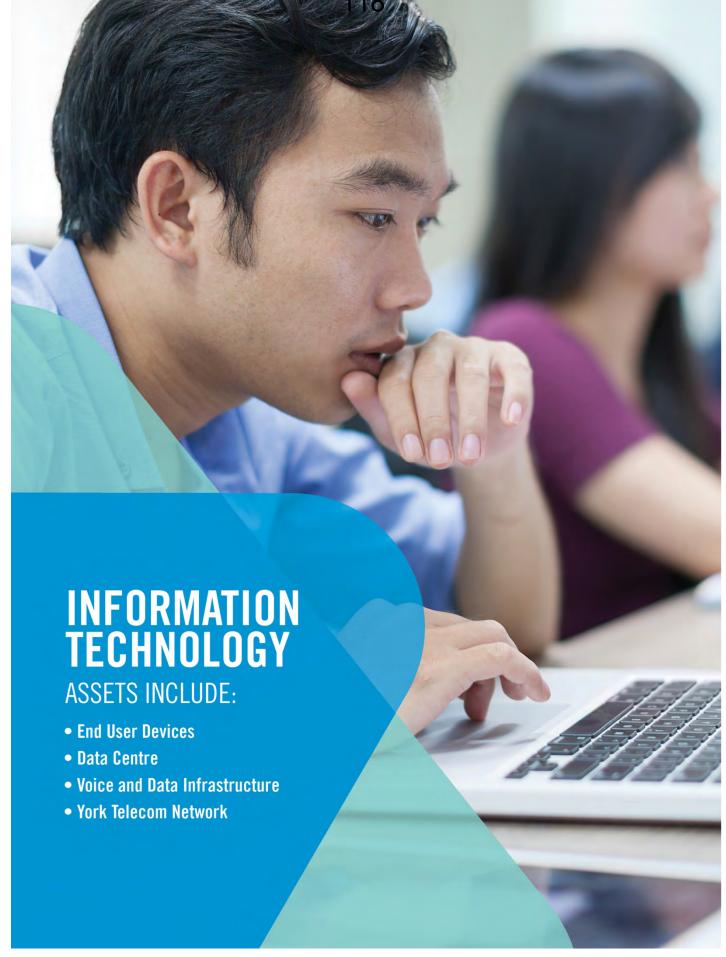
There is no current growth forecast in this service area at this time.

Capital Forecast - Asset Renewal of Existing Infrastructure

As there is no current growth forecast for this asset portfolio, the future average annual renewal needs including growth are pending. Renewal needs are currently being evaluated and this work will help inform the next multi-year budget.

Operating Forecast – Operations and Maintenance Needs

The 2016 operating budget included a gross amount of \$33.3 million for Seniors Services' operations and maintenance needs. As there is no growth forecast for this asset portfolio, the future annual operating costs are not expected to increase.



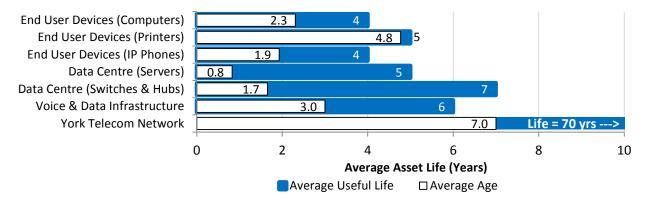
INFORMATION TECHNOLOGY - Corporate Management

State of Infrastructure (\$46.8 million)

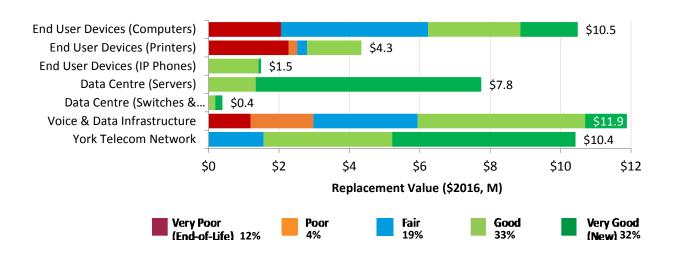
This program area supports the Region's organization by developing, operating and maintaining the Region's technology networks, and distributing and maintaining end-user devices.

Key business drivers at this time are continuous management of the scheduled renewal of technology assets, while keeping up-to-date with technology advances and procurement opportunities.

Although many of the assets are relatively new due to planned replacement of devices, however, as technology devices are generally short lived, replacement will continue as devices reach the end of their useful lives.



The Region's information technology assets range widely in condition grade, resulting from the planned replacement asset strategy. It is important to note that many technology-related devices are replaced at the end of their useful lives as refurbishment is typically not possible or effective. As such, it is expected that the condition grades for Information Technology infrastructure would be somewhat equally spread across the spectrum, ranging from Very Poor to Very Good.



This program area is responsible for all Regional technology networks and end user devices. Current levels of service will be further developed and documented as per Section 8: Required Actions and Continuous Improvement.

Asset Management Strategy

The strategies associated with this service area include:

- Expansion of the asset portfolio is developed through the master planning process and includes provision of additional hardware for growth-related service expansions;
- Replacements for technology assets are age-based;
- Non-infrastructure solutions include shared computers and a print reduction strategy with business centre, and department strategies such as matching information technology services with individual needs;
- Operations and maintenance of the asset portfolio is based on industry standards
- Continuing to carry out maintenance of the Region's assets to ensure safety and preservation of assets; and
- Assessing consequential operational and maintenance requirements of significant new infrastructure planned to be added to the asset portfolio.

Risks Associated with the Strategy

Risks relating to asset failure are mitigated through investment planning, inspection and maintenance programs which provide the necessary data to ensure that the work required to achieve the established levels of service is identified. Annual capital and maintenance programs and associated budgets ensure that funding to undertake the necessary work is provided. Currently, the Region is developing a Corporate Risk Framework for Asset Management as per Section 8: Required Actions and Continuous Improvement.



Majority of technology assets are replaced solely based on age, mainly to address technological advances, manufacturers' planned obsolescence and compatibility with new systems

Financing Strategy

This Corporate Asset Management Plan is the first step in identifying non-core asset funding requirements for Asset Management needs going forward. Currently the Region is developing a strategy how best to finance these needs through the multi-year budget process 2019-2022 inclusive.

Capital Forecast – New Infrastructure Required to Service Growth

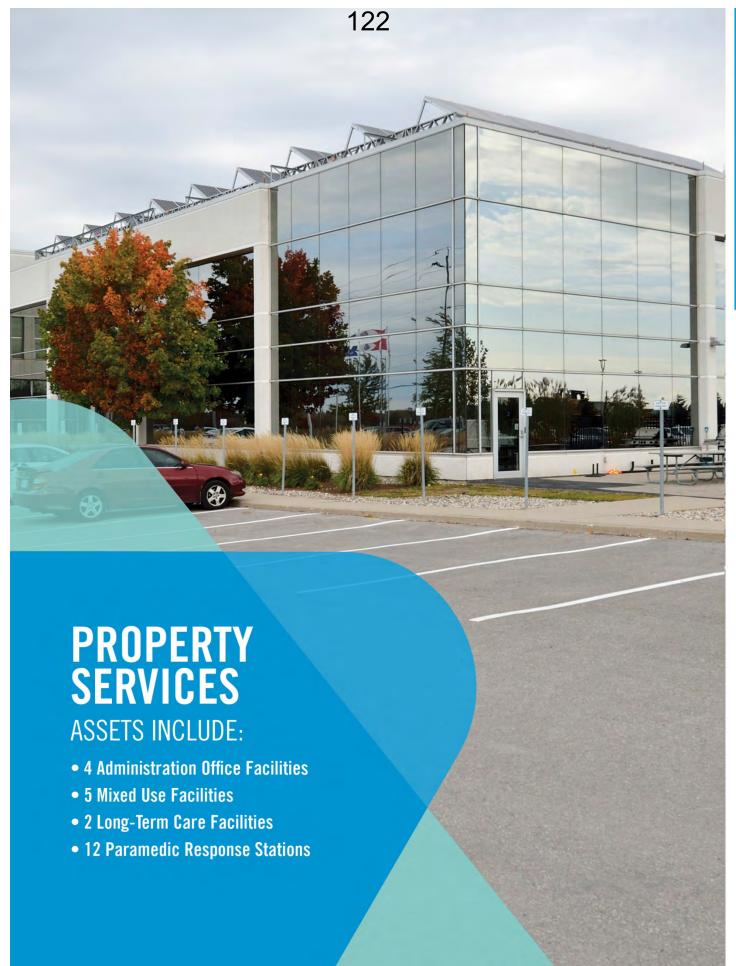
To meet the demand for expanded services, the Region acquires new assets and extends the capacity of the asset portfolio, in addition to implementing non-infrastructure strategies. The estimated service area asset portfolio replacement value at the end of 2026 is \$62.8 million in 2016 dollars. Forecasts of growth from 2016 to 2041 are assumed to be at a rate of 3.0 per cent annually.

Capital Forecast - Asset Renewal of Existing Infrastructure

The funding required to renew existing assets over the long term, at current levels of service, is determined by applying the asset management renewal strategy to the asset portfolio. Future average annual renewal needs including growth are calculated proportional to the increased size of the asset portfolio based on what is outlined in the planning documents. Identification of backlog renewal needs (e.g. work that is "due" based on the network analysis of the renewal strategies) as determined by age includes \$2.3 million for end user devices (printers).

Operating Forecast – Operations and Maintenance Needs

The 2016 operating budget included a gross amount of \$26.5 million for information technology services operations and maintenance needs. Annual operating costs are expected to increase proportional to the increased size of the information technology network.



PROPERTY SERVICES - Corporate Services

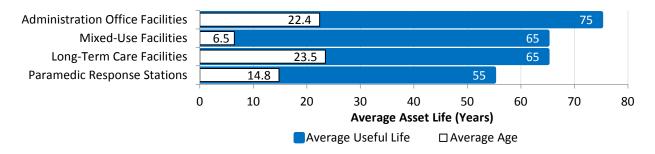
State of Infrastructure (\$439.4 million)

Property Services acquires property, is responsible for facility maintenance, security and parking services, manages facility-related capital construction projects (for example, paramedic stations and administrative space), plans and designs space, and oversees efficient delivery of day-to-day facility operations.

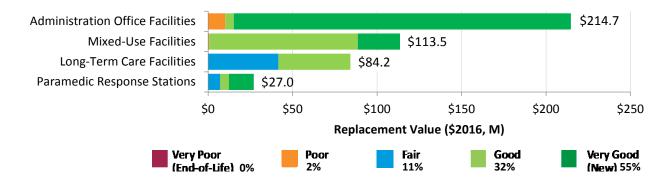
Key business drivers at this time are future population and associated asset growth and aging infrastructure.

Since most of the facilities are relatively new, it is important to have a well-developed plan to ensure that the best life cycle investments are made and that the investments made in assets can be realized.

Property Services Branch conducts comprehensive building condition assessments to better understand the condition of all building systems and their components on a 5 year rolling schedule. In addition, preventative maintenance activities by property services staff is carried out to ensure assets are well maintained and performing to targets. Through ongoing programs short and long-term planning needs are managed for the asset portfolio, to help proactively address and troubleshoot emerging facility concerns.



The Property Services assets are generally in good and very good condition, as assessed based on facility condition indices (FCIs) determined through building condition assessments.



The capacity of corporate facilities is measured by the ratio of occupancy to design capacity and total staff to staff parking space availability. The reliability of property services facilities is measured by compliance with safety and security requirements, and availability of standby power. The renewal needs of property services facilities are determined by industry standard condition assessments of facility systems which are undertaken on approximately 20 per cent of the portfolio each year. Current levels of service will be further developed and documented in Section 8: Required Actions and Continuous Improvement.

Asset Management Strategy

The strategies associated with this service area include:

- Expansion of the asset portfolio is developed through the master planning process which considers provision of additional space for growth-related service expansions, including development of the Administrative Centre Annex and 10 Paramedic Response Stations;
- Renewal of the asset portfolio is based on minimizing life cycle cost while maintaining levels of service. The asset management strategy for the renewal of facility assets is based on building condition assessments and industry standards for replacement costs. Facilities have preventative maintenance plans to ensure assets are well maintained for maximum asset life cycle expectancy;
- Non-infrastructure solutions are developed through the Corporate Energy Conservation & Demand Management Plan which includes components for administrative facilities as they account for a significant portion of the Region's energy use and associated greenhouse gas emissions. Other initiatives include Smart Commute and Flexible Work Arrangements;
- Operations and maintenance of the asset portfolio is based on industry standards, such as:
 - Continuing to carry out maintenance of the Region's assets to ensure safety and preservation of assets; and
 - Assessing consequential operational and maintenance requirements of significant new infrastructure planned to be added to the asset portfolio.

Risks Associated with the Strategy

Risks relating to asset failure are mitigated through investment planning, inspection and maintenance programs which provide the necessary data to ensure that the work required to achieve the established levels of service is identified. Annual capital and maintenance programs and associated budgets ensure that funding to undertake the necessary work is provided. Currently, the Region is developing a Corporate Risk Framework for Asset Management as per Section 8: Required Actions and Continuous Improvement.



Building condition audits are completed every five years to help inform asset management planning

Financing Strategy

This Corporate Asset Management Plan is the first step in identifying non-core asset funding requirements for asset management needs going forward. Currently, the Region is developing a strategy how best to finance these needs through the multi-year budget process 2019-2022 inclusive.

Capital Forecast – New Infrastructure Required to Service Growth

To meet the demand for expanded services, the Region constructs new assets and extends the capacity of the asset portfolio, in addition to implementing non-infrastructure strategies. The 10-Year 2017 Growth Capital Program totals \$280 million for an estimated service area asset portfolio replacement value of \$719 million in 2016 dollars at the end of 2026.

The estimated costs to service asset growth from 2026 to 2041 are based on asset growth being more or less proportional to population growth over the same period.

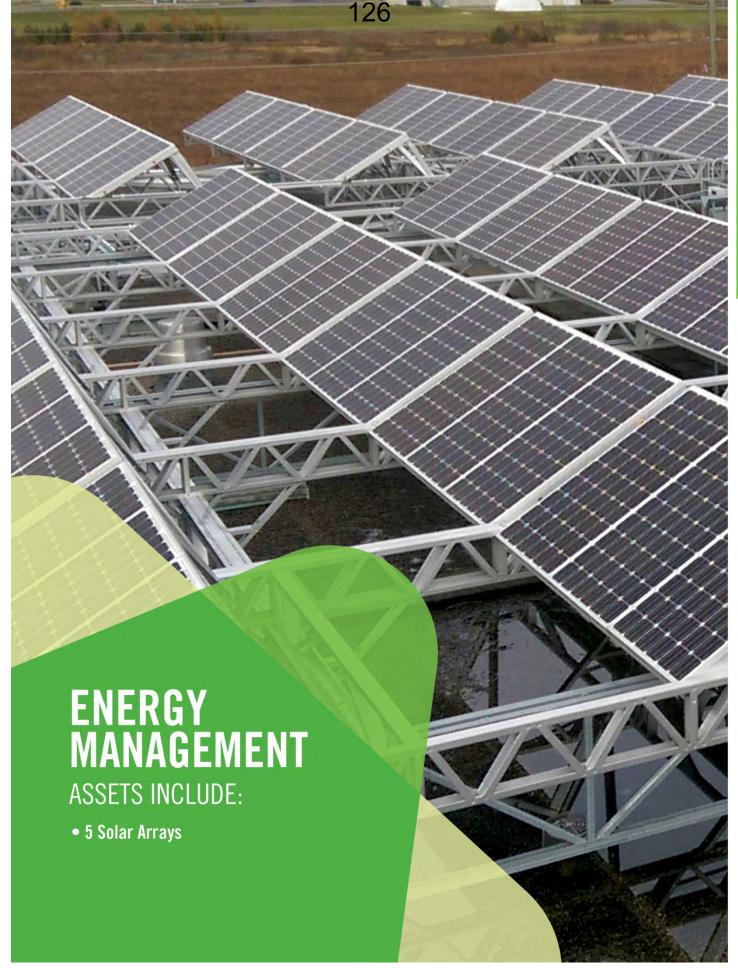
Capital Forecast - Asset Renewal of Existing Infrastructure

The funding required to renew existing assets over the long term, at current levels of service, is determined by applying the asset management renewal strategy to the asset portfolio. Future average annual renewal needs including growth are calculated proportional to the increased size of the asset portfolio based on what is outlined in the planning documents.

Identification of immediate renewal needs (e.g. work that is "due" based on analysis of renewal strategies) is determined through the building condition assessments (facilities where FCI indicates building condition of poor or very poor) and includes \$10.2 million for Corporate Administration Offices and \$0.6 million for Mixed-Use Facilities.

Operating Forecast – Operations and Maintenance Needs

The 2016 operating budget included a gross amount of \$5.1 million for Property Services operations and maintenance needs. Annual operating costs are expected to increase proportional to the increased size of the asset portfolio.

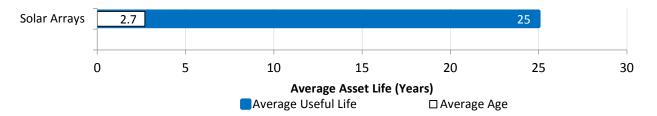


ENERGY MANAGEMENT - Environmental Services

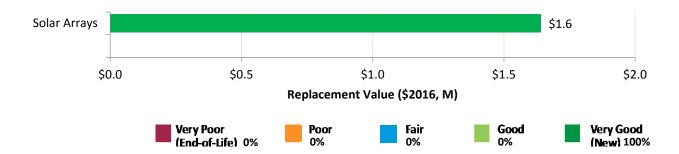
State of Infrastructure (\$1.6 million)

This service area provides assets to support sustainable environment including five solar photovoltaic (PV) arrays, all of which are relatively new and constructed in the past 10 years.

The department's renewable energy assets are all less than 10-Years old. These assets do not require a lot of maintenance; however irregular meter readings quickly alert the Energy Management team to any issues with solar panels or inverters. A condition assessment program for solar panels is currently in development.



The Region's Energy Management assets are all in very good condition, as assessed based on age.



Set through the Energy Conservation and Demand Management Plan, the level of service is measured by greenhouse gas emission offsets realized through infrastructure directly managed by the service area. Excerpted from the 2017 Climate Change and Energy Conservation Asset Management Plan, a preliminary level of service is indicated below:

Capacity & Scope

 Greenhouse Gas Emission Reduction through Renewable Energy Sources (tonnes equivalent to carbon dioxide)

Asset Management Strategy

Due to its infancy and the nature of the equipment (constantly evolving technology), assets in this service area are typically run to failure, as rehabilitation is usually not feasible nor practical. Renewal of the Energy Management portfolio is based on minimizing life cycle cost while maintaining levels of service. Activities include:

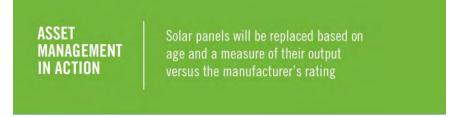
- Rehabilitation planning to develop renewal needs forecasts based on past experience with similar assets. For example, the rehabilitation of a roof may drive the replacement of an existing solar PV array installation;
- Performance monitoring to identify premature asset failure; and
- Replacement at the end of service life.

Significant growth of renewable energy infrastructure is anticipated over the next 20 years. Much of this growth will be realized by leveraging existing green technologies and other emerging sources.

Risks Associated with the Strategy

Three risk factors have been identified for energy-generating assets and will be addressed in future asset management plans:

- Premature failure and performance issues;
- Physical and weather damage; and
- Emerging technology and improvements.



Financing Strategy

This Corporate Asset Management Plan is the first step in identifying non-core asset funding requirements for Asset Management needs going forward. Currently, the Region is developing a strategy how best to finance these needs through the multi-year budget process 2019-2022, including the use of funds from the green energy reserve and revenues from Feed-in Tariff contracts.

Capital Forecast – New Infrastructure

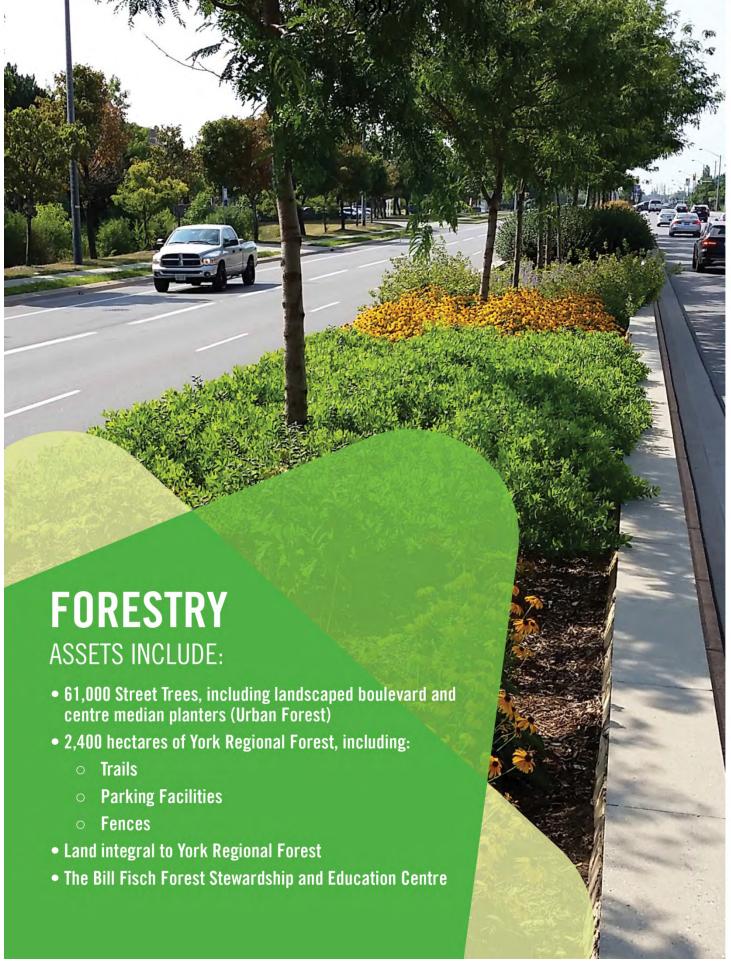
New Energy Management assets are constructed or expanded to provide a return on investment and to offset or reduce the Region's carbon footprint.

Capital Forecast - Asset Renewal of Existing Infrastructure

Energy management assets are all relatively new assets. Future average annual renewal needs will be developed in more detail in future budgets. Due to their recent construction, there is no identified backlog of renewal needs.

Operating Forecast – Operations and Maintenance Needs

The 2016 operating budget included a gross amount of \$0.62 million for energy management operations and maintenance needs. Annual operating costs are expected to increase proportional to the increased size of the asset portfolio.



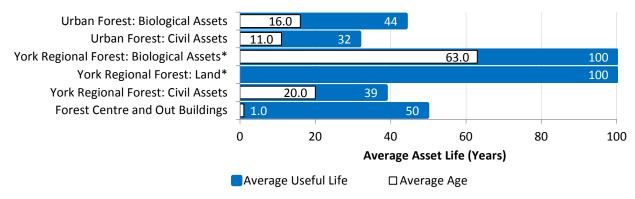
FORESTRY - Environmental Services

State of Infrastructure (\$488.3 million)

York Region owns and manages a diverse network of planted and natural vegetation communities, and associated recreational and supporting infrastructure collectively known as green infrastructure.

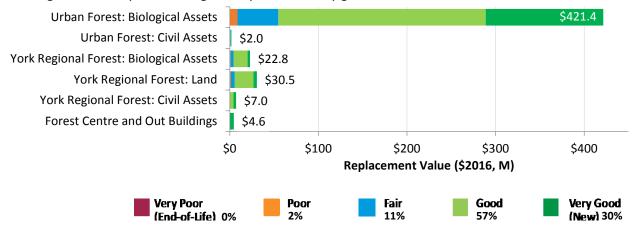
York Region utilizes dedicated staff and contracted services to monitor and maintain all street trees to maximize the expected life. Silviculture (the growing and cultivation of trees) management of the York Regional Forest is regularly undertaken to maximize forest health. Forestry staff are currently engaged in proactive initiatives to study and prepare for the effects of climate change, invasive species, urbanization, and pollution.

Most assets are relatively new due to recent growth of the Urban Forest and construction of the Bill Fisch Forest Stewardship and Education Centre.



^{*}Forest stands and lands, if properly maintained, do not have an end of life. The age of land is not applicable.

The Region's Forestry assets are generally in fair to very good condition.



The Region is in the process of refining levels of service for Regional Forest uses, such as recreation and environmental protection. Excerpted from the 2017 Green Infrastructure Asset Management Plan, preliminary levels of service are indicated below:

Capacity & Scope

- Area of sensitive habitat protected (per cent of hectares);
- Per cent conformance to Forest Stewardship Council Regional standards; and
- Per cent of available planting space occupied by street trees.

Reliability

- Per cent area of forest regenerating to acceptable levels;
- Health of street trees and landscape plantings as a measure of aesthetics and performance of supporting assets (e.g. growing media and irrigation systems); and
- Amount of water consumed per year at the Bill Fisch Forest Stewardship and Education Centre sourced from offsite.

Asset Management Strategy

The urban forest generally expands as a result of such capital projects as road construction, because street trees are planted as an important element of streetscaping.

- Renewal of the asset portfolio is based on life cycle cost-benefit analysis to determine the best treatment type and timing among available options throughout the life of the asset while maintaining levels of service;
- Green Infrastructure provides environmental enhancement and protection, recreation facilities, outdoor education and demonstrates sustainable forest management;
- York Region is moving to proactive tree maintenance for the urban forest. The Region is also placing an increased emphasis on improvement of soil through soil amelioration, constructed soil trenches and soil cells;
- Operations and maintenance of the asset portfolio is based on:
 - Continuing maintenance of the Region's assets to ensure safety and preservation; and
 - Assessing operational and maintenance consequences of significant new additions to the asset portfolio.
- Program to add plantings along existing roads, with the aim of achieving the target where 100 per cent of roads meet applicable landscaping standards.

ASSET MANAGEMENT IN ACTION

Proactive tree maintenance and monitoring will help to ensure continued growth in asset value of Urban Forests

Risks Associated with the Strategy

Key risks for Forestry assets include:

- Physical damage by wind and ice; and
- Disease and invasive insects.

The Region is currently developing a formal Corporate Risk Framework for Asset Management. In the meantime, existing life cycle management plans include measures to manage risks locally (for example, assessing trees that may pose a hazard) and at the Regional level (for example, increasing species diversity), as well as, an annual allowance for addressing costs of unforeseen events.

Risks relating to asset failure are mitigated through investment planning, inspection and maintenance programs which provide the necessary data to identify the work required to achieve levels of service. Annual capital and maintenance programs and associated budgets ensure that funding to undertake the necessary work is provided.

Financing Strategy

This Corporate Asset Management Plan is the first step in identifying non-core asset funding requirements for asset management needs going forward. Currently, the Region is developing a strategy how best to finance these needs through the multi-year budget process 2019-2022 inclusive.

Capital Forecast - New Infrastructure

For the Forestry service area, capital expenditures are funded through three sources:

- Current tax levy;
- Development charges; and
- Land securement reserves.

The current 10-Year forecast for the Capital Program identifies the works required to support a variety of individual projects related to the asset portfolio. The 10-Year 2017 Capital Program is \$16.6 million for Natural Heritage and Forestry.

Operating Forecast – Operations and Maintenance Needs

The 2016 operating budget included a gross amount of \$7.8 million for forestry operations and maintenance needs. Annual operating costs are expected to increase proportional to the increased size of the asset portfolio.



WASTE MANAGEMENT - Environmental Services

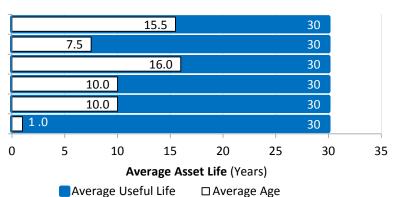
State of Infrastructure (\$153.0 million)

This service area works in partnership with the local municipalities to ensure proper disposal of solid waste. It also operates public drop-off depots for materials not managed at curbside such as electronic waste, scrap metal, and household hazardous waste.

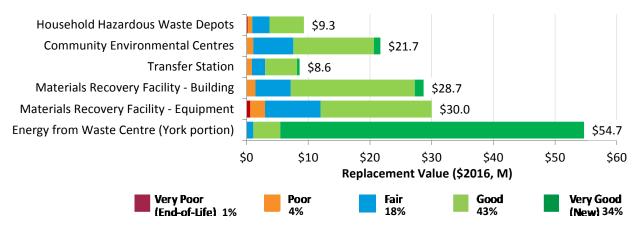
York Region's Waste Management facilities are operated by third-party contractors. At the York Region Waste Management Centre and the Durham York Energy Centre, the contractor is required to perform regular condition assessments and undertake rehabilitation works necessary to ensure the facilities continue to operate above a stipulated level of service as specified in the operation agreements. The performance of the contractors is monitored by York Region and verified by independent consultants. At the Public Waste drop-off facilities, the Region manages condition assessments and undertakes rehabilitation work as required.

Although many of the assets are relatively new, others are reaching the middle to later stages of their useful lives and will require renewal in the upcoming years.

Household Hazardous Waste Depots
Community Environmental Centres
Transfer Station
Materials Recovery Facility - Building
Materials Recovery Facility - Equipment
Energy from Waste Centre (York portion)



In general, Waste Management assets have been assessed based solely on age, with the majority of the assets in fair or better condition, meaning that they are fit to deliver the services. Assets identified in the poor or very poor categories are programmed for renewal in the upcoming years.



Levels of service provide "line of sight" between the asset management plan and York Region strategic objectives. The Region is in the process of refining levels of service for the Waste Management service area. Excerpted from the 2017 Solid Waste Management Asset Management Plan, preliminary levels of service are indicated below:

Capacity & Scope

- Tonnes per week of receiving capacity; and
- Number of Environmental Compliance Approval (ECA) compliance issues due to the performance/failure of the facility.

Reliability

- Number of complaints due to performance/failure of the facility received per year from local municipalities/customers;
- Number of public or staff health, safety & environment issues due to performance/failure of the building, facility equipment or roadways; and
- Availability of facility to receive (if applicable) materials delivered by local municipalities/customers.

Asset Management Strategy

The strategies associated with this service area include:

- Non-infrastructure solutions include integrated infrastructure planning through the SM4RT Living Plan as well as, continuing demand management through education and waste diversion and other related programs;
- Renewal of the waste management portfolio is based on performance monitoring and life cycle cost/benefit analysis to determine the lowest cost intervention and timing to ensure existing levels of service are maintained; and
- Operations and maintenance of the asset portfolio is based on industry best practices including implementation of Reliability Centered Maintenance across all high criticality components and assessing consequential operational and maintenance requirements of significant new infrastructure planned to be added to the asset portfolio.



Risks Associated with the Strategy

The risks associated with the asset management strategies are identified as follows:

- Changes to Ontario's Blue Box Program under the Waste-Free Ontario Act, 2016 may cause the cessation of operations of the Materials Recovery Facility;
 - Once municipalities' transition and transfer the responsibility of processing blue box material to Stewardship Ontario, the Region would likely no longer provide the service. A decision would need to be made about the future of the Region's Material Recovery Facility including negotiating options to lease the facility to interested vendors. The Region will continue to engage its local municipal partners as these decisions affect the Integrated Waste Management System delivered to residents; and
 - Transition to full producer responsibility under the Resource Recovery and Circular Economy Act, 2016 will shift responsibility of end-of-life management of designated materials such as blue box, tires, electronics and household hazardous wastes to producers. Diversion capital is eligible for development charge funding, which will help to partially off-set the costs associated with managing one of the most cost intensive programs, the green bin.

Financing Strategy

This Corporate Asset Management Plan is the first step in identifying non-core asset funding requirements for asset management needs going forward. Currently, the Region is developing a strategy how best to finance these needs through the multi-year budget process 2019-2022 inclusive.

Capital Forecast – New Infrastructure Required to Service Growth

To meet the demand for expanded services, the Region constructs new and expands the capacity of the existing asset portfolio, in addition to implementing non-infrastructure solutions.

Capital Forecast - Asset Renewal of Existing Infrastructure

The funding required to renew existing assets over the long-term, at current levels of service, is determined by applying the asset management renewal strategy to the asset portfolio.

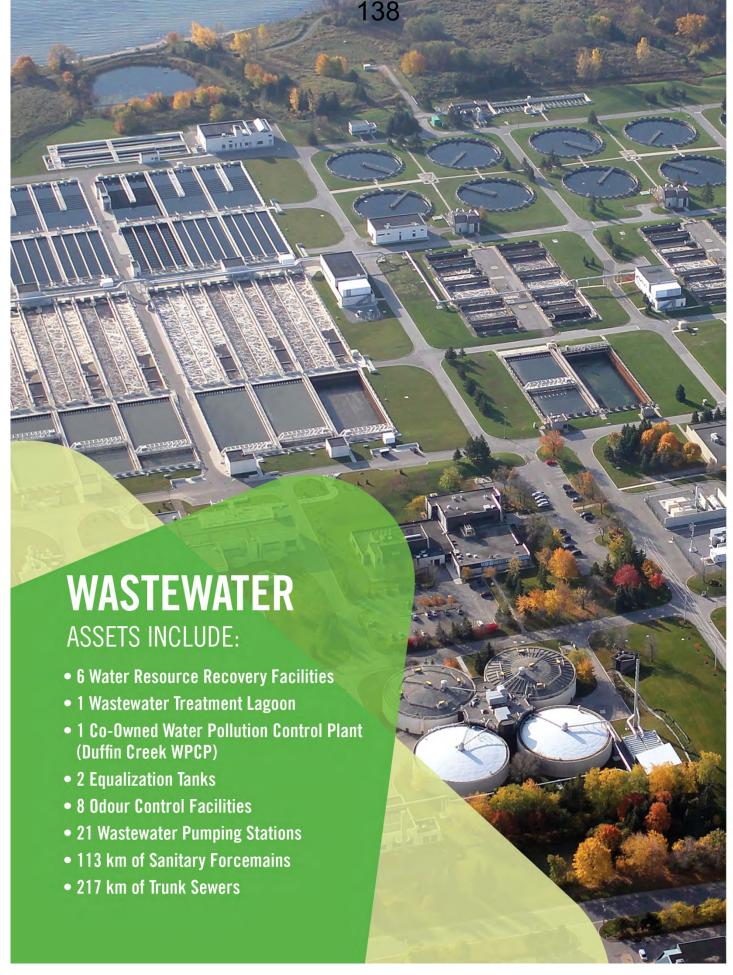
For the Waste Management asset class, capital expenditures are funded through three sources:

- Current Tax Levy;
- Development Charges; and
- Reserves.

The current 10-Year forecast for the Capital Program identifies the works required to support a variety of individual projects related to the asset portfolio. The 10-Year 2017 Capital Program is \$47.2 million for Waste Management.

Operating Forecast – Operations and Maintenance Needs

The 2016 operating budget included a gross amount of \$62.6 million in operations and maintenance needs. Annual operating costs are expected to increase proportional to the increased size of the asset portfolio.



WASTEWATER (CORE ASSET) - Environmental Services

State of Infrastructure (\$4,026.9 million)

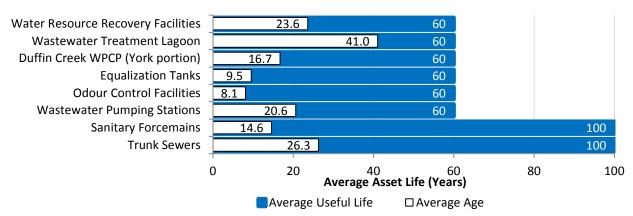
Water and wastewater infrastructure, while distinct, provide complementary services and are considered through integrated planning.

In York Region, wastewater services are delivered through a two-tier system. For wastewater, local municipalities are responsible for local wastewater collection and local pumping whereas the Region is responsible for major pumping stations, trunk sewers and treatment facilities.

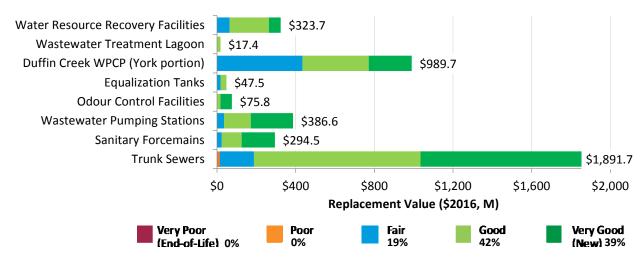
Through wastewater services, the Region:

- Ensures servicing is available to meet current needs and support future growth;
- Ensures environmental protection through wastewater treatment; and
- Monitors and maintains the wastewater network in a good state of repair to ensure sustainable delivery of services.

The majority, the Region's wastewater assets are relatively young compared with their expected service lives. Others, assets are reaching the middle stages of their useful lives and have recently been or will require renewal in the upcoming years. These renewal projects are identified in the approved 10-Year Capital Plan.



The Region's wastewater assets are generally in very good to fair condition, assessments are completed based on inspected condition using industry standard protocols.



In addition to the ongoing proactive maintenance and monitoring carried out by staff at every facility, the Region develops annual prioritized condition assessment plans focused on wastewater infrastructure. These assessments inform asset-specific rehabilitation and renewal projects that ensure our infrastructure continues to provide a high level of service. As an example, a recent comprehensive condition assessment of the Southeast Collector has led to the identification of a rehabilitation project (currently in design) including re-lining, rehabilitation and/or replacement of chambers and manholes with observed deterioration.

Levels of Service

The Region seeks information on customer satisfaction and input for water and wastewater services through various mechanisms including formal public consultation sessions and surveys as part of the Municipal Comprehensive Review and Vision 2051. This input is used to set level of service targets as part of the Water and Wastewater Master Plan and Water Rate Study updates.

In general, wastewater level of service indicators have been summarized from existing Council-endorsed plans and indicate that wastewater asset management strategies are effective in ensuring service levels are achieved.

Level of Service Indicator	2016 Actual	Discussion on Gaps and Trends
Capacity		
Per cent of urban properties serviced by the municipal wastewater system	95%	Servicing in town and village areas are considered urban, but often cannot be achieved cost-effectively.
Per cent of growth accounted for in servicing Master Plan	100%	Life cycle costs for all identified growth infrastructure is included in this Corporate Asset Management Plan.
Reliability		
Number of sampling results exceeding Environmental Compliance Approval limits	3	More information regarding this metric is included in the Region's Wastewater Annual Performance Report.
Per cent of wastewater treated prior to return to the environment	99.99%	System operation is monitored on a real-time basis and, in 2015, the Region launched shift schedules to ensure operational staff were available at facilities on a 24/7 basis. More information regarding this metric is included in the Region's Wastewater Annual Performance Report.
Financial		
Per cent of infrastructure captured in the User Rate Study	100%	This metric indicates the per cent of infrastructure addressed in the most recent Council-approved rate study in 2015. Any infrastructure not included may result in a financial shortfall.
Infrastructure Replacement value per capita	\$3,393/ capita	Increased quantity of infrastructure directly results in higher life cycle costs. Maintaining a consistent intensity of infrastructure generally indicates a stable and sustainable long-term life cycle need.

The Region's performance on additional community level of service indicators are provided in Section 7: Community Levels of Service for Core Assets.

Asset Management Strategy

The Region's 2016 Water and Wastewater Master Plan, which was updated as part of the Municipal Comprehensive Review, identifies the most viable long term servicing strategy and determines new infrastructure and non-infrastructure solutions required to support growth, sustainably.

- The Region's One Water Action Plan monitors and supports the implementation of noninfrastructure solutions such as:
 - Inflow and Infiltration Reduction Program;
 - Energy Management & System Optimization; and
 - Behaviour change, market transformation, education programs (e.g. York Children's Water Festival, attendance at community events), and programs to promote water sustainability in new developments beyond the levels stipulated by the January 2014 building code update.
- Due to the long service life and complexity of wastewater assets, renewal planning is developed through a two-step strategy:
 - o Renewal Implementation Plan (20-Years) An implementation-focused plan that optimizes renewal project scope, timing and implementation approach using risk-based engineering assessments. These assessments are scheduled based on asset criticality and include performance monitoring and testing, comprehensive condition assessment and cost/benefit analysis; and
 - Long Term Forecast (100-Years) Building from the short term renewal implementation
 plan, the Long Term Forecast provides input to financial strategies by identifying the timing
 and cost of infrastructure investment required in the future using typical or designed life
 cycle assumptions. This forecast also considers the need for multi-year renewal projects to
 begin prior to actual need and ensures peak investment years are realistic.
- Operations and maintenance of the asset portfolio is based on industry best practices including:
 - o Implementation of preventative and proactive maintenance across all high criticality assets; and
 - Assessing operational and maintenance requirements of significant new infrastructure planned to be added to the asset portfolio.

Risks Associated with Wastewater Infrastructure

Current wastewater levels of service indicators and strategies are aligned with existing Council-endorsed strategies or plans. Moving forward, multiple factors are expected to affect the assumptions underlying asset management decisions including:

- Climate change and environmental changes will require continued monitoring and detailed assessment to quantify impacts and risk in order to define and prioritize implementable adaptation initiatives; and
- Increasing population density goes hand in hand with greater infrastructure density that is, more assets and more different types of assets crowded together in a smaller area. Potential impacts include reduced accessibility to an asset requiring renewal.

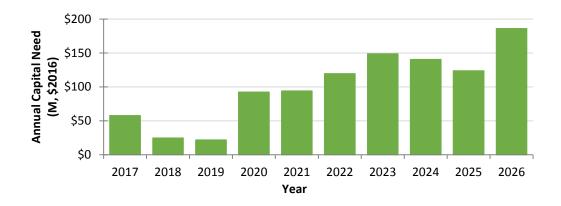


Financing Strategy

This section summarizes the Council-endorsed financial plan included as part of the 2016 Water and Wastewater Master Plan and the Water and Wastewater Financial Sustainability Plan.

Capital Needs - New Infrastructure Required to Service Growth

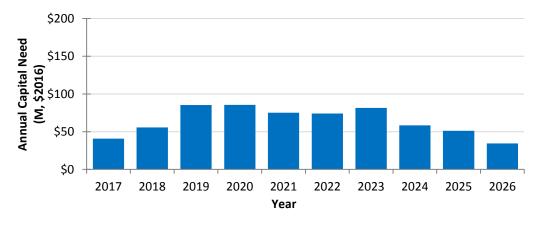
The 2016 Water and Wastewater Master Plan has identified the need for approximately \$3 billion of new water and wastewater infrastructure to support growth to 2041. This increase maintains a wastewater infrastructure replacement cost of approximately \$3,393 per capita. Estimated expenditures for 2017 to 2026 are shown in the graph below.



Capital Needs – Asset Renewal of Existing Infrastructure

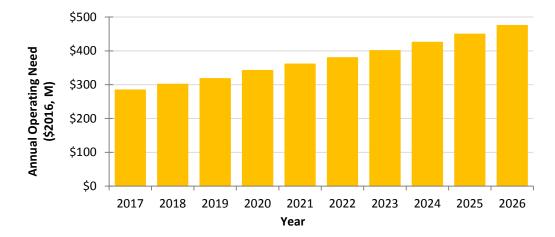
To ensure planned levels of service are met, asset renewal is an ongoing activity. The graph below shows the capital renewal needs forecast from 2017 to 2026 to sustain current levels of wastewater service.

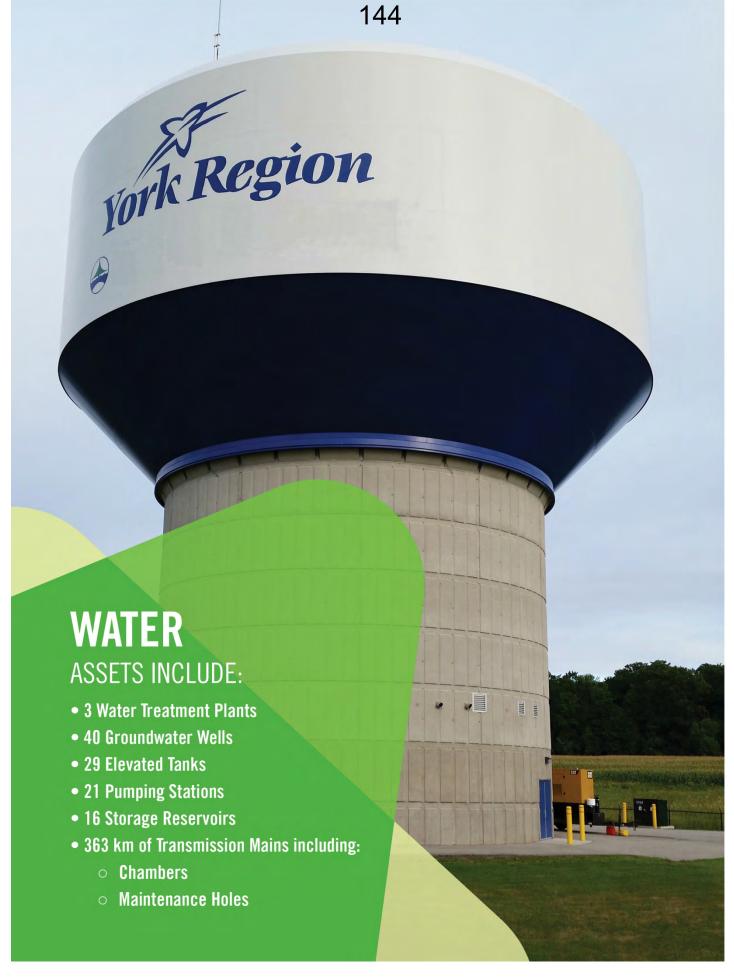
Renewal projects in this period are individually prioritized based on engineering assessments that detail the scope, costs, risks and implementation plan.



Operating Needs – Operations and Maintenance Needs

The Region undertakes regularly programmed operations activities, including maintenance of assets to ensure services are reliably delivered to customers. The 2015 Water and Wastewater Financial Sustainability Plan identified a statistical relationship between historical operating costs in response to increase asset portfolio and was used as the basis for the graph below.





WATER (CORE ASSET) - Environmental Services

State of Infrastructure (\$1,941.1 million)

Water and wastewater infrastructure, while distinct, provide complementary services and are considered through integrated planning.

In York Region, water services are delivered through a two-tier system. For water, the Region is responsible for securing and delivering drinking water to the nine local municipalities, which in turn distribute it to residents and businesses.

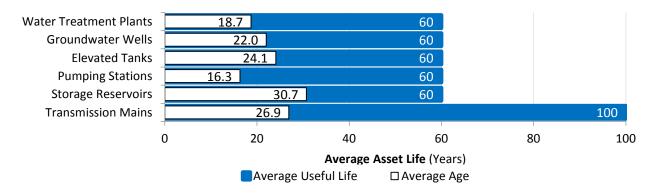
The Drinking Water Quality Management System (DWQMS) framework is used to manage day to day risk to the water supply system by identifying possible hazards, assigning risk scores, and identifying procedures to mitigate the risk.

Through these services, the Region:

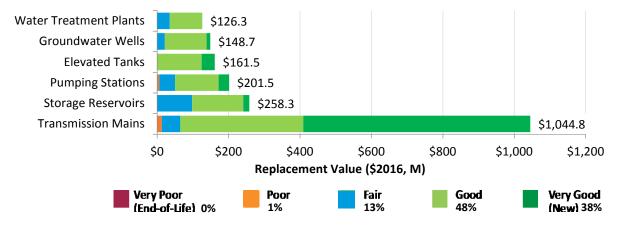
- Provides safe, reliable drinking water to local municipalities and York Region residents;
- Monitors and maintains the water network in a good state of repair to ensure sustainable delivery of services; and
- Ensures servicing is available to meet current needs and support future growth.

In addition to the ongoing proactive maintenance and monitoring carried out by staff at every facility, the Region develops annual prioritized condition assessment plans focused on water infrastructure. These assessments inform asset-specific rehabilitation and renewal projects that ensure our infrastructure continues to provide a high level of service. As an example, yearly intake cleanings and inspections of the Georgina Water Treatment Plant have led to an ongoing membrane rehabilitation project and the installation of a new multi-barrier mussel control system.

Ensuring services are available to meet current needs and support future growth the Region's water assets are relatively young as compared with their expected service lives. Some assets are reaching the middle stages of their useful lives and have recently been or will soon require rehabilitation in the upcoming years. These rehabilitation or renewal projects are identified in the approved 10-Year Capital Plan.



The Region's water assets are generally in very good to fair condition, assessment is based on inspected condition using industry standard protocols.



Levels of Service

The Region seeks information on customer satisfaction and input for water and wastewater services through various mechanisms including formal public consultation session and surveys as part of the Municipal Comprehensive Review and Vision 2051. This input is used to set level of service targets as part of Water and Wastewater Master Plan and Water Rate Study updates.

In general, water level of service indicators have been summarized from existing Council-endorsed plans and indicate that water asset management strategies are effective in ensuring service levels are achieved.

Level of Service Indicator	2016 Actual	Discussion on Gaps and Trends
Capacity		
Per cent of urban properties serviced by the municipal water system	95%	Servicing in town and village areas are considered urban, but often cannot be achieved cost-effectively.
Per cent of urban properties serviced with fire flow by the municipal water system	100%	Sufficient fire flow is a key design criteria used for the Regional water system.
Per cent of growth accounted for in servicing Master Plan	100%	Life cycle costs for all identified growth infrastructure is included in this Corporate Asset Management Plan.
Reliability		
Per cent of samples that met Ontario Drinking Water Standard.	99.96%	More information regarding this metric is included in the Region's Annual Drinking Water Report.
Number of boil water advisory notices per year attributed to York Region infrastructure failure	0	Boil water advisories are monitored through existing Integrated Management System indicators.
Financial		
Per cent of infrastructure captured in the User Rate Study	100%	This metric indicates the per cent of infrastructure addressed in the most recent Council-approved rate study in 2015. Any infrastructure not included may result in a financial shortfall.
Infrastructure Replacement value per capita	\$1,635/ capita	Increased quantity of infrastructure directly results in higher life cycle costs. Maintaining a consistent intensity of infrastructure generally indicates a stable and sustainable long term life cycle need.

The Region's performance on additional community level of service indicators are provided in Section 7: Community Levels of Service for Core Assets.

Asset Management Strategy

The Region's 2016 Water and Wastewater Master Plan, which is updated as part of the Municipal Comprehensive Review, identifies the most viable long term servicing strategy and determines new infrastructure and non-infrastructure solutions required to sustainably support growth.

The Region's One Water Action Plan monitors and supports the implementation of non-infrastructure solutions such as:

- Long Term Water Conservation Strategy;
- Water Reuse Research Demonstration Project & Non-Revenue Water Audits;
- Energy Management & System Optimization; and
- Behaviour change, market transformation, education programs (e.g. York Children's Water Festival, attendance at community events), and programs to promote water sustainability in new developments beyond the levels stipulated by the January 2014 building code update.

Due to the long service life and complexity of wastewater assets, renewal planning is developed through a two-step strategy:

- Renewal Implementation Plan (20-Years) An implementation-focused plan that optimizes renewal project scope, timing and implementation approach using risk-based engineering assessments. These assessments are scheduled based on asset criticality and include performance monitoring and testing, comprehensive condition assessment and cost/benefit analysis; and
- Long-Term Forecast (100-Years) Building from the short-term renewal implementation plan, the Long-Term Forecast provides input to financial strategies by identifying the timing and cost of infrastructure investment required in the future using typical or designed life cycle assumptions. This forecast also considers the need for multi-year renewal projects to begin prior to actual need and ensures peak investment years are realistic.

Operations and maintenance of the asset portfolio is based on industry best practices including:

- Implementation of preventative and proactive maintenance across all high criticality assets; and
- Assessing operational and maintenance requirements of significant new infrastructure planned to be added to the asset portfolio.

Risks Associated with Water Infrastructure

Current levels of service indicators and strategies for water infrastructure are aligned with existing Council-endorsed strategies or plans. Moving forward, multiple factors are expected to affect the assumptions underlying asset management decisions including:

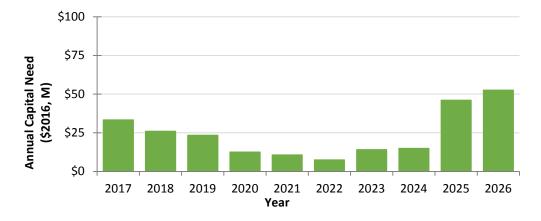
- Climate change and environmental changes will require continued monitoring and detailed assessment to quantify impacts and risk in order to define and prioritize implementable adaptation initiatives; and
- Increasing population density goes hand in hand with greater infrastructure density that is, more assets and more different types of assets crowded together in a smaller area. Potential impacts include reduced accessibility to an asset requiring renewal.

Financing Strategy

This section summarizes the Council-endorsed financial plan included as part of the 2016 Water and Wastewater Master Plan and the Water and Wastewater Financial Sustainability Plan.

Capital Needs - New Infrastructure Required to Service Growth

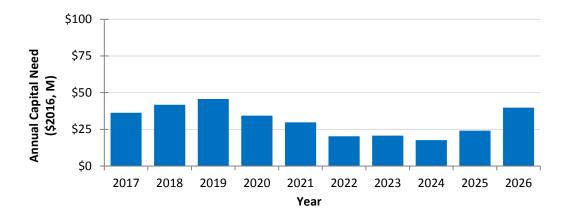
The 2016 Water and Wastewater Master Plan has identified the need for approximately \$3 billion of new water and wastewater infrastructure to support growth to 2041. This increase maintains a water infrastructure replacement cost of approximately \$1,635 per capita. Estimated expenditures for 2017 to 2026 are shown in the graph below.



Capital Forecast – Asset Renewal of Existing Infrastructure

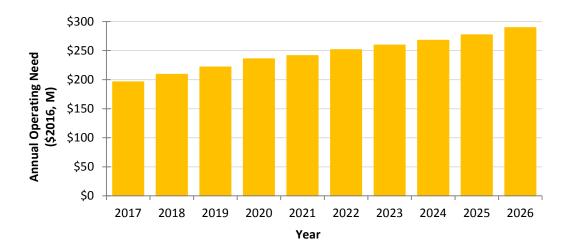
To ensure planned levels of service are met, asset renewal is an ongoing activity. The graph below shows the capital renewal needs forecast from 2017 to 2026 to sustain current levels of water service.

Renewal projects in this period are individually prioritized based on engineering assessments that detail the scope, costs, risks and implementation plan.



Operating Forecast – Operations and Maintenance Needs

The Region undertakes regularly programmed operations activities, including maintenance of the assets to ensure services are reliably delivered to customers. The 2015 Water and Wastewater Financial Sustainability Plan identified a statistical relationship between historical operating costs in response to increase asset portfolio and was used as the basis for the graph below.





ROADS (CORE ASSET) - Transportation Services

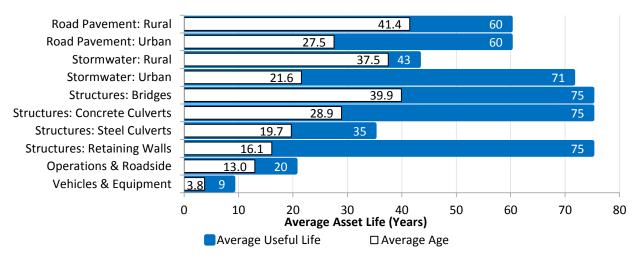
State of Infrastructure (\$3,552.2 million)

This service area assists in the safe and efficient transport of people and goods through interconnecting roads between urban and rural areas. It also provides safe and effective drainage and preserves water quality. It maintains the road and storm networks in a state of good repair.

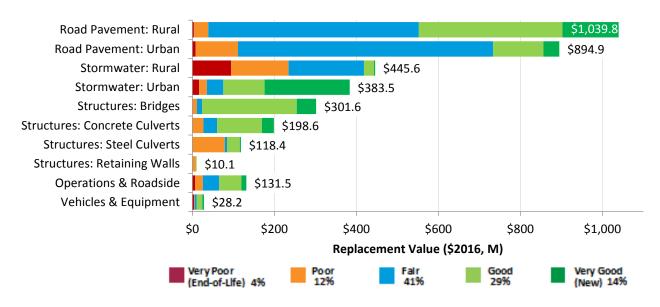
Key business drivers at this time are future population and associated asset growth and aging infrastructure.

Transportation Services undertakes biennial pavement inspections to determine how the driving surface of the road is performing. Based on these inspections, Transportation Services staff will perform resurfacing treatments to seal the road surface and prevent potholes from forming.

Although many of the roads are relatively new due to recent growth, others are reaching the middle to later stages of their useful lives and will require renewal in the upcoming years.



The Region's road assets are generally in fair condition, as assessed using industry standard inspection protocols. However, over \$600 million (18 per cent) are in poor or very poor condition, which includes a backlog of renewal needs that is overdue from before 2017.



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Levels of Service

The capacity of the road network is measured by compliance with volume/capacity targets which vary by roadside environment and road classification. The reliability of the road network is measured by compliance with load restriction targets which also vary by roadside environment and road classification. The resiliency of the stormwater network to impacts such as climate change is measured by per cent blockage of pipes and structures. The renewal needs of the road and storm networks are determined by industry standard condition assessments of pavement, bridges, pipes and culverts.

The following table summarizes current performance against service area specific measures required by O.Reg.588/17, organized under the Region's technical criteria.

Level of Service Indicator	2016 Actual	Discussion on Gaps and Trends
Capacity		
Number of lane-km of arterial (Class 1 and 2) roads per land area (km/km²)	1.7%	
Number of lane-km of collector (Class 3 and 4) roads per land area (km/km²)	0.6%	There is currently a need for \$1,329 million in road traffic capacity improvement works as planned in the 10-Year Roads Capital Plan.
Per cent of bridges with loading or dimensional restrictions	0%	,
Reliability		
Per cent of the municipal stormwater management system resilient to a 5-Year storm	100%	The ability to convey minor storms based on the per cent of assets without blockages, flooding, or debris.
Condition		
For paved roads, average pavement condition index (PCI)	70.0	There is currently a \$350 million backlog in
For bridges, average bridge condition index (BCI)	74.7	pavement and associated road renewal works, of \$58 million in structures renewal work, and \$74 million in storm pipes, roadside ditches
For structural culverts, average bridge condition index (BCI)	71.7	and small culverts.

The Region's performance on additional community level of service indicators are provided in Section 7: Community Levels of Service for Core Assets.

> Biennial pavement inspections are completed **ASSET** to determine how the driving surface of the MANAGEMENT road is performing and inform planning IN ACTION of pavement renewal projects

Asset Management Strategy

Non-infrastructure solutions are developed through the master planning process and include promoting other modes of transport, advanced traffic management system, and reducing fleet energy use, resulting in reductions to associated greenhouse gas emissions.

- Expansion of the asset portfolio is based on the Transportation 10-Year Capital Plan. Key components include:
 - o Grade separation additions and widenings, Hwy 400-series interchanges and ramp extensions, jog eliminations and intersection improvements, mid-block crossings, new arterial road links, road widenings and conversions to urban cross-sections; and
 - Southeast road operations facility, fleet additions for growth, and snow melting equipment.
- Renewal of the asset portfolio is based on life cycle cost/benefit analysis to determine the lowest cost treatment type and timing among available options throughout the life of the asset, while maintaining levels of service. Renewal planning is supported by the Region's pavement management system, which helps to forecast short and medium term needs and priorities based on road inspection data collected every two years. Longer term needs are forecast using rule-based strategies outlined in more detail in the Pavement Asset Management Plan;
- Asset operations and maintenance is based on industry standards, and includes:
 - Continuing to carry out maintenance of the Region's road infrastructure to ensure safety and preservation of assets in accordance with O. Reg. 239/02 Minimum Standards for Municipal Highways; and
 - Assessing consequential operational and maintenance requirements of significant new infrastructure planned to be added to the asset portfolio.

Risks Associated with the Strategy

Within Transportation Services, risks relating to road infrastructure failure are mitigated through inspection and maintenance programs which provide the necessary data to ensure that the work required to achieve the established levels of service is identified. Risks relating to vehicle asset failure are mitigated through inspection and maintenance programs.

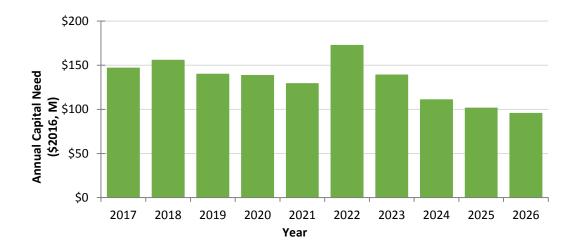
Financing Strategy

Growth activities occur once in the life cycle of each asset, while renewal and operating costs are required in perpetuity to support service delivery.

155

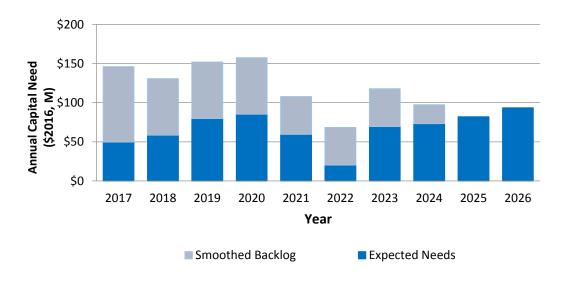
Capital Needs to Service Growth

To meet the demand for expanded services, the Region constructs new and extends the capacity of the asset portfolio, in addition to implementing non-infrastructure strategies. The capital growth needs forecast for roads assets from 2017 to 2026, based on the implementation plans outlined in the Transportation 10-Year Capital Plan, are shown in the graph below.



Capital Needs to Renew Assets

To manage asset condition and address potential asset and associated service reliability gaps, the Region continuously renews the asset portfolio. The graph below shows the capital renewal needs forecast from 2017 to 2026 to sustain current levels of service.

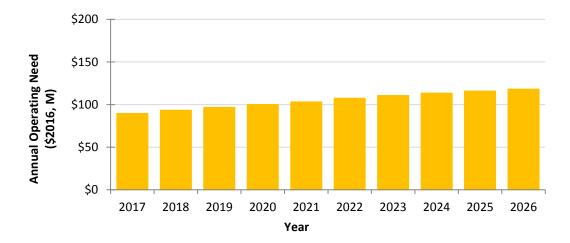


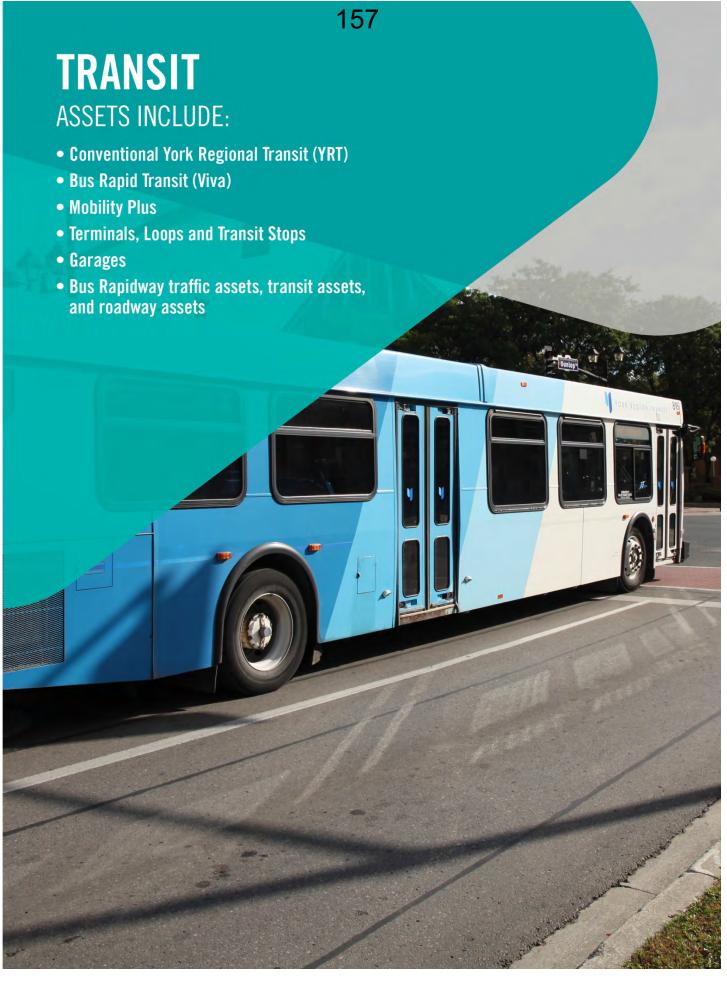
The renewal needs for road assets presented above includes a backlog of renewal needs, which is work that is "overdue" from before 2017. These are also referred to as "now needs". The majority of the

backlog has been distributed over a period of 25 years. The Region is currently developing a strategy to determine how best to fund these and other asset life cycle capital needs.

Operating Needs Forecast

To deliver the defined levels of service, the Region undertakes regularly programmed activities, including operating and maintaining the assets. The forecast population and asset portfolio growth will place pressure on the capacity of existing operations and maintenance needs, as shown in the graph below.





TRANSIT - Transportation Services

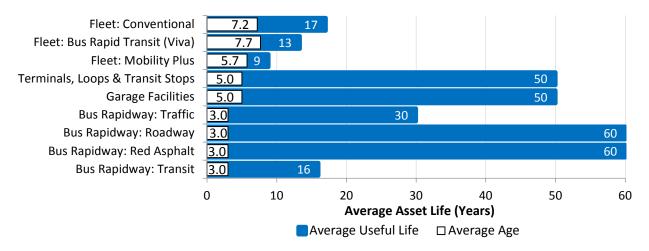
State of Infrastructure (\$557.3 million)

This service area provides reliable, convenient and seamless travel across the nine local municipalities, and easy access to the Toronto Transit Commission and provincial GO Transit systems. It maintains the transit assets in a state of good repair.

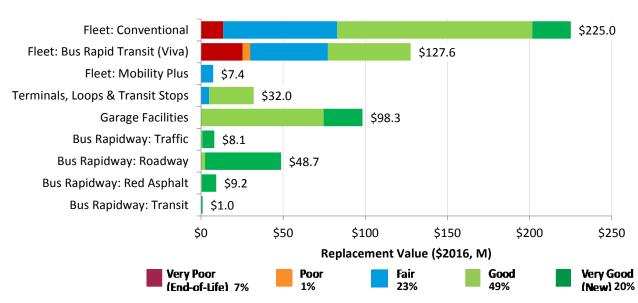
Key business drivers at this time are future population and associated asset growth and aging infrastructure.

Transportation Services staff and contracted staff perform regular inspections, such as bus inspections to ensure the vehicle is meeting service life expectations. Mid-life overhauls will also be completed to extend the service life of the bus fleet.

Most of the assets are relatively new due to recent growth, with the majority of fleet assets at mid-life.



The Region's transit assets are generally in fair to very good condition, as assessed based on age.



Levels of Service

The capacity of the transit system is measured by demand to capacity for vehicles during the peak hour, and transit garage capacity. The reliability of the transit system is measured by mean distance between failure (MDBF) and on-time performance. The renewal needs of the transit system are determined by age and remaining life of assets, quality assurance vehicle inspections and bus stop inspections.

Levels of service as currently provided will be further developed and documented as indicated in Section 8: Required Actions and Continuous Improvement.



Asset Management Strategy

The strategies associated with this service area include:

- Expansion of the asset portfolio is developed through the master planning process:
 - Includes fleet expansion (conventional, rapid transit & mobility plus), support vehicles, terminals, garages, stops/viva stations, garages, shelters, bus pads, land acquisition, transit management systems including Presto and fare collection systems, information technology infrastructure and parking facilities; and
 - Also includes York Region's share of costs for the Toronto-York Spadina Subway Extension (TYSSE) including rights of way, system tracks, tunnel and single system, crossovers, subway stations and subway commuter facilities. Renewal of the transit portfolio is based on minimizing life cycle cost while maintaining levels of service.
- Non-infrastructure solutions are developed through the Conservation & Demand Management Plan which includes components for the transit fleet as it accounts for a significant portion of the Region's energy use and associated greenhouse gas emissions;
- Operations and maintenance of the asset portfolio is based on industry standards, and includes:
 - Continuing to conduct routine and preventative maintenance activities according to legislative requirements; and
 - Assessing consequential operational and maintenance requirements of significant new infrastructure planned to be added to the asset portfolio.

Risks Associated with the Strategy

Within the Transit service area, risks relating to infrastructure failure include not meeting service standards such as published transit schedules, which could affect public trust in the service. Ensuring that vehicles are in suitable operating condition will help to avoid claims from the public or fines.

Financing Strategy

This Corporate Asset Management Plan is the first step in identifying non-core asset funding requirements for asset management needs going forward. Currently, the Region is developing a strategy how best to finance these needs through the multi-year budget process 2019-2022 inclusive.

Capital Forecast – New Infrastructure Required to Service Growth

To meet the demand for expanded services, the Region constructs new assets and extends the capacity of the asset portfolio, in addition to implementing non-infrastructure strategies. The 10-Year 2017 Growth Capital Program totals \$382 million for an estimated service area asset portfolio replacement value at the end of 2026 of \$940 million in 2016 dollars. The estimated costs to service asset growth from 2026 to 2041 are based on asset growth being more or less proportional to population growth over the same period.

Capital Forecast - Asset Renewal of Existing Infrastructure

The funding required to renew existing assets over the long term, at current levels of service, is determined by applying the asset management renewal strategy to the asset portfolio. Future average annual renewal needs including growth are calculated proportional to the increased size of the asset portfolio based on what is outlined in the planning documents.

Operating Forecast - Operations and Maintenance Needs

The 2016 operating budget included a gross amount of \$216.5 million in operations and maintenance needs.

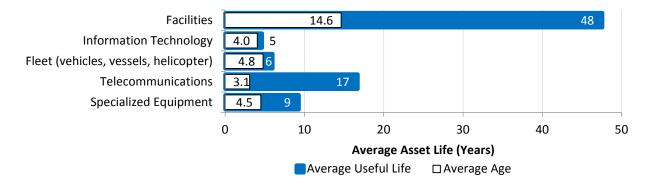


POLICE SERVICES – York Regional Police

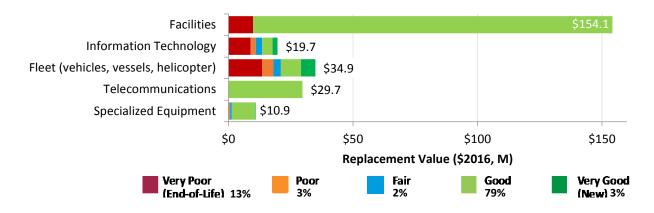
State of Infrastructure (\$249.3 million)

York Regional Police provides crime prevention and law enforcement to the Region's nearly 1.2 million citizens. There are 2,200 dedicated sworn and civilian members who serve the Region's diverse communities, ensuring that our neighbourhoods, roads and schools are safe for all residents.

Although many of the assets are relatively new due to recent growth, some of the shorter lived assets are reaching the middle to later stages of their useful lives (on average) and will require rehabilitation or replacement in the upcoming years.



The Region's police assets have been assessed based on age and are generally in good condition. Assets shown in poor and very poor condition are in the latter stages of their useful life and have been inspected to ensure functionality. The end of life (red) portion of the facilities bar is #1 District Headquarters, which was originally constructed in 1950 and is scheduled for replacement (plus expansion) in 2019 and 2020. The end of life (red) portion of the fleet bar consists mostly of support vehicles and does not include those directly involved in policing activities.



Levels of Service

This program area provides crime prevention, safe streets and schools, community policing, reaching out to diverse communities through our ethnic media partners, plus initiatives such as a mental health co-responder model in collaboration with external partners.

Levels of service will be developed and documented as per the actions noted in Section 8: Required Actions and Continuous Improvement.

Asset Management Strategy

Expansion of the physical asset portfolio is based on the 15-Year Police Services Capital Program and includes:

- A district multi-function building growth portion, a training facility, a sub-station outlook, and a district marine headquarters, land acquisition; and
- New vehicles, marine boats, police helicopter, specialized equipment, portable & mobile gear, business intelligence and data governance retention management.

Renewal of the asset portfolio is based on minimizing life cycle cost while maintaining levels of service. The asset management strategies for facilities are based on typical facility renewal treatment schedules and renewal rates. All other assets are included in an age-based renewal program developed by asset type.

Operations and maintenance of the asset portfolio is based on industry standards which dictate that the Region:

- Continue to carry out maintenance of the Region's assets to ensure safety and preservation of assets;
- York Regional Police buildings are maintained by Facilities & Capital Projects. Condition is evaluated on a rotating basis using inspection and checks through a work order system. A standard approach and rating method is used to compile building condition reports with forecasted cost analysis. Deficiencies are identified and scheduled for resolution through capital and operating investments. Priority is taken to maintain mission critical assets impacting delivery of front line service; and
- Assessments on roofs occur every 4 years and buildings every 5 years.

Risks Associated with the Strategy

Risks relating to asset failure are mitigated through investment planning, inspection and maintenance programs which provide the necessary data to ensure that the work required to achieve the established levels of service is identified. Annual capital and maintenance programs and associated budgets ensure that funding to undertake the necessary work is provided. Currently, the Region is developing a Corporate Risk Framework for Asset Management as per Section 8: Required Actions and Continuous Improvement.



Financing Strategy

This Corporate Asset Management Plan is the first step in identifying non-core asset funding requirements for asset management needs going forward. Currently the Region is developing a strategy how best to finance these needs through the multi-year budget process 2019 - 2022 inclusive.

Capital Forecast – New Infrastructure Required to Service Growth

To meet the demand for expanded services, the Region constructs new and extends the capacity of the asset portfolio, in addition to implementing non-infrastructure strategies. The 2017 Development Charges Background Study program totals \$227 million for an estimated service area asset portfolio replacement value of \$477 million in 2016 dollars by the end of 2031. The estimated costs to service asset growth from 2031 to 2041 are based on asset growth being more or less proportional to population growth over the same period.

Capital Forecast - Asset Renewal of Existing Infrastructure

The funding required to renew existing assets over the long-term, at current levels of service, is determined by applying the asset management renewal strategy to the asset portfolio. Future average annual renewal needs including growth are calculated proportional to the increased size of the asset portfolio based on what is outlined in the planning documents. Renewal needs are currently being evaluated and this work will help inform the next multi-year budget.

Operating Forecast – Operations and Maintenance Needs

The 2016 operating budget included a gross amount of \$330.9 million for Police Services operations and maintenance needs. Annual operating costs are expected to increase proportional to the increased size of the asset inventory.

7. Community Levels of Service for Core Assets

7.1 Overview

This section describes the current community levels of service provided by core assets, based on their current performance. It is intended to provide some insight into the services that are currently provided by these assets and will help to inform development of proposed levels of service, in the future.

7.2 Community Levels of Service (per O. Reg. 588/17)

The following describes the Region's community levels of service for core infrastructure assets.

7.2.1 Transportation Services

Roads

The road network and its level of connectivity

An interconnected mobility system that encourages active transportation, and is supported by compact, complete communities is essential to creating a healthy, economically- vibrant, socially-connected and sustainable Region. The delivery of this interconnected system of mobility is supported by the progressive objectives, policies and actions embedded in many of the Region's Council-approved plans and documents, including Vision 2051, the Regional Official Plan (2010) and the 2015 to 2019 Strategic Plan.

Performance measurement is a key aspect of ensuring objectives and initiatives are being met in the years following the development of the Transportation Master Plan (TMP). Ongoing monitoring and evaluation helps determine the effectiveness of the objectives, policies and program improvements moving forward. Figure 7-1 shows the proposed strategic goods movement network.

The Region is developing a framework to evaluate and report on the progress and effectiveness of the TMP. The framework of indicators will be structured to align with the Region's Vision 2051, the Regional Official Plan (2010) and the strategic objectives of the TMP. Accurately evaluating the progress, effectiveness and implementation of the TMP will help ensure the Region is on the right track moving forward so that residents and stakeholders know where the Region is headed.

The different levels of road class pavement condition

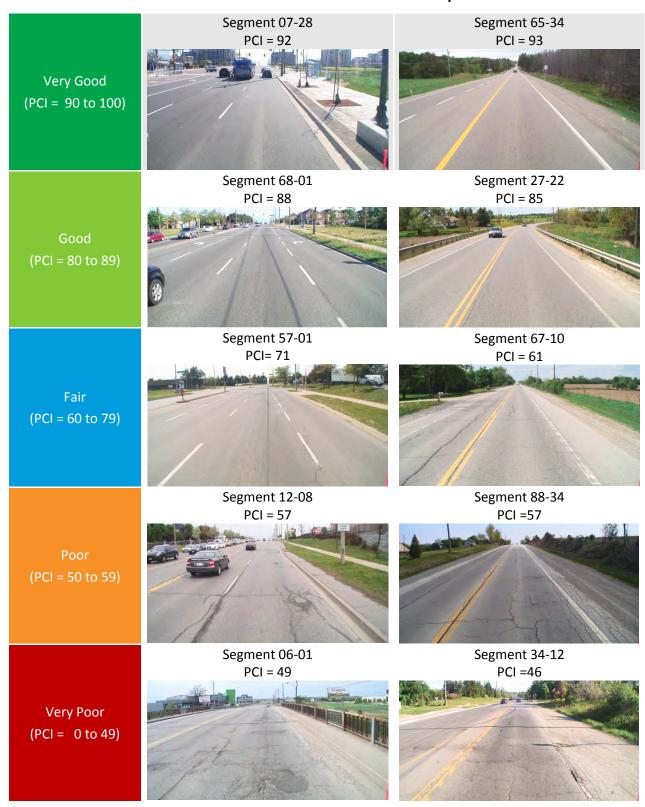
Pavement condition levels of service are defined by the Pavement Condition Index (PCI) and vary by road environment (urban or rural) and by maintenance class, as established by the Ontario Ministry of Transportation classification system based on the posted speed and traffic volume.

Pavement condition data is collected on the entire road network every two years. Data collected includes the type, extent and severity of distresses (cracks and rutting) and smoothness or ride comfort of the road. An overall PCI is calculated from all collected data and is used as input into the annual road resurfacing and reconstruction program. The index is scaled from zero to one hundred and has been divided into ranges to assess condition as shown in Table 2-3. Examples of Regional roads in each of the PCI rating categories are provided in **Table 7-1**.

Lake Simeoe **Proposed Strategic Goods Movement Network** Transportation Master Plan EAST VILLIMBUR NEWMARKE N. G HII York Region yorkmaps KHA © Copyright, The Regional Municipatities of and Peel, County of Simcoe, City of Toronto © Queen's Printer for Ontario 2003-2010, Includes Greenbelt and Oak Ridges Moraine BASE MAP INFORMATION **Strategic Goods Movement** Interchange Improvements (to be Corridors confirmed by MTO) Provincial Freeway Future Interchange on Existing Freeway Tier 1 - Provincial Highway Future Interchange on Future Freeway Highway Goods Movement Corridor Future Highway Goods Movement Corridor Other Interchange Improvement - Road Employment Areas (as of mid-2013) □□ | Future MTO Freeway ***** Rail Freight Corridor Railway Tier 2 Interim Primary Arterial Goods Movement Corridor Primary Arterial Goods Movement Corridor — 4 Lane Network

Figure 7-1 Proposed Strategic Goods Movement Network - Transportation Master Plan

Table 7-1 Pavement Condition Grade Examples



Bridges and Culverts

The traffic that is supported by municipal bridges The Ontario Ministry of Transportation (MTO) defines:

- A bridge as "a structure which provides a roadway or walkway for the passage of vehicles, pedestrians or cyclists across an obstruction, gap or facility and is greater than or equal to 3.0 meters in span"; and
- A structural culvert as "a structure that forms an opening through soil and has a span of 3 meters or more, or has the sum of the individual spans of 3 meters or more, for adjacent multiple cell culverts".

The Region's bridges have been designed in accordance with the Bridge Design Code current at the time of construction to carry heavy transport vehicles, motor vehicles, emergency vehicles, cyclists and pedestrians.

The need for mobility requires that the Region's roadway system be kept in a state of good repair.

Structures are a vital part of this system. The efficiency of the system is impaired and the public inconvenienced if a structure fails or its load-carrying capacity is reduced for any reason. To avoid such failings, an effective structure management system is required.

An essential component of a structure management system is systematic inspection. In accordance with O. Reg. 104/97: Standards for Bridges, the Region conducts detailed inspections of all of its bridges every two years. All inspections are supervised by a trained, professional engineer following the guidelines in Ontario's Structure Inspection Manual (OSIM), which sets standards for the visual inspection and condition rating of bridges and their elements.

The inspector assesses each bridge element and records the amount of the element in each of three condition states: Good, Fair and Poor. The inspector also records suspected performance deficiencies and recommends maintenance and renewal activities, with costs.

The typical follow-up action for a suspected load carrying capacity deficiency would be to carry out a strength evaluation of the structure (or element) to determine the load-carrying capacity in accordance with the requirements of the Canadian Highway Bridge Design Code. The Region is responsible to pass any load limit by-law including load limit posting and duration, supported by two professional engineers' stamps. Currently, the Region has no bridges or structural culverts with load limit postings.

An overall Bridge Condition Index (BCI) is calculated from all collected data and is used as input into the annual bridge and structural culvert rehabilitation and reconstruction program. The index is scaled from zero to one hundred and has been divided into ranges to assess condition as shown in **Table 2-3** (Good, Fair, Poor). The BCI is not used to rate or indicate the safety of a bridge or structural culvert. Any safety issues are immediately reported by the inspector to supervising engineers and maintenance crews.

Table 7-2 provides examples of bridges and structural culverts in each of the three condition grades: Good, Fair and Poor.

Table 7-2 Bridge Condition Grade Examples

Condition Grade	Road Bridge Examples	Road Culvert Examples				
Good	Bridge 34-06 B0010	Culvert 49-18 C0211				
(BCI is >70 to 100)	BCI = 74	BCI = 88				
Fair	Bridge 07-10 B1580	Culvert 49-28 C0800				
(BCI is >60 to 70)	BCI = 69	BCI = 68				
Poor	Bridge 67-38 B0859	Culvert 11-12 C0040				
(BCI is 0 to 60)	BCI = 44	BCI = 57				

Stormwater Management

Areas protected from flooding

York Region is approximately 1,776 square kilometres in area, stretching from the City of Toronto in the south to Lake Simcoe and the Holland Marsh in the north, and bounded by Peel Region to the west and Durham Region to the east. The dominant physical features of York Region include Lake Simcoe and the Oak Ridges Moraine, an east-west rolling topography, including forested areas, wetlands and kettle lakes covering 500 square kilometres.

The Regional road network has limited areas that are prone to flooding and this is only as a result of high intensity localized events (concentrated rainfall or run-off). Figure 7-2 provides a map of York Region indicating the historical flooding locations. There are now 10 flood prone areas within the Region, down from twelve in 2013, across York Region. The location on Warden Avenue (south of Major Mackenzie Drive) in the City of Markham was corrected as part of the Warden Avenue bridge reconstruction project completed in 2015. The location on Highway 7 in the City of Markham, east of Highway 404, was corrected in advance of the Viva Rapidway project, also completed in 2015.

York Region Flood Prone Areas Lake Simone Rural Road Regional Road Town of Provincial Highway Georgina Freeway Waterbody Municipal Boundary Regional Boundary Railway Town of East Gwillimbury Simcoe County **Durham Region** Town of Newmarke Township Town of Town of of King Aurora Whitchurch-Stouffville Town of Peel Region Richmond Hilt City of Vaughan City of Markham York Region yorkmaps City of Toronto Produced by: The Regional Municipality of York Roads and Traffic Operations, Transportation Services March 2018 15 Data Sources:

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See York ca for disclaimer information. 8 Kilometers

Figure 7-2 York Region Flood Prone Areas

7.2.2 Environmental Services

Water and Wastewater

York Region, in partnership with nine local municipalities, is responsible for providing municipal drinking water and wastewater services to the community. Although customer interaction with these services is limited to common household fixtures, complex infrastructure systems are required to ensure services are available on demand.

The Region is the wholesale supplier of water to its nine local municipalities, responsible for bulk supply, treatment and storage. York Region has direct access to Lake Simcoe and groundwater sources, but does not border Lake Ontario, the primary source of drinking water for southern Ontario. The Region has long term agreements with the Region of Peel and the City of Toronto for the supply of treated drinking water from Lake Ontario that together supply approximately 88 per cent of York Region's total demand. The balance comes from Lake Simcoe and regional groundwater wells.

York Region's drinking water supply is therefore currently divided into several distinct systems: the Lake Ontario-based York Water System, the Lake Simcoe-based Georgina Water System and the various stand-alone groundwater well systems. Communities serviced by stand-alone water systems include Mount Albert (Town of East Gwillimbury), Ballantrae (Town of Whitchurch-Stouffville), Ansnorveldt, Nobleton and Schomberg (Township of King).

In its role as a wholesale provider of wastewater services, York Region collects wastewater from local municipalities and conveys it to treatment plants. It operates a complex system of trunk sewers, pumping stations and wastewater equalization tanks. It co-owns, with Durham Region, the Duffin Creek Water Pollution Control Plant in Pickering, which treats about 85 per cent of the Region's wastewater, as well as, part of the conveyance system to Duffin Creek. York Region also has an agreement with the Region of Peel for the treatment of roughly a further 10 per cent of the Region's wastewater. Finally, York Region operates and maintains seven wholly owned water resource recovery facilities (formerly called water pollution control plants), mainly in the northern part of the Region, that treat the balance.

The Regional wastewater system includes several components: the York Durham Sewage System (including the Peel diversion system) for Aurora, Markham, Richmond Hill, Vaughan, King City, Stouffville and the majority of Newmarket; Georgina Wastewater System, and the stand-alone facilities for Keswick and Sutton (Town of Georgina), Mount Albert (Town of East Gwillimbury), Ballantrae (Town of Whitchurch-Stouffville), Ansnorveldt, Nobleton and Schomberg (Township of King). No combined sanitary and storm sewers exist in the Regional wastewater system. Figure 7-3 shows the location of Regional water and wastewater assets.

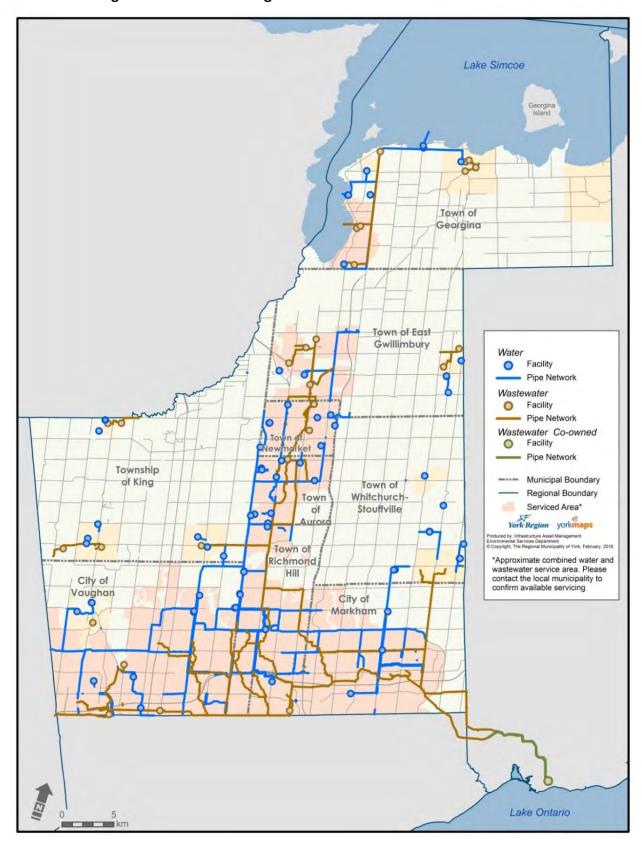


Figure 7-3 Location of Regional Water and Wastewater Assets

Community levels of service

Delivery of water and wastewater services in York Region is governed by a variety of Federal and Provincial Acts, regulations, guidelines, and policies. As such, the Region's baseline level of service is to provide continuous, uninterrupted water and wastewater services that meet all regulatory requirements. It is important to note that even with intended continuous uninterrupted service, occasional service interruptions may occur due to planned maintenance or unplanned emergencies.

To support this objective, York Region is committed to continuously improving its drinking water systems by maintaining ISO 9001 certification and operating under the Drinking Water Quality Management Standard. The Region uses its Integrated Management System (IMS) to ensure compliance with these standards and drive continuous improvement in the system. Similarly, wastewater effluent quality assurance and control measures include an extensive sampling program and controls required by the ISO 14001 Environmental Management Standard, which is captured by the IMS.

Development of current and future community levels of service

The Region's Vision 2051 and Regional Official Plan provide high-level guidance to what community levels of service must address. York Region's water and wastewater community levels of service have been developed by assessing the availability, health and safety and affordability of water and wastewater services. These three areas are evaluated through more granular attributes and align with those prescribed in O. Reg. 588/17. Table 7-3 shows how water and wastewater community levels of service are translated into action.

Water and wastewater community levels of service are reviewed every five years through Water and Wastewater Master Plan Updates as part of the Region's Municipal Comprehensive Review process. The most recent Water and Wastewater Master Plan Update was completed in 2016 which identified the Regional initiatives and infrastructure investments required to meet servicing needs to 2041 and beyond. These actions are incorporated into this plan.

Table 7-3 Translating Water and Wastewater Community Levels of Service into Action

Community Level of Service	Service Attribute	Example of Service Attribute			
Are water and wastewater services accessible?		Per cent of urban properties serviced by the public potable water and wastewater networks by York Region infrastructure			
This metric discusses access to the service now	Scope & Capacity	Number of unplanned service interruptions attributed to York Region infrastructure			
and in the future		Per cent of growth accounted for in servicing Water and Wastewater Master Plan			
	Reliability	Per cent of drinking water samples that met Ontario Drinking Water Standard per year			
Is drinking water safe? How does wastewater impact my community? This metric assesses		Number of boil water advisory notices per year attributed to York Region infrastructure failure			
		Per cent of wastewater treated prior to return to the environment			
health and safety related to the service		Number of wastewater sampling results exceeding ECA limits			
		Per cent of serviced properties serviced with fire flow			
Are water and wastewater		Infrastructure Replacement value per capita			
services affordable and cost efficient?	Financial	Per cent of infrastructure captured in the User Rate Study			
This metric assesses financial considerations					

8. Required Actions and Continuous Improvement

8.1 Overview

This section outlines recommended actions that will advance asset management across York Region. These actions respond to an assessment of current asset management planning against the new regulatory requirements, as well as, reflecting the Region's commitment to continuous improvement.

In drawing up this plan, a third party carried out a regulatory gap analysis. In addition to identifying gaps, this exercise suggested other opportunities for improvement.

None of the gaps identified by the analysis affected the Region's compliance with the requirements of O. Reg. 588/17 Phase 1 – Current Levels of Service for Core Assets.

The analysis set out proposed action items in two categories:

- Requirements to meet O. Reg. 588/17, as shown in **Table 8-3**; and
- Asset Management Continuous Improvement, as shown in Table 8-4.

8.2 Actions to Meet O. Reg. 588/17

O. Reg. 588/17, the regulation on asset management planning under the *Infrastructure for Jobs and Prosperity Act, 2015,* requires that:

- Every municipality prepare a strategic asset management policy by July 1, 2019 and shall review it and, if necessary, update it at least every five years;
- Every municipality prepare an asset management plan, with current levels of service, in respect of its core municipal infrastructure assets by July 1, 2021, and in respect of all of its other municipal infrastructure assets by July 1, 2023;
- Every municipality prepare an asset management plan, with proposed levels of service, in respect of all of its municipal infrastructure assets by July 1, 2024;
- Every asset management plan must indicate how all background information and reports upon which the information is based will be made available to the public;
- Every asset management plan must be endorsed by the executive lead of the municipality, and approved by a resolution passed by the municipal council; and
- Every municipality review and update its asset management plan at least every five years.

This 2018 Corporate Asset Management Plan meets the regulatory requirements for asset management plans with current levels of service, for core municipal infrastructure assets (water, wastewater, stormwater, roads, bridges and culvert assets) well in advance of the July 1, 2021 deadline.

Tables 8-1 and **8-2** summarize the Region's current state of compliance with O. Reg. 588/17. **Table 8-1** summarizes the status for core assets, with page numbers referring to the portion of the document which demonstrates compliance with the respective portion of the regulation and **Table 8-2** provides the status for non-core assets.

The Region has already met the regulatory requirement for a strategic asset management policy. The tables show that this plan meets requirements around core assets, for which the deadline is July 1, 2021. The gaps that were identified relate to requirements in the regulation after that date.

Table 8-1 Corporate-Wide Regulation Status - Core Assets

	Phase 1 (Current Levels of Service) by July 1, 2021				Phase 2 (Proposed Levels of Service) by July 1, 2024			
Service Area	State of Infrastructure	Current Levels of Service	Asset Management Strategy	Financing Strategy	State of Infrastructure	Proposed Levels of Service	Asset Management Strategy	Financing Strategy
Wastewater	Compliant	Compliant	Compliant	Compliant	Compliant	In	Compliant	Compliant
	(pg. 64)	(pg. 65)	(pg. 66)	(pg. 67)	(pg. 64)	Progress	(pg. 66)	(pg. 67)
Water	Compliant	Compliant	Compliant	Compliant	Compliant	In	Compliant	Compliant
	(pg. 70)	(pg. 71)	(pg. 73)	(pg. 74)	(pg. 70)	Progress	(pg. 73)	(pg. 74)
Roads	Compliant	Compliant	Compliant	Compliant	Compliant	In	In	In
	(pg. 77)	(pg. 78)	(pg. 79)	(pg. 79)	(pg. 77)	Progress	Progress	Progress

Table 8-2 Corporate-Wide Regulation Status - Non-Core Assets

	Phase 1 (Current Levels of Service) by July 1, 2023			Phase 2 (Proposed Levels of Service) by July 1, 2024				
Service Area	State of Infrastructure	Current Levels of Service	Asset Management Strategy	Financing Strategy	State of Infrastructure	Proposed Levels of Service	Asset Management Strategy	Financing Strategy
Housing Services	Compliant	In Progress	In Progress	In Progress	Compliant	In Progress	In Progress	In Progress
Paramedic Services	Compliant	In Progress	In Progress	In Progress	Compliant	pliant In Progress In		In Progress
Seniors Services	Compliant	In Progress	In Progress	In Progress	Compliant	In Progress	In Progress	In Progress
Information Technology	Compliant	In Progress	In Progress	In Progress	Compliant	In Progress	In Progress	In Progress
Property Services	Compliant	In Progress	In Progress	In Progress	Compliant	In Progress	In Progress	In Progress
Energy Management	Compliant	Compliant	Compliant	Compliant	Compliant	In Progress	Compliant	In Progress
Forestry	Compliant	Compliant	Compliant	Compliant	Compliant	In Progress	Compliant	In Progress
Waste Management	Compliant	Compliant	Compliant	Compliant	Compliant	In Progress	Compliant	In Progress
Roads	Compliant	Compliant	In Progress	In Progress	Compliant	In Progress	In Progress	In Progress
Transit	Compliant	Compliant	In Progress	In Progress	Compliant	In Progress	In Progress	In Progress
Police Services	Compliant	In Progress	In Progress	In Progress	Compliant	In Progress	In Progress	In Progress

The Region is in the process of developing a road map to continue to meet regulatory requirements over the next six years. Table 8-3 sets out needed actions, with timelines that will ensure compliance well in advance of deadlines. Action items are described in detail following the table.

Table 8-3 Action Items Required to Meet O. Reg. 588/17

Action	Action		etion By	O. Reg.		
Item Number			2022	588/17 Requirement		
1	Improve asset inventories for non-core assets	Х				
2	Develop current levels of service for non- core assets	x				
3	Develop a life cycle strategy for non-core assets	x		Phase 1 By July 1, 2023		
4	Document a financing strategy for non- core assets	x		Ву Јију 1, 2023		
5	Create or finalize Asset Management Plans for service areas that currently do not have them		X			
6	Ongoing update of asset inventories	X				
7	Document proposed levels of service for core and non-core assets	Х				
8	Document life cycle strategies for core and non-core assets	X		Phase 2		
9	Document financing strategy for lifecycle activities, core and non-core assets	x		By July 1, 2024		
10	Update Corporate and Departmental Asset Management Plans		X			

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Phase 1 (O. Reg. 588/17 deadline of July 1, 2023)

The following provides more detail on the Phase 1 action items in Table 8-3.

Action Item #1: State of Infrastructure (Non-Core Assets): Ensure that asset inventories are accurate and at an appropriate level in the asset hierarchy to enable effective management of the assets. Generally, this entails disaggregating assets to the level at which renewal treatments will be applied and at which assets have similar life cycles. For example, non-core assets such as Housing Service, Information Technology, Property Services, Energy Management, Forestry and Police have asset inventories however the accuracy and level of detail will need to be confirmed and adjusted as required. The asset inventory for a building requires a hierarchy set-up with appropriate sub assets such as heating and ventilating equipment, generators, roofs, parking lots, etc. to ensure the effective management of the assets over their life cycles. Each asset in the inventory should include a unique identifier, asset description and location, installation/acquisition date, planned and actual maintenance completed, life cycle costs (historical, replacement, operations, maintenance, and disposal costs), expected useful life, and condition;

Action Item #2: Levels of Service (Non-Core Assets): Identify stakeholder and organizational objectives, including regulatory requirements. Identify current and future service area needs including capacity and reliability needs. Define community and technical service levels through appropriate measures with targets or triggers for application of life cycle activities. Evaluate current and forecasted future performance against the defined levels of service to identify performance gaps;

Action Item #3: Life Cycle Strategy (Non-Core Assets): Conduct risk and best life cycle cost analyses, based on identified capacity and reliability performance gaps. Risk analyses to align with the Region's Climate Change Action Plan that is expected to be completed in 2019 and will be considered in future Corporate Asset Management Plan updates. Life Cycle strategies are to be used to help inform and determine growth, renewal, operations and maintenance activities needed to maintain current levels of service;

Action Item #4: Financing Strategy (Non-Core Assets): Develop and document financial strategies developed using the multi-year budget to identify the capital and operating funds needed over the following 10 year period, based on the identified life cycle strategies, to deliver current levels of service; and

Action Item #5: Asset Management Plans (Non-Core Assets): Clearly document the above asset management planning in an asset management plan.

Phase 2 (O. Reg. 588/17 deadline of July 1, 2024)

The following provides more detail on the Phase 2 action items in **Table 8-3.**

Action Item #6: State of Infrastructure: Ensure that ongoing updates of asset inventories are accurate and at an appropriate level in the asset hierarchy to enable effective management of the assets, as described above in Action Item #1;

Action Item #7: Levels of Service: Document the levels of service the Region proposes to provide over the 10 years that follow the date of the asset management plan, including any changes from current

levels of service, levels of service options that were considered, risks to long-term sustainability, and demonstration of affordability. Document the proposed performance for each year in the 10 years that follow the date of the asset management plan;

Action Item #8: Life Cycle Strategy: Document asset management life cycle strategies to provide proposed levels of service, including the cost-benefit and risk analysis of life cycle activity options considered, and an estimate of annual life cycle capital and significant operating costs for each of the 10 years that follow the date of the asset management plan. Risk analyses to align with the Region's Climate Change Action Plan that is expected to be completed in 2019 and will be considered in future Asset Management Plan updates;

Action Item #9: Financing Strategy: Develop and document financing strategies developed using the multi-year budget to fund all life cycle activities including revenue source options examined to fund the plan, and any identified shortfalls and associated risks; and

Action Item #10: Asset Management Plan: Clearly document the above asset management planning in an asset management plan, including the risks associated with implementing the asset management plan and any actions that would be proposed in response to those risks.

8-3 Asset Management Continuous Improvement

The Region has already built significant capability in its asset management practice. Table 8-4 outlines actions over the next five years to support continuous improvement. Action items are described in detail following the table.

Table 8-4 Continuous Improvement Actions

Action		Comple	etion By			
Item Number	Action	2021	2022	Comments		
11	Improve Corporate Asset Management Strategy	Х		Improve compliance with Corporate Asset Management Policy		
12	Improve coordinated effort across the organization in asset management	Ong	oing	Ongoing through Corporate Asset Management Committees		
13	Develop and improve asset management processes	Ong	oing	As per the Corporate Asset Management Gap Assessment Report (04/2018)		
14	Evaluate cost, risk and performance	х		Compliance with the Corporate Asset Management Policy		
15	Further develop and implement the fiscal strategy	Ongoing		Align with asset management plans through the next multi-year budget in 2018		

Action	Antinu	Comple	etion By	Comments		
Item Number	Action	2021	2022			
16	Strengthen corporate data management capabilities		X			
17	Lead Region wide asset management collaboration	X		Thursday Company		
18	Include business software in the next Corporate Asset Management Plan update	Х		Through Corporate Asset Management Committees		
19	Include data in the next Corporate Asset Management Plan update		X			

Asset Management Continuous Improvement Actions

The following provides more detail on the actions in **Table 8-4.**

Action Item #11: Improve Corporate Asset Management Strategy: Continue to develop Region-wide Corporate Asset Management Strategy as per the Council approved Corporate Asset Management Policy to standardize where possible and align best management approaches that are currently in place across various departments;

Action Item #12: Improve coordinated efforts: Continue to improve coordinated effort between and among departments as asset management matures across the organization. Guided by the Corporate Asset Management Policy, coordination has been improving for a number of years, examples include developing a Corporate Risk Framework for assets, aligning life cycle data to support improved financial planning and investment decisions, piloting data standardization, and standardizing Departmental Asset Management Plans. Continuing to improve coordination efforts can advance asset management in similar, cost-effective and efficient ways;

Action Item #13: Asset Management Process Development: Continue to develop and improve asset management processes, including those related to updating inventory data, reviewing program and technical performance against objectives, formulating and funding best life cycle cost programs to address identified performance gaps, and implementing life cycle plans;

Action Item #14: Cost, Risk and Performance Evaluation Strategy: Develop the ability to evaluate and appropriately balance cost and risk for various levels of service, including processes and frameworks (e.g. the Region is currently developing a Corporate Risk Management Framework for assets to provide risk data to form part of this action item);

Action Item #15: Fiscal Strategy: Further develop and implement the Regional Fiscal Strategy to support financial sustainability of asset management;

Action Item #16: Corporate Data Management Capabilities: Strengthen corporate data management capabilities and systems to better support the Region's asset management strategy and practices;

Action Item #17: Customer Focused Collaboration Strategy: Increase collaboration with York Region's nine local municipalities to define levels of service and leverage other opportunities to coordinate asset management;

Action Item #18: Software/Information Technology Strategy: Add business software applications as assets to information technology asset inventory in future Asset Management Plans;

Action Item #19: Data and Information Strategy: Develop plans to manage Regional data and information as Regional assets to ensure their continuing value; and

The 19 action items outlined above will be implemented through the Corporate Asset Management Steering and Coordinating Committees.



Status: Final Approved By: Council

The Regional Municipality of York

CORPORATE ASSET MANAGEMENT POLICY

Policy No.: 8201695

Original Approval Date: November 21, 2013

Policy Last Updated: February 15, 2018

Policy Statement:

York Region assets will be managed through a coordinated approach that ensures financial sustainability following recognized asset management principles guided by the Region's Strategic Plan and Vision 2051.

Application:

This policy applies to all Regional staff involved in asset life cycle management, which includes planning, design/construction/acquisition, operation and maintenance, rehabilitation, renewal/disposal, and monitoring/reporting of owned in whole or in part, leased or operated Regional assets.

Purpose:

This policy is to provide clear objectives for asset management practices across all Regional departments to enable a consistent, coordinated and affordable approach to provide the services required to meet customer expectations. Asset Management at the Region is to be guided by the following objectives:

 Adopt and advance industry leading asset management practices that align with established standards and legislation;

CORPORATE ASSET MANAGEMENT POLICY February 15, 2018

- Provide defined levels of service which are balanced against considerations of costs and risks;
- Align Asset Management Plans with the Regional Fiscal Strategy;
- Demonstrate financially sustainable life cycle management by appropriately balancing cost, risk and performance to achieve full value from assets;
- Improve evidence-based decision-making from in-service asset data related to expenditures, operations and maintenance; and
- Ensure organizational accountability and transparency by engaging customers to provide input into asset management planning.

Definitions:

Asset¹: Item, thing or entity that has potential or actual value to an organization. Value can be tangible or intangible, financial or non-financial, and includes consideration of risks and liabilities.

Asset Management¹: Coordinated activity of an organization to realize value from assets. Realization of value will normally involve an appropriate balancing of costs, performance and risks, opportunities and performance benefits.

Asset Management Plan¹: Documented information that specifies the activities, resources, and timescales required for an individual asset, or grouping of assets, to achieve the organization's asset management objectives.

Level of Service¹: Parameters or a combination of parameters, which reflect social, political, environmental and economic outcomes that an organization delivers from their assets.

Example - Transportation (Roads) – level of service is indicated by different road pavement conditions according to pavement condition index

Life cycle¹: Phases involved in the management of an asset.

Life cycle data: Includes cost, performance and risk data collected and managed through business processes required to help make well informed, evidence-based decisions in all phases of an asset's life cycle.

Tangible Capital Asset: Per the Region's Tangible Capital Asset (TCA) Policy, TCAs are non-financial assets having physical substance that are acquired, constructed or developed, including land, land improvements, roads, buildings, vehicles, equipment, water mains, sewer mains and capital assets acquired by capital lease or through donation.

¹ ISO/IEC (2014) 55000 - Asset Management, Geneva, Switzerland: International Organization for Standardization (ISO).

Description:

The Region is responsible for provision of a diverse array of services which depend on a large financial portfolio of assets. An integral component of ensuring reliable and sustainable services requires an effective approach to managing existing and future municipal assets.

Effective asset management focuses on the value an asset can provide to an organization. Ultimately, adopting effective and comprehensive asset management objectives across an organization will support the long term sustainability and efficiency of all assets to ensure they provide defined levels of service.

Asset Management Framework

To meet the objectives of this Policy, the Region will follow the Corporate Asset Management Framework in Appendix 1. The framework represents the Region's asset management process and stakeholders: Corporate, Departmental, and Customers. The asset management process begins with the alignment of legislative requirements and customer expectations into the Regional Strategic Plan and Fiscal Strategy to ultimately deliver levels of services to both external and internal customers.

The following sections in the framework assist in coordinating efforts across the Region to ensure value is realized from all Regional assets.

Corporate

- Assess and incorporate legislative requirements and customer expectations into the Regional Strategic Plan and Fiscal Strategy
- Maintain Corporate Asset Management Policy by updating every five years, as required
- Develop a Corporate Asset Management Strategy to outline how the Region's asset management objectives will be achieved, and will:
 - a. Adopt and adhere to the asset management planning principles listed in Section 3 of the *Infrastructure for Jobs and Prosperity Act, 2015*;
 - b. Develop well-coordinated investment planning, capital programming, work management and asset maintenance practices;
 - c. Define levels of service that balance customer expectations, compliance and legislative requirements, technological and environmental considerations;
 - d. Manage risk, through well-informed decision-making processes which
 minimize probability of failure and manage the consequences of failure with
 regards to safety, environmental protection, levels of service and cost impacts;
 - e. Develop long term financial plans aligned with the Regional Fiscal Strategy to ensure appropriate capital/operating funding for all asset life cycle phases;

CORPORATE ASSET MANAGEMENT POLICY February 15, 2018

- Monitor and evaluate the performance of assets and associated programs and track the efficacy of asset management principles and practices to ensure continuous improvement;
- g. Ensure the strategy remains up-to-date in view of evolving asset management best practices (i.e. ISO 55000) and professional experience and review and update periodically;
- Align and rationalize asset management business processes and data management systems to ensure a standardized and coordinated approach to an asset management system;
- i. Consider opportunities to coordinate planning between interrelated infrastructure assets by pursuing collaborative opportunities;
- Align asset management planning with growth management objectives in the Region's Official Plan;
- k. Align asset management planning to support implementation of the Region's Climate Change Action Plan and Emergency Response Plan.
- Develop a Corporate Asset Management Plan to provide an overview of the Region's assets, based on departmental asset management plans, and update as required

Departmental

- Obtain in-service asset data to better inform decisions for all asset life cycle phases, including financial expenditures, work and maintenance management, condition assessments, operational performance and risk management
- Collaborate and work with Finance to implement departmental Asset
 Management Plans through the development of sustainable budgets as part of the annual budget process and alignment with the Regional Fiscal Strategy
- Develop a Departmental Asset Management Plan that aligns with the Corporate Asset Management Policy to provide an overview of the department's assets and asset management approaches and will:
 - a. Outline long term goals, processes and steps to make asset management decisions;
 - b. Include current asset inventory, performance, and risk management strategies;
 - c. Integrate with corporate financial and risk management processes; and
 - d. Record tangible capital assets in accordance with the Region's Tangible Capital Asset Policy.

Customers

- Includes both internal and external customers
- Receive and experience service delivery and provide feedback on level of service expectations
- Provide input into asset management planning

Responsibilities

Responsibilities include both internal staff and external stakeholders. Internal staff are outlined in the York Region Asset Management Organization Structure shown in Appendix 2, subject to change as required.

Council

- Approves Corporate Asset Management Policy and Plan, as required
- Serves as representative of customers' needs
- Approves asset funding to ensure required financial sustainability for Asset Management through the annual budget

Executive Lead - Corporate Asset Management Steering Committee

- Co-sponsored by the Commissioners of Environmental Services and Transportation Services, comprised of directors/managers from service areas and support groups within the Region
- Holds overall ownership and accountability for ensuring compliance with this
 policy and delegates responsibility to the Corporate Asset Management
 Coordinating Committee the responsibility for the implementation of
 Departmental Asset Management Programs
- Deliver key objectives as stated in the Region's strategic and business plans in relation to asset management (Strategic Plan, Vision 2051, etc.) and allocate appropriate resources for the achievement of the policy objectives
- Provide a forum for senior level cross-departmental collaboration on initiatives or projects related to asset management

Corporate Asset Management Unit

- Lead and support the Corporate Asset Management Coordinating Committee in their roles and responsibilities and report to the Corporate Asset Management Steering Committee quarterly regarding compliance with this policy
- Responsible for the coordination, implementation and reporting of legislated requirements
- Provide leadership to ensure the objectives of the Asset Management Policy are achieved through the Corporate Asset Management Strategy
- Advance opportunities to improve coordination of effort across the Region such as data sharing, business process alignments, resource sharing, data management systems consolidation, etc. related to asset management

Corporate Asset Management Coordinating Committee

 Led by the Corporate Asset Management Unit, comprised of delegates from service areas and support groups within the Region

CORPORATE ASSET MANAGEMENT POLICY February 15, 2018

- Reports to the Corporate Asset Management Steering Committee, responsible for the development, implementation and continuous improvement of the Departmental Asset Management Programs
- Integrate Departmental Asset Management Plans into Corporate Asset Management Plan
- Provide corporate collaboration with asset management best practices and expertise to guide departmental asset management plans and initiatives
- Champion corporate asset management policy objectives within the respective service areas

Departmental Asset Management Leads

- Leads which govern and maintain the Region's assets in compliance with the Corporate Asset Management Policy and liaise with Finance to ensure a sustainable financial strategy and include delegates from the following departments:
 - Environmental Services (ENV)
 - Transportation Services (TRN)
 - Community and Health Services (CHS)
 - York Regional Police (YRP)
 - Corporate Management (CM) includes Corporate Services and Finance
- Support integration with Corporate Asset Management Policy
- Responsible for the development, implementation, operation and continuous improvement of Departmental Asset Management Programs
- Liaise with Controllership Office Risk Management to assist and utilize the corporate risk registry process to assess asset risks to help inform decisions
- Liaise with Finance to provide asset management requirements as inputs to the annual budget process and long term financial forecasts, which will ensure that sustainable financial strategies support asset life cycle needs
- Participate in the development and implementation of the Asset Management Plans pertaining to their departments and related asset management initiatives
- Engage customers to obtain feedback on levels of service and asset management planning and incorporate feedback

Customers

- Participate in stakeholder engagement initiatives, where possible
- Provide feedback related to levels of service, service experience, and service expectations

Non-Compliance:

Accountability and compliance with this policy is the responsibility of the Corporate Asset Management Steering Committee. Compliance with the Corporate Asset Management Policy will be monitored by the Corporate Asset Management Unit as required.

Reference:

Legislative and other authorities

- Tangible Capital Asset Policy;
- Municipal Asset Management Planning Regulation;
- Infrastructure for Jobs and Prosperity Act, 2015;
- ISO/IEC (2014) ISO International Standard ISO/IEC 55000;2014 (E) Asset Management — Overview, Principles and Terminology, Geneva, Switzerland: International Organization for Standardization (ISO).

Appendices

Corporate Asset Management Framework

Keyword Search

Corporate Asset Management, Asset Management Policy

Contact:

Manager, Corporate Asset Management

Approval Information:

Council Approval

2018 Whole

Council Minute No.: 25 Report No.: 2

Extract eDOCS #: 8135656 Clause No.: 6

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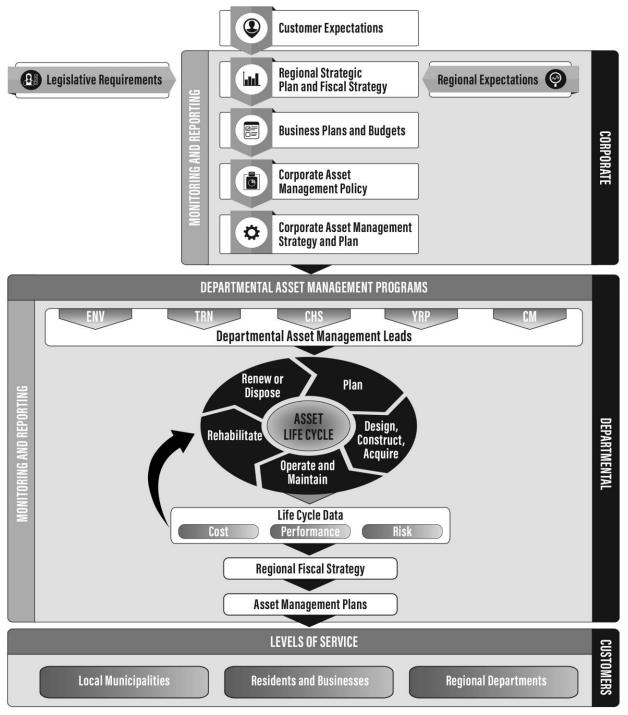
CORPORATE ASSET MANAGEMENT POLICY February 15, 2018

8201695 (Policy)

5267618 (Archived Policy)

Accessible formats or communication supports are available upon request.

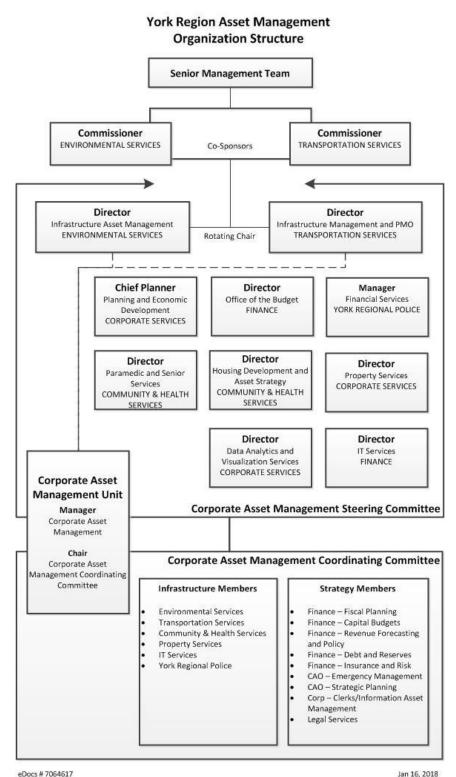
Appendix 1 – Corporate Asset Management Framework



DEPARTMENTAL ASSET MANAGEMENT LEADS:

ENV - Environmental Services TRN - Transportation Services CHS - Community & Health Services YRP - York Regional Police CM - Corporate Management (includes Corporate Services & Finance)

Appendix 2 - York Region Asset Management Organization Structure



ASSET MANAGEMENT PLAN

The Regional Municipality of YorkEnvironmental Services Department
Administrative Centre — 2nd Floor

1-877-464-9675

york.ca

Accessible formats or communication supports are available upon request.







Purpose

This presentation will:

- Present an overview of the Region's first Corporate Asset Management Plan
- Inform Committee of the Whole that the Corporate Asset Management Plan meets Ontario Regulation 588/17: Asset Management Planning for Municipal Infrastructure

The Region's first Corporate Asset Management Plan formalizes asset management planning across all departments

Core and Non-Core Assets

- Core assets include:
 - Water
 - Wastewater
 - > Roads including stormwater, bridges and culvert assets
- Non-core assets include:
 - ➤ Administrative Facilities ➤ Fleet Vehicles

 - Community HousingWaste Management Assets
 - ➤ Technology Network and ➤ Forest Equipment





Core assets account for over 75% per cent of the Region's asset base



Asset Service Areas

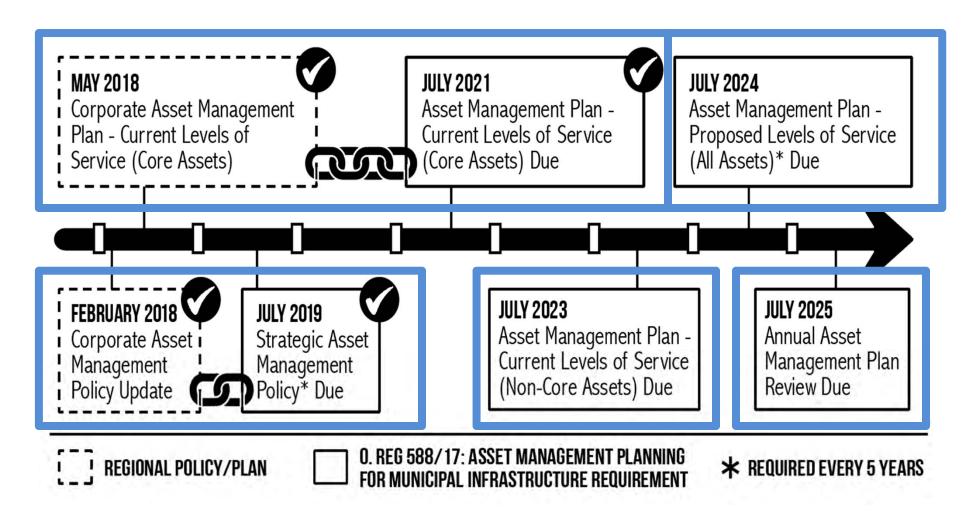


This Corporate Asset Management Plan is the culmination of efforts across 13 asset service areas





Asset Management Planning Timelines



Approval of this plan will satisfy the next step in the regulation

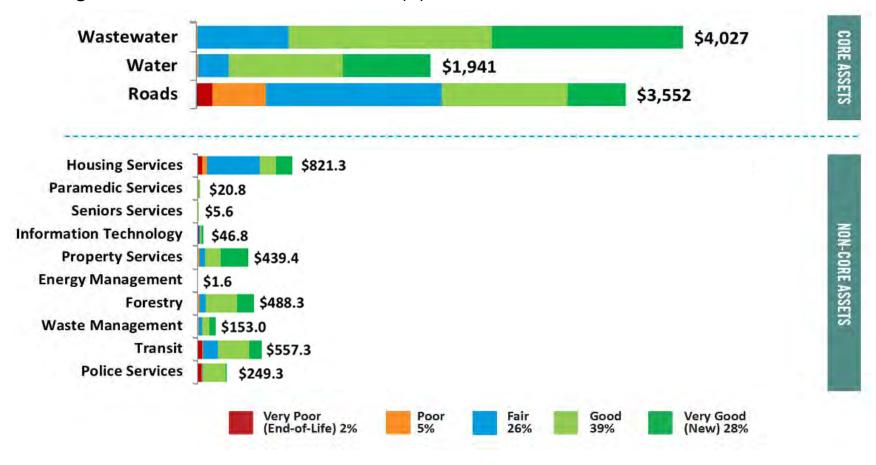
Regulatory Compliance Status for Core Assets

	Phase 1 (Current Levels of Service) by July 1, 2021			Phase 2 (Proposed Levels of Service) by July 1, 2024				
Service Area	State of Infrastructure	Levels of Service	Asset Management Strategies	Financing Strategy	State of Infrastructure	Levels of Service	Asset Management Strategies	Financing Strategy
Roads	Compliant	Compliant	Compliant	Compliant	Compliant	In Progress	In Progress	In Progress
Wastewater	Compliant	Compliant	Compliant	Compliant	Compliant	In Progress	Compliant	Compliant
Water	Compliant	Compliant	Compliant	Compliant	Compliant	In Progress	Compliant	Compliant

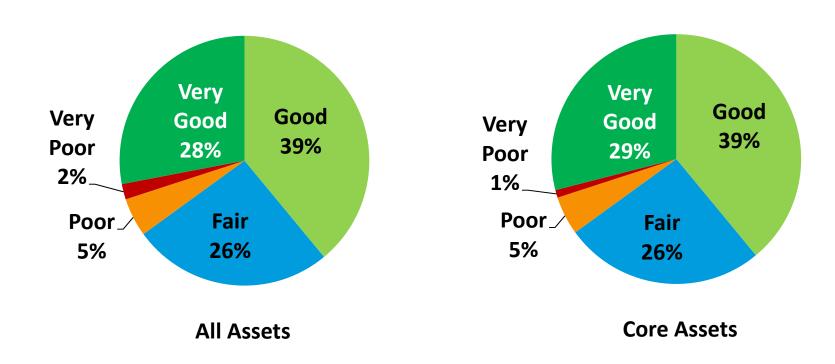
Plan requirements for core service area assets are compliant with regulation well ahead of July 2021 deadline

Inventory and Condition of Regional Assets

- Estimated current replacement value of all Regional assets is \$12.3 Billion
- Figures below shown in Millions (\$)



Condition Grade of Regional Assets



Condition Grade of Regional Assets Example – Very Good Condition



Condition Grade of Regional Assets Example - Fair Condition



Condition Grade of Regional Assets Example Rehabilitation – Poor to Good



- Levels of Service define the scope or quality of services provided
- Technical levels of service are used by technical staff to guide investment decisions
- Community levels of service are simplified measures that are more easily understood by travellers



Levels of service define services expected by the community and provide metrics to evaluate performance by technical staff



Roads with pavement classified to be in "very good" condition are new roads



Half of the Region's roads have pavement that is classified to be in "fair" condition



Roads with pavement classified to be in "very poor" condition require more substantial repairs

Consultation on Proposed Levels of Service

- Feedback on existing levels of service achieved through integrated master planning process
 - > 2016 Water and Wastewater Master Plan
 - 2016 Transportation Master Plan
- Continued engagement will help the Region to consider how to best manage its assets and inform next update to the Corporate Asset Management Plan, planned for 2022

Input from the public will be important in determining proposed levels of service



Financial Sustainability

- Financial sustainability means...
 - Growth can be accommodated without unacceptable tax levy or debt increases
 - Infrastructure kept in a state of good repair
 - Service levels can be increased as necessary
 - Service levels can be maintained in the face of changes in economic conditions
 - Financial responsibility is shared between current and future residents
- Council has approved two major initiatives that contribute to long-term financial sustainability
 - Fiscal Strategy commitment to funding reserves for asset management needs
 - Financial Sustainability Plan for Water and Wastewater annual rate which will support full funding of water and wastewater needs by 2021

Council continues to ensure the long-term financial sustainability of the Corporate Asset Management Plan



Summary

- 93 per cent of the Region's assets are in "fair" condition or better
- Requirements of the asset management regulation will be met three years ahead of the deadline
- The Corporate Asset Management plan is coordinated with the Fiscal Strategy to ensure the financial sustainability of Regional assets
- Through Council's leadership, the Region is at the forefront of asset management planning in Ontario

Next update to the Plan is planned for 2022



Report Recommendations

- Council approve the Corporate Asset Management Plan provided in Attachment 1.
- Regional Clerk circulate this report to the local municipalities.

The Region's first Corporate Asset Management Plan will meet legislated requirements of O. Reg. 588/17



THANK YOU



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Brian Titherington

Director, Transportation Services
Transportation and Infrastructure Planning
brian.titherington@york.ca 1-877-464-9675 x 75901





The Corporation of the Municipality of Killarney 32 Commissioner Street Killarney, Ontario POM 2A0

MOVED BY:

Nancy Wirtz

SECONDED BY:

Michael Reider

RESOLUTION NO. 18-159

WHEREAS municipal governments in Ontario do not have the right to approve landfill projects in their communities, but have authority for making decisions on all other types of development;

AND WHEREAS this out-dated policy allows private landfill operators to consult with local residents and municipal Councils, but essentially ignore them;

AND WHEREAS municipalities already have exclusive rights for approving casinos and nuclear waste facilities within their communities;

AND FURTHER that the province has recognized the value of municipal approval for the siting of power generation facilities;

AND WHEREAS the recent report from Ontario's Environmental Commissioner has found that Ontario has a garbage problem, particularly from Industrial, Commercial and Institutional (ICI) waste generated within the City of Toronto, where diversion rates are as low as 15%;

AND WHEREAS municipalities across Ontario are quietly being identified and targeted as potential landfill sites;

AND WHEREAS municipalities should be considered experts in waste management, as they are responsible for this within their own communities, and often have decades' worth of in-house expertise in managing waste, recycling, and diversion programs;

AND WHEREAS municipalities should have the right to approve or reject these projects, and assess whether the potential economic benefits are of sufficient value to offset any negative impacts and environmental concerns;

THEREFORE BE IT RESOLVED THAT the Municipality of Killarney supports *Bill 16, Respecting Municipal Authority Over Landfilling Sites Act* introduced by MPP Ernie Hardeman and calls upon the Government of Ontario, and all political parties, to formally grant municipalities the authority to approve landfill projects in or adjacent to their communities;

AND FURTHER THAT the Municipality of Killarney send copies of this resolution to MPP Ernie Hardeman and all municipalities.

CARRIED

I, Candy K. Beauvais, Clerk Treasurer of the Municipality of Killarney do certify the foregoing to be a true copy of Resolution #18-159 passed in a Regular Council Meeting of The Corporation of the Municipality of Killarney on the 16th day of May 2018.

Candy K. Beauyais Clerk Treasurer



On December 21, 2000, the Ontario Legislature officially proclaimed the month of June in each year as Deaf-Blind Awareness Month, to recognize that "Deafblindness is a unique disability that incorporates the sensory loss of both sight and hearing" and was created to help "recognize that increased public awareness of this disability is crucial to increase opportunities for those who live with it."

More recently, the Canadian Senate passed a motion on May 28, 2015 also recognizing June as Deafblind Awareness Month across Canada. This motion helps "to promote public awareness of deafblind issues and to recognize the contribution of Canadians who are deafblind."

June is also the birth month of Helen Keller, an internationally recognized person who lived with deafblindness.

Join us in celebrating National Deafblind Awareness Month in communities across Ontario by attending an event near you. A list of events occurring nationally can be found at www.deafblindnetworkontario.com.

Founded in 1989, DeafBlind Ontario Services is a not-for-profit organization that helps individuals who are deafblind increase their independence and improve their quality of life through specialized services. With residential locations and community services programs across the province, their services extend into a wide range of communities in Ontario.

To learn more, visit www.deafblindontario.com.

2018

Pollinator Week Toolkit







Celebrate with us June 18-24, 2018!

Welcome to the official **2018 Pollinator Week Toolkit!** Utilize these resources to help you celebrate and promote your involvement in this year's Pollinator Week (**June 18-24, 2018**). Additional information can be found at http://www.pollinator.org/pollinatorweek/ or by contacting Pollinator Partnership at info @pollinator.org.

ACTIVITY IDEAS -

There are countless ways to celebrate:

- Encourage your Mayor to sign a proclamation
- Display pollinator artwork and outreach materials in your office lobby
- Begin your own or join a social media campaign
- Highlight Pollinator Week in a newsletter, blog, or magazine
- Sponsor Pollinator Week (see additional resources)
- Host a pollinator-themed meal or mixer
- Pollinator planting day at your school, office, local park, or library
- Build native bee houses (see additional resources)
- Join the Million Pollinator Garden Challenge (see additional resources)
- Request a local establishment or building light up for Pollinator Week (For example: Light up City Hall, CN Tower, or Parliament Hill in Yellow and Black)
- Plant habitat in your backyard using native plants
- Host a nature walk or pollinator expert lecture
- Screen a pollinator film (see additional resources)
- Host a pollinator festival or native plant sale
- Host an educational event at a local library

Be sure to post all local public events at http://pollinator.org/pollinator-week!

SOCIAL MEDIA —

Use **#pollinatorweek** for all mentions of pollinator week, events and resources shared. Mention **Pollinator Partnership** on Facebook, twitter, and Instagram and we may re-share!

Sample posts:

- It's #pollinatorweek! #DYK that pollinators like bees, butterflies, and bats, provide 1 out of 3 bites of food we eat? Say thanks by planting native plants, supporting local Canadian farmers, and educating others about the importance of pollinators!
- This #pollinatorweek, join the Million Pollinator Garden Challenge and #beecounted in the effort to provide habitat for pollinators! Get on the #PoliNation map at www.pollinator.org/mpgcmap/
- About 75% of all flowering plant species need animal pollinators for reproduction. As a result, pollinators contribute to ecosystem health and a sustainable food supply.
 Celebrate them this #pollinatorweek!

Pair these posts with one of the graphics found in the following section and direct your audience back to www.pollinator.org!

GRAPHICS AND PHOTOS -

Graphics:

 Official Pollinator Week Graphics can be downloaded at: http://www.pollinator.org/pollinatorweek/#pw-resources

Photos:

- Please share your photos of all Pollinator Week events using **#pollinatorweek**
- You can share photos directly to info@pollinator.org with consent that Pollinator Partnership can use the images for promotional purposes. Please provide photo credit, date and location.

SWAG

Pollinator Week Commemorative Shirts

- A limited edition tee-shirt has been commissioned to help celebrate Pollinator Week. To order a commemorative shirt (the proceeds of which support pollinator conservation efforts) visit www.bonfire.com/pollinator-week-2018
- Campaign will run May 1 May 21, 2018 and shirts will arrive before Pollinator Week.



Pollinators and Seeds Poster

- Pollinator Partnership's 2018 Poster shows how a diversity of managed and native pollinators supports healthy wildlands and a nutritious food supply in North America. In turn, native plant communities that sustain pollinators are an essential foundation for ecosystem integrity and diversity.
- Order at http://pollinator.org/shop/posters

Brochures, Books and more!

 Order more Pollinator Partnership materials at http://pollinator.org/shop







ADDITIONAL RESOURCES -

Visit these links for ideas and updates:

National Pollinator Week - http://pollinator.org/pollinator-week

Educational Materials - http://pollinator.org/shop

Post your event on the Pollinator Week map - http://pollinator.org/pollinator-week#find-events

Request a Proclamation from Mayor - http://pollinator.org/pollinator-week#pw-action

Sponsorship Opportunities - http://pollinator.org/nappc/sponsor

Ecoregional Planting Guides - http://pollinator.org/canada

DIY Bee Hotel - http://pollinator.org/PDFs/DIYBeeHotel.pdf

7 Things You Can Do For Pollinators - http://pollinator.org/7things

Million Pollinator Garden Challenge - http://pollinator.org/mpgcmap

The Guardians Film - http://www.theguardiansfilm.com/

Pollinator Recipes and Fun Activities for Kids - http://pollinator.org/pollinator-week#pw-activities

Please contact Pollinator Partnership at info@pollinator.org with any questions!



April 30th, 2018

Ms. Lisa Lyons, Town Clerk, Town of Newmarket, 395 Mulock Drive, Box 328, Station Main, Newmarket, Ontario L7B 1A1

Re: Request for Proclamation and Flag Raising for York Region's Pride Week: June 8-17, 2018

Dear Ms. Lyons,

On behalf of York Region's Lesbian, Gay, Bisexual and Transgender (LGBTQ2S) community and its allies, we are writing to request your municipality's participation in York Region's 18th annual Pride festival – to proudly unite with us in celebration and promotion of acceptance, inclusivity, equality and love.

York Pride Fest is a registered not-for-profit, community based organization that has organized York Region's Annual Pride Festival each year for the past decade. This festival is one of the fastest growing regional Pride festivals across Canada and includes many events; most notably the annual York Region Pride Parade and concurrent festivities that incorporate live entertainment, a community fair, beer garden, firework display and a variety of other family-friendly activities. This year and next, we are striving to expand our festival as we prepare for our twentieth anniversary of Pride celebrations in York Region in 2020.

Our organization brings visibility to the region's LGBTQ2S community in order to pursue its mission to illuminate and celebrate human diversity, captivate the general public and inspire inclusivity. York Pride is run entirely by a team of dedicated volunteers which includes representatives from many local organizations. It is because of the generous support from our partners that we are able to be as active in the community as we are.

By choosing to align yourself with our Pride Festival, you demonstrate your commitment to a safe, inclusive and discrimination free region for all of our citizens.



165-A Pony Drive, Newmarket, ON, L3Y 7B5

Online: www.yorkpridefest.com Phone: 905-235-3186 Email: info.2018@yorkpridefest.com

This year, we are requesting involvement and leadership from the Town of Newmarket through:

- The Proclamation of Pride Week (June 8th 17th, 2018). This proclamation would be a valued acknowledgement of the lives and contributions of people of all sexual orientations and gender identities living in York Region. Each year, for more than a decade, York Region's Pride Week has been recognized by the Regional Municipality of York and proclaimed by most of York Region's nine municipalities.
- Rainbow Flag Raising during Pride Week on a municipal flagpole in the Town of Newmarket, in celebration of diversity, inclusivity and equality. Last year's Pride Week was launched by official flag-raising ceremonies in five municipalities, and additionally at York Regional Police regional headquarters in Aurora as well as each of their 5 districts across the region. In addition, the Towns of Georgina and East Gwillimbury raised the flag on four flag poles surrounding the Woodbine Ave and Ravenshoe Road intersection. Throughout Pride Week the flag was also flown without ceremony by many schools and various public service organizations.

Thank you for your consideration and we look forward to welcoming you, your elected officials, your staff colleagues and community members at this year's Pride Festival.

For information about York Region's 2018 Pride Festival, please visit <u>yorkpridefest.com</u> or contact <u>jacob.gal@yorkpridefest.com</u>.

Sincerely,

Jacob Gal

Development & Communications

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