
REPORT TITLE: Enterprise Asset Management Program Update

FROM: Gary Kent, CPA, CGA, ICD.D, Chief Financial Officer and Commissioner of Corporate Services

RECOMMENDATION

That the amendments to the asset classes and asset levels of service, outlined in Appendix II of the report of the Chief Financial Officer and Commissioner of Corporate Services, listed on the November 25, 2021 Regional Council Budget agenda titled “Enterprise Asset Management Program Update,” be approved;

And further, that the 2021 Asset Management Plan be endorsed, in compliance with Ontario Regulation 588/17 and the *Infrastructure for Jobs and Prosperity Act, 2015*.

REPORT HIGHLIGHTS

- The Region’s Enterprise Asset Management (EAM) Program is guided by industry best practices, as well as regulatory requirements. This report provides an update on the Asset Management Program and identifies any emerging issues or opportunities.
- The 2021 Asset Management Plan highlights the Region’s commitment to maintaining existing assets in a state of good repair and building new infrastructure. Council’s endorsement of the 2021 Asset Management Plan will satisfy compliance requirements under the *Infrastructure for Jobs and Prosperity Act, 2015* and Ontario Regulation 588/17 for the Region of Peel.
- The 2021 Infrastructure Status and Outlook Report outlines the current state of the Region of Peel’s infrastructure and highlights some of the organization’s major improvement priorities. Currently, the Region of Peel’s \$34 billion infrastructure portfolio is in good state of repair including \$2.6 billion for Peel Housing Corporation.
- The Asset Management Program has achieved several milestones to modernize systems and tools, including the launch of the Work Management System (IBM Maximo) implementation.
- A Maturity Assessment exercise has been undertaken to measure how well the Region aligns with international best practices. Presently, the Region’s Maturity Rating is “Establishing” which reflects a well-run municipal program. Over the next five years, the Region will strive to mature to a rating of “Competent” in line with the ISO 55000 Standard.

DISCUSSION

1. Background

Enterprise Asset Management is an integral part of the Region of Peel’s strategic and long-term planning practices. The responsible management of the Region of Peel’s infrastructure

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supports Term of Council outcomes that achieve the vision of “Community for Life”. Roads, water and wastewater pipes, paramedic equipment, long term care facilities and housing are all critical for ensuring a healthy, vibrant and safe community.

As an asset intensive organization, the Region recognizes that keeping these assets in good working order is essential to providing high quality and affordable municipal services. Assets in good state of repair facilitate progress in each of the areas of Living, Thriving and Leading and in turn create a place where everyone enjoys a sense of belonging and has access to the services they need to thrive.

The Region of Peel’s infrastructure is a public investment worth over \$34 billion, including Peel Housing Corporation assets valued at \$2.6 billion (excludes Police and land assets), and the Region is committed to effective stewardship of this public asset through good asset management. Peel’s Asset Management Program supports the Long-Term Financial Planning Strategy objectives 1.2 – “Ensure the Capital Plan is sustainable” and 1.3 – “Maintain assets”.

The Region’s Asset Management Program is guided by industry best practices, as well as regulatory requirements. As such, the Program is continuously evolving to leverage opportunities, enhance service delivery and address challenges. This report provides an update on the status of Peel’s Asset Management Program and identifies any emerging issues or opportunities.

2. 2021 Enterprise Asset Management Plan

The Region has released the 2021 Asset Management Plan, which is available on the Regional webpage at <https://peelregion.ca/finance/financial-documents.asp#asset>.

The Asset Management Plan highlights the Region’s commitment to maintaining existing assets in a state of good repair and building new infrastructure which meets current and future service needs. The Plan is predicated on several factors including:

- The Region’s comprehensive Asset Management Policy and long-range strategic planning of its infrastructure requirements
- Steady and prudent levels of reinvestments to maintain state of good repair
- Council’s priority to maintain the Region’s existing assets without incurring long term debt

The 2021 Asset Management Plan represents a significant milestone in meeting the requirements of Ontario’s *Infrastructure for Jobs and Prosperity Act, 2015* (“Act”). Ontario Regulation 588/17 made under the *Act* requires the preparation of an Asset Management Plan for Core Infrastructure (Water, Wastewater, Stormwater, Roads and Bridges) by July 2022.

Council’s endorsement of the 2021 Asset Management Plan will satisfy the compliance requirements for the Region of Peel. The Region exceeds the regulatory requirements by including almost all its assets within its Plan, including those owned through Peel Housing Corporation (PHC). The next regulatory milestone (July 2024) will require all assets to be incorporated within the Asset Management Plan, including Peel Regional Police assets.

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3. 2021 Infrastructure Status and Outlook Report

The 2021 Infrastructure Status and Outlook Report, included as Appendix I of this report, outlines the current state of infrastructure, including Regional infrastructure and assets owned by Peel Housing Corporation. It highlights some of the organization's major improvement priorities. Significant work is underway for inclusion of Peel Regional Police in the 2022 Report.

The Report also reflects Risk Management Ratings, which consider approved funding for state of good repair and service enhancements; that is, infrastructure renewal projects that are in progress or soon to be initiated. A "Good" rating indicates that most assets within a portfolio are achieving the desired level of service.

Currently, the Region of Peel's \$34 billion infrastructure portfolio is in good state of repair. This is the result of ongoing capital programs to replace outdated and deficient assets with new, modernized infrastructure. An investment of approximately \$3.3 billion over the next 10 years is necessary to maintain the infrastructure in a good state of repair.

Council has also set a target of 70 per cent of infrastructure portfolios meeting a Risk Management Rating of "Good" or "Very Good". Presently, this target is exceeded with 76 per cent of the infrastructure portfolios falling within this range.

The Condition Grades and Risk Management Ratings measure the Region's ability to meet its service objectives. While the set targets are currently met or exceeded, over the long-term Peel's assets will age, and the size of the portfolio will grow, resulting in increased funding pressure to continue to meet these targets.

4. New and Amended Asset Levels of Service and Asset Classes

The Region of Peel's asset categorizations and levels of service require amendments from time to time to respond to current challenges and opportunities. Updating the asset classes and asset levels of service improves staff's ability to evaluate and quantify asset needs and to prioritize asset management actions.

As part of its continuous improvement journey, staff have added infrastructure to the asset management planning analysis resulting in several additions to the Region's asset classes and asset levels of service which have been reflected in the infrastructure requirements recommendations of the proposed 2022 Capital Budget and Forecast.

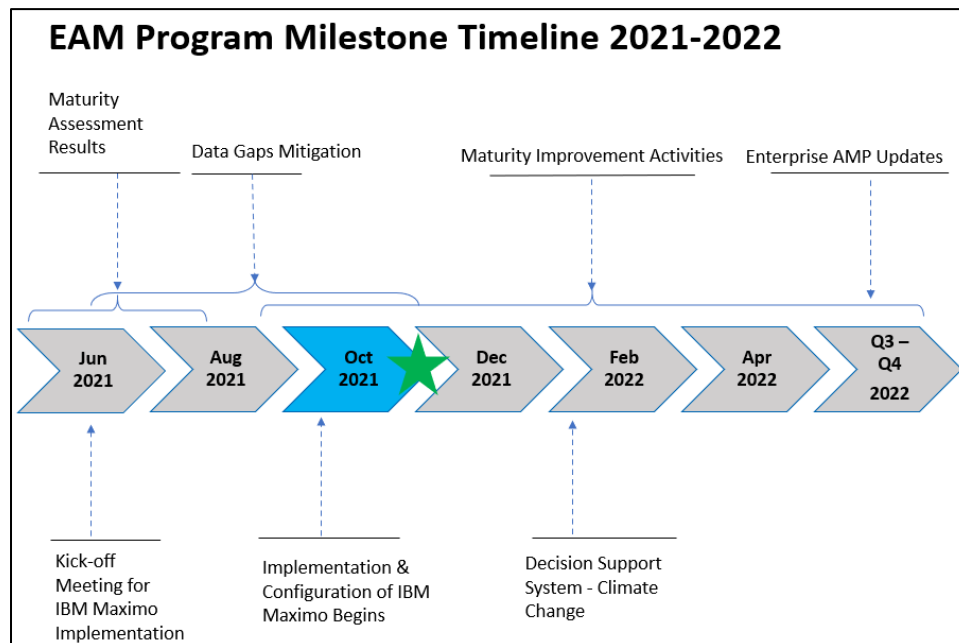
Approval of the additions to the asset levels of service and asset classes will not alter the proposed 2022 Capital Budget and Forecast. The revised asset levels of service will more appropriately reflect the Region's current and potential risk to services. They serve as a foundation for planning infrastructure improvements and ensure that newly identified capital requirements and corresponding funding is accommodated in future plans.

5. Peel Asset Management Program Maturity Implementation

The Region has the objective of aligning its Asset Management Program with international standards and best practices. A multi-year plan has been developed to advance the Region's Asset Management Program and adopt best practice activities as standard operating procedures.

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The Enterprise Asset Management Program has recently achieved several milestones, including establishing new business processes and technology solutions which will enable more efficient management of assets and modernize existing systems that enhance the organization's asset management capabilities.



The Region has selected IBM Maximo as its Work Management System and is presently implementing it across the organization. A common Work Management System ensures that best practices are shared among all user groups, that assets are managed based on evidence, and that the value they provide is optimized.

Work is currently underway to improve climate change analytics for critical and vulnerable infrastructure that provides better insight for adaptation and mitigation needs. This insight will inform future capital plans and ensure that considerations for infrastructure resiliency are included in rehabilitation of existing infrastructure and the construction of new assets.

A Maturity Assessment exercise has also been undertaken to measure how well the Region aligns with international best practices. The results of the Maturity Assessment will guide the Region's EAM Program on a long-term journey to achieve asset management "Excellence". Presently, the Region's Maturity Rating is "Establishing" which is indicative of a well-run municipal program.

Over the next five years, the Region will endeavour to reach an ISO 55000 aligned standard rating of "Competent". This rating represents an organization's ability to systematically and consistently achieve relevant requirements set out in ISO 55001.

The asset management Maturity Assessment project has considered the long-term resource requirement to meet this goal. At present time, service areas will leverage existing staff to undertake this work. Additional resources that may be required will be included in future budgets for Council's consideration.

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6. Continuous Improvement

Modernizing the Region's EAM Program through the optimization of processes and tools provides assurances that resources are used effectively, and that assets are managed through a lens of continuous improvement. Having common processes and systems allows for best practices developed in one service area to be leveraged by others, and for sharing of new tools and technologies.

Investing in advanced analytics and robust processes has real tangible benefits to financial sustainability. As a practical example, better analytics applied to the linear Water and Wastewater assets (pipes) have resulted in the improved ability to predict lifecycles and future expenditures. Deferred investment over the short term (20-years) gives more time to build up reserves and bridge the infrastructure gap, providing tools for better investment decisions.

RISK CONSIDERATIONS

Approval of the Asset Management Plan is required to achieve compliance with the *Act* and Regulation 588/17 and will reduce the risk of not qualifying for higher level of government infrastructure funding programs.

The revised asset levels of service will more appropriately reflect the Region's current and potential risk to services. Council has adopted a balanced approach for infrastructure, selecting a "Moderate" tolerance for infrastructure risk, which prefers safe service delivery with limited tolerance for uncertainty. The current state of the infrastructure is compatible with Council's risk tolerance.

Investment in advanced analytics, for example, in relation to a climate change risk model, will reduce future risk by identifying asset vulnerability and building climate change resiliency within current and future capital plans.

FINANCIAL IMPLICATIONS

There are no financial implications related to the recommendations of this report.

CONCLUSION

The Region of Peel's \$34 billion infrastructure portfolio is rated "Good" in relation to Council targets and assets are currently in a good state of repair. Regional Council's proactive policy of ensuring adequate funds to support Peel's long-term infrastructure needs has positioned Peel to manage the risks and challenges of the future. Staff will continue to implement the Asset Management roadmap to ensure the sustainability of Peel's infrastructure.

APPENDICES

Appendix I – 2021 Infrastructure Status and Outlook Report

Appendix II – New and Amended Asset Levels of Service and Asset Classes

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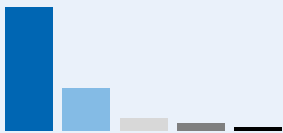


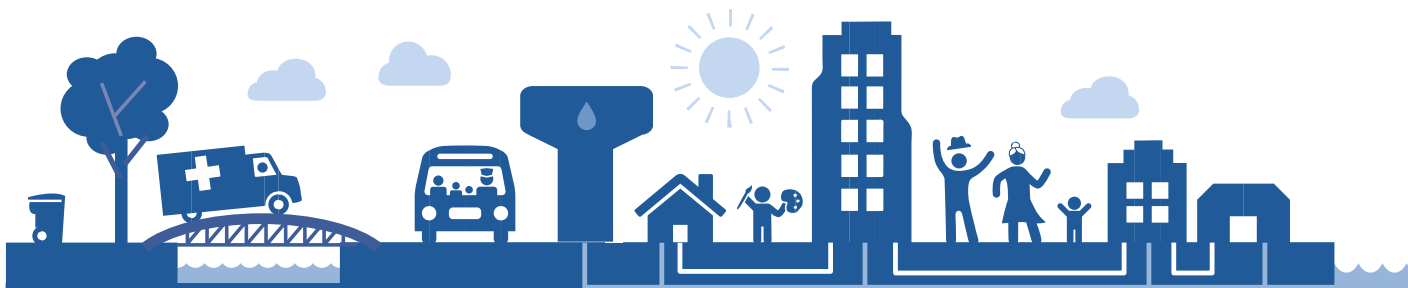
2021 Infrastructure Status and Outlook Report

Maintaining existing assets in a state of good repair and building new infrastructure which meets current and future needs is critical to the success of the Region of Peel. **The Region’s target asset level of service is to achieve an overall infrastructure status of Good.** This goal allows the Region to balance investing enough in the infrastructure to support efficient and reliable services while maintaining affordable tax and utility rates for the community.

This report outlines the current state of the Region of Peel’s infrastructure and highlights some of the organization’s major improvement priorities. The Risk Management Ratings take into account approved funding that is available for State of Good Repair (SoGR) and Performance Enhancement projects that are in progress or have yet to be initiated.

The Region Overall

Infrastructure	Status
<p>The Region owns and operates roads, bridges, buildings, pipes, fleet and equipment to support services from Housing Support to Water Supply with a replacement value of approximately **\$34 Billion.</p> <p>**Excludes Peel Regional Police managed infrastructure.</p>	<p>Risk Management Rating</p>  <p>Good</p>
Outlook	<p>Condition Grade</p>  <p>A B C D F</p>



What do the symbols mean?

Risk Management Rating

This accounts for approved funding that is available for SoGR

	Very Good	Almost all assets in the portfolio are achieving the desired targets
	Good	Most assets in the portfolio are achieving the desired targets
	Fair	Many assets in the portfolio are not achieving the desired targets
	Poor	Most assets in the portfolio are not achieving the desired targets
	Very Poor	Almost all assets in the portfolio are not achieving the desired targets










Condition Grade

This represents the physical health of the assets
















	A	New or like new condition
	B	In a good state of repair
	C	Some non-critical defects; some critical repairs in the near term
	D	Some critical defects; many critical repairs in the near term
	F	Many critical defects; immediate repairs or replacement required

Service (Asset Value)	Infrastructure	Status	Outlook
Water Supply (\$14,078M) 	Two treatment plants, 15 wells, 19 pumping stations, 27 water storage facilities and 4,650 km of water pipes provide safe, reliable, high quality drinking water.	 Very Good A B C D F	The Capital Plan includes adequate reinvestments to sustain the assets. Asset reinvestments will continue to be optimized to ensure long-term sustainability of the Region’s distribution system and water treatment plants and to maintain the desired service outcomes.
Wastewater (\$13,167M) 	Two treatment plants, 27 sewage pumping stations and 3,616 km of sanitary sewer pipes provide safe and environmentally responsible collection and treatment of wastewater.	 Fair A B C D F	The Capital Plan includes adequate reinvestments to maintain the condition of the assets. However, enhancements to the system are required to manage the growing risks from climate change and improve operational efficiency. Expansions and rehabilitations are in progress at the Wastewater Treatment Plant, many older pumping stations and critical trunk sewers to improve functionality and reduce the risk of overflows and backups.
Operations Yards, Fleet and Equipment (\$130M) 	Five Public Works yards, 503 vehicles and 230 pieces of major equipment support the delivery of the Region’s services.	 Very Good A B C D F	The Capital Plan includes adequate reinvestments to sustain the assets and improve the current condition. On-going redevelopments across the Operation Yard’s portfolio are being completed to support Regional Program service delivery.
Heritage, Arts & Culture (\$33M) 	Four Heritage facilities are home to the Peel Art Gallery, Museum and Archives, supporting and sustaining the historical and cultural fabric of Peel.	 Good A B C D F	The Capital Plan includes adequate reinvestments to sustain the assets and improve the current condition. Assessments continue to address storage needs and environmental needs to ensure services, archives and collections are sustained.







Appendix I - Enterprise Asset Management Program Update

Service (Asset Value)	Infrastructure	Status	Outlook
<p>Waste (\$266M)</p> 	<p>Six community recycling centres, one composting and curing facilities, one material recycling facility, two transfer stations, ten closed landfill sites, 10,649 multi-residential carts and 984,653 curbside collection carts support the safe removal of solid waste from the community and advance the achievement of our waste diversion goals. Peel also manages leachate collection and landfill gas systems to minimize environmental and health impacts.</p>	<p> Very Good</p>  A B C D F	<p>The Capital Plan includes adequate reinvestments to address identified infrastructure needs.</p> <p>An Infrastructure Plan is currently being developed that will identify new infrastructure and modifications to existing infrastructure necessary to support the efficient and reliable operation of the Waste Management system. The analysis and outlook of the portfolio may change in the future once the Infrastructure Plan is completed.</p>
<p>Roads and Transportation (\$2,781M)</p> 	<p>1,637 km of Regional roads, 187 bridges and large culverts, 30,851 meters of noise walls, 157 retaining walls, two stormwater pumping stations, 336 kms of storm sewers, two storm ponds and 95 manufactured treatment devices support the movement of goods and people through an essential transportation hub for Ontario, and also manage the treatment and/or disposal of rainfall runoff.</p>	<p> Very Good</p>  A B C D F	<p>The Capital Plan includes adequate reinvestments to sustain the assets.</p> <p>Results from updated condition and inventory data for Bridges & Grade Separations, Major Culverts and Major Retaining Walls are being validated and will be included in future analysis and reporting.</p>
<p>TransHelp (\$7M)</p> 	<p>66 TransHelp vehicles support Peel residents in need travel within their community without barriers.</p>	<p> Very Good</p>  A B C D F	<p>The Capital Plan includes adequate reinvestments to sustain the assets.</p>

Appendix I - Enterprise Asset Management Program Update

Service (Asset Value)	Infrastructure	Status	Outlook
<p>Paramedics (\$148M)</p> 	<p>23 Regional paramedic stations, 183 paramedic vehicles and 777 pieces of paramedic equipment efficiently deploy emergency medical services from strategically located hubs throughout Peel.</p>	<p> Very Good</p>  <p>A B C D F</p>	<p>The Capital Plan includes adequate reinvestments to sustain the assets.</p> <p>Adaptation and improvement of emergency services will continue with the addition of new stations, fleet and equipment to meet the medical needs of a growing and aging community</p>
<p>Long Term Care and Adult Day (\$242M)</p> 	<p>Five long term care centres provide long term care services, adult day services, respite care and Meals on Wheels to seniors, promoting quality of life, dignity, independence and community connections.</p>	<p> Very Good</p>  <p>A B C D F</p>	<p>The Capital Plan includes adequate reinvestments to sustain the assets and improve the current condition.</p> <p>Council's approval on reconstruction of Peel Manor as part of the Long Term Care and Community Support Services Strategic Plan will provide complete senior care services and promote opportunities for seniors to experience greater independence and more community integration.</p>
<p>Housing Support^{1*} (\$338M)</p> 	<p>Eight affordable housing buildings provide safe, accessible accommodations geared to lower income families and individuals.</p>	<p> Very Good</p>  <p>A B C D F</p>	<p>The Capital Plan includes adequate reinvestments to sustain the assets.</p> <p>Reasonable and affordable rental fees ensure maintenance of the condition of housing stock over the life of the assets.</p>
<p>Peel Housing Corporation^{2*} (\$2,560M)</p> 	<p>88 affordable housing buildings provide safe, accessible accommodations geared to lower income families and individuals.</p>	<p> Very Good</p>  <p>A B C D F</p>	<p>The Capital Plan includes adequate reinvestments to sustain the assets and improve the current condition. The analysis is based on the most current available data.</p> <p>Reasonable and affordable rental fees ensure maintenance of the condition of housing stock over the life of the assets.</p>
<p>Homelessness Support (\$38M)</p> 	<p>Five homeless shelters provide 24-hour access to safe, secure, temporary living for families and individuals in distress.</p>	<p> Fair</p>  <p>A B C D F</p>	<p>The Capital Plan includes adequate reinvestments to sustain the assets and improve the current condition.</p> <p>Regular and proactive maintenance is required to maintain the facilities in good condition.</p>

Appendix I - Enterprise Asset Management Program Update

Service (Asset Value)	Infrastructure	Status	Outlook
<p>Child Care (\$10M)</p> 	<p>Three child care centres host private child care services for children between 18-months and five years of age and provide a range of family centred services.</p>	<p> Good</p>  <p>A B C D F</p>	<p>The Capital Plan includes adequate reinvestments to sustain the assets and to maintain the marketability of child care centres for private operators.</p>
<p>Regional Office Complexes (\$251M)</p> 	<p>Two Regional office complexes centralize many operations and services and provide public access to Regional services and Council.</p>	<p> Fair</p>  <p>A B C D F</p>	<p>The Capital Plan includes adequate reinvestments to sustain the assets and improve the current condition.</p> <p>Suite A of 10 Peel Centre Drive is 41 years old and requires extensive work to modernize and efficiently use space to remain viable to meet growing service needs.</p>

¹ Includes Region owned assets managed by either the Region or third party.

² Includes Peel Housing Corporation (PHC) assets managed by PHC, Region of Peel is the sole shareholder.

*Excludes other social housing providers.

**Appendix II
Enterprise Asset Management Program Update**

Service	Asset Class	Current Asset Level of Service (If applicable)	Proposed Change	Reason	New Asset Level of Service (if applicable)
Waste	Curbside Collection Carts	N/A	New ALOS	New Asset Class	Maintain Equipment at a Condition Rating = B (Good)
	Curbside Collection Carts	N/A	New ALOS	New Asset Class	Sufficient redundancy (spares) to meet demand
	Multi-Residential Collection Carts	N/A	New ALOS	New Asset Class	Maintain Equipment at a Condition Rating = B (Good)
	Multi-Residential Collection Carts	N/A	New ALOS	New Asset Class	Sufficient redundancy (spares) to meet demand
Roads and Transportation	Storm Ponds	N/A	New ALOS	New Asset Class	Maintain Equipment at a Condition Rating = B (Good)
	Manufactured Treatment Devices	N/A	New ALOS	New Asset Class	Maintain Equipment at a Condition Rating = B (Good)