Region of Peel
working with you

2022
Enterprise Asset Management Plan

Investments in Peel's Infrastructure

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Executive Summary

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 infrastructure is necessary to provide service levels that the public expects, achieve Term of Council Priorities, and realize the vision of the Region of Peel as a **Community for Life**.[1]

The Region's infrastructure has a replacement value of approximately **$34.3 Billion**. The Region is committed to being a strong steward of the public's infrastructure assets. These assets allow the Region to provide high quality and affordable municipal services to the Peel community.

The Region uses a risk-based approach to asset management. This approach is integrated with the Region's Strategic Plan and the Long Term Financial Planning Strategy and supports the desired service outcomes and the long term goal of a Community for Life.

Current State of the Infrastructure

The Region's goal is to achieve an overall infrastructure status of '**Good**'. The 2022 Rating is in line with this goal due to several factors:

- The Region's comprehensive asset management policy and strategy for 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 assets in a state of good repair without incurring long term debt

2022

Good[2]

This rating currently excludes Peel Regional Police

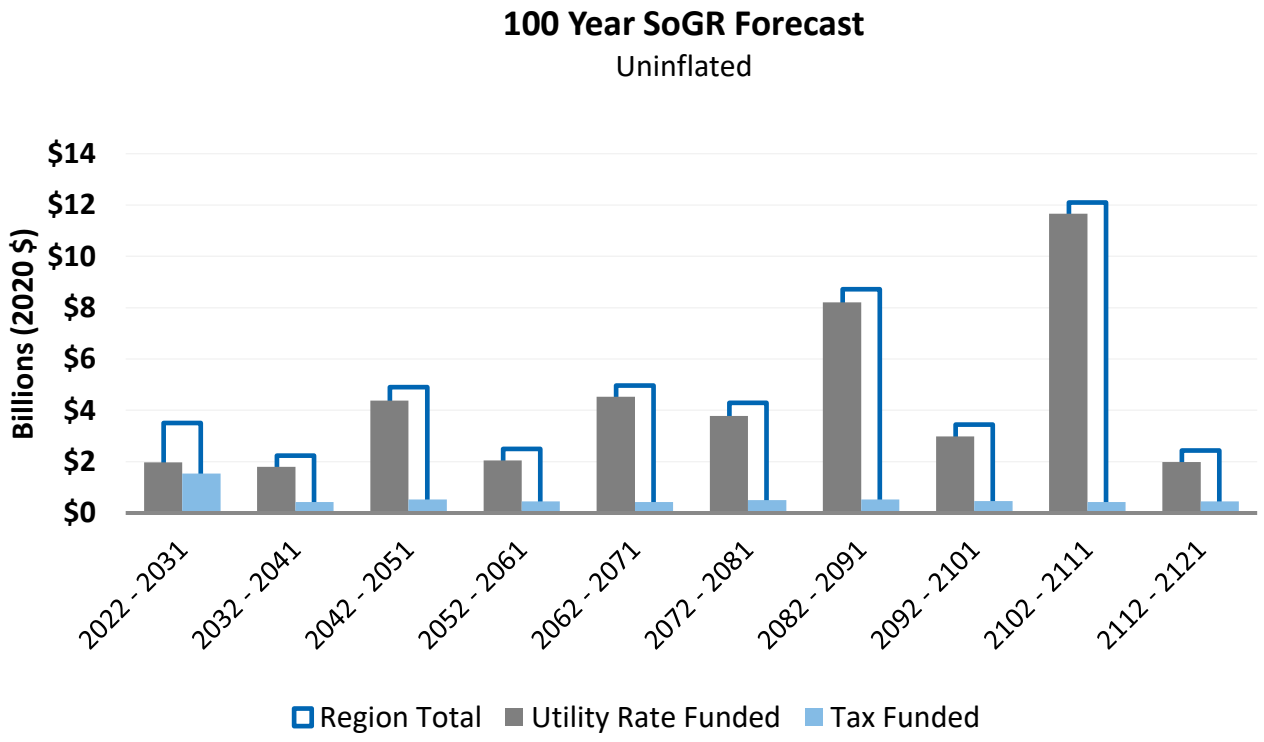
Reinvestment Plan

Reinvestments of **$3,318.5 Million** are included in the 10-year Capital Plan. **$2,020.4 Million** of this will be required to be funded through Utility Rates and **$1,298.1 Million** will be required to be funded through Property Taxes unless alternate funding sources are identified or confirmed and validated for on-going availability.

These planned reinvestments are in line with the forecasted infrastructure reinvestment needs.

[1] **Appendix I** *Line of Sight* shows the link between a single asset and the "**Community for Life**" vision of the Strategic Plan.
[2] Descriptions of the **Infrastructure Risk Management Scores** are included in **Appendix II** *Reading Guide*

Long Term Forecast

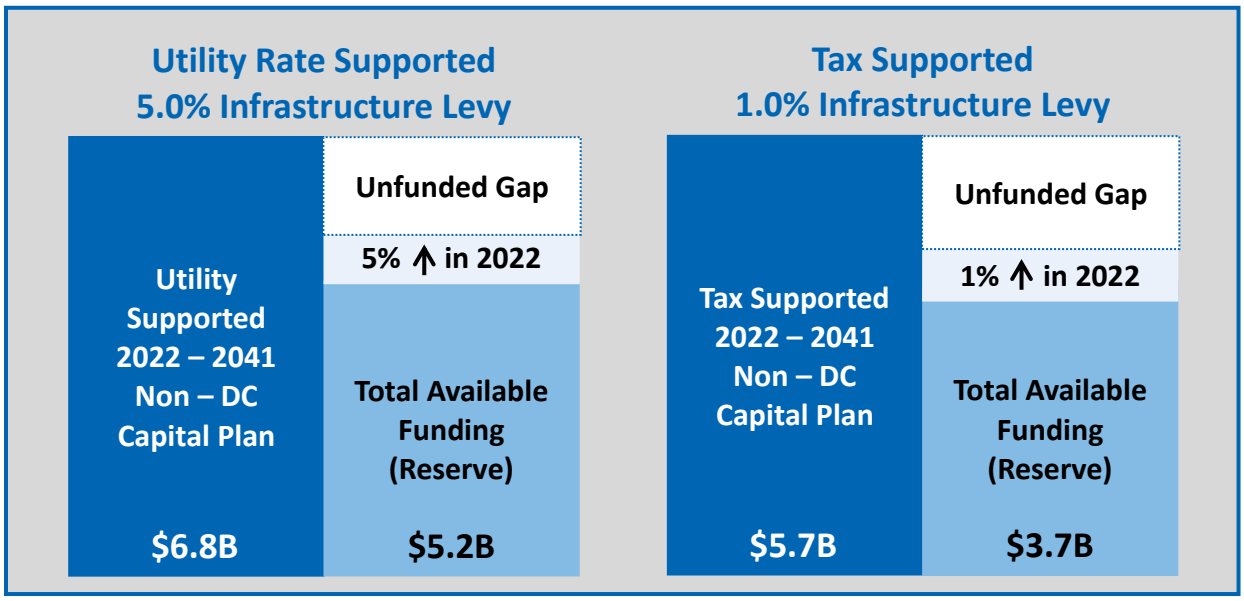


Infrastructure reinvestment needs at the Region of Peel are expected to increase steadily over the next 70 years. While the requirements for Tax funded infrastructure are expected to stabilize in 20 years, requirements for the Utility Rate funded infrastructure are expected to continue to grow. This is primarily because the bulk of the water and wastewater systems are relatively new and account for over 80% of the asset replacement values. As these systems age, they will require greater and more frequent reinvestments.

Financing Plan

The Region of Peel's Long Term Financial Planning Strategy promotes a "Pay as You Go" philosophy for state of good repair financing and discourages the use of debt to fund such work.

Council approved increases in the dedicated capital reserve contributions of 5.0% from the utility rates and 1.0% from the tax rate as part of the 2022 Budget.



Despite these increases in reserve contributions, infrastructure financing gaps remain. The unfunded gap (**$1.6 Billion**) for utility rate supported programs may be closed within the next three years with continued infrastructure levy increases. The unfunded gap (**$2.0 Billion**) for tax supported programs may be closed within the next eight years with continued infrastructure levy increases.

Although the unfunded gap may be closed in the short term the Long Term Forecast shows the infrastructure reinvestment needs at the Region of Peel are expected to increase steadily over the next 70 years.

Options and opportunities to further reduce the Region's unfunded infrastructure investment gap will be considered with Council and incorporated into future plans.

Emerging Risks and Challenges

The Region of Peel is a growing, thriving community and a major economic hub, that is facing a changing and dynamic environment especially as it enters the recovery stage of COVID-19.

Notwithstanding the infrastructure financing gap, and despite the '**Good**' rating of the Region's infrastructure, there are a number of challenges and unknown conditions underlying the Region's immense asset portfolio that result in increased service pressures and create infrastructure risks for which the organization must be prepared.

Major trends which are resulting in increased service pressures and more complex community issues are:

Growing and Rapidly Ageing Population

A rapidly growing and ageing population increases service demands and places stress on existing infrastructure, creating more demand for new infrastructure investment.

Ageing Infrastructure

Peel's infrastructure is ageing requiring increased levels of investment to keep them in a state of good repair.

Climate Change

Climate change leading to extreme weather events presents risks for effective and long-lasting infrastructure.

Changing Economy

Changes to economic conditions including inflation, energy costs, grants and subsidies may adversely affect the Financing Plan. Impacts of COVID-19 on the economy will have a long term effect on financial sustainability.

Rapidly Changing Technology

Rapidly changing technology in a changing and uncertain macro environment challenges how quickly we adapt in the way we connect with residents and deliver services.

Changing Legislative Environment

Constantly evolving legislation and regulations impact infrastructure decisions.

Continued COVID-19 Impact and Response

Continued COVID-19 response can have multi-year implications on how the Region operates and maintains assets. COVID-19 may also cause permanent impacts on asset design and delivery of capital programs.

Climate Change

A More Resilient Region is a more Resilient Community for Life

The Region of Peel is experiencing the impacts of climate change. Anticipated future impacts, including severe heat waves, threats to the water supply, extreme storms, and adverse health effects, could disrupt society and the economy. Integrating climate change into asset management means taking stock of the physical and financial impacts climate change will have on the condition, performance, and longevity of assets and service delivery, and using this information to identify and prioritize investment needs, both in the near and long-term.

Ontario Regulation 588/17: Asset Management Planning for Municipal Infrastructure, requires the Region to consider climate change in the development of its asset management policy and asset management plans, and will be supported by this approach.

The Region's Enterprise Asset Management Roadmap

The Region's Asset Management program is guided by industry best practices and regulatory requirements. As such, the program is continuously evolving to leverage opportunities and address challenges.

Anticipated improvements include:

- Staff are undertaking many **technical studies** and **condition assessments** to improve knowledge of the Region's infrastructure conditions.
- **Asset Management planning process improvements** are being undertaken across all services to improve investment forecasting and to manage risks to Regional services.
- **Operations and maintenance costs** have been added to services to provide a full lifecycle perspective on asset ownership. The data and modelling of operations and maintenance is a priority for improvement.
- An **Enterprise Asset Management system** will be introduced to support asset management functions across the organization.
- The assets supporting **Peel Regional Police** will be added to Enterprise Asset Management reporting in the 2023 reporting cycle.
- Engaging in the **continuous improvement** of asset management practices and strategies that can significantly impact asset lifecycle costs, management of risk, and service delivery performance. Continuous Improvement is also an industry best practice and a requirement of Ontario Regulation 588/17: Asset Management Planning for Municipal Infrastructure.

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Introduction

Building new infrastructure and maintaining existing assets in a state of good repair is critical to the success of the Region of Peel. Good infrastructure enhances the Region's ability to provide high quality and affordable municipal services to Peel's residents and businesses.

The Enterprise Asset Management Plan outlines the Region's corporate strategy and plan to achieve the Region's long-term infrastructure risk management goal of finding the balance between providing reliable, efficient services, and doing it at the lowest reasonable cost. [1]

Overview of the Region's Approach

The Region uses a risk-based approach to asset management. Council has approved Asset Level of Service (ALOS) targets to manage the risks that may affect the Region's services. ALOS targets are specific to each type of asset and where and how it is being used. While some assets need to be kept in top shape to ensure residents of Peel receive critical services, others can be allowed to degrade without a significant decrease in the services delivered. [2]

The closer the assets are to meeting the ALOS targets, the less risk there is of not delivering the desired service outcomes. The Region measures its progress in managing the infrastructure to the ALOS targets using **Infrastructure Risk Management Ratings**. [3]

The Region's long-term goal is to maintain Peel's infrastructure portfolios at a minimum overall rating of '**Good**'. A rating of '**Good**' maintains the balance between having assets in an adequate state to support the Region's desired service outcomes and investing in infrastructure at rates that are reasonable and affordable to the public.

The Enterprise Asset Management Plan uses lifecycle models to forecast infrastructure condition, reinvestment needs, and asset related risks to service. The models are specific to the Region's assets and use the most recently available asset information. [1]

- The Enterprise Asset Management Plan uses a **10-year** forecast to align with the Capital Plan and Budget.
- The Plan also uses a **20-year** forecast to coordinate with Master Plans, Development Charges horizons, and inform reserve contributions.
- A full **100-year** forecast is used to inform strategic decision making and ensure sustainability in the longer term, in line with the full lifecycles of the longest-lived infrastructure.

[1] **Appendix III** provides detail of the Region's **Enterprise Asset Management Strategy**
[2] All current Council approved **Asset Level of Service** targets are included as **Appendix IV**
[3] Descriptions of the **Infrastructure Risk Management Ratings** are included in **Appendix II**

Strategic Connections to Asset Management

Enterprise Asset Management is an integrated part of the Region of Peel's annual, strategic, and long-term planning practices. Asset Management supports the strategic objectives of Regional Council, the delivery of services to the public, and the sustainability of the Region of Peel.

Alignment with The Strategic Plan

Enterprise Asset Management is central to sustainable service delivery and as such, is key to the achievement of the Region's 2015-2035 Strategic Plan and the 2018-2022 Term of Council Priorities.

- The **Vision** describes what we are working towards over the long-term.
- The **Mission** describes how we will deliver on our vision and the difference we want to make.
- **Living**, **Thriving** and **Leading** are the areas of focus we will improve through this plan.

The Region's ***Strategic Plan*** is available on the Region of Peel website under Strategic Plan. [1]

Enterprise Asset Management processes have a direct link to the Strategic Plan's long-term outcome of being a government in which the community can trust that **"sustainability and long-term benefits to future generations are considered"**.

Status of Regional Infrastructure Assets

Ongoing Asset Management Services at the Region of Peel fall under the **Leading** Area of Focus. Progress towards the 20-Year **Leading** outcomes is measured by tracking key indicators which include the **Status of Regional Infrastructure Assets.**

The **Status of Regional Infrastructure Assets** indicator is measured using the same Enterprise Asset Management processes described in this report.

The Region's progress across all key indicators can be found in the ***Community for Life Dashboard*** [2] on the Region of Peel website.

[1] 2015 - 2035 Strategic Plan
[2] Community for Life Dashboard

Contribution to Service Outcomes

The Region has a large portfolio of diverse services ranging from Water Supply to Income Support. Each service has a desired **Service Outcome** and is aligned with one of the three Areas of Focus: **Living**, **Thriving**, or **Leading**. Those services and Service Outcomes which are directly supported by infrastructure are included in this Enterprise Asset Management Plan. Enterprise Asset Management allows the Region to manage the asset related risk to meeting the desired Service Outcomes.

Asset Management Line of Sight

An important asset management principle is **Line of Sight**. Line of sight in asset management, achieves two important things:

1. People doing the physical work on the infrastructure can see how the work they do supports the strategic goals of the Region.
2. People setting the strategic goals of the Region can see how their decisions influence how we manage our infrastructure.

Enterprise Asset Management at the Region enables this line of sight, connecting the Service Outcomes down to the assets that support them. [1]

Asset Management as a Service

On top of enabling the line of sight for other services, Asset Management is a service itself. The Region tracks the progress towards the outcomes for each service using different metrics. These are publicly available on the Regional Service Dashboard on the Region of Peel website under Strategic Plan. [2]

Asset Management

The Region of Peel builds, maintains, and monitors infrastructure

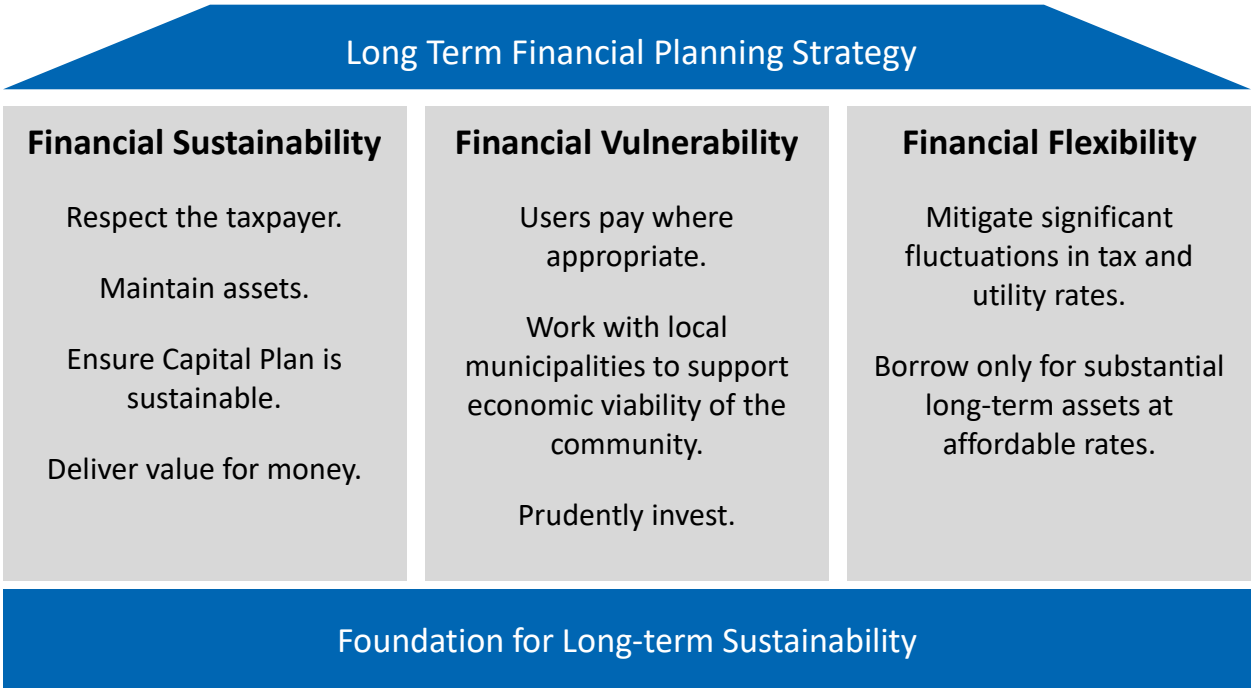
Target: **Good**; most assets in the portfolio are achieving the desired targets. [3]

[1] **Appendix I** provides an example of the **Line of Sight** between a single asset and the Strategic Plan

[2] 20-Year Outcomes Progress Dashboard

[3] Descriptions of the Infrastructure **Risk Management Ratings** which are used as the metric towards tracking the service outcome of Asset Management are included in **Appendix II**

The Long Term Financial Planning Strategy



The Long Term Financial Planning Strategy (LTFPS) provides a framework through which the Region endeavors to achieve the long-term financial sustainability of Regional services and is available on the Region's website.[1] The LTFPS strives to maintain a balance between three pillars: Financial Sustainability, Financial Vulnerability, and Financial Flexibility.

Asset Management supports all three pillars of the Strategy:

1. Financial Sustainability

The Region's ability to provide and maintain planned service levels and infrastructure assets without unplanned increases in rates or disruptive cuts to services.

2. Financial Vulnerability

The degree to which the Region is dependent on external funding sources that it cannot control; it is the level of risk that could impact the ability to meet existing financial obligations and commitments, including the delivery of Regional services.

3. Financial Flexibility

The Region's ability to change either debt levels or taxes and utility rates to meet financial obligations and ensure intergenerational equity.

[1] Long Term Financial Planning Strategy

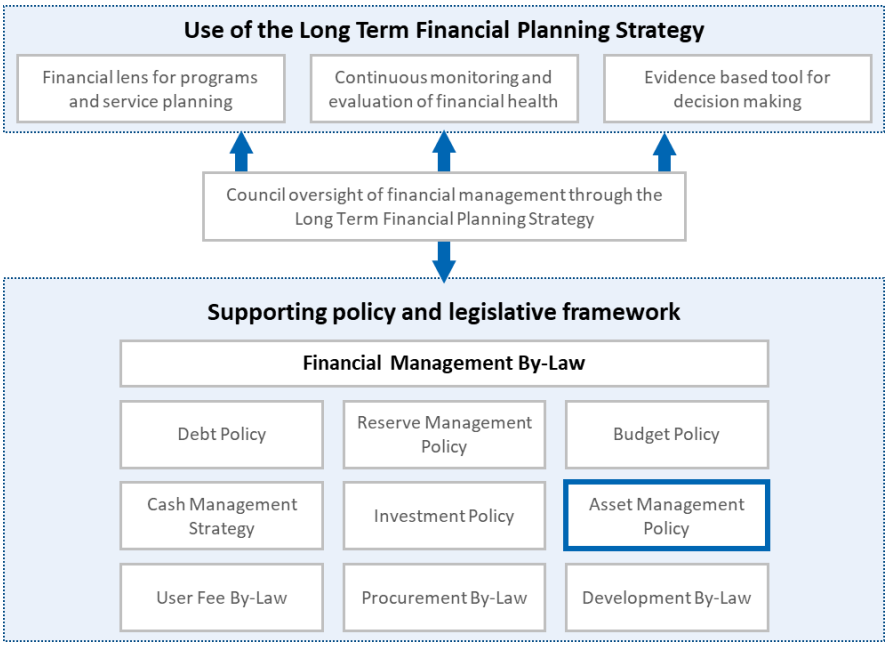
The **Financial Scorecard** provides indicators of the strength of the three financial pillars.[1]

Financial Pillar	Indicator
Financial Sustainability	**Asset Health Score** **Target: Good**

*The **Asset Health Score** used as an indicator for **Financial Sustainability** is the same **Risk Management Rating** provided in this report.*[2]

To realize the objectives of the LTFPS, the Region of Peel takes an integrated financial management approach which combines the long-term financial planning and sustainability policies under the Financial Management By-Law. This ensures that asset management needs are not looked at in isolation, but rather planned and balanced with other financial management activities as can been seen in the graphic below.

The Asset Management Policy specifically supports the objectives of the Long Term Financial Planning Strategy[3]. This integrated approach ensures long-term capital projections which result from Enterprise Asset Management are directly input into other financial tools such as reserve management.



[1] Financial Scorecard
[2] Descriptions of the Infrastructure **Risk Management Ratings** which are used as the metric towards tracking the service outcome of Asset Management are included in **Appendix II**
[3] Long Term Financial Planning Strategy

Climate Change Master Plan

In 2019 Region of Peel Council approved its first 2020 – 2030 Climate Change Master Plan[1]. The Region will lead by example, influence best practices, and transform to a climate resilient future.

The actions in the plan will reduce the Region's corporate greenhouse gas (GHG) emissions and ensure its services, operations, and infrastructure can adapt to the changing climate. In doing so, the Region will be resilient in the face of climate change.

The Region will apply an integrated and systematic approach to combat the impacts of climate change by:

- Increasing readiness to respond to extreme events
- Proactively protecting the Regions existing infrastructure assets to maintain service delivery
- Reducing the impacts of heat and flooding through green infrastructure
- Planning and building assets and service delivery taking future climate projections into consideration
- Integrating climate change into the asset management planning process, by applying climate design and performance criteria to new and state of good repair infrastructure work
- Investing in innovative and sustainable approaches to finance action on climate change
- Monitoring, reporting, and understanding the progress of addressing Regionally-funded climate change work

[1] Climate Change Master Plan

The Asset Management Policy

Region of Peel Council has approved an Asset Management Policy. The Policy establishes formal management controls for the responsible stewardship of capital infrastructure.

The Asset Management Policy is implemented through the Enterprise Asset Management Strategy [1].

The policy framework is divided into four key areas:

1. **Levels of Service** – Measures of quality or quantity of service which serves as a desired target for a particular activity, asset or service area as determined by Council;
2. **Risk Management** – Measures risks to assets and by extension to the services the assets provide is fundamental to the Enterprise Asset Management Strategy;
3. **Life Cycle Management** – Defines how assets are managed throughout the asset life cycle to maximize the assets' value to the organization and the service to clients; and
4. **Corporate Reporting on Asset Management** – Defines the requirements of corporate level reporting which is undertaken annually to give an organization-wide perspective on the Region of Peel's infrastructure needs and priorities to enable better, more informed strategic planning and decision making.

The Enterprise Asset Management Plan and the Infrastructure Status and Outlook Report are updated annually for Council approval and are published on the Region's website [2].

[1] **Appendix III** provides detail of the Region's **Enterprise Asset Management Strategy**

[2] Corporate Reporting on Asset Management

Non-Infrastructure Solutions

The Region ensures that growth is coordinated with existing infrastructure when additional service capacity is needed.

1. Infrastructure investment is aligned with growth projections in the Official Plan. The Region is forecasted to grow to 2.3 million people and 1,070,000 jobs by 2051. Regional Council passed By-law 20-2022 to adopt a new Region of Peel Official Plan (Peel 2051), which is currently awaiting Provincial approval. Peel 2051 is developed to ensure a continued vision for growth.
2. Master Plans and Service Strategies look at growth needs and integrate new assets within existing infrastructure with the least economic and environmental impact.

The Region also coordinates with other levels of Government and agencies to deliver capital projects efficiently and effectively, including:

- Working with the Cities of Mississauga and Brampton and the Town of Caledon to minimize impact on residents during construction and optimize joint and overlapping infrastructure life
- Supporting delivery of large transit projects by coordinating infrastructure works with transit agencies
- Partnering with the Federal and Provincial Governments for funding and delivering supportive housing projects

Activities such as waste reduction and diversion initiatives, encouraging the use of transit supportive modes of transportation (e.g., walking, biking), and energy conservation practices also defer the need for capital reinvestment, while maintaining or improving services.

Operations and Maintenance Activities

Most of the value an asset provides to services happens during its operation throughout its life. Standard Operating Procedures are in place to extend the life of the assets, by ensuring that they are meeting legislative requirements, and that they are operating safely and with the least amount of wear-and-tear.

Maintenance is routinely performed, to ensure assets meet their intended life, as well as monitoring the condition and performance compared to standards.

Planned restorative maintenance activities extend the service life of the assets. Minor repairs such as replacement of parts and patching minor defects save capital expenditures by preventing more serious damage to assets.

Ongoing Operations and Maintenance activities are considered in Lifecycle Strategies, as they are essential to ensuring that assets are owned at the lowest cost. Opportunities to better operate and maintain assets are explored through continuous improvement processes.

Operations and Maintenance costs will be captured within Service Plans and will continue to be analyzed and optimized as business processes are improved and new tools, such as the Enterprise Asset Management System, are implemented.

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Asset Management Reinvestment Plan
The Region of Peel

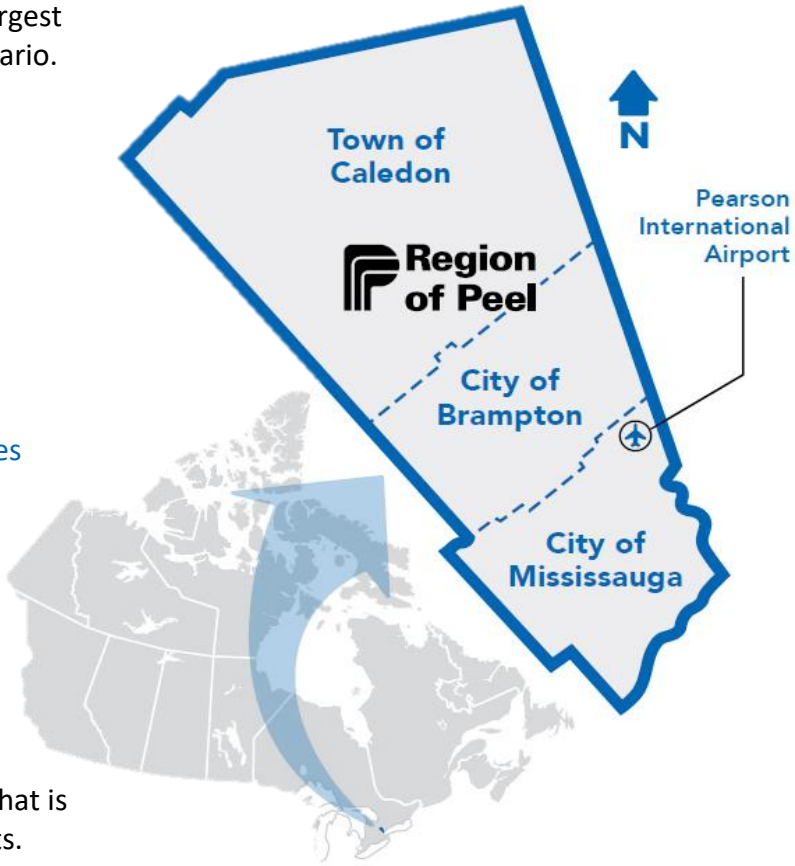
Peel's Infrastructure

What Infrastructure Does the Region Own?

The Region of Peel is the second largest municipality in the Province of Ontario.

The Region owns and operates infrastructure assets including:

- Roads
- Bridges
- Pipes
- Pumping stations
- Reservoirs
- Treatment plants
- Waste management facilities
- Buildings
- Fleet
- Equipment



These assets support the Region in providing a variety of services to the community.

This plan breaks down the asset portfolio according to the service that is responsible for managing the assets.

The replacement, rehabilitation, and enhancement of assets is primarily funded through either property taxes or the utility rate.

The asset managing services supported by the **Utility Rate** are:

Wastewater **Water Supply**

The asset managing services supported by the **Property Taxes** are:

Waste **Roads and Transportation (includes Stormwater)**

TransHelp **Paramedics**

Long Term Care **Housing Support**

Homelessness Support **Early Years and Child Care**

Heritage, Arts and Culture

In addition to these services, this plan also includes two internal service providers that manage assets on behalf of many other services. They are:

Operations Yards, Fleet and Equipment **Regional Office Complexes**

Value of the Infrastructure

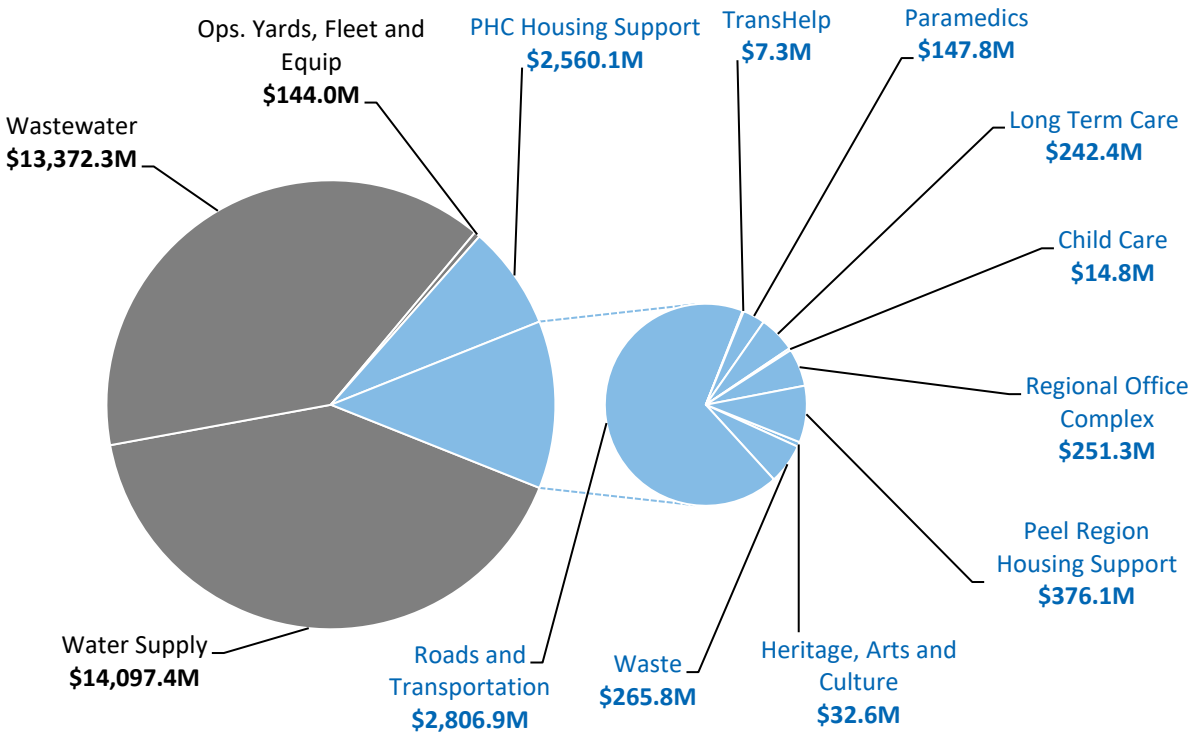
What Would the Infrastructure Cost to Replace?

The Region's portfolio of directly owned infrastructure has an estimated replacement value of **$34.3 Billion** (2020 values excluding land).

Total Asset Repalcement Value

$34.3 Billion

2020 Dollars



Utility Rate Funded Asset Replacement Value

$27.6 Billion

2020 Dollars

Tax Funded Asset Replacement Value

$6.7 Billion

2020 Dollars

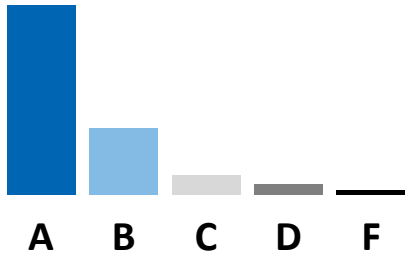
The Region owned assets **covered under the Enterprise Asset Management Strategy** have an estimated replacement value of **$34.3 Billion** (2020 values excluding land).

Currently, the Enterprise Asset Management Strategy covers the majority of Peel's Infrastructure under the services mentioned above. As part of the ongoing continuous improvement of asset management and as more asset information becomes available, the Strategy will be expanded to cover more infrastructure. The Strategy currently excludes Peel Regional Police assets but will be added in the 2023 reporting.

State of the Infrastructure

What is the Condition of the Infrastructure?

Generally, the Region tries to maintain its infrastructure in a State of Good Repair (B) or better. As infrastructure ages, its condition grade will decrease. Reinvestments in the assets will improve the grade. There are cases where the condition for specific types of assets can degrade further because the risk to services does not increase significantly and the Region can realize cost savings for the taxpayer.



How is the Condition Graded?

When the condition of individual assets is assessed, a wide range of techniques are used as appropriate to the infrastructure. Peel's State of Good Repair (SoGR) Condition Grades provide a common way to look at the condition of all the diverse infrastructure that the Region owns.

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 repair or replacement required

How well is the Infrastructure being Managed?

The goal for the Region of Peel is to have most of the assets financed to achieve their condition and performance targets in order to provide efficient and reliable services at rates affordable to the taxpayer. This will achieve a Risk Management Rating of **Good**.

The Region of Peel is currently achieving a rating of: **Good**

Asset Management Service Target[1]

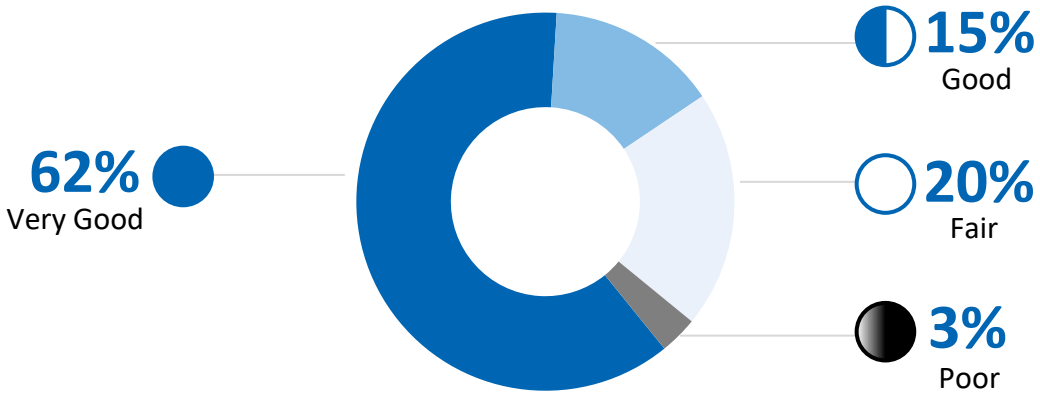
Status of Regional Infrastructure Assets[2]

Asset Health Score[3]

Target: Good

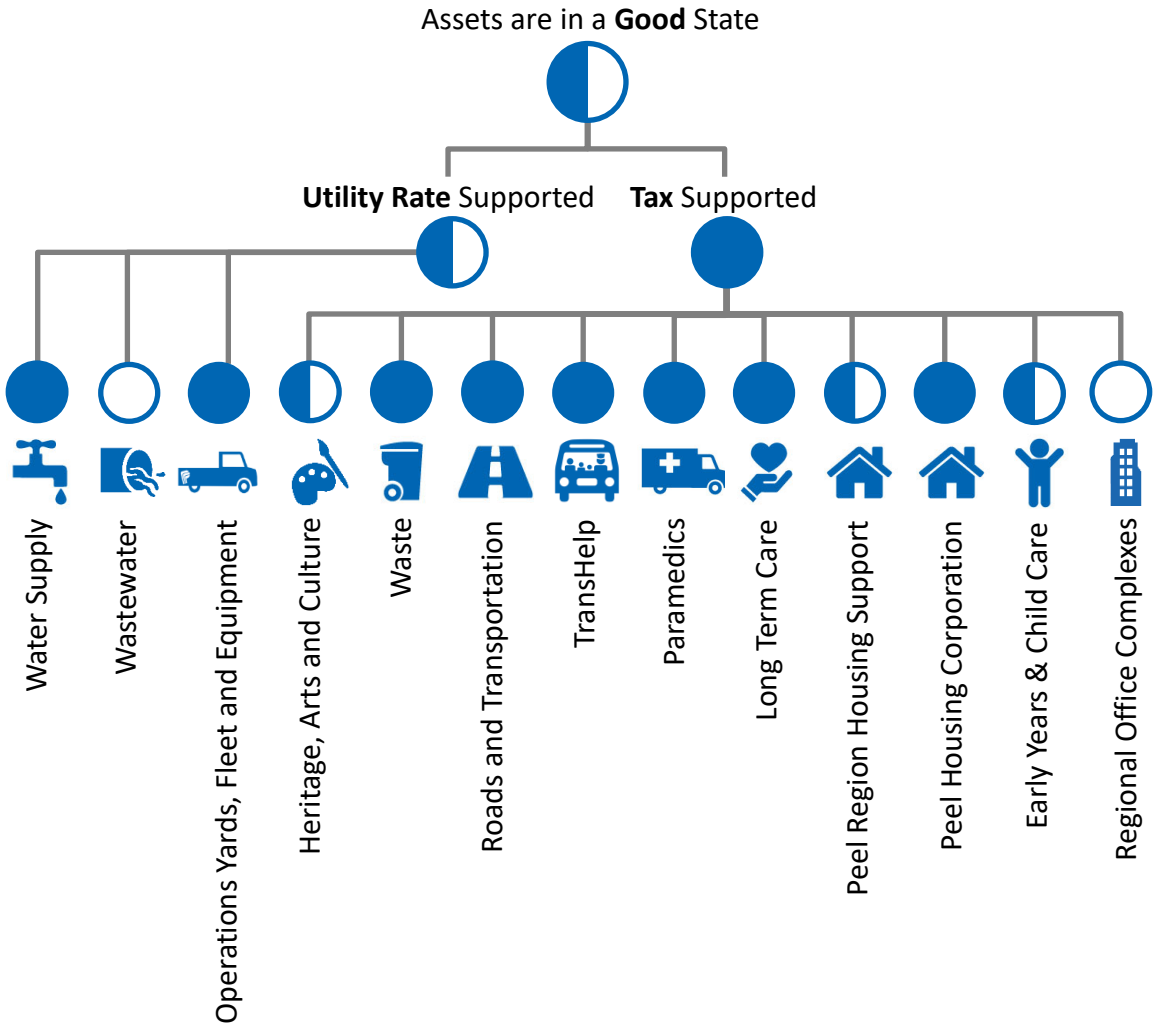
*This indicator is used to measure and report the progress towards the **Asset Management Service** outcomes, the **Leading** outcomes in **the Strategic Plan**, the **Financial Sustainability** pillar of the **Long Term Financial Planning Strategy** and as the primary measure in the **Infrastructure Status and Outlook Report**.*[4]

What is the Breakdown of Ratings?



1 Community for Life Dashboard
2 Community for Life Dashboard (Status of Regional Infrastructure Assets)
3 Financial Scorecard
4 Infrastructure Status and Outlook Report

How Do the Services Contribute to the Overall Rating?



What do the Risk Management Ratings mean?

Asset Management is about more than making sure the infrastructure is in good condition. The Region also needs to consider whether the right assets are in the right place to support the desired service outcomes. Do the assets provide enough capacity? Are there spares and backups? Are they meeting all required codes and regulations? Does the community want the infrastructure to look nice? The Region calls these types of requirements Performance Levels of Service. The Risk Management Rating considers the State of Good Repair (SoGR) Levels of Service, the Performance Levels of Service and funding that is dedicated or planned for the infrastructure.

●	**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

10-Year Infrastructure Reinvestment Plan

What is the Plan?

	Total (SoGR)
Forecasted 10-Year Reinvestment Needs	**$3,288.1M**
Reinvestments in the 10-Year Capital Plan	**$3,318.5M**

Values are in 2022 dollars

Reinvestment requirements of **$3,288.1 Million** are forecasted for the next 10 years to maintain the infrastructure in a state of good repair. **$2,002.1 Million** of this will be required to be funded through Utility Rates and **$1,286.0 Million** will be required to be funded through Property Taxes unless alternate funding sources are identified or confirmed and validated for on-going availability.

The Region's 10-Year Capital Plan includes **$3,318.5 Million** in asset reinvestments. The difference between the Forecasted Needs and the Capital Plan is within the Region's accepted tolerances and meets the needs to support service delivery.

Why is there a difference between the forecasted needs and the plan?

There are many reasons why the 10-year plan does not match exactly with the 10-year reinvestment needs forecast. The reasons can be broken into three broad categories:

Strategic Planning
The Region is always trying to find efficiencies and make the best long-term decisions. Infrastructure reinvestments may need to be delayed or advanced to align the timing of projects, complete studies or be eligible for provincial or federal funding opportunities.

External Pressures
The Region strives to align infrastructure replacement projects with those of local municipalities and other agencies, to achieve efficiencies and minimize the impact to the public during construction. Other factors such as economic conditions and the need to meet regulatory requirements may also impact which projects are included within the Capital Plan.

Updated Information
The Region is continually trying to improve the accuracy of the asset information. There can be significant updates and changes in the time between when the infrastructure needs forecasts are prepared and when the Capital Plan is developed. These changes can be due to updated condition assessments, asset replacement values and lifecycle strategies.

What is the Plan for Utility Rate Supported Infrastructure?

	Total (SoGR)
Forecasted 10-Year Reinvestment Needs	**$2,002.1M**
Reinvestments in the 10-Year Capital Plan	**$2,020.4M**

Values are in 2022 dollars

What is the Plan for Tax Supported Infrastructure?

	Total (SoGR)
Forecasted 10-Year Reinvestment Needs	**$1,286.0M**
Reinvestments in the 10-Year Capital Plan	**$1,298.1M**

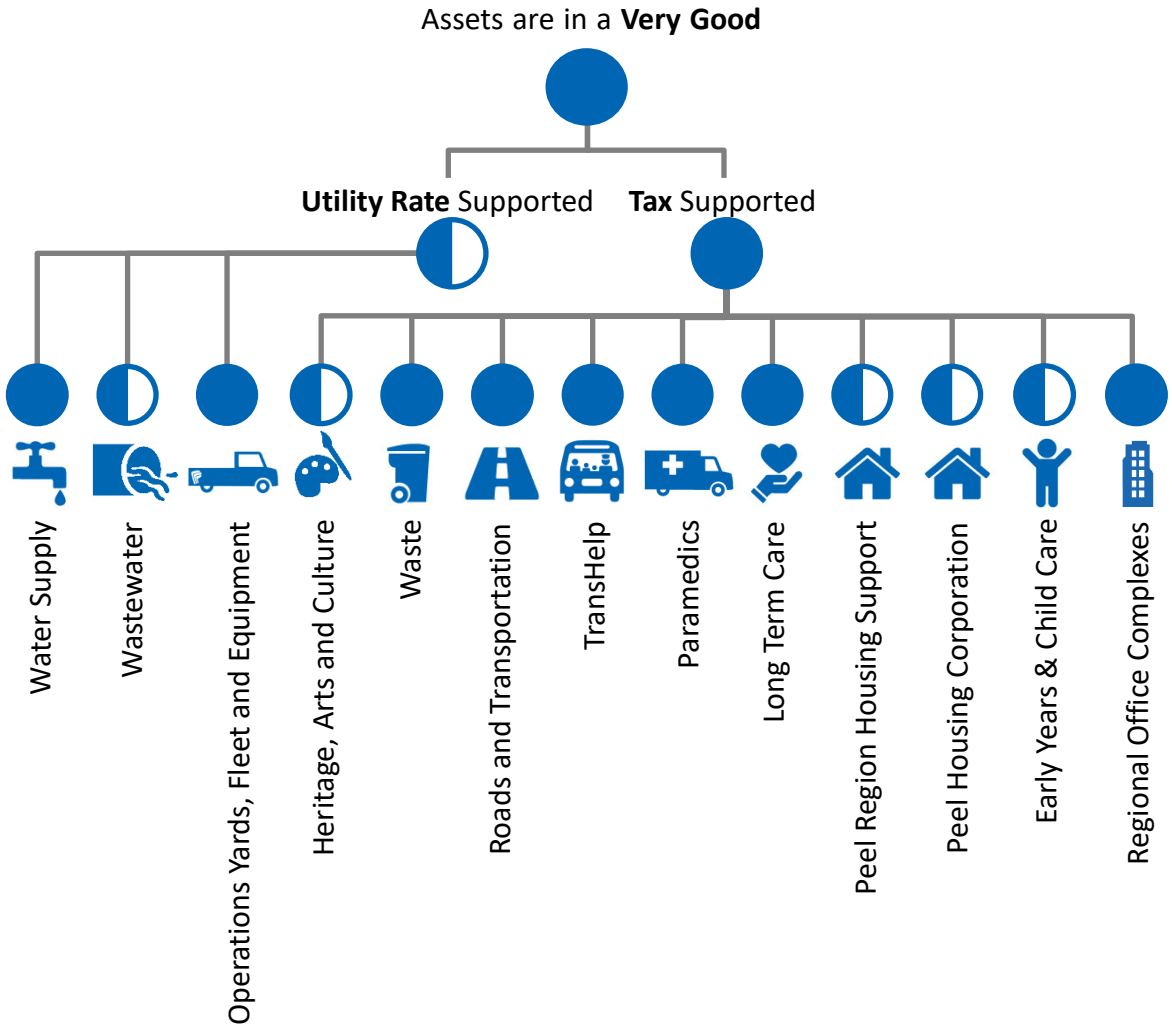
Values are in 2022 dollars

Forecasted State of the Infrastructure in 2031

With the Reinvestments in the 10-year Capital Plan…

The Region of Peel will achieve an overall rating of: **Very Good**

How will the Services Contribute to the Overall Rating?



What do the Risk Management Ratings mean?		
●	**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

Summary of the 10-Year Plan

Service	Current State		10 Year Reinvestment Plan		
	Current Rating (2022)	Replacement Value (2020 $ Millions)	Forecasted Reinvestment Needs (2022 $ Millions)	Reinvestments in the 10-Year Capital Plan (2022 $ Millions)	Forecasted Rating (2031)
Water Supply	●	14,078.4	766.4	776.0	●
Wastewater	○	13,166.5	1,171.4	1,180.0	◐
Ops. Yards, Fleet & Equipment	●	130.3	64.3	64.4	●
Utility Rate Supported Services - Total	◐	**27,375.2**	**2,002.1**	**2,020.4**	◐
Heritage, Arts and Culture	◐	32.6	8.5	9.4	◐
Waste	●	265.8	138.2	141.2	●
Roads and Transportation	●	2,781.4	399.3	381.6	●
TransHelp	●	7.3	11.3	11.5	●
Paramedics	●	147.8	62.5	62.9	●
Long Term Care	●	242.2	50.2	52.3	●
Peel Region Housing Support	◐	376.1	13.8	15	◐
Peel Housing Corporation	●	2,560.1	560.2	579.6	◐
Early Years and Child Care	◐	9.6	6.2	6.3	◐
Regional Office Complexes	○	251.3	35.8	38.2	●
Tax Supported Services - Total	●	**6,672.3**	**1,286.0**	**1,298.1**	●
Region of Peel - Total	◐	**34,049.5**	**3,288.1**	**3,318.5**	◐

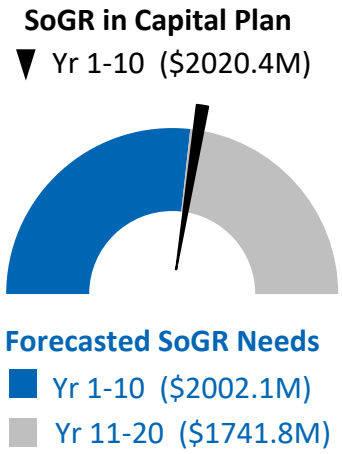
What do the Risk Management Ratings mean?

●	**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

20-Year State of Good Repair (SoGR) Forecast

The 20-year State of Good Repair forecast allows decision makers to take a wider view of the upcoming asset reinvestment needs. Many of the assets that the Region relies on to provide service have very long lifecycles. There will be times when many expensive assets need replacement within a short time span. It is important to see increases and decreases in needs coming, so that plans can be made, and sudden large changes in Tax and Utility rates can be avoided.

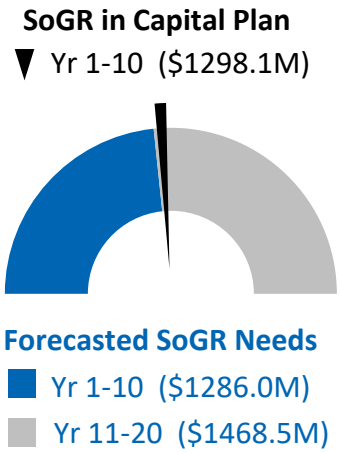
Utility Rate Supported Infrastructure 20-Year SoGR Forecast



Uninflated SoGR reinvestment needs for the utility rate supported infrastructure portfolio are forecasted to remain comparable in the next 20 years.

The 10-year Capital Plan is in line with the forecasted 10-year State of Good Repair reinvestment needs.

Tax Supported Infrastructure 20-Year SoGR Forecast

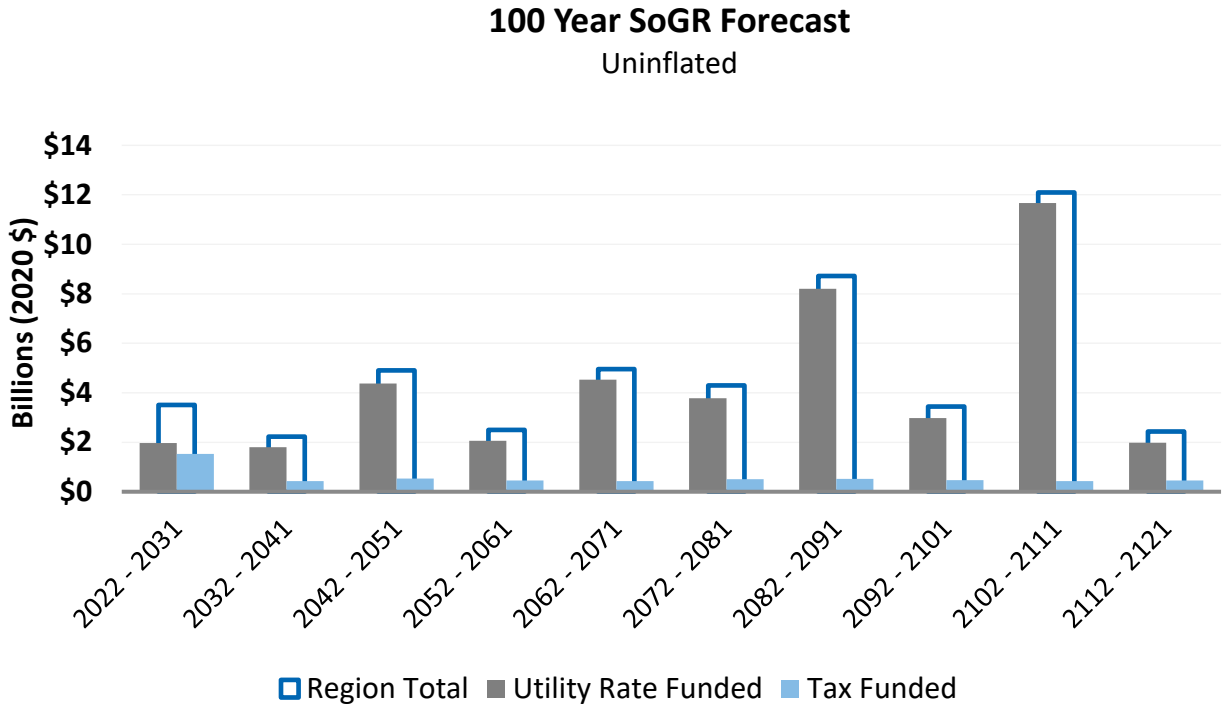


Uninflated SoGR reinvestment needs for the tax levy supported infrastructure portfolio are forecasted to remain comparable in the next 20 years.

The 10-year Capital Plan is slightly higher than the forecasted 10-year SoGR reinvestment needs. Since the SoGR needs are forecasted to increase over the next 20 years, future Capital Plans will need to increase beyond the rate of inflation in order to ensure that the infrastructure is in an adequate state to support the delivery of services.

100-Year State of Good Repair Forecast

Long-term infrastructure investment forecasts allow decision makers to anticipate major trends in the Region's infrastructure needs and make proactive financing and asset management decisions. Long-term SoGR projections include the estimated rehabilitation and replacement costs of existing assets as well as the estimated rehabilitation and replacement cost of planned asset growth.



The Region of Peel's Capital SoGR needs are expected to increase steadily over a 70-year timeframe even before factoring in inflation. Increasing capital reserve contributions at the rate of inflation will not be enough to meet forecasted needs.

The first 20 years primarily see increased needs in the tax funded portfolio with a small decrease in the needs of the utility funded portfolio. After the first 20 years, the tax funded infrastructure needs are forecasted to stabilize while the utility rate funded infrastructure needs are expected to continue to grow. This is primarily due to the fact that the bulk of the water and wastewater systems are relatively new and account for over 80% of the infrastructure value. As these systems age, they will require greater and more frequent reinvestments.

Because the 100-Year forecast is shown without forecasted inflation; the dollars can be roughly translated into the volume of work required.

Financing Plan

Infrastructure Reinvestment Financing Strategy

State of Good Repair capital works are financed through the **Tax-supported Capital Reserve** and **Utility Rate-supported Capital Reserve**. The Enterprise Asset Management Plan proposes and prioritizes the Region's infrastructure investment requirements according to their respective reserve financing sources.

The Region of Peel's Debt Management Policy promotes a "**Pay as You Go**" philosophy to state of good repair financing and generally discourages the use of debt to fund state of good repair work.

Regional Council has been supportive of this approach and has approved modest annual increases to the Capital Reserve levies since 2009 to reduce the unfunded infrastructure gap.

The infrastructure reinvestment strategy supports the three objectives of Peel's Long Term Financial Planning Strategy:

1. **Ensure financial sustainability**
2. **Minimize financial vulnerability**
3. **Manage financial flexibility**

> *"**Borrow when appropriate for capital infrastructure** – Maintain an affordable level of debt required to achieve desired service levels while minimizing the impact of borrowing to the taxpayer and ensuring intergenerational equity"*
>
> ***– 2019 Long Term Financial Planning Strategy***

Financial Modeling

The Region's Financing Strategy utilizes financial modelling to determine revenue requirements to finance the Region's annual budget and forecast. The inputs for the Financial Model include, but are not limited to:

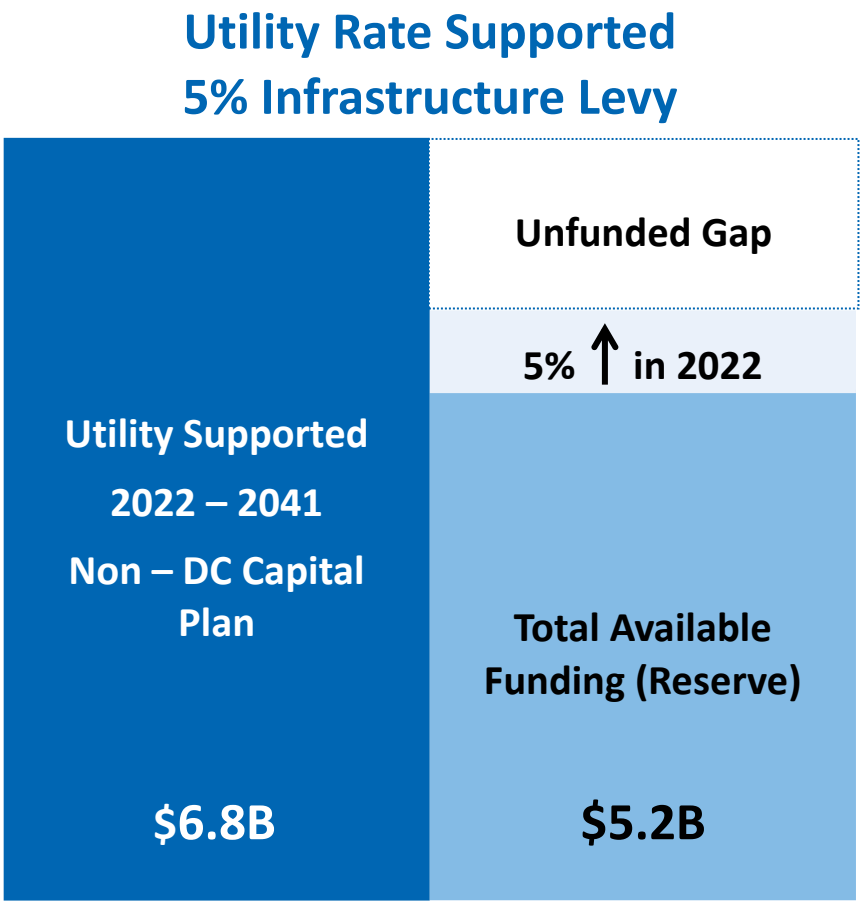
- Tax and Utility Rates
- Forecasted growth
- Employment and demographics
- Capital plans
- Operational plans and projections, and
- 20-year Enterprise Asset Management reinvestment forecasts

The Model is updated on an annual basis to reflect changes in policy and strategy and informs the capital planning process. The Financial Model is used in part to determine the adequacy of the tax and utility rate supported reserves and to calculate an appropriate adjustment in rates if required.

Utility Rate Supported Infrastructure Financing Plan

The utility rate infrastructure financing plan uses a 20-year horizon to determine the adequacy of infrastructure reserves. There is expected to be a **$1.6 Billion gap** by the end of 2041 at current reserve funding rates.

A **5%** increase in utility rates dedicated to funding the capital reserve is included in the 2022 Capital Plan to partially close the gap. A long-term financial planning exercise is ongoing. Options and opportunities to further reduce the Region's unfunded infrastructure investment gap will be considered with Council and incorporated into future plans.



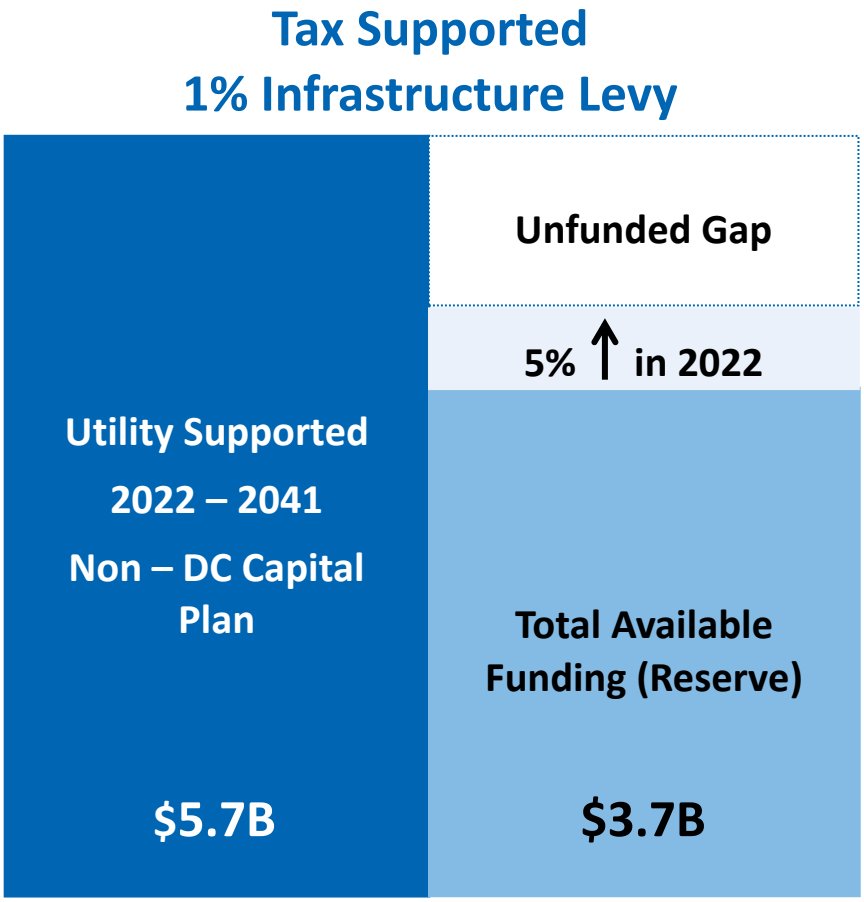
The Utility Rate Capital Reserve gap can be mitigated within the next three years with continued, dedicated, capital reserve contribution increases.

Although the unfunded gap may be closed in the short term the Long Term Forecast shows the infrastructure reinvestment needs at the Region of Peel are expected to increase steadily over the next 70 years.

Tax Rate Supported Infrastructure Financing Plan

The tax rate supported infrastructure financing uses a 20-year horizon to determine the adequacy of infrastructure reserves. There is expected to be a **$2.0 Billion gap** by the end of 2041 at current reserve funding rates.

A **1.0%** increase in property tax rates dedicated to funding the capital reserve is included in the 2022 Capital Plan to partially close the gap. A further five years of 1% infrastructure levy increases are required to close the infrastructure gap.



The gap can be mitigated in eight years with continued infrastructure levy increases. Options and opportunities to further reduce the Region's unfunded infrastructure investment gap will be considered with Council and incorporated into future plans.

Although the unfunded gap may be closed in the short term the Long Term Forecast shows the infrastructure reinvestment needs at the Region of Peel are expected to increase steadily over the next 70 years.

Risks to the Financing Plan

Servicing Peel's Population Growth

Intensification of populated areas – In order to promote better use of land and services, preserve green space and satisfy the Province's "*Places to Grow*" requirements, there is greater emphasis on intensifying the use of populated lands. Although this is a prudent method to better utilize lands and services, the construction of infrastructure to accommodate growth in such areas can lead to higher initial capital costs and the need to prematurely replace infrastructure which may not have reached its full life span.

Expanding into un-serviced "greenfield" lands – Peel's growth also requires the urbanization of rural lands. Such expansions require the extension of water, wastewater, roads, solid waste, health, and social services to accommodate the added population. The expansion of infrastructure to accommodate these services as well as the increase in Regional fleet and distances to provide services will create added pressures in terms of operating and maintaining the Region's expanded network.

Ongoing Condition Assessment Program

Detailed asset condition assessments are carried out across the organization. The results of these assessments will improve the SoGR analysis and more accurately identify capital needs.

Weather and Climate Change Impacts

Weather impacts water consumption demand primarily during the summer as well as the TransHelp and road maintenance programs in the winter. Efforts are made to mitigate this risk using trend analysis and the Stabilization Reserves.

Additionally, the risk of damage to assets from significant weather events is increasing. Future increased capital reinvestment to mitigate this damage will be required.

Economic Conditions

Changes to economic conditions can impact the Financing Plan. Specific risks to the plan include:

- Increases in labour costs
- Decreases in revenue for recycled materials
- Increases in energy costs
- Increases in debt servicing costs
- Decreases in grants and subsidies

Significant change to the broader economic conditions may also impact service delivery and demand. The COVID-19 pandemic has elevated fiscal risks which in turn may contribute to higher long-term financial stability and sustainability risks.

Regulatory Impacts

Changes to regulations in the Region of Peel's operational environment have significant impact on financial plans and may change:

- What services are provided by the Region
- The content of the Region's capital asset portfolio
- The availability of funding sources
- Design and construction
- Technology requirements
- Operational practices

Changes to Level of Service Targets

Level of Service Targets drive the reinvestment forecasts in the Asset Management Reinvestment Plan. Levels of Service are based on regulations, standards, and council approved service levels. Increased regulations and standards will require changes to the level of service targets. Council approved levels of service may also change to better align with the priorities of the community.

Impacts from and Alignment with Infrastructure Plans of Other Governments and Agencies

Where the Region of Peel owns or manages infrastructure in proximity to that of other levels of government or external agencies, reinvestment plans may need to be adjusted to align infrastructure planning between organizations. These adjustments have the potential to significantly increase the Region's infrastructure financing requirements if a high value piece of infrastructure is required to be relocated or enhanced prior to the asset's normal end of life. Alternatively, there are opportunities for cost sharing between organizations when co-located assets require replacement or rehabilitation within a similar time frame.

Continued COVID-19 Impact, Response and Recovery

The COVID-19 response will also continue to have an impact on service delivery, requiring modifications to operations and maintenance activities to meet social distancing guidelines, as well as impact infrastructure design and delivery of infrastructure renewal projects. As the longer-term impacts are understood, these considerations will need to be incorporated into future Asset Management Plans.

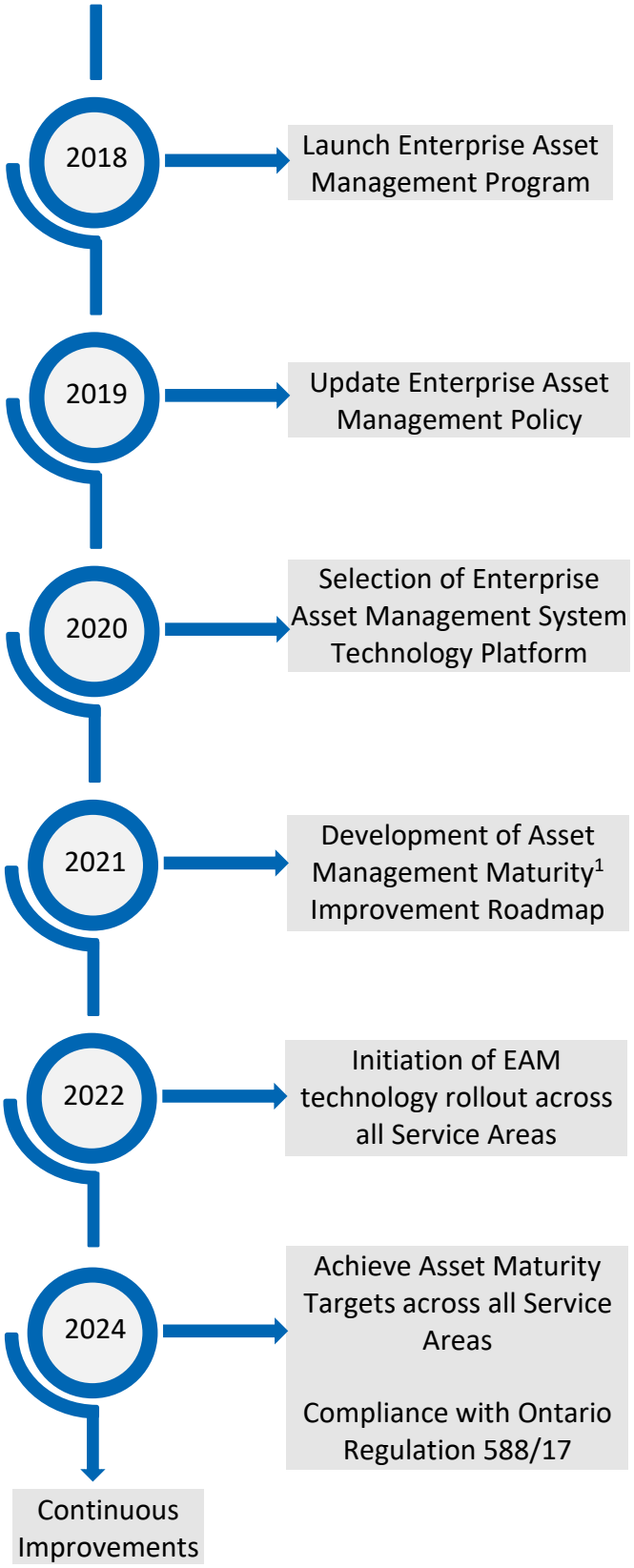
Enterprise Asset Management Road Map

Enterprise Asset Management is an integral part of the Region of Peel's strategic and long-term planning practices. Introduced in 2007, the program focuses on developing sustainable plans to maintain the infrastructure over a planning horizon that can be as long as 100 years. Guided by the principle of continuous improvement, these plans support Council's level of service targets and long-term financial strategies. The Region's Asset Management program is guided by industry best practice, as well as regulatory requirements. The program is continuously evolving to leverage opportunities and address challenges.

Although the Region of Peel's long-term asset planning program has been in place since 2007, it is still good practice to review the program to accommodate emerging trends. In 2017, the Region retained an independent third-party consultant to initiate a comprehensive asset management program review. The objective of the review was to align the Region's asset management practices with industry best practices. As a result of the review, over the next several years several initiatives have been proposed. These initiatives will address emerging trends as well as focus on identified gaps.

Changes since the 2018 Enterprise Asset Management Plan

- **Enterprise Asset Management** (EAM) division established within the Finance department.
- The Region's **Asset Management Policy** has been updated to meet the new Ontario Regulation 588/17.
- The assets supporting the **Affordable Housing** service managed by **Peel Housing Corporation** is incorporated into Asset Management reporting.
- **Operations and Maintenance** costs incorporated into Service areas for full lifecycle costing considerations.



Improvements for the Future

- Staff is undertaking many **technical studies** and **condition assessments** to improve knowledge of the Region's infrastructure conditions.
- **Asset Management planning process improvements** are being made across several services to improve investment forecasting and to manage risks to Regional services.
- An **Enterprise Asset Management System** will be introduced to support asset management functions across the organization.
- The assets supporting **Peel Regional Police** will be added to the Enterprise Asset Management Plan in the 2023 reporting cycle.

[1] In accordance with **ISO** (International Organization for Standardization) **55000**

Strategic Plan Area of Focus:

Thriving

Communities are integrated, safe and connected

Strong, successful communities just work. They have strong bones and arteries. Their systems, many unseen below the surface, function efficiently and are well maintained, with an eye on preserving value and reliable performance for future generations.
The Region of Peel works and serves its residents and businesses throughout a ***Community for Life***.

Asset Management Reinvestment Plan
Water Supply

State of the Infrastructure Water Supply

Two treatment plants
15 wells
19 pumping stations
27 water storage facilites
4,650 km of water pipes

Total Asset Replacement Value
$14.1 Billion
2020 Dollars

The water infrastructure is in a very good state for delivering safe, reliable drinking water; however, there are concerns that climate change risks are impacting Peel's water treatment and transmission services.

The Region is proactively identifying how the infrastructure can be enhanced to mitigate the risk of extreme heat events and changing quality of the Lake Ontario water and will require future investments to mitigate these risks.

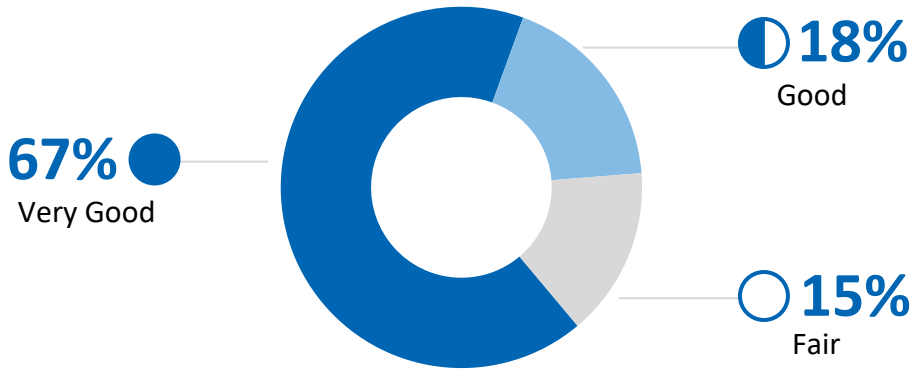
Proactive pipe replacement programs are in place to keep the water system safe and reliable for homes and industries.

Condition of the Infrastructure

The average age of Water assets is 20 years. Asset condition is calculated based on break history for water pipes, condition assessments for buildings and structures and estimated service life for most of the other assets.

How is the Condition Graded?	
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 repair or replacement required

Water Supply is currently achieving a rating of: **Very Good**



What do the Risk Management Ratings mean?		
●	**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

Target Customer Levels of Service[1]

Our customers should expect…

Potable water which meets or exceeds all regulatory requirements.

Aesthetically pleasing water quality.

Efficient and reliable Water Treatment.

Reliable and consistent water pressure and flow.

Efficient delivery of water services.

The Facilities are structurally sound and in a state of good repair.

The Facilities fully meet the Programs' services requirements.

The Facilities provide a safe, healthy environment for staff and the public.

The Facilities are accessible as required.

[1] O. Reg. 588/17 related Levels of Service are presented in Appendix V

Infrastructure Reinvestment Plan Water Supply

10 Year Reinvestment	Forecasted Needs	Capital Plan
Total Reinvestment (SoGR)	**$766.4M**	**$776.0M**

Values are in 2022 dollars

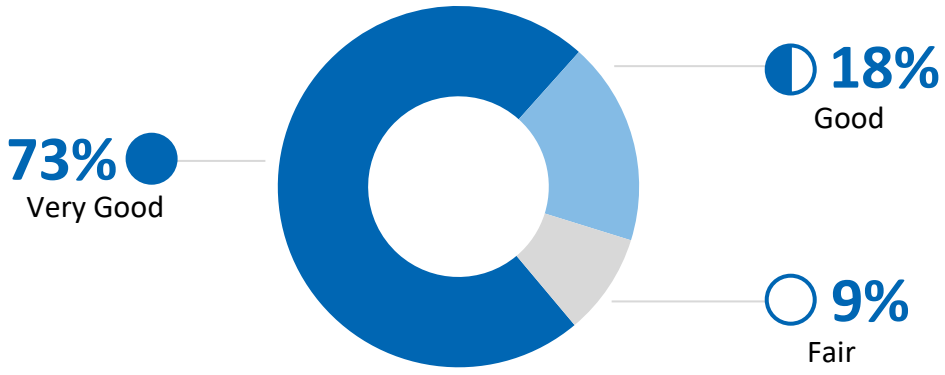
Operations and Maintenance Expenses		
Annual Expenditures	**$25.6M**	**0.2%** of replacement value

Capital reinvestments of **$776.0 Million** are planned over the next 10 years to maintain the infrastructure in a state of good repair. The infrastructure reinvestments in the Capital Plan are slightly greater than the forecasted reinvestment needs.

Operations and Maintenance expenses of approximately **$25.6M** per year or **0.2%** of asset replacement value are incurred to operate the water distribution and treatment systems, and conduct maintenance activities on the assets. These costs are considered as part of whole lifecycle strategies development and will continue to be optimized as asset management information and technology improve.

If the Reinvestments in the Capital Plan are made over 10 Years, in 2031…

Water Supply is forecasted to achieve a rating of: **Very Good**



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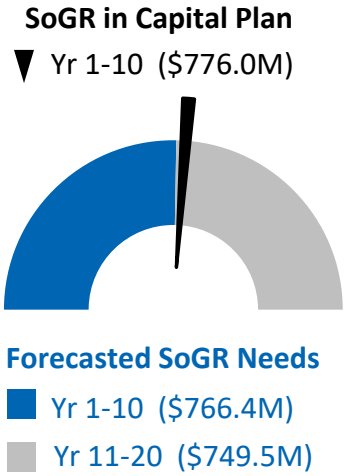
10 Year Summary Water Supply

Service	Current State		10 Year Plan		
	Current Rating (2022)	Replacement Value (2020 $ Millions)	Forecasted Reinvestment Needs (2022 $ Millions)	2022-2031 Capital Plan Reinvestments (2022 $ Millions)	Forecasted Rating (2031)
			SoGR	SoGR	
Water Supply	●	14,078.4	766.4	776.0	●

20 Year SoGR Outlook Water Supply



State of good repair reinvestment needs are forecasted to remain comparable in the next 20 years.

The SoGR reinvestments in the Capital Plan are comparable to the forecasted reinvestment needs

Asset Management Reinvestment Plan
Wastewater

State of the Infrastructure Wastewater

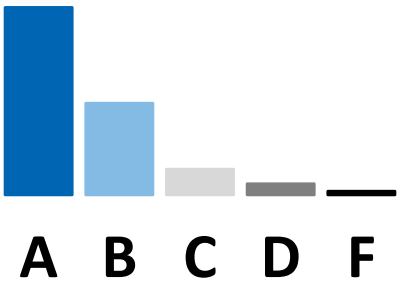
Two treatment plants,
27 sewage pumping stations
3,616 km of sanitary sewer pipes

Total Asset Replacement Value
$13.2 Billion
2020 Dollars

The wastewater infrastructure is currently in good condition; however, the early effects of climate change are beginning to impact the Peel wastewater collection system.

The Region is proactively identifying how the infrastructure can be enhanced to mitigate the risk of overflows to the environment and backups into homes and businesses which should raise the overall score of the portfolio.

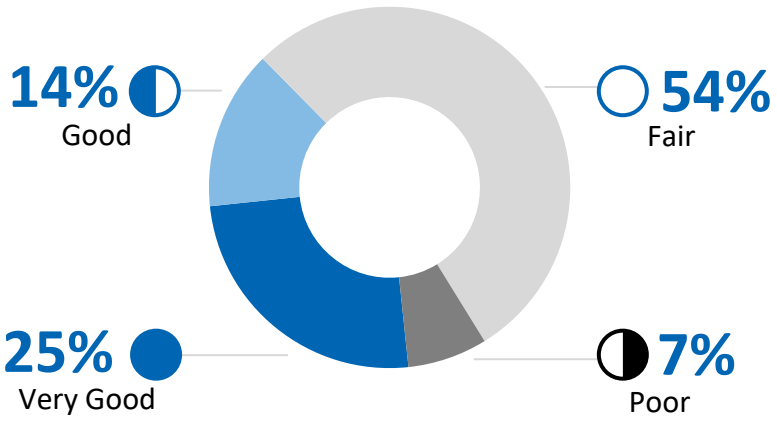
Condition of the Infrastructure



The average age of Wastewater assets is 18 years. Asset condition is calculated based on inspections for pipes, condition assessments for buildings and structures, and estimated service life for most other assets.

How is the Condition Graded?	
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 repair or replacement required

Wastewater is currently achieving a rating of: ◯ **Fair**



While the infrastructure is in good condition overall, issues related to climate change are increasing the risk in this asset portfolio resulting in the fair rating.

What do the Risk Management Ratings mean?

●	**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

Target Customer Levels of Service[1]

Our customers should expect…

Reliable, efficient and effective wastewater collection and treatment.

The Facilities are structurally sound and in a state of good repair.

The Facilities fully meet the Programs' services requirements.

The Facilities provide a safe, healthy environment for staff and the public.

The Facilities are accessible as required.

[1] **O. Reg. 588/17 related Levels of Service are presented in Appendix V**

Infrastructure Reinvestment Plan Wastewater

10 Year Reinvestment	Forecasted Needs	Capital Plan
Total Reinvestment (SoGR)	**$1,171.4M**	**$1,180.0M**

Values are in 2022 dollars

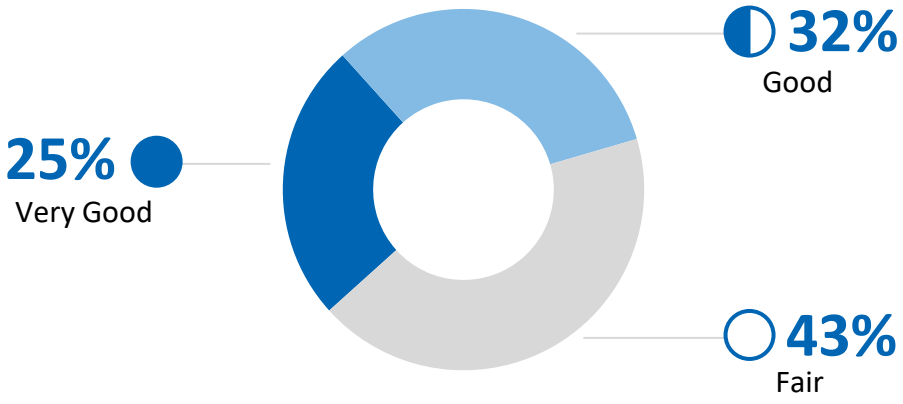
Operations and Maintenance Expenses		
Annual Expenditures	**$16.9M**	**0.1%** of replacement value

Capital reinvestments of **$1,180.0 Million** are planned over the next 10 years to maintain the infrastructure in a state of good repair. The infrastructure reinvestments in the Capital Plan are in line with forecasted reinvestment needs.

Operations and Maintenance expenses of approximately **$16.9 M** per year or **0.1%** of asset replacement value are incurred to operate the wastewater collection and treatment systems, and conduct maintenance activities on the assets These costs are considered as part of whole lifecycle strategies development and will continue to be optimized as asset management information and technology improve.

If the Reinvestments in the Capital Plan are made over 10 years, in 2031…

Wastewater is forecasted to achieve a rating of: Good



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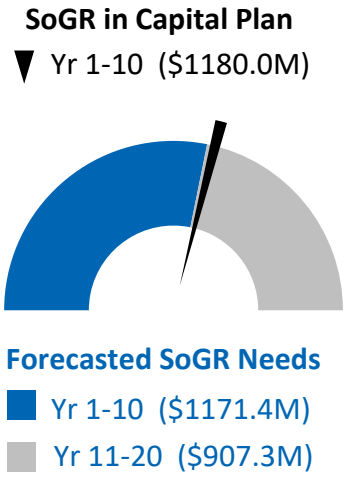
10 Year Summary Wastewater

Service	Current State		10 Year Plan		
	Current Rating (2022)	Replacement Value (2020 $ Millions)	Forecasted Reinvestment Needs (2022 $ Millions)	2022-2031 Capital Plan Reinvestments (2022 $ Millions)	Forecasted Rating (2031)
			SoGR	SoGR	
Wastewater	○	13,166.5	1,171.4	1,180.0	◐

20 Year SoGR Outlook Wastewater



State of good repair reinvestment needs are forecasted to slightly decrease in the next 20 years.

The SoGR reinvestments in the Capital Plan are in line with forecasted reinvestment needs

Asset Management Reinvestment Plan
Operations Yards, Fleet and Equipment

State of the Infrastructure Ops. Yards, Fleet and Equipment

Five works yards
503 vehicles
230 pieces of major equipment

Total Asset Replacement Value
$130.3 Million
2020 Dollars

Operations, Yards and Equipment assets are generally in a good condition to support the service in achieving their service level objectives.

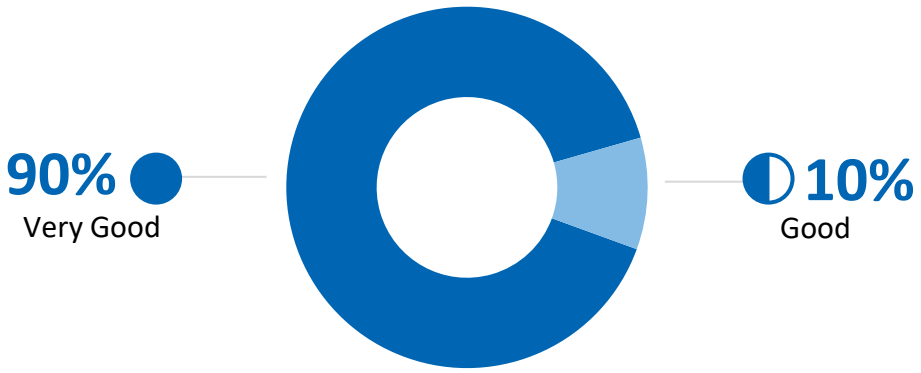
Works yard redevelopment projects are underway to enhance or replace some aging facilities which do not meet all current requirements of the assets.

Condition of the Infrastructure

The average age of Operations, Yards and Equipment assets is 11 years. Asset condition is calculated based building condition assessments for buildings and estimated service life for most other assets.

How is the Condition Graded?	
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 repair or replacement required

Ops. Yards, Fleet & Equipment is currently achieving a rating of: **Very Good**



What do the Infrastructure Risk Management Ratings mean?		
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◑	**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

Target Customer Levels of Service

Our customers should expect…

The Facilities are structurally sound and in a state of good repair.

The Facilities fully meet the Programs' services requirements.

The Facilities provide a safe, healthy environment for staff and the public.

The Facilities are accessible as required.

Fleet is safe and maintained in a state of good repair.

The Fleet quality and availability fully meet the Programs' service requirements.

Infrastructure Reinvestment Plan Ops. Yards, Fleet and Equipment

10 Year Reinvestment	Forecasted Needs	Capital Plan
Total Reinvestment (SoGR)	**$64.3M**	**$64.4M**

Values are in 2022 dollars

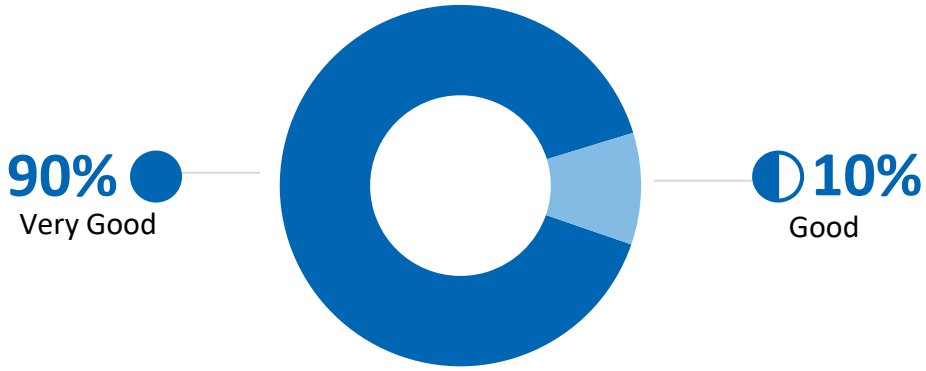
Operations and Maintenance Expenses		
Annual Expenditures	**$26.8M**	**19.7%** of replacement value

Capital reinvestments of **$64.4 Million** are planned over the next 10 years to maintain the infrastructure in a state of good repair. The infrastructure reinvestments in the Capital Plan are in line with forecasted reinvestment needs.

Operations and Maintenance expenses of approximately **$26.8M** per year or **19.7%** of asset replacement value are incurred to operate the Works Yard, fleet and equipment and conduct maintenance activities on the assets. These costs are considered as part of whole lifecycle strategies development and will continue to be optimized as asset management information and technology improve.

If the Reinvestments in the Capital Plan are made over 10 years, in 2031…

Ops. Yards, Fleet & Equipment is forecasted to achieve a rating of: Very Good

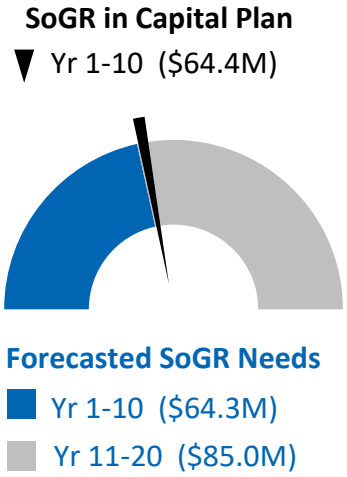


What do the Risk Management Ratings mean?		
●	**Very Good**	Almost all assets in the portfolio are achieving the desired targets
◐	**Good**	Most assets in the portfolio are achieving the desired targets
○	**Fair**	Many assets in the portfolio are not achieving the desired targets
◑	**Poor**	Most assets in the portfolio are not achieving the desired targets
⊗	**Very Poor**	Almost all assets in the portfolio are not achieving the desired targets

10 Year Summary Operations Yards, Fleet and Equipment

Service	Current State		10 Year Plan		
	Current Rating (2022)	Replacement Value (2020 $ Millions)	Forecasted Reinvestment Needs (2022 $ Millions)	2022-2031 Capital Plan Reinvestments (2022 $ Millions)	Forecasted Rating (2031)
			SoGR	SoGR	
Operations Yards, Fleet and Equipment	●	130.3	64.3	64.4	●

20 Year SoGR Outlook Operations Yards, Fleet and Equipment



State of good repair reinvestment needs are forecasted to slightly increase in the next 20 years.

The SoGR reinvestments in the Capital Plan are in line with forecasted reinvestment needs.

Asset Management Reinvestment Plan
Heritage, Arts and Culture

State of the Infrastructure Heritage, Arts and Culture

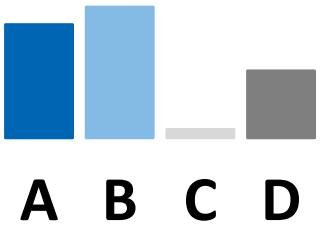
Four heritage facilities

Total Asset Replacement Value
$32.6 Million
2020 Dollars

The Heritage, Arts and Culture infrastructure is in good condition. There are currently projects underway that will improve the condition of these facilities to support and sustain the historical and cultural fabric of Peel.

Being a Heritage Complex, all the buildings are designed to older building standards impeding their ability to meet some current program requirements.

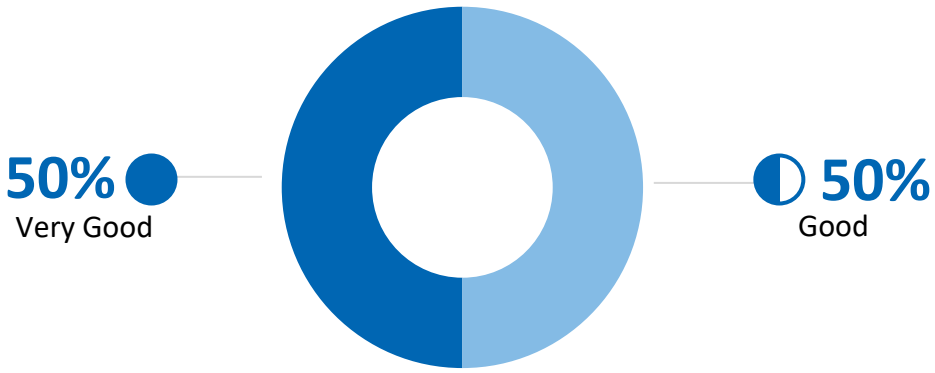
Condition of the Infrastructure



The average age of Heritage, Arts and Culture assets is 125 years. Asset condition is calculated based building condition assessments for facilities.

How is the Condition Graded?	
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 repair or replacement required

Heritage, Arts and Culture is currently achieving a rating of: Good



What do the Risk Management Ratings mean?		
●	**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

Target Customer Levels of Service

Our customers should expect…

A place where the past, present and future are linked in dynamic displays and explored through creative programming and research.

The Region's artistic heritage is preserved and promoted, and quality educational programs are produced.

Materials which deal with the development of the Region of Peel are collected, preserved and made available.

Local, regional, and national artists unique gift ideas for every occasion and budget are on offer.

Infrastructure Reinvestment Plan Heritage, Arts and Culture

10 Year Reinvestment	Forecasted Needs	Capital Plan
Total Reinvestment (SoGR)	**$8.5M**	**$9.4M**

Values are in 2022 dollars

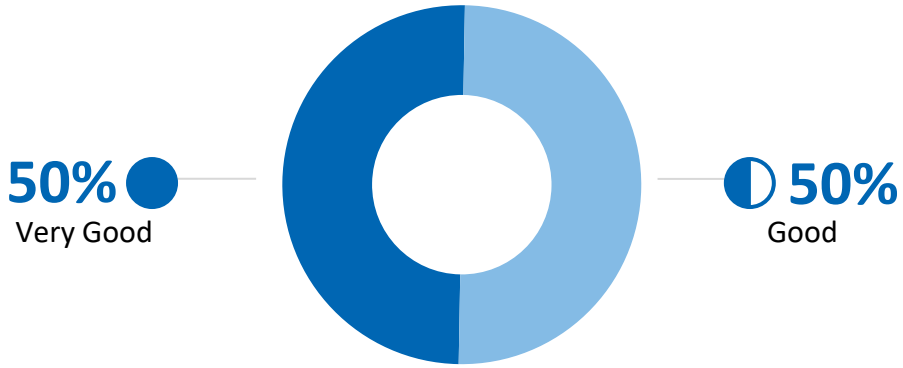
Operations and Maintenance Expenses		
Annual Expenditures	**$0.1M**	**0.3%** of replacement value

Capital reinvestments of **$9.4 Million** are planned over the next 10 years to maintain the infrastructure in a state of good repair. The infrastructure reinvestments in the Capital Plan are higher than the forecasted reinvestment needs due to updated information that will be included in the next reporting cycle and COVID-19 pandemic implications on the construction industry resulting in increased project costing.

Operations and Maintenance expenses of approximately **$0.1M** per year or **0.3%** of asset replacement value are incurred to operate the Heritage, Arts and Culture facilities and equipment and conduct maintenance activities on the assets. These costs are considered as part of whole lifecycle strategies development and will continue to be optimized as asset management information and technology improve.

If the Reinvestments in the Capital Plan are made over 10 years, in 2031…

Heritage, Arts and Culture is forecasted to achieve a rating of: **Good**

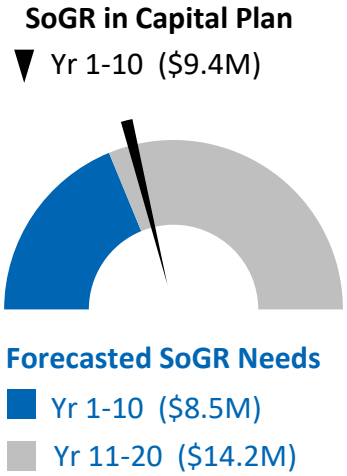


What do the Risk Management Ratings mean?		
●	**Very Good**	Almost all assets in the portfolio are achieving the desired targets
◐	**Good**	Most assets in the portfolio are achieving the desired targets
○	**Fair**	Many assets in the portfolio are not achieving the desired targets
◑	**Poor**	Most assets in the portfolio are not achieving the desired targets
⊗	**Very Poor**	Almost all assets in the portfolio are not achieving the desired targets

10 Year Summary Heritage, Arts and Culture

Service	Current State		10 Year Plan		
	Current Rating (2022)	Replacement Value (2020 $ Millions)	Forecasted Reinvestment Needs (2022 $ Millions)	2022-2031 Capital Plan Reinvestments (2022 $ Millions)	Forecasted Rating (2031)
			SoGR	SoGR	
Heritage, Arts and Culture	◐	32.6	8.5	9.4	◐

20 Year SoGR Outlook Heritage, Arts and Culture



State of good repair reinvestment needs are forecasted to increase in the next 20 years.

The infrastructure reinvestments in the Capital Plan are higher than the forecasted reinvestment needs due to updated information that will be included in the next reporting cycle and COVID-19 pandemic implications on the construction industry resulting in increased project costing.

Asset Management Reinvestment Plan
Waste

State of the Infrastructure Waste

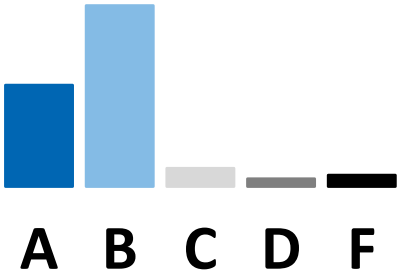
Six community recycling centres
One composting and curing facilities
One material recycling facility
Two transfer stations
Ten closed landfills
10,649 multi-residential carts
984,653 curbside collection carts

Total Asset Replacement Value
$265.8 Million
2020 Dollars

Majority of the Waste Management infrastructure is in good condition, supporting the safe removal of solid waste from the community.

Waste Management staff is working on an Infrastructure Development Plan to support diversion targets outlined by the Region's Waste Reduction and Resource Recovery Strategy to adapt to Council's long-term direction.

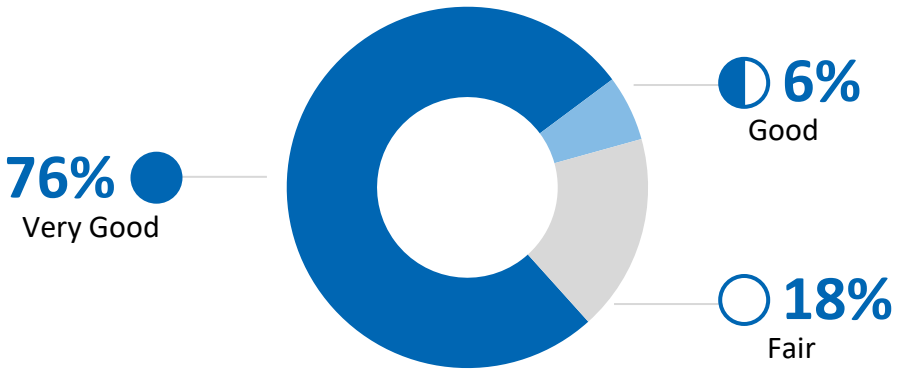
Condition of the Infrastructure



The average age of Waste assets is 11 years. Asset condition is calculated based building condition assessments for facilities and service life for most other assets.

How is the Condition Graded?	
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 repair or replacement required

Waste is currently achieving a rating of: **Very Good**



What do the Risk Management Ratings mean?		
●	**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

Target Customer Levels of Service

Our customers should expect…

Biweekly collection of recyclables and processing of recyclables.

Biweekly collection of garbage.

Weekly collection of organics.

Seasonal collection of yard waste – weekly/biweekly.

Community Recycling Centres open during appropriate hours to meet community needs.

Operations of sites within Certificate of Approval parameters, with no impact on site neighbours.

The facilities are structurally sound and in a state of good repair.

The facilities fully meet the Programs' services requirements.

The facilities provide a safe, healthy environment for staff and the public.

The Facilities are accessible as required.

Infrastructure Reinvestment Plan Waste

10 Year Reinvestment	Forecasted Needs	Capital Plan
Total Reinvestment (SoGR)	**$138.2M**	**$141.2M**

Values are in 2022 dollars

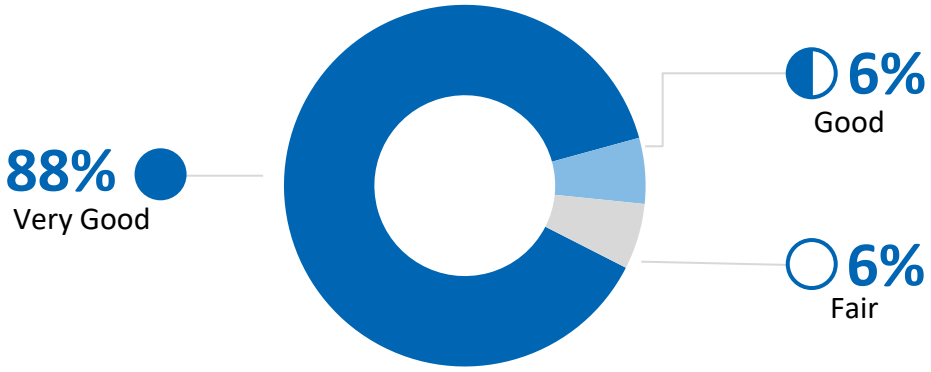
Operations and Maintenance Expenses		
Annual Expenditures	**$4.3M**	**1.5%** of replacement value

Capital reinvestments of **$141.2 Million** are planned over the next 10 years to maintain the infrastructure in a state of good repair. The infrastructure reinvestments in the Capital Plan are in line with the forecasted reinvestment needs. Direction from Council to explore waste processing option and changing provincial regulations have introduced uncertainty into the service. Staff are monitoring the infrastructure to ensure risks to services are managed while new plans are being implemented.

Operations and Maintenance expenses of approximately **$4.3M** per year or **1.5%** of asset replacement value are incurred to operate the Waste facilities, provide environmental protection for closed landfills and conduct maintenance activities on the assets. These costs are considered as part of whole lifecycle strategies development and will continue to be optimized as asset management information and technology improve

If the Reinvestments in the Capital Plan are made over 10 years, in 2031…

Waste is forecasted to achieve a rating of: **Very Good**

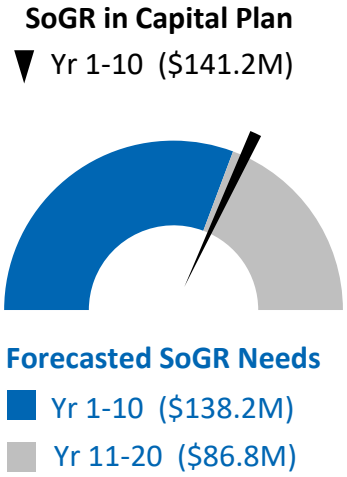


What do the Risk Management Ratings mean?		
●	**Very Good**	Almost all assets in the portfolio are achieving the desired targets
◐	**Good**	Most assets in the portfolio are achieving the desired targets
○	**Fair**	Many assets in the portfolio are not achieving the desired targets
◑	**Poor**	Most assets in the portfolio are not achieving the desired targets
⊗	**Very Poor**	Almost all assets in the portfolio are not achieving the desired targets

10 Year Summary Waste

Service	Current State		10 Year Plan		
	Current Rating (2022)	Replacement Value (2020 $ Millions)	Forecasted Reinvestment Needs (2022 $ Millions)	2022-2031 Capital Plan Reinvestments (2022 $ Millions)	Forecasted Rating (2031)
			SoGR	SoGR	
Waste	●	265.8	138.2	141.2	●

20 Year SoGR Outlook Waste



State of good repair reinvestment needs are forecasted to decrease in the next 20 years.

The SoGR reinvestments in the Capital Plan are in line with the forecasted reinvestment needs.

Asset Management Reinvestment Plan
Roads and Transportation

State of the Infrastructure Roads and Transportation

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 km of storm sewers
Two storm ponds
95 manufactured treatment devices

Total Asset Replacement Value
$2.8 Billion
2020 Dollars

The Transportation infrastructure is in good condition to provide reliable transportation services. The Region continues to proactively assess the condition of roads infrastructure to support safe and efficient transportation services.

Condition assessments of Peel's stormwater management systems, bridges and culverts and roadside retaining walls inspections are being finalized. The improvements recommended by these studies will be included in future Capital Plans.

Condition of the Infrastructure

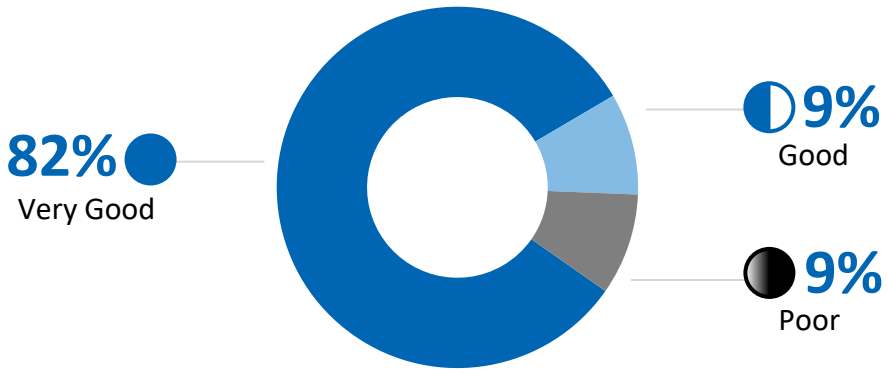
Average age is 6 years for Roads (pavement), 41 years for Bridges and Grade Separations, 37 years for Major Culverts, and 17 years for Stormwater Assets.

Asset condition is calculated based on pavement and bridge inspections, building condition assessments for buildings and based on estimated service life for most other assets.

Average condition for Roads, Bridges and Major Culverts are presented in Appendix V.

How is the Condition Graded?	
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 repair or replacement required

Roads and Transportation is currently achieving a rating of: **Very Good**



What do the Risk Management Ratings mean?		
●	**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

Target Customer Levels of Service[1]

Our customers should expect…

Roads are safe and accessible year round and during all weather conditions.

Roads are maintained in a state of good repair at the lowest practical costs.

Roads are capable of supporting all modes of transportation and facilitate emergency vehicles.

Roadways are designed and operated in an environmentally sustainable manner and address social and aesthetic considerations.

Traffic signals are synchronized to promote the highest practical level of progression.

The Facilities are structurally sound and in a state of good repair.

The Facilities fully meet the Programs' services requirements.

The Facilities provide a safe, healthy environment for staff and the public.

The Facilities are accessible as required

[1] **O. Reg. 588/17 related Levels of Service are presented in Appendix V**

Infrastructure Reinvestment Plan Roads and Transportation

10 Year Reinvestment	Forecasted Needs	Capital Plan
Total Reinvestment (SoGR)	**$399.3M**	**$381.6M**

Values are in 2022 dollars

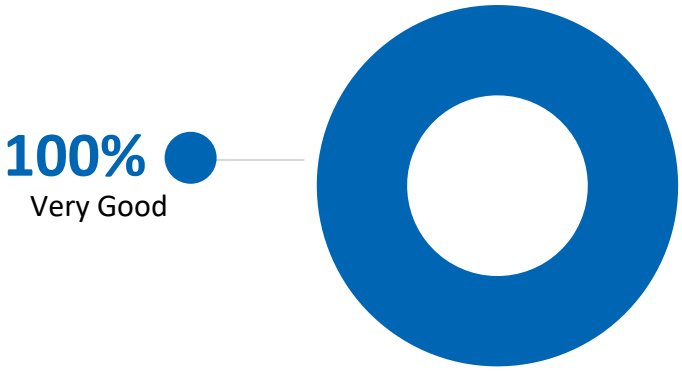
Operations and Maintenance Expenses		
Annual Expenditures	**$2.8M**	**0.2%** of replacement value

Reinvestments of **$381.6 Million** are planned over the next 10 years to maintain the infrastructure in a state of good repair. The infrastructure reinvestments in the Capital Plan are in line with forecasted reinvestment needs.

Operations and Maintenance expenses of approximately $2.8M per year or 0.2% of asset replacement value are incurred for roads and stormwater management operations and maintenance activities. These costs are considered as part of whole lifecycle strategies development and will continue to be optimized as asset management information and technology improve.

If the Reinvestments in the Capital Plan are made over 10 years, in 2031…

Roads and Transportation is forecasted to achieve a rating of: **Very Good**

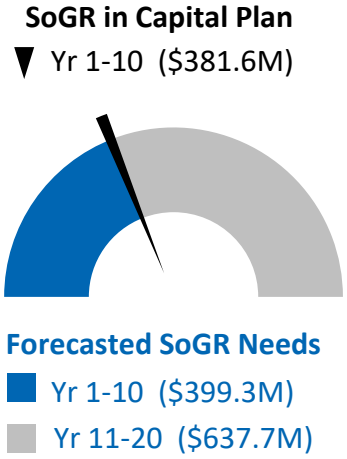


What do the Infrastructure Risk Management Ratings mean?		
●	**Very Good**	Almost all assets in the portfolio are achieving the desired targets
◐	**Good**	Most assets in the portfolio are achieving the desired targets
○	**Fair**	Many assets in the portfolio are not achieving the desired targets
◑	**Poor**	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

10 Year Summary Roads and Transportation

Service	Current State		10 Year Plan		
	Current Rating (2022)	Replacement Value (2020 $ Millions)	Forecasted Reinvestment Needs (2022 $ Millions)	2022-2031 Capital Plan Reinvestments (2022 $ Millions)	Forecasted Rating (2031)
			SoGR	SoGR	
Roads and Transportation	●	2,781.4	399.3	381.6	●
Roads	●	1,760.2	233.7	208.4	●
Bridges	●	452.9	77.1	80.0	●
Major Culverts	◐	133.0	25.1	26.0	●
Stormwater Management Systems	●	363.8	57.9	59.3	●

20 Year SoGR Outlook Roads and Transportation



State of good repair reinvestment needs are forecasted to increase significantly in the next 20 years.

The SoGR reinvestments in the Capital Plan are in line with forecasted reinvestment needs.

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Strategic Plan Area of Focus:

Living

People's lives are improved in their time of need

Investing to build a ***Community for Life*** begins with people, and ensuring that those in need can find the help and support they need in Peel – from housing to accessible transportation, and from income support to paramedic services and long term care – the Region of Peel is a welcoming community to all.

Asset Management Reinvestment Plan
TransHelp

State of the Infrastructure TransHelp

66 TransHelp vehicles

Total Asset Replacement Value
$7.3 Million
2020 Dollars

The TransHelp assets are in good condition to support travel within the community for Peel's residents in need.

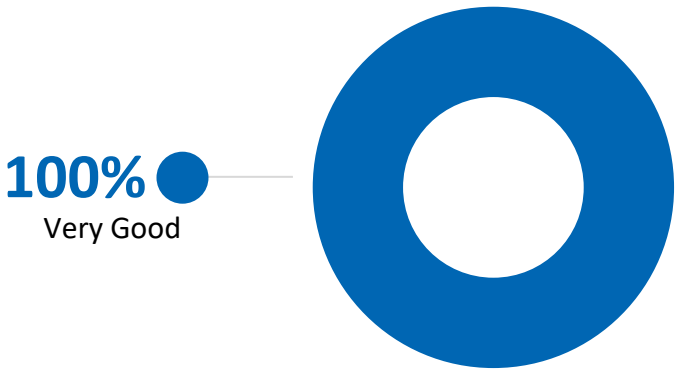
Condition of the Infrastructure

A B C D F

The average age of TransHelp assets is 3 years. Asset condition is calculated based on estimated service life of the assets.

How is the Condition Graded?	
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 repair or replacement required

TransHelp is currently achieving a rating of: **Very Good**



What do the Risk Management Ratings mean?		
●	**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

Target Customer Levels of Service

Our customers should expect…

Clients are transported in a safe manner and travel in a clean and well-maintained vehicle by an operator who practices appropriate personal hygiene.

Clients are treated with courtesy and respect.

Service calls are answered promptly and courteously.

Clients are picked up on time and within the pickup window.

Transport to a safe place if delivery to original destination is not possible.

Clients are taken to the first accessible door of the final destination.

Service is compliant with the Accessibility for Ontarians with Disabilities Act (AODA).

Infrastructure Reinvestment Plan TransHelp

10 Year Reinvestment	Forecasted Needs	Capital Plan
Total Reinvestment (SoGR)	**$11.3M**	**$11.5M**

Values are in 2022 dollars

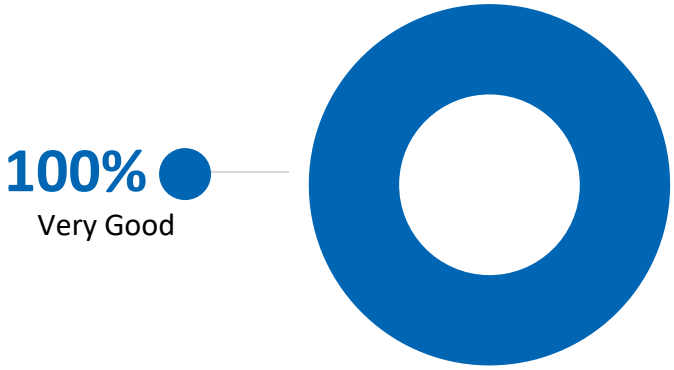
Operations and Maintenance Expenses		
Annual Expenditures	**$2.1M**	**27.2%** of replacement value

Reinvestments of **$11.5 Million** are planned over the next 10 years to maintain the infrastructure in a state of good repair. The infrastructure reinvestments in the Capital Plan are in line with forecasted reinvestment needs.

Operations and Maintenance expenses of approximately **$2.1M** per year or **27.2%** of asset replacement value are incurred to operate TransHelp vehicles and conduct maintenance activities on the assets. These costs are considered as part of whole lifecycle strategies development and will continue to be optimized as asset management information and technology improve.

If the Reinvestments in the Capital Plan are made over 10 years, in 2031…

TransHelp is forecasted to achieve a rating of: ● **Very Good**



What do the Risk Management Ratings mean?		
●	**Very Good**	Almost all assets in the portfolio are achieving the desired targets
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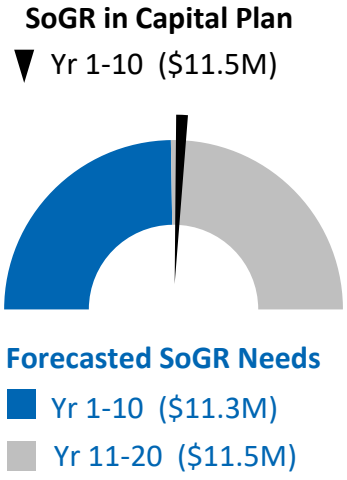
○	**Fair**	Many assets in the portfolio are not achieving the desired targets
◑	**Poor**	Most assets in the portfolio are not achieving the desired targets
⊗	**Very Poor**	Almost all assets in the portfolio are not achieving the desired targets

10 Year Summary TransHelp

Service	Current State		10 Year Plan		
	Current Rating (2022)	Replacement Value (2020 $ Millions)	Forecasted Reinvestment Needs (2022 $ Millions)	2022-2031 Capital Plan Reinvestments (2022 $ Millions)	Forecasted Rating (2031)
			SoGR	SoGR	
TransHelp	●	7.3	11.3	11.5	●

20 Year SoGR Outlook TransHelp



State of good repair reinvestment needs are forecasted to remain comparable in the next 20 years.

The SoGR reinvestments in the Capital Plan are in line with forecasted reinvestment needs.

Asset Management Reinvestment Plan
Paramedics

State of the Infrastructure Paramedics

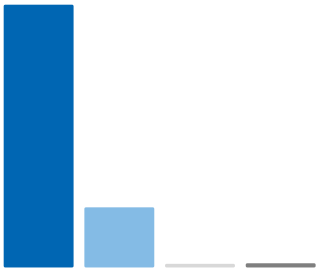
23 Regional paramedic stations
183 paramedic vehicles
777 pieces of paramedic equipment assets

Total Asset Replacement Value
$147.8 Million
2020 Dollars

The Region's paramedic services consist of new state-of-the-art-facilities, medical equipment, and emergency response vehicles, which are in good condition to support the emergency medical services.

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

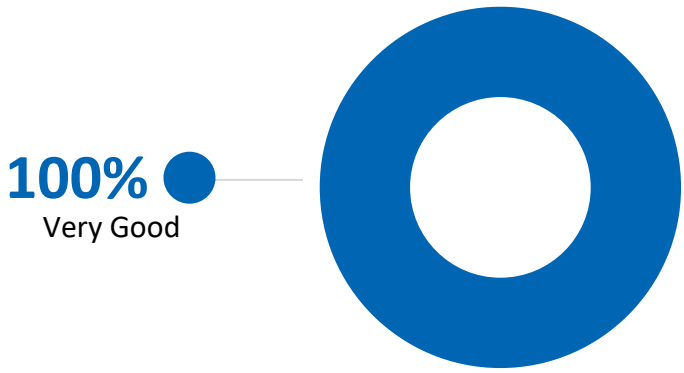
Condition of the Infrastructure



The average age of Paramedics assets is 5 years. Asset condition is calculated based on building condition assessments for buildings and estimated service life for most other assets.

How is the Condition Graded?	
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 repair or replacement required

Paramedics is currently achieving a rating of: **Very Good**



What do the Risk Management Ratings mean?		
●	**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

Target Customer Levels of Service

Our customers should expect…

Expedient and safe response and possible transport to hospital.

Provide the best evidence based medical care.

Pre-hospital emergency care at the minimum standard of the Ambulance Act.

24/7 functionality for an emergency service.

Recognizable positioning in the community.

A safe and comfortable environment.

Accessible and properly equipped EMS Facilities

Infrastructure Reinvestment Plan Paramedics

10 Year Reinvestment	Forecasted Needs	Capital Plan
Total Reinvestment (SoGR)	**$62.5M**	**$62.9M**

Values are in 2022 dollars

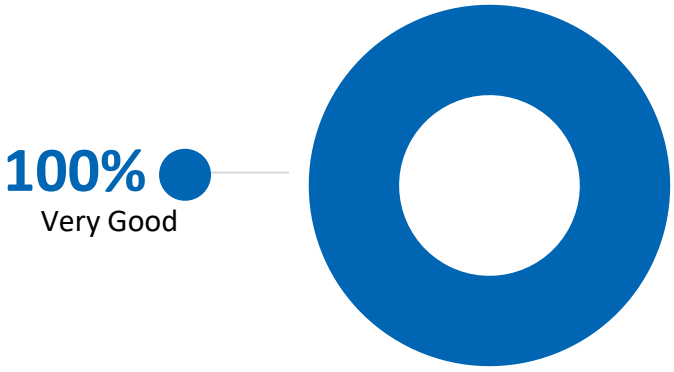
Operations and Maintenance Expenses		
Annual Expenditures	**$8.2M**	**5.3%** of replacement value

Reinvestments of **$62.9 Million** are planned over the next 10 years to maintain the infrastructure in a state of good repair. The infrastructure reinvestments in the Capital Plan are in line with forecasted reinvestment needs.

Operations and Maintenance expenses of approximately **$8.2M** per year or **5.3%** of asset replacement value are incurred to operate Paramedics facilities, vehicles and equipment, and conduct maintenance activities on the assets. These costs are considered as part of whole lifecycle strategies development and will continue to be optimized as asset management information and technology improve.

If the Reinvestments in the Capital Plan are made over 10 years, in 2031…

Paramedics is forecasted to achieve a rating of: **Very Good**

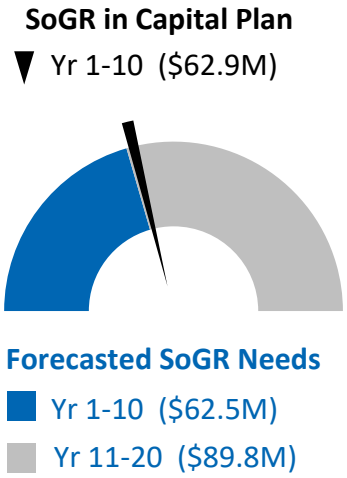


What do the Risk Management Ratings mean?		
●	**Very Good**	Almost all assets in the portfolio are achieving the desired targets
◐	**Good**	Most assets in the portfolio are achieving the desired targets
○	**Fair**	Many assets in the portfolio are not achieving the desired targets
◑	**Poor**	Most assets in the portfolio are not achieving the desired targets
⊗	**Very Poor**	Almost all assets in the portfolio are not achieving the desired targets

10 Year Summary Paramedics

Service	Current State		10 Year Plan		
	Current Rating (2022)	Replacement Value (2020 $ Millions)	Forecasted Reinvestment Needs (2022 $ Millions)	2022-2031 Capital Plan Reinvestments (2022 $ Millions)	Forecasted Rating (2031)
			SoGR	SoGR	
Paramedics	●	147.8	62.5	62.9	●

20 Year SoGR Outlook Paramedics



State of good repair reinvestment needs are forecasted to increase in the next 20 years.

The SoGR reinvestments in the Capital Plan are in line with forecasted reinvestment needs.

Asset Management Reinvestment Plan
Long Term Care

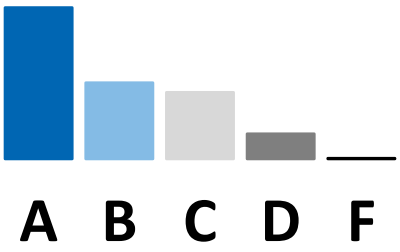
State of the Infrastructure Long Term Care

Five Long Term Care Centres

Total Asset Replacement Value
$242.4 Million
2020 Dollars

The Region continually monitors the ability of the Long Term Care Centres to meet the ever-changing requirements of senior care and support. Peel Manor no longer meets the service needs and will be replaced with a new facility. Otherwise, the Long Term Care Centres are in good condition to support the Region's array of senior care services.

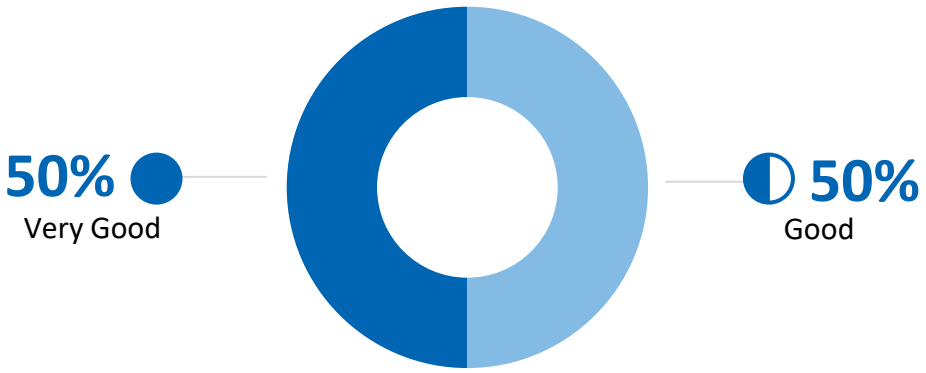
Condition of the Infrastructure



The average age of Long Term Care assets is 49 years. Asset condition is calculated based on Building Condition Assessments for buildings and estimated service life for most other assets.

How is the Condition Graded?	
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 repair or replacement required

Long Term Care is currently achieving a rating of: **Very Good**



What do the Risk Management Ratings mean?		
●	**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

Target Customer Levels of Service

Our customers should expect…

Provision of support and services to residents and their families in accordance with the Long Term Care Homes Act.

A safe and secure building environment which meets all Long Term Care Homes Act standards.

Fully accessible and equipped Facilities (Buildings) to meet the needs of resident, visitors, and staff.

Infrastructure Reinvestment Plan Long Term Care

10 Year Reinvestment	Forecasted Needs	Capital Plan
Total Reinvestment (SoGR)	**$50.2M**	**$52.3M**

Values are in 2022 dollars

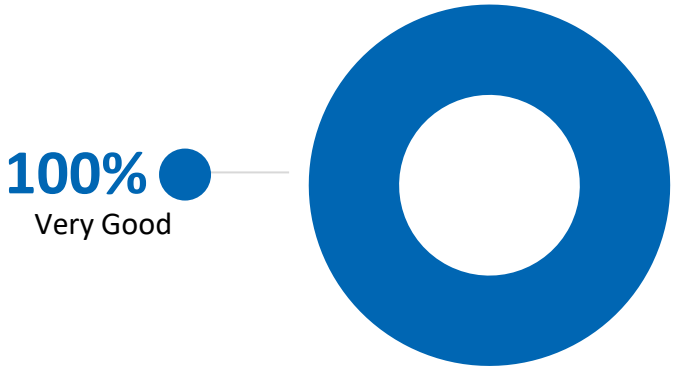
Operations and Maintenance Expenses		
Annual Expenditures	**$8.4M**	**3.3%** of replacement value

Reinvestments of **$52.3 Million** are planned over the next 10 years to maintain the infrastructure in a state of good repair. The infrastructure reinvestments in the Capital Plan are in line with the forecasted reinvestment needs.

Operations and Maintenance expenses of approximately **$8.4M** per year or **3.3%** of asset replacement value are incurred to operate Long Term Care facilities and equipment and conduct maintenance activities on the assets. These costs are considered as part of whole lifecycle strategies development and will continue to be optimized as asset management information and technology improve.

If the Reinvestments in the Capital Plan are made over 10 years, in 2031…

Long Term Care is forecasted to achieve a rating of: **Very Good**

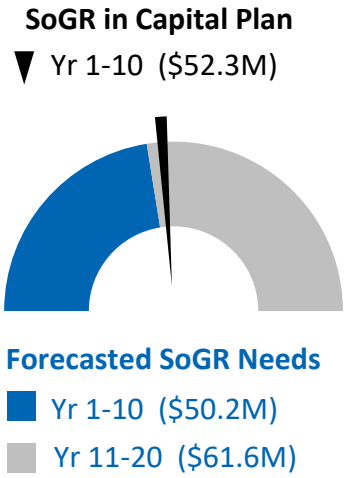


What do the Infrastructure Risk Management Ratings mean?		
●	**Very Good**	Almost all assets in the portfolio are achieving the desired targets
◐	**Good**	Most assets in the portfolio are achieving the desired targets
○	**Fair**	Many assets in the portfolio are not achieving the desired targets
◑	**Poor**	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

10 Year Summary Long Term Care

Service	Current State		10 Year Plan		
	Current Rating (2022)	Replacement Value (2020 $ Millions)	Forecasted Reinvestment Needs (2022 $ Millions)	2022-2031 Capital Plan Reinvestments (2022 $ Millions)	Forecasted Rating (2031)
			SoGR	SoGR	
Long Term Care	●	242.4	50.2	52.3	●

20 Year SoGR Outlook Long Term Care



State of good repair reinvestment needs are forecasted to slightly increase in the next 20 years.

The SoGR reinvestments in the Capital Plan are in line with the forecasted reinvestment needs.

Asset Management Reinvestment Plan
Housing Support

State of the Infrastructure Housing Support

Eight affordable housing buildings
Five homeless shelters

Total Asset Replacement Value
$376.1 Million
2020 Dollars

The Region owned Affordable Housing stock is relatively new. However, intensive use of the facilities requires that ongoing investments continue to maintain a liveable environment for residents and to blend with the surrounding community.

The shelters and homelessness support facilities are achieving the desired outcome of supporting safe, secure, temporary living services. These facilities experience intensive use and high turnover of residents and are constantly in need of significant repair and maintenance.

Condition of the Infrastructure

The average age of Housing Support assets is 19 years. The average age of Affordable Housing assets is 10 years and Homelessness Support assets is 33 years. Asset condition is calculated based on Building Condition Assessments for facilities and estimated service life for most other assets.

How is the Condition Graded?	
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 repair or replacement required

Housing Support is currently achieving a rating of: **Good**

What do the Risk Management Ratings mean?		
●	**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

Target Customer Levels of Service

Our customers should expect…

Prompt, efficient, and effective property management services.

A safe, well maintained, amenable living environment meeting all legislative requirements.

Provision of basic needs, protection, referral, and the alleviation of trauma associated with homelessness to those in emergency shelters.

Immediate, 24 hour access to shelters, and a safe, secure temporary living environment meeting all legislative requirements

Infrastructure Reinvestment Plan Housing Support

10 Year Reinvestment	Forecasted Needs	Capital Plan
Total Reinvestment (SoGR)	**$13.8M**	**$15.0M**

Values are in 2022 dollars

Operations and Maintenance Expenses		
Annual Expenditures	**$4.0M**	**1.0%** of replacement value

Reinvestments of **$15.0 Million** are planned over the next 10 years to maintain the infrastructure in a state of good repair. The infrastructure reinvestments in the Capital Plan are slightly more than forecasted reinvestment needs. The difference is primarily due to updated information that will be included in the next reporting cycle.

Operations and Maintenance expenses of approximately **$4.0M** per year or **1.0%** of asset replacement value are incurred to operate Housing Support facilities and equipment, and conduct maintenance activities on the assets. These costs are considered as part of whole lifecycle strategies development and will continue to be optimized as asset management information and technology improve.

If the Reinvestments in the Capital Plan are made over 10 years, in 2031…

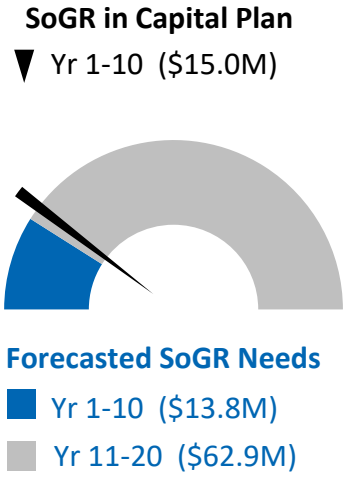
Housing Support is forecasted to achieve a rating of: Good

What do the Risk Management Ratings mean?		
●	**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

10 Year Summary Housing Support

Service	Current State		10 Year Plan		
	Current Rating (2022)	Replacement Value (2020 $ Millions)	Forecasted Reinvestment Needs (2022 $ Millions)	2022-2031 Capital Plan Reinvestments (2022 $ Millions)	Forecasted Rating (2031)
			SoGR	SoGR	
Housing Support	◐	376.1	13.8	15.0	◐

20 Year SoGR Outlook Housing Support



State of good repair reinvestment needs are forecasted to significantly increase in the next 20 years, which is expected in a portfolio of newer assets.

The infrastructure reinvestments in the Capital Plan are slightly more than forecasted reinvestment needs. The difference is primarily due to updated information that will be included in the next reporting cycle.

Asset Management Reinvestment Plan
Peel Housing Corporation

State of the Infrastructure Peel Housing Corporation

88 affordable housing buildings

Total Asset Replacement Value

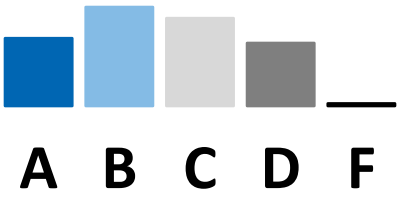
$2.6 Billion

2020 Dollars

The affordable housing stock managed by Peel Housing Corporation has a diverse mix of dwelling types, ages, designs, building code conformities and locations. The portfolio is currently in good condition.

However, intensive use of the facilities requires that ongoing investments continue to maintain a liveable environment for residents and to blend with the surrounding community.

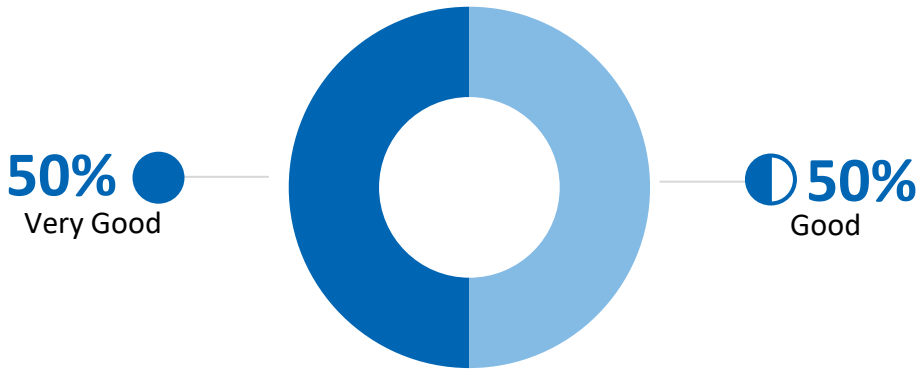
Condition of the Infrastructure



The average age of Peel Housing Corporation assets is 35 years. Asset condition is calculated based on building condition assessments for buildings.

How is the Condition Graded?	
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 repair or replacement required

Housing Support is currently achieving a rating of: **Very Good**



What do the Risk Management Ratings mean?		
●	**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

Target Customer Levels of Service

Our customers should expect…

Prompt, efficient, and effective property management services.

A safe, well maintained, amenable living environment meeting all legislative requirements.

Infrastructure Reinvestment Plan Peel Housing Corporation

10 Year Reinvestment	Forecasted Needs	Capital Plan
Total Reinvestment (SoGR)	**$560.2M**	**$579.6M**

Values are in 2022 dollars

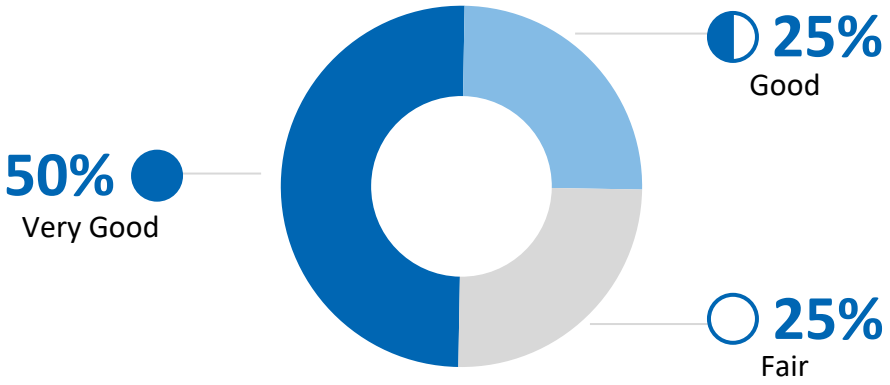
Operations and Maintenance Expenses		
Annual Expenditures	**$18.6M**	**0.7%** of replacement value

Reinvestments of **$579.6 Million** are planned over the next 10 years to maintain the infrastructure in a state of good repair. The infrastructure reinvestments in the Capital Plan are in line with the forecasted reinvestment needs.

Operations and Maintenance expenses of approximately **$18.6M** per year or **0.7%** of asset replacement value are incurred to operate facilities and conduct maintenance activities on the assets. These costs are considered as part of whole lifecycle strategies development and will continue to be optimized as asset management information and technology improve.

If the Reinvestments in the Capital Plan are made over 10 years, in 2031…

Peel Housing Corporation is forecasted to achieve a rating of: **Good**

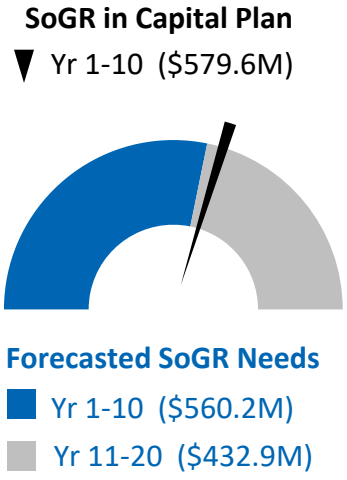


What do the Risk Management Ratings mean?		
●	**Very Good**	Almost all assets in the portfolio are achieving the desired targets
◐	**Good**	Most assets in the portfolio are achieving the desired targets
○	**Fair**	Many assets in the portfolio are not achieving the desired targets
◑	**Poor**	Most assets in the portfolio are not achieving the desired targets
⊗	**Very Poor**	Almost all assets in the portfolio are not achieving the desired targets

10 Year Summary Peel Housing Corporation

Service	Current State		10 Year Plan		
	Current Rating (2022)	Replacement Value (2020 $ Millions)	Forecasted Reinvestment Needs (2022 $ Millions)	2022-2031 Capital Plan Reinvestments (2022 $ Millions)	Forecasted Rating (2031)
			SoGR	SoGR	
Peel Housing Corporation	●	2,560.1	560.2	579.6	◐

20 Year SoGR Outlook Peel Housing Corporation



State of good repair reinvestment needs are forecasted to decrease in the next 20 years.

The SoGR reinvestments in the Capital Plan are in line with the forecasted reinvestment needs.

Asset Management Reinvestment Plan
Early Years and Child Care

State of the Infrastructure Early Years and Child Care

Three child care centres

Total Asset Replacement Value
$14.8 Million
2020 Dollars

The Child Care centres are in a good condition to support the private child care services. The Region of Peel has leased the facilities to independent child care providers.

Condition of the Infrastructure

The average age of Child Care centres is 49 years. Asset condition is calculated based on building condition assessments for facilities and on estimated service life for most other assets.

How is the Condition Graded?	
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 repair or replacement required

Early Years and Child Care is currently achieving a rating of: **Good**

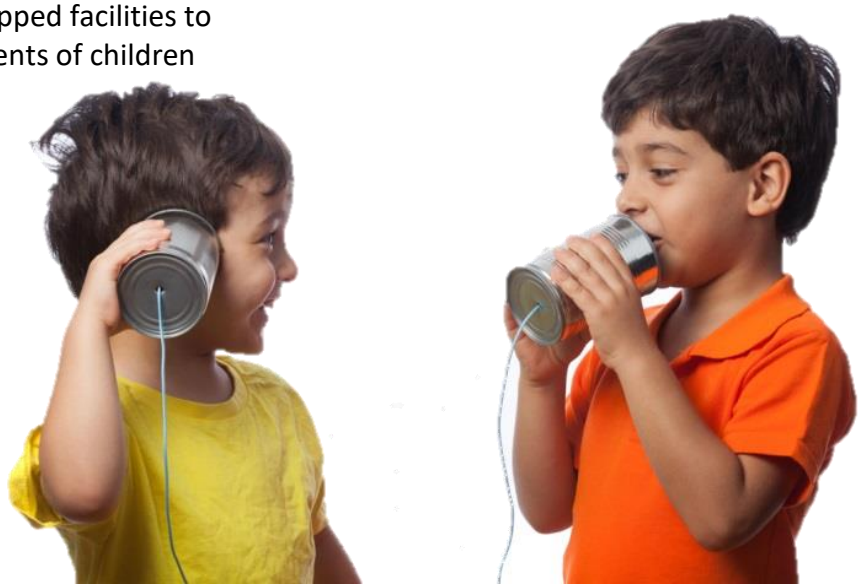
What do the Risk Management Ratings mean?		
●	**Very Good**	Almost all assets in the portfolio are achieving the desired targets
◐	**Good**	Most assets in the portfolio are achieving the desired targets
○	**Fair**	Many assets in the portfolio are not achieving the desired targets
◑	**Poor**	Most assets in the portfolio are not achieving the desired targets
⊗	**Very Poor**	Almost all assets in the portfolio are not achieving the desired targets

Target Customer Levels of Service

Our customers should expect…

Provision of high-quality licensed child care in a safe environment.

Fully accessible and equipped facilities to meet the daily requirements of children and caregivers.



Infrastructure Reinvestment Plan Early Years and Child Care

10 Year Reinvestment	Forecasted Needs	Capital Plan
Total Reinvestment (SoGR)	**$6.2M**	**$6.3M**

Values are in 2022 dollars

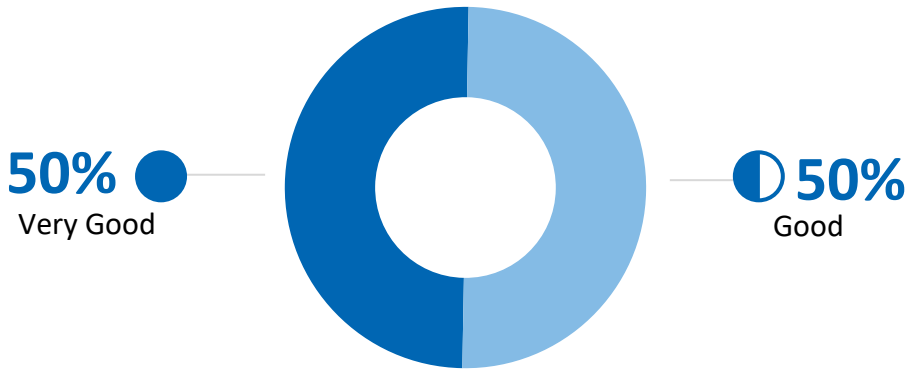
Operations and Maintenance Expenses		
Annual Expenditures	**$0.1M**	**1.1%** of replacement value

Reinvestments of **$6.3 Million** are planned over the next 10 years to maintain the infrastructure in a state of good repair. The infrastructure reinvestments in the Capital Plan are in line with forecasted reinvestment needs.

Operations and Maintenance expenses of approximately **$0.1M** per year or **1.1%** of asset replacement value are incurred to operate facilities and conduct maintenance activities on the assets. These costs are considered as part of whole lifecycle strategies development and will continue to be optimized as asset management information and technology improve.

If the Reinvestments in the Capital Plan are made over 10 years, in 2031…

Early Years and Child Care is forecasted to achieve a rating of: Good

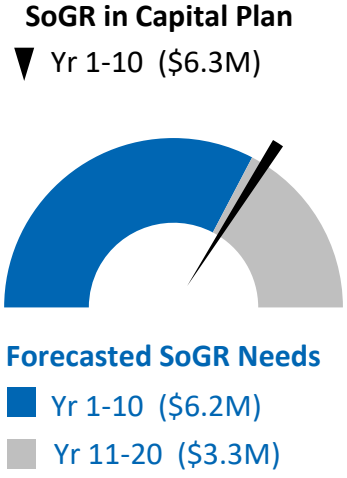


What do the Infrastructure Risk Management Ratings mean?		
●	**Very Good**	Almost all assets in the portfolio are achieving the desired targets
◐	**Good**	Most assets in the portfolio are achieving the desired targets
○	**Fair**	Many assets in the portfolio are not achieving the desired targets
◑	**Poor**	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

10 Year Summary Early Years and Child Care

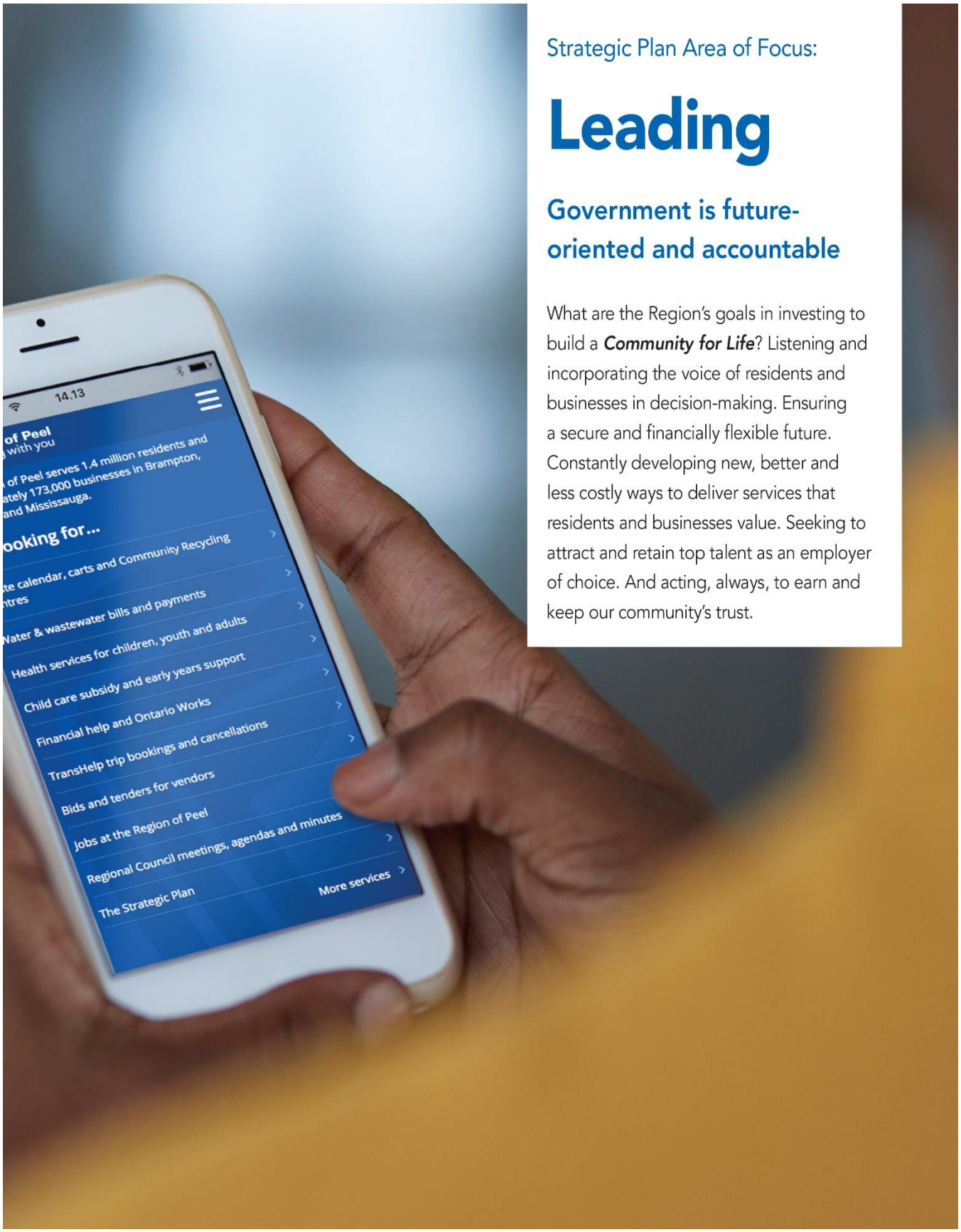
Service	Current State		10 Year Plan		
	Current Rating (2022)	Replacement Value (2020 $ Millions)	Forecasted Reinvestment Needs (2022 $ Millions)	2022-2031 Capital Plan Reinvestments (2022 $ Millions)	Forecasted Rating (2031)
			SoGR	SoGR	
Early Years and Child Care	◐	9.6	6.2	6.3	◐

20 Year SoGR Outlook Early Years and Child Care



State of good repair reinvestment needs are forecasted to significantly decrease in the next 20 years.

The SoGR reinvestments in the Capital Plan are in line with forecasted reinvestment needs.



Strategic Plan Area of Focus:

Leading

Government is future-oriented and accountable

What are the Region's goals in investing to build a ***Community for Life***? Listening and incorporating the voice of residents and businesses in decision-making. Ensuring a secure and financially flexible future. Constantly developing new, better and less costly ways to deliver services that residents and businesses value. Seeking to attract and retain top talent as an employer of choice. And acting, always, to earn and keep our community's trust.

Asset Management Reinvestment Plan
Regional Office Complexes

State of the Infrastructure Regional Office Complexes

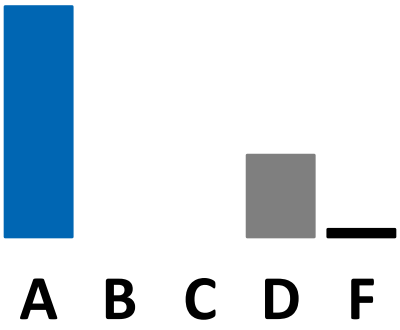
Two Regional office complexes

Total Asset Replacement Value
$251.3 Million
2020 Dollars

Most of the Regional office buildings are fairly new and in good condition.

The original building at 10 Peel Centre Drive (Suite A) is 40 years old and requires higher levels of capital to maintain. Suite A remains viable to provide Regional services.

Condition of the Infrastructure



The average age of Regional Office Complexes assets is 23 years. Asset condition is calculated based on building condition assessments for facilities and based on estimated service life for most other assets.

How is the Condition Graded?	
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 repair or replacement required

Regional Office Complexes is currently achieving a rating of: ○ **Fair**

What do the Risk Management Ratings mean?		
●	**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

Target Customer Levels of Service

Our customers should expect…

Regional properties are maintained at an acceptable level of cleanliness and in a state of good repair.

Customer concerns are promptly addressed.

Infrastructure Reinvestment Plan Regional Office Complexes

10 Year Reinvestment	Forecasted Needs	Capital Plan
Total Reinvestment (SoGR)	**$35.8M**	**$38.2M**

Values are in 2022 dollars

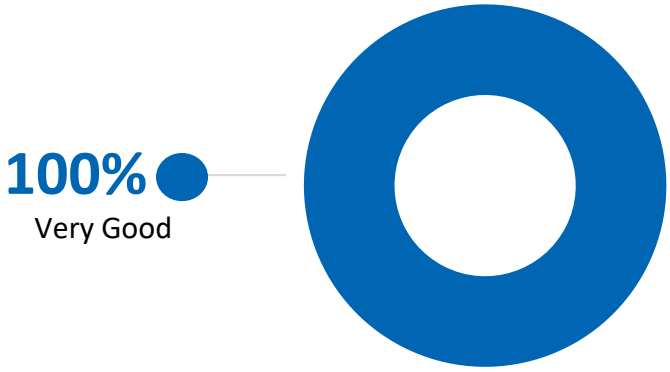
Operations and Maintenance Expenses		
Annual Expenditures	**$1.1M**	**0.4%** of replacement value

Reinvestments of **$38.2 Million** are planned over the next 10 years to maintain the infrastructure in a state of good repair. The infrastructure reinvestments in the Capital Plan are more than forecasted reinvestment needs due to updated information that will be included in the next reporting cycle and COVID-19 pandemic implications on the construction industry resulting in increased project costing.

Operations and Maintenance expenses of approximately **$1.1M** per year or **0.4%** of asset replacement value are incurred to operate Regional Office Complexes and conduct maintenance activities on the assets. These costs are considered as part of whole lifecycle strategies development and will continue to be optimized as asset management information and technology improve.

If the Reinvestments in the Capital Plan are made over 10 years, in 2031…

Regional Office Complexes is forecasted to achieve a rating of: **Very Good**

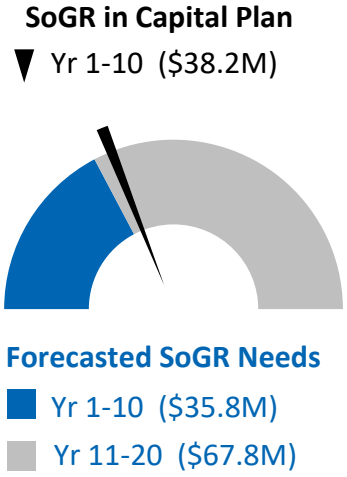


What do the Risk Management Ratings mean?		
●	**Very Good**	Almost all assets in the portfolio are achieving the desired targets
◐	**Good**	Most assets in the portfolio are achieving the desired targets
○	**Fair**	Many assets in the portfolio are not achieving the desired targets
◑	**Poor**	Most assets in the portfolio are not achieving the desired targets
⊗	**Very Poor**	Almost all assets in the portfolio are not achieving the desired targets

10 Year Summary Regional Office Complexes

Service	Current State		10 Year Plan		
	Current Rating (2022)	Replacement Value (2020 $ Millions)	Forecasted Reinvestment Needs (2022 $ Millions)	2022-2031 Capital Plan Reinvestments (2022 $ Millions)	Forecasted Rating (2031)
			SoGR	SoGR	
Regional Office Complexes	○	251.3	35.8	38.2	●

20 Year SoGR Outlook Regional Office Complexes



State of good repair reinvestment needs are forecasted to increase significantly in the next 20 years which is typical as a portfolio of newer facilities ages.

The SoGR reinvestments in the Capital Plan are more than forecasted reinvestment needs due to updated information that will be included in the next reporting cycle and COVID-19 pandemic implications on the construction industry resulting in increased project costing.

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Asset Management Line of Sight

Strategic Plan Vision & Mission | **Area of Focus** | **Service** | **Service Category** | **Asset Class** | **Asset**

Community For Life

Thriving

Water Supply

Lake Based Water Treatment

Water Disinfection

Pump

Mission
Working with You to create a healthy safe and connected community

Area of Focus Outcome
Communities are integrated, safe and complete

Service Outcome
Safe, reliable and high quality drinking water is available to Peel customers

Customer Levels of Service
- Potable water at an appropriate pressure and quality.
- Efficient delivery of water services.

Asset Levels of Service
- Asset Condition = B (Good)
- Sufficient Capacity to meet demand
- Backup Power Generator
- Backup Capacity for Critical Equipment
- Automated monitoring systems in place

Asset Information
- Asset Condition
- Installation Date
- Usage Data
- Replacement Cost
- Rehab Cost
- Asset Lifecycle
- Number/Redundancy
- Size/Capacity
- Suitability

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Reading Guide

Interpreting the Infrastructure Risk Management Ratings

The Infrastructure Risk Management Ratings indicate the state of the assets relative to the target levels of service and the risk they are presenting to service delivery. The ratings consider approved funding that is available for State of Good Repair (SoGR) and Performance Enhancement projects.

The ratings and the accompanying explanations are provided to give a sense of how much excess risk exists within an infrastructure portfolio. Since the rating is measured at a portfolio level, the health and performance of individual assets may vary widely within the larger infrastructure portfolio.

Very Good State – Almost all assets are achieving the desired targets.

Good State – Most assets are achieving the desired targets.

Fair State – Many assets are not achieving the desired targets.

Poor State – Most assets are not achieving the desired targets.

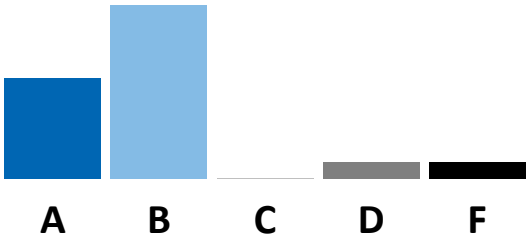
Very Poor State – Almost all assets are not achieving the desired targets.

Interpretation Examples:

In a **Very Good State:** Almost all assets are at or near Asset Level of Service targets and therefore, the risk to services is at a desired or acceptable level.

In a **Poor State:** Most assets are not achieving Asset Level of Service targets and therefore the risk to services is significantly higher than desired.

Interpreting the Condition Grades



This indicator breaks down the distribution of asset condition across a standardized grading system (A-F). The Condition (SoGR) scores only represent the physical heath of the assets and unlike the Risk Management Ratings, do not consider currently approved funding.

Asset condition is graded based on combination of asset age, expected life, condition assessment data, and current life cycle strategies as is appropriate for each type of asset.

Most assets have Level of Service targets which should keep them 'in a good sate of repair' (B) or better, though some assets have lower targets which allow their condition to deteriorate further, provided that the customer level of service is not impacted and that it lowers the total cost providing the service. Since different assets have different targets, this indictor does not indicate the level of risk to services which is illustrated by the Infrastructure Risk Management Rating.

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 repair or replacement

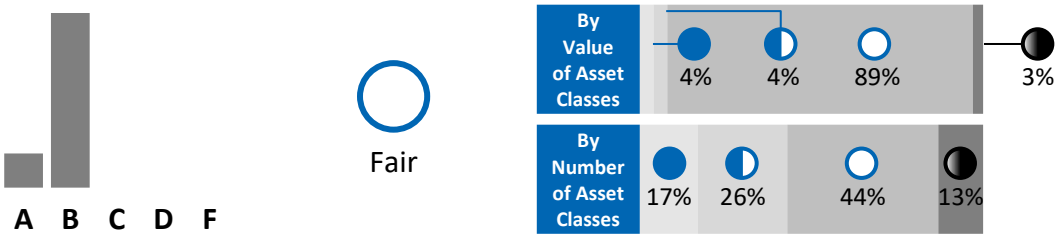
Comparing Risk Management Ratings and Condition Grades

Condition Grades and **Risk Ratings** are especially powerful metrics when viewed together. One metric alone does not tell the whole story.

Condition Grades	Risk Rating	Distribution of Portfolio Risk Ratings

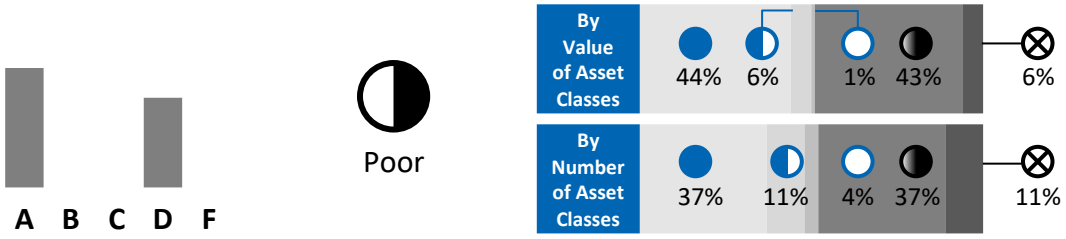
An asset portfolio with assets which have **critical defects** in their condition may be **Very Good** in terms of risk if council has already approved funding to address the condition of the assets.

Condition Grades	Risk Rating	Further Breakdown of Risk Ratings



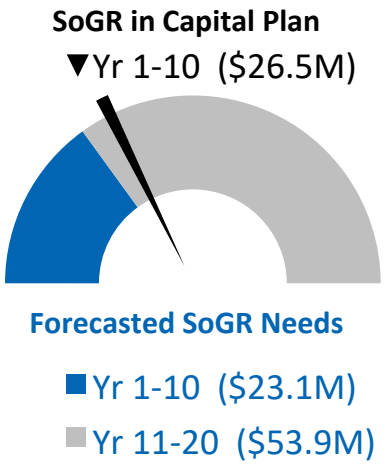
An asset portfolio with all assets in a **good state of repair** may be **Fair** in terms of risk if there are performance issues for which Council has not approved funding to address, such as a lack of backup capacity or failure to meet accessability requirements.

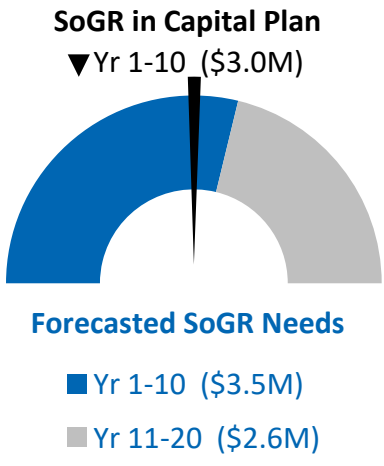
Condition Grades	Risk Rating	Breakdown of Portfolio Risk Ratings



An asset portfolio with assets which have **critical defects** in their condition may be **Poor** in terms of risk if there are condition and/or performance issues for which there is no approved funding to address.

Interpreting the SoGR Capital Reinvestment Outlook





Increasing Forecasted Needs 10-year Capital Plan is Above Forecasted Needs	Decreasing Forecasted Needs 10-year Capital Plan is Below Forecasted Needs

This indicator provides a 20-year perspective of infrastructure investment needs. The intent is to show the general reinvestment requirements beyond the 10-year capital plan and aid decision-makers to assess future infrastructure trends and related resourcing requirements. This could include increasing or decreasing requirements for financing, maintenance and operations, internal project management staff, or external suppliers and contractors.

The black needle indicates how the planned reinvestments in the 10-year Capital Plan align with the forecasted reinvestment needs. A difference does not mean anything is wrong. The planned reinvestments do not always align with the forecasted needs. There can be good reasons for this, such as:

- new information from studies and condition assessments have become available
- there have been increases or decreases in asset costs
- there have been recent Council decisions or changes in regulations which need to be accounted for
- investments in assets are being strategically delayed or advanced for various reasons including:
    - to smooth resourcing needs over the longer term
    - to align projects internally or with external parties
    - to avoid reinvestments in assets which will be decommissioned

The Enterprise Asset Management Strategy

The Enterprise Asset Management Strategy defines how the Asset Management Policy is implemented. The Strategy outlines how infrastructure is assessed and how infrastructure needs are identified and prioritized in a consistent way across the entire organization. The Enterprise Asset Management Strategy is made up of four sub-strategies:

Level of Service Strategy

The Level of Service Strategy links an assets' condition and performance to the level of service it provides to the customer. Asset levels of service targets are set to enable the delivery of service outcomes the public is expecting to receive. The Asset Levels of Service are approved by Council under the Asset Management Policy.

Risk Management Strategy

The Risk Management Strategy supports informed decisions across a very complex and diverse portfolio of assets. Asset risk is directly related to whether an asset meets level of service targets. Risk helps to prioritize infrastructure investments and maximize return on investments. When a service is exposed to asset related risk beyond the tolerances of Council, the assets generating the high-level of risk become a priority for infrastructure investments.

Lifecycle Management Strategy

The Lifecycle Management Strategy provides a means to forecast both how an asset will measure up against level of service targets and future asset investment needs. As assets age their health deteriorates and their ability to meet level of service targets decreases. The amount of risk to the service delivery is directly related to the degree to which assets don't meet level of service targets. Asset investments are used to improve the health or replace an asset. Asset life cycles are unique to each type of asset and include replacement and refurbishment strategies. Replacement strategies identify the optimal time to replace an asset. Refurbishment strategies prolong the functional lifespan of an asset. Both replacement and refurbishment strategies maximize the Region's return on asset investments. Life cycles allow the Region to forecast risk and investment needs.

Asset Replacement Values

Asset Replacement values are required as part of asset lifecycles. Replacement values are estimates of the realistic cost to replace an asset at current day standards. Asset life cycles require asset replacement values to forecast asset investment needs.

Corporate Reporting on Asset Management

The Reporting Strategy defines the requirements of Corporate level reporting which is undertaken annually to give an organization wide perspective on the Region of Peel's infrastructure needs and priorities to enable better, more informed strategic planning and decision-making.

Levels of Service

Defined Levels of Service are an integral part of the Region of Peel's Enterprise Asset Management Strategy. Levels of Service allow for the assessment of both financial requirements and risk. The Region's Enterprise Asset Management Strategy uses two tiers of Levels of Service:

Customer Levels of Service

Customer Levels of Service (CLOS) describe how a service is expected to be received by the customer and sets non-technical service targets. The Region considers factors including health and safety, adequacy, quantity, quality, and other social, financial, and environmental factors when defining CLOS.

Asset Levels of Service

Asset Levels of Service (ALOS) are specific and measurable. The Region sets ALOS targets at levels which mitigate the risk of the Region not delivering on the CLOS targets. Some ALOS are discretionary and can be adjusted to suit Council's risk tolerance. Other ALOS are regulatory requirements. All ALOS are endorsed by Regional Council under Peel's Asset Management Policy. The level of risk to services is determined according to the degree to which the assets are not meeting desired ALOS targets. The Region's Enterprise Asset Management Strategy utilizes two types of Asset Levels of Service:

*Asset **Condition** Levels of Service*

Condition Levels of Service measure the physical "health" of the assets. Measures on the condition of the asset can include pipe breaks, pavement wear, roof leaks, foundation cracks, equipment malfunctions and failures. The Condition Levels of Service can be forecasted using lifecycle models. Capital projects to improve the condition of the assets generally involve major rehabilitation or replacement of the assets.

*Asset **Performance** Levels of Service*

Performance Levels of Service measure the "suitability" of the assets. They assess the assets' or asset systems' ability to provide sufficient quality and quantity of service and/or have adequate capacity to reasonably protect against external risks to services. Performance Levels of Service can include ensuring adequate pipe capacities, acceptable heating and cooling of building units, adequate back-up capacity in the event of primary system failures and adequate measures to protect the environment. Capital projects to improve the performance of an asset or system can include replacing and upgrading an old asset with more modern technology, reconfiguring assets, or adding additional assets to the system.

Risk Management

Finding the balance between ensuring that the Region's infrastructure is in a state to support the Region's desired Service Outcomes and doing so at the least possible cost to the residents of Peel is about managing risk. The Region could try to maintain all assets in as good as new condition, but that would be financially unrealistic for the residents of Peel. At the other extreme, the Region could stop reinvesting in the infrastructure, but then the Region would not be able to provide the services that residents rely on. Risk management is the tool to find the balance between these extremes.

The risk management approach looks at infrastructure related threats to the Region's Services and assesses the level of risk using consequence and likelihood.

Consequence is the impact that a potential threat could have on the Region's goals. Consequence is assessed using a standardized scoring guide on a scale from 'Insignificant' to 'Severe' and looks at potential:

- Strategic and long-term impacts to the community
- Corporate image and reputational impacts to the Region
- Environment impacts
- Health and safety impacts to employees and the public
- Third party impacts
- Operational impacts and the continuity of service
- Financial impacts to the Region

Likelihood is the probability that the consequences of a potential threat will be experienced. Likelihood is assessed using a standardized scoring guide on a scale from 'Rare' to 'Certain'. The asset levels of service reduce the likelihood of potential threats to the Region's goals to within council's risk tolerance.

The Enterprise Asset Management Strategy uses the risk-management-based approach to:

- Identify the assets that are putting the Region's service outcomes and goals at undue risk because of condition and performance deficiencies as measured by the asset level of service targets.
- Prioritize asset reinvestments to minimize the risk to service from potential asset failures and impaired asset performance.

Lifecycles

Defined asset lifecycles allow for the forecasting of asset related risk to service and the capital requirements of rehabilitations and replacements. They are also used to estimate the current condition of assets where condition inspections are not possible or current condition data is not available.

Lifecycles are calibrated to specific types of assets and are extensively tested and validated with program staff to ensure they represent current best practices and are aligned with the risk models. Lifecycles include strategies for the major rehabilitation and replacement of assets. They are developed with planned maintenance practices in mind. The lifecycles assume that the programs are actively managing the assets between treatments, by undertaking the planned maintenance activities. The lifecycles are calibrated with actual asset data, and changes in maintenance practices are reflected in the assumptions. The lifecycle assumptions are reviewed annually, and the lifecycles are re-calibrated as needed to consider new practices, changing technologies, and new asset information.

There are four broad types of lifecycle models used:

No Deterioration: This model is used when a measure is not expected to change over time without intervention. Performance levels of service and some condition levels of service are static measures. This model may drive a current need but will never forecast a future need.

Estimated Service Life (ESL): This model is used when there is insufficient data to develop lifecycle curves for an asset class, or there is no cost benefit to do so. ESL models can include rehabilitations which extend the asset life at defined trigger points. Assets are replaced when they reach the end of life.

Lifecycle Curve: This model is used when sufficient data, in house knowledge, or industry knowledge exists to plot the change of an ALOS over time. Lifecycle Curve Models can include rehabilitations which improve the level of service of an asset. Assets are replaced when either they reach a defined ALOS target or reach a defined end of service life.

Forward Works: This model is used for facilities. Detailed Building Condition Assessments (BCAs) are used to forecast a Facility Condition Index (FCI). Rehabilitations occur when the FCI passes a trigger point defined by the ALOS.

All lifecycle models require asset class specific data to run. Asset data is evaluated and updated annually and includes the following data at a minimum:

- Asset ID and/or Name;
- Asset condition, installation data, Estimate Service Life, and/or Forward Works Plan;
- Asset Replacement and Rehabilitation costs; and
- Asset specific attributes (i.e. material type, size, location etc.)

Asset Replacement Values

The asset replacement value is the cost that would be incurred to replace the capital asset in its current configuration based on market and industry prices today. A variety of cost estimation approaches are applied to the asset inventory to derive the replacement values depending on the availability of data.

Inflation

Asset costs are required to be represented in current and future values. Where current infrastructure costs are not available inflation is applied to historical costs.

Inflation rates from Stats Canada are used to bring the assets replacement values to current dollars. Forecasted inflation rates are used to project replacement and rehabilitation costs for long-term reserve sustainability modelling according to Region of Peel standards.

Corporate Reporting

Corporate reporting provides an organization-wide perspective on the Region of Peel's infrastructure needs. This reporting helps decision-makers prioritize infrastructure reinvestment and enables better, more informed strategic planning and decision-making. Varying levels of reporting are provided to different stakeholder groups to best support the decisions that they need to make.

Detailed reporting is provided to asset managers throughout the Region to support the development of the Capital Plan.

Organization wide executive asset management reporting is provided to the senior leadership to support strategic decision-making.

Service focused reporting is provided to Regional Council to support Council decisions, meet current and future regulatory requirements, and to instill public confidence in the Region as stewards of the infrastructure. This reporting ensures that the public is aware of the state of the Region's infrastructure and how any associated risks are being managed.

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Water Supply — Asset Levels of Service

Asset	Level of Service	What Does It Mean?	Type
Intake	Maintain Equipment at a Condition Rating = B (Good)	Replace assets when they are no longer in good condition	SoGR
	Backup capacity for all critical equipment (electrical and mechanical). Provide sufficient backup pump capacity.	Spare/excess capacity must be present to continue to treat enough water to meet demand, while addressing an unplanned critical equipment failure.	Performance
	Backup capacity for all critical equipment (electrical and mechanical): Provide sufficient redundant screen capacity. Able to meet average day capacity with largest unit out of service.	Spare/excess capacity must be present to continue to treat enough water to meet demand, while addressing an unplanned critical equipment failure.	Performance
	Secondary intake gate	A secondary intake is needed to provide redundancy and allow for maintenance on the intake system.	Performance
	Improved protection of sampling and chemical lines	To protect sampling lines that deliver chemicals to the intake system. Chlorination at the intake is needed to prevent the accumulation of zebra mussels, which can cause clogging of screens and equipment damage.	Performance
	Backup capacity for intake	A secondary intake is needed to provide redundancy and allow for maintenance on the intake system.	Performance
	Provide Standby Power	Enough Standby Power to operate for 36 hours without electricity	Performance
	Provide redundant power supply	Two power feed lines into the plant, to enhance resiliency to power failure	Performance

Water Supply — Asset Levels of Service

Asset	Level of Service	What Does It Mean?	Type
	Maintain Equipment at a Condition Rating = B (Good)	Replace assets when they are no longer in good condition	SoGR
	Security Systems in place and 24/7 monitoring	Monitor activity within the plant	Performance
	Backup capacity for all critical equipment (electrical and mechanical): provide sufficient redundant treatment capacity. Plant operating capacity not exceeding 95% of total rated capacity plus reasonable back up capacity for all critical treatment process.	Spare/excess capacity must be present to continue to treat enough water to meet demand, while addressing an unplanned critical equipment failure. Plant capacity utilization must not greater than 95%. If plant operating demands exceed 95%, a plant expansion may be needed.	Performance
Pre-treatment	Provide capacity and technology to produce water of suitable quality: provide sufficient pre-treatment system capacity to convert raw water to acceptable levels for efficient treatment. Plant operating capacity not exceeding 95% of total rated capacity plus reasonable back up capacity for all critical treatment process.	Spare/excess capacity must be present to continue to treat enough water to meet demand, while addressing an unplanned critical equipment failure. Plant capacity utilization must not greater than 95%. If plant operating demands exceed 95%, a plant expansion may be needed.	Performance
	Provide Standby Power	Enough Standby Power to operate for 36 hours without electricity	Performance
	Provide redundant power supply	Two power feed lines into the plant, to enhance resiliency to power failure	Performance
	Maintain Equipment at a Condition Rating = B (Good)	Replace assets when they are no longer in good condition	SoGR
Water Disinfection	Backup capacity for all critical equipment (electrical and mechanical)	Spare/excess capacity must be present to continue to treat enough water to meet demand, while addressing a critical equipment failure.	Performance

Water Supply — Asset Levels of Service

Asset	Level of Service	What Does It Mean?	Type
Water Disinfection	Provide Standby Power	Enough Standby Power to operate for 36 hours without electricity	Performance
	Provide redundant power supply	Two power feed lines into the plant, to enhance resiliency to power failure	Performance
	Provide capacity and technology to produce water of suitable quality	Plant capacity utilization must not greater than 95%. If plant operating demands exceed 95%, a plant expansion may be needed.	Performance
	Automated monitoring systems in place	Monitor activity within the plant	Performance
Filtration	Maintain Equipment at a Condition Rating = B (Good)	Replace assets when they are no longer in good condition	SoGR
	Provide capacity and technology to produce water of suitable quality	Plant capacity utilization must not greater than 95%. If plant operating demands exceed 95%, a plant expansion may be needed.	Performance
	Backup capacity for all critical equipment (electrical and mechanical)	Spare/excess capacity must be present to continue to treat enough water to meet demand, while addressing a critical equipment failure.	Performance
	Provide Standby Power	Enough Standby Power to operate for 36 hours without electricity	Performance
	Provide redundant power supply	Two power feed lines into the plant, to enhance resiliency to power failure	Performance
	Automated monitoring systems in place	Monitor activity within the plant	Performance
	Low turbidity water for backwashing	Provision of enough clear water to allow for backwashing (cleaning) of filtering media	Performance
	Sufficient backwash water	Provision of enough clear water to allow for backwashing (cleaning) of filtering media	Performance

Water Supply — Asset Levels of Service

Asset	Level of Service	What Does It Mean?	Type
Treated Water Storage	Reservoir Condition Score = B (2.5)	Maintain Plant Reservoir in Good Condition (as per Reservoir Score Matrix)	SoGR
	Reservoir Performance Score = B (2.5)	Reservoir to meet safety, hydraulic and security standards	Performance
	Provide sufficient on-site storage capacity	Spare/excess capacity must be present to continue to store enough water to meet demand and maintain system pressure demands	Performance
	Backup capacity for all critical equipment	Plant can continue to operate with the loss of a reservoir cell	Performance
Chemical Systems	Maintain Equipment at a Condition Rating = B (Good)	Replace assets when they are no longer in good condition	SoGR
	Backup capacity for all critical equipment (electrical and mechanical)	Spare/excess capacity must be present to continue to treat enough water to meet demand, while addressing a critical equipment failure.	Performance
	Provide capacity and technology to produce water of suitable quality	Plant capacity utilization must not greater than 95%. If plant operating demands exceed 95%, a plant expansion may be needed.	Performance
	Provide Standby Power	Enough Standby Power to operate for 36 hours without electricity	Performance
	Provide redundant power supply	Two power feed lines into the plant, to enhance resiliency to power failure	Performance
High Lift Pumps	Maintain Equipment at a Condition Rating = B (Good)	Replace assets when they are no longer in good condition	SoGR
	Backup capacity for all critical equipment (electrical and mechanical)	Spare/excess capacity must be present to continue to treat enough water to meet demand, while addressing a critical equipment failure.	Performance

Water Supply **Asset Levels of Service**

Asset	Level of Service	What Does It Mean?	Type
High Lift Pumps	Provide Standby Power	Enough Standby Power to operate for 36 hours without electricity	Performance
	Provide redundant power supply	Two power feed lines into the plant, to enhance resiliency to power failure	Performance
	Provide adequate pressure during maximum day demands periods	Provide sufficient system capacity to maintain acceptable pressure within the water distribution system	Performance
Plant Wide Support Systems	Maintain Equipment at a Condition Rating = B (Good)	Replace assets when they are no longer in good condition	SoGR
	Backup capacity for all critical equipment (electrical and mechanical)	Spare/excess capacity must be present to continue to treat enough water to meet demand, while addressing a critical equipment failure.	Performance
Water Treatment Automation Systems (SCADA)	Maintain Equipment at a Condition Rating = B (Good)	Replace assets when they are no longer in good condition	SoGR
	Provision of redundant network components (WAN)	Backup Network Components to prevent loss of connection	Performance
	Automatic redundant infrastructure	Backup for critical SCADA components	Performance
	Provision of redundant network components (WAN)	Backup SCADA servers in case of server failure	Performance
	Replace hardware before obsolescence	Replace hardware before it becomes less efficient/ not compatible with systems	Performance
	Provide Standby Power (UPS)	Enough Standby Power to operate for 36 hours without electricity	Performance
	Provide redundant power supply	Two power feeds to the SCADA network components	Performance
	Physical security on SCADA assets (Lock-ins & Block-outs)	Network is physically secured to prevent unauthorized access	Performance

Water Supply — Asset Levels of Service

Asset	Level of Service	What Does It Mean?	Type
Water Treatment Automation Systems (SCADA)	Server and switch configuration to block and detect unauthorized access	Network Security to prevent unauthorized access	Performance
Wells	Maintain Equipment at a Condition Rating = B (Good)	Replace assets when they are no longer in good condition	SoGR
	Must meet design capacity	Well can meet water treatment demand	Performance
Well Pumps	Maintain Equipment at a Condition Rating = B (Good)	Replace assets when they are no longer in good condition	SoGR
	Must meet design capacity	Well can meet water treatment demand	Performance
	Provide sufficient capacity to ensure a minimum service flow and pressure of 50 psi during maximum day demands periods	Provide sufficient system capacity to maintain acceptable pressure and flow within the water distribution system	Performance
	Provide back up pump capacity	Spare/excess capacity must be present to continue to treat enough water to meet demand, while addressing a critical equipment failure.	Performance
Well Disinfection	Maintain Equipment at a Condition Rating = B (Good)	Replace assets when they are no longer in good condition	SoGR
	Provide backup capacity for all critical process components	Spare/excess capacity must be present to continue to treat enough water to meet demand, while addressing a critical equipment failure.	Performance
Wells Power Supply	Maintain Equipment at a Condition Rating = B (Good)	Replace assets when they are no longer in good condition	SoGR
	Standby Power for critical systems	Enough Standby Power to operate for 24 hours without electricity, with a seamless power transfer.	Performance

Water Supply — Asset Levels of Service

Asset	Level of Service	What Does It Mean?	Type
Groundwater Booster Pumps	Maintain Equipment at a Condition Rating = B (Good)	Replace assets when they are no longer in good condition	SoGR
	Back up pump capacity	Spare/excess capacity must be present to continue to treat enough water to meet demand, while addressing a critical equipment failure.	Performance
	Maintain a minimum pressure of 50 psi during maximum day demand periods	Provide sufficient system capacity to maintain acceptable pressure within the water distribution system	Performance
	Standby Power for critical systems	Enough Standby Power to operate for 36 hours without electricity	Performance
Groundwater Water Storage	Reservoir Condition Score = B (2.5)	Maintain Elevated Tank in Good Condition (as per Reservoir Score Matrix)	SoGR
	Reservoir Performance Score = B (2.5)	Maintain Reservoirs and Standpipes to meet safety, hydraulic and security standards	Performance
Ground Water Systems Automation Systems (SCADA)	Maintain Equipment at a Condition Rating = B (Good)	Replace assets when they are no longer in good condition	SoGR
	Provision of redundant network components (WAN)	Backup Network Components to prevent loss of connection	Performance
	Automatic redundant infrastructure	Backup for critical SCADA components	Performance
	Provision of redundant network components	Backup SCADA servers in case of server failure	Performance
	Replace hardware before obsolescence	Replace hardware before it becomes less efficient/ not compatible with systems	Performance
	Provide Standby Power	Enough Standby Power to operate for 36 hours without electricity	Performance
	Provide redundant power supply	Two power feeds to the SCADA network components	Performance

Water Supply **Asset Levels of Service**

Asset	Level of Service	What Does It Mean?	Type
Ground Water Systems Automation Systems (SCADA)	Physical security devices	Network is physically secured to prevent unauthorized access	Performance
	Server and switch configuration to block and detect unauthorized access	Network Security to prevent unauthorized access	Performance
Tier I Distribution Mains	Maximum 2 breaks per segment of pipe	Replace watermain segment when it is anticipated to reach 2 breaks	SoGR
	Fire Flow Metric (Hydraulic Performance from DSS=1)	Provide enough water within the system to meet fire fighting needs	Performance
	Maintain a minimum pressure of 40 psi during peak hour demand periods	Provide sufficient system capacity to maintain acceptable pressure within the water distribution system	Performance
Tier II Distribution Mains	Maximum 1 break per segment of pipe	Replace watermain segment when it is anticipated to reach 1 break	SoGR
	Fire Flow Metric (Hydraulic Performance from DSS=1)	Provide enough water within the system to meet fire fighting needs	Performance
	Maintain a minimum pressure of 40 psi during peak hour demand periods	Provide sufficient system capacity to maintain acceptable pressure within the water distribution system	Performance
Tier III Distribution Mains	Maximum 0 breaks per segment of pipe	Replace watermain segment before it is anticipated to break	SoGR
	Fire Flow Metric (Hydraulic Performance from DSS=1)	Provide enough water within the system to meet fire fighting needs	Performance
	Maintain a minimum pressure of 40 psi during peak hour demand periods	Provide sufficient system capacity to maintain acceptable pressure within the water distribution system	Performance
Tier II Feeder Mains	Maximum 1 break per segment of pipe	Replace watermain segment when it is anticipated to reach 1 break	SoGR

Water Supply **Asset Levels of Service**

Asset	Level of Service	What Does It Mean?	Type
Tier II Feeder Mains	Provide sufficient system capacity to meet average day demand during a failure event.	Provide sufficient system capacity to maintain acceptable pressure within the water distribution system	Performance
Tier III Feeder Mains	No Breaks	Replace before it is anticipated to break. Refining of TLOS is pending further condition assessment studies	SoGR
	Provide sufficient system capacity to meet average day demand during a failure event.	Provide sufficient system capacity to maintain acceptable pressure within the water distribution system	Performance
Tier II Transmission Mains	No Breaks	Replace before it is anticipated to break. Refining of TLOS is pending further condition assessment studies	SoGR
	Provide sufficient system capacity to meet average day demand during a failure event.	Provide sufficient system capacity to maintain acceptable pressure within the water distribution system	Performance
Tier III Transmission Mains	No Breaks	Replace before it is anticipated to break. Refining of TLOS is pending further condition assessment studies	SoGR
	Provide sufficient system capacity to meet average day demand during a failure event.	Provide sufficient system capacity to maintain acceptable pressure within the water distribution system	Performance
Water Pumping Station	Maintain Equipment at a Condition Rating = B (Good)	Replace assets when they are no longer in good condition	SoGR
	Back up pump capacity	Spare/excess capacity must be present to continue to treat enough water to meet demand, while addressing a critical equipment failure.	Performance
	Maintain a minimum pressure of 50 psi and Fire Flow during maximum day demand periods	Provide sufficient system capacity to maintain acceptable pressure and flow within the water distribution system	Performance

Water Supply — Asset Levels of Service

Asset	Level of Service	What Does It Mean?	Type
Water Pumping Station	Standby Power for critical systems	Enough Standby Power to operate for 36 hours without electricity	Performance
	Secondary Disinfection System for Rechlorination	Rechlorinate water within reservoir if needed	Performance
Elevated Tanks	Reservoir Condition Score = B (2.5)	Maintain Elevated Tank in Good Condition (as per Reservoir Score Matrix)	SoGR
	Reservoir Performance Score = B (2.5)	Elevated Tank to meet safety, hydraulic and security standards	Performance
Reservoirs	Reservoir Condition Score = B (2.5)	Maintain Reservoir in Good Condition (as per Reservoir Score Matrix)	SoGR
	Reservoir Performance Score = B (2.5)	Reservoir to meet safety, hydraulic and security standards	Performance
Water Pump Station Automation Systems (SCADA)	Maintain Equipment at a Condition Rating = B (Good)	Replace assets when they are no longer in good condition	SoGR
	Provision of redundant network components (WAN)	Backup Network Components to prevent loss of connection	Performance
	Automatic redundant infrastructure	Backup for critical SCADA components	Performance
	Provision of redundant network components	Backup SCADA servers in case of server failure	Performance
	Replace hardware before obsolescence	Replace hardware before it becomes less efficient/ not compatible with systems	Performance
	Provide Standby Power	Enough Standby Power to operate for 36 hours without electricity	Performance
	Provide redundant power supply	Two power feeds to the SCADA network components	Performance
	Physical security devices	Network is physically secured to prevent unauthorized access	Performance
	Server and switch configuration to block and detect unauthorized access	Network Security to prevent unauthorized access	Performance

Water Supply **Asset Levels of Service**

Asset	Level of Service	What Does It Mean?	Type
Water Administrative Offices	Building Condition = B (Good)	Maintain Building in an acceptable Condition (as per Facility Condition Index)	SoGR
	Building Quality and Relationship to Current Standards = C (Fair)	Building meets current standards and codes (e.g. Fire Code, Building Code)	Performance
	Facility Finishes and Fixtures = C (Fair)	Maintain appropriate interior appearance and curb appeal	Performance
	Capacity and Change Adaptability for Program Requirements = B (Good)	Building has space and room to grow as needed	Performance
	Building Environment and Security = B (Good)	Building and site have appropriate security and built environment to support services	Performance
	Building Amenities for Service Delivery = C (Fair)	Building has appropriate amenities for staff and the public, and can be accessed easily	Performance
	Accessibility Features = C (Fair)	Building meets service accessibility needs	Performance
Water General Storage	Building Condition = B (Good)	Maintain Building in an acceptable Condition (as per Facility Condition Index)	SoGR
	Building Quality and Relationship to Current Standards = C (Fair)	Building meets current standards and codes (e.g. Fire Code, Building Code)	Performance
	Facility Finishes and Fixtures = C (Fair)	Maintain appropriate interior appearance and curb appeal	Performance
	Capacity and Change Adaptability for Program Requirements = C (Fair)	Building has space and room to grow as needed	Performance
	Building Environment and Security = C (Fair)	Building and site have appropriate security and built environment to support services	Performance
	Building Amenities for Service Delivery = C (Fair)	Building has appropriate amenities for staff and the public, and can be accessed easily	Performance

Water Supply **Asset Levels of Service**

Asset	Level of Service	What Does It Mean?	Type
Water General Storage	Accessibility Features = C (Fair)	Building meets service accessibility needs	Performance
Water Heavy Industrial	Building Condition = B (Good)	Maintain Building in an acceptable Condition (as per Facility Condition Index)	SoGR
	Building Quality and Relationship to Current Standards = C (Fair)	Building meets current standards and codes (e.g. Fire Code, Building Code)	Performance
	Facility Finishes and Fixtures = C (Fair)	Maintain appropriate interior appearance and curb appeal	Performance
	Capacity and Change Adaptability for Program Requirements = B (Good)	Building has space and room to grow as needed	Performance
	Building Environment and Security = B (Good)	Building and site have appropriate security and built environment to support services	Performance
	Building Amenities for Service Delivery = C (Fair)	Building has appropriate amenities for staff and the public, and can be accessed easily	Performance
	Accessibility Features = C (Fair)	Building meets service accessibility needs	Performance
Water Medium Industrial	Building Condition = B (Good)	Maintain Building in an acceptable Condition (as per Facility Condition Index)	SoGR
	Building Quality and Relationship to Current Standards = C (Fair)	Building meets current standards and codes (e.g. Fire Code, Building Code)	Performance
	Facility Finishes and Fixtures = C (Fair)	Maintain appropriate interior appearance and curb appeal	Performance
	Capacity and Change Adaptability for Program Requirements = B (Good)	Building has space and room to grow as needed	Performance
	Building Environment and Security = B (Good)	Building and site have appropriate security and built environment to support services	Performance

Water Supply	Asset Levels of Service		
Asset	**Level of Service**	**What Does It Mean?**	**Type**
Water Medium Industrial	Building Amenities for Service Delivery = C (Fair)	Building has appropriate amenities for staff and the public, and is accessed easily	Performance
	Accessibility Features = C (Fair)	Building meets service accessibility needs	Performance
Water Process Support Structures	Building Condition = B (Good)	Maintain Building in an acceptable Condition (as per Facility Condition Index)	SoGR
	Building Quality and Relationship to Current Standards = C (Fair)	Building meets current standards and codes (e.g. Fire Code, Building Code)	Performance
	Facility Finishes and Fixtures = C (Fair)	Maintain appropriate interior appearance and curb appeal	Performance
	Capacity and Change Adaptability for Program Requirements = C (Fair)	Building has space and room to grow as needed	Performance
	Building Environment and Security = B (Good)	Building and site have appropriate security and built environment to support services	Performance
	Building Amenities for Service Delivery = B (Good)	Building has appropriate amenities for staff and the public, and is accessed easily	Performance
	Accessibility Features = C (Fair)	Building meets service accessibility needs	Performance
Water Treatment Facilities Site Elements	Building Site Condition = B (Good)	Maintain site in an acceptable Condition (as per Condition Index)	SoGR
Water Transmission Facilities Site Elements	Building Site Condition = B (Good)	Maintain site in an acceptable Condition (as per Condition Index)	SoGR

Wastewater		**Asset Levels of Service**	
Asset	**Level of Service**	**What Does It Mean?**	**Type**
South Peel - Headworks	Maintain Equipment at a Condition Rating = B (Good)	Replace assets when they are no longer in good condition	SoGR
	Able to provide firm capacity.	Spare/excess capacity must be present to continue to treat sewage, while addressing an unplanned critical equipment failure.	Performance
	Process operating capacity during dry weather flows not to exceed 90% of total capacity.	Plant flow under dry weather condition should not exceed 90% of the total design capacity.	Performance
	Presence of functional Gas detection and HVAC controls system.	Plant has equipment in place to remove and detect the buildup of harmful gases, and meets regulatory requirements	Performance
	Secondary electrical supply and standby power for secondary process equipment.	Enough Standby Power to operate for 36 hours without electricity and secondary power feed	Performance
South Peel - Primary Treatment	Maintain Equipment at a Condition Rating = B (Good)	Replace assets when they are no longer in good condition	SoGR
	Sufficient Hydraulic Capacity to avoid bypass during maximum peaking factor	Plant has enough capacity to prevent overflows of partially treated effluent to the environment	Performance
	Secondary electrical supply and standby power for secondary process equipment.	Enough Standby Power to operate for 36 hours without electricity and secondary power feed	Performance
	Able to provide firm capacity.	Spare/excess capacity must be present to continue to treat sewage, while addressing an unplanned critical equipment failure.	Performance
	Process operating capacity during dry weather flows not to exceed 90% of total capacity.	Plant flow under dry weather condition should not exceed 90% of the total design capacity.	Performance

Wastewater	Asset Levels of Service		
Asset	**Level of Service**	**What Does It Mean?**	**Type**
South Peel - Secondary Treatment	Maintain Equipment at a Condition Rating = B (Good)	Replace assets when they are no longer in good condition	SoGR
	Sufficient Hydraulic Capacity to avoid bypass during maximum peaking factor.	Plant has enough capacity to prevent overflows of partially treated effluent to the environment	Performance
	Secondary electrical supply and standby power for secondary process equipment.	Enough Standby Power to operate for 36 hours without electricity and secondary power feed	Performance
	Able to provide firm capacity.	Spare/excess capacity must be present to continue to treat sewage, while addressing an unplanned critical equipment failure.	Performance
	Process operating capacity during dry weather flows not to exceed 90% of total capacity.	Plant flow under dry weather condition should not exceed 90% of the total design capacity.	Performance
South Peel - Disinfection Systems	Maintain Equipment at a Condition Rating = B (Good)	Replace assets when they are no longer in good condition	SoGR
	Provide reasonable onsite chemical storage. Able to provide firm capacity.	Spare/excess capacity must be present to continue to treat sewage, while addressing an unplanned critical equipment failure.	Performance
	Secondary electrical supply and standby power for secondary process equipment	Enough Standby Power to operate for 36 hours without electricity and secondary power feed	Performance
	Able to provide firm capacity	Spare/excess capacity must be present to continue to treat sewage, while addressing an unplanned critical equipment failure.	Performance
	Disinfection system to operate at peak wet weather flows	Enough disinfection capacity is available to treat increased sewage volumes during significant weather events (e.g. rainstorms). Disinfection must be maintained during overflow conditions.	Performance

Wastewater	**Asset Levels of Service**		
Asset	**Level of Service**	**What Does It Mean?**	**Type**
South Peel - Biosolids Processing	Maintain Equipment at a Condition Rating = B (Good)	Replace assets when they are no longer in good condition	SoGR
	Able to provide firm capacity	Spare/excess capacity must be present to continue to treat sewage, while addressing an unplanned critical equipment failure.	Performance
	Capacity exceeding loading	Plant flow under dry weather condition should not exceed 90% of the total design capacity.	Performance
	Secondary electrical supply and standby power for secondary process equipment	Enough Standby Power to operate for 36 hours without electricity and secondary power feed	Performance
South Peel - Biosolids Disposal	Maintain Equipment at a Condition Rating = B (Good)	Replace assets when they are no longer in good condition	SoGR
	Able to provide firm capacity	Spare/excess capacity must be present to continue to treat sewage, while addressing an unplanned critical equipment failure.	Performance
	Capacity exceeding loading	Plant flow under dry weather condition should not exceed 90% of the total design capacity.	Performance
	Secondary electrical supply and standby power for secondary process equipment	Enough Standby Power to operate for 36 hours without electricity and secondary power feed	Performance
South Peel - Plant Wide Support Systems	Maintain Equipment at a Condition Rating = B (Good)	Replace assets when they are no longer in good condition	SoGR
	Secondary electrical supply and standby power for all critical process and life safety assets.	Enough Standby Power to operate for 36 hours without electricity and secondary power feed	Performance
	Secondary water supply feeds	Enough capacity for potable water	Performance

Wastewater — Asset Levels of Service

Asset	Level of Service	What Does It Mean?	Type
Wastewater Treatment Automation Systems (SCADA)	Maintain Equipment at a Condition Rating = B (Good)	Replace assets when they are no longer in good condition	SoGR
	Provision of redundant network components (WAN)	Backup Network Components to prevent loss of connection	Performance
	Automatic redundant infrastructure	Backup for critical SCADA components	Performance
	Replace hardware before obsolescence	Replace hardware before it becomes less efficient/ not compatible with systems	Performance
	Provide Standby Power	Enough Standby Power to operate for 36 hours without electricity	Performance
	Provide redundant power supply	Two power feeds to the SCADA network components	Performance
	Physical security devices	Network is physically secured to prevent unauthorized access	Performance
	Server configuration to block and detect unauthorized access	Network Security to prevent unauthorized access	Performance
Tier I Collection Sewers	Maintain PACP Condition Grade = Level 3	Replace when sewer is no longer in good condition	SoGR
	No surcharging of pipes in a 5-year rainfall event	Have sufficient excess capacity to prevent sewage overflows during a 5-year storm event	Performance
	Overflows are alarmed and monitored	Alarm to alert staff of overflows	Performance
Tier II Collection Sewers	Maintain PACP Condition Grade = Level 3	Replace when sewer is no longer in good condition	SoGR
	No surcharging of pipes in a 5-year rainfall event	Have sufficient excess capacity to prevent sewage overflows during a 5-year storm event	Performance
	Overflows are alarmed and monitored	Alarm to alert staff of overflows	Performance

Wastewater		**Asset Levels of Service**	
Asset	**Level of Service**	**What Does It Mean?**	**Type**
Tier III Collection Sewers	Maintain PACP Condition Grade = Level 3	Replace when sewer is no longer in good condition	SoGR
	No surcharging of pipes in a 5-year rainfall event	Have sufficient excess capacity to prevent sewage overflows during a 5-year storm event	Performance
	Overflows are alarmed and monitored	Alarm to alert staff of overflows	Performance
Tier II Trunk Sewers	Maintain PACP Condition Grade = Level 3	Replace when sewer is no longer in good condition	SoGR
	No surcharging of pipes in a 5-year rainfall event	Have sewers of sufficient capacity to prevent surcharging	Performance
	Access to sewers	Sewers must be accessible for maintenance	Performance
	Slope Erosion protection around creeks and rivers (geomorphology)	Prevent trunk sewers from being exposed by erosion	Performance
	Overflows are alarmed and monitored	Alarm to alert staff of overflows	Performance
Tier III Trunk Sewers	Maintain PACP Condition Grade = Level 3	Replace when sewer is no longer in good condition	SoGR
	No surcharging of pipes in a 5-year rainfall event	Have sewers of sufficient capacity to prevent surcharging	Performance
	Access to sewers	Sewers must be accessible for maintenance	Performance
	Slope Erosion protection around creeks and rivers (geomorphology)	Prevent trunk sewers from being exposed by erosion	Performance
	Overflows are alarmed and monitored	Alarm to alert staff of overflows	Performance
Odour and Corrosion Control Systems	Maintain Equipment at a Condition Rating = B (Good)	Replace assets when they are no longer in good condition	SoGR
Forcemains	No Breaks	Replace before breaks could occur. Refining of TLOS is pending further condition assessment studies	SoGR

Wastewater **Asset Levels of Service**

Asset	Level of Service	What Does It Mean?	Type
Forcemains	Air relief valves are operational	Reduce likelihood of a pipe failure from internal pressure changes	Performance
Wastewater Tier I Pumping Stations	Maintain Equipment at a Condition Rating = B (Good)	Replace assets when they are no longer in good condition	SoGR
	Overflows are alarmed & monitored	Alarm to alert staff of overflows	Performance
	Overflows are operable	Overflow work to direct spills into designed location	Performance
	Backup capacity for all critical equipment (mechanical): Able to meet peak demands with largest pump out of service.	Spare/excess capacity must be present to continue to treat sewage, while addressing an unplanned critical equipment failure.	Performance
	Provision for a portable generator or sufficient wet well storage to meet ROP design standards and Ministry of the Environment regulations.	Sufficient storage to mitigate the risk of overflows in the event of forcemain failure	Performance
	Required wet well storage as per ROP design standards.	Enough Standby Power to operate without electricity or enough storage to prevent overflows	Performance
Wastewater Tier II Pumping Stations	Maintain Equipment at a Condition Rating = B (Good)	Replace assets when they are no longer in good condition	SoGR
	Overflows are alarmed & monitored	Alarm to alert staff of overflows	Performance
	Overflows are operable	Overflow work to direct spills into designed location	Performance
	Backup capacity for all critical equipment (mechanical): Able to meet peak demands with largest pump out of service.	Spare/excess capacity must be present to continue to treat sewage, while addressing an unplanned critical equipment failure.	Performance

Wastewater		**Asset Levels of Service**	
Asset	**Level of Service**	**What Does It Mean?**	**Type**
Wastewater Tier II Pumping Stations	Required wet well storage according to station Tier as per ROP design standards.	Sufficient storage to mitigate the risk of overflows in the event of forcemain failure	Performance
	Ensure standby power or sufficient wet well storage to meet ROP design standards and Ministry of the Environment regulations.	Enough Standby Power to operate without electricity or enough storage to prevent overflows	Performance
Wastewater Tier III Pumping Stations	Maintain Equipment at a Condition Rating = B (Good)	Replace assets when they are no longer in good condition	SoGR
	Overflows are alarmed & monitored	Alarm to alert staff of overflows	Performance
	Overflows are operable	Overflow work to direct spills into designed location	Performance
	Backup capacity for all critical equipment (mechanical): Able to meet peak demands with largest pump out of service.	Spare/excess capacity must be present to continue to treat sewage, while addressing an unplanned critical equipment failure.	Performance
	Required wet well storage as per ROP design standards.	Sufficient storage to mitigate the risk of overflows in the event of forcemain failure	Performance
	Ensure standby power and sufficient wet well storage to meet ROP design standards and Ministry of the Environment regulations.	Enough Standby Power to operate without electricity or enough storage to prevent overflows	Performance
Wastewater Pump Station Automation Systems (SCADA)	Maintain Equipment at a Condition Rating = B (Good)	Replace assets when they are no longer in good condition	SoGR
	Replace hardware before obsolescence	Replace hardware before it becomes less efficient/ not compatible with systems	Performance
	Provide Standby Power	Enough Standby Power to operate for 36 hours without electricity	Performance
	Provide redundant power supply	Two power feeds to the SCADA network components	Performance

Wastewater		Asset Levels of Service	
Asset	**Level of Service**	**What Does It Mean?**	**Type**
Wastewater Pump Station Automation Systems (SCADA)	Physical security devices	Network is physically secured to prevent unauthorized access	Performance
Wastewater Administrative Offices	Building Condition = B (Good)	Maintain Building in an acceptable Condition (as per Facility Condition Index)	SoGR
	Building Quality and Relationship to Current Standards = C (Fair)	Building meets current standards and codes (e.g. Fire Code, Building Code)	Performance
	Facility Finishes and Fixtures = B (Good)	Maintain appropriate interior appearance and curb appeal	Performance
	Capacity and Change Adaptability for Program Requirements = B (Good)	Building has space and room to grow as needed	Performance
	Building Environment and Security = B (Good)	Building and site have appropriate security and built environment to support services	Performance
	Building Amenities for Service Delivery = B (Good)	Building has appropriate amenities for staff and the public, and can be accessed easily	Performance
	Accessibility Features = B (Good)	Building meets service accessibility needs	Performance
Wastewater General Storage	Building Condition = B (Good)	Maintain Building in an acceptable Condition (as per Facility Condition Index)	SoGR
	Building Quality and Relationship to Current Standards = C (Fair)	Building meets current standards and codes (e.g. Fire Code, Building Code)	Performance
	Facility Finishes and Fixtures = C (Fair)	Maintain appropriate interior appearance and curb appeal	Performance
	Capacity and Change Adaptability for Program Requirements = B (Good)	Building has space and room to grow as needed	Performance
	Building Environment and Security = C (Fair)	Building and site have appropriate security and built environment to support services	Performance

Wastewater — Asset Levels of Service

Asset	Level of Service	What Does It Mean?	Type
Wastewater General Storage	Building Amenities for Service Delivery = C (Fair)	Building has appropriate amenities for staff and the public, and can be accessed easily	Performance
	Accessibility Features = C (Fair)	Building meets service accessibility needs	Performance
Wastewater Heavy Industrial	Building Condition = B (Good)	Maintain Building in an acceptable Condition (as per Facility Condition Index)	SoGR
	Building Quality and Relationship to Current Standards = C (Fair)	Building meets current standards and codes (e.g. Fire Code, Building Code)	Performance
	Facility Finishes and Fixtures = C (Fair)	Maintain appropriate interior appearance and curb appeal	Performance
	Capacity and Change Adaptability for Program Requirements = B (Good)	Building has space and room to grow as needed	Performance
	Building Environment and Security = B (Good)	Building and site have appropriate security and built environment to support services	Performance
	Building Amenities for Service Delivery = C (Fair)	Building has appropriate amenities for staff and the public, and can be accessed easily	Performance
	Accessibility Features = C (Fair)	Building meets service accessibility needs	Performance
Wastewater Tier I and II Pumping Stations	Building Condition = B (Good)	Maintain Building in an acceptable Condition (as per Facility Condition Index)	SoGR
	Building Quality and Relationship to Current Standards = C (Fair)	Building meets current standards and codes (e.g. Fire Code, Building Code)	Performance
	Facility Finishes and Fixtures = C (Fair)	Maintain appropriate interior appearance and curb appeal	Performance
	Capacity and Change Adaptability for Program Requirements = B (Good)	Building has space and room to grow as needed	Performance

Wastewater **Asset Levels of Service**

Asset	Level of Service	What Does It Mean?	Type
Wastewater Tier I and II Pumping Stations	Building Environment and Security = B (Good)	Building and site have appropriate security and built environment to support services	Performance
	Building Amenities for Service Delivery = C (Fair)	Building has appropriate amenities for staff and the public, and can be accessed easily	Performance
	Accessibility Features = C (Fair)	Building meets service accessibility needs	Performance
Wastewater Tier III Pumping Stations	Building Condition = B (Good)	Maintain Building in an acceptable Condition (as per Facility Condition Index)	SoGR
	Building Quality and Relationship to Current Standards = C (Fair)	Building meets current standards and codes (e.g. Fire Code, Building Code)	Performance
	Facility Finishes and Fixtures = C (Fair)	Maintain appropriate interior appearance and curb appeal	Performance
	Capacity and Change Adaptability for Program Requirements = B (Good)	Building has space and room to grow as needed	Performance
	Building Environment and Security = B (Good)	Building and site have appropriate security and built environment to support services	Performance
	Building Amenities for Service Delivery = C (Fair)	Building has appropriate amenities for staff and the public, and can be accessed easily	Performance
	Accessibility Features = C (Fair)	Building meets service accessibility needs	Performance
Wastewater Light Industrial	Building Condition = B (Good)	Maintain Building in an acceptable Condition (as per Facility Condition Index)	SoGR
	Building Quality and Relationship to Current Standards = C (Fair)	Building meets current standards and codes (e.g. Fire Code, Building Code)	Performance
	Facility Finishes and Fixtures = C (Fair)	Maintain appropriate interior appearance and curb appeal	Performance

Wastewater		**Asset Levels of Service**	
Asset	**Level of Service**	**What Does It Mean?**	**Type**
Wastewater Light Industrial	Capacity and Change Adaptability for Program Requirements = B (Good)	Building has space and room to grow as needed	Performance
	Building Environment and Security = B (Good)	Building and site have appropriate security and built environment to support services	Performance
	Building Amenities for Service Delivery = B (Good)	Building has appropriate amenities for staff and the public, and can be accessed easily	Performance
	Accessibility Features = C (Fair)	Building meets service accessibility needs	Performance
Wastewater Process Support Structures	Building Condition = B (Good)	Maintain Building in an acceptable Condition (as per Facility Condition Index)	SoGR
	Building Quality and Relationship to Current Standards = C (Fair)	Building meets current standards and codes (e.g. Fire Code, Building Code)	Performance
	Facility Finishes and Fixtures = C (Fair)	Maintain appropriate interior appearance and curb appeal	Performance
	Capacity and Change Adaptability for Program Requirements = C (Fair)	Building has space and room to grow as needed	Performance
	Building Environment and Security = B (Good)	Building and site have appropriate security and built environment to support services	Performance
	Building Amenities for Service Delivery = B (Good)	Building has appropriate amenities for staff and the public, and can be accessed easily	Performance
	Accessibility Features = C (Fair)	Building meets service accessibility needs	Performance
Wastewater Treatment Facilities Site Elements	Building Site Condition = B (Good)	Maintain site in an acceptable Condition (as per Condition Index)	SoGR

Wastewater — Asset Levels of Service

Asset	Level of Service	What Does It Mean?	Type
Wastewater Collection Facilities Site Elements	Building Site Condition = B (Good)	Maintain site in an acceptable Condition (as per Condition Index)	SoGR

Operations Yards, Fleet and Equipment — Asset Levels of Service

Asset	Level of Service	What Does It Mean?	Type
PW & Corporate Light & Medium Duty Vehicles	Maintain Equipment at a Condition Rating B (Good)	Replace assets when they are no longer in good condition	SoGR
PW & Corporate Heavy-Duty Vehicles & Equipment	Maintain Equipment at a Condition Rating = B (Good)	Replace assets when they are no longer in good condition	SoGR
PW & Corporate Standard (or small) Equipment	Maintain Equipment at a Condition Rating = B (Good)	Replace assets when they are no longer in good condition	SoGR
PW & Corporate Trailers	Maintain Equipment at a Condition Rating = B (Good)	Replace assets when they are no longer in good condition	SoGR
Operations Support Administrative Offices	Building Condition = B (Good)	Maintain Building in an acceptable Condition (as per Facility Condition Index)	SoGR
	Building Quality and Relationship to Current Standards = C (Fair)	Building meets current standards and codes (e.g. Fire Code, Building Code)	Performance
	Facility Finishes and Fixtures = B (Good)	Maintain appropriate interior appearance and curb appeal	Performance
	Capacity and Change Adaptability for Program Requirements = B (Good)	Building has space and room to grow as needed	Performance
	Building Environment and Security = B (Good)	Building and site have appropriate security and built environment to support services	Performance
	Building Amenities for Service Delivery = B (Good)	Building has appropriate amenities for staff and the public, and can be accessed easily	Performance
	Accessibility Features = B (Good)	Building meets service accessibility needs	Performance

Operations Yards, Fleet and Equipment — Asset Levels of Service

Asset	Level of Service	What Does It Mean?	Type
Operations Support General Storage	Building Condition = B (Good)	Maintain Building in an acceptable Condition (as per Facility Condition Index)	SoGR
	Building Quality and Relationship to Current Standards = C (Fair)	Building meets current standards and codes (e.g. Fire Code, Building Code)	Performance
	Facility Finishes and Fixtures = C (Fair)	Maintain appropriate interior appearance and curb appeal	Performance
	Capacity and Change Adaptability for Program Requirements = C (Fair)	Building has space and room to grow as needed	Performance
	Building Environment and Security = C (Fair)	Building and site have appropriate security and built environment to support services	Performance
	Building Amenities for Service Delivery = C (Fair)	Building has appropriate amenities for staff and the public, and can be accessed easily	Performance
	Accessibility Features = C (Fair)	Building meets service accessibility needs	Performance
Operations Support Light Industrial	Building Condition = B (Good)	Maintain Building in an acceptable Condition (as per Facility Condition Index)	SoGR
	Building Quality and Relationship to Current Standards = C (Fair)	Building meets current standards and codes (e.g. Fire Code, Building Code)	Performance
	Facility Finishes and Fixtures = C (Fair)	Maintain appropriate interior appearance and curb appeal	Performance
	Capacity and Change Adaptability for Program Requirements = B (Good)	Building has space and room to grow as needed	Performance
	Building Environment and Security = B (Good)	Building and site have appropriate security and built environment to support services	Performance
	Building Amenities for Service Delivery = B (Good)	Building has appropriate amenities for staff and the public, and can be accessed easily	Performance
	Accessibility Features = C (Fair)	Building meets service accessibility needs	Performance

Operations Yards, Fleet and Equipment — Asset Levels of Service

Asset	Level of Service	What Does It Mean?	Type
Operations Support Ancillary Storage	Building Condition = B (Good)	Maintain Building in an acceptable Condition (as per Facility Condition Index)	SoGR
	Building Quality and Relationship to Current Standards = C (Fair)	Building meets current standards and codes (e.g. Fire Code, Building Code)	Performance
	Facility Finishes and Fixtures = D (Poor)	Maintain appropriate interior appearance and curb appeal	Performance
	Capacity and Change Adaptability for Program Requirements = B (Good)	Building has space and room to grow as needed	Performance
	Building Environment and Security = B (Good)	Building and site have appropriate security and built environment to support services	Performance
	Building Amenities for Service Delivery = B (Good)	Building has appropriate amenities for staff and the public, and can be accessed easily	Performance
	Accessibility Features = C (Fair)	Building meets service accessibility needs	Performance
Operations Support Facilities Site Elements	Building Site Condition = C (Fair)	Maintain site in an acceptable Condition (as per Condition Index)	SoGR
Operations Support Fuel Islands	Facility Condition Index (FCI) = B	Poor Building and Property Condition	SoGR
	Building Quality and Relationship to Current Standards = C (Fair)	Building meets current standards and codes (e.g. Fire Code, Building Code)	Performance
	Environmental Sustainability = A -F	Poor Environmental Sustainability	Performance
	Facility Finishes and Fixtures = C (Fair)	Maintain appropriate interior appearance and curb appeal	Performance
	Capacity and Change Adaptability for Program Requirements = C (Fair)	Building has space and room to grow as needed	Performance
	Building Environment and Security = C (Fair)	Building and site have appropriate security and built environment to support services	Performance

Operations Yards, Fleet and Equipment — Asset Levels of Service

Asset	Level of Service	What Does It Mean?	Type
Operations Support Fuel Islands	Building Amenities for Service Delivery = C (Fair)	Unavailable and/or Inadequate Building Amenities for Service Delivery	Performance

Heritage, Arts and Culture — Asset Levels of Service

Asset	Level of Service	What Does It Mean?	Type
PAMA Facilities	Building Condition = B (Good)	Maintain Building in an acceptable Condition (as per Facility Condition Index)	SoGR
	Building Quality and Relationship to Current Standards = C (Fair)	Building meets current standards and codes (e.g. Fire Code, Building Code)	Performance
	Facility Finishes and Fixtures = B (Good)	Maintain appropriate interior appearance and curb appeal	Performance
	Capacity and Change Adaptability for Program Requirements = B (Good)	Building has space and room to grow as needed	Performance
	Building Environment and Security = B (Good)	Building and site have appropriate security and built environment to support services	Performance
	Building Amenities for Service Delivery = B (Good)	Building has appropriate amenities for staff and the public, and can be accessed easily	Performance
	Accessibility Features = B (Good)	Building meets service accessibility needs	Performance
PAMA Site Elements	Building Site Condition = B (Good)	Maintain Building Site in an acceptable Condition (as per Condition Index)	SoGR

Waste — Asset Levels of Service

Asset	Level of Service	What Does It Mean?	Type
Material Recovery Equipment	Maintain Equipment at a Condition Rating = B (Good)	Replace assets when they are no longer in good condition	SoGR
	Redundancy on most critical equipment.	Plant can still operate if some of the equipment fails	Performance
	2 days on-site material storage capacity on tipping floor	To accommodate temporary loss of processing capacity	Performance
	Standby Power	Some Standby power to operate if electricity is lost	Performance
	Achievement of design throughput and market specifications for sorted materials	Must have enough equipment and right configuration to produce materials which meet market specifications	Performance
Transfer Stations	Maintain Equipment at a Condition Rating = B (Good)	Replace assets when they are no longer in good condition	SoGR
	Redundancy on critical equipment	Plant can still operate if some of the equipment fails	Performance
	2-4 days storage requirements on tipping floor	To accommodate temporary storage of materials	Performance
	Standby Power	Some Standby power to operate if electricity is lost	Performance
Composting and Curing	Maintain Equipment at a Condition Rating = B (Good)	Replace assets when they are no longer in good condition	SoGR
	Redundancy - modular box system	Plant can still operate if some of the equipment fails	Performance
CRCs	Maintain Equipment at a Condition Rating = B (Good)	Replace assets when they are no longer in good condition	SoGR
	On-site storage in Transtors and bins (1 day)	To accommodate temporary storage of materials	Performance
Pumping and Treatment Systems	Maintain Equipment at a Condition Rating = B (Good)	Replace assets when they are no longer in good condition	SoGR
	Backup capacity for all critical equipment (mechanical)	Can continue to operate if largest piece of equipment fails	Performance
	Overflows are operable	Overflow work to direct spills into designed location	Performance

Waste — Asset Levels of Service

Asset	Level of Service	What Does It Mean?	Type
Pumping and Treatment Systems	Standby Power meets MECP (Ministry of Environment, Conservation and Parks) guidelines	Standby power to operate if electricity is lost	Performance
Gas Collection System	Maintain Equipment at a Condition Rating = B (Good)	Replace assets when they are no longer in good condition	SoGR
	Standby Power	Standby power to operate if electricity is lost	Performance
	Automatic redundant infrastructure	Backup for critical SCADA components	Performance
Gas Collection Automation Systems (SCADA)	Maintain Equipment at a Condition Rating = B (Good)	Replace assets when they are no longer in good condition	SoGR
	Provision of redundant network components (WAN)	Backup Network Components to prevent loss of connection	Performance
	Automatic redundant infrastructure	Backup for critical SCADA components	Performance
	Provision of redundant network components	Backup SCADA servers in case of server failure	Performance
	Replace hardware before obsolescence	Replace hardware before it becomes less efficient/ not compatible with systems	Performance
	Provide Standby Power	Enough Standby Power to operate for 36 hours without electricity	Performance
	Provide redundant power supply	Two power feeds to the SCADA network components	Performance
	Physical security devices	Network is physically secured to prevent unauthorized access	Performance
	Server and switch configuration to block and detect unauthorized access	Network Security to prevent unauthorized access	Performance
Curbside Collection Carts	Maintain Equipment at a Condition Rating = B (Good)	Replace assets when they are no longer in good condition	SoGR
	Sufficient redundancy (spares) to meet demand	Spares must be present to meet demand in the event of an asset failure	Performance

Waste — Asset Levels of Service

Asset	Level of Service	What Does It Mean?	Type
Multi-Residential Collection Carts	Maintain Equipment at a Condition Rating = B (Good)	Replace assets when they are no longer in good condition	SoGR
	Sufficient redundancy (spares) to meet demand	Spares must be present to meet demand in the event of an asset failure	Performance
Waste Management Administrative Offices	Building Condition = B (Good)	Maintain Building in an acceptable Condition (as per Facility Condition Index)	SoGR
	Building Quality and Relationship to Current Standards = C (Fair)	Building meets current standards	Performance
	Facility Finishes and Fixtures = B (Good)	Maintain appropriate interior appearance and curb appeal	Performance
	Capacity and Change Adaptability for Program Requirements = B (Good)	Building has space and room to grow as needed	Performance
	Building Environment and Security = B (Good)	Building and site have appropriate security and built environment to support services	Performance
	Building Amenities for Service Delivery = B (Good)	Building has appropriate amenities for staff and the public, and can be accessed easily	Performance
	Accessibility Features = B (Good)	Building meets service accessibility needs	Performance
Waste Management Process Support Structures	Building Condition = B (Good)	Maintain Building in an acceptable Condition (as per Facility Condition Index)	SoGR
	Building Quality and Relationship to Current Standards = C (Fair)	Building meets current standards	Performance
	Facility Finishes and Fixtures = C (Fair)	Maintain appropriate interior appearance and curb appeal	Performance
	Capacity and Change Adaptability for Program Requirements = C (Fair)	Building has space and room to grow as needed	Performance
	Building Environment and Security = B (Good)	Building and site have appropriate security and built environment to support services	Performance

Waste — Asset Levels of Service

Asset	Level of Service	What Does It Mean?	Type
Waste Management Process Support Structures	Building Amenities for Service Delivery = B (Good)	Building has appropriate amenities for staff and the public, and can be accessed easily	Performance
	Accessibility Features = C (Fair)	Building meets service accessibility needs	Performance
Waste Management CRC Dropoff	Building Condition = B (Good)	Maintain Building in an acceptable Condition (as per Facility Condition Index)	SoGR
	Building Quality and Relationship to Current Standards = C (Fair)	Building meets current standards	Performance
	Facility Finishes and Fixtures = B (Good)	Maintain appropriate interior appearance and curb appeal	Performance
	Capacity and Change Adaptability for Program Requirements = B (Good)	Building has space and room to grow as needed	Performance
	Building Environment and Security = B (Good)	Building and site have appropriate security and built environment to support services	Performance
	Building Amenities for Service Delivery = B (Good)	Building has appropriate amenities for staff and the public, and can be accessed easily	Performance
	Accessibility Features = B (Good)	Building meets service accessibility needs	Performance
Waste Management Retail Spaces	Building Condition = B (Good)	Maintain Building in an acceptable Condition (as per Facility Condition Index)	SoGR
	Building Quality and Relationship to Current Standards = C (Fair)	Building meets current standards	Performance
	Facility Finishes and Fixtures = B (Good)	Maintain appropriate interior appearance and curb appeal	Performance
	Capacity and Change Adaptability for Program Requirements = B (Good)	Building has space and room to grow as needed	Performance
	Building Environment and Security = B (Good)	Building and site have appropriate security and built environment to support services	Performance

Waste — Asset Levels of Service

Asset	Level of Service	What Does It Mean?	Type
Waste Management Retail Spaces	Building Amenities for Service Delivery = B (Good)	Building has appropriate amenities for staff and the public, and can be accessed easily	Performance
	Accessibility Features = B (Good)	Building meets service accessibility needs	Performance
Waste Management Processing and Transfer	Building Condition = B (Good)	Maintain Building in an acceptable Condition (as per Facility Condition Index)	SoGR
	Building Quality and Relationship to Current Standards = C (Fair)	Building meets current standards	Performance
	Facility Finishes and Fixtures = C (Fair)	Maintain appropriate interior appearance and curb appeal	Performance
	Capacity and Change Adaptability for Program Requirements = B (Good)	Building has space and room to grow as needed	Performance
	Building Environment and Security = B (Good)	Building and site have appropriate security and built environment to support services	Performance
	Building Amenities for Service Delivery = B (Good)	Building has appropriate amenities for staff and the public, and can be accessed easily	Performance
	Accessibility Features = C (Fair)	Building meets service accessibility needs	Performance
Waste Management Landfill Pumping Stations	Building Condition = B (Good)	Maintain Building in an acceptable Condition (as per Facility Condition Index)	SoGR
	Building Quality and Relationship to Current Standards = C (Fair)	Building meets current standards	Performance
	Facility Finishes and Fixtures = C (Fair)	Maintain appropriate interior appearance and curb appeal	Performance
	Capacity and Change Adaptability for Program Requirements = B (Good)	Building has space and room to grow as needed	Performance

Waste — Asset Levels of Service

Asset	Level of Service	What Does It Mean?	Type
Waste Management Landfill Pumping Stations	Building Environment and Security = B (Good)	Building and site have appropriate security and built environment to support services	Performance
	Building Amenities for Service Delivery = C (Fair)	Building has appropriate amenities for staff and the public, and can be accessed easily	Performance
	Accessibility Features = C (Fair)	Building meets service accessibility needs	Performance
Waste Management Non-CRC Facilities Site Elements	Building Site Condition = B (Good)	Maintain site in an acceptable Condition (as per Condition Index)	SoGR
Waste Management CRC Facilities Site Elements	Building Site Condition = B (Good)	Maintain site in an acceptable Condition (as per Condition Index)	SoGR

Roads and Transportation — Asset Levels of Service

Asset	Level of Service	What Does It Mean?	Type
Roads	Minimum pavement condition index = 72	Regional Roads to be kept in good condition	SoGR
	Pavement rehabilitations and road reconstruction to incorporate all feasible and practical aspects of Peel's Road Characterization Policy	Road rehabilitations will retrofit aspects of the Road Characterization Policy where feasible and practical	Performance
Bridges and Grade Separations	Minimum bridge condition index = 91	Maintain Structures in Good Condition	SoGR
Major Culvert	Minimum condition index = 91	Maintain Structures in Good Condition	SoGR
Regional Noise Walls	Minimum overall rating = C (Fair)	Walls must be maintained in fair condition	SoGR
	Replace and relocate private noise walls to Regional Property when minimum overall rating <= C (Fair)	Service Improvement; Maintenance of walls in fair condition per Council Resolution 2015-663	Performance
Regional Retaining Walls	Minimum overall rating = C (Fair)	Walls must be maintained in fair condition	SoGR
Storm Sewers	Maintain PACP Condition Grade = Level 3 for storm sewers	Replace when storm sewer is no longer in good condition	SoGR
	Sufficient storm sewer and overland capacity to accommodate major storm events	Sewer pipes and other storm management assets have enough capacity to handle major storm events and not cause flooding	Performance
Storm Ponds	Maintain Equipment at a Condition Rating = B (Good)	Equipment is maintained in a good condition	SoGR
Manufactured Treatment Devices	Maintain Equipment at a Condition Rating = B (Good)	Equipment is maintained in a good condition	SoGR
Stormwater Pumping Stations	Maintain Equipment at a Condition Rating = C (Fair)	Equipment is maintained in a fair condition	SoGR
	Backup capacity for all critical equipment (mechanical)	Can continue to operate if largest piece of equipment fails	Performance

Roads and Transportation	Asset Levels of Service		
Asset	**Level of Service**	**What Does It Mean?**	**Type**
Stormwater Pumping Stations	Ensure standby power or sufficient wet well storage to meet Ministry of the Environment regulations	Enough Standby Power to operate without electricity or enough storage to prevent overflows	Performance
	Secondary forcemain or storage capacity	Twinned or enough capacity to prevent overflows	Performance
Stormwater Pumping Stations Facilities	Building Condition = B (Good)	Building Condition - Based on Facility Condition Index	SoGR
	Building Quality and Relationship to Current Standards = C (Fair)	Building's compliance with current code	Performance
	Facility Finishes and Fixtures = C (Fair)	Condition of Finishes and Fixtures	Performance
	Capacity and Change Adaptability for Program Requirements = B (Good)	Building Capacity and suitability to service delivery	Performance
	Building Environment and Security = B (Good)	Site and Security	Performance
	Building Amenities for Service Delivery = C (Fair)	Amenities suitability for Service Delivery	Performance
	Accessibility Features = C (Fair)	Building Accessibility	Performance
Stormwater Pumping Station Facilities Site Elements	Building Site Condition = B (Good)	Maintain site in an acceptable Condition (as per Condition Index)	SoGR

TransHelp **Asset Levels of Service**

Asset	Level of Service	What Does It Mean?	Type
TransHelp Fleet	Condition Rating = B (Good)	Replace fleet when it reaches its estimated service life	SoGR

Paramedic Services — Asset Levels of Service

Asset	Level of Service	What Does It Mean?	Type
Paramedics Reporting Stations	Building Condition = B (Good)	Maintain Building in an acceptable Condition (as per Facility Condition Index)	SoGR
	Building Quality and Relationship to Current Standards = C (Fair)	Building meets current standards	Performance
	Facility Finishes and Fixtures = B (Good)	Maintain appropriate interior appearance and curb appeal	Performance
	Capacity and Change Adaptability for Program Requirements = B (Good)	Building has space and room to grow as needed	Performance
	Building Environment and Security = B (Good)	Building and site have appropriate security and built environment to support services	Performance
	Building Amenities for Service Delivery = B (Good)	Building has appropriate amenities for staff and the public, and can be accessed easily	Performance
	Accessibility Features = B (Good)	Building meets service accessibility needs	Performance
Paramedics Satellite Stations	Building Condition = B (Good)	Maintain Building in an acceptable Condition (as per Facility Condition Index)	SoGR
	Building Quality and Relationship to Current Standards = C (Fair)	Building meets current standards	Performance
	Facility Finishes and Fixtures = B (Good)	Maintain appropriate interior appearance and curb appeal	Performance
	Capacity and Change Adaptability for Program Requirements = B (Good)	Building has space and room to grow as needed	Performance
	Building Environment and Security = B (Good)	Building and site have appropriate security and built environment to support services	Performance
	Building Amenities for Service Delivery = B (Good)	Building has appropriate amenities for staff and the public, and can be accessed easily	Performance
	Accessibility Features = B (Good)	Building meets service accessibility needs	Performance

Paramedic Services — Asset Levels of Service

Asset	Level of Service	What Does It Mean?	Type
Paramedics Facilities Site Elements	Building Site Condition = B (Good)	Maintain Building Site in an acceptable Condition (as per Condition Index)	SoGR
Medical Equipment	Maintain Equipment at a Condition Rating = B (Good)	Replace assets when they are no longer in good condition	SoGR
Emergency Response Vehicles	Maintain Equipment at a Condition Rating = B (Good)	Replace assets when they are no longer in good condition	SoGR
Administrative Vehicles	Maintain Equipment at a Condition Rating = B (Good)	Replace assets when they are no longer in good condition	SoGR

Long Term Care — Asset Levels of Service

Asset	Level of Service	What Does It Mean?	Type
Long Term Care Centres	Building Condition = B (Good)	Maintain Building in an acceptable Condition (as per Facility Condition Index)	SoGR
	Building Quality and Relationship to Current Standards = C (Fair)	Building meets current standards	Performance
	Facility Finishes and Fixtures = B (Good)	Maintain appropriate interior appearance and curb appeal	Performance
	Capacity and Change Adaptability for Program Requirements = B (Good)	Building has space and room to grow as needed	Performance
	Building Environment and Security = B (Good)	Building and site have appropriate security and built environment to support services	Performance
	Building Amenities for Service Delivery = B (Good)	Building has appropriate amenities for staff and the public, and can be accessed easily	Performance
	Accessibility Features = B (Good)	Building meets service accessibility needs	Performance
Long Term Care Centres Site Elements	Building Site Condition = B (Good)	Maintain Building Site in an acceptable Condition (as per Condition Index)	SoGR

Housing Support — Asset Levels of Service

Asset	Level of Service	What Does It Mean?	Type
Peel Region High Density Affordable Housing	Building Condition = B (Good)	Maintain Building in an acceptable Condition (as per Facility Condition Index)	SoGR
	Building Quality and Relationship to Current Standards = C (Fair)	Building meets current standards	Performance
	Facility Finishes and Fixtures = C (Fair)	Maintain appropriate interior appearance and curb appeal	Performance
	Capacity and Change Adaptability for Program Requirements = C (Fair)	Building has space and room to grow as needed	Performance
	Building Environment and Security = B (Good)	Building and site have appropriate security and built environment to support services	Performance
	Building Amenities for Service Delivery = B (Good)	Building has appropriate amenities for staff and the public, and can be accessed easily	Performance
	Accessibility Features = B (Good)	Building meets service accessibility needs	Performance
Peel Region Medium Density Affordable Housing	Building Condition = B (Good)	Maintain Building in an acceptable Condition (as per Facility Condition Index)	SoGR
	Building Quality and Relationship to Current Standards = C (Fair)	Building meets current standards	Performance
	Facility Finishes and Fixtures = C (Fair)	Maintain appropriate interior appearance and curb appeal	Performance
	Capacity and Change Adaptability for Program Requirements = C (Fair)	Building has space and room to grow as needed	Performance
	Building Environment and Security = B (Good)	Building and site have appropriate security and built environment to support services	Performance
	Building Amenities for Service Delivery = B (Good)	Building has appropriate amenities for staff and the public, and can be accessed easily	Performance
	Accessibility Features = B (Good)	Building meets service accessibility needs	Performance

Housing Support — Asset Levels of Service

Asset	Level of Service	What Does It Mean?	Type
Peel Region Affordable Housing Facility Site Elements	Building Site Condition = B (Good)	Maintain Building Site in an acceptable Condition (as per Condition Index)	SoGR
Shelter Facilities	Building Condition = B (Good)	Maintain Building in an acceptable Condition (as per Facility Condition Index)	SoGR
	Building Quality and Relationship to Current Standards = C (Fair)	Building meets current standards	Performance
	Facility Finishes and Fixtures = B (Good)	Maintain appropriate interior appearance and curb appeal	Performance
	Capacity and Change Adaptability for Program Requirements = B (Good)	Building has space and room to grow as needed	Performance
	Building Environment and Security = B (Good)	Building and site have appropriate security and built environment to support services	Performance
	Building Amenities for Service Delivery = B (Good)	Building has appropriate amenities for staff and the public, and can be accessed easily	Performance
	Accessibility Features = B (Good)	Building meets service accessibility needs	Performance
Shelter Facilities Site Elements	Building Site Condition = B (Good)	Maintain Building Site in an acceptable Condition (as per Condition Index)	SoGR

Peel Housing Corporation (PHC)	Asset Levels of Service		
Asset	**Level of Service**	**What Does It Mean?**	**Type**
PHC High Density Affordable Housing	Building Condition = B (Good)	Maintain Building in an acceptable Condition (as per Facility Condition Index)	SoGR
	Building Quality and Relationship to Current Standards = C (Fair)	Building meets current standards	Performance
	Facility Finishes and Fixtures = C (Fair)	Maintain appropriate interior appearance and curb appeal	Performance
	Capacity and Change Adaptability for Program Requirements = C (Fair)	Building has space and room to grow as needed	Performance
	Building Environment and Security = B (Good)	Building and site have appropriate security and built environment to support services	Performance
	Building Amenities for Service Delivery = B (Good)	Building has appropriate amenities for staff and the public, and can be accessed easily	Performance
	Accessibility Features = B (Good)	Building meets service accessibility needs	Performance
PHC Medium Density Affordable Housing	Building Condition = B (Good)	Maintain Building in an acceptable Condition (as per Facility Condition Index)	SoGR
	Building Quality and Relationship to Current Standards = C (Fair)	Building meets current standards	Performance
	Facility Finishes and Fixtures = C (Fair)	Maintain appropriate interior appearance and curb appeal	Performance
	Capacity and Change Adaptability for Program Requirements = C (Fair)	Building has space and room to grow as needed	Performance
	Building Environment and Security = B (Good)	Building and site have appropriate security and built environment to support services	Performance
	Building Amenities for Service Delivery = B (Good)	Building has appropriate amenities for staff and the public, and can be accessed easily	Performance
	Accessibility Features = B (Good)	Building meets service accessibility needs	Performance

Peel Housing Corporation (PHC) — Asset Levels of Service

Asset	Level of Service	What Does It Mean?	Type
PHC Low Density Affordable Housing	Building Condition = B (Good)	Maintain Building in an acceptable Condition (as per Facility Condition Index)	SoGR
	Building Quality and Relationship to Current Standards = C (Fair)	Building meets current standards	Performance
	Facility Finishes and Fixtures = C (Fair)	Maintain appropriate interior appearance and curb appeal	Performance
	Capacity and Change Adaptability for Program Requirements = C (Fair)	Building has space and room to grow as needed	Performance
	Building Environment and Security = B (Good)	Building and site have appropriate security and built environment to support services	Performance
	Building Amenities for Service Delivery = B (Good)	Building has appropriate amenities for staff and the public, and can be accessed easily	Performance
	Accessibility Features = B (Good)	Building meets service accessibility needs	Performance
PHC Affordable Housing Facilities Site Elements	Building Site Condition = B (Good)	Maintain Building Site in an acceptable Condition (as per Condition Index)	SoGR

Early Years and Child Care — Asset Levels of Service

Asset	Level of Service	What Does It Mean?	Type
Peel Region Child Care Centre Facilities	Building Condition = B (Good)	Maintain Building in an acceptable Condition (as per Facility Condition Index)	SoGR
	Building Quality and Relationship to Current Standards = C (Fair)	Building's compliance with current code	Performance
Peel Region Child Care Centre Facilities Site Elements	Building Site Condition = B (Good)	Maintain Building Site in an acceptable Condition (as per Condition Index)	SoGR

Regional Office Complexes — Asset Levels of Service

Asset	Level of Service	What Does It Mean?	Type
Headquarters Facilities	Building Condition = B (Good)	Maintain Building in an acceptable Condition (as per Facility Condition Index)	SoGR
	Building Quality and Relationship to Current Standards = C (Fair)	Building meets current standards	Performance
	Facility Finishes and Fixtures = B (Good)	Maintain appropriate interior appearance and curb appeal	Performance
	Capacity and Change Adaptability for Program Requirements = B (Good)	Building has space and room to grow as needed	Performance
	Building Environment and Security = B (Good)	Building and site have appropriate security and built environment to support services	Performance
	Building Amenities for Service Delivery = B (Good)	Building has appropriate amenities for staff and the public, and can be accessed easily	Performance
	Accessibility Features = B (Good)	Building meets service accessibility needs	Performance
Headquarters Facilities Site Elements	Building Site Condition = B (Good)	Maintain Building Site in an acceptable Condition (as per Condition Index)	SoGR

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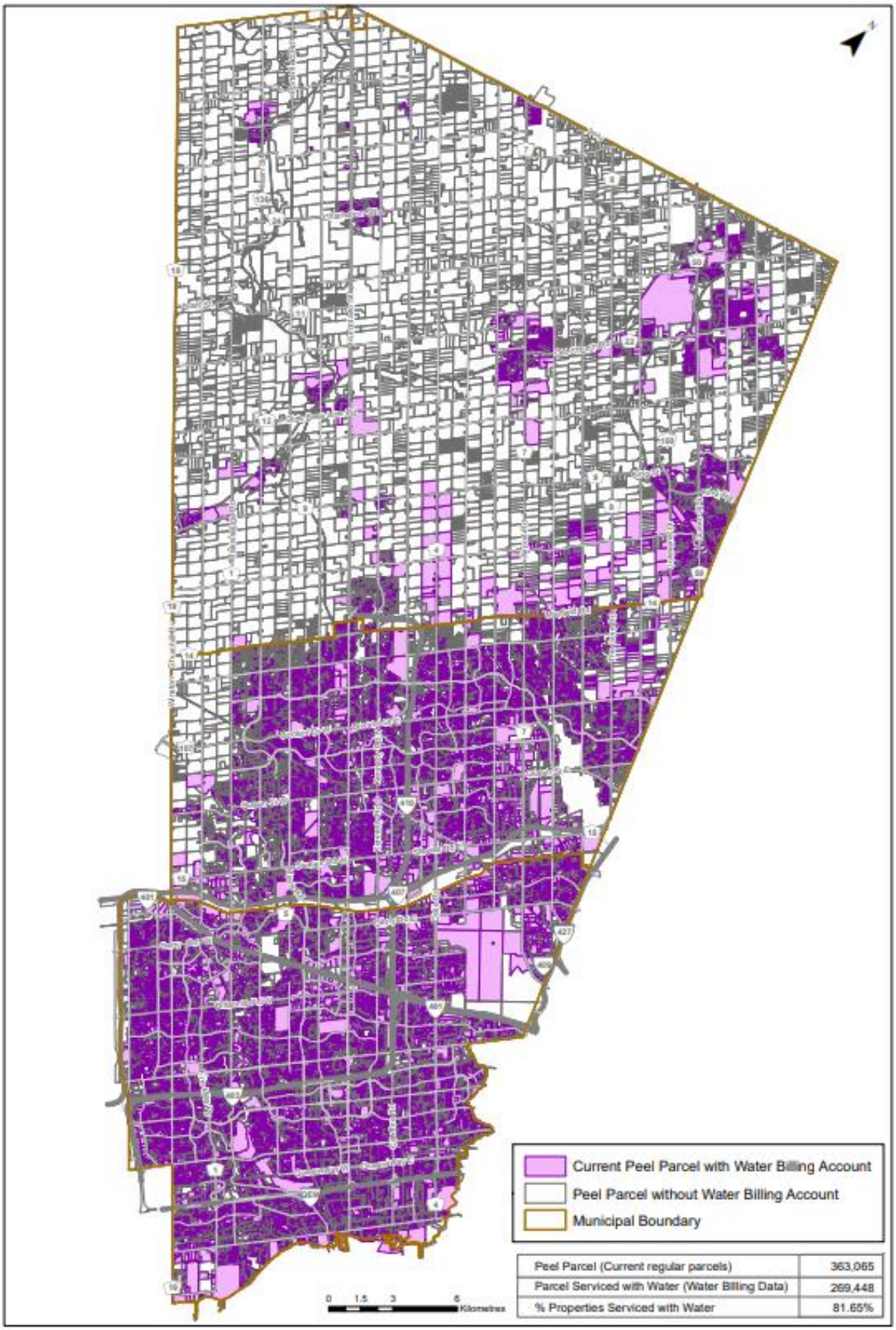
Additional Levels of Service

In addition to the Council approved Levels of Service, the following Community Levels of Service (Qualitative Description) and Technical Levels of Service (Technical Metrics) are in accordance with compliance with the Ontario Regulation 588/17 for Asset Management Planning.

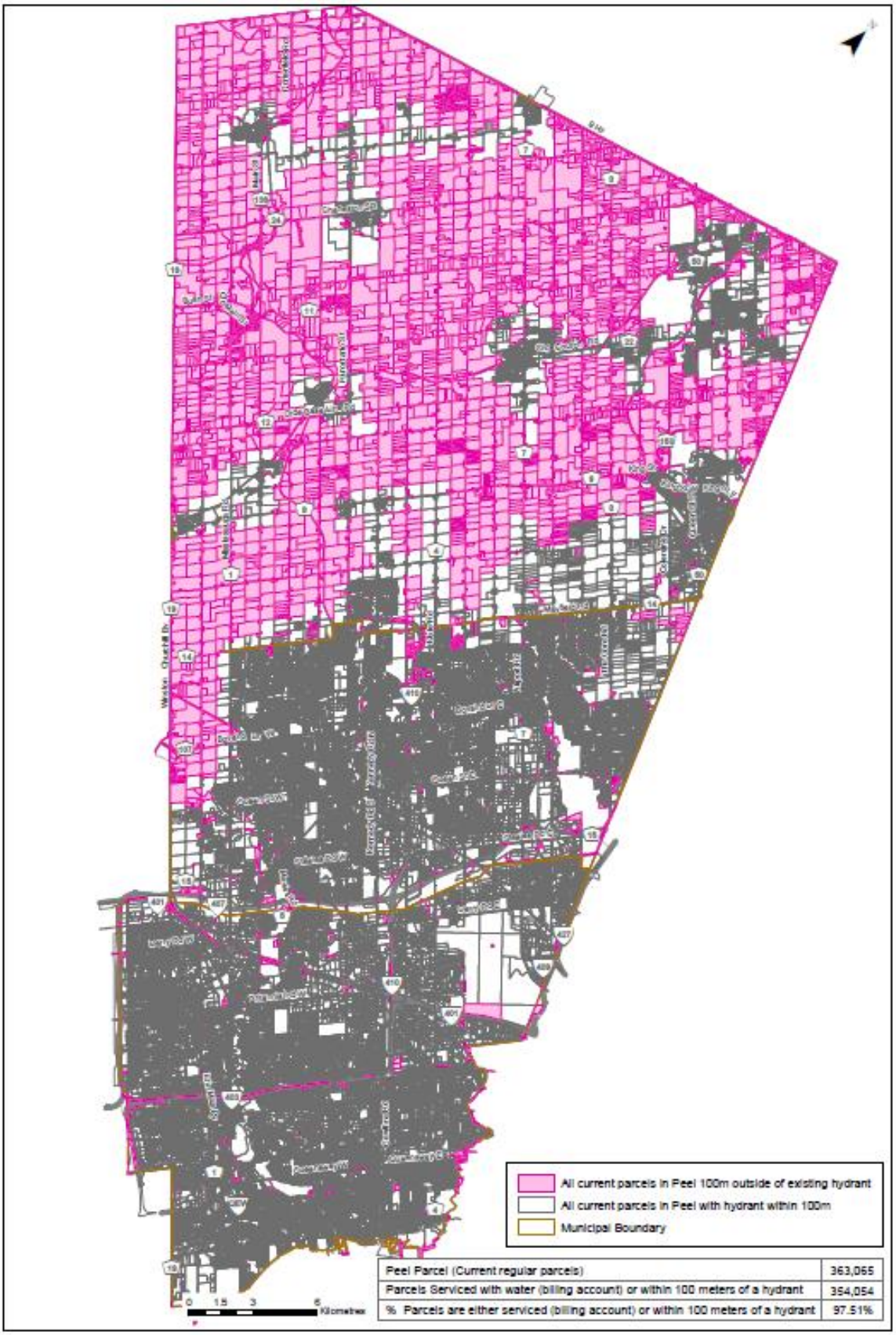
Water Supply		**Levels of Service**	
Community Levels of Service		**Technical Levels of Service**	
Service Attribute: Scope			
1. Description, which may include maps, of the user groups or areas of the municipality that are connected to the municipal water system.	Please refer to Page V-2	1. Percentage of properties connected to the municipal water system.	81.7%
2. Description, which may include maps, of the user groups or areas of the municipality that have fire flow.	Please refer to Page V-3	1. Percentage of properties where fire flow is available.	97.5%
Service Attribute: Reliability			
1. Description of boil water advisories and service interruptions.	There was no Boil Water Advisory Notice	1. The number of connection-days per year where a boil water advisory notice is in place compared to the total number of properties connected to the municipal water system.	0.0%
		2. The number of connection-days per year due to water main breaks compared to the total number of properties connected to the municipal water system.	0.003%

Properties with Water Serving



Peel Parcel (Current regular parcels)	363,065
Parcel Serviced with Water (Water Billing Data)	269,448
% Properties Serviced with Water	81.65%

Properties with Fire flow

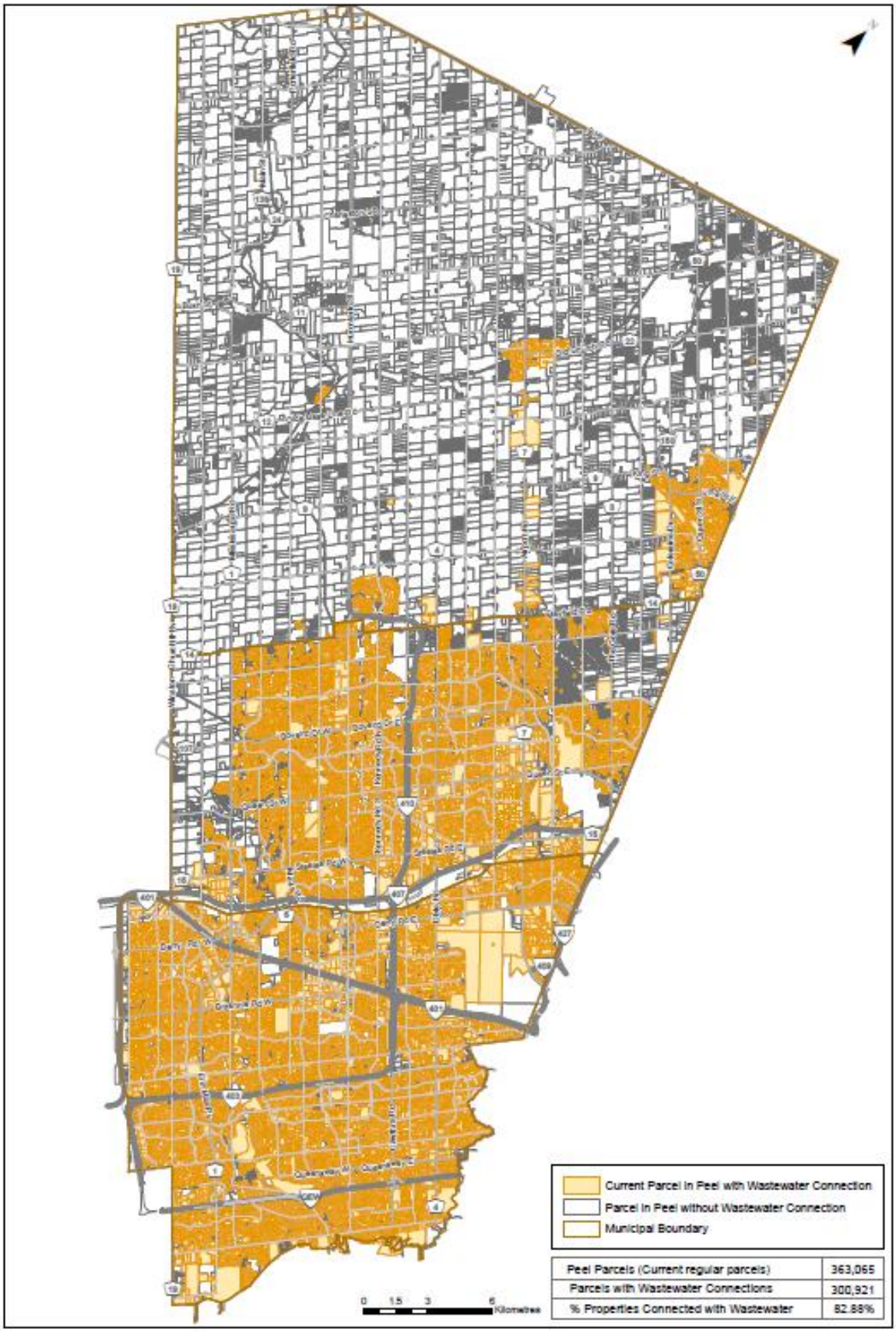


Peel Parcel (Current regular parcels)	363,065
Parcels Serviced with water (billing account) or within 100 meters of a hydrant	354,054
% Parcels are either serviced (billing account) or within 100 meters of a hydrant	97.51%

Wastewater		**Levels of Service**	
Community Levels of Service		**Technical Levels of Service**	
Service Attribute: Scope			
1. Description, which may include maps, of the user groups or areas of the municipality that are connected to the municipal wastewater system.	Please refer to Page V-6	1. Percentage of properties connected to the municipal wastewater system.	82.8%
Service Attribute: Reliability			
1. Description of how combined sewers in the municipal wastewater system are designed with overflow structures in place which allow overflow during storm events to prevent backups into homes.	Not Applicable	1. The number of events per year where combined sewer flow in the municipal wastewater system exceeds system capacity compared to the total number of properties connected to the municipal wastewater system.	Not Applicable
2. Description of the frequency and volume of overflows in combined sewers in the municipal wastewater system that occur in habitable areas or beaches.	Not Applicable	2. The number of connection-days per year due to wastewater backups compared to the total number of properties connected to the municipal wastewater system.	0.1%
3. Description of how stormwater can get into sanitary sewers in the municipal wastewater system, causing sewage to overflow into streets or backup into homes.	Storm water can enter sanitary system via three distinct ways: a) Through holes and cracks in manholes and sewers often caused due to age (wear and tear) b) Through non-conforming connections to the sanitary system such as cross-connected downspouts or catch basins, etc. c) Through floor drains in flooded basement, or via top of the manholes in a flooded road, etc. Such situations happen only when the storm water management system is overwhelmed and is not capable to handle rainwater or river flow	3. The number of effluent violations per year due to wastewater discharge compared to the total number of properties connected to the municipal wastewater system.	0.003% (Includes Spills, Bypass or Overflows that exceed effluent quality limits prescribed in the Environmental Compliance Approval)

Wastewater	Levels of Service	
Community Levels of Service		**Technical Levels of Service**
4. Description of how sanitary sewers in the municipal wastewater system are designed to be resilient to avoid events described in paragraph 3.	Storm water will always find a way to enter sanitary system. There is no practical way of stopping that. Hence, some allowance for storm water is considered during the design of sanitary sewers. a) Peel has multiple programs that systematically and continuously ensure that the infrastructure is in a state of good repair, and that holes and cracks are fixed. b) Peel has multiple programs to find and remedy non-conforming connections to the system including downspout disconnection program and fixing cross-connections. c) Peel ensures that susceptible manholes to flooding are watertight and sealed, however, storm water management is most often not within the Region's mandate (Regional Roads only). Hence, once storm water management system is overwhelmed for any reason, it is likely that water will find a way into sanitary system which will quickly overwhelm the sanitary system as well.	
5. Description of the effluent that is discharged from sewage treatment plants in the municipal wastewater system.	Not Applicable	

Properties with Wastewater Servicing



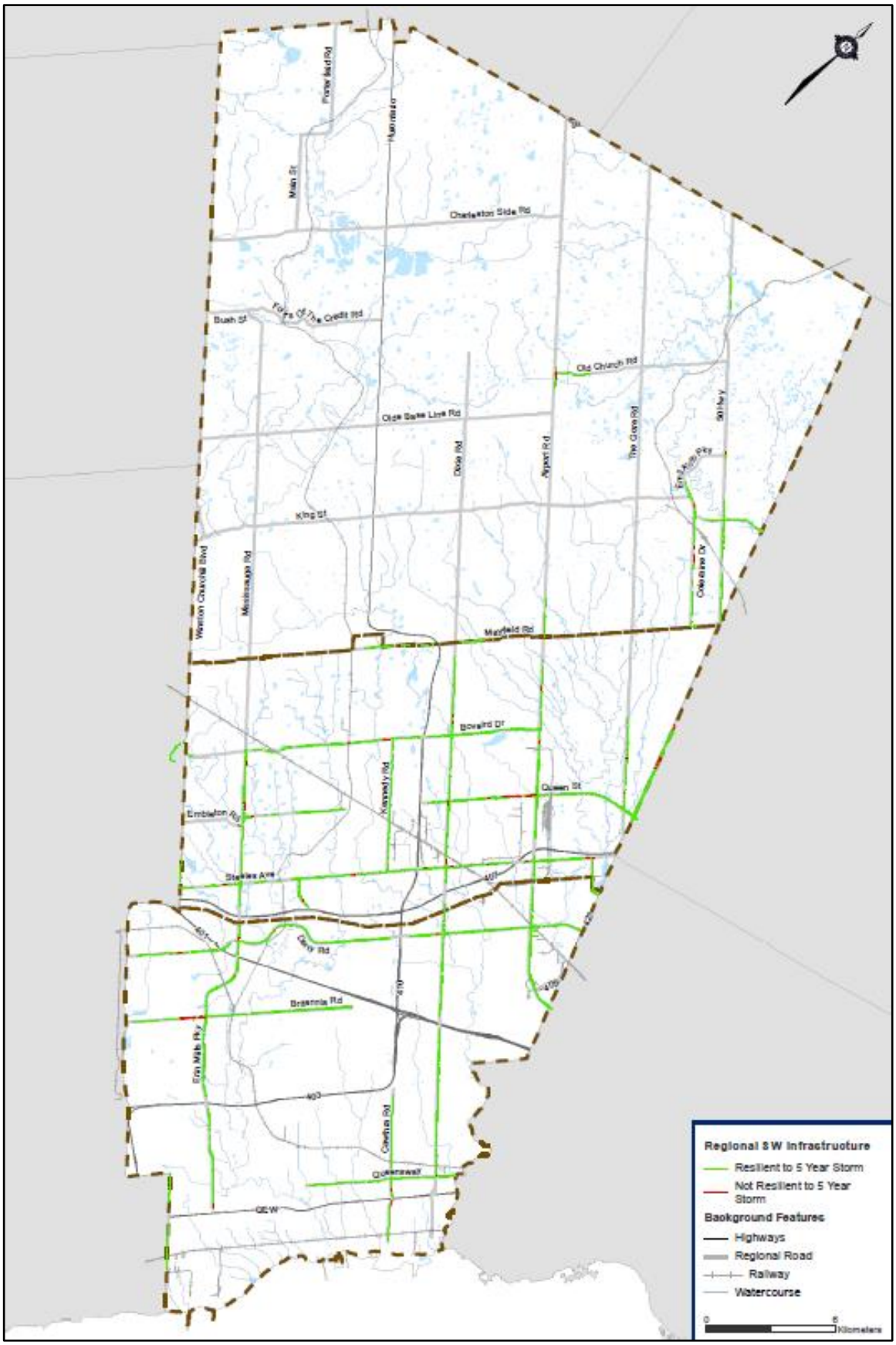
Stormwater Management Systems — Levels of Service

NOTE: The below metrics only includes Region owned infrastructure. For the Lower Tier Municipalities reported levels of service please refer to their Asset Management Plans:

City of Mississauga
City of Brampton
Town of Caledon

Community Levels of Service		Technical Levels of Service	
Service Attribute: Scope			
1. Description, which may include maps, of the user groups or areas of the municipality that are protected from flooding, including the extent of the protection provided by the municipal stormwater management system.	Please refer to Page V-8	1. Percentage of properties in municipality resilient to a 100-year storm. Not Applicable	
		2. Percentage of the municipal stormwater management system resilient to a 5-year storm.	97%

Existing Stormwater Infrastructure



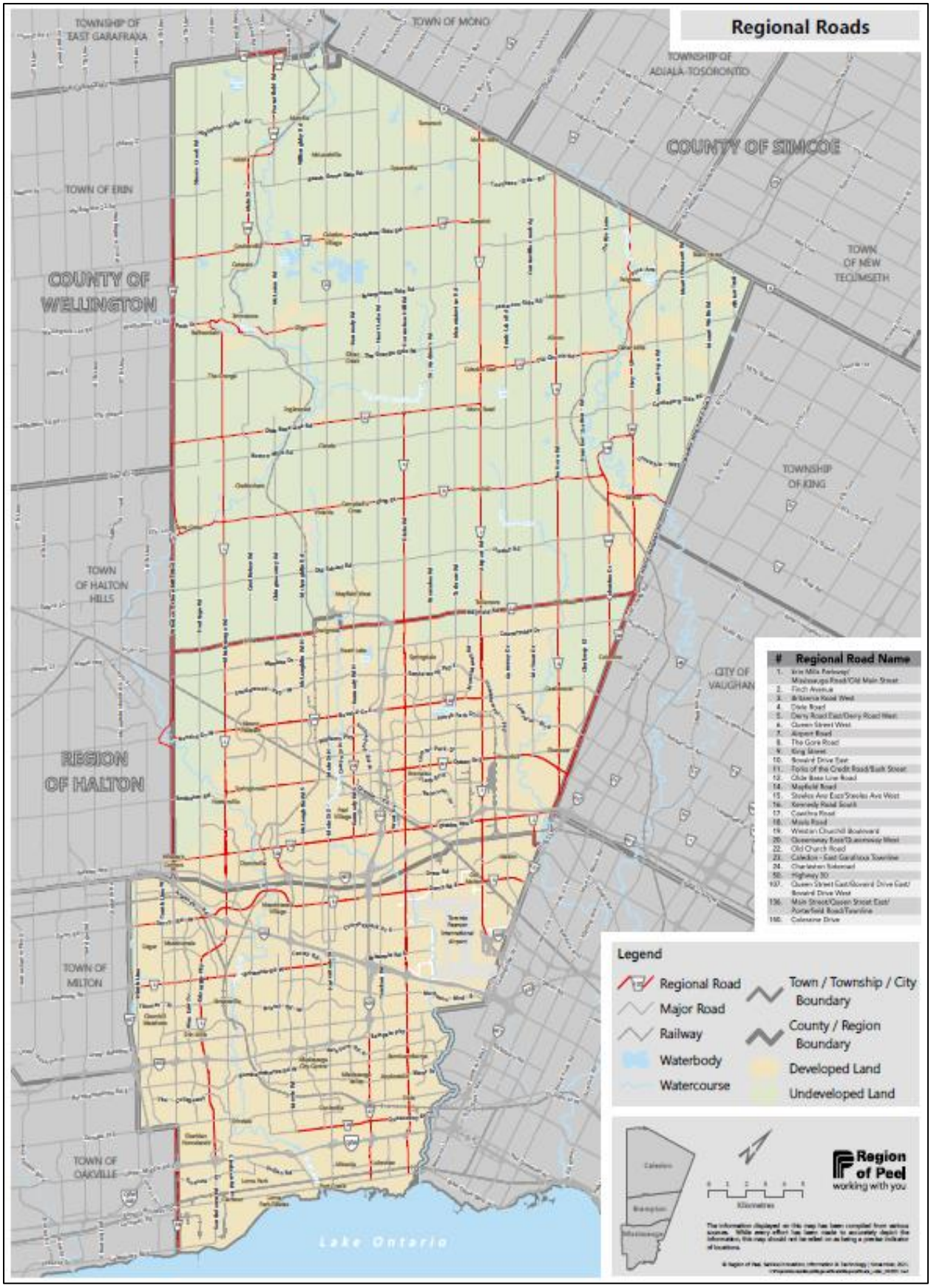
Roads — Levels of Service

NOTE: The below metrics only includes Region owned infrastructure. For the Lower Tier Municipalities reported levels of service please refer to their Asset Management Plans:

City of Mississauga
City of Brampton
Town of Caledon

Community Levels of Service		Technical Levels of Service	
Service Attribute: Scope			
1. Description, which may include maps, of the road network in the municipality and its level of connectivity.	Please refer to Page V-10	1. Number of lane-kilometres of each of arterial roads, collector roads and local roads as a proportion of square kilometres of land area of the municipality.	1.34
Service Attribute: Quality			
1. Description or images that illustrate the different levels of road class pavement condition.	Pavement Rating Scale (RCI): Very Good 88-100 Good 78 -87 Fair 66-77 Poor 46-65 Very Poor 0-45	1. For paved roads in the municipality, the average pavement condition index value.	89
		2. For unpaved roads in the municipality, the average surface condition (e.g. excellent, good, fair or poor).	Not Applicable (No Unpaved Roads)

Existing Regional Road Network



Bridges and Culverts		Levels of Service	
Community Levels of Service		**Technical Levels of Service**	
Service Attribute: Scope			
1. Description of the traffic that is supported by municipal bridges (e.g., heavy transport vehicles, motor vehicles, emergency vehicles, pedestrians, cyclists).	Region owned bridges are located along Arterial roadways and support a variety of vehicular and pedestrian uses such as: - heavy and light commercial vehicles - passenger vehicles - emergency vehicles - public transit vehicles - pedestrians and cyclists	1. Percentage of bridges in the municipality with loading or dimensional restrictions.	Loading = 0 % Dimensional: N/A Vehicular = LRTP identifies road capacity needs, EA for specific road widening projects identifies bridge dimensional restrictions and alternatives. Pedestrian = N/A
Service Attribute: Quality			
1. Description or images of the condition of bridges and how this would affect use of the bridges.	The Region rates the condition of bridges and major culverts (span greater than 3 m – structural culverts) using the MTO Bridge Condition Index (BCI) format.	1. For bridges in the municipality, the average bridge condition index value.	78
2. Description or images of the condition of culverts and how this would affect use of the culverts.	The Region rates the condition of bridges and major culverts (span greater than 3 m – structural culverts) using the MTO Bridge Condition Index (BCI) format.	2. For structural culverts in the municipality, the average bridge condition index value.	78

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