Introduction

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

The Enterprise Asset Management Plan outlines the Peel's corporate strategy and plan to achieve the Peel'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 Peel's Approach

Peel Region uses a risk based approach to asset management guided by Council approved Asset Level of Service (ALOS) targets. These targets are tailored to each type of asset, considering its specific use and location. While some assets must be maintained in good condition to ensure the delivery of critical services to Peel residents, others can be allowed to degrade without significantly affecting service outcomes[2].

The closer assets are to meeting their ALOS targets, the lower the risk of failing to deliver the desired service outcomes. To track progress, Peel uses **Infrastructure Risk Management Ratings[3]**, which assess how well assets align with ALOS targets.

Peel Region's long term goal is to maintain Peel's infrastructure portfolios at a minimum overall rating of '**Good**'. This rating strikes a balance between ensuring assets are in sufficient condition to support service delivery and making infrastructure investments that are reasonable and affordable for the public.

The Enterprise Asset Management Plan leverages lifecycle models to forecast infrastructure condition, reinvestment needs, and asset related risks to service delivery. These models are customized to Peel's assets, based on

---

[1] **Appendix III** provides detail of the Peel'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**

the most up to date asset information available, and structured across three key planning horizons:

- A 10 year forecast aligns with the Capital Plan and budget.
- A 20 year forecast supports coordination with master plans, Development Charge horizons, and reserve contributions.
- A 100 year forecast provides strategic insights for long term sustainability, aligning with the full lifecycles of the Peel's longest lived infrastructure.

Strategic connections to Asset Management

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

Alignment with the Strategic Plan

Vision: Community for Life, where everyone has a sense of belonging and access to the services they need at every stage of life

Mission: *Working with you* to create a healthy, safe and connected community

Enterprise Asset Management is central to sustainable service delivery and plays a key role in achieving Peel Region's 2015 - 2035 Strategic Plan.

- The **Vision** describes the long term outcomes Peel is working toward.
- The **Mission** describes how Peel delivers on that vision and the impact it seeks to achieve.

The Strategic Plan is supported by Peel's Strategic Agenda, which translates long term priorities into actionable initiatives and outcomes over the near term.

Peel Region's ***Strategic Plan*** is available on Peel's website under Strategic Plan.

Status of Peel's Infrastructure Assets: Ongoing Asset Management services at Peel Region are tracked through progress towards the 20 Year outcomes. Key indicators include the **Status of Peels Infrastructure Assets**.

Enterprise Asset Management processes are directly aligned with the Strategic Plan's long term goal of fostering community trust by ensuring that "**sustainability and long term benefits for future generations are considered**."

Contribution to service outcomes

Peel Region delivers a wide range of services, from Water Supply to Income Support, each with defined **service outcomes**. This Enterprise Asset Management Plan addresses the infrastructure required to support the delivery of these services. Through Enterprise Asset Management, Peel Region effectively manages asset related risks to ensure the achievement of these 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 Peel Region.
2. People setting the strategic goals of the Peel Region can see how their decisions influence how we manage our infrastructure.

Enterprise Asset Management at Peel enables this line of sight, connecting the desired service outcomes down to the assets that support them.[4]

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

Asset Management as a service

On top of enabling the line of sight for other services, Asset Management is a service itself. Peel tracks the progress towards the outcomes for each service using different metrics.

The Infrastructure Risk Management Rating is used as a performance measure to assess how well we are achieving our goals and where we need to improve operations. The result also informs decision making and strengthens accountability.

Figure 1. Performance measure

Asset Management

Peel Region builds, maintains, and monitors infrastructure

The target is to achieve an overall infrastructure Risk Management Rating of ‘Good’, where most assets are achieving the Asset Level of Service targets. This goal allows Peel Region to balance investing enough in the infrastructure to support efficient and reliable services while maintaining affordable tax and utility rates for the community. Peel Region is currently achieving a rating of ‘Good’.

The Long Term Financial Planning Strategy

The Long Term Financial Planning Strategy (LTFPS) provides a framework through which Peel endeavors to achieve the long term financial sustainability of Peel services and is available on Peel Region's website.[5] The LTFPS strives to maintain a balance between three pillars: Financial Sustainability, Financial Vulnerability, and Financial Flexibility.

Figure 2. Three pillars provide a foundation for long term sustainability.

Long Term Financial Planning Strategy

Financial Sustainability

Respect the taxpayer.

Maintain assets.

Ensure Capital Plan is sustainable.

Deliver value for money.

Financial Vulnerability

Users pay where appropriate.

Work with local municipalities to support economic viability of the community.

Prudently invest.

Financial Flexibility

Mitigate significant fluctuations in tax and utility rates.

Borrow only for substantial long term assets at affordable rates.

Foundation for Long term Sustainability

[5] https://peelregion.ca/sites/default/files/2024-05/2019-financial-planning-strategy.pdf

Asset Management supports all three pillars of the Strategy:

1. Financial sustainability

Peel 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 Peel 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 Peel services.

3. Financial flexibility

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

The Financial scorecard provides indicators of the strength of the three financial pillars. The current overall status of the Peel infrastructure state of repair is "Good" because of ongoing capital programs to replace outdated and deficient assets with new modernized infrastructure. However, the reinvestments necessary to maintain the service levels that the public expects continue to increase. This is largely driven by aging infrastructure, growing climate change impacts and uncertainty, additions of infrastructure to address growth and any Council priorities, as well as renewed data and information on the existing infrastructure.

Figure 3. Asset health score

Financial pillar	Indicator
Financial sustainability	Asset Health Score Target: Good

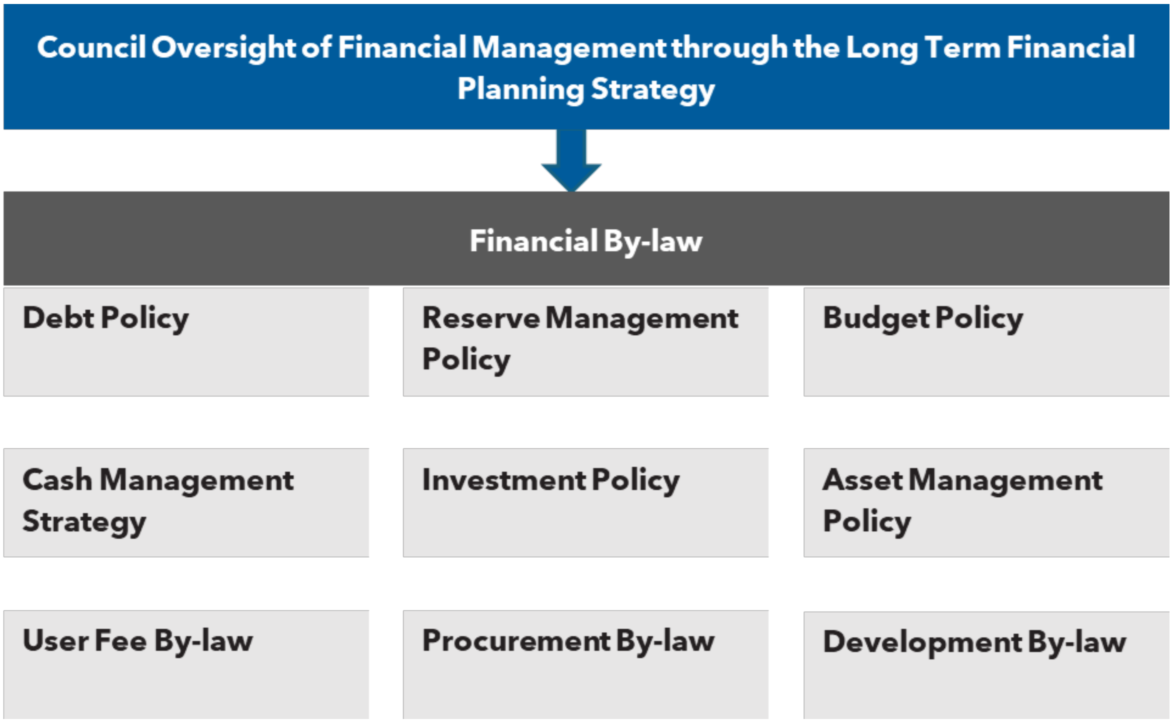
The Asset health score used as an indicator for financial sustainability is the same Risk Management Rating provided in this report.[6]

To realize the objectives of the LTFPS, 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. 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.

[6] 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**

Figure 4. Financial management By law



The Figure 4 above provides a visual of the oversight of Peel's Financial Policies and Strategies.

To ensure alignment with the principles outlined in the Long Term Financial Planning Strategy, Peel developed a Financial Management By law ("the By law"). This By law embeds nine core financial principles that guide the development of financial policies and support long term financial sustainability. It serves as a key tool for implementing the Finance Strategy by providing a consistent framework for decision making, monitoring, and reporting to Council.

Additionally, the By law governs a range of financial policies and strategies, establishing clear objectives, responsibilities, controls, and reporting requirements across key areas such as risk management, financial planning, debt and investment management, and revenue and expenditure control.

Climate Change

Peel region is experiencing the impacts of climate change, including more frequent heat waves, heavy precipitation, and flooding. These hazards introduce pressures on infrastructure condition, performance, lifecycle costs, service reliability, and community well being. As climate risks intensify, Peel must ensure that its infrastructure remain safe, functional, and resilient over the long term.

Peel's 2020–2030 Climate Change Master Plan provides the strategic direction for reducing corporate greenhouse gas emissions and preparing services, operations, and infrastructure for a changing climate. Many program areas are already applying climate resilient design standards, vulnerability assessments, and green infrastructure solutions into their capital planning processes in alignment with the Master Plan.

Peel has also begun identifying the incremental costs associated with climate change, led by the Office of Climate and Energy Management. This work is being tested within select program areas to understand how climate impacts affect capital and operating budgets. As the methodology matures, it will inform how climate-related costs are incorporated into the corporate asset management framework to support consistent and transparent long-term financial planning.

Although progress is underway, climate considerations are not yet fully standardized across all asset classes. As Peel advances its asset management program, climate change will be integrated into corporate policies, risk frameworks, lifecycle strategies, and decision-making processes. This includes assessing climate risks, protecting existing infrastructure, applying future climate projections, incorporating green infrastructure, embedding climate criteria into state of good repair and growth projects, and evaluating incremental climate-related costs. Ongoing monitoring and reporting will support continuous improvement.

Ontario Regulation 588/17 requires municipalities to consider climate impacts in their asset management policies and plans. Peel's approach meets this requirement by integrating climate risk assessment, adaptation strategies, and resilience considerations into long-term infrastructure planning. As corporate asset management processes mature, climate integration including cost assessment will become standardized across all asset classes, ensuring consistent and transparent decision-making.

The Asset Management Policy

Peel Region Council has approved an Asset Management Policy that establishes a formal framework for the responsible stewardship of infrastructure assets.

The Asset Management Policy is implemented through the Enterprise Asset Management Strategy and is structured around the four key areas:

1. **Levels of Service** – Defines the quality and quantity of services to be provided, as established by Council, to guide planning and decision making.
2. **Risk Management** – Supports the identification and management of risks to assets and the services they deliver.
3. **Life Cycle Management** – Guides how assets are planned, managed, and renewed over their lifecycle to optimize value and service delivery.
4. **Corporate Reporting on Asset Management** – Establishes requirements for annual, organization wide reporting on infrastructure condition, needs, and priorities to support informed decision making.

The Enterprise Asset Management Plan and the Infrastructure Status and Outlook Report are updated annually, approved by Council and made available on the Peel Region's website.

Non infrastructure solutions

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

- Infrastructure investment is aligned with growth projections in the Official Plan. Peel region is forecasted to grow to 2.3 million people and 1,070,000 jobs by 2051. Peel Region Council passed Bylaw 20 2022 to adopt a new Peel Region's Official Plan (Peel 2051), approved by Minister of Affairs and Housing in 2022. Peel 2051 is developed to ensure a continued vision for growth.
- Master plans and service strategies look at growth needs and integrate new assets within existing infrastructure with the least economic and environmental impact.

Peel 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

An asset's value is realized during its operational life. Effective operations and maintenance practices are essential to ensuring assets perform as intended, meet legislative requirements, and operate safely and efficiently while minimizing deterioration.

Routine and planned maintenance activities are undertaken to preserve asset condition, achieve expected service life, and maintain performance standards. Preventative and minor corrective maintenance helps extend asset life and reduce the need for more costly capital interventions.

Operations and maintenance activities are integrated into lifecycle strategies to optimize asset performance and total cost of ownership. Continuous improvement efforts support the identification of opportunities to enhance operating practices and maintenance approaches.

Operations and maintenance costs will be incorporated into Tactical Asset Management Plans and optimized over time through improved processes and tools within the Enterprise Asset Management system.

Governance

Peel Region's Asset Management Program is supported by a governance framework that establishes clear lines of accountability, decision making authority, and organizational alignment. This framework defines how asset related decisions are set, coordinated, and monitored across the organization to ensure consistency with Council priorities, approved levels of service, risk tolerance, and long term financial sustainability.

The governance structure connects strategic direction from Council to planning, budgeting, and operational activities across the organization. It enables the integration of asset management considerations into corporate decision making processes, including capital planning, financial management, and service delivery, ensuring a coordinated and consistent approach across all service areas.

Within this framework, asset management decisions are guided by standardized methodologies, corporate policies, and risk based approaches that enable transparent evaluation of trade offs between service levels, cost, and risk. This supports consistent prioritization of investments across asset classes and service areas.

The framework also establishes processes for oversight, coordination, and escalation to ensure issues are addressed, cross organizational alignment is maintained, and decisions are made at the appropriate level. It supports alignment between long term infrastructure planning and short term operational priorities, enabling a coordinated and enterprise wide approach to managing assets.

Governance is supported by defined roles and responsibilities across Council, Executive Leadership, and a structured committee model, including Steering and Advisory Committees that provide oversight, coordination, and subject matter input to support informed decision making.

A key component of the governance framework is its emphasis on continuous improvement. Performance monitoring, maturity assessments, and regular updates to asset management plans and strategies ensure that the framework remains responsive to evolving risks, regulatory requirements, and community expectations.

Together, these elements enable Peel to maintain transparency, accountability, and responsible stewardship of infrastructure assets while supporting informed, evidence based decision making across the organization.

Public Consultation

Public consultation plays an important role in Peel Region's asset management planning by helping align infrastructure decisions with community needs, expectations, and values. While asset management is a technical and long term discipline, meaningful engagement with residents, businesses, and stakeholders helps inform priorities, levels of service, and investment trade offs.

Peel incorporates public and stakeholder input through existing consultation and engagement processes related to strategic planning, budgeting, and infrastructure planning. These include Regional Council and Committee meetings that are open to public, public budget consultations and delegations, surveys, and project specific engagement activities led by service areas and departments. For major infrastructure initiatives, such as water and wastewater master planning, Peel conducts Public Information Centres and provides opportunities for public feedback through online platforms and formal review processes.

Feedback gathered through these channels contributes to understanding community expectations for infrastructure performance, affordability, resilience, and accessibility and informs the development of capital and operating plans aligned with Peel's Strategic Plan and community priorities.

Asset management planning supports public consultation by translating technical data on asset condition, risk, and lifecycle costs into information that can inform policy and investment discussions. This enables transparent conversations about infrastructure needs, funding constraints, and the long term implications of investment decisions.

As Peel's Enterprise Asset Management program continues to mature, opportunities to further strengthen public facing communication and engagement will be explored. This includes enhancing how asset management information is presented to decision makers and the public, supporting clearer understanding of infrastructure challenges, funding pressures, and the actions required to sustain reliable services for current and future generations.

Peel's Enterprise Asset Management Roadmap

Peel's Asset Management program is guided by industry best practices and regulatory requirements and continues to evolve to address emerging challenges and leverage opportunities for improvement. The Enterprise Asset Management Roadmap outlines key initiatives that strengthen asset management capabilities, support risk informed decision making, and enhance long term service and financial sustainability.

Anticipated improvements include:

- Ongoing technical studies and condition assessments to improve understanding of infrastructure condition and performance.
- Enhancements to asset management planning processes across services to improve investment forecasting and the management of risks to service delivery.
- Continued integration and enhancement of operations and maintenance costs to support a more complete lifecycle view of asset ownership, with continued improvements to data and modelling.
- Continued integration of the asset management technology solutions across service areas to support consistent practices and improved data driven decision making.
- Continued inclusion of additional asset classes in future reporting cycles, building on existing green infrastructure and adding Police IT infrastructure.
- Enhancing the EAM Decision Support System (DSS) to improve lifecycle forecasting and modelling of complex assets, supporting stronger, risk informed long term investment planning.
- Development of an Enterprise Asset Management Strategy to translate Council priorities, service objectives, risk tolerance, and financial constraints into clear, enterprise wide direction for asset stewardship.
- Integration of climate and decarbonization considerations through a Decarbonization Capital Work Business Process Review to better align capital planning with emissions reduction goals while maintaining service levels and managing lifecycle costs.
- Strengthening organizational capability and alignment through an Asset Management Planning Community of Practice that promotes consistency, collaboration, and knowledge sharing across service areas.
- Ongoing internal asset management maturity assessments across service areas to identify strengths, gaps, and priorities for continuous improvement.

Continuous Improvement

Continuous improvement is fundamental to Peel Region's approach to asset management and reflects a commitment to learning, refinement, and adaptation over time. As infrastructure assets age, service expectations evolve, and external risks such as climate change, technological disruption, and regulatory change increase, Peel recognizes that asset management practices must continuously evolve to remain effective, resilient, and sustainable.

Peel's EAM program is designed as an iterative process that emphasizes ongoing assessment, feedback, and enhancement of people, processes, data, and systems across Peel. Continuous improvement activities focus on strengthening the integration between asset condition, risk, levels of service, lifecycle costs, and funding decisions to ensure infrastructure investments deliver the greatest value to the community over the long term.

Key elements of Peel's continuous improvement approach include regular review and refinement of asset management policies, practices, and assumptions; incorporation of new data and improved condition assessments; and enhanced use of analytics to support evidence based decision making. As asset information quality improves, forecasts of lifecycle costs, risks, and reinvestment needs become more reliable, supporting more informed prioritization and long term financial planning.

Performance monitoring and benchmarking are also central to continuous improvement. Asset management outcomes are tracked through defined performance measures, maturity assessments, and reporting mechanisms that enable Peel to monitor progress, identify gaps, and adjust strategies as required. Lessons learned from operational performance, capital delivery, and emerging best practices are systematically incorporated into future plans and processes.

Technology plays a critical role in supporting continuous improvement. The implementation and enhancement of asset management technology solutions improves data consistency, transparency, and accessibility across services. Over time, increased system integration will enable stronger linkages between asset data, work management, financial planning, and risk management, further strengthening lifecycle decision-making.

Continuous improvement is also supported by collaboration across service areas and disciplines. Shared governance structures, standardized methodologies, and enterprise wide coordination help ensure that improvements achieved in one area inform and benefit the broader organization. Training, knowledge sharing, and change management activities further support the development of asset management capability across Peel.

Through this ongoing cycle of learning and refinement, Peel continues to advance the maturity of its asset management program. This approach supports compliance with Ontario Regulation 588/17: Asset Management Planning for Municipal Infrastructure, aligns with recognized international asset management best practices, and reinforces Peel's commitment to responsible stewardship of public infrastructure ensuring assets remain safe, reliable, resilient, and responsive to community needs today and into the future.

Maturity

Peel Region is advancing asset management maturity through a structured and coordinated approach aligned with leading industry practices. An organization wide maturity framework supports consistent application of asset management principles, enabling alignment between assets and service needs, improved management of lifecycle costs and risks, and identification of priorities for continuous improvement.

Regular maturity assessments provide a snapshot of current practices across service areas, help track progress over time, and identify trends and opportunities for improvement. These insights support more informed decision making and guide the development of a long term roadmap for asset management advancement.

Key areas of focus include strengthening governance and accountability, improving process consistency, clarifying roles and responsibilities, and enhancing the use of data to support decision making. Advancing asset management maturity enables more effective use of resources, improved risk management, and the delivery of safe, reliable, and sustainable services over the long term.

Together, these actions support Peel's commitment to responsible stewardship of public assets. Advancing asset management maturity helps ensure that limited resources are used effectively, risks are understood and managed, and assets continue to support safe, reliable, and sustainable services for the community, today and into the future.

Diversity, Equity, and Inclusion (DEI)

Advancing DEI for both our workforce and the community is a top priority for Peel Region. Peel is one of the most diverse communities in Canada accounting for 18% of Ontario's immigrant population, and where 69% of residents identify with a 'racialized' group (2021 Stats Canada).

Peel is committed to working with our residents to deliver programs and services that are not only inclusive and equitable, but also reflective of our communities.

Peel Region has developed a DEI Strategy, that focusses on:

- Peel's workforce and community,
- Identifying and addressing systemic barriers within the programs and services we offer to residents. (Systemic barriers are policies, practices, or

procedures that result in some people getting unequal access or being excluded.)

DEI principles encourage recognizing and valuing differences among individuals, ensuring fairness, and fostering an environment where everyone has equal opportunities and feels included. Incorporating DEI into infrastructure and service delivery involves actively considering and addressing the diverse needs and perspectives of all communities impacted by infrastructure and service delivery. This includes ensuring fair representation in decision making processes, promoting equal access to benefits and opportunities, and fostering a culture of inclusivity to create infrastructure that serves the entire population equitably while addressing historical disparities and promoting social cohesion.

Consideration of DEI in Peel's infrastructure projects mean:

- Designing infrastructure with accessibility in mind, considering the needs of people with disabilities or a diverse range of needs to create inclusive and user friendly spaces.
- Redevelopment projects take into account the historical and cultural significance of the area to various communities, including Indigenous communities, incorporating design elements that reflect and respect diverse cultural heritage.
- Housing projects consider the diverse needs of residents by incorporating a mix of housing types suitable for various family sizes and income levels, addressing the housing challenges faced by different demographic groups.
- Facilities projects that meet Ontario Accessibility Standards and varied individual needs, promoting a more inclusive environment.

Peel has commenced its journey of implementing DEI principles into infrastructure through various projects. Additionally, a strategy is being developed to promote a holistic approach in embedding DEI principles into our asset management practices, including levels of service endorsement by Peel Region Council, ensuring that consistent and equitable service standards are applied across the organization, with all assets maintained to defined targets that support fair and reliable service outcomes.

The following examples show how Peel has integrated DEI considerations into infrastructure projects:

- Wastewater Treatment Facility: An accessible gender neutral changing and washroom space has been constructed to meet the needs of our diverse workforce.
- Housing Support: Barrier free showers are installed for residents to directly roll into the shower using a shower wheelchair.

- TransHelp: To enable eligible residents to travel into other municipalities, Peel has partnered with other paratransit providers in a shared ride public service for cross boundary trips.
- Transportation: Inclusion of multi use trails for shared use by cyclists, pedestrians, and other authorized devices.