

2027

London Transit Commission Asset Management Plan



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Land Acknowledgement

We acknowledge that we are gathered today on the traditional lands of the Anishinaabek, Haudenosaunee, Lūnaapéewak and Attawandaron. We acknowledge all the treaties that are specific to this area: the Two Row Wampum Belt Treaty of the Haudenosaunee Confederacy/Silver Covenant Chain; the Beaver Hunting Grounds of the Haudenosaunee NANFAN Treaty of 1701; the McKee Treaty of 1790, the London Township Treaty of 1796, the Huron Tract Treaty of 1827, with the Anishinaabeg and the Dish with One Spoon Covenant Wampum of the Anishnaabek and Haudenosaunee.

This land continues to be home to diverse Indigenous people (First Nations, Métis and Inuit) whom we recognize as contemporary stewards of the land and vital contributors to society. We hold all that is in the natural world in our highest esteem and give honor to the wonderment of all things within Creation. We bring our minds together as one to share good words, thoughts, feelings and sincerely send them out to each other and to all parts of creation. We are grateful for the natural gifts in our world and we encourage everyone to be faithful to the natural laws of Creation.

The three Indigenous Nations that are neighbours to London are the Chippewas of the Thames First Nation; Oneida Nation of the Thames; and the Munsee-Delaware Nation who all continue to live as sovereign Nations with individual and unique languages, cultures and customs.

This Land Acknowledgement is a first step towards reconciliation. Awareness means nothing without action. It is important that everyone takes the necessary steps towards decolonizing practices. We encourage everyone to be informed about the traditional lands, Treaties, history and cultures of the Indigenous people local to their region.

1. Executive Summary - London Transit Commission

10-Year Projected Funding

\$574.2 Million

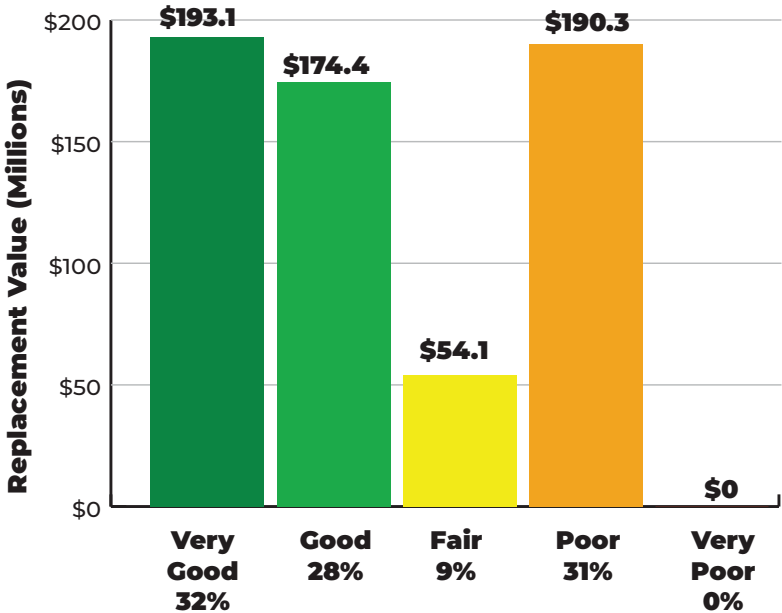
10-Year Infrastructure Gap

\$60.5 Million To maintain Current Levels of Service

+\$0 Million To achieve Proposed Levels of Service



Asset Condition Distribution



* Subject to rounding.

Asset Highlights



\$612.0 M
Replacement Value



6 years
Average Age of Rolling Stock



69%
Assets in Fair or better condition



240
Rolling Stock Buses

2. Introduction

The London Transit Commission (LTC) is responsible for operating, maintaining and managing public transit services within the City of London, including conventional transit and specialized transportation services for persons with physical disabilities. LTC's asset management responsibilities include planned inspections, preventative maintenance, renewal and replacement activities that support regulatory compliance, public safety, accessibility, service reliability, operational continuity and long-term financial sustainability.

This Asset Management Plan (AMP) establishes the basis for managing LTC's infrastructure assets by aligning organizational and community objectives with day-to-day operations and long-term investment decisions to support sustainable transit service delivery. Definitions of key asset management terms and acronyms used throughout this AMP are provided in Appendix A – Glossary.

2.1. Provincial Requirements

Ontario Regulation (O. Reg.) 588/17 came into effect on January 1, 2018, as part of a province-wide initiative to strengthen infrastructure planning and financial sustainability. The regulation was introduced in response to aging municipal infrastructure, growing maintenance backlogs and inconsistent asset management practices across municipalities. Its purpose is to standardize requirements and ensure municipalities adopt a lifecycle-based, data-driven approach that aligns asset management with long-term financial planning. This AMP addresses the requirements of O. Reg. 588/17 related to Current and Proposed Levels of Service (LOS), lifecycle management, risk and financial strategy. The AMP is reviewed and updated at least once every five years in accordance with the regulation.

2.2. Asset Management Program

The Corporate Asset Management (CAM) Program enhances asset management by aligning strategic objectives with investment decisions through an iterative process that improves each cycle.

Continuous improvement is fundamental to effective asset management, ensuring that practices, data and investment decisions remain aligned with evolving service expectations, regulatory requirements and organizational priorities. LTC, in collaboration with the CAM Team, monitors performance through asset condition assessments, lifecycle costs, service levels and risk indicators. These insights are used to identify gaps, refine processes and implement ongoing improvements.

2.3. Developing the Asset Management Plan

This AMP reflects the coordinated efforts of the CAM Team and LTC staff responsible for infrastructure asset management. Developed through the City's CAM Program, this AMP achieves the following:

- Establishes a plan for managing infrastructure assets to deliver service levels aligned with community needs, regulatory requirements and LTC approved objectives.
- Forecasts the impact of projected budgets (2026–2035) on the condition of infrastructure assets.
- Identifies implications for lifecycle strategies and associated risks where funding gaps exist between Projected Funding and the investment required to maintain Current LOS or achieve Proposed LOS.
- Fulfills the requirements of O. Reg. 588/17 and supports eligibility for senior government funding programs.
- Records the assumptions, data sources and financial inputs used to support the analysis so that investment needs can be traced, reviewed and improved in future AMP updates.

The following components outline the AMP framework and supporting elements required to inform asset management decision-making and regulatory compliance.

State of Infrastructure

Provides a summary of assets, including Replacement Value, age, Expected Useful Life and condition, to support an evidence-based understanding of municipal infrastructure.

Levels of Service

Defines the quality and extent of services delivered, linking asset performance to strategic objectives and policy commitments. This information is used in the financial analysis to compare the cost to maintain Current LOS with the additional investment required to achieve a Proposed LOS.

Lifecycle Management

Outlines the planned activities required to deliver sustainable services over the asset's lifecycle, including acquisition, operation, maintenance, renewal and disposal, with consideration for risk and cost optimization.

Financial Analysis

Identifies funding requirements to maintain Current LOS and achieve Proposed LOS over a 10-year horizon. Infrastructure Gaps represent the difference between required investment and Projected Funding. The Reinvestment Rate is calculated as the ratio of average annual asset investment to the asset's current Replacement Value. This analysis supports long-term financial planning and integration with the budgeting process.

2.4. Asset Overview

LTC assets are managed to meet service requirements with the aim of providing safe, reliable, accessible and cost-effective transit services that support mobility, community connectivity and public value. LTC infrastructure assets are categorized as follows:

Facilities

- Buildings and Site Works including administration offices, garages, storage and maintenance facilities.

Fleet

- Rolling Stock including 40-foot buses and 60-foot articulated buses.
- Service Fleet vehicles including inspector vans, pickup trucks, cargo vans and transit vans.
- Fleet Equipment including tools, lifts, compressors, skids, hydraulic presses and bus washes.

Information Technology

- Computer hardware including personal computers, monitors and laptops.
- Computer software, dispatch radio software and transit scheduling software.
- Data collection equipment including automatic people counters.
- Fare equipment including fareboxes and smart card systems.
- Communication equipment including camera equipment on buses and automatic vehicle location equipment.

Other Infrastructure Assets

- Shelters providing passenger waiting areas.
- Bus stop pads.
- Terminals and associated signage supporting passenger circulation, wayfinding and transfers at key transit locations.

2.5. Assumptions

This AMP is designed to enhance the lifecycle management of LTC assets. The intent is to connect strategic objectives to day-to-day decisions related to lifecycle investments made within the context of various assumptions. The following points summarize the assumptions and limitations of the data:

- The scope of this AMP covers the assets directly owned by LTC as of December 31, 2025 and associated Projected Funding reflected in the approved capital plan and 2026 budget update.
- The data accuracy and reliability are rated as moderate, meaning the data is generally reliable but includes minor gaps, assumptions or estimates and is appropriate for planning purposes.
- The AMP factors inflation into cost estimates and financial projections.
- Replacement valuations for building-related assets are based on the 2025 Altus Group Canadian Cost Guide unit rates corresponding to the appropriate building type, multiplied by the applicable area. These unit rates include related costs such as design, project management and permitting. Replacement valuations for all other assets are estimated internally based on market rates, vendor information and recent purchases.
- Asset age was calculated using acquisition or installation dates from service area asset records.
- Condition assessments are based on a combination of technical assessments, internal and external expert opinion, inspections and age-based proxies where direct inspections are not available.
- Investment and condition forecasts are based on age, rehabilitation history, Expected Useful Life estimates and internal expert opinion.

3. Asset Management Plan

3.1. State of Infrastructure

This section summarizes the current state of LTC assets, including inventory, Replacement Value, age profile and overall condition, to support risk-based investment decisions and long-term sustainability.

3.1.1. Asset Inventory and Valuation

The LTC infrastructure portfolio has a total Replacement Value of approximately \$612 million, spanning four primary asset categories: Facilities, Fleet, Information Technology and Other Infrastructure Assets. Table 3.1 summarizes the asset inventory and Replacement Values in 2025 dollars, representing the estimated full replacement cost of the asset portfolio. Age and Expected Useful Life are based on the weighted average of all assets and derived from internal asset records, historical performance and expert assessment.

Table 3.1 - State of Infrastructure Summary

Asset Type	Asset	Inventory	Unit	Replacement Value (Millions)	Average Age (Years)	Expected Useful Life (Years)
Facilities	Buildings and Site Works	15	Each	\$335.4	34	50
Fleet	Rolling Stock	240	Each	\$233.3	6	12
	Service Fleet	11	Each	\$0.8	5	7
	Fleet Equipment	141	Grouped	\$7.9	13	20
Information Technology	Computer Hardware	12	Grouped	\$1.8	6	5
	Computer Software	10	Grouped	\$2.4	4	5
	Data Collection Equipment	7	Grouped	\$1.1	6	15
	Fare Equipment	366	Each	\$9.0	12	15
	Communication Equipment	64	Grouped	\$14.5	10	15
Other Infrastructure Assets	Shelters	686	Each	\$3.3	7	10
	Bus Stop Pads	4,244	Each	\$1.5	12	20
	Terminals	16	Each	\$0.8	11	18
Total				\$612.0	-	-

*Subject to rounding.

LTC Facilities have a Replacement Value of \$335.4 million and represent more than half of the assets included in this AMP. The average age of Facilities assets is 34 years; however, this portfolio average reflects a mix of newer and older facilities, including the Wonderland Facility, which is approximately 15 years old, and the Highbury Facility, which is more than 50 years old. The Highbury Facility is currently undergoing a phased redevelopment and modernization program intended to increase capacity, improve operational efficiency, replace aging infrastructure and address long-term facility condition and service capacity risks.

Fleet assets include Rolling Stock, Service Fleet and Fleet Equipment. Rolling Stock has a Replacement Value of \$233.3 million and includes 226 40-foot buses and 14 60-foot articulated clean-diesel buses. Its average age is six years compared with an Expected Useful Life of 12 years, reflecting LTC's ongoing renewal strategy where newer bus purchases offset assets approaching the end of their lifecycle to maintain service reliability and operational continuity. Service Fleet has a Replacement Value of \$0.8 million and primarily consists of inspection and maintenance vans and on-site trucks used to support transit operations. Fleet Equipment has a Replacement Value of \$7.9 million and includes grouped maintenance and operational support assets with an average age of 13 years compared with an Expected Useful Life of 20 years.

Information Technology assets have a Replacement Value of \$28.8 million and a mixed lifecycle profile. Computer Hardware has an average age of six years compared with an Expected Useful Life of five years and may require more than one replacement over the 10-year planning period. Computer Software is key to supporting service delivery and has an Expected Useful Life of five years, requiring ongoing lifecycle renewal. Fare Equipment and Communication Equipment have longer Expected Useful Lives but require continued investment to maintain reliability, security and operational continuity. These lifecycle characteristics contribute to the renewal pressures identified in the Financial Analysis.

Other Infrastructure Assets, including Shelters, Bus Stop Pads and Terminals, have a Replacement Value of \$5.6 million and are within their Expected Useful Life. These assets support the customer-facing transit network and should continue to be monitored as service levels, accessibility requirements and customer expectations evolve.

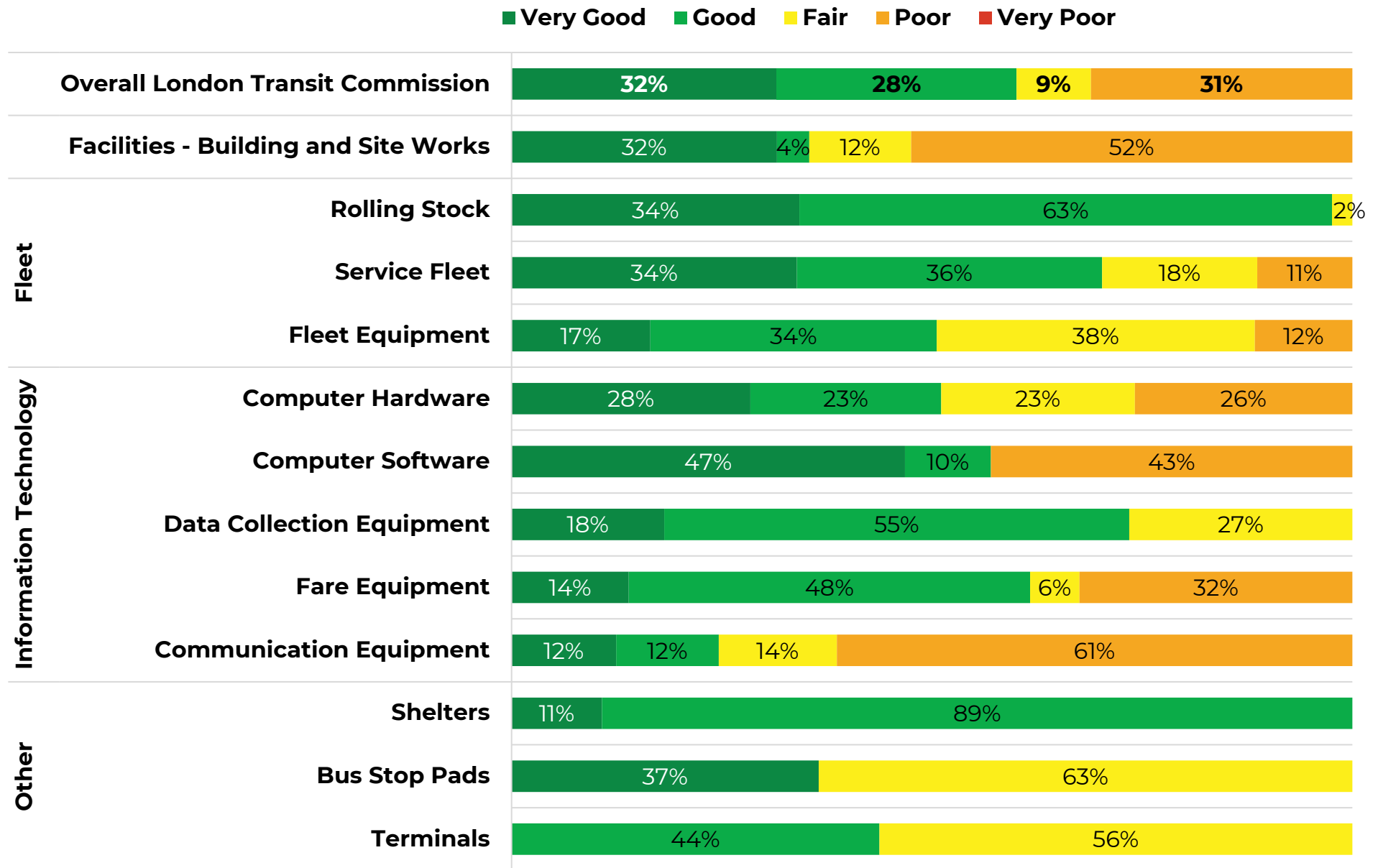
New Rapid Transit (RT) shelters have been designed to accommodate high passenger volumes and include seating areas, route information, security cameras, enhanced lighting and tempered glass to improve passenger safety, comfort and accessibility. These assets are currently under construction and are excluded from the scope of this AMP. They will be incorporated into a future AMP once construction of all shelters is complete.

3.1.2. Asset Condition

Condition is a key indicator of an asset's ability to deliver services and supports informed asset management decision-making. Regular condition assessments inform lifecycle planning, risk management and investment prioritization, helping LTC maintain safe, reliable and sustainable transit services. Figure 3.1 presents the condition distribution of LTC assets, with approximately 69% of the portfolio in Fair or better condition when weighted by Replacement Value. Maintaining this condition profile will require continued lifecycle investment aligned with the Current LOS. Further details on CAM's condition scale can be found in Appendix A, Table A.1.



Figure 3.1 - Overall Asset Condition and Detail



*Subject to rounding.

LTC staff regularly assess facility assets and apply professional judgement to determine condition. Based on these assessments, 48% of Facilities assets are in Fair or better condition. Assets in Poor condition are concentrated at the Highbury Facility, reflecting the age and condition of the infrastructure at that site. The redevelopment and modernization of this facility is expected to address many of these deficiencies over time. Until redevelopment is complete, LTC will continue to identify and prioritize rehabilitation and renewal activities required to maintain safe and reliable operations.

Fleet is organized into three asset types that include Rolling Stock, Service Fleet vehicles and Fleet Equipment. Rolling Stock is in strong overall condition, with all assets rated Fair or better and the majority rated Good or Very Good. This condition profile supports the safety, reliability and accessibility requirements of transit service delivery and reflects ongoing investment in renewal. Maintaining the Rolling Stock condition profile, average age target and Current LOS may require additional lifecycle investment. Service Fleet and Fleet Equipment assets exhibit a broader range of conditions, reflecting their diverse functions, ages and lifecycle characteristics. These assets will continue to be monitored and renewed through planned lifecycle programs to reduce reliability risks and support maintenance and operational response activities.

Information Technology assets have a mixed condition profile, with 54% rated Fair or better. Computer Hardware, Computer Software, Fare Equipment and Communication Equipment each have a significant portion of assets in Poor condition, increasing operational, security and service continuity risks if renewal is deferred. Poor condition and shorter replacement cycles for certain assets create significant renewal requirements, although these assets have a limited effect on LTC's overall asset condition rating.

Other Infrastructure Assets, including Shelters, Bus Stop Pads and Terminals, are all rated Fair or better and continue to support current service delivery requirements. These assets generally exhibit a stable condition profile; however, ongoing monitoring and lifecycle investment will be required to maintain accessibility, customer amenities and service standards as the transit network evolves.

3.2. Levels of Service

O. Reg. 588/17 requires municipalities to define and monitor LOS by linking Community LOS and Technical LOS. Community LOS describes how the community experiences services in terms of cost efficiency, reliability, environmental stewardship and service scope. Technical LOS uses measurable performance metrics to show how asset condition and operations support those outcomes. Additional details on LOS attribute descriptions are found in Appendix A, Table A.2. Developed in collaboration with LTC staff, the Community LOS described below, together with the Technical LOS in Table 3.2, establish performance metrics used to evaluate service delivery. The 2025 Performance represents the baseline, reflecting the most recent measured performance for each Technical LOS. The 10-year Target (2026–2035) represents the intended performance level to maintain Current LOS or achieve a Proposed LOS over the planning period. These indicators serve as benchmarks for evaluating the performance of LTC assets.

London Transit Community LOS: LTC services are planned, funded and maintained to provide safe, reliable, accessible and sustainable transit services that support community mobility, connectivity and quality of life while ensuring the responsible stewardship of public assets.

Table 3.2 - Levels of Service

Service Attribute	Technical Performance Measure	2025 Performance	10-Year Target (2026–2035)
Cost Efficiency	Overall Reinvestment Rate	7.3%	8.1% to 10.4%
Reliability	Percentage of LTC assets in Fair or better condition	69%	Maintain ≥69%
	Percentage of Rolling Stock buses within Expected Useful Life	98%	100%
	Average age of Rolling Stock buses	6 years	Maintain 6 years
	Rides per service hour – Conventional	24.4	21.9
Scope	Ridership – Conventional	17.46 million	16.46 million
Environmental Stewardship	Annual electricity consumption (kWh/ft ²)	10.5 kWh/ft ²	Monitor and optimize
	Annual natural gas consumption (m ³ /ft ²)	4.7 m ³ /ft ²	Monitor and optimize
	Annual water consumption (m ³ /ft ²)	0.05 m ³ /ft ²	Monitor and optimize

*Subject to rounding.

The Technical LOS performance measures collectively demonstrate the cost efficiency, reliability, service scope and environmental sustainability of the LTC asset portfolio. Where applicable, performance targets reflect planned service levels and forecast demand over the planning horizon rather than continual growth.

The 2025 baseline Reinvestment Rate of 7.3% would need to increase to 8.1% over the 10-year planning horizon to maintain the Current LOS and eliminate the Infrastructure Gap. An increase to 10.4% would achieve the Proposed LOS reflecting additional investment associated with the Highbury Facility modernization and service improvements. These targets provide a benchmark for assessing whether projected funding levels are sufficient to maintain or improve asset condition and service outcomes.

Overall, 69% of LTC assets are in Fair or better condition, meeting the 10-year target of maintaining at least this level of performance. Sustained lifecycle investment will be required to preserve asset condition, manage asset risks and support reliable service delivery.

A key component of LTC's fleet management strategy is a progressive replacement program targeted to reach and maintain an average Rolling Stock bus age of six years. Longer service lives may reduce near-term capital replacement costs but can increase overhaul and maintenance requirements, reflecting a trade-off between capital and operating expenses. In 2025, 98% of Rolling Stock buses were within their Expected Useful Life and the average bus age was six years. As the fleet has grown, the funded replacement program is no longer sufficient to maintain the six-year average age target over the planning horizon. The resulting lifecycle funding shortfall is reflected in the Current LOS Infrastructure Gap and will be reviewed through the Multi-Year Budget process.

Conventional transit achieved 24.4 rides per service hour, while annual ridership reached 17.46 million passenger trips in 2025, exceeding LTC's 10-year planning targets. These targets reflect approved service plans and forecast demand assumptions rather than a maximum service outcome. Current forecasts anticipate a modest decline in ridership over the planning horizon, driven in part by reduced post-secondary student enrolment, with students representing an important transit user group. LTC will continue to monitor ridership trends and travel patterns to identify opportunities to improve service reliability, network efficiency and the overall customer experience. Planned service reviews, strategic investments and targeted operational improvements will support efforts to attract and retain riders while aligning service delivery with evolving community needs and travel demand.

Environmental performance measures at LTC Facilities establish baseline consumption levels of 10.5 kWh/ft² for electricity, 4.7 m³/ft² for natural gas and 0.05 m³/ft² for water. These measures will be monitored and optimized over the 2026–2035 period to improve resource efficiency, reduce operating costs and support LTC's environmental sustainability objectives. Performance is expected to improve as the Highbury Facility redevelopment incorporates more energy-efficient building systems and technologies.

Together, these measures show that LTC is generally performing well against current service expectations and provide a framework for monitoring future investment needs, service risks and improvement opportunities.

3.3. Lifecycle Management

This section describes the lifecycle management strategies, risk considerations and climate change opportunities used to operate, maintain, renew and replace assets over time, while sustaining service levels, managing risks and supporting long-term resilience.

3.3.1. Lifecycle Management Activities

Asset lifecycle management encompasses a series of planned actions that are essential to sustaining asset performance and reliability. Through preventative maintenance, condition assessments and lifecycle evaluations, LTC optimizes asset utilization, reduces service interruptions and improves cost efficiency. Table 3.3 highlights the lifecycle management activities, designed to maintain service levels and manage risks while ensuring sustainable lifecycle costs. For further descriptions of lifecycle activities, refer to Appendix A, Table A.3.

Table 3.3 - Lifecycle Management Activities

Lifecycle Activity	Lifecycle Management Details
Acquisition	. Growth-related capital needs, where applicable, are identified and advanced through business cases and the City’s capital planning and budget processes. . Adopt technologies that support current and future service levels while improving reliability, safety, customer experience and lifecycle value. . Consult transit users and community partners to identify service improvement opportunities. . Apply strategic planning documents such as the Five-Year Service Plan to guide service delivery, asset investment and technology modernization.
Operation	. Operate facilities in compliance with applicable standards and operational requirements. . Manage facility systems and services to support safe and efficient operations. . Schedule and dispatch fleet resources to meet service requirements and maintain Current LOS. . Monitor fleet utilization, fuel consumption, inspections and compliance requirements. . Manage assets through policies and practices that support reliability and minimize disruption. . Maintain software applications to reduce cybersecurity risk and support operational continuity.
Maintenance	. Conduct inspections and preventative maintenance to preserve asset condition and performance. . Generate and track maintenance work orders through LTC's asset management processes.

Lifecycle Activity	Lifecycle Management Details
Maintenance	. Monitor vehicle and equipment condition and address identified deficiencies. . Update procurement specifications to improve asset performance and reduce recurring issues. . Perform repair maintenance to address breakdowns, failures and unforeseen events. . Track failures and incidents to support continuous improvement and reduce downtime. . Support hardware and software through maintenance programs and user support activities.
Renewal	. Assess facilities and infrastructure to identify rehabilitation and renewal requirements. . Replace Information Technology assets at end of life to address obsolescence, support requirements and cybersecurity risks. . Renew fleet assets based on condition, reliability, performance and lifecycle value. . Evaluate opportunities to repurpose or augment fleet assets where cost-effective.
Disposal	. Dispose of assets in accordance with procurement requirements, regulations and environmental standards. . Plan disposal activities to maximize asset value recovery and minimize long-term ownership costs. . Recycle Information Technology assets at end of life and securely dispose of data storage devices.

3.3.2. Risk Considerations

LTC strives to meet defined LOS while minimizing lifecycle costs, however, risks may arise if lifecycle management strategies are not followed. Risk mitigation strategies focus on structured operation, maintenance and proactive lifecycle replacement programs to ensure services are delivered to the community. Table 3.4 identifies the key risks related to each lifecycle management activity and the mitigation strategies currently in place.

Table 3.4 - Risk Assessment and Current Mitigation Strategies

Lifecycle Activity	Risk	Current Mitigation Strategy
Acquisition	. Asset acquisitions may not align with ridership growth, service demands or long-term plans. . Funding constraints may delay procurement of vehicles, equipment	. Use ridership forecasts, growth projections and service plans to validate acquisition requirements. . Align capital procurement with the City's Official Plan, Development Charges (DC) Background Study, Master Transit Plans, Five-Year Service Plan and fleet replacement strategies.

Lifecycle Activity	Risk	Current Mitigation Strategy
Acquisition	or infrastructure required to maintain service levels.	Integrate the Multi-Year Budget with lifecycle cost models to support sustainable funding decisions.
Operation	Ineffective operation or monitoring of assets may increase service disruptions, safety risks, regulatory non-compliance and reliability issues.	- Apply continuous monitoring and standard operating procedures to support performance. - Maintain licensing, certification and compliance programs. - Review asset utilization and operational performance to minimize service disruptions.
Maintenance	- Inadequate maintenance capacity or prolonged repair cycles may accelerate asset deterioration. - Parts shortages or vendor delays may reduce service reliability. - Skilled labour shortages may affect LTC's ability to maintain required service levels.	- Optimize preventative maintenance intervals using condition assessments, manufacturer recommendations and asset performance data. - Maintain inventory buffers, vendor performance monitoring and contingency staffing plans. - Use analytics to reduce backlogs and extend asset life. - Implement workforce development, recruitment and selective outsourcing strategies to address labour shortages.
Renewal	- Renewal and rehabilitation projects may not achieve expected lifecycle performance or improvements. - Cost escalation, construction delays or system integration issues may affect project outcomes. - Deferred Rolling Stock replacement may increase fleet age and reliability risks.	- Apply condition-based renewal forecasting supported by risk assessments and lifecycle analysis. - Monitor project delivery, market conditions and asset performance to confirm expected outcomes. - Prioritize renewal investments based on asset criticality, condition and service impacts. - Use condition monitoring to inform fleet replacement priorities.
Disposal	- Asset replacement timing may affect operational requirements. - Delayed disposal may increase storage costs and reduce asset value.	- Implement controlled disposal processes aligned with replacement planning, inventory management and environmental requirements. - Coordinate disposal activities with asset replacement schedules to maximize value recovery and minimize operational impacts.

3.3.3. Climate Change Considerations

The City of London's Climate Emergency Action Plan (CEAP) provides the broader framework for climate action across the community. LTC supports this direction through initiatives intended to reduce greenhouse gas emissions, improve resilience to climate change impacts and align transit operations with City climate objectives. Climate change considerations are incorporated into LTC lifecycle and service planning and are evaluated during asset replacement, renewal and service improvement projects where practical, affordable and aligned with service delivery requirements.

A key initiative is the Zero-Emission Bus pilot program, which will allow LTC to assess the operational, financial and infrastructure implications of transitioning to zero-emission transit technology. The pilot includes buses and charging infrastructure and will provide local operating experience related to vehicle performance, reliability, charging requirements, maintenance needs, lifecycle costs and service delivery impacts. Findings will help inform future fleet transition planning, including facility and infrastructure requirements, funding needs and long-term fleet management strategies. LTC will also consider experience from hydrogen fuel cell bus pilots underway at other Ontario transit systems as part of future fleet transition modelling.

The planned redevelopment of the Highbury Facility also provides an opportunity to incorporate energy-efficiency measures into future facility design. LTC has previously implemented efficiency improvements at the Highbury Facility, including LED lighting, high-speed doors, motion-activated lighting and large-volume fans. The Wonderland Facility was also designed with energy efficiency features, including high-speed doors, water conservation and storage for bus washing, LED and motion-activated lighting, in-floor heating, building automation systems and rooftop solar panels.

Increasing public transit service is another important component of LTC's climate approach. Expanding access to reliable transit can support increased ridership and reduce reliance on private vehicles, contributing to community-wide greenhouse gas reductions. Continued service growth will need to be considered alongside the capital and operating resources required to support expanded transit service.

Implementation of climate-aligned initiatives must be balanced with affordability, service requirements and available funding. A broader zero-emission fleet transition would require significant investment. Future costs will also need to reflect current market conditions, including bus price increases, tariffs and updated operating experience with zero-emission technologies. LTC will continue to evaluate climate-related opportunities through future lifecycle, service and capital planning.

3.4. Financial Analysis

This section compares Projected Funding with the investment required to maintain Current LOS and achieve Proposed LOS over the 2026 – 2035 planning horizon. Lifecycle renewal funding is insufficient to fully maintain Current LOS, resulting in a 10-year Infrastructure Gap driven primarily by Rolling Stock renewal.

Funding scenarios are summarized below:

Current LOS - Projected Funding is not sufficient to maintain Current LOS lifecycle renewal requirements.

- **10-Year Infrastructure Gap:** \$60.5 million
- **Required Reinvestment Rate:** 8.1%

Proposed LOS - Projected Funding is sufficient to achieve planned Proposed LOS improvements.

- **Incremental 10-Year Infrastructure Gap:** \$0
- **Required Reinvestment Rate:** 10.4%

Overall 10-Year Infrastructure Gap: \$60.5 million

The following sections provide further details on this financial analysis.

3.4.1. Funding Strategies

LTC considers the following lifecycle funding strategies:

- **Projected Funding:** Capital funding approved through the budgeting process including lifecycle renewal, service improvements, reserve funds and life-to-date budgets. This funding forms the baseline for calculating Infrastructure Gaps and Reinvestment Rates.
- **Current LOS:** Capital funding required to maintain current levels and replace assets at the end of their Expected Useful Life to prevent further deterioration in condition.
- **Proposed LOS:** The additional capital funding required to improve service levels beyond Current LOS.

Excluded from this lifecycle analysis are the following funding sources:

- **Operating Budget:** LTC's lifecycle approach is supported by operating funding, which is essential for delivering reliable services to the community. The operating budget of approximately \$125.3 million supports all operational requirements and reflects the full range of expenditures within the approved budget. Operating budgets are excluded from lifecycle analysis, as it is assumed that operational needs are addressed within the existing budget framework. Any emerging operating pressures are managed through the annual budget process.
- **Growth Budget:** Growth funding required to support development is managed through the DC Background Study process. Once constructed and placed into service, growth assets are incorporated into the Asset Management Program, and their future lifecycle requirements are considered through the assessment growth business case review process.

3.4.2. Forecasted Infrastructure Gap

The Infrastructure Gap represents the difference between available capital funding and the investment required to maintain current levels and deliver planned service improvements over the 10-year planning horizon. LTC's total 10-year (2026–2035) capital Projected Funding is \$574.2 million comprised of the following:

- \$437.2 million allocated to lifecycle renewals required to maintain Current LOS; and
- \$137.0 million allocated to service improvements for planned upgrades to achieve a Proposed LOS.

Figure 3.2 compares LTC's Projected Funding, investment needs and resulting Infrastructure Gap to maintain the Current LOS over the 2026 to 2035 planning horizon. The bars show annual Projected Funding and annual needs while the lines show the resulting cumulative Infrastructure Gap. The Cumulative Gap (Current LOS) line reflects only the difference between Current LOS Funding and Current LOS Needs. The Proposed LOS scenario does not incrementally increase the Infrastructure Gap, therefore the Cumulative Gap (Proposed LOS) line is the same. Table 3.5 provides the corresponding annual funding, needs and summarizes the financial implications of maintaining the Current LOS.

Figure 3.2 - 10-Year Comparison of Funding, Needs and Cumulative Infrastructure Gaps (Millions)

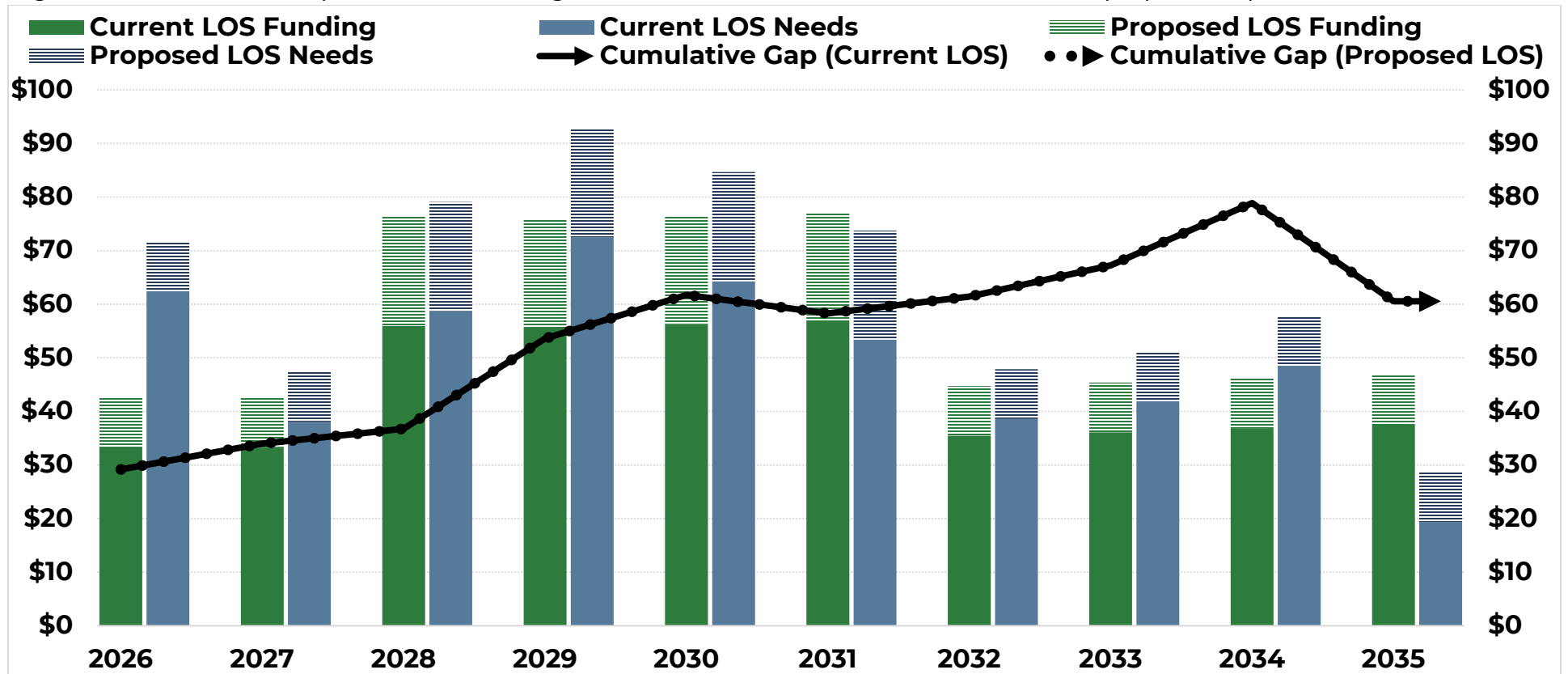


Table 3.5 - 10-Year Funding, Needs and Infrastructure Gap Summary (Millions)

Scenario	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total	Gap
Current LOS Funding	\$33.3	\$33.2	\$56.0	\$55.6	\$56.2	\$56.8	\$35.5	\$36.1	\$36.9	\$37.7	\$437.2	-
Proposed LOS Funding	\$9.3	\$9.3	\$20.3	\$20.3	\$20.3	\$20.3	\$9.3	\$9.3	\$9.3	\$9.3	\$137.0	-
Total Projected Funding	\$42.5	\$42.5	\$76.3	\$76.0	\$76.5	\$77.2	\$44.7	\$45.4	\$46.1	\$46.9	\$574.2	-
Current LOS Needs	\$62.4	\$38.0	\$58.7	\$72.5	\$64.3	\$53.4	\$38.6	\$41.9	\$48.5	\$19.3	\$497.8	\$60.5
Proposed LOS Needs	\$9.3	\$9.3	\$20.3	\$20.3	\$20.3	\$20.3	\$9.3	\$9.3	\$9.3	\$9.3	\$137.0	\$0
Total Needs	\$71.7	\$47.3	\$79.1	\$92.8	\$84.7	\$73.7	\$47.9	\$51.2	\$57.8	\$28.6	\$634.7	\$60.5

*Subject to rounding.

Lifecycle capital renewal needs required to maintain Current LOS are estimated at \$497.8 million over the 2026–2035 planning horizon. Projected Funding allocated to lifecycle renewal totals \$437.2 million, resulting in a cumulative 10-year Infrastructure Gap of \$60.5 million.

The Infrastructure Gap is concentrated in Rolling Stock, with a forecasted shortfall of \$42.7 million, or approximately 70% of the total gap. This relates to lifecycle replacement required to support the six-year average bus age target, maintain asset condition and sustain reliable transit service. Tariff uncertainty has also increased cost pressures associated with Fleet renewal. LTC will continue to monitor potential cost impacts and update funding requirements through the Multi-Year Budget process.

Information Technology accounts for approximately \$10.7 million or 17% of the Infrastructure Gap. Fare Equipment represents the largest contributor within this category at approximately \$5.7 million. Communication Equipment, Computer Hardware, Computer Software and Data Collection Equipment collectively account for the remaining \$5.0 million. These renewal needs reflect a combination of assets in Poor condition and shorter replacement cycles for certain technology assets, increasing the need for timely renewal to support operational reliability and continuity.

The remaining Infrastructure Gap consists of approximately \$4.2 million for Other Infrastructure Assets, primarily existing LTC-owned shelters, and \$2.9 million for Service Fleet and Fleet Equipment. Although these assets represent a smaller share of the overall gap, they continue to support day-to-day transit operations and customer service delivery. Facilities do not have a forecast Current LOS Infrastructure Gap under the Projected Funding, indicating that identified lifecycle renewal needs are funded over the planning horizon.

Total Needs of \$634.7 million include \$497.8 million required to maintain Current LOS and an additional \$137.0 million to achieve Proposed LOS. The identified Proposed LOS initiatives include improvements associated with the Highbury Facility redevelopment and the Zero-Emission Bus pilot program. Under the funding assumptions used in this AMP, these initiatives do not create an additional Infrastructure Gap. As a result, the overall 10-year Infrastructure Gap remains \$60.5 million.

The Infrastructure Gap reflects only the capital lifecycle requirements included in this AMP. Additional pressures from growth, operating costs or external market conditions may affect future funding needs and will be reflected in future forecasts where applicable.

3.4.3. Condition Forecasts

This section considers how each funding scenario affects the projected condition profile for Facilities and Rolling Stock over a 10-year period based on available asset data, lifecycle assumptions and planned capital investment. The conditions of Service Fleet, Fleet Equipment, Information Technology and Other Infrastructure Assets are monitored through the State of Infrastructure and Reinvestment Rate analysis.

Facilities and Rolling Stock are the focus of the condition forecasts because they represent the majority of LTC's Replacement Value and have defined lifecycle investment programs over the planning period. Deferred renewal of supporting assets is not expected to materially change these two condition forecasts but may increase operational, reliability, cybersecurity and service continuity risks.

Facilities Condition Forecast

As shown in Table 3.6, all funding scenarios are forecast to improve the overall Facilities condition from an average rating of Fair to Good by 2035. This improvement is primarily driven by the phased redevelopment of the Highbury Facility, which is currently in Poor condition and represents a significant portion of the Facilities asset portfolio. This planned investment includes lifecycle renewal activities required to maintain Current LOS as well as service improvement initiatives associated with the Highbury Facility redevelopment, increased bus storage capacity and infrastructure required to support battery-electric bus operations.

Table 3.6 - Funding Scenarios and Condition Forecasts (Facilities)

Scenario	Current Condition	Forecasted 2035 Condition
Projected Funding	Fair	Good
Current LOS	Fair	Good
Proposed LOS	Fair	Good

Overall, the condition forecast indicates that planned investment is expected to improve Facilities to Good condition over the planning horizon under all three scenarios. The forecast should continue to be reviewed as project scope, timing and capital investment assumptions are updated.

Rolling Stock Condition Forecast

As shown in Table 3.7, Rolling Stock is currently in Good condition overall and is forecast to remain in Good condition through 2035 under all three funding scenarios. While Projected Funding is sufficient to maintain the overall condition rating, it is not sufficient to maintain the six-year average bus age target over the planning horizon.

The identified Rolling Stock Infrastructure Gap reflects a lifecycle replacement shortfall related to fleet age and reliability rather than a decline in the overall condition rating. Without additional lifecycle replacement investment, the average age of the fleet is expected to increase, which may increase maintenance requirements, reliability risks and potential service disruptions as buses remain in service longer.

Table 3.7 - Funding Scenarios and Condition Forecasts (Rolling Stock)

Scenario	Current Condition	Forecasted 2035 Condition
Projected Funding	Good	Good
Current LOS	Good	Good
Proposed LOS	Good	Good

Funding the Current LOS replacement requirement is forecast to maintain the six-year average bus age target while sustaining Rolling Stock in Good overall condition. This investment supports a more consistent replacement cycle, helps manage age-related risks and supports reliable transit service.

The Proposed LOS scenario includes investment in the Zero-Emission Bus pilot program. This investment is intended to support environmental objectives and evaluate future fleet technology rather than materially change the overall Rolling Stock condition forecast over the 10-year planning horizon.

Rolling Stock lifecycle replacement follows a cyclical pattern, with the timing and number of buses replaced varying from year to year. As a result, the condition and age profile of individual buses may fluctuate even when the overall portfolio remains in Good condition.

3.4.4. Reinvestment Rates

Reinvestment Rates show how effectively LTC is renewing and replacing assets through the capital program and are calculated as follows:

$$\text{Annual Average Capital Investment} \div \text{Total Replacement Value}$$

An overview of the reinvestment rates for each funding scenario is provided in Table 3.8.

Table 3.8 - Summary of Reinvestment Rates

Asset	Replacement Value (Millions)	Scenario	Annual Average Capital Investment (Millions)	Annual Reinvestment Rate (2026–2035)
Overall	\$612.0	Projected Funding	\$57.4	9.4%
		Current LOS	\$49.8	8.1%
		Proposed LOS	\$63.5	10.4%
Facilities	\$335.4	Projected Funding	\$35.0	10.4%
		Current LOS	\$22.7	6.8%
		Proposed LOS	\$35.0	10.4%
Fleet	\$242.1	Projected Funding	\$20.8	8.6%
		Current LOS	\$24.3	10.0%
		Proposed LOS	\$25.4	10.5%
Information Technology	\$28.9	Projected Funding	\$1.3	4.4%
		Current LOS	\$2.3	7.9%
		Proposed LOS	\$2.3	8.1%
Other Infrastructure Assets	\$5.7	Projected Funding	\$0.3	4.9%
		Current LOS	\$0.5	8.3%
		Proposed LOS	\$0.7	12.4%

*Subject to rounding.

Overall, LTC's Projected Funding provides an annual average capital investment of \$57.4 million over the 2026–2035 planning horizon, representing a 9.4% Reinvestment Rate. Of this, approximately \$43.7 million is allocated to lifecycle renewal, equivalent to a Reinvestment Rate of approximately 7.1% compared with the \$49.8 million or 8.1% required to maintain Current LOS. The difference between Projected Funding allocated to lifecycle renewal and Current LOS needs contributes to the forecast 10-year Infrastructure Gap of \$60.5 million.

The Proposed LOS scenario includes Current LOS lifecycle renewal requirements and additional service improvement initiatives, resulting in an average annual investment requirement of \$63.5 million, representing a Reinvestment Rate of 10.4%. These incremental improvements do not add to the Infrastructure Gap.

The primary financial pressure is therefore associated with lifecycle renewal required to maintain Current LOS, particularly Rolling Stock replacement to support safe, reliable transit services across London.

3.5. Conclusion

This AMP provides a strategic framework for managing LTC's \$612.0 million infrastructure portfolio over the 2026–2035 planning horizon to support reliable, accessible and sustainable transit services. Overall, 69% of assets are in Fair or better condition, with key performance measures generally supporting the Current LOS. Ongoing Rolling Stock renewal is required to maintain buses in Good condition and support the six-year average age target. Planned investment is expected to improve the overall Facilities condition from Fair to Good. The Highbury Facility redevelopment and Zero-Emission Bus pilot program are also expected to strengthen long-term operational capacity, service reliability and sustainability.

The financial analysis identifies a 10-year Infrastructure Gap of \$60.5 million associated with capital lifecycle renewal required to maintain Current LOS. Approximately 70% of the gap relates to Rolling Stock replacement, with the remainder associated with Information Technology and other supporting assets. Tariff-related cost pressures and insufficient funding for Rolling Stock replacement may create future funding pressures. The \$137.0 million Proposed LOS program is not anticipated to increase the overall Infrastructure Gap.

Future changes in technology delivery models, including potential transitions to cloud-based subscription services, may shift some lifecycle costs from the capital budget to the operating budget. These changes should be reflected in future AMP updates as service delivery models and funding arrangements are confirmed.

Next steps are to prioritize Rolling Stock lifecycle renewal, address Information Technology and other supporting asset renewal requirements, advance planned facility modernization and climate initiatives and continue reviewing funding requirements through the Multi-Year Budget process.

LTC and the CAM Team will continue to monitor ridership trends, asset performance and funding adequacy to support continuous improvement and informed investment decisions. Ongoing refinement of asset data, condition assessment methodologies, lifecycle forecasting and performance monitoring will strengthen the Asset Management Program and support the long-term delivery of sustainable transit services.

Appendix A

Glossary

Asset: Non-financial assets that are acquired, constructed or developed and are held for use in the production or supply of goods and services, for rental to others, for administrative purposes or for the development, construction, maintenance or repair of other tangible assets; have useful economic lives extending beyond an accounting period; and are to be used on a continuing basis.

Asset Management: The coordinated activity of an organization to realize value from assets.

Asset Management Plan (AMP): A plan that combines multi-disciplinary techniques, including technical and financial analysis, over the lifecycle of infrastructure assets to provide defined LOS in the most cost-effective manner and manage risks associated with those assets.

Climate Emergency Action Plan (CEAP): The City of London's plan to support net-zero greenhouse gas emissions by 2050, improve climate resilience and encourage inclusive participation.

Condition Rating: The qualitative assessment of an asset's physical condition using the CAM condition scale (Very Good, Good, Fair, Poor, Very Poor).

Corporate Asset Management (CAM): The City program/team that supports asset management practices, including lifecycle planning, condition assessment, service level analysis and financial forecasting.

Current Levels of Service (LOS): The current service level being provided and planned to be maintained through lifecycle activities, operating practices and capital investment.

Current LOS Needs: The capital investment required to maintain current LOS and replace or renew assets at the end of their Expected Useful Life.

Development Charges (DC): Growth-related funding managed through the Development Charges Background Study.

Expected Useful Life (EUL): The estimated period over which an asset is expected to provide its intended service before replacement or major renewal is required.

Greenhouse Gas (GHG): Emissions that contribute to climate change, referenced in relation to the CEAP.

Infrastructure Gap (IG): The difference between Projected Funding and the investment required to maintain Current LOS or achieve Proposed LOS over the planning period.

Level of Service (LOS): The statement that describes the outputs or objectives intended to be delivered to the community. LOS may be expressed in terms of community experience and/or technical performance.

Lifecycle Activities: Activities undertaken to manage assets over their lifecycle, including acquisition, operation, maintenance, renewal and disposal.

Ontario Regulation 588/17 (O. Reg. 588/17): Ontario's *Asset Management Planning for Municipal Infrastructure* regulation, which establishes requirements for municipal asset management planning, including Levels of Service, lifecycle management and long-term financial strategies.

Projected Funding: Capital funding expected to be available over the planning period through approved budgets, reserve funds, lifecycle renewal programs, service improvement funding or other identified funding sources.

Proposed Levels of Service (LOS): A service level that reflects an improvement, change or enhancement beyond Current LOS. Achieving Proposed LOS may require additional funding, changes in lifecycle activities, expanded scope or changes to service standards.

Proposed LOS Needs: The additional capital investment required to achieve a higher or enhanced service level beyond Current LOS.

Reinvestment Rate: A measure of annual capital investment compared to the total Replacement Value of assets. It is calculated as annual average capital investment divided by total Replacement Value.

Replacement Value (RV): The cost that would be incurred to completely replace an infrastructure asset, at a selected point in time, at which a similar LOS would be provided.

Rolling Stock: Revenue-service transit vehicles used to provide public transportation, including conventional and articulated buses.

Service Fleet: Non-revenue vehicles used to support transit operations, maintenance and inspections.

State of Infrastructure (SOI): A summary of asset inventory, age, condition, Expected Useful Life and Replacement Value used to assess the overall health of the asset portfolio.

10-Year Target (2026–2035): The desired performance objective or direction over the 10-year planning period. A 10-year target may represent maintaining Current LOS, improving toward a Proposed LOS or optimizing performance depending on the service attribute and technical performance measure.

2025 Performance: The current or baseline performance measure used in the LOS table. It reflects the most recent available performance information and is used to describe the current LOS.

Table A.1 Condition and Scale Descriptions

Grade	Summary	Description
1	Very Good Fit for the future	The infrastructure in the system or network is generally in very good condition, typically new or recently rehabilitated. A few elements show general signs of deterioration that require attention.
2	Good Adequate for now	The infrastructure in the system or network is in good condition; some elements show general signs of deterioration that require attention. A few elements exhibit significant deficiencies.
3	Fair Requires attention	The infrastructure in the system or network is in fair condition; it shows general signs of deterioration and requires attention. Some elements exhibit significant deficiencies.
4	Poor At risk	The infrastructure in the system or network is in poor condition and mostly below standard, with many elements approaching the end of their service life. A large portion of the system exhibits significant deterioration.
5	Very Poor Unfit for sustained service	The infrastructure in the system or network is in unacceptable condition with widespread signs of advanced deterioration. Many components in the system exhibit signs of imminent failure, which is affecting service.
-	Not Assessed	This category is reserved for assets where data is either missing, not updated or cannot be considered reliable.

Table A.2 Levels of Service Attribute Descriptions

Service Attribute	Description
Accessibility	Service is available and usable by the community to the greatest extent possible, regardless of age, ability or circumstance and meets asset accessibility and legislative requirements.
Cost Efficiency	Measures financial performance in terms of providing the maximum service outcomes (more output for less cost) out of the available budgets. Examples include annual cost to provide the service, asset lifecycle budget as a percentage of current Replacement Value.
Community Satisfaction	Service meets community expectations, measured through community experience metrics such as survey results and the percentage of community members satisfied with assets or service delivery.
Environmental Stewardship	Service is delivered in a way that considers, controls or reduces environmental impacts, using metrics related to stewardship and sustainability (e.g., utility use per square metre of facility space, fuel-based greenhouse gas emissions).
Quality	Service meets defined performance objectives based on plans and intended use/delivery. Metrics assess the quality of services on a technical basis (e.g., multi-criteria quality rating systems).
Reliability	Service is fit for its purpose, supported by reliability metrics (e.g., asset condition and unplanned maintenance events).
Safety	Service safeguards against known dangers and risks and complies with applicable legislation, codes and internal policies/practices. Metrics may include the percentage of required safety inspections completed and the percentage of facility components inspected annually.
Scope	The extent or coverage of service provided through municipal infrastructure assets, describing which user groups or areas of the municipality are served. Measures can include maps of areas connected to the municipal water system, with fire flow access or with access to other municipal services.

Table A.3 Lifecycle Activities Descriptions

Lifecycle Activities	Description
Acquisition	Works that create a new asset, increase capacity or provide a higher LOS to accommodate growth or service improvement. Excludes like-for-like replacement.
Operation	Routine activities required to deliver services to the public. Includes staffing, utilities, routine access, cleanliness and inspections necessary to operate assets safely and efficiently. Does not materially change the asset condition.
Maintenance	Preventative and repair maintenance that preserves asset condition and functionality, so the asset provides service for its planned life. May include minor repairs or replacement of small components, but no material increases in capacity or LOS.
Renewal	Capital activities that rehabilitate or replace existing assets or major components to the original service standard that may extend the service life, without increasing capacity or LOS.
Disposal	Decommissioning, removing or repurposing assets that are no longer cost-effective, safe or necessary.



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