2024 London Public Library Asset Management Plan City of London

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Acknowledgement

Land Acknowledgment
We acknowledge that the London Public Library resides on the traditional lands of the Anishinaabeg, 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. As representatives of the people of the London Public Library, we are grateful to have the opportunity to work and live in this territory.

Staff Acknowledgment
The Corporate Asset Management office would like to acknowledge the London Public Library staff for the effort and support they put forth to help accumulate the data and develop the findings of this Asset Management Plan. We are also sincerely thankful to the London Public Library Board and City of London Council for their support.

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Councillors: Hadleigh McAlister (Ward 1), Shawn Lewis (Ward 2), Peter Cuddy (Ward 3), Susan Stevenson (Ward 4), Jerry Pribil (Ward 5), Sam Trosow (Ward 6), Corrine Rahman (Ward 7), Steve Lehman (Ward 8), Anna Hopkins (Ward 9), Jerry Pribil (Ward 5), Sam Trosow (Ward 6), Corrine Rahman (Ward 7), Steve Lehman (Ward 8), Anna Hopkins (Ward 9), Paul Van Meerbergen (Ward 10), Councillor Skylar Franke (Ward 11), Elizabeth Peloza (Ward 12): David Ferreira (Ward 13), and Steven Hillier (Ward 14)

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Members: Brian Gibson (Chair), Jeremy McCall (Vice Chair), Heather Jack (Member), Beth Allison (Member), Zeba Hashmi (Member), Sharon Desserud (Member), Scott Collyer (Member), Sam Trosow (Councillor), and Peter Cuddy (Councillor)

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Section 1. Executive Summary

<table>
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<tr>
<th>Summary</th>
<th>Maintain Current LOS</th>
<th>Achieve Proposed LOS</th>
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<tbody>
<tr>
<td>Replacement Value ($millions)</td>
<td>$206.2</td>
<td>$206.2</td>
</tr>
<tr>
<td>Cumulative 10-Year Infrastructure Gap ($millions)</td>
<td>$24.6</td>
<td>$36.4</td>
</tr>
<tr>
<td>Infrastructure Gap as a Percentage of Replacement Value</td>
<td>11.9%</td>
<td>17.7%</td>
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1.1: 2024 London Public Library Asset Management Plan

Introduction

The London Public Library (LPL) is a deeply embedded, essential community infrastructure that supports and connects Londoners and those new to London and to Canada with the resources they need to belong and thrive today and into the future. LPL’s 16 branch libraries are rooted deeply in London’s neighbourhoods, acting as hubs for literacy and learning at all stages of life, nurturing community partnerships, ensuring the sharing and distribution of resources including City of London information and resources, offering free cultural and educational programming and much needed access to technology and support for using technology.

This Asset Management Plan (AMP) is designed to enhance the management of LPL’s infrastructure assets in a way that connects strategic LPL, City of London, and community objectives to day-to-day and long-term infrastructure investment decisions. This is accomplished by:

- Aligning with the regulatory landscape, by meeting the requirements of Ontario Regulation 588/17 – Asset Management Planning for Municipal Infrastructure (O. Reg. 588/17), and positioning LPL for capital grant funding applications.
- Understanding the current state of the infrastructure systems (value, quantity, age, condition, etc.).
- Measuring and monitoring levels of service (LOS) to quantify how well infrastructure systems are meeting expectations.
- Communicating asset lifecycle management activities (e.g., how infrastructure is operated, maintained, rehabilitated, replaced, etc.).
- Determining the optimal costs and reinvestment rates of the asset lifecycle activities split between those that maintain current LOS and those that achieve proposed LOS;
- Establishing an infrastructure gap financing strategy to fund the expenditures that are required to meet London Public Library Board (LPLB) approved LOS and associated lifecycle activities.

Based on this analysis key findings of the 2024 LPL AMP are:

- There are $206.2 million dollars of infrastructure assets under LPL management;
- Overall, these assets are in Fair condition;
- Cumulative 10-year maintain current LOS and achieve proposed LOS infrastructure gaps of $24.6 million and $36.4 million, respectively, exist, noting these gaps exclude consideration of additional investments associated with the 2023 cyberattack; and
- The average planned budget for 2023-2032 (based on the 2023 annual budget update) represents a reinvestment rate of 0.7%, which is less than the recommended average to maintain current LOS and achieve proposed LOS reinvestment rates of 2.1% and 2.8%, respectively.

A summary of these results is presented in the following tables and figures:

- Table 1.1 summarizes the infrastructure gaps and presents them as a percentage of LPL’s infrastructure assets replacement value;
- Figure 1.1 summarizes the overall condition distribution of the assets between those that are in Very Good to Very Poor condition;
- Table 1.2 presents the reinvestment rates for planned budget, maintain current LOS, and achieve proposed LOS; and
- Figure 1.2 shows the optimal maintain current LOS and achieve proposed LOS expenditures compared to planned
budget and additional reserve fund availability, and the resulting infrastructure gaps.

Table 1.1 2024 AMP Summary Information

<table>
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<tr>
<td>10-Year Infrastructure Gap ($millions)</td>
<td>$24.6</td>
<td>$36.4</td>
</tr>
<tr>
<td>Infrastructure Gap as a Percentage of Replacement Value</td>
<td>14.0%</td>
<td>20.7%</td>
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</tbody>
</table>

Figure 1.1 Overall Condition

Table 1.2 Approved Budget, Maintain Current LOS, and Achieve Proposed LOS Annual Reinvestment Rates

<table>
<thead>
<tr>
<th>Current Annual Reinvestment Rate (Planned Budget)</th>
<th>Maintain Current LOS Recommended Annual Reinvestment Rate</th>
<th>Achieve Proposed LOS Recommended Annual Reinvestment Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.7%</td>
<td>2.1%</td>
<td>2.8%</td>
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1.2: Summary of Asset Management Plan Structure
The AMP is designed to provide the reader with a strong functional knowledge of the basis of this report along with the process and data behind the development and results. This is achieved through the following report structure:

- **Introduction** section provides an overview of the provincial and municipal policies that govern asset management reporting requirements and the City’s Corporate Asset Management (CAM) Program as well as a summary of the various components of the AMP that culminate together to provide meaningful information that supports asset and budget decisions.

- **Detailed Asset Management Plan** section summarizes the existing asset inventory, its replacement value, condition, age distribution, and how LPL stores its asset data. This section then explores the LOS delivered by the assets, the associated lifecycle management strategies, and activities, and concludes with an analysis of the identified infrastructure gaps and supporting financing strategies.
• **Conclusion and Recommendations** section outlines the findings and observations made throughout the AMP development and reporting process and establishes the recommendations that will be used to guide future asset management activities, subject to LPLB approval.

• **Appendix A. O.Reg.588/17 Asset Management Plan Requirements** section encompasses a detailed mapping of the legislated requirements to the various sections and/or sub-sections of this AMP.

### 1.3: Executive Summary Conclusion and Recommendations

#### Conclusion

Based on LPL staff input and asset data, the LPL AMP is a tactical outcome of the City’s CAM Program, setting out the details of the current plan for LPL to manage its $206.2 million worth of infrastructure, and the required investments to expand the asset portfolio to meet maintain current LOS and achieve proposed LOS objectives. There are no easy solutions to how the entire infrastructure system works together to achieve an optimal delivery of library services. But this AMP, among other LPL strategic documents, helps to identify the additional efforts required to address the reported infrastructure gaps.

Based on the analysis, the 2023 maintain current LOS and achieve proposed LOS infrastructure gaps of $3.0 million and $5.0 million, respectively, compared to a $206.2 million asset base are considered well managed gaps. However, the cumulative 10-year maintain current LOS and achieve proposed LOS gaps of $24.6 million and $36.4 million, respectively, are concerning. This growth in the infrastructure gaps has the potential to escalate beyond LPL’s ability to manage services effectively. As there is no intent to allow this to occur, further action is needed to address both the understanding and forecasted growth of the gaps.

Choices are available as to how LPL manages the infrastructure gaps:

• LPL can continue to deliver services at their current or proposed levels by committing to make required investments thereby mitigating or even eliminating the infrastructure gaps. This funding can come from either tax supported or non-tax supported sources of financing, but funding sources are limited. Thus, LPL must continue to manage its services in an affordable manner with due regard to community and staff impacts.

• Paying for the gaps is not the only opportunity. In rare cases, LPL can reduce LOS to match its ability to pay. However, there may be an unwillingness to give up services currently enjoyed and a strong desire to improve services especially when considered in the context of public learning and safe community gathering spaces.

• A third opportunity for LPL is to find more efficient and effective ways of delivering services, including changing the asset mix that supports service delivery to the community. When possible, LPL strongly supports this direction and regularly invests in improvements. One element of this third approach is the work underway to enhance asset management practices.

Overall, LPL has a long-standing practice of pursuing all possible means to achieve service delivery goals and has been reasonably successful delivering quality services. In effect LPL adopts a blend of the three approaches outlined and is continuously seeking to improve these strategies.
Recommendations
The City’s CAM Program is founded on the principle of continuous improvement with the object of increasing line-of-sight quality of data/information and the tools and techniques that are used to inform services and asset management decision-making. This increased quality will lead to greater confidence in the analysis documented and decisions formed through the AMP and supporting processes.

Based on these objectives the Recommendations section of this AMP outlines administrative projects that will enhance the management of and reporting against LPL’s $206.2 million worth of infrastructure assets. These recommendations are structured to address short- and long-term asset management objectives and are categorized according to distinct asset management knowledge areas.

Each of these recommendations will be completed with leading support from the City’s CAM staff per the approved asset management service level agreement, and there are no additional funding needs associated with the completion of these administrative projects (i.e., initial projects will be completed leveraging existing staff and other resources).
Section 2. Introduction
2.1: Supporting London Public Library Goals Through the Corporate Asset Management Program

London Public Library (LPL) infrastructure systems support a range of services that connect Londoners and those new to London and to Canada with the resources they need to belong and thrive today and into the future. These service delivery results are based on LPL’s strategic community and organizational objectives established through the LPL Strategic Plan, which outlines the strategic priorities, and values that guide LPL in a way that aligns with the core values of our community. The 2022-2026 LPL Strategic Plan summarizes these objectives as follows:

**Strategic Priority 1: Spaces That Inspire**
Physical and virtual spaces will be welcoming, enterprising, and compassionate in meeting and anticipating the needs of Londoners. Spaces will be optimized using an evidence-based approach that ensure environmental sustainability and designed to support and promote our commitment to 21st Century literacy skills.

**Strategic Priority 2: Creating Possibilities**
With a focus on youth and marginalized communities, to help Londoners succeed, library services will actively engage patrons to understand their unique needs and work to identify and overcome barriers. State-of-the-art technology will be used to support patrons’ creative aspirations, skill building, and entrepreneurial spirit.

**Strategic Priority 3: Exceptional Experiences**
Based on the needs and values of our community, Library’s service delivery model will provide patrons meaningful, thought-provoking, enriching, entertaining, and/or educational experiences. This service delivery model will be established through transparent policies and procedures that seek input and feedback from the community before, during, and after the implementation of initiatives, programs, and ongoing services.

**Strategic Priority 4: Community Engagement**
Through direct partnerships and outreach activities, library services will foster modern in-person and virtual connections that will encourage an environment of collaboration and community discourse among Londoners. Library will create or curate events that rally the community around literacy and will continue to provide the collections the community wants and needs. To demonstrate return on investment and value to the community, LPL will hold itself to the highest level of accountability, in terms of financial stewardship, outcome measures, and sustainable practices.

These strategic priorities are realized using the following values that guide LPL’s engagement with every patron, and partner or member of our community, and are reflected in our spaces, our policies, our technology, and the removal of service delivery barriers.

**Our Values**
- Exceptional Customer Service
- Anti-Racism and Anti-Oppression
- Strong Relationships
- Digital Empowerment
- Accountability and Responsibility
- Foundational Literacies

The City’s CAM Program is designed to enhance the management of the infrastructure assets (both City of London and Agencies, Boards, and Commissions assets) in a way that connects strategic objectives to day-to-day decisions related to when, why, and how investments are made into infrastructure systems. Like the strategic planning and budgeting processes,
this is an iterative process that continuously improves through each cycle. For further information regarding the CAM Program refer to the City’s CAM Policy¹.

This AMP was developed through the City’s CAM Program based on an approved Service Level Agreement between LPL and the City. By following this development process the AMP achieves the following:

- Sets out the plan for managing the infrastructure assets to ensure they can provide services at levels that meet the community and LPLB approved objectives.
- Forecasts the expected impact that the 2023 annual budget update, inclusive of 2023-2032 capital plan (hereon referred to as “planned budget”), will have on the state of the infrastructure assets.
- Understanding of the changes in lifecycle strategies and associated risks if there are funding gaps between the planned budget and the expenditures required to maintain current LOS or achieve proposed LOS.
- Fulfill O. Reg. 588/17 mandated requirements and maintain eligibility for current and future other levels of government capital funding programs.

2.2: Provincial Asset Management Planning Requirements

This AMP builds upon existing LPL asset management activities and leverages others that have been developing since the establishment of the City’s CAM department and CAM Program. London’s legislated asset management journey began in 2008 when Canada’s Public Sector Accounting Board (PSAB) established new requirements for municipalities to practice tangible capital asset (TCA) accounting. This accounting process resulted in the development of the first comprehensive inventory of all assets owned by the City (both directly and non-directly owned assets). In 2012, the Province then published ‘Building Together: Guide for Municipal Asset Management Plans’ to encourage and support municipalities in Ontario to develop AMPs in a consistent manner.

Building Together outlines the information and analysis that municipal asset management plans are to include and was designed to provide consistency across the province for asset management. To encourage the development of AMPs, the Provincial and Federal governments began to frequently make AMPs a prerequisite to accessing capital funding programs.

In 2015, Ontario passed the ‘Infrastructure for Jobs and Prosperity Act’, which affirmed the role that municipal infrastructure systems play in supporting the vitality of local economies. After a year-long industry review process, the Province created O. Reg. 588/17 under the Infrastructure for Jobs and Prosperity Act. O. Reg. 588/17 further expands on the Building Together guide, mandating specific requirements for municipal asset management policies and AMPs.

Among others, these requirements mandated:

- Municipalities to complete Council approved and publicly available AMPs for all assets presented on the consolidated financial statements, excluding Joint Water Boards. It is noted LPL financial statements are consolidated within the City’s financial statements. The following AMP dates are provincially required:

1 CAM Policy https://london.ca/council-policies/corporate-asset-management-policy
By July 1, 2024, the O. Reg. 588/17 requires an AMP that documents the current LOS being provided, the costs to maintain them, and the financing strategy to fund the expenditures necessary to maintain current LOS for all infrastructure systems in the City.

By July 1, 2025, the O. Reg. 588/17 requires an AMP that documents the current LOS being provided and the costs to maintain them, the proposed LOS, and the costs to achieve them, and the financial strategies to fund the expenditures necessary to maintain current LOS and achieve proposed LOS for all infrastructure systems in the City.

- That these AMPs be updated annually and comprehensively reviewed and updated every 5-years.

For a complete reconciliation and mapping of how this AMP complies with all O. Reg. 588/17 requirements (both July 1, 2024, and July 1, 2025, requirements) see Appendix A. O.Reg.588/17 Asset Management Plan Requirements.

2.3: Developing the Asset Management Plan

This AMP is the culmination of efforts from staff across LPL who are involved with managing infrastructure assets, inclusive of staff involved with finance, technical staff involved with planning and executing the construction and maintenance of infrastructure assets, and on-the-ground staff who operate and maintain infrastructure assets.

Through this collaborative development process the AMP addresses the following questions:
- What do we own and why?
- What is it worth?
- What condition is it in?
- What are its current and proposed service levels?
- What activities do we employ to manage the assets?
- What does it all cost?

A more modern asset management question is also to ask, “Is this asset providing the community the service it expects and is willing to pay for?”

To answer these questions as best as possible, the CAM Program and this AMP are structured based on several interdependent development strategies that support answering or providing insight into the responses to these questions.

These development strategies and processes (steps) are categorized as:
- State of Local Infrastructure
- Levels of Service
- Asset Lifecycle Management Strategy
- Forecasted Infrastructure Gaps and Financing Strategies
- Discussion and Conclusion

To enhance readers understanding of the data and information presented, the following explanations are provided regarding each development strategies purpose, processes, and results.

2.3.1: State of Local Infrastructure

The State of Local Infrastructure is the initial building block of the AMP and is intended to provide the following information:
- Inventory of assets – What do we own?
- Valuation of assets (replacement value) – What is it worth?
- Age and expected useful life of assets – How old is it and when does it need to be replaced?
- Condition of assets – What Condition is it in?

This information is a fundamental building block of an AMP and helps inform future management of infrastructure assets based on individual and collective needs.
It is important to note replacement values seek to utilize best available information to identify all asset costs associated with replacing assets. As such this AMP reflects capital financing pressures that go beyond what can be accommodated in the LPL 2023-2032 planned budget.

A sample of the capital financing pressures captured in the AMP are:

- Inflation - the rising cost of goods and services can put additional strain on the budget for infrastructure projects to maintain current LOS;
- Climate – addressing the impact of climate change and implementing climate-related initiatives can require significant financial resources;
- Achieve Proposed LOS – meeting the desired LOS may require additional investments in existing or new infrastructure; and
- Aging Infrastructure – the need to upgrade or replace versus rehabilitating aging assets can contribute to capital financing pressures.

Additionally, due to evolving legislative changes and ongoing CAM Program development and implementation, the following capital financing pressures have not been fully analyzed, but are summarized here to provide information regarding potential future amendments:

- Growth – as the City expands and develops, additional infrastructure investments will be required to support the increasing population and demands, and
- More Homes Built Faster Act, 2022 – legislative changes may impact the City’s funding of growth costs.

By acknowledging capital financing pressures and considering both current and future challenges, the AMP sets the foundation for strategic infrastructure planning and helps to prioritize and address infrastructure needs effectively.

### 2.3.2: Levels of Service

Asset related LOS are specific parameters that describe the extent and quality of asset related services; they are not an exhaustive presentation of all service levels provided to the community. These LOS link an asset’s performance to target performance goals associated with LPL’s strategic plans, budgets, and other relevant policies and reports. Additionally, in accordance with O. Reg. 588/17 requirements, these LOS are quantified and reported between the costs to maintain current LOS and achieve proposed LOS, which are defined as:

- **Maintain Current LOS** – is defined as the persistent efforts of an organization to manage its assets through comprehensive lifecycle activities and effectively allocating necessary financial resources with the aim of consistently delivering its services at the current established service levels.
- **Achieve Proposed LOS** – is defined as the strategic initiatives undertaken by an organization to modify its service levels represented in a new proposed standard of service provision. This could involve modifying the condition, scope, or accessibility of the services beyond their current levels, based on strategic goals (e.g., regulatory requirements, master plans, other LPLB approved targets, etc.). The achievement of these proposed service levels may require changes in quantity of assets and/or frequency and scope of asset related lifecycle activities.

LOS metrics are organized in a hierarchical manner. At the forefront are the direct LOS metrics, which serve as the primary benchmarks. From these, we can provide clear lines-of-sight to
determine the cost to maintain current LOS and achieve proposed LOS. Next in line are the related LOS metrics. These are closely tied to the direct LOS metrics due to their primarily formal relationship. However, pinpointing their associated costs can be more intricate.

Overall, LPL strives to provide services to the community that are accessible, cost efficient, provide customer satisfaction, demonstrate environmental stewardship, reliability, and safety, with suitable scope. As shown in Figure 2.1, to obtain a desired LOS, LPL faces a complex trade-off challenge, which includes three parameters: Cost, LOS, and Risk.

This part of the AMP describes the asset lifecycle activities applied to the assets. This includes the typical practices and actions, and risks associated with each asset activity. From here three scenarios that forecast the condition profile of the asset portfolio based on planned budget, the required budget to maintain current LOS, and the required budget to achieve proposed LOS are provided.

2.3.4: Forecasted Infrastructure Gaps and Financing Strategies
In this part of the AMP identified infrastructure gaps are summarized and illustrated in both table and figure format. The infrastructure gaps are a dollar amount based on the difference between:

- The amount of money that needs to be spent on assets to maintain current LOS and achieve proposed LOS for the community, and
- The amount of funding presently identified in the planned budget and capital reserve fund over a 10-year period (2023-2032).

In other words, what LPL plans to spend versus what the asset needs are. Ideally, the infrastructure gaps decline over time as greater investments are made to replace older infrastructure, to improve the condition of infrastructure, to minimize the risks associated with failing assets, and to acquire new infrastructure.

Next are the infrastructure gap financing strategies, which set out the approach to ensuring that appropriate funds are available to facilitate the delivery of infrastructure dependent services. These strategies are meant to strengthen current budgeting processes by reinforcing a long-term perspective on the impact of providing various asset-related LOS and the required investments versus the affordability to the community, which is consistent with the outcomes and expected results of the 2022-2026 LPL Strategic Plan and 2023-2027 City of London Strategic Plan.
2.3.5: Discussion and Conclusion
The discussion part of the AMP looks at current and future opportunities and challenges associated with addressing infrastructure gaps. This discussion includes opportunities and challenges that are both in and outside of the control of LPL and LPLB. Among others, this includes consideration of the following:

• Service delivery characteristics,
• Cost pressures, and
• Growth and service improvement planning.

The final element of the detailed AMP is the conclusion section. In this section the results are summarized and to facilitate interpretation of the AMP data accuracy and data reliability ratings with supporting commentary are provided. The goal is to transparently provide the reader with knowledge of the validity and limitations of the information provided and to highlight continuous data improvement plans.

2.4: Assumptions and Limitations
As previously stated, this AMP is designed to enhance the management of LPL infrastructure assets in a way that connects strategic objectives to day-to-day decisions related to when, why, and how investments are made into infrastructure systems. However, all AMPs are developed within the context of various assumptions and limitations.

The following points summarize the assumptions and limitations of this AMP:

• The scope of this AMP covers the assets directly owned by LPL as of December 31, 2022, and associated planned budgets approved in the 2023 annual budget update. Thus, timing differences exist between when this AMP was developed versus current 2024-2027 MYB approvals.

Based on O. Reg. 588/17 requirements these differences are permissible and are minimized through the AMP annual update process as well as the CAM Program continues to explore opportunities to limit such timing differences.

• This AMP is compliant with the July 2024 and July 2025 requirements of O. Reg. 588/17 in that it encompasses both maintain current LOS and achieve proposed LOS as well as associated forecasted infrastructure gaps and supporting financing strategies.

• The AMP addresses condition information in three ways:
  o Condition may be technically assessed and reported on in a quantifiable technique. This method is the most accurate and most expensive (e.g., facilities condition);
  o Condition may be assumed based on age and estimated useful life; and
  o Finally, condition may be based on the expert opinion of staff using the asset.

• Unexpected events (e.g., severe storms attributed to climate change, etc.) will not disrupt infrastructure replacement and renewal projects over the period of analysis.

• The planned budget and expected reserve fund availability will occur as planned over the period of analysis.
Section 3. Detailed Asset Management Plan
3.1: State of Local Infrastructure

3.1.1: Asset Inventory and Valuation

London Public Library (LPL) owns and operates a broad array of assets with a replacement value of approximately $206.2 million. These assets range from facilities, collections, furniture and equipment, and information technology (IT). Each asset is managed and maintained to meet both legislated and non-legislated service requirements with an aim of providing the highest level of customer service, 21st century literacy skills, state-of-the-art technology, and diverse community engagement opportunities.

Table 3.1 summarizes the assets by type, inventory/quantity, and replacement values. The asset replacement values have been identified using different LPL databases including financial systems, VFA Facilities Management software, and internal expert opinion. These replacement values aim to capture current market prices for the fully replacement of identified assets. For further information regarding costing refer to State of Local Infrastructure.

To further contextualize the complexity and necessity of these assets the following summarizes LPL’s organizational and service delivery structures.

Who We Are:

LPL is a deeply embedded, essential community infrastructure that supports and connects Londoners and those new to London and to Canada with the resources they need to belong and thrive today and into the future. LPL’s 16 branches are rooted deeply in London’s neighbourhoods, acting as hubs for literacy and learning at all stages of life, nurturing community partnerships, ensuring the sharing and distribution of resources including City of London information and resources, offering free cultural and education programming and much need access to technology and support for using technology. In addition, LPL provides digital resources available from home that include ebooks, audiobooks, digital newspapers from around the work, research databases, instructional tools for language learning, building job technology skills, standardized test practice and do-it-yourself projects. All at no cost to members of the community with a library card.

What We Do:

We provide essential services to Londoners, including, but not limited to the following:

- Through our network of 16 branch libraries located strategically in London neighbourhoods, we provide community space to gather that is free, safe, accessible, and open to the public, a distribution network of pertinent information for the City of London and other partners, and a recognizable community cornerstone for partner service such as the Library Settlement Partnership program serving newcomers to London;

- Through our extensive partnership network that includes the City of London and many non-profits and businesses, we create an environment of collaboration and coordination that provides mutually beneficial enhancements to services for Londoners;

- Through our collections of books, media, magazines, and digital resources including ebooks, online learning tools and digital newspapers that are provided to the public free of charge, we deliver high quality, accessible, current, and relevant materials to all Londoners.

- Through our programs and events, we provide education, cultural and informational opportunities for all Londoners;
• Through our literacy support services, we create a love of reading, a comfort with technology, and access to information on almost any topic; and
• Through our technology services, we provide computers, free wi-fi, wi-fi hotspots, labs offering state of the art equipment, and other service that help bridge the digital divide.

Why We Do It:
The Public Libraries Act does not require a municipality to establish a public library but all municipalities of similar size and most in the Province have a long tradition of operating public libraries with multiple branches. LPL has provided public library service to Londoners since 1895.

Table 3.1 Inventory and Valuation

<table>
<thead>
<tr>
<th>Asset Type</th>
<th>Asset</th>
<th>Inventory</th>
<th>Unit</th>
<th>Replacement Value (Thousands)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facilities</td>
<td>Buildings</td>
<td>16</td>
<td>Each</td>
<td>$165,066</td>
</tr>
<tr>
<td></td>
<td>Site Work</td>
<td>9</td>
<td>Each</td>
<td>$6,314</td>
</tr>
<tr>
<td>Collections</td>
<td>Non-Tangible/Digital Media</td>
<td>43,131</td>
<td>Each</td>
<td>$2,149</td>
</tr>
<tr>
<td></td>
<td>Tangible/Print Media</td>
<td>683,880</td>
<td>Each</td>
<td>$20,158</td>
</tr>
<tr>
<td>Furniture and Equipment</td>
<td>Audio Video (AV) Equipment</td>
<td>205</td>
<td>Each</td>
<td>$333</td>
</tr>
<tr>
<td></td>
<td>Furniture</td>
<td>8,272</td>
<td>Each</td>
<td>$8,001</td>
</tr>
<tr>
<td></td>
<td>Laboratory Equipment</td>
<td>18</td>
<td>Each</td>
<td>$24</td>
</tr>
<tr>
<td></td>
<td>Theatre and Stage Equipment</td>
<td>159</td>
<td>Each</td>
<td>$476</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>46</td>
<td>Each</td>
<td>$35</td>
</tr>
<tr>
<td>Information Technology (IT)</td>
<td>IT Equipment</td>
<td>3,944</td>
<td>Each</td>
<td>$3,546</td>
</tr>
<tr>
<td>Equipment and Software</td>
<td>Software</td>
<td>1</td>
<td>Each</td>
<td>$99</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td>$206,201.5</td>
</tr>
</tbody>
</table>
To provide additional context to the assets under management, the following details regarding each asset type are provided.

**Facilities**
Valued at over $171 million, from a replacement value perspective LPL’s facilities represent 83.1% of assets under management. There are 16 branch libraries and for 9 of these locations LPL is responsible for exterior site work. Site work consists of infrastructure assets related to exterior parking, driveways, landscaping, and other areas of the exterior property serving the buildings (libraries). In alphabetical order the 16 branches and 9 site works are:

- Beacock Library and Site Work
- Bostwick Library at Startech.com Community Centre
- Byron Library and Site Work
- Carson Library and Site Work
- Central Library and Site Work
- Cherryhill Library
- Crouch Library and Site Work
- East London Library and Site Work
- Glanworth Library and Site Work
- Jalna Library at South London Community Centre
- Lambeth Library at Lambeth Community Centre
- Landon Library and Site Work
- Masonville Library and Site Work
- Pond Mills Library
- Sherwood Forest Library
- Stoney Creek Library at Stoney Creek Community Centre

These facilities are located within strategic cross sections of the City with an aim of providing accessible, educational, and safe library services to all Londoners.

Valued at approximately $99.8 million, the Central Library represents 58% of the total facilities replacement value. This library is located in the historic Hudson Bay building and boasts the Wolf Performance Hall in which visitors can enjoy concerts, theatre performances, dance recitals, films, lectures, and much more.

**Collections**
Collection assets have an approximate replacement value of $22 million and represent 10.8% of assets under management. The majority of Collection assets pertain to the quantity and replacement value of tangible/print media. However, demand for non-tangible/digital media is growing rapidly, thus, the balance between each is expected to significantly change in the future.

Examples of tangible/print media include fiction and non-fiction literature, picture books, DVDs, audiobooks in CD format, large print books, and music CDs. Examples of non-tangible/digital media include digital audiobooks, ebooks, and digital subscriptions such as emagazines.

**Furniture and Equipment**
Valued at approximately $9 million or 4.3% of total replacement value the Furniture and Equipment asset type constitutes a vital array of less financially material assets. These assets complement the aesthetic and functional requirements of various library spaces. Additionally, they provide interactive displays and information provision to visitors and facilitate the administrative tasks that support LPL’s educational and cultural programs. Although less financially material, the strategic management and maintenance of these assets are critical to library’s success and its service to the public.
This category includes various assets such as:

- Furniture inclusive of a large quantity of tables, desks, chairs, shelving (bookshelves and administrative filing cabinets), etc.
- AV Equipment inclusive of musical instruments, audio amplifiers and receivers, projectors, microphones, etc.
- Laboratory Equipment inclusive of design station computers, sewing machines, digital scanning equipment, etc. Heavy Equipment
- Theatre and Stage Equipment inclusive of Wolf Performance Hall assets such as lighting, grand piano, stage furniture, drapes, etc.

**IT Equipment and Software**
Valued at approximately $4 million or 1.8% of replacement value, IT Equipment and Software represents the least financially material asset base under management. However, without such assets it would not be possible to effectively deliver modern library services. In today’s modern era, connectivity, information, and data are strategic business assets used to streamline, advance, and provide continuity to all aspects of operations.

Client facing IT assets include various types of personal computer devices (desktops, laptops, handheld devices, etc.), software, voice-over-internet phones, printers, wireless access points, etc. Non-client facing IT assets include servers, switches/routers, security cameras and supporting devices, as well as administrative computers, printers, and software. Like most municipalities and other public service corporations, the value, condition, and infrastructure gaps with respect to IT soft assets of ‘data’ and ‘information’ are not currently assessed nor is any methodology readily available to undertake such an assessment.

3.1.2: Age Summary
Figure 3.1 shows the LPL average asset age as a proportion of the average expected useful life. This comparison provides a visual representation of how close assets are to the ends of their lifecycle, which demonstrates LPL’s ability to replace such assets on-time. Overall, the data affirms that most assets are within their expected useful life, noting that lifecycle activities must continue over a 10-year period to ensure the age distribution would remain under expected useful life or be enhanced.

**Facilities**
The ages of all facilities were calculated using the recorded construction date in the VFA Facilities Management software. Overall facility assets are approximately three quarters through the standard expected useful life of 40-years. This leads to an increase in the operation and maintenance cost of the facilities. It is important to note that 40-years was selected as the expected useful life based on the non-structural components of buildings which have the longest expected useful life. In practice the many components that comprise a building are slated for renewal based upon a combination of factors including age, condition, consequence of failure, likelihood of failure, etc., and the practical expected useful life is largely indefinite while the building continues to serve its intended/required purpose in its given geographic location.

Nevertheless, the age of LPL facilities and the evolving demands and best practices of library service delivery have given rise to the need for comprehensive facility assessments and asset management industry best practices. The first facility assessment was completed in 2022 and resulted in the establishment of a facilities asset registry using VFA Facility Management software. This assessment along with internal LPL
staff professional knowledge helped form the basis for the 2024-2027 MYB business case #P-58 – Library Facilities Capital Assets Management. Further details and financial impacts of the VFA facilities assessment and industry best practices are provided in Asset Lifecycle Management Strategy – Maintaining Current and Achieving Proposed Levels of Service.

**Collections**
Collections assets ages are informed by LPL’s collection management software and expected useful life by internal expert opinion based on historical performance. Expected useful life estimates are continuously assessed to ensure the best possible product offering and lifecycle replacement management. As demonstrated in Figure 3.1, on average Library is able to replace these assets on time. All tangible assets have an expected useful life of 7-years except for magazines, which have a useful life of 2-years. All non-tangible assets have an expected useful life of 7-years except for digital subscriptions, which have a useful life of 1-year.

**Furniture and Equipment**
The average age of the Furniture and Equipment assets is determined through the acquisition year recorded in LPL’s financial systems. The estimation of each asset’s average expected useful life is based on internal expert opinion and an assessment of historical data. This category includes various assets, each possessing its own acquisition date and expected useful life. On average all asset ages, except for Laboratory Equipment, are well within the expected useful life estimates. Laboratory Equipment assets past their expected useful lives include computer design stations, sewing machines, and digital scanning equipment. Over the near term these assets will be prioritized for replacement.

**Information Technology**
IT asset average age and expected useful life are based upon internal expert opinion. The analysis excludes Software assets as these are assumed to be operational until replacement needs are identified. This approach is taken as software age and expected useful life are impacted by regular upgrades/renewals. Thus, data is not readily available to calculate traditional age and expected useful life assumptions. In absence of age and expected useful life profile predictions for software, operational risks are mitigated by periodically assessing asset condition and forecasting expected capital financing needs. For all other IT Equipment there are detailed data listings tracking the age of assets, noting for these assets the average age, and expected useful life are 7-years and 9-years, respectively.
Figure 3.1 Average Age and Expected Useful Life
3.1.3: Asset Condition

The condition of the assets was determined using one of the three methods below based on data availability and accuracy:
1. Existing condition rating systems (e.g., Facility Condition Index, etc.),
2. Estimated based on age and the remaining expected useful life of the assets, and
3. Estimated based on expert opinion, in the absence of 1 or 2 above, or where there was low confidence that age and expected useful life appropriately represented the asset condition.

Based on these methodologies, asset conditions are recorded on a ratings scale of 1 to 5. Table 3.2 provides the definitions of each condition scale used in the CAM Program and in this AMP.

<table>
<thead>
<tr>
<th>Grade</th>
<th>Summary</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Very Good Fit for the future</td>
<td>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.</td>
</tr>
<tr>
<td>2</td>
<td>Good Adequate for now</td>
<td>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.</td>
</tr>
<tr>
<td>3</td>
<td>Fair Requires attention</td>
<td>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.</td>
</tr>
<tr>
<td>4</td>
<td>Poor At risk</td>
<td>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.</td>
</tr>
<tr>
<td>5</td>
<td>Very Poor Unfit for sustained service</td>
<td>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.</td>
</tr>
<tr>
<td>-</td>
<td>Not Assessed</td>
<td>This category is reserved for assets where data is either missing, not updated, or cannot be considered reliable. Flagging this data helps identify where gaps in information exist and may allow for the development of assessment plans to improve future data.</td>
</tr>
</tbody>
</table>
Figure 3.2 presents the condition distribution of all LPL assets. It shows that approximately 87% of the assets are in Very Good to Fair condition. However, the majority of this 87% are in Fair condition (66% Fair), and another 10% and 4% of assets are in Poor and Very Poor condition, respectively. This indicates a large portion of assets will require lifecycle rehabilitation and/or replacement in the near term to maintain existing service delivery standards.

Although pressures exist, assets are overall maintained in safe, serviceable condition, with replacement of non-facility assets occurring for the most part on a planned basis as assets reach their optimum lifecycle stage. When possible retired assets such as Collections and IT Equipment are sold off and the associated proceeds used to offset the purchase of new ones. If resale is not suitable, assets are either maintained as spares, donated to support those in need, or disposed of using appropriate protocols.

Figure 3.3 provides a detailed condition distribution for each asset type. As presented most assets are in Fair or better condition, which is consistent with Figure 3.2 and reflective of LPL’s strong asset management practices. However, there are areas of concern which are described below. Generally, it is noted that in the lifecycle management of an asset inventory, the presence of some assets categorized as 'Poor' condition is a typical phase, indicating these assets are scheduled for replacement. But assets categorized as “Very Poor” is not typical, and indicative of immediate lifecycle management needs.
### Figure 3.3 Asset Condition Detail

#### Facilities
- **Building**: 3% Very Good, 12% Good, 76% Fair, 9% Poor
- **Site Work**: 16% Very Good, 19% Good, 75% Fair, 8% Poor

#### Collection
- **Tangible/Print Media**: 38% Very Good, 13% Good, 16% Fair, 13% Poor, 20% Very Poor
- **Non-Tangible/Digital Media/Non-print media**: 17% Very Good, 19% Good, 21% Fair, 15% Poor, 28% Very Poor

#### Furniture and Equipment
- **AV Equipment**: 45% Very Good, 25% Good, 17% Fair, 11% Poor
- **Furniture**: 9% Very Good, 82% Good, 5% Fair, 5% Poor
- **Laboratory Equipment**: 19% Very Good, 7% Good, 74% Fair, 24% Poor
- **Other**: 6% Very Good, 70% Good, 24% Fair, 24% Poor
- **Theatre and Stage Equipment**: 22% Very Good, 20% Good, 49% Fair, 9% Poor

#### IT
- **IT Equipment**: 16% Very Good, 19% Good, 30% Fair, 31% Poor
- **Software**: 100% Very Poor

---

**2024 LPL AMP**
Facilities
The conditions of LPL facilities and associated assets have been recently evaluated through a comprehensive condition assessment. This assessment establishes and provides capacity to update an industry-standard Facility Condition Index (FCI) that reflects the overall condition of the facilities and their sub-components (building envelope, mechanical and electrical systems, etc.). The facilities condition ratings present the physical condition of the buildings and are not a representation of the functionality required to satisfy library service delivery (i.e. size, location, ability to accommodate certain types of functions or equipment, etc.). Still this assessment provides a valuable source of information that is used in conjunction with other inputs to help identify the repair, rehabilitation, and/or replacement strategies for each facilities asset.

The current condition assessment identifies that 85% of buildings (16 locations) and 83% of site works (9 locations) assets are in Fair or worse condition. In the context of library service delivery requirements, such a material amount of facilities assets in Fair or worse condition is indicative of a need for further lifecycle reinvestment in the short to medium term. However, further analysis such as those completed through a facilities master plan are needed to refine these results into a strategic plan based on LPL’s unique objectives and goals, and taxpayer and non-taxpayer (library-generated revenue) affordability. This approach is consistent with the basis of the 2024-2027 MYB business case #P-58 – Library Facilities Capital Assets Management.

Collection
Looking into the condition distribution of the Collection asset type, 67% of tangible/print media and 57% of non-tangible/digital media are in Fair or better condition. The condition of these assets is based on either asset age or internal expert opinion.

The area requiring attention within this asset type are the assets in Poor or Very Poor condition. Here, the tangible/print media percent of assets in Poor and Very Poor condition are 13% and 20%, respectively. This result is primarily attributable to portions of non-fiction, fiction, DVDs, and picture books remaining in circulation beyond the 7-years expected useful life. Next, the non-tangible/digital media percent of assets in Poor and Very Poor condition are 15% and 28%, respectively. This result is primarily attributable to portions of audiobooks and ebooks remaining in circulation beyond the 7-years expected useful life.

The presence of these Poor and Very Poor assets suggest it is critical to replace these assets promptly in order to preserve the asset portfolio within an acceptable state of repair.

Furniture and Equipment
Based on replacement value 94% of all Furniture and Equipment assets are Fair or better condition. This demonstrates that for this asset type LPL is able to maintain assets in safe, serviceable condition, with replacement occurring for the most part on a planned basis as assets reach their optimum lifecycle stage. However, an area of note pertains to Laboratory Equipment, which has 74% of assets in Poor condition. As previously stated, this suggests a large portion of these assets require reinvestment in the short to medium term, it being further noted assets in most need of replacements are the computer design stations and 3D printer.

Information Technology
Based on replacement value 91% of all IT Equipment and Software are in Fair or better condition. IT asset conditions were evaluated based on internal expert opinion and industry standards. Performance and condition concerns of IT assets are
captured on a proactive basis through monitoring and alerting applications. It also occurs through routine maintenance programs or problems reported by end users.

As it specifically relates to IT Equipment assets, 65% of these assets are in Fair or better condition, which reinforces an overall strong capacity to achieve lifecycle renewal and replacement targets. The 31% of assets in Very Poor condition primarily relates to computer switches at or near the end of their expected useful life and the dynamics of a rapidly changing IT landscape.

The Software category excludes all applications for which LPL leases and pays monthly/annual licencing fees for through the operating budget. Such assets are excluded as LPL does not own the infrastructure and is not responsible or its lifecycle needs. Thus, the LPL Software category consists of one asset, the Cisco Phone System. For this asset the condition score of 100% Very Poor represents this asset is at the end of its useful life and LPL will be assessing replacement options within the short term. The methodology of this expert opinion considers the functional requirements of applications and software based on LPL needs. If needs are being met, condition is maintained at Very Good until significant software updates or new software needs are deemed necessary.

3.2: Levels of Service
Asset management LOS link strategic plans and budget service delivery objectives to corresponding asset performance metrics. As such this AMP strives for LOS performance measures linked to:

- 2022-2026 LPL Strategic Plan,
- 2023-2027 City of London Strategic Plan, and
- 2023 Annual Budget Update.

These LOS foundations guide the establishment of customer service deliver values (herein referred to as “customer values”), which in turn guide the development of overarching AMP LOS objectives. Informed by these objectives, LPL and CAM staff collaborate to formulate effective metrics that can be linked to asset performance. Table 3.3 lists the LOS customer value definitions created through this development process.

The selection and development of meaningful LOS linked to many aspects of asset management decision making and cost requires a long-term continuous improvement methodology. Thus, the LOS used in the 2024 LPL AMP are focused on traditional asset management metrics like reinvestment rate and condition. Continuous effort will be made towards expanding costed LOS as part of future LPL AMP development processes and practices and these planned efforts are outlined in the Conclusion and Recommendations section of the AMP.
<table>
<thead>
<tr>
<th>Customer Value</th>
<th>Corporate Definition and Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accessible</td>
<td>Service is accessible by the community, not exclusive, it is inclusive to those who wish to/may use the service to the greatest extent possible, regardless of age, ability, etc. Includes metrics related to asset accessibility and legislated requirements. For example, <em>Accessibility for Ontarians with Disabilities Act (AODA)</em>.</td>
</tr>
<tr>
<td>Cost Efficiency</td>
<td>Presents service area budgets, and where possible measures financial performance in terms of providing the maximum service outcomes (more output for less cost) out of the available operating and capital budgets. Examples include annual cost to provide the service, asset lifecycle budget as a percentage of current replacement value.</td>
</tr>
<tr>
<td>Customer Satisfaction</td>
<td>Service is satisfactory/meeting expectations from the perspective of a customer or community. Includes a diversity of metrics that cover the performance of a service based on customer experiences. Metrics consist of descriptions from customer surveys and the like. Example includes percentage of customers satisfied with assets or service delivery.</td>
</tr>
<tr>
<td>Environmental Stewardship</td>
<td>Service is provided in a means that considers, controls, or reduces impacts to the environment. Includes metrics related to the assessment of service provision based on environmental stewardship and sustainability practices. Examples include annual monitoring of utility usage by square footage of facility spare, or fuel consumption-based greenhouse gas emissions.</td>
</tr>
<tr>
<td>Reliability</td>
<td>Service is fit for its purpose. Includes metrics related to the reliability of services such as condition of assets.</td>
</tr>
<tr>
<td>Scope</td>
<td>Service is extended to/covers a defined range, or description of service range provided through municipal infrastructure. LPL future customer value reporting will be related to implemented Facility Master Plan percentage.</td>
</tr>
<tr>
<td>Safety</td>
<td>As best as possible, the service safeguards against known dangers and risks. Covers performance assessments of services related to various forms of safety and compliancy with legislation, codes, and/or internal policies/practices.</td>
</tr>
</tbody>
</table>

**Direct and Related LOS**

Selected LOS metrics are organized in a hierarchical manner. At the forefront are the direct LOS metrics, which serve as the primary benchmarks. From these, we can readily determine the cost to maintain current LOS and achieve proposed LOS. Next in line are the related LOS metrics, which are closely tied to the direct LOS metrics but in some cases cannot be readily costed. After review with LPL staff, direct LOS considered most representative of asset-based services and able to be costed over a 10-year projected period (2023-2032) are documented as in Table 3.4, and the support related LOS are documented in Table 3.5.
### 3.2.1: Direct Levels of Service

Table 3.4 Direct Levels of Service

<table>
<thead>
<tr>
<th>Customer Value</th>
<th>Focus</th>
<th>Service Performance Measure</th>
<th>2022 Performance</th>
<th>Proposed Target (2022 to 2031)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost Efficiency</td>
<td>Technical</td>
<td>Overall capital reinvestment rate</td>
<td>0.73%</td>
<td>2.13%²</td>
</tr>
<tr>
<td>Environmental Stewardship</td>
<td>Technical</td>
<td>Annual electric energy consumption kilowatt-hour per square foot</td>
<td>11.37 kWh/sf</td>
<td>Positive Downwards</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Annual natural gas consumption cubic meters per square foot</td>
<td>0.57 m³/sf</td>
<td>Positive Downwards</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Annual water consumption cubic meters per square foot</td>
<td>0.003 m³/sf</td>
<td>Positive Downwards</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Annual green energy, electricity, created per square foot (Microfit at Landon Library)</td>
<td>0.46 kWh/sf</td>
<td>Positive Upwards</td>
</tr>
<tr>
<td>Reliability</td>
<td>Customer</td>
<td>Percentage of LPL assets in Fair or better condition</td>
<td>87%</td>
<td>Maintain current</td>
</tr>
</tbody>
</table>

### 3.2.2: Related Levels of Service

Table 3.5 Related Levels of Service

<table>
<thead>
<tr>
<th>Customer Value</th>
<th>Focus</th>
<th>Service Performance Measure</th>
<th>2022 Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accessible</td>
<td>Technical</td>
<td>Percentage of entrances that are FADS compliant</td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Percentage of washrooms that are FADS compliant</td>
<td>90%</td>
</tr>
<tr>
<td>Customer Satisfaction</td>
<td>Customer</td>
<td>Percentage of patrons satisfied with the LPL and its services</td>
<td>95%</td>
</tr>
<tr>
<td>Reliability</td>
<td>Customer</td>
<td>Percentage of Facilities assets in Fair or better condition</td>
<td>91%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Percentage of Collections assets in Fair or better condition</td>
<td>58%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Percentage of Furniture and Equipment assets in Fair or better condition</td>
<td>94%</td>
</tr>
<tr>
<td>Safety</td>
<td>Technical</td>
<td>Percentage of Facilities that meet security standards</td>
<td>90%</td>
</tr>
<tr>
<td>Scope</td>
<td>Customer</td>
<td>Map presenting the geographic distribution of LPL 16 locations within City boundary</td>
<td>See Figure 3.4</td>
</tr>
</tbody>
</table>

² The reinvestment rate proposed target is equal to the costs of maintaining current LOS.
Figure 3.4 Geographic distribution of library locations
3.3: Asset Lifecycle Management

3.3.1: Asset Lifecycle Management Activities

The asset lifecycle management activities are the range of actions funded through the operating and capital budgets that are practiced on the assets. Asset lifecycle activities are generally grouped into the categories shown in Table 3.6.

Table 3.6 Definitions for Lifecycle Activities

<table>
<thead>
<tr>
<th>Activities</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-Infrastructure Solutions</td>
<td>Actions or policies that can lower costs or extend useful lives.</td>
</tr>
<tr>
<td>Maintenance</td>
<td>Including regularly scheduled inspection and maintenance or more significant repairs and activities associated with unexpected events.</td>
</tr>
<tr>
<td>Renewal/Rehab</td>
<td>Significant repairs designed to extend the life of the asset.</td>
</tr>
<tr>
<td>Replacement/Construction</td>
<td>Activities that are expected to occur once an asset has reached the end of its useful life and renewal/rehab is no longer an option.</td>
</tr>
<tr>
<td>Disposal</td>
<td>Activities associated with disposing of an asset once it has reached the end of its useful life or is otherwise no longer needed by the municipality.</td>
</tr>
<tr>
<td>Service Improvement</td>
<td>Planned activities to improve an asset’s capacity, quality, and system reliability.</td>
</tr>
<tr>
<td>Growth</td>
<td>Planned activities required to extend services to previously unserved areas – or expand services to meet growth demands.</td>
</tr>
</tbody>
</table>
3.3.2: Asset Lifecycle Management Strategy

LPL employs a combination of lifecycle management activities to maintain current levels of service (LOS) while striving to optimize costs based on defined risks. This strategy includes activities for maintenance, rehabilitation, replacement, disposal, and regular investments in master planning studies, while continuing to prepare for growth and introduce service improvements.

When feasible, LPL also strives to further optimize these lifecycle activities by coordinating and synchronizing work across multiple assets or asset categories, which can result in cost and service efficiencies. Additionally, with significant asset investments, LPL seeks to optimize asset use and redundant capacity, often achieved through risk benefit cost analyses and cost effectiveness analyses.

This strategy is not static. Lifecycle activities LPL chooses to apply to assets are selected, reviewed, and modified based on continual industry benchmarking, staff training, professional networking, online reviews, consultant recommendations, and trial and error through scenarios and pilot programs. LPL also invests in climate change adaptation and mitigation planning through a Board approved Environmental Policy, which may trigger asset investment needs.

The current LPL lifecycle management activities (practices and planned actions) are presented as follows:

- Table 3.7 and Table 3.8 list specific asset management practices or planned actions by lifecycle activity for Facilities and IT assets.
- Table 3.9 lists generic lifecycle activities for all other LPL assets.
- Table 3.10 lists specific risks associated with asset management practices or planned actions by lifecycle activity.
Table 3.7 Facilities Current Asset Management Practices or Planned Actions

<table>
<thead>
<tr>
<th>Activity</th>
<th>Specific Asset Management Practices or Planned Actions</th>
</tr>
</thead>
</table>
| Non-Infrastructure Solutions    | • Facilities are maintained and renewed through a specialized Facilities Team and their use of VFA software (supplied through Gordian) and other facilities management applications, which combined with comprehensive condition assessments and Facilities Team experience, determines the lifecycle management needs of a facility.  
• Needs include the direct care of the building envelope, mechanical and electrical systems, etc.                                                                                           |
| Maintenance                     | • Business practices and processes exists for LPL Facilities Team employees to generate and document capital works requests and completions.                                                                                                                                                                                                                                                                 |
| Renewal/Rehabilitation           | • Facilities are regularly evaluated through comprehensive condition assessments, which establish and update an industry-standard Facility Condition Index (FCI) score that reflects the overall condition of the facilities (splits into components of building envelope, mechanical and electrical systems, etc.). These condition assessments, the expertise of Facilities Team, and computer software programs used, determine the cost and timing of renewal requirements. |
| Replacement/Construction         | • Facilities are regularly evaluated through comprehensive condition assessments, which establish and update an industry-standard Facility Condition Index (FCI) score that reflects the overall condition of the facilities (splits into components of building envelope, mechanical and electrical systems, etc.). These condition assessments, the expertise of Facilities Team, and computer software programs used, determine the cost and timing of replacement requirements. |
| Disposal                        | • Appropriate and proper disposal occur when assets are replaced or renewed.                                                                                                                                                                                                                                                                                                                                   |
| Service Improvement             | • Consultation with community partners and users of facilities determines service improvement needs.                                                                                                                                                                                                                                                                                                             |
| Growth                          | • See Table 3.10.                                                                                                                                                                                                                                                                                                                                                                                             |
### Table 3.8 Information Technology Current Asset Management Practices or Planned Actions

<table>
<thead>
<tr>
<th>Activity</th>
<th>Specific Asset Management Practices or Planned Actions</th>
</tr>
</thead>
</table>
| Non-Infrastructure Solutions  | • Monitor and track age and utilization to help prioritize when assets should be replaced.  
                                | • Soft strategies (i.e., policies) to mitigate adverse effects of high rises on communication system are continuously updated.  
                                | • For software assets the focus is to ensure that assets are considered ‘in support’ to mitigate potential malware/cyber-attacks and ensure assets are operating efficiently for individuals using them. |
| Maintenance                   | • Users of LPL hardware and software assets provide asset concerns on proactive basis through alerting applications and preventative maintenance programs.  
                                | • Concerns are also addressed through routine maintenance programs reported by the user to the IT Team.                                                                                                                                           |
| Renewal/Rehabilitation        | • Rehabilitation programs exist for LPL directly owned cable and telecommunication networks. Proactive rehabilitation of LPL software programs exists for both directly and third-party support software. |
| Replacement/Construction      | • When applications and software no longer receive support, they are replaced with new supported applications and software.  
                                | • IT Equipment replaced when asset reaches end of useful life or unexpected event occurs with asset.                                                                                                                                             |
| Disposal                      | • Laptops hard drives are wiped of data using appropriate procedures and are typically sent to an ethical recycler or sanitized and donated.                                                                                                              |
| Service Improvement           | • Service improvements projects are identified and financed by service areas using IT assets. IT Team would then be responsible for acquisition and maintenance of the service improvement asset.                                                          |
| Growth                        | • See Table 3.10.                                                                                                                                                                                                                                      |

### Table 3.9 Generic Asset Management Practices or Planned Actions (All LPL Assets)

<table>
<thead>
<tr>
<th>Activity</th>
<th>Generic Asset Management Practices or Planned Actions</th>
</tr>
</thead>
</table>
| Non-infrastructure Solutions  | • Development controls and approvals.  
                                | • Financial planning strategies to control costs, and ongoing search for additional funding.  
                                | • Developing computerized maintenance management system.  
                                | • Updating and applying design standards.  
                                | • Operational continuous improvements e.g., developing asset management program.  
                                | • Improvements to employee capabilities, communications, training, etc.  
                                | • Public involvement practices including awareness training, posters, and website.  
                                | • Changes to LOS.  
                                | • Leadership networks with peers through conferences and committees to learn from other’s experiences.                                                                                     |
| Maintenance                   | • Maintenance also triggered by the public ‘inspection’ through phone, email, and web interface available for public reports/complaints.                                                                                                                   |
Activity | Generic Asset Management Practices or Planned Actions
--- | ---
Renewal/Rehab | • Adopt the latest technology that maintains the current LOS.
Replacement/Construction | • Adopt the latest technology that maintains the current LOS.
Disposal | • Dispose of assets under the applicable regulation and environmental standards.
Service Improvement | • Based on strategic service review results, implement service delivery changes that improve asset performance, cost, and risk.
 | • Adopt the latest technology that enhances current or achieves proposed LOS.
Growth | • Participate in discussions surrounding or related to the impacts of growth on service delivery and participate in Development Charges Background Studies and Assessment Growth Policy processes to secure appropriate levels of growth funding (subject to provincial legislation requirements and City of London policy).

Table 3.10 Risk Associated with Asset Management Practices or Planned Actions (All LPL Assets)

<table>
<thead>
<tr>
<th>Activity</th>
<th>Specific Risks Associated with Asset Management Practices or Planned Actions</th>
</tr>
</thead>
</table>
| Non-Infrastructure Solutions | • Lack of a realization of the benefit from the activity (i.e., the life is not extended or the cost of managing an asset increases rather than decreases).
 | • Need for revised plans, reports, and recommendations.
 | • Asset management plans or proposed network solutions not followed.
 | • Inadequate funding, economic fluctuations (inflation, downturns, etc.), and use reduction/increases.
 | • Poor quality asset information, planning assumptions incorrect.
 | • Regulatory requirements/standards criteria change or do not exist.
 | • Occurrence of climate change, adverse weather/unforeseen events, and emergencies, resulting in funds being diverted to assets that were not originally planned.
 | • Growth projections not as planned or service provision changes.
 | • Extending useful life past optimum can increase the risk of critical failure of major components.
 | • Assets beyond optimum life have reduced salvage and remarketing value and can have significantly higher maintenance costs.
 | • Inability to mitigate malware/cyber-attacks resulting from deteriorated and non-supported asset.
 | • IT industry shift to relying on operating licenses financed through operating budgets versus historical capital expenditure nature.
### Activity

<table>
<thead>
<tr>
<th>Specific Risks Associated with Asset Management Practices or Planned Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Maintenance</strong></td>
</tr>
</tbody>
</table>
| • Completing planned maintenance activities while managing the need to execute reactive maintenance activities.  
• Incorrectly planned maintenance activities can lead to premature asset failure.  
• Enough resources available to complete a series of unplanned, urgent work requests that are submitted in close succession.  
• Overscheduling preventative maintenance can lead to excessive maintenance and additional costs with no actual benefits. |
| **Renewal/Rehabilitation** |
| • Incorrect assumptions regarding improved expected useful life after rehabilitation. |
| **Replacement/Construction** |
| • Cost over-runs during large, complex design and construction projects.  
• Minimizing service and repairs at end of life increases the chance of failures. |
| **Disposal** |
| • Disposal incorrectly performed or cost overruns resulting from increase disposal requirements compared to initial estimates.  
• Timing for replacements has an operational impact. Delaying or holding inventory requires storage and can adversely affect the function and value of the retiring asset. |
| **Service Improvement** |
| • Service improvement is either not required or incorrectly assessed. |
| **Growth** |
| • Incorrect growth assessments may result in overabundance or underabundance of assets.  
• Risk of insufficient funding to maintain new asset. |

### 3.3.3: Lifecycle Management Scenario Forecasts – Planned Budget, Maintain Current LOS, and Achieve Proposed LOS

#### General Approach

The type and frequency of lifecycle management strategies and activities impact both an asset’s condition and its ability to enable service delivery. Because of this relationship, the AMP presents three different lifecycle management scenarios and their associated funding requirements. To align with the categories of Asset Lifecycle Management Activities outline above, each scenario is broken down by the operating, renewal (inclusive of replacement, rehabilitation, and disposal), service improvement, and growth funding requirements. Growth activities and funding requirements are constrained to those identified in the 2021 Development Charges Background Study Update. Thus, no growth infrastructure gaps are presented.

In summary these scenarios are defined as:

1. **Planned Funding** – This scenario presents the budget constrained to the level of expenditure approved in the 2023 annual budget update.
2. **Maintain Current LOS** – This scenario forecasts the level of investment required to maintain current LOS. The approach to establishing the maintain current LOS budget is to forecast the lifecycle activity expenditures required to ensure that the proportion of assets in Poor or Very Poor condition remains relatively stable in comparison to 2022 performance.
3. Achieve Proposed LOS – This scenario forecasts the level of investment required to achieve proposed LOS. The approach to establishing the achieve proposed LOS targets is to consider the desired LOS documented in LPL’s strategic plans (e.g., 2022-2026 LPL Strategic Plan, and 2023-2027 City of London Strategic Plan). Next, the analysis considers the current condition of assets, the rate that the condition is expected to degrade, and appropriate condition triggers for rehabilitation/replacement activities to forecast the condition profile and lifecycle expenditures into the future.

Figure 3.5 shows the projected condition of Facilities assets, and Figure 3.6 shows the projected condition of the Collections, Furniture and Equipment, and IT Equipment and Software assets based on the three scenarios (planned budget, maintain current LOS, and achieve proposed LOS). The figures also show the amount of planned budget, and the investments required to maintain current LOS and achieve proposed LOS. Each scenario is further explained in the following sections. After each scenario is presented, the Forecasted Infrastructure Gap and Financing Strategy section provides an overview of the results along with the short- and long-term financing strategies that will be used to manage the gap and work towards long term service, financial, and infrastructure sustainability.
A. **Scenario One: Planned Funding**

The LPL average annual activity and planned funding is summarized in Table 3.11. This scenario presents the budget constrained to the current level of planned expenditures. If there is insufficient budget in any particular year to complete a rehabilitation or replacement activity on an asset that has reached its expected useful life age or condition trigger, then the asset remains in a Poor or Very Poor condition state until there is sufficient budget in a future year to complete the lifecycle activity.

For this analysis, average annual activity for operating and capital budgets are presented as the average expenditure budget from the 2021 and 2022 fiscal years. Planned funding operating budget is equal to the 2023 fiscal year budget. Planned funding capital budgets (e.g., renewal, service improvement, and growth) are the annual average of the approved 10-year capital plan for 2023-2032. Growth activities are analyzed using the 2021 Development Charges Background Study Update for which LPL has no identified capital projects. Present the expected condition profiles for the next 20-years based on the planned budget for Facilities and Non-Facilities assets, respectively.
Table 3.11 Scenario One – Average Annual Planned Budget ($Thousands)

<table>
<thead>
<tr>
<th>Activity Type</th>
<th>Average Annual Activity for 2021 and 2022</th>
<th>Planned Funding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating</td>
<td>21,567</td>
<td>22,129</td>
</tr>
<tr>
<td>Renewal, Replacement, Rehabilitation, Disposal</td>
<td>720</td>
<td>1,275</td>
</tr>
<tr>
<td>Service Improvement</td>
<td>None Identified</td>
<td>None Identified</td>
</tr>
<tr>
<td>Growth</td>
<td>None Identified</td>
<td>None Identified</td>
</tr>
</tbody>
</table>

Figure 3.7 Facilities Projected 20-Year Planned Budget Condition Profile

Figure 3.8 Non-Facilities Projected 20-Year Planned Budget Condition Profile
B. Scenario Two: Maintain Current LOS

The cost to maintain current LOS are summarized in Table 3.12. The approach to establishing the cost to maintain current LOS is to forecast the lifecycle activities that are required to maintain the current performance (fiscal year 2022) of the direct LOS condition metric, expected useful life age triggers, and to account for changes in legislated service requirements, if any. To achieve this, the analysis first considers the current age of assets along with the expected useful life age triggers for rehabilitation and replacement activities to forecast the funding requirements into the future. The variables in the analysis are adjusted until the forecasted condition profile meets the current condition profile of assets. Next, information regarding known changes to legislated service delivery requirements with a capital impact are collected and used to forecast associated infrastructure needs.

For this analysis, planned funding remains the same as in Scenario One. Also, to enhance the accuracy of the maintain current LOS infrastructure gap calculation, available reserve fund drawdowns, if any, are reported and factored into the calculation.

The maintain current LOS analysis forecasts a 10-year average annual infrastructure gap of approximately $2.5 million. Average annual facilities pressures of $2.15 million per year are the primary contributor to the gap. Consist with the 2024-2027 MYB business case #P-58 – Library Facilities Capital Assets Management funding request, these needs include a broad mix of rehabilitation and replacement of existing facilities infrastructure systems based on the 2022 Facilities Condition Assessment (FCA). It is important to note the recommended investment to maintain current LOS does not reflect all lifecycle activities identified in the FCA as such a level of investment goes beyond maintaining the current condition profile of facilities and may also be greater than LPLB approved achieve proposed LOS targets.

The remainder of the average annual infrastructure gap is attributable to cost pressures associated with a broad mix of Furniture and Equipment, and IT Equipment assets. No infrastructure gap has been identified for the Collections assets.

Figure 3.9 and Figure 3.10 present the expected condition profiles for facilities assets and non-facilities assets, respectively, over the next 20-years based on investments required for maintain current LOS. This scenario indicates the condition profile for most facilities and non-facilities assets is trending between Good to Poor condition, which is consistent with the 2022 performance of assets.

To date LPL has been able to mitigate some of the risks associated with these capital financing pressure through enhanced preventative maintenance and inspection programs as well as other procedures and protocols. However, these non-financial measures are not sustainable in the long term. Thus, through the establishment of a facilities master plan, AMP continuous improvement projects, and future multi-year budget processes, LPL will seek to refine long term asset financing strategies that balance community affordability and asset needs.

Also, aligned with the City’s Climate Emergency Action Plan (CEAP), like-for-like lifecycle rehabilitation and renewal activities tied to maintain current LOS will be substituted with green-for-like whenever feasible. This means that instead of simply replacing existing infrastructure with a similar one (like-for-like), there will be an increased focus on incorporating more energy efficient and greenhouse gas (GHG) emissions friendly infrastructure solutions (green-for-like). Such investments will incrementally support long term net zero targets.
Table 3.12 Scenario Two - Average Annual Cost to Maintain Current LOS ($Thousands)

<table>
<thead>
<tr>
<th>Activity Type</th>
<th>Planned Funding</th>
<th>Additional Reserve Fund Drawdown</th>
<th>Cost to Maintain Current LOS</th>
<th>Maintain Current LOS Infrastructure Gap</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating Budget</td>
<td>22,129</td>
<td>None identified</td>
<td>22,129</td>
<td>None identified</td>
</tr>
<tr>
<td>Renewal, Replacement, Rehabilitation, Disposal</td>
<td>1,275</td>
<td>996</td>
<td>3,735</td>
<td>2,460</td>
</tr>
<tr>
<td>Service Improvement</td>
<td>None identified</td>
<td>None identified</td>
<td>None identified</td>
<td>None identified</td>
</tr>
<tr>
<td>Growth Activities</td>
<td>None identified</td>
<td>None identified</td>
<td>None identified</td>
<td>None identified</td>
</tr>
</tbody>
</table>

Figure 3.9 Facilities Projected 20-Year Maintain Current LOS Condition Profile

Figure 3.10 Non-Facilities Projected 20-Year Maintain Current LOS Condition Profile

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C. Scenario Three: Achieve Proposed LOS

The cost to achieve proposed LOS are summarized in Table 3.13. This scenario forecasts the enhanced lifecycle activities that are required to achieve the proposed LOS. Investing in the proposed LOS provides benefits related to meeting strategic plan objectives, which go beyond the scope of maintain current LOS condition profiles and legislated changes.

The analysis considers the current condition of assets, the rate that the condition is expected to degrade, and appropriate condition triggers for rehabilitation and replacement activities to forecast the condition profile into the future. The variables in the analysis are adjusted until the forecasted condition profile and implementation of new assets meets the expectation of LPL staff involved with the management of the assets. The future lifecycle and/or service improvement activities that are required to achieve the desired condition profile (asset condition and composition) are then used to establish the average annual investment to achieve proposed LOS.

The achieve proposed LOS analysis forecasts a 10-year average annual infrastructure gap of approximately $3.6 million, which is inclusive of the $2.5 million average annual maintain current LOS gap. The average annual infrastructure gap increase of $1.1 million ($3.6 million less $2.5 million) primarily relates to additional investments in facilities, noting the facilities achieve proposed LOS 10-year (2022-2032) capital budget is equal to $32.5 million or $3.25 million per year. This level of investment would improve the condition for the facilities portfolio and allow for new investments such as those contained in the 2024-2027 MYB business cases #P-59 – Library Security Systems Updates and #P-30 – Enhancing Digital Divide Support Service – London Public Library.

Figure 3.11 and Figure 3.12 present the expected condition profiles for facilities assets and non-facilities assets, respectively, over the next 20-years based on investments required for achieve proposed LOS. For facilities assets, this scenario indicates the achieve proposed LOS condition profile is improving with the trend now solely between Very Good to Fair condition versus the maintain current LOS trend of Good to Poor condition. For non-facilities assets, this scenario indicates the achieve proposed LOS condition profile is relatively unchanged from the maintain current LOS condition profile i.e., trend is that non-facilities assets are in Good to Poor condition. This non-facilities outcome is consistent with the minimal amount of additional investments identified to achieve proposed LOS.

Like any additional investments to maintain current LOS, achieve proposed LOS investments will seek to leverage green-for-like lifecycle activities aligned with the City’s CEAP targets and any future climate change targets established by LPLB.
Table 3.13 Scenario Three - Average Annual Cost to Achieve Proposed LOS ($Thousands)

<table>
<thead>
<tr>
<th>Activity Type</th>
<th>Planned Funding</th>
<th>Additional Reserve Fund Drawdown</th>
<th>Cost to Maintain Current LOS</th>
<th>Incremental Cost to Achieve Proposed LOS</th>
<th>Achieve Proposed LOS Infrastructure Gap&lt;sup&gt;3&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating Budget</td>
<td>22,129</td>
<td>None identified</td>
<td>22,129</td>
<td>None identified</td>
<td>None identified</td>
</tr>
<tr>
<td>Renewal, Replacement, Rehabilitation, Disposal</td>
<td>1,275</td>
<td>None identified</td>
<td>3,735</td>
<td>1,180</td>
<td>3,640</td>
</tr>
<tr>
<td>Service Improvement</td>
<td>None identified</td>
<td>None identified</td>
<td>None identified</td>
<td>None identified</td>
<td>None identified</td>
</tr>
<tr>
<td>Growth Activities</td>
<td>None identified</td>
<td>None identified</td>
<td>None identified</td>
<td>None identified</td>
<td>None identified</td>
</tr>
</tbody>
</table>

Figure 3.11 Facilities Projected 20-Year Achieve Proposed LOS Condition Profile

<sup>3</sup>Infrastructure gap to achieve proposed LOS is inclusive of maintain current LOS infrastructure gap and incremental investment to achieve proposed LOS.
3.4: Forecasted Infrastructure Gaps and Financing Strategy

3.4.1: Forecasted Infrastructure Gaps

The infrastructure gaps are a dollar amount based on the difference between:

- the amount of money that needs to be spent on LPL assets required to provide services, and
- the amount of funding presently identified in budgets and reserve funds over a 10-year period (2023-2032).

In other words, what London plans to spend versus what the assets need. Ideally, the infrastructure gaps decline over time as greater investments are made to replace older infrastructure, to improve the condition of infrastructure and to minimize the risks associated with failing assets and insufficient asset compliments.

The LPL identified infrastructure gaps are summarized below in Table 3.14 and illustrated in Figure 3.13. Over the 10-year analysis period, the cumulative maintain current LOS and achieve proposed LOS infrastructure gaps are expected to be $24.6 million and $36.4 million, respectively.

The gap to maintain current LOS is 11.9% of LPL’s $206 million infrastructure replacement value. LPL facility pressures are the primary contributor to the gap. These needs include rehabilitation and replacement of existing infrastructure systems. Rehabilitation and replacement investments are based on needs identified in the VFA Facilities Management software, critiquing of consultant FCA results, and considering industry best practices to maintain the facilities current condition profile.

Additional maintain current LOS pressures of note include further investment in Furniture and Equipment, and IT Equipment assets to ensure LPL can continue providing exceptional literacy, community meeting spaces, and cultural opportunities to Londoners.

The incremental gap to achieve proposed LOS is 5.7% of LPL’s infrastructure replacement value (combined gaps represent 17.7% of replacement value). This amount primarily represents further facilities investments aimed at improving asset
Various components of the maintain current LOS and achieve proposed LOS gaps were brought forward for funding as part of the 2024-2027 MYB. Thus, future updates to this AMP will most likely present reductions to the infrastructure gaps, but not elimination.

Table 3.14 Average Annual Budget and Gap Analysis ($Thousands)

<table>
<thead>
<tr>
<th>Asset Type</th>
<th>Planned Funding</th>
<th>Reserve Fund Availability</th>
<th>Investment to Maintain Current LOS</th>
<th>Incremental Investment to Achieve Proposed LOS</th>
<th>Infrastructure Gap to Maintain Current LOS</th>
<th>Infrastructure Gap to Achieve Proposed LOS</th>
</tr>
</thead>
<tbody>
<tr>
<td>London Public Library</td>
<td>1,275</td>
<td>None identified</td>
<td>3,735</td>
<td>1,180</td>
<td>2,460</td>
<td>3,640</td>
</tr>
</tbody>
</table>

Figure 3.13 Maintain Current and Achieve Proposed LOS Cumulative Infrastructure Gap (Millions)
3.4.2: Infrastructure Gap Financing Strategy
At present, Canada lacks a defined standard or guidance for assessing the acceptability of municipal infrastructure gaps. Nevertheless, the fundamental objective of asset management is that LPL actions are collectively (both financial and non-financial) are anticipated to tackle the growth in projected infrastructure gaps.

Typically, the infrastructure gap financing strategies supports this objective by setting out the approach to ensuring that appropriate funds are available to support the delivery of infrastructure dependent services. This is done by completing the AMP well in advance of the multi-year budgeting process so that its results help inform the requested operating and capital budgets. However, due to lagging impacts of the pandemic, the AMPs for all the City’s agencies, boards, and commissions were delayed post 2024-2027 MYB development. As such this infrastructure gap financing strategy does not present alternative financing options. In replacement of alternative financing strategies, in 2025, this AMP will be updated and reported to LPLB and Council based on the approved 2024-2027 MYB and 2025 annual budget update.

3.5: Discussion
3.5.1: Lifecycle Management Scenarios
The lifecycle management section included three scenarios – planned budget, maintain current LOS, and achieve proposed LOS.

Scenario One planned budget is identified to have constraints on LPL’s capacity to effectively maintain infrastructure. This leads to a deterioration in asset condition. This decline might not be immediate but, over time, it becomes more visible to the public and has the potential to cause operating problems, increasing the operating and maintenance costs, and potentially leading to higher repair or replacement costs in the future.

Scenario Two maintain current LOS funding is greater than what is currently allocated, illustrating the financial strain of maintaining a healthy asset portfolio and library services. This scenario acknowledges the need for continual investment in assets to maintain their current condition state, eliminating the degradation seen in the first scenario. It prevents further decline and enhances the condition of the assets as well as ensures legislated requirements are met.

Scenario Three achieve proposed LOS represents service improvements inline with strategic plans, evolving industry standards and community needs, plus energy efficiencies and GHG reductions consistent with City CEAP initiatives. This level of funding is greater than both the planned budget and the one needed to maintain current LOS. The advantages of this approach are improved public access to educational materials (both digital and non-digital), enhanced community and cultural engagement, physically safe and appealing facilities, more environmentally friendly infrastructure, and potential long term cost savings.

These three scenarios result in different LOS depending on the funding provided for asset lifecycle activities. Thus, the choices made will have an implication on LPL assets and staff ability to deliver the desired LOS and resulting customer satisfaction.

3.5.2: Current and Future Challenges
General
Both now and into the future, LPL faces a dynamic combination of opportunities and challenges that impact service delivery and infrastructure. For example, some of these conditions and trends include:
- Economic (e.g., budget pressures/inflation, unemployment)
• Social (e.g., population demographics, cultural needs)
• Technology (e.g., service delivery and literacy innovation, digital strategy, cyber crime)
• Environmental (e.g., sustainability, climate change, urban versus rural development)
• Organizational (e.g., engagement and partnerships, recruitment, and retention)

To help navigate and prioritize these factors the LPL 2022-2026 Strategic Plan provides direction regarding Library’s primary and secondary priorities as it relates to service delivery, facilities, technology, and staff development.

The following commentary summarizes the main current and future challenges impacting infrastructure needs and costs.

Inflation
As Canada’s economy has emerged from the pandemic, inflationary pressures beyond those accounted for within the 2020-2023 MYB and associated 10-year capital plans started developing in 2021 and continued throughout 2022 and into 2023 due to COVID-19 induced supply chain disruptions and supply-demand imbalances. As of 2023, these higher input costs have been incorporated into the 2024 LPL AMP and are a material component of the infrastructure replacement values and 10-year infrastructure gaps reported. These capital financing pressures represent a significant risk to the condition and LOS associated with infrastructure assets.

Technology
Changes in technology continue to influence how library service are delivered. From a service delivery perspective, especially public literacy, access to information, and engagement, the use of technology in all forms of services has created significant opportunities to enhance service offerings and quality. These increasingly complex characteristics highlight opportunities and challenges associated with staff recruitment and training, technology infrastructure needs, organizational and public safety, and personal privacy and ethics.

Climate Change
In 2019, London City Council declared a climate emergency at the urging of the community. As it relates to LPL’s impact on climate, there are current and future challenges that must be contended with. It is important to address these challenges thoroughly and promptly if we are to leave a positive legacy for future generations. This AMP incorporates preliminary facilities energy efficiency and GHG reduction investments (i.e., green for like lifecycle activity costs) consistent with the infrastructure needs stemming from the FCA and those presented in the 2024-2027 MYB.

Aging Infrastructure
Like most Canadian municipalities, City of London and LPL owns and maintains aging infrastructure. In the case of LPL, this is most materially representative in the 16 buildings and 9 site works which are, on average, approximately 32-years old and 27-years old, respectively. Facilities this age often need substantial capital investments to maintain their condition and operational functionality. For example, this could include replacing many building elements such as the roof, and repairing and updating mechanical, electrical, and plumbing systems. Additionally, facilities at this age contain outdated designs and features that are not barrier-free or able to meet modern service delivery needs.

Growth
London is experiencing steady to above average population and employment growth. This growth triggers a surge of service and asset capacity needs, resulting in a proportional boom in new
and/or enhanced infrastructure construction and acquisition. As the asset portfolio increases due to growth, ongoing renewal of these new assets require more resources. To accommodate the tax-supported financing pressures Council approved the Assessment Growth Policy to ensure new property tax dollars attributable to growth are used to fund the long-term operating and capital financing needs of applicable City services and assets.

Additionally, this growth may correspond to increased demand on existing assets, such as increasing ‘wear and tear’ due to volume. As a result, maintaining existing infrastructure capacity and quality, especially with climate change impacts as well, poses continuous challenges as intensification occurs and as additional urban and rural development continues.

3.6: Conclusion
Valued at over $206 million, the LPL assets are overall in Fair condition, indicating that historically there has been sufficient investment in sustaining these assets to maintain the current LOS. However, to maintain current LOS and achieve proposed LOS additional investments are required, with preliminary calculations at approximately $24.6 million and incremental $11 million, respectively, over 10-years (2023-2032). It is also noted that if supply chain issues and rising costs continue, the timely rehabilitation, replacement, and acquisition of LPL assets will be in jeopardy and could result in degradation of the services ultimately delivered. Table 3.15 presents the summary of the State of Local Infrastructure, Infrastructure Gap, and Reinvestment Rates for LPL assets.

Table 3.15 Summary of the State of Local Infrastructure, Infrastructure Gap, and Reinvestment Rates (Millions)

<table>
<thead>
<tr>
<th>Asset Type</th>
<th>Replacement Value</th>
<th>Current Condition</th>
<th>Infrastructure Gap Maintain Current LOS</th>
<th>Infrastructure Gap Achieve Proposed LOS</th>
<th>Current Annual Reinvestment Rate</th>
<th>Recommended Annual Reinvestment Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>London Public Library</td>
<td>$206.2</td>
<td>Fair</td>
<td>$24.6</td>
<td>$36.4</td>
<td>0.73%</td>
<td>2.13% to 2.8%</td>
</tr>
</tbody>
</table>
Reliability and Accuracy Commentary
To facilitate interpretation of the AMP results Figure 3.14 visually presents LPL and CAM staff assessment of AMP data reliability and accuracy with supporting commentary following. This assessment rates data reliability as moderate and data accuracy as moderate to low.

Based on the materiality of assets, key rating considerations and conclusions are:
- Facilities valuation and needs is based on VFA information and corroborated with Altus standard costing. However, full implementation of VFA Facilities Management software within operations is undergoing a phased approach, which was not complete at the point of AMP completion.
- Collections, Furniture and Equipment, and IT Equipment and Software asset inventories are an amalgamation of data sources. Majority of valuation, condition, and investment actuals and forecasts are primarily based on expert opinion. Further processes, systems, and controls are required to improve these data sets.

These ratings are consistent with many City of London service areas. To improve these ratings, a review of systems and processes that support LPL asset registries is recommended over the 2024-2027 MYB and beyond. Such investments will raise the reliability and accuracy of the data, noting the long-term goal is to have all asset registries within advanced asset management focused software applications.
Section 4. Conclusion and Recommendations
4.1: Conclusions

4.1.1: Key Findings

London Public Library (LPL) infrastructure systems are an integral piece of library services and play a key role in achieving LPL 2022-2026 Strategic Plan objectives and goals. This AMP is a strategic document that describes the state of LPL’s infrastructure and the approach to managing assets over their lifecycle to maintain current LOS and achieve approved LOS at the lowest lifecycle cost possible. It was produced through extensive efforts of LPL and City CAM staff leveraging the City’s CAM Policy and Program as well as knowledge gained from the City’s 2014, 2019, 2023 AMPs. Over time, each successive AMP will play a larger role in informing infrastructure and service decision-making.

The key findings of the AMP are:

- There is $206.2 million worth of infrastructure under the direct ownership and control of LPL. This infrastructure represents a diverse array of assets including facilities, tangible and non-tangible collections, furniture and equipment, and IT equipment.
- The overall condition of LPL assets is rated as Fair. Fair condition indicates that the infrastructure shows general signs of deterioration and requires attention, some elements exhibit significant deficiencies.
- Based on the existing LPL planned funding, the annual average of the 10-year maintain current LOS infrastructure gap is approximately $2.5 million and the annual average of the 10-year achieve proposed LOS infrastructure gap is approximately $3.6 million.
- Through the 2024-2027 MYB a portion of this gap has been approved for funding by the LPLB and this budget is currently being deliberated by City of London Council.
- Future AMPs will be brought forward to align with the development of MYBs and will present financing strategies to mitigate remaining infrastructure gaps annual growth while balancing the impact of taxation affordability on the community.

4.1.2: Ontario Regulations 588/17 Compliance

O. Reg 588/17 has a phased approach with two timelines of July 1, 2024, and July 1, 2025, that are applicable to the City’s agencies, boards, and commissions (ABCs). The July 1, 2024, timeline is where all City infrastructure assets, including those of ABCs, will have an AMP documenting maintain current LOS and financial strategies to fund these expenditures. The final deadline of July 1, 2025, builds on the July 1, 2024, deadline with the additional requirement to document achieve proposed LOS and financial strategies to fund these expenditures for all types of municipal infrastructure assets.

This AMP is compliant with the July 1, 2024, and July 1, 2025, O.Reg. 588/17 requirements. A detailed reconciliation of this AMP’s compliance with the O. Reg. 588/17 requirements is contained in Appendix A. O.Reg.588/17 Asset Management Plan Requirements.

4.2: Recommendations

The City’s CAM Program is founded on the principle of continuous improvement with the object of increasing line-of-sight quality of data/information and the tools and techniques that are used to inform services and asset management decision-making. This increased quality will lead to greater confidence in the analysis documented and decisions formed through the AMP.
Based on these objectives, Table 4.1 recommendations will ensure that this process and AMP continues to help LPL manage its $206.2 million asset portfolio to provide affordable and sustainable service delivery and keep compliant with the regulatory requirements. These recommendations are structured to address short- and long-term objectives and are categorized according to distinct asset management knowledge areas, considering the current state, future needs, and overall LPL strategic objectives and goals. Short term objectives are those that are recommended for completion over the 2024-2027 MYB period. Long term objectives are those that are recommended for completion beyond the 2024-2027 MYB period. Each of these recommendations will be completed with leading support from the City’s CAM staff per the approved asset management service level agreement.

### Table 4.1 2024 LPL AMP Recommendations

<table>
<thead>
<tr>
<th>Category</th>
<th>Improvement Initiative details</th>
<th>Key Benefits</th>
<th>Time Period</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asset Inventory/Knowledge</td>
<td>Enhance data attributes and data accuracy of existing asset registries (asset inventory databases).</td>
<td>• Provides a sound basis for decision making on the asset base and enables more efficient reporting.</td>
<td>Short Term</td>
</tr>
<tr>
<td></td>
<td>By asset type, develop a standardized methodology for determining asset conditions.</td>
<td>• Enables consistency of asset management practices across LPL assets and improves decision-making.</td>
<td>Long Term</td>
</tr>
<tr>
<td>Level of Service</td>
<td>Develop more asset related LOS metrics and their performance targets.</td>
<td>• Ensuring the consistent delivery of services at expected standards, thereby aligning operational performance with customer expectations and strategic objectives.</td>
<td>Long Term</td>
</tr>
<tr>
<td>Lifecycle Management and Decision Making</td>
<td>Develop and implement investment strategies for LPL infrastructure based on asset registries and strategic plans.</td>
<td>• Enables a clear understanding of the investment priorities for each asset type and investment period.</td>
<td>Short Term</td>
</tr>
<tr>
<td></td>
<td>Incorporate and align the AMP into LPL strategic planning exercises to better reflect asset and service delivery capability.</td>
<td>• Strategic plans developed on a sound basis reflecting the actual capability of the asset base and required capital investments to achieve desired LOS.</td>
<td>Long Term</td>
</tr>
<tr>
<td></td>
<td>Develop and implement a Maintenance Management Strategy incorporating enhanced maintenance practices.</td>
<td>• Lifecycle cost savings, and productivity and LOS improvements.</td>
<td>Long Term</td>
</tr>
<tr>
<td>Category</td>
<td>Improvement Initiative details</td>
<td>Key Benefits</td>
<td>Time Period</td>
</tr>
<tr>
<td>--------------------------------</td>
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<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>-------------</td>
</tr>
</tbody>
</table>
| Risk Management                | **Enhance LPL asset risk framework in line with the City’s CAM Risk Management Strategy.**                                                                                                                                                                                                                                                                               | • Better targeted asset interventions.  
• Increased ability to sustain service levels.                                                                                                                                                                                                                                   | Long Term   |
| Financial Management          | **Improve infrastructure funding through appropriate alignment of operating and capital budgets.**                                                                                                                                                                                                                                                                     | • Clarity in financial planning and reporting.  
• Enhanced investment strategies.                                                                                                                                                                                                                                                                                                | Short Term  |
|                               | **Explore opportunities to address the infrastructure gap through various financing strategies.**                                                                                                                                                                                                                                                                                                                             | • Achieve service and financial sustainability.                                                                                                                                                                                                                           | Long Term   |
| Systems and Technology        | **Leveraging either City or LPL software solutions, implement centralized asset registry technology.**                                                                                                                                                                                                                                                             | • Implementation will streamline asset management, enhancing operational efficiency, decision-making accuracy, and compliance.                                                                                                                                         | Long Term   |
| People and Staff              | **Enhance asset management governance within each LPL service area.**                                                                                                                                                                                                                                                                                                 | • Enhances oversight of asset interventions and reporting.                                                                                                                                                                                                               | Long Term   |
|                               | **Add asset management duties in relevant positions job description.**                                                                                                                                                                                                                                                                                                  | • Proactive identification of staff, skills, and qualifications.  
• Improved asset management.                                                                                                                                                                                                                                                                                                       | Long Term   |
| Monitoring and Reporting      | **Develop a comprehensive AMP every 4-years aligned with the City’s multi-year budget process.**                                                                                                                                                                                                                                                                  | • Informed budget decision-making.  
• Regulatory compliance.                                                                                                                                                                                                                                                                                                               | Short Term  |
|                               | **Annually review the progress of this AMP. The annual progress review will address implementation of the recommendations and any factors impeding completion progress.**                                                                                                                                                                                                 | • Regulatory compliance.                                                                                                                                                                                                                                                                                                              | Short Term  |
|                               | **With the support of City CAM staff, when possible incorporate infrastructure related data and public feedback opportunities in existing LPL public engagement practices.**                                                                                                                                                                                     | • Enhanced adaptability to changing operational environments and community needs.  
• Improved customer satisfaction and engagement.  
• Increased efficiency and effectiveness in asset management operations.                                                                                                                                                                                                                                           | Short Term  |
Appendix A. O.Reg.588/17 Asset Management Plan Requirements
### A1. O.Reg.588/17 Asset Management Plan Compliance Reconciliation

#### Table A1.1 O.Reg.588/17 July 1, 2024, Requirements

<table>
<thead>
<tr>
<th>O.Reg.588/17 Section</th>
<th>Requirement</th>
<th>Mapping to AMP</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Summary of assets in each category</td>
<td>Sections - #3.1.1</td>
</tr>
<tr>
<td>5.(2) 3.</td>
<td>Replacement cost of assets in each category</td>
<td>Sections - #3.1.1</td>
</tr>
<tr>
<td>5.(2) 3.</td>
<td>Average age of assets in each category</td>
<td>Sections - #3.1.2</td>
</tr>
<tr>
<td>5.(2) 3.</td>
<td>Condition of assets in each category</td>
<td>Sections - #3.1.3</td>
</tr>
<tr>
<td>5.(2) 3.</td>
<td>Description of municipality's approach to assessing condition of assets in each category</td>
<td>Sections - #3.1.3</td>
</tr>
<tr>
<td>5.(2) 1.</td>
<td>Current levels of service</td>
<td>Sections - #3.2.1 and #3.2.2</td>
</tr>
<tr>
<td>5.(2) 2.</td>
<td>Current performance measures of assets in each category based on established metrics</td>
<td>Sections - #3.2.1 and #3.2.2</td>
</tr>
<tr>
<td>5.(2) 4.</td>
<td>Lifecycle activities needed to maintain current levels of service for 10 years</td>
<td>Sections - #3.3.2</td>
</tr>
<tr>
<td>5.(2) 4.</td>
<td>Costs of providing lifecycle activities needed to maintain current LOS, based on assessment of lifecycle, options, risks, lower cost</td>
<td>Sections - #3.3.2</td>
</tr>
<tr>
<td>5.(2) 4.</td>
<td>Link or description of assessment of current LOS lifecycle, options, risks, lower cost</td>
<td>Sections - #3.3.2</td>
</tr>
<tr>
<td>5.(2) 5.</td>
<td>For population &lt;25K, description of population or economic forecast assumptions, and how these connect to lifecycle cost projections for current LOS</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>5.(2) 6.i.</td>
<td>For population 25K or more, population and employment forecasts</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>5.(2) 6.ii.</td>
<td>For population 25K or more, lower tier in Greater Golden Horseshoe (GGH), Sched 7 or portion of upper tier growth plan forecast, or assumptions</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>5.(2) 6.iii.</td>
<td>For population 25K or more, upper/single tier outside GGH, population and employment forecasts, or assumptions</td>
<td>See City of London 2023 CAM Plan^4</td>
</tr>
<tr>
<td>5.(2) 6.iv.</td>
<td>For population 25K or more, lower tier outside GGH, portion of upper tier growth plan forecast</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>5.(2) 6.vi.</td>
<td>For population 25K or more, capital, and significant operating costs for each of 10 years, to maintain LOS to accommodate increase in demand cause by growth</td>
<td>Sections - #3.3.3</td>
</tr>
<tr>
<td>7.(1)</td>
<td>Date of review and update of AMP - within 5 years</td>
<td>Include once finalized</td>
</tr>
<tr>
<td>8.</td>
<td>Endorsement of AMP by executive lead</td>
<td>Include once finalized</td>
</tr>
<tr>
<td>8.</td>
<td>Approval of AMP by municipal Council resolution</td>
<td>Include once finalized</td>
</tr>
<tr>
<td>9.(1)</td>
<td>Date of municipal Council review of AM progress - before July 1, every year</td>
<td>Include once finalized</td>
</tr>
<tr>
<td>9.(2)</td>
<td>Annual municipal Council review includes progress, factors impeding implementation, strategy to address factors</td>
<td>Include once finalized</td>
</tr>
<tr>
<td>10</td>
<td>Website availability of policy and AMP, copy provided if requested</td>
<td>Include once finalized</td>
</tr>
</tbody>
</table>

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^4 [https://london.ca/sites/default/files/2023-10/Corporate%20Asset%20Management%20Plan%202023.pdf](https://london.ca/sites/default/files/2023-10/Corporate%20Asset%20Management%20Plan%202023.pdf)
Table A1.2 O.Reg.588/17 July 1, 2025, Requirements

<table>
<thead>
<tr>
<th>O.Reg.588/17 Section</th>
<th>Requirement</th>
<th>Mapping to AMP</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.(1) 1.</td>
<td>Proposed levels of service for each of 10 years</td>
<td>Sections - #3.2.1</td>
</tr>
<tr>
<td>6.(1) 2.</td>
<td>Explanation of why proposed LOS are appropriate, based on options, delta, achievability, affordability</td>
<td>Sections - #3.3</td>
</tr>
<tr>
<td>6.(1) 2.</td>
<td>Link or description of assessment of proposed LOS options, delta, achievability, affordability</td>
<td>Sections - #3.3</td>
</tr>
<tr>
<td>6.(1) 3.</td>
<td>Proposed performance measures of assets based on metrics established by the municipality (e.g., measures for energy usage, operating efficiency, etc.)</td>
<td>Sections - #3.2</td>
</tr>
<tr>
<td>6.(1) 4.</td>
<td>Lifecycle management strategy: Identification of lifecycle activities needed to provide proposed levels of service for a 10-year period, based on assessment of full lifecycle, options, risks, lowest cost</td>
<td>Sections - #3.3.3</td>
</tr>
<tr>
<td>6.(1) 4. i.</td>
<td>Link or description of assessment of proposed LOS lifecycle, options, risks, lower cost</td>
<td>Sections - #3.3.3</td>
</tr>
<tr>
<td>6.(1) 4. ii.</td>
<td>An estimate of annual costs for undertaking identified lifecycle activities over a 10-year period.</td>
<td>Sections - #3.3.3</td>
</tr>
<tr>
<td>6.(1) 4. iii.</td>
<td>Projections for annual funding to be available to undertake identified lifecycle activities over a 10-year period</td>
<td>Sections - #3.3.3</td>
</tr>
<tr>
<td>6.(1) 4. iii.</td>
<td>Explanation of the options examined to maximize the funding projected to be available</td>
<td>Sections - #3.3.3 and #3.4.1</td>
</tr>
<tr>
<td>6.(1) 4. iv.</td>
<td>Identification of funding shortfalls for lifecycle activities over a 10-year period</td>
<td>Sections - #3.4.1</td>
</tr>
<tr>
<td>6.(1) 4. iv.</td>
<td>Identification of lifecycle activities that will be undertaken if there is a shortfall</td>
<td>Sections - #3.3.3</td>
</tr>
<tr>
<td>6.(1) 4. iv.</td>
<td>Explanation of how risks associated with not undertaking any of the lifecycle activities will be managed.</td>
<td>Sections - #3.3.3</td>
</tr>
<tr>
<td>6.(1) 5.</td>
<td>For population &lt;25K, description of population or economic forecast assumptions, and how these connect to lifecycle cost projections for proposed LOS</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>6.(1) 6.</td>
<td>For population 25K or more, capital, and significant operating costs for each of 10 years, to achieve proposed LOS to accommodate increase in demand caused by growth</td>
<td>Sections - #3.3.3</td>
</tr>
<tr>
<td>6.(1) 6. ii.</td>
<td>For population 25K or more, funding projected to be available, by source, due to growth</td>
<td>Sections - #3.3.3</td>
</tr>
<tr>
<td>6.(1) 6. iii.</td>
<td>For population 25K or more, overview of the risks associated with implementation of the AMP</td>
<td>Sections - #3.5</td>
</tr>
<tr>
<td>6.(1) 7.</td>
<td>Explanation of other key assumptions</td>
<td>Sections - #2.4</td>
</tr>
</tbody>
</table>
Glossary
Definitions

Achieve Proposed Levels of Service: is defined as the strategic initiatives undertaken by an organization to modify its service levels represented in a new proposed standard of service provision. This could involve modifying the condition, scope, or accessibility of the services beyond their current levels, based on strategic goals (e.g., Regulation Requirements, Master Plans or Strategic Plan Targets). The achievement of these proposed service levels may require changes in frequency and/or scope of asset lifecycle activities.

Asset: Non-financial assets having physical substance 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 of one year;
- are to be used on a continuing basis; and
- are not for resale in the ordinary course of operations.

For the LPL, capital assets have the following characteristics:

- Beneficial ownership and control clearly rest with LPL, and
- The asset is utilized to achieve LPL plans, objectives, and services with the intention of being used on a continuous basis and is not intended for sale in the ordinary course of business.

Asset Management: is an integrated approach, involving all organization departments, to effectively manage existing and new assets to deliver services to customers. The intent is to maximize benefits, reduce risks and provide satisfactory levels of service to the community in a sustainable manner.

AMP: The LPL Asset Management Plan which combines multi-disciplinary management techniques (technical and financial) over the life cycle of infrastructure assets to provide a specific level of service in the most cost-effective manner and manage risks associated with municipal infrastructure assets. This typically includes plans to invest, design, construct, acquire, operate, maintain, renew, replace, and decommission assets.

CAM Program: A set of interrelated or interacting components of the City and its agencies, boards, and commissions that establishes asset management policies and objectives and the processes needed to achieve those objectives. An asset management program also includes the organization structure, roles, responsibilities, business processes, plans, and operations of asset management practices.

Capitalization Threshold: The threshold represents the minimum cost an individual asset must have before it is to be recorded as a capital asset on the statement of financial position.

City: The Corporation of the City of London.

Consequence of Failure: A measure of the direct and indirect impacts on the city in the event of an asset failure.

Core Municipal Infrastructure Asset: Defined by O.Reg 588/17, any municipal infrastructure asset that is a Water asset that relates to the collection, production, treatment, storage, supply or distribution of drinking water; Wastewater asset that relates to the collection, transmission, treatment or disposal of...
wastewater, including any wastewater asset that from time to time manages stormwater; Stormwater management asset that relates to the collection, transmission, treatment, retention, infiltration, control or disposal of stormwater; Road; or Bridge or culvert.

**Critical Asset:** An asset for which the financial, business, or service level consequences of failure are sufficiently severe to justify proactive inspection, rehabilitation, or replacement, and is considered a municipal infrastructure asset.

**Customer:** Any person or entity who from the municipal infrastructure asset or service, is affected by it or has an interest in it either now or in the future.

**Direct Levels of Service:** Levels of service that are most representative of a municipal service and can be costed over a 10-year projected period.

**Green Infrastructure Asset:** Defined by O.Reg. 588/17, means an infrastructure asset consisting of natural or human-made elements that provide ecological and hydrological functions and processes and includes natural heritage features and systems, parklands, stormwater management systems, street trees, urban forests, natural channels, permeable surfaces, and green roofs.

**Infrastructure Asset:** All or part of physical structures and associated facilities that form the foundation of development, and by or through which a public service is provided to the city, such as highways, bridges, bicycle paths, drinking water systems, social housing, hospitals, courthouses, and schools, as well as any other thing by or through which a public service is provided to the city.

**Maintain Current Levels of Service:** is defined as the persistent efforts of an organization to manage its assets through comprehensive lifecycle activities and effectively allocating necessary financial resources with the aim of consistently delivering its services at the current established service levels.

**Municipal Infrastructure Asset:** An infrastructure asset (core and non-core municipal infrastructure assets), including a green infrastructure asset, directly owned by a municipality, or included on the consolidated financial statements of a municipality, but does not include an infrastructure asset that is managed by a joint municipal water board.

**Public:** Residential, commercial, industrial, and institutional partners, and any other party that rely on municipal infrastructure assets.

**Related Levels of Service:** Levels of service that have a causal relationship with direct levels of service but cannot be easily costed over 10-year projected period.

**Replacement Value:** The cost LPL would incur to completely replace a municipal infrastructure asset, at a selected point in time, at which a similar level of service would be provided. This definition can also be referred to as 'Replacement Cost'.

**Tangible Capital Assets (TCA):** A legislative reporting requirement specified by Section PS 3150 in the Public Sector Accounting Board Handbook to identify asset inventories, additions, disposals, and amortization on an annual basis.
Acronyms

**ABC**: Agencies, Boards, and Commissions  
**AMP**: Asset Management Plan  
**AODA**: Accessibility for Ontarians with Disabilities Act  
**CAM**: Corporate Asset Management  
**CAM Plan**: Corporate Asset Management Plan  
**CEAP**: Climate Emergency Action Plan  
**DC**: Development Charges  
**FCA**: Facility Condition Assessment  
**FCI**: Facilities Condition Index  
**GHG**: Green House Gases  
**IT**: Information Technology  
**kWH/sf**: Kilowatt hours per square foot  
**LCR**: Lifecycle Renewal  
**LPL**: London Public Library  
**LPLB**: London Public Library Board  
**LOS**: Levels of Service  
**MESL**: Maintain Existing Service Levels  
**m3/sf**: Cubic Meters per Square Foot  
**MYB**: Multi-Year Budget  
**O. Reg.**: Ontario Regulation  
**RF**: Reserve Fund  
**RV**: Replacement Value  
**TCA**: Tangible Capital Asset  
**VFA**: Facilities Management Software