

TO:	CHAIR AND MEMBERS STRATEGIC PRIORITIES AND POLICY COMMITTEE MEETING ON AUGUST 26, 2019
FROM:	ANNA LISA BARBON MANAGING DIRECTOR, CORPORATE SERVICES AND CITY TREASURER, CHIEF FINANCIAL OFFICER
SUBJECT	2019 CORPORATE ASSET MANAGEMENT PLAN

RECOMMENDATION

That, on the recommendation of the Managing Director, Corporate Services and City Treasurer, Chief Financial Officer, with the advice of the Manager III, Corporate Asset Management, the City of London (City) 2019 Corporate Asset Management Plan, and outlined in the staff report dated August 26, 2019 **BE APPROVED**.

PREVIOUS REPORTS PERTINENT TO THIS MATTER

- April 8, 2019, Report to Strategic Priorities and Policy Committee – Corporate Asset Management Policy
- July 17, 2018, Report to Corporate Services Committee – FCM Grant Funding Agreement & RFP 18-23 Award For Corporate Asset Management Plan And Policy.
- January 23, 2018, Report to Corporate Services Committee –FCM Municipal Asset Management Program Grant Application.
- August 26, 2014, Report to Corporate Services Committee – Corporate Asset Management Plan 2014.
- January 7, 2014 Report to Corporate Services Committee – State of the Infrastructure Report 2013.

STRATEGIC PLAN 2019-2023

This report and recommendation supports several strategic priorities including:

Strategic Area of Focus	Expected Result	How are we doing it?
Building a Sustainable City	<i>Maintain or increase current levels of service.</i>	<ul style="list-style-type: none"> • Develop and document current levels of service and identify proposed level of services.
	<i>Build infrastructure to support future development and protect the environment.</i>	<ul style="list-style-type: none"> • Prioritize investment in assets to implement the Asset Management Plan
	<i>Manage the infrastructure gap for all assets.</i>	<ul style="list-style-type: none"> • Communicate the Infrastructure Gap
Leading in Public Service	<i>Improve public accountability and transparency in decision making.</i>	<ul style="list-style-type: none"> • Measure and publicly report on corporate performance
	<i>Maintain London's finances in a transparent and well- planned manner to balance equity and affordability over the long term.</i>	<ul style="list-style-type: none"> • Continue to ensure the strength and sustainability of London's finances • Establish and monitor targets for reserves and reserve funds
	<i>Increase efficiency and effectiveness of service delivery.</i>	<ul style="list-style-type: none"> • Promote and strengthen continuous improvement practices

BACKGROUND

Ontario Regulation 588/17

Ontario Regulation 588/17 – Asset Management Planning for Municipal Infrastructure, under the *Infrastructure for Jobs and Prosperity Act, 2015*, came into force on January 1, 2018. Building on the Province's 2012 *Building Together: Guide for Municipal Asset Management Plans*, the *Ontario Regulation 588/17* (O.Reg 588/17) sets out requirements and deadlines for municipal asset management plans and policies.

The key requirements of O.Reg 588/17 are described in further detail below. They include preparation of a strategic asset management policy and phased implementation of the asset management plan.

Strategic Asset Management Policy

The deadline for strategic asset management policy implementation was July 1, 2019. It requires Municipal Council endorsement and shall be reviewed and updated every five (5) years. City Council approved the Corporate Asset Management Policy in April 23, 2019, fulfilling this requirement

Corporate Asset Management Plan (AMP)

The Corporate AMP has three implementation deadlines summarized below:

- i. July 1, 2021 – Preparation of an AMP, including current levels of service (LOS) in respect of a municipality's core municipal infrastructure which is defined as water, wastewater, storm water, roads, bridges and culverts;
- ii. July 1, 2023 – Preparation of an AMP with respect to all of its other municipal infrastructure assets ; and
- iii. July 1, 2024 –Preparation of an AMP, which will include proposed levels of service, with respect to all its municipal infrastructure assets.

The regulation also outlines that a municipality shall review and update its asset management plan at least every five (5) years.

Corporate Asset Management Plan 2014

The Corporate Asset Management (CAM) office developed a Corporate AMP in 2014. This strategic document stated how London's municipal infrastructure assets were to be managed over a ten year period from 2013-2022. It was the City's first Corporate AMP developed in accordance with the provincial '*Building Together: Guide for Municipal Asset Management Plans*'. The 2014 Corporate AMP was a companion document to the State of Infrastructure Report 2013. The Corporate AMP was intended to be updated every 4 years to align with the Multi-Year Budget process.

CORPORATE ASSET MANAGEMENT PLAN

Corporate AMP Regulation Requirements

As required by O.Reg 588/17 (with a deadline of July 1, 2021 for Core assets, and July 1, 2023 for all other municipal infrastructure assets), every municipality shall prepare an asset management plan that must include the following:

- For each asset category, the current levels of service being provided, determined in accordance with regulation-specific qualitative descriptions and technical metrics (quantitative) for Core assets, and municipal-established metrics for remaining assets.

- A summary of the assets in the category, their replacement cost, their average age based on asset components, the information available on asset condition, and a description of the City's approach to assessing the condition, based on recognized and generally accepted good engineering practices where appropriate.
- For each asset category, the lifecycle activities that would need to be undertaken to maintain the current levels of service for each of the 10 years following the year for which the current levels of service are determined, with the associated costs and risks of providing those activities.
- The population and employment forecasts for the City that are set out in its official plan and a description of assumptions regarding future changes in population or economic activity.
- For each of the 10 years following the year for which the current levels of service are determined, the estimated capital expenditures and significant operating costs related to the lifecycle activities, that are required to maintain the current levels of service in order to accommodate projected increases in demand caused by growth, must be identified.

Corporate Asset Management Plan Development Approach

The Corporate AMP is the culmination of efforts from staff across the city who are involved with managing municipal infrastructure assets, including finance and technical service areas and operations staff. The process of developing and updating the comprehensive Corporate AMP was sophisticated and required multiple meetings and workshops with each of the 17 service areas included in the scope of the Corporate AMP. The Corporate AMP was developed through different stages shown in Figure 1.

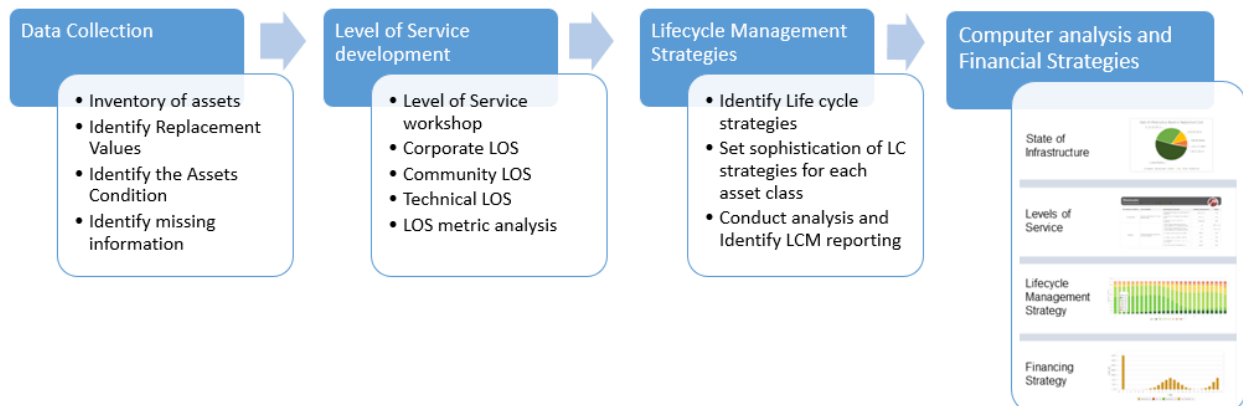


Figure 1: Corporate Asset Management Plan Development Framework

- Data Collection:** Asset Inventory, installation dates, location, expected useful life, deterioration of profiles, replacement values, condition assessment, etc.
- Level of Service Development:** CAM conducted workshops with each service area in order to identify the Level of Service statements at three (3) levels; Corporate, Community and Technical.
- Lifecycle Management Strategies:** CAM conducted workshops with each service area in order to identify the Lifecycle Strategy for each asset type with a 10 year period of analysis (2018-2027).
- Computer Analysis & Financing Strategy:** Using the City's asset management data analytic (Predictor modelling) and decision support tools, CAM projected long term condition profiles to optimize service level outcomes and capital expenditures. A number of financing options were also explored in order to address/manage the infrastructure gap identified based on identified level of service and recommend lifecycle management strategies.

Updating the 2019 Corporate AMP was completed, primarily, with the city's internal staff, and external support from consultant(s).

Structure of the Corporate Asset Management Plan

The Corporate AMP is structured to provide consistency to stakeholders who are engaged with the document. An overview of the Corporate AMP sections is illustrated in Figure 2.

1. The Introduction outline the City's Vision, Mission and Values. It also provides an overview of the CAM program, Ontario regulations for Asset Management Planning, the Corporate AMP scope, etc.
2. A brief section overview describes the six (6) parts that are documented for each service area (asset category):
 - State of Infrastructure
 - Levels of Service
 - Asset Lifecycle Management Strategy
 - Forecasted Infrastructure Gap
 - Discussion
 - Conclusions

A series of separate sections for each infrastructure service area reviews each of the six (6) major components listed above.

3. A Financial Strategies section sets out the possible approaches to ensure that the appropriate funds to address the infrastructure gap are available and provides multiple alternatives.
4. A Conclusion and Recommendation section aggregates the Corporate AMP findings into an overall picture and provides recommendations.

The content and wording contained in each section ensures the Corporate AMP is aligned with O.Reg 588/17, requirements for directly-owned City assets.

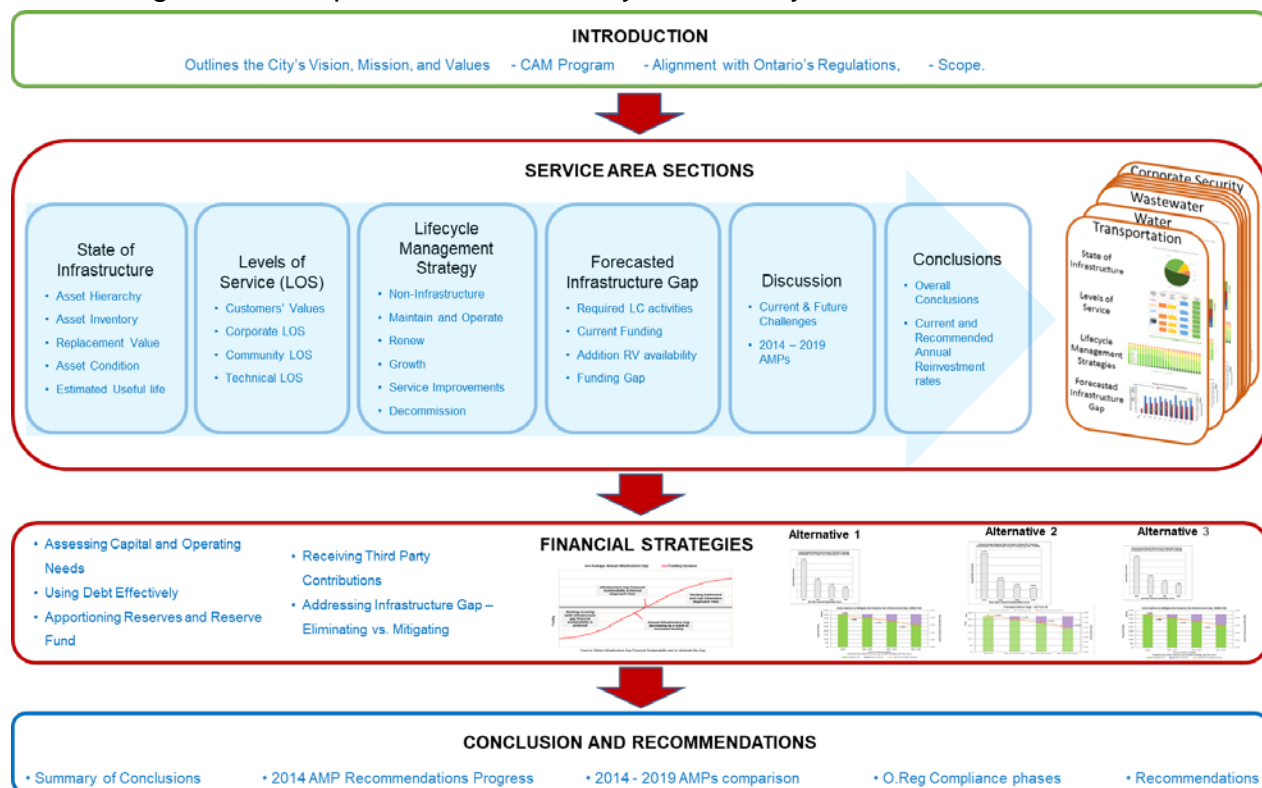


Figure 2: Corporate Asset Management Plan Structure

City of London's Current Compliance with Ontario Regulation 588/17

The 2019 Corporate AMP addresses directly owned City assets to be compliant with the July 1, 2021 and July 1, 2023 regulation requirements for all directly-owned municipal infrastructure assets. It also includes some components of the July 1, 2024 requirements and includes a 10 year period of analysis (2018-2027).

Based on the O. Reg. 588/17 definition of a municipal infrastructure asset, future Corporate Asset Management Plans will include Board and Agency assets that are

consolidated within the City’s Financial Statements. The City is undertaking an asset management maturity assessment in late 2019/early 2020 to determine the appropriate work to be completed to ensure July 1, 2023 & July 1, 2024 regulation requirements are met in subsequent comprehensive Corporate AMP updates. Table 1 summarizes the City of London’s compliance status with the O.Reg. 588/17 phases.

Table 1: City of London Compliance Status with O.Reg. 588/17

Asset Category	Phase 1 & 2: O.Reg. 588/17 due July 1, 2021 & July 1, 2023				Phase 3: O.Reg 588/17 due July 1, 2024			
	State of Infrastructure	Current Level of Service	Lifecycle Management and Risk	Financial Strategy	State of Infrastructure	Proposed Level of Service	Lifecycle Management and Risk	Financial Strategy
Core City Owned Assets	Compliant	Compliant	Compliant	Compliant	Compliant	In Progress	In Progress	In Progress
Other Directly Owned City Assets	Compliant	Compliant	Compliant	Compliant	Compliant	In Progress	In Progress	In Progress
Boards and Agencies	Under review - Due by July 1, 2023				Under Review			

Key Findings

Inventory and Replacement Value

Currently, the City of London owns and maintains approximately \$20.1 billion worth of directly owned municipal infrastructure assets. Approximately 88% of this replacement value is attributed to Core Assets - Water, Wastewater, Stormwater, and Transportation. Inventory highlights include 3,656 Lane-kms of roads, 1,603 km of water mains, 14 fire stations, six (6) wastewater treatment facilities, 1,434 km of wastewater mains, 1,377 stormwater mains, and 13 Community Centres.

Asset Condition

The results show that the City manages its infrastructure effectively, keeping it generally in ‘Good’ condition. ‘Good’ condition indicates that the infrastructure is adequate for now with some elements showing general signs of deterioration that require attention. The assets that are of immediate concern to the City are the 3% of assets listed in ‘Very Poor’ condition. These are the assets at the end of their useful lives and although the 10% listed in ‘Poor’ condition may still be functioning, these are functioning at an unpredictable level of service. The City needs to be prepared to respond to failures or proactively address them before these assets fail. Figure 3 summarizes the overall condition distribution of the City assets.

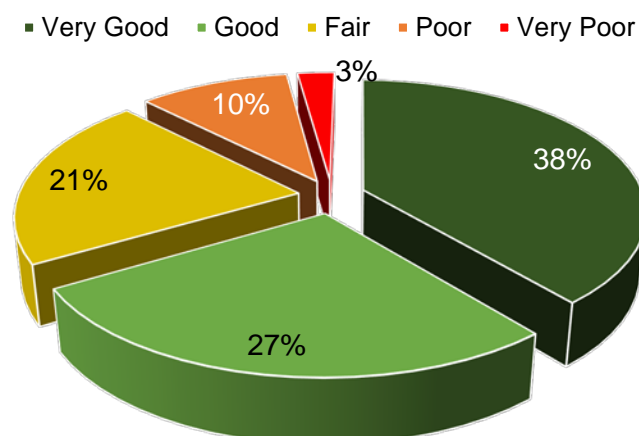


Figure 3: City of London Overall Condition of Municipal Infrastructure Assets¹

¹ Subject to rounding.

Infrastructure Gap

An optimal amount of funding is required to manage current and future asset risks. The difference between the optimal amount and available budget is the infrastructure gap. The analysis concludes that over the next decade, the City of London projects spending is in excess of \$1.4 Billion to address its lifecycle assets in scope of the Corporate AMP. This level of expenditure will result in an infrastructure investment gap of roughly **\$568.8 Million** over the cumulative 10 year period of 2018-2027, as seen in Figure 4. The analysis reveals that the current infrastructure gap is approximately **\$168 Million** (0.84% of the \$20.1 billion asset base). The analysis does not consider expenditures required to address growth, service improvements or inflation. The analysis also does not consider Boards and Agencies. This current gap of replacement value of 0.84% is considered to be a low percentage and demonstrates strong commitment to asset management practices on part of the City and Council. However, the gap and its projected growth over the next ten years is a significant concern.

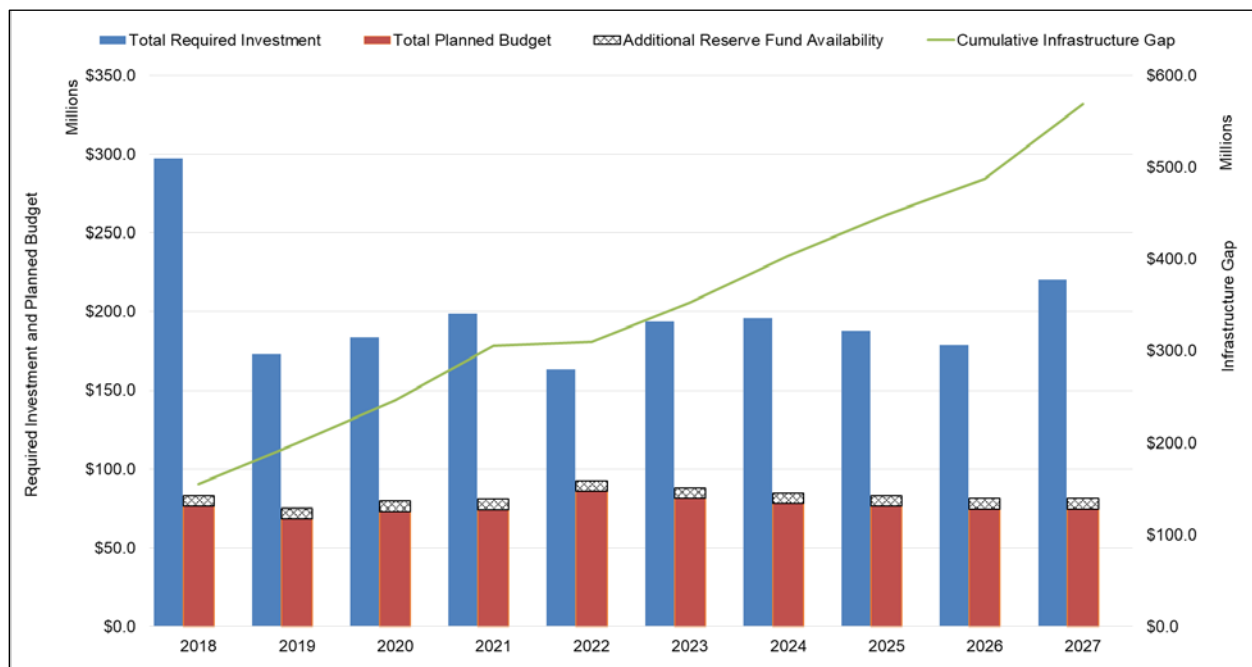


Figure 4: All 2019 Corporate AMP Assets Cumulative 10 Year Infrastructure Gap

Table 2 lists the breakdown of the infrastructure gap by service areas over the next 10 years.

Table 2: 2019 AMP Infrastructure Gap Contribution by Service Area

Service(s)	Cumulative 10 Year Infrastructure Gap (\$000's)
Roads, Structures, & Traffic	223,049
Parking	411
Solid Waste	46,544
Parks	31,330
Recreation	106,478
Urban Forestry	22,920
Fire	28,484
Long Term Care	11,623
Corporate Facilities	32,036
Cultural Facilities	19,530
Fleet	No Gap
Information Technology	No Gap
Land	N/A
Corporate Security & Emergency Management	6,364
Water	No Gap
Sanitary	36,280
Stormwater	3,746
Total – Property Tax, Water, and Wastewater	568,795

Figure 5 illustrates the projected 2014 Corporate AMP infrastructure gap and the 2019 infrastructure gap curve with the adopted infrastructure gap mitigation strategies. The strategies adopted through 2016-2019 Multi-Year budget period to mitigate the 2014 projected infrastructure gap had a major contribution to the reduction of the actual assessed gap in 2018. Additional mitigation strategies contributing to this improvement include improving and integrating condition information; data quality improvements; and asset management decision optimization for long term planning.

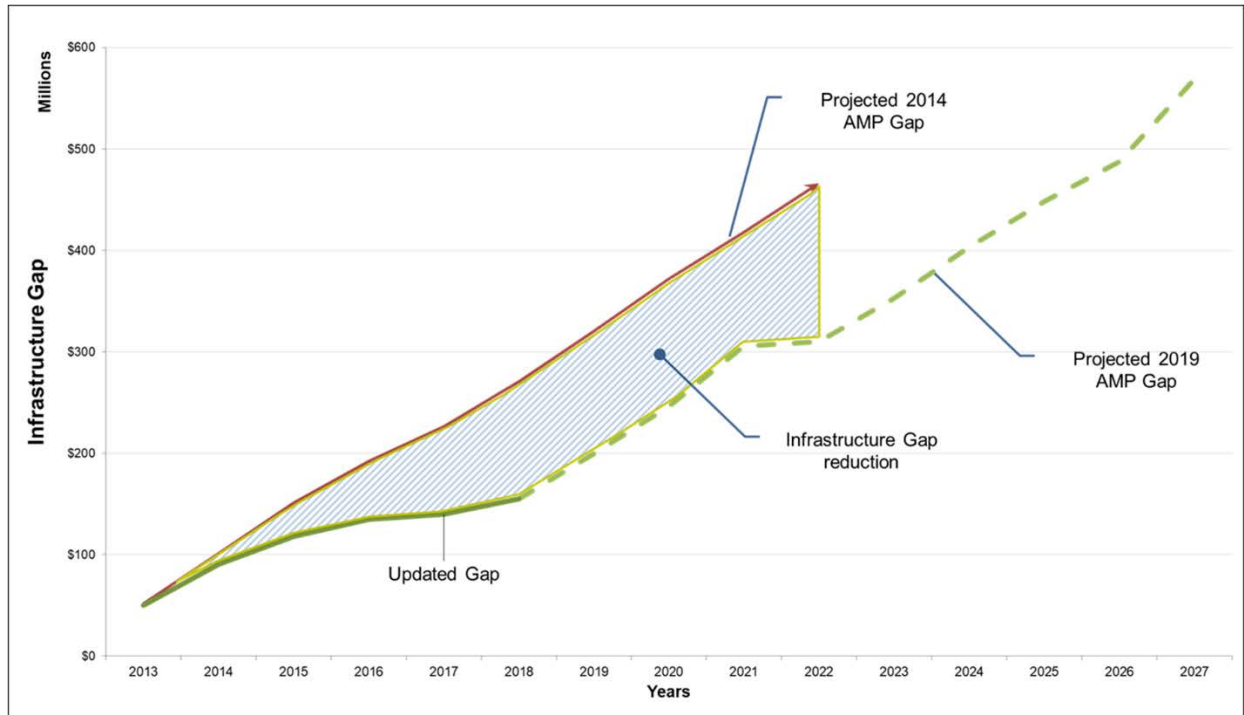


Figure 5: Projected 2014 Corporate AMP Infrastructure Gap versus 2019 Infrastructure Gap with Mitigation Strategies

Financing Strategy

Based on the current gap identified, the projected gap will grow to \$568.8 million by 2027. The 2019 Corporate AMP assumes that the gap can be divided between property tax supported budgets and utility rate supported budgets. It assumes that updating the Water & Wastewater 20 Year Financial Plans for the utilities will address the Sanitary and Stormwater infrastructure gap (\$40 million) and continue to monitor Water Infrastructure requirement. This lowers the projected amount that needs to be addressed in 10 years to \$528.8 million relating exclusively to property tax supported assets.

The 2019 Corporate AMP provides various options to either eliminate or mitigate the infrastructure funding gap. It is important to realize that frequent tax rate increases have a larger impact on the affordability of municipal taxation on the community. Considering the impracticality and unaffordability of completely eliminating the gap in the 10 year time period, the Corporate AMP provides options to mitigate the growth of the gap over the next 10, 25, 50 & 75 years.

Table 3 identifies the recommended years at which the annual funding gap is mitigated for four (4) different revenue increase alternatives (assumed to begin in 2020) for property tax budgets. It illustrates the differing infrastructure levy (or property tax increases) that would occur based on the assumption that the City would be required to finance 80% of cumulative 10 year gap.

Table 3: Financial Sustainability Property Tax Based Funding Gap (80% City Financed)

Year when Financial Sustainability Occurs	Annual Infrastructure Levy
	Mitigate Cumulative 10 year Gap (80% City Financed)
2029 (Year 10)	0.72%
2044 (Year 25)	0.33%
2069 (Year 50)	0.22%
2094 (Year 75)	0.18%

The plan suggests that the City should target financial sustainability to mitigate the growth of the infrastructure gap between 10 years to 25 years, which could result in an incremental tax increase of at least 0.33% per year.

Additionally, the City will continue to explore opportunities to address the infrastructure gap through different financial strategies. This includes pursuing funding from external sources;; incorporating reinvestment rate concept in assessment growth and service improvement business cases; and continuing to utilize one-time funding to address the gap (e.g. Surplus/Deficit Policy and Assessment Growth Policy).

NEXT STEPS

Over the next few years, Implementation & enhancement of the corporate AMP will focus on the following areas:

- Continue to advance the CAM Program.
- Continue to improve and align the Corporate AMP with the Corporate Strategic Plan and the Ontario Regulation 588/17.
- Submit a Business Cases through the 2020-2023 Multi-Year Budget to continue progress in addressing the infrastructure gap.
- In fall 2019 or early 2020, Civic Administration will launch an Asset Management Maturity Assessment initiative for local Boards and Agencies. This will help them to identify their asset management needs in order to develop a Corporate AMP that is compliant with the O.Reg. 588/17 requirement by the July 1, 2023 deadline. Meanwhile, Civic Administration will continue to coordinate with local Boards and Agencies to align their asset management planning with the City’s Corporate Asset Management Plan.
- 2020-2022 - Develop a public engagement and communication plan to communicate the currently provided Levels of Service and identify the proposed Levels of Service by service area.

SUMMARY

O.Reg 588/17 came into effect January 1, 2018. It requires the City to develop a comprehensive Corporate Asset Management Plan based on a phased approach with three (3) deadlines of July 1, 2021, July 1, 2023, and July 1, 2024. The July 1, 2021 and July 1, 2023 deadlines is where ‘Core’ assets (water, wastewater, stormwater, road, bridges, and culverts) and all other City infrastructure assets, respectively, to have an asset management plan documenting current levels of service. The final deadline requires the documentation of proposed levels of service and financial strategies to fund these expenditures.

The 2019 Corporate AMP includes all directly owned assets of the City of London. It is compliant with the July 1, 2021 and July 1, 2023 Ontario Regulation requirements. Furthermore, it also includes some components of the July 1, 2024 requirements.

The analysis shows that City of London owns and maintains assets with a replacement value of approximately \$20.1 billion. The results show that the City manages its infrastructure to keep it in generally 'Good' condition. However, it also concludes that over the next decade, the City of London projects spending in excess of \$1.4 Billion to address the lifecycle needs of the assets in the scope of the Corporate AMP. The current infrastructure gap is approximately **\$168 Million** and it is forecasted that the infrastructure gap will grow to roughly **\$568.8 Million** over the cumulative 10 year period of this corporate AMP (2018-2027).

The 2019 Corporate AMP provides various options to either eliminate or mitigate the infrastructure funding gap. Note that faster tax levy increases have a larger impact on the affordability of municipal taxation for the community.

The 2019 Corporate AMP proposes to explore opportunities to address the infrastructure gap through different financial strategies, including pursuing funding from external sources; updating the Water and Wastewater 20 Year Financial Plans; incorporating reinvestment rate concepts through assessment growth and service improvement business cases; and continuing to utilize one-time funding to address the gap. In addition, it suggests that the City should target financial sustainability to mitigate the growth of the infrastructure gap between 10 years to 25 years, which could result in an incremental tax increase of at least 0.33%.

Acknowledgements

The 2019 Corporate Asset Management Plan would not have been possible without the significant efforts of every Service Area cited in the Corporate AMP. This report was prepared with the help of Ahmed Eweda, Nathan de Witt, and Tricia Badal.

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cc: CAM Steering Team
 Kyle Murray, Director, Financial Planning & Business Support

Attach: Appendix A – Corporate Asset Management Plan 2019