

**Subject: 2024 Asset Management Plans**

**File Number: ACS2024-IWS-AM-0002**

**Report to Finance and Corporate Services Committee on 7 May 2024**

**and Council 15 May 2024**

**Submitted on April 26, 2024 by Susan Johns, P. Eng., Director, Asset Management Services, Infrastructure and Water Services Department**

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**Ward: Citywide**

**Objet : Plans de gestion des actifs de 2024**

**Numéro de dossier : ACS2024-IWS-AM-0002**

**Rapport présenté au Comité des finances et des services organisationnels**

**Rapport soumis le 7 mai 2024**

**et au Conseil le 15 mai 2024**

**Soumis le 2024-04-26 par Susan Johns, Directrice, Gestion des actifs, Direction des services d'infrastructure et des services de l'eau**

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**Quartier : À l'échelle de la ville**

## REPORT RECOMMENDATION(S)

That the Finance and Corporate Services Committee recommend that Council:

1. Approve the Asset Management Plans as described in this report and attached as Document 1 – 7; and
2. Approve the renewal components of the Library Services Asset Management Plan, as described in this report and attached as Document 8.

## RECOMMANDATION(S) DU RAPPORT

Que le Comité des finances et des services organisationnels recommande ce qui suit au Conseil municipal :

1. d'approuver les Plans de gestion des actifs décrits dans le présent rapport et joints aux documents 1 à 7;
2. d'approuver les éléments de renouvellement du plan de gestion des actifs des services de bibliothèque, tels que décrits dans le présent rapport et joints au document 8.

## EXECUTIVE SUMMARY

The City of Ottawa set out in its Official Plan its goal to become North America's most livable mid-sized city by 2046. The City is growing and delivers many important services to residents that are dependent on the stewardship of critical infrastructure and assets.

The City has a strong legacy of asset management planning. The City has ensured that all assets are consistently maintained to be safe and to provide service to meet the needs of the community.

In 2018, the Ontario government introduced: [Asset Management Planning for Municipal Infrastructure \(2015\)](#), requiring municipalities in Ontario to prepare baseline asset management plans (AMPs) for municipally-owned infrastructure assets. The purpose of these AMPs is to provide an inventory of assets, asset conditions, service levels, and the asset life cycle costs required to maintain service levels for the next 10 years.

In 2022, Council ([ACS2022-IWS-AM-0001](#)) approved four Asset Management Plans in accordance with the first phase requirements of the Provincial legislation. AMPs for

drinking water, wastewater, stormwater and transportation were approved. These assets represent more than 80 per cent of the value of the city's assets.

To continue meeting Provincial requirements, an additional eight AMPs for the remaining assets must be approved by Council by July 1, 2024. The 2024 AMPs mark a foundational step in consolidating key information about the City's \$73 billion in assets into a unified framework.

This report focuses on City-owned assets for community and social services, emergency and protective services, government services and information technology, greenspace and forest services, library services, recreation and cultural services, solid waste services and transit services. It provides a snapshot of the current condition of these assets, the cost to maintain the current state of assets and the financial needs of the assets over the next decade.

Overall, the combined 2024 AMPs detail City-owned assets to be in good to fair condition across the eight service areas, including assets like facilities, rinks, parks, fleets, IT, assets supporting transit, specialty equipment and more. The City of Ottawa's asset management planning ensures all assets are maintained safely.

The report also discusses current municipal asset considerations, and their impacts. Many of today's asset challenges, reflecting broader trends across Canadian cities, have increased projected funding needs over the next 10 years as detailed in both the 2022 and 2024 AMPs.

For example, Ottawa's aging infrastructure requires ongoing investment for maintenance and renewal to meet community needs and safety standards. Financial pressures are also driven by new regulatory and policy demands, modern accessibility standards, and climate change impacts, all contributing to an increase in forecasted costs for asset renewal, enhancement, and growth.

The forecasted investment needs over the next 10 years exceed total planned capital budgets by \$3 billion. This figure represents the cumulative difference related to growth, renewal and enhancement costs to maintain current service levels. Due to the new provincial regulation, the difference identified in the AMPs is not directly comparable to figures from past reports. Unlike previous reports which would have focused on the renewal of critical assets only, these new estimates include all assets as required by

regulation. The regulation also requires municipalities to report the funding requirements for future assets required for growth, the renewal of all assets classes, and enhancements including impacts of new policies, standards, and climate change. It is important to note the estimate 2024 AMPs include previously reported pressures to Council such as, Transit and Solid Waste services.

Asset management planning and AMPs remain a key tool for ensuring the City's infrastructure evolves in step with Ottawa's growth, service expectations, and emerging standards, all within a financially sustainable framework.

The 2024 AMPs do not seek Council decisions on changing funding strategies or service levels, however, Council's endorsement and approval of these plans recognize the existing state of assets and their projected funding requirements, as required by the Provincial legislation.

Understanding the current forecasted estimates will support future decisions in 2025 and beyond. Under *Asset Management Planning for Municipal (2015)*, Council must approve new proposed levels of service and funding strategies for all 12 AMPs by July 1, 2025. This will build upon the baseline assessments made in the previous AMPs to support Council decisions on future funding and strategic priorities.

The AMPs will also provide important information for the City's long-range financial plans and be updated as companion reports to the 2025 Asset Management Plans.

The Comprehensive Asset Management Steering Committee will lead the 2025 asset management plans engagement, ensuring alignment with regulatory requirements. Service delivery experts and Council will have future and ongoing discussions about proposed service levels, funding strategies, and risk. The approach will be iterative and flexible, allowing for a refinement asset management plans, non-financial strategies, and financial strategies in response to council priorities.

The City of Ottawa is committed to producing Asset Management Plans that ensure the sustainability of municipal services while managing risk and optimizing asset value.

## **RÉSUMÉ**

Dans son plan officiel, la Ville d'Ottawa s'est fixé pour objectif de devenir la ville de taille moyenne la plus agréable où vivre en Amérique du Nord d'ici 2046. La Ville évolue et fournit aux résidents de nombreux services importants qui dépendent de la gérance d'infrastructures et d'actifs essentiels.

La Ville dispose d'un solide patrimoine en matière de planification de la gestion des actifs. Elle a veillé à ce que tous les actifs soient entretenus de manière cohérente afin d'être sûrs et d'offrir un service pour répondre aux besoins de la collectivité.

En 2018, le gouvernement de l'Ontario a introduit : [Planification de la gestion des biens pour l'infrastructure municipale \(2015\)](#), exigeant que les municipalités de l'Ontario préparent des plans de gestion des actifs (PGA) de base pour les actifs d'infrastructure appartenant aux municipalités. L'objectif de ces PGA est de fournir un inventaire des actifs, des conditions des actifs, des niveaux de service et des coûts du cycle de vie des actifs nécessaires pour maintenir les niveaux de service au cours des 10 prochaines années.

En 2022, le Conseil ([ACS2022-IWS-AM-0001](#)) a approuvé quatre plans de gestion des actifs conformément aux exigences de la première phase de la législation provinciale. Les PGB liés à l'eau potable, aux eaux usées, aux eaux pluviales et au transport ont été approuvés. Ces actifs représentent plus de 80 % de la valeur des actifs de la Ville.

Pour continuer à répondre aux exigences provinciales, huit autres PGA pour les actifs restants doivent être approuvés par le Conseil d'ici le 1<sup>er</sup> juillet 2024. Les PGA 2024 marquent une étape fondamentale dans la consolidation des renseignements clés sur les 73 milliards de dollars d'actifs de la Ville dans un cadre unifié.

Ce rapport se concentre sur les actifs appartenant à la Ville pour les services communautaires et sociaux, les services d'urgence et de protection, les services gouvernementaux et les technologies de l'information, les services d'espaces verts et forestiers, les services de bibliothèque, les services récréatifs et culturels, les services de déchets solides et les services de transport. Il donne un aperçu de l'état actuel de ces biens, du coût de leur maintien en l'état et des besoins financiers pour les dix prochaines années.

Dans l'ensemble, les plans d'action combinés pour 2024 indiquent que les biens appartenant à la Ville sont en bon ou moyen état dans les huit secteurs de service, y

compris les installations, les patinoires, les parcs, les parcs automobiles, les technologies de l'information, l'équipement spécialisé et plus encore. La planification de la gestion des actifs de la Ville d'Ottawa s'assure que tous les actifs sont entretenus de façon sécuritaire.

Le rapport aborde également les considérations actuelles en matière d'actifs municipaux et leurs impacts. Bon nombre des défis actuels en matière d'actifs, qui reflètent des tendances plus générales dans les villes canadiennes, ont augmenté les besoins de financement prévus au cours des dix prochaines années, comme l'indiquent les PGA 2022 et 2024.

Par exemple, l'infrastructure vieillissante d'Ottawa nécessite des investissements continus pour l'entretien et le renouvellement afin de répondre aux besoins de la communauté et aux normes de sécurité. Les pressions financières sont également dues aux nouvelles exigences réglementaires et politiques, aux normes d'accessibilité modernes et aux effets du changement climatique, qui contribuent tous à l'augmentation des coûts prévus pour le renouvellement, l'amélioration et la croissance des actifs.

Les besoins d'investissement prévus pour les dix prochaines années dépassent de trois milliards de dollars le total des budgets d'investissement prévus. Ce chiffre représente la différence cumulée entre les coûts de croissance, de renouvellement et d'amélioration et le maintien des niveaux de service actuels. En raison de la nouvelle réglementation provinciale, la différence constatée dans le cadre de l'élaboration des PGA n'est pas directement comparable aux chiffres des rapports précédents. Contrairement aux rapports précédents qui se concentraient seulement sur le renouvellement des actifs essentiels, ces nouvelles estimations comprennent tous les actifs, comme l'exige la réglementation. En vertu de la réglementation, les municipalités doivent également faire un compte-rendu des exigences de financement pour de futurs actifs nécessaires à la croissance, le renouvellement de toutes les catégories d'actifs et les améliorations, y compris l'incidence de nouvelles politiques et normes, de même que les changements climatiques. Il est important de noter que les PGA 2024 estimés comprennent des pressions précédemment rapportées au Conseil, comme le transport en commun et les Services des déchets solides.

La planification de la gestion des actifs et les PGA demeurent un outil essentiel pour faire en sorte que l'infrastructure de la Ville évolue au rythme de la croissance d'Ottawa,

des attentes en matière de services et des normes émergentes, le tout dans un cadre financièrement viable.

Les PGA 2024 ne demandent pas au Conseil de prendre des décisions sur la modification des stratégies de financement ou des niveaux de service, mais l'approbation de ces plans par le Conseil reconnaît l'état actuel des actifs et les besoins de financement prévus, comme l'exige la législation provinciale.

La compréhension des estimations prévisionnelles actuelles facilitera les décisions futures en 2025 et au-delà. En vertu du règlement 588/17 de l'Ontario, le Conseil doit approuver les nouveaux niveaux de service proposés et les stratégies de financement pour les 12 PGA d'ici le 1<sup>er</sup> juillet 2025. Cela s'appuiera sur les évaluations de base effectuées dans les précédents PGA pour soutenir les décisions du Conseil sur le financement futur et les priorités stratégiques.

Les PGA fourniront également des renseignements importants pour les plans financiers à long terme de la ville et seront mis à jour en tant que rapports complémentaires aux plans de gestion des actifs 2025.

Le Comité directeur de la gestion globale des actifs dirigera l'engagement des plans de gestion des actifs pour 2025, en veillant à l'alignement sur les exigences réglementaires. Les experts en prestation de services et le Conseil auront des discussions futures et continues sur les niveaux de service proposés, les stratégies de financement et les risques. L'approche sera itérative et flexible, permettant d'affiner les plans de gestion des actifs, les stratégies non financières et les stratégies financières en réponse aux priorités du conseil.

La Ville d'Ottawa s'est engagée à produire des plans de gestion des actifs qui assurent la durabilité des services municipaux tout en gérant les risques et en optimisant la valeur des actifs.

## **BACKGROUND**

Ottawa is a diverse capital city with unique urban and rural neighborhoods. The [Official Plan](#) projects Ottawa to reach a population 1.4 million by 2046, spanning over 2,500 square kilometers, with the aim to become North America's most livable mid-sized city.

At the backbone of the city's vision is the responsible stewardship of its \$73 billion in assets.

Ottawa's assets face new challenges today. These challenges are not unique to Ottawa and reflect a broader trend. Today, larger and older Canadian cities with aging infrastructure are renewing and modernizing assets as urban growth and expansion continues. Municipalities are also integrating new asset categories and embracing contemporary standards and policies, reshaping the management of important assets. Moreover, municipalities must also address the realities of climate change. With the escalating impacts of climate change, our existing assets and infrastructure face challenges they were not designed to withstand, putting an additional strain on efforts and cost to maintain these assets.

As the City addresses today's needs, the City also paves the way for tomorrow, employing asset management as a useful planning tool to make future decisions on how assets support the services the City provides to residents.

### **Asset Management History**

Asset management is well-established within the City of Ottawa, with a strong foundation built over the past two decades. Successive Councils have consistently endorsed the development and accomplishments of our asset management practices, thereby ensuring the continued sustainability, safety, and service of the City's assets.

The City's early asset management planning milestones include the [Long-Range Financial Plan \(LRFP\)](#) in 2002 and a review of Public Works Infrastructure in 2004 ([ACS2004-TUP-INF-0009](#)). The City of Ottawa then formalized its Comprehensive Asset Management (CAM) Program in 2012 ([ACS2012-PAI-INF-0007](#)) which set Council's asset management expectations. The 2012 LRFP IV for tax-supported capital ([ACS2012-CMR-FIN-0039](#)) established a new funding target aligned with the capital investment needs to maintain critical assets in a state of good repair.

More recently, in 2017, the update to the CAM Program ([ACS2017-PIE-IS-0002](#)), along with the [State of the Asset Report](#) and [Strategic Asset Management Plan](#), was complemented by LRFP V for tax supported capital ([ACS2017-CSD-FIN-0017](#)) and water, wastewater and stormwater support programs ([ACS2017-CSD-FIN-0023](#)), which included recommendations for financial and non-financial asset funding strategies.



Council has prioritized investments in our assets and infrastructure. In alignment with recommendations from the tax LRFP V, Council increased funding to achieve \$195 million in annual base renewal from 2019-2027, a target the City is set to exceed by 2025. On the rate side, the LRFP V increased water, wastewater, and stormwater to attain \$260 million annually in capital renewal financing. The City has surpassed this target since 2023. Additionally, this term of Council has already approved one-time investments of \$100 million from 2022 to 2024 reflecting Council's commitment to robust asset management.

The City's AMPs are closely coordinated with the LRFPs. The LRFPs provide a forecast of the City's operational and capital needs for the coming decade, along with strategies for financing them. This integrated approach ensures assets are managed and financed strategically, supporting the City's growth, sustainability and council priorities.

## **New Regulations and Reporting Requirements**

The latest evolution in City asset management planning and reporting happened following provincial regulatory changes adopted in 2018. Ontario's new Regulation [Asset Management Planning for Municipal Infrastructure \(2015\)](#) built upon Ottawa's strong and proactive asset management approach to help Ontario municipalities improve and standardize asset management practices. It is mandated that all municipalities must prepare asset management plans for all municipal infrastructure assets.

The regulations require the following:

1. Approval of the four asset management plans by July 1, 2022
2. Approval of the remaining asset management plans by July 1, 2024
3. Approval of the proposed level of service asset management plans by July 1, 2025

Current Levels of Service AMP July 2022 and 2024:

- Inventory of assets by category
- Replacement cost of assets
- Average age of assets
- Condition of assets

- Approach to assessing condition
- Current level of service provided
- Lifecycle and Cost of lifecycle activities needed for each of the next 10 years to:
- Meet demand caused by growth or upgrade of existing assets
- Maintain the current level of service

Proposed Levels of Service AMP July 2025:

- Inventory of assets by category
- Replacement cost of assets
- Average age of assets
- Condition of assets
- Approach to assessing condition
- Proposed level of service for each of the next 10 years and why its appropriate based on risk and affordability assessment
- Cost of lifecycle activities needed for each of the next 10 years to:
  - Meet demand caused by growth or upgrade of existing assets
  - Provide proposed level of service
  - Project funding to be available to undertake needed lifecycle activities
  - Describe which activities would not be funded and associated risks for funding shortfalls

On [April 13, 2022 City Council approved](#) four Asset Management Plans (AMPs) addressing over 80 per cent of the value of Ottawa's assets, covering drinking water, wastewater, stormwater and transportation services, thereby meeting the first mandatory provincial legislative requirement.

To continue meeting Provincial requirements, eight AMPs addressing the remaining 20 percent value of assets must be approved by July 1, 2024. The eight 2024 “current state” asset management plans include information about buildings, fleet and special equipment assets that support these services:

- Community and social services
- Emergency and protective services
- Government services and information technology
- Greenspace and forest services
- Library services
- Recreation and cultural services

- Solid waste services
- Transit services

The 2024 AMPs are important in giving a picture of City assets, their current condition, how much it will cost maintain the current state of the assets and the financial needs for the assets over the next decade.

The 2024 AMPs do not seek Council decisions on changing funding strategies or service levels, however, Council's endorsement and approval of these plans recognize the existing state of assets and the projected funding requirements.

In the next phase of asset management planning, under *Asset Management Planning for Municipal (2015)*, Council must approve proposed levels of service and funding strategies for all 12 AMPs by July 1, 2025. This will mark a step from assessment to actionable planning, with the provincial intent to align infrastructure investment with long-term service and financial objectives. In 2025, updates to the LRFPs will also incorporate insights from the AMPs to forecast how the City will meet asset needs over the next 10 years.

## **DISCUSSION**

### **Ottawa's Asset Considerations**

The City of Ottawa owns, operates, and maintains assets with a current replacement value of approximately \$73 billion. Together, Ottawa's 2022 and 2024 AMPs consolidate key information about the City's \$73 billion in assets into a unified framework.

The asset conditions and financial details in the 2024 AMPs reflect common considerations among Canadian municipalities. Ottawa faces a set of interconnected factors in managing the growth of city infrastructure and its large inventory of existing assets.

These factors include:

- Much of Ottawa's infrastructure was built in the post-war era, through various economic periods, with different standards and funding models from various levels of government. This large asset base is critical to City services and

requires continued investments to maintain and renew, ensuring these important but aging assets continue to serve the community's needs and remain safe.

- Incremental regulatory and policy changes have increased the financial pressures to modify or enhance existing municipal assets, rather than just renew, to suit service needs.
- *Asset Management Planning for Municipal Infrastructure (2015)*, requires more comprehensive and detailed asset reporting, including additional assets.
- Ottawa's important incorporation of modern standards around accessibility, equity, diversity, and inclusion also requires increased investments to enhance assets to support the current delivery of service.
- Increased current asset replacement values resulting from inflationary pressures, supply chain issues, material, and labour shortages, combined with increased costs of renewing, operating, and maintaining municipal assets over time, results in increased forecasted renewal and enhancement costs.
- Climate change also requires consideration of the costs to adapt to increased deterioration rates of assets, mitigation of future impacts, reducing GHG emissions and recovery from extreme weather events.

Ottawa manages these considerations and impacts with proactive asset management planning. The ongoing process of asset management is about prudence and careful planning for the renewal, growth and enhancement of City assets supporting services where future citizens can inherit and enjoy the benefits of today's foresight and investments.

## **Climate Change**

Municipal services and the assets that support these, are on the front lines of climate change. The practice of asset management requires the City's portfolio of assets adapt to both mitigate contribution to climate change, as well as responding to changing service needs and accelerated asset deterioration because of changing climate conditions and more frequent extreme weather events.

Provincial regulation requires that municipal asset management plans consider the actions that may be required to address infrastructure assets vulnerabilities caused by climate change, and the impact of aspects, such as increased operational costs, more

frequent maintenance and renewal schedules, or changes in level of service expectations, such as disaster planning and contingency funding.

In addition to forecasted investment needs for renewal, enhancement, and growth, the 2024 AMPs forecast capital and operating costs related to climate change, including for the next 10 years:

- Increased operations and maintenance costs and capital renewal costs for buildings due to gradual, long-term impacts of climate change based on the Financial Accountability Office of Ontario (FAO), “Costing Climate [Change Impacts to Public Infrastructure \(CIPI\) Report](#)”. The FAO report used Ottawa-specific data, as well as data from municipalities across Ontario to estimate the long-term costs that climate change impacts could impose on Ontario’s provincial and municipal infrastructure, and the potential budgetary implications.
- Increased operations and maintenance costs were also forecasted for some service areas due to extreme weather events, extrapolated from costs of responding to climate emergencies within the past five years, as reported through the City’s [Task Force for Climate-related Financial Disclosures \(TCFD\)](#) in the 2022 Annual Report.

In total, over the next 10 years, it is forecasted that climate change will increase the need for expenditure on the City’s existing assets for these service areas by an additional \$472 million in capital and operating costs. This includes \$143 million in climate change adaptation costs and \$329 million in climate change mitigation costs.

Of these projected costs, \$70 million is forecasted operating costs and \$402 million is forecasted capital costs. For the \$402 million forecasted capital costs, the City’s 10-year capital budget forecast includes \$223 million dedicated specifically to address climate change, resulting in a funding gap of \$179 million. Costs associated with proactive climate adaptation and resiliency strategies will be incorporated into future iterations of the AMPs, guided by Council-approved policy.

The AMPs offer a summary of the asset inventory supporting City services, and this snapshot will support future discussions on how best to address climate changes impacts on City’s assets. The plans are one of many tools the City can utilize in its broader strategy for climate action.

## **Asset Management Plan Contents**

The services documented within the 2024 AMPs are those supported by City-owned facilities, fleet, specialized equipment and infrastructure supporting transit. The costs of services delivered through assets owned by community partners and other agencies are outside the scope of the Provincial regulations and are not included in these AMPs. The information presented in the 2024 AMP documents represent a moment in time, based on data gathered in 2023, and is a tool to support future decisions and measure progress towards Council priority objectives, including affordable and reliable service.

In accordance with the requirements of the Ontario regulations, each service-focused, AMP includes the following sections:

### **State of local infrastructure**

- Current inventory and valuation of City-owned assets
- Measure of asset age and condition, and condition assessment methodology and frequency

This section provides information on the size and current replacement value of the asset portfolio supporting the respective service. The age and condition provide an indicator of how close assets are to the end of service life and the types of intervention and levels of investment that may be appropriate. Where assets support more than one service, they have been represented in a single AMP and noted in the others.

### **Level of Service**

- Level of service measures
- Current Performance

This section provides an explanation and measure of the services delivered through the respective assets, both by the community and by City staff. This enables decisions about the assets to be based on the service(s) it supports, in addition to asset condition. It can also connect the assets with corporate strategic objectives across services, such as reducing greenhouse gas emissions associated with City-owned facilities or ensuring all City-owned facilities meet accessibility standards.

## Asset Management Strategy

- Current practices, procedures and tools in place
- Forecasted future demands and service enhancements
- Forecasted lifecycle management and risk

This section describes the asset needs forecasted cost of renewal interventions required to minimize the lifecycle cost of asset ownership.

## Financing Strategy

- Information and sources for expenditure/revenue history and forecast
- Details on current needs categorized as those to support renewal, growth, and enhancements.
- Funding gap

This section provides information sources and assumptions to forecast the expenditures related to capital growth, enhancement, and renewal, and the operating expenditures for the next 10 years. The primary source of this information is the 10-year capital forecast and projections from the 2023 operating budget. The objectives of the AMPs reflect the City's strategic objectives and financial forecasts by aligning with the goals and targets of more focused master plans, initiatives, and studies.

Each AMP also categorized the forecasted capital needs and expenditures into three distinct sections that define the scope of the City's infrastructure investments:

- **Growth or Expansion** refers to activities that introduce entirely new assets or expand the capacity of existing ones to accommodate the city's development.
- **Upgrade or Enhancement** involves activities aimed at improving current assets for enhanced performance, to meet new policy objectives, or to comply with regulatory requirements.
- **Renewal** pertains to activities that rehabilitate or replace existing assets to restore their original quality, capacity, or functionality, ensuring they continue to serve the community effectively. This is sometimes referred to as "like for like" replacement.

The funding gap presented in the AMPs is the difference between the forecasted asset needs and the planned capital budget for the next 10 years. In the same way that the City's asset portfolio and the services it supports are multifaceted, the funding gap can be broken down into different groups and require different strategies to address each distinct category. Each category is important to the City's approach to managing infrastructure in a way that aligns with long-term service delivery and community well-being.

As described in following sections, there are a range of financial, non-asset and service delivery strategies that can address forecasted differences in asset needs and planned expenditure, and Council will decide the appropriate balance between cost, risk and levels of service.

### **Improvement and Monitoring Plan**

The City has undertaken a comprehensive City-wide exercise to collect and analyze asset, service, and financial data to prepare service-focused AMPs in accordance with Provincial regulations. The City works to continuously improve data quality and processes, increased collaboration and information sharing, and documentation as part of the City's data-driven asset management and planning.

The City's ongoing improvement will support the incorporation of updated data into the 2025 Asset Management Plans and beyond.

### **Asset Management Plan Summary**

Information gathering and reporting is a critical initial step to fulfill the requirements under the Ontario regulations. Information in the AMPs will provide a basis of information Council can use for future decisions about infrastructure investments.

City staff collaborated across departments and used multiple data sources, to assemble a comprehensive picture of asset conditions and needs. These data sources included City asset management databases, preliminary Development Charges study, lifecycle forecasts, operating and capital budget forecasts, alignment with other initiatives, and climate change cost estimates based on City studies and a provincial costing study.

Overall, the combined 2024 AMPs detail City-owned assets to be in good to fair condition across the eight service areas, including assets like facilities, rinks, parks,



fleets, IT, specialty equipment and more. The City of Ottawa's asset management planning ensures all assets are maintained safely and consistent with Council-approved asset management strategies keeping critical infrastructure in a state of good repair.

The forecasted investment needs over the next 10 years exceed total planned capital budgets by \$3 billion. This figure represents the cumulative difference related to growth, renewal and enhancement costs to maintain current service levels. Due to the new provincial regulation, the difference identified in the AMPs is not directly comparable to figures from past reports. Unlike previous reports which would have focused on the renewal of critical assets only, these new estimates include all assets as required by regulation. The regulation also requires municipalities to report the funding requirements for future assets required for growth, the renewal of all assets classes, and enhancements including impacts of new policies, standards, and climate change.

Part of the growth gap shown below is caused by a timing difference between the budget forecast data used for the AMP analysis from 2023 and update to the City's Development Charge Background study expected in 2024 and 2025. After the next development charge background study is approved, forecasts for development charge revenue and growth capital budgets will be updated.

It is important to note the estimate 2024 AMPs include previously reported pressures to Council such as, Transit and Solid Waste services.

As shown in Table 1.1 the 10-year capital funding gap for the eight service areas, plus the addition capital costs forecasted due to climate change impacts are a combination of pressures related to asset growth, as well as enhancement and renewal of existing assets.

**Table 1.1: Draft Capital Analysis (2024 AMPs)**

Service	10-Year Capital Funding (Gap)/Surplus		
	Growth (\$ millions)	Renewal (\$ millions)	Enhancement (\$ millions)
Community & Social Services <sup>(1)</sup>	\$0	(\$39)	(\$6)
Emergency & Protective Services	(\$18)	(\$131)	(\$7)

Government Services & IT	(\$9)	(\$92)	(\$4)
Greenspace & Forest Services <sup>(2)</sup>	(\$61)	(\$5)	Not available
Library Services	(\$24)	(\$36)	(\$6)
Recreation & Cultural Services	(\$443)	(\$328)	(\$139)
Subtotal	(\$555)	(\$631)	(\$162)
Transit Services <sup>(3)</sup>	(\$578)	(\$532)	
Solid Waste Services <sup>(4)</sup>	(\$404)		
Climate Change Impacts	(\$179 M)		
<b>Total</b>	<b>(\$3,041 M)</b>		

(1) Excludes Ottawa Community Housing.

(2) Gap analysis for Greenspace & Forest Services is not comprehensive (some needs are not identified at this time, and/or currently funded out of operating budget)

(3) Refer to Transit LRFP Update for more details on assumptions.

(4) Estimates for Solid Waste are conservative; Growth only includes Fleet. Solid Waste services are partially tax-supported, and partially solid waste rate supported.

The next section of this report provides a summary of the eight AMPs for approval while supporting Documents 1 – 8 provide the full detail. This is exclusive of the forecasted costs and investment to address climate change discussed earlier in this report. The information presented in this report is based on estimated costs and is not intended to represent the detailed capital funding costs.

### **Community and Social Services Asset Management Plan**

The Community and Social Services Asset Management Plan outlines all City-owned infrastructure that enables the support of vulnerable members of the community through child-care, long-term care, and emergency shelters.

The total replacement value of the City's municipally owned community and social services assets is \$274 million and the City's planned investment in these assets over

the next 10 years is \$20 million. There were no growth needs identified for this service for the next 10 years. The estimated 10 year needs to maintain all infrastructure at current level of service (per Provincial requirement) is \$65 million as outlined in Table 2.1.

Table 2.1 - Community and Social Services Asset Capital Funding Gap Summary

Community and Social Services	10-Year Needs (\$ Millions)	10-Year Forecasted Investment (\$ Millions)	10-Year Funding Gap (\$ Millions)
Enhancement	\$8	\$2	(\$6)
Renewal	\$57	\$18	(\$39)
<b>Total</b>	<b>\$65</b>	<b>\$20</b>	<b>(\$45)</b>

The detailed the Community and Social Services Asset Management Plan is attached as Document 1.

### Emergency and Protective Services Asset Management Plan

The Emergency and Protective Services Asset Management Plan encompasses all infrastructure supporting By-law and Regulatory Services, Fire Services and Paramedic Services to deliver critical frontline services to residents, businesses, and visitors to protect loss of life, property, and the environment with an emphasis on quality services, efficiency, effectiveness and safety.

The total replacement value of all the City's emergency and protective services assets is \$620 million, and the City's planned investment in these assets over the next 10 years is \$316 million. The estimate to maintain all infrastructure at current level of service over the next 10 years (per Provincial requirement) is \$472 million as outlined in Table 2.2.

Table 2.2 - Emergency and Protective Services Asset Capital Funding Gap Summary

Emergency and Protective Services	10-Year Needs (\$ Millions)	10-Year Forecasted Investment (\$ Millions)	10-Year Funding Gap (\$ Millions)
Growth	\$147	\$129	(\$18)

Enhancement	\$15	\$8	(\$7)
Renewal	\$310	\$179	(\$131)
<b>Total</b>	<b>\$472</b>	<b>\$316</b>	<b>(\$156)</b>

The detailed Emergency and Protective Services Asset Management Plan is attached as Document 2.

### **Government Services and Information Technology Asset Management Plan**

The Government Services and Information Technology Asset Management Plan encompasses all infrastructure supporting the provision of administrative and corporate services and technology solutions that support municipal service delivery such as City Hall and Ben Franklin Place.

The total replacement value of all the City's government services and information technology assets is \$424 million, and the City's planned investment in these assets over the next 10 years is \$107 million. The estimated cost to maintain all infrastructure at current level of service (per Provincial requirement) is \$163 million as outlined in Table 2.3. These estimates exclude enhancement investments and costs for IT assets, which is indeterminate due to the inability to predict shifts in corporate priority, term of Council priorities, audit response, and other strategy priorities or disruptions.

Table 2.3 - Government Services and Information Technology Assets Capital Funding Gap Summary

<b>Government Services and Information Technology</b>	<b>10-Year Needs (\$ Millions)</b>	<b>10-Year Forecasted Investment (\$ Millions)</b>	<b>10-Year Funding Gap (\$ Millions)</b>
Growth	\$43	\$35	(\$8)
Enhancement	\$6*	\$2*	(\$4)
Renewal	\$163	\$70	(\$93)
<b>Total</b>	<b>\$212</b>	<b>\$107</b>	<b>(\$105)</b>

The detailed Government Services and Information Technology Asset Management Plan is attached as Document 3.

**Greenspace and Forest Services Asset Management Plan**

The Greenspace and Forest Services Asset Management Plan encompasses fleet assets that support the natural environmental features and systems that provide recreation and leisure opportunities for the public, as well as other benefits such as water quality protection, rainwater management, flood protection, habitat, and pollination.

The total replacement value of all the City’s trees is estimated at \$168 million, and the City has not yet established estimated replacement values for greenspace assets. This value assigns a financial value based on key characteristics of each tree, not reflective of the cost of planting a new tree.

The replacement value for forestry fleet assets is \$6 million.

The City’s planned investment in these assets over the next 10 years is \$119 million in capital funding, though additional funding comes from operating budgets. The estimated 10 year needs to maintain all infrastructure at current level of service (per Provincial requirement) is \$185 million as outlined in Table 2.4, but some needs are not identified at this time and the needs for trees and forest are currently largely funded out of the operating budget.

Table 2.4 - Greenspace and Forest Services Asset Capital Funding Gap Summary

<b>Greenspace and Forest Services</b>	<b>10-Year Needs (\$ Millions)</b>	<b>10-Year Forecasted Investment (\$ Millions)</b>	<b>10-Year Funding Gap (\$ Millions)</b>
Growth	\$177	\$116	(\$61)
Enhancement	Not available	Not available	Not available
Renewal	\$8	\$3	(\$5)
<b>Total</b>	<b>\$185</b>	<b>\$119</b>	<b>(\$66)</b>

The Greenspace and Forest Services AMP does not include any facilities, however, the gap presented is exclusive of the forecasted operational costs to address climate change discussed earlier in this report.

The analysis does not present a complete picture of the funding gaps for greenspace and forest service, as:

- A number of the forecasted future needs are not available or not identified at this time
- The needs for trees and forest are currently largely funded out of the operating budget, and there was not sufficient financial data to complete a funding gap analysis for operating expenditures.

The detailed Greenspace and Forest Services Asset Management Plan is attached as Document 4.

**Recreation and Cultural Services Asset Management Plan**

The Recreation and Cultural Services Asset Management Plan encompasses all infrastructure supporting the delivery of recreation and cultural services to encourage healthy and active lifestyles, and to contribute to the City’s cultural identity and heritage.

The total replacement value of all the City’s recreation and cultural services assets is \$3.8 billion, and the City’s planned investment of these assets over the next 10 years is \$888 million. The estimated 10 year needs to maintain all infrastructure at current level of service (per Provincial requirement) is \$1.8 billion as outlined in Table 2.5.

Table 2.5 - Recreation and Cultural Services Asset Capital Funding Gap Summary

<b>Recreation and Cultural Services</b>	<b>10-Year Needs (\$ Millions)</b>	<b>10-Year Forecasted Investment (\$ Millions)</b>	<b>10-Year Funding Gap (\$ Millions)</b>
Growth	\$655	\$212	(\$443)
Enhancement	\$166	\$27	(\$139)
Renewal	\$977	\$649	(\$328)
<b>Total</b>	<b>\$1,798</b>	<b>\$888</b>	<b>(\$910)</b>

The growth needs are based on the preliminary estimates compiled for the update of the City’s Development Charges Study and the 2022 Community Benefits Charge Study and guided by the levels of service as expressed in this AMP reflect the asset needs

aligned with the Council approved Parks and Recreation Facilities Master Plan ([ACS2021-RCF-GEN-0018](#)).

The 10-year growth need for fleet could not be estimated at this time, though it is acknowledged that growth in facilities assets typically results in growth pressure for fleet assets to support those facilities.

The forecasts provided in the Asset Management Plans financing strategies include capital requirements for the facilities within the scope of the Asset Management Plans, including deferred maintenance (In accordance with recommendation 25 from the Audit of Facility Management). The capital requirements forecasts (including deferred maintenance) will be updated regularly as part of the regular update of the Asset Management Plans.

The detailed Recreation and Cultural Services Asset Management Plan is attached as Document 5.

### **Solid Waste Services Asset Management Plan**

The Solid Waste Services Asset Management Plan (AMP) encompasses all infrastructure supporting the development, management, and environmentally sound operation of the residential solid waste management system.

The total replacement value of all the City's solid waste services assets is \$518 million, and per the draft financial analysis for the Solid Waste Master Plan (August 2023), the City's planned investment of these assets over the next 10 years is \$233 million. The estimated 10 year needs to maintain all infrastructure at current level of service (per Provincial requirement) is \$637 million.

A Long-Range Financial Plan (LRFP) is currently being developed to present a sustainable and affordable funding model to fund current and future solid waste service needs and master plan actions.

The Final Solid Waste Master Plan will be presented to Committee and Council for approval alongside the LRFP in Q2 2024.

Following Council approval, the Solid Waste Services AMP will be updated to reflect the decisions and direction outlined in the Solid Waste Master Plan and LRFP.

The detailed Solid Waste Services Asset Management Plan is attached as Document 6.

**Transit Asset Management Plan**

The Transit Asset Management Plan encompasses all infrastructure supporting bus, O-Train, and Para Transpo services that provide public transit travel options to residents and visitors.

The total replacement value of all the City’s transit assets is \$4.4 billion and per the Transit Long-Range Financial Plan Update (September 2023), the City’s planned investment of these assets over the next 10 years is \$12.0 billion. The estimated 10 year needs to maintain all infrastructure at current level of service (per Provincial Requirement) is \$13.1 billion as outlined in Table 2.6.

Table 2.6 - Transit Services Asset Capital Funding Gap Summary

<b>Transit Services</b>	<b>10-Year Needs (\$ Millions)</b>	<b>10-Year Revenue (\$ Millions)</b>	<b>10-Year Gap (\$ Millions)</b>
Growth	\$10,682	\$10,104	(\$578)
Other	\$2,388	\$1,856	(\$532)
<b>Total</b>	<b>\$13,070</b>	<b>\$11,960</b>	<b>(\$1,100)</b>

The City continues to experience lower than expected ridership levels. The AMP reflects assumptions from the Transit Long Range Financial Plan update in September 2023 regarding funding from other levels of government. If the funding assumptions made do not materialize, the funding gap forecasted could increase.

The detailed Transit Asset Management Plan is attached as Document 7.

**Library Services Asset Management Plan**

The Ottawa Public Library Board, under the Public Library Act and under the Board’s Terms of Reference have authority over library assets. The Library Services Asset



Management Plan will be presented to the Ottawa Public Library Board on May 2 and to Council on May 15. However, consistent with budget, the Finance and Corporate Services Committee has the authority over the renewal of library assets and therefore, is required to approve this portion of the Library Services Asset Management Plan. This portion can be found in Section 4: Asset Management Strategy and Section 5: Financing Strategy of Document 8.

The Library Services Asset Management Plan encompasses all infrastructure supporting the delivery of collections, expertise, programs, spaces, and tools through physical branches, virtual channels, bookmobiles, home delivery service, and other means.

The total replacement value of all the City’s library services assets is \$252 million and the City’s planned investment of these assets over the next 10 years is \$64 million. The estimated 10 year needs maintain all infrastructure at current level of service (per provincial requirement) is \$130 million as outlined in Table 2.7.

Table 2.7 - Library Services Asset Capital Funding Gap Summary

<b>Library Services</b>	<b>10-Year Needs (\$ Millions)</b>	<b>10-Year Forecasted Investment (\$ Millions)</b>	<b>10-Year Funding Gap (\$ Millions)</b>
Growth	\$62	\$38	(\$24)
Enhancement	\$9	\$3	(\$6)
Renewal	\$59	\$23	(\$36)
<b>Total</b>	<b>\$130</b>	<b>\$64</b>	<b>(\$66)</b>

Lifecycle and climate change retrofits for all OPL facilities are funded by the City, however, OPL retains responsibility for growth and enhancement projects.

**Next Steps – 2024 and Beyond**

**Aligning Asset Management Plans and the Long-Range Financial Plan Per Provincial Regulation**

By July 1, 2025, Council must approve proposed levels of service and a financial strategy for all 12 AMPs that set out the following:

- 10-year forecast of lifecycle activities needed to provide the proposed level of service, and the associated costs;
- An identification of the annual funding projected to be available to undertake lifecycle activities and an explanation of the options examined by the municipality to maximize the funding projected to be available; and
- Examination of potential funding gaps and funded priorities.

The updated AMPs will build on the information assembled in the 2022 and 2024 AMPs, and introduce proposed service levels, potential changes to operating and asset renewal strategies, and financial strategies to address the forecasted growth, enhancement and renewal needs identified for all municipally-owned assets. The regulation requires a description of what lifecycle activities will be undertaken, as well as explanation of how risks will be managed for activities that will not be undertaken, in the event needs exceed forecasted funding.

There has historically been alignment between asset management planning and the LRFP, with funding targets established in 2012 and updated in 2017, to keep critical infrastructure in a state of good repair while remaining affordable and sustainable.

The 2025 AMPs will provide important information for the City's long-range financial plans. The LRFP for Tax and Rate will be updated as companion reports to the 2025 Asset Management Plans.

These AMPs will contribute not only to financial strategies but also to non-financial strategies important for the upkeep and renewal of the City's assets, ensuring they remain in good condition. This approach underscores the importance of strategic planning in asset management, balancing financial and non-financial considerations for long-term sustainability.

### **Financial Strategies and Non-Financial Strategies**

The asset management process is an important part of developing non-financial and financial strategies faced to help balance capital and operating costs, affordability, risks to assets and services, and service level expectations. The City assesses the costs of potential lifecycle activities to determine the lowest lifecycle cost strategy to manage each asset type.

The Financial Strategy for each AMP will consider options to fund growth infrastructure, enhancements, and lifecycle strategies for renewal. Options will consider current and projected reserve fund balances, issuing debt within appropriate and sustainable debt levels, identifying new revenue sources and the impact of increasing existing revenue sources such as property taxes, water rates, and development charges.

Like most large and well-established cities, Ottawa will require additional long-term, stable, predictable funding from senior levels of government to complement municipal resources. The City of Ottawa has dedicated staff that actively review government stimulus funding programs, identify opportunities, and ensure they are maximized. The City has been successful in receiving funding from other levels of government to offset some of the costs and/or advance the renewal of key infrastructure assets. Since 2020, the City has been awarded approximately \$79 million in infrastructure-related funding to support 192 projects. As new programs are announced, such as the Housing-Enabling Water Systems Fund, Canada Housing Infrastructure Fund, Community Sport and Recreation Infrastructure Fund, the City is prepared to evaluate suitable projects.

Like financial strategies, non-financial strategies, actions or policies that can reduce demand, lower costs or extend asset life, are important and can support the longevity and performance of assets without additional significant capital investment. These strategies can focus on policy implementation that optimize the use of existing assets, improving operational efficiency, and enhancing asset life spans with strategic planning and management practices. These various strategies may include:

- Rationalization of assets
- Changing service provisions
- Service Delivery Review initiatives
- Public outreach and education

These approaches exemplify how strategic, non-financial measures can support sustainable asset management by aligning usage patterns with asset lifecycles and capacities.

## **Annual Asset Management Reporting**

This report sets the stage for the next phase of AMPs in 2025. By July 1, 2025, according to Provincial regulation, Council will receive the target levels of service and

funding plans for all 12 AMPs. This step builds on the foundation laid by the 2022 and 2024 AMPs, introducing proposed service levels and financial strategies for all municipal infrastructure assets, transitioning from preliminary assessments to risk analysis and strategic planning.

In advance of the 2025 AMPs, engaging Council will be important, and discussions may focus on:

- Balancing asset funding with needs;
- Documenting the risks associated with City asset needs exceeding funding; and
- Detailing risk mitigation, ensuring the long-term sustainability of our assets and their service.

The Comprehensive Asset Management Steering Committee will lead the 2025 asset management plans engagement, ensuring alignment with regulatory requirements. Service delivery experts and Council will have ongoing discussions about proposed service levels, funding strategies, and risk. The approach will be iterative and flexible, allowing us to refine asset management plans, non-financial strategies, and financial strategies in response to priorities.

Numerous factors contribute to our current status, suggesting a range of strategic levers for discussion to define and deliver service. Council and community input are important to asset management's ongoing success and to evaluating how future choices affect costs, services, and risk.

Provincial regulation also requires annual reporting, starting on or before July 1, 2026. The annual report will speak to the City's progress in implementing its AMPs, lessons learned, factors impeding progress, and a strategy to address these impediments.

The City is also mandated to update and seek Council approval of its AMPs at least every five years (the next update to be no later than July 1, 2030).

## **FINANCIAL IMPLICATIONS**

There are no financial implications to this report. The Council approved Long Range Financial Plan for Tax Supported Capital and Transit remain in effect.

The LRFP for Solid Waste will be presented to Committee and Council for approval alongside the Final Solid Waste Master Plan in Q2 2024. The LRFP for Tax and Rate will be updated as companion reports to the 2025 Asset Management Plans. The Transit LRFP will be updated as a companion report to the 2025 Transportation Master Plan.

## **LEGAL IMPLICATIONS**

The recommendations in this report ensure that the City meets its continuing legal obligations contained in Ontario Regulation 588/17 under the *Infrastructure for Jobs and Prosperity Act, 2015*.

## **COMMENTS BY THE WARD COUNCILLOR(S)**

This is a city-wide report.

## **CONSULTATION**

This report is administrative in nature and therefore no consultation was required.

## **ACCESSIBILITY IMPACTS**

The City's Comprehensive Asset Management Program and practices intend to maximize benefits, reduce risks, and provide safe and reliable levels of service to all community users by:

- Consulting with the public and the Accessibility Advisory Committee as required by the Integrated Accessibility Standards Regulation 191/11;
- Including the Provincial Design of Public Spaces requirements in the City's Accessibility Design Standards;
- Ensuring that people with physical disabilities and other types of disabilities can access City facilities and infrastructure through accessible design

## **ASSET MANAGEMENT IMPLICATIONS**

The implementation of asset management results in timely decisions that minimize lifecycle costs and ensure the long-term affordability of assets.

Supporting the recommendations of this report ensures the City of Ottawa complies with the mandatory Provincial regulation.

## **RISK MANAGEMENT IMPLICATIONS**

Risk management implications are contained in the report. The City's asset management planning involves a risk-based approach in the decision-making process for the City's infrastructure assets.

## **RURAL IMPLICATIONS**

Asset management planning provides a holistic approach to managing the City's infrastructure, including infrastructure that supports services delivered to rural residents and businesses.

## **TERM OF COUNCIL PRIORITIES**

This report supports the 2023-2026 Term of Council Priorities of:

- A city that has affordable housing and is more livable for all
- A city that is more connected with reliable, safe and accessible mobility options
- A city that is green and resilient
- A city with a diversified and prosperous economy

## **SUPPORTING DOCUMENTATION**

Document 1 Community and Social Services

Document 2 Emergency and Protective Services

Document 3 Government Services and Information Technology

Document 4 Greenspace and Forest Services

Document 5 Recreation and Culture Services

Document 6 Solid Waste Services

Document 7 Transit Services

Document 8 Library Services

## **DISPOSITION**

Following Council's approval, staff will implement any direction received by Council as a result of approving the Asset Management Plans in accordance with the provincial regulations.