

**Subject: 2025 Asset Management Plans**

**File Number: ACS2025-IWS-AM-0002**

**Report to Finance and Corporate Services Committee on 3 June 2025**

**and Council 11 June 2025**

**Submitted on May 23, 2025 by Susan Johns, P. Eng., Director, Asset Management Services, Infrastructure and Water Services Department**

**Contact Person: Meagan Wheeler-Cuddihy, P. Eng., Program Manager, Capital Planning and Strategic Asset Management, Asset Management Services, Infrastructure and Water Services Department**

**613-809-1538, meagan.wheelercuddihy@ottawa.ca Ward: Citywide**

**Objet : Plans de gestion des actifs 2025**

**Dossier : ACS2025-IWS-AM-0002**

**Rapport au Comité des finances et du développement économique**

**le 3 juin 2025**

**et au Conseil le 11 juin 2025**

**Soumis le 23 mai 2025 par**

**Susan Johns, Directrice, Gestion des actifs, Direction des services d'infrastructure et des services de l'eau**

**Personne ressource : Meagan Wheeler-Cuddihy, ing., gestionnaire de programme, Planification des immobilisations et Gestion stratégique des actifs, Services de gestion des actifs, Direction générale des services d'infrastructure et d'eau**

**613-809-1538, meagan.wheelercuddihy@ottawa.ca Quartier : À l'échelle de la ville**

## **REPORT RECOMMENDATION(S)**

1. Approve the 2025 Asset Management Plans as attached in Documents 1 – 12 and as described in this report.
2. Direct staff return to Committee and Council in 2028 with updated Asset Management Plans and continue to report every four years hereafter.
3. Approve an update to the City of Ottawa's Asset Management Policy as attached in Document 13 and as described in this report.
4. Direct staff to update the asset management program and governance structure.
5. Direct staff to include a mandatory asset management implications section in Committee and Council reports as a part of the consultations for the 2026-2030 Term of Council Governance Review

## **RECOMMANDATION(S) DU RAPPORT**

1. Approuver les plans de gestion des actifs 2025, tels qu'ils sont annexés aux documents 1 à 12 et décrits dans le présent rapport.
2. Demander au personnel de se présenter de nouveau devant le Comité et le Conseil en 2028 pour soumettre les plans de gestion des actifs mis à jour et de continuer à faire rapport tous les quatre ans par la suite.
3. Approuver la mise à jour de la Politique de gestion des actifs de la Ville d'Ottawa, telle qu'elle est annexée au document 13 et décrite dans le présent rapport.
4. Demander au personnel de mettre à jour le programme de gestion des actifs et la structure de gouvernance.
5. Demander au personnel d'inclure dans les rapports au Comité et au Conseil une section obligatoire concernant les répercussions sur la gestion des actifs à l'occasion des consultations relatives à l'examen de la structure de gestion publique du Conseil pour le mandat 2026-2030.

## **EXECUTIVE SUMMARY**

The 2025 Asset Management Plans (AMPs) mark a significant milestone for Ottawa, representing the first time comprehensive and standardized data on all municipal assets, worth approximately \$90 billion, have been consolidated into a single, unified framework.

The AMPs offer a clear view of the current state of Ottawa's infrastructure: it is safe, in good to fair condition, and continues to serve residents.

The 2025 AMPs fulfill the final phase of Ontario Regulation 588/17, building on the 2022 and 2024 Council-approved AMPs highlighting all asset classes across all City services, including roads, water and wastewater systems, transit, recreation, libraries, emergency services, and more.

Each AMP presents a consistent summary of:

- The inventory and condition of City-owned assets.
- Service levels currently delivered and Council-approved targets for the next 10 years
- Forecasted lifecycle costs for renewal, growth, and enhancement
- Risks to service delivery if needs exceed funding
- Mitigation strategies to help manage those risks

Overall, these plans confirm that the City's assets are currently safe and functional, with no imminent risk to day-to-day service delivery.

The AMPs are not a request for new capital funding. Rather, they are a strategic tool to help Council and staff understand the current state of infrastructure, forecast future needs, and make informed decisions that balance cost, risk, and service delivery.

Over the next 10 years, a \$10.8 billion gap is forecasted between projected infrastructure needs and planned funding. These forecasted needs reflect asset renewal, growth, service enhancements, and climate change adaptation and mitigation costs.

A measured backlog is expected in a large and established municipal portfolio, and the City has a strong track record of managing these challenges. By documenting current conditions, service levels, projected funding versus forecasted need, and anticipated future risks, the AMPs help staff and Council understand drivers and contextualize the impact of decisions related to individual assets or service levels, as well as future financial and non-financial strategies.

Ottawa is experiencing a trend seen in all Canadian municipalities – a growing infrastructure backlog, largely driven by aging assets, the effects of climate change, rising construction costs and a limited number of revenue sources. These challenges

and the scale of infrastructure in Canada, Ontario and Ottawa highlights just how important a tool the continued practice of asset management can be.

The financial analysis supporting the AMPs is based on the City's 2024 financial strategy. Future AMPs will incorporate new funding strategies, such as the Long Range Financial Plans (LRFPs), as they are approved by Council. As part of the City's ongoing financial planning efforts, the upcoming updates to the rate-supported and tax-supported LRFPs will serve as the key vehicle for identifying funding strategies to respond to priority funding requirements within affordable parameters to mitigate some of the risk outlined in the AMPs.

These plans will incorporate the data and needs identified in the AMPs as inputs, helping to inform an affordable and risk-based funding approach. The updated LRFPs are expected to reflect the affordability constraints while advancing investments that prioritize safety and essential service delivery.

The City uses a risk-based approach to prioritize investments, focusing on safety, criticality, and service continuity and the 2025 AMPs offer the opportunity to highlight non-financial strategies to optimize asset use, adjust service levels and explore innovative delivery models.

The plans also support transparency and public engagement by clearly communicating the challenges and opportunities facing Ottawa's infrastructure.

The 2025 AMPs are aligned with the City's Long-Range Financial Plans and other strategic documents, including the Climate Change Master Plan and Infrastructure Master Plan. Together, these plans provide a coordinated framework for managing infrastructure in a way that is sustainable, resilient, and responsive to community needs.

The purpose of this report is to seek Council's approval of the 2025 AMPs (Documents 1–12), the updated Asset Management Policy (Document 13), and future governance and training enhancements to strengthen asset management practices across the organization.

The City will continue to report annually on asset management progress, as required by O. Reg. 588/17, and recommends that staff return to Council in 2028 with updated AMPs, ensuring continuous improvement and alignment with evolving priorities.

## **RÉSUMÉ**

Les Plans de gestion des actifs (PGA) 2025 constituent une étape importante pour Ottawa, puisque c'est la première fois que la Ville dispose d'un cadre unifié regroupant des données exhaustives et normalisées sur tous les actifs municipaux, qui valent environ 90 milliards de dollars.

Les PGA offrent un aperçu clair de l'état actuel de l'infrastructure d'Ottawa, qui est sécuritaire, se trouve dans un état bon à passable et continue de servir les résidents.

Les PGA 2025 constituent la dernière phase du *Règlement de l'Ontario 588/17* et font suite aux PGA approuvés par le Conseil municipal en 2022 et en 2024 qui ont mis en lumière tous les actifs appartenant à toutes les catégories d'actifs des services municipaux, y compris les routes, les systèmes de traitement des eaux et des eaux usées, le transport en commun, les loisirs, les bibliothèques, les services d'urgence et plus encore.

Chaque PGA présente un résumé cohérent des éléments suivants :

- L'inventaire et l'état des actifs appartenant à la Ville.
- Les niveaux de service actuellement offerts et les cibles approuvées par le Conseil pour les dix prochaines années.
- Les coûts prévus du cycle de la vie pour le renouvellement, la croissance et l'amélioration des actifs.
- Les risques liés à la prestation de service si les besoins dépassent le financement.
- Les stratégies d'atténuation pour permettre de gérer ces risques.

Dans l'ensemble, ces plans confirment que les actifs de la Ville sont actuellement sûrs et fonctionnels, sans risques imminents pour la prestation de services quotidiennes.

Les PGA ne constituent pas une demande de financement des nouvelles dépenses en immobilisations. Il s'agit plutôt d'un outil stratégique qui permet au Conseil et au personnel de comprendre l'état actuel des infrastructures, de prévoir les besoins futurs et de prendre des décisions éclairées qui concilient les coûts, les risques et la prestation de services.

Un déficit de 10,8 milliards de dollars est prévu au cours des dix prochaines années entre les besoins projetés en infrastructures et le financement prévu. Ces besoins projetés reflètent le renouvellement des actifs, la croissance, l'amélioration des services et les coûts d'adaptation au changement climatique et d'atténuation de leurs effets.

On s'attend à un arriéré dans un portefeuille municipal important et établi, mais la Ville est en mesure de gérer efficacement ces défis. En consignnant les conditions actuelles, les niveaux de service, le financement projeté par rapport aux besoins prévus ainsi que les futurs risques prévus, les PGA aident le personnel et le Conseil à comprendre les facteurs et à contextualiser l'incidence des décisions liées aux actifs ou aux niveaux de service ainsi que les futures stratégies financières et non financières.

Comme toutes les autres municipalités canadiennes, la Ville d'Ottawa doit composer avec un arriéré croissant en matière d'infrastructure qui est en grande partie attribuable à des actifs vieillissants, aux effets des changements climatiques, à la hausse des coûts de construction et à un nombre limité de sources de revenus. Ces défis et l'envergure de l'infrastructure au Canada, en Ontario et à Ottawa mettent en évidence l'importance d'un outil de gestion des actifs continue.

L'analyse financière qui sous-tend les PGA repose sur la stratégie financière 2024 de la Ville. Les prochains PGA intégreront de nouvelles stratégies de financement, comme les plans financiers à long terme (PFLT), comme ils seront approuvés par le Conseil. Dans le cadre des efforts de planification financière continue de la Ville, les mises à jour qui seront bientôt apportées aux PFLT financés par les recettes fiscales et les redevances aideront à déterminer les stratégies de financement qui permettront de satisfaire aux exigences de financement prioritaires tout en respectant les critères d'abordabilité afin d'atténuer certains des risques décrits dans les PGA.

Ces plans prendront en compte les données et les besoins cernés dans les PGA afin d'aider à mettre au point une approche de financement abordable et fondée sur le risque. Les PFLT mis à jour devraient tenir compte des contraintes de l'abordabilité tout en faisant progresser les investissements qui accordent la priorité à la sécurité et à la prestation des services essentiels.

La Ville utilise une approche fondée sur les risques pour prioriser les investissements, en se concentrant sur la sécurité, la criticité et la continuité du service. Et les PGA 2025 offrent la possibilité de mettre en évidence les stratégies non financières afin d'optimiser l'utilisation des actifs, d'ajuster les niveaux de service et d'explorer des modèles de prestation novateurs.

Les plans favorisent également la transparence et l'engagement du public en communiquant clairement les défis et les possibilités auxquels sont soumises les infrastructures de la Ville d'Ottawa.

Les PGA 2025 sont axés sur les plans financiers à long terme de la Ville et sur d'autres documents stratégiques, notamment le plan directeur sur le changement climatique et le plan directeur des infrastructures. Ensemble, ces plans offrent un cadre coordonné pour gérer les infrastructures de manière durable, résiliente et adaptée aux besoins de la collectivité.

L'objectif du présent rapport consiste à demander au Conseil d'approuver les PGA 2025 (documents 1 à 12), la politique de gestion des actifs mise à jour (document 13) ainsi que les futures améliorations en matière de gouvernance et de formation visant à renforcer les pratiques de gestion des actifs dans l'ensemble de l'organisation.

La Ville continuera à rendre compte chaque année des progrès réalisés en matière de gestion des actifs, comme l'exige le *Règlement de l'Ontario 588/17*, et recommande au personnel de revenir devant le Conseil en 2028 avec des PGA mis à jour afin d'assurer une amélioration continue et une concordance avec les priorités en constante évolution.

## **BACKGROUND**

### **Asset Management History**

Asset management is the coordinated activity of an organization to derive the greatest value and service from its assets over their entire lifecycle. The amalgamated City of Ottawa's asset management journey began in 2001 with several distinct municipalities becoming one unified city. This process brought together a diverse inventory of assets, service standards, and operational approaches. As a start, Ottawa took stock of its infrastructure, the differing ages and conditions of various assets and laid the groundwork for a cohesive understanding of its asset base.

From 2002 to 2003, the City began to take its first structured steps with the introduction of [Long-Range Financial Plans](#), providing a framework for financial planning tied to asset priorities.

Between 2004 and 2007, Ottawa continued advancing its approach through a Capital Standards Review ([ACS2004-TUP-INF-0009](#)) and a third Long Range Financial Plan.

In 2012, the City launched the Comprehensive Asset Management Program ([ACS2012-PAI-INF-0007](#)). This important milestone brought new structure, stability, and consistency to how the City manages its infrastructure. The report included the Program and State of the Asset report, the Comprehensive Asset Management Policy, the Comprehensive Asset Management Strategy and the Canadian Infrastructure Report

Card. The program formalized expectations for asset management and aligned them with funding strategies through Long Range Financial Plan IV ([ACS2012-CMR-FIN-0039](#)). The Strategy provides common objectives for asset management. The Policy provides direction to staff, establishes accountabilities and ensures consistency. As part of the approval of the 2012 report, Council approved the inclusion of an asset management implications section in all relevant future Committee and Council reports.

In 2017, through the update to the Comprehensive Asset Management Program ([ACS2017-PIE-IS-0002](#)), along with the [State of the Asset Report](#) and [Strategic Asset Management Plan](#), the City continued to report a picture of its infrastructure and complemented it with tax and rate Long Range Financial Plan V for tax supported capital ([ACS2017-CSD-FIN-0017](#)) and water, wastewater and stormwater rate supported capital ([ACS2017-CSD-FIN-0023](#)). This report included an update to the Comprehensive Asset Management Strategy as part of the Strategic Asset Management Plan to reflect the ongoing evolution of the City's asset management approach.

## **New Regulations and Requirements**

In 2018, the Province introduced the [Asset Management Planning for Municipal Infrastructure Regulation, O. Reg. 588/17 \(as amended by O. Reg. 193/21\)](#). This regulation strengthens the practice of asset management by setting consistent requirements for municipalities, supporting improved long-term planning, and standardizing asset management plans to promote best practices and enable the collection of comparable data across the sector.

The City of Ottawa provided input and feedback into the new regulation and recognizes the value of formalizing the way to assess asset conditions, understand risk, and identify gaps and the strategies to address them across all asset classes.

The regulation requires the following steps:

1. Approval of drinking water, wastewater, stormwater and transportation asset management plans, based on current levels of service, by July 1, 2022.
2. Approval of the asset management plans for all remaining assets, based on current levels of service, by July 1, 2024.
3. Approval of all asset management plans updated to include the target level of service, funding and risk mitigation sections by July 1, 2025.

4. An annual review of the municipality's asset management progress on or before July 1 in each year, starting the year after the municipality's asset management plan is completed.
5. Approval of asset management plans updated to reflect present conditions, at least every five years after the municipality's asset management plan is completed.

In addition, the legislation explicitly requires the municipality to include consideration of the predicted impact and cost of climate change on existing and future assets, and the delivery of municipal services.

On April 13, 2022, City Council approved ([ACS2022-IWS-AM-0001](#)) the drinking water, wastewater, stormwater and transportation Asset Management Plans (AMPs), addressing over 80 per cent of the value of Ottawa's owned assets, thereby meeting the first mandatory provincial legislative requirement.

On May 15, 2024, City Council approved ([ACS2024-IWS-AM-0002](#)) the remaining AMPs, addressing the other 20 per cent value of the City's owned assets, completing the second phase of the regulatory requirement. These AMPs were grouped by eight service areas and included information about buildings, fleet and special equipment assets that support these services.

Building on the 2022 and 2024 AMPs, which measured the current asset condition and service levels being delivered, the 2025 AMPs complete the third phase of the regulatory requirements, adding additional information regarding the target levels of service, funding plan, and risks to service, where the forecasted service needs exceed planned funding.

On May 13, 2025, the Ottawa Public Library Board approved the Library AMP ([Library Services - Asset Management Plan](#)) as per the legislative process. The Library AMP is also included in this package for Committee and Council approval.

### **Purpose of Asset Management Plans**

The 2025 AMPs serve as a strategic tool connecting asset data, service levels, risk management, and long-term financial planning. "The goal of this regulation is to help improve the way municipalities plan for their infrastructure. The regulation builds on the progress municipalities have made while bringing consistency and standardization to asset management plans to help spread best practices throughout the sector and

enable the collection of comparable data.” ([Municipal Asset Management Planning, Province of Ontario](#))

The 2025 AMPs are not a request for capital investment and do not propose changes to level of service or funding. Instead, the AMPs provide an overview of asset condition, service level performance, anticipated lifecycle needs, and associated risks over the coming decade. Bringing together this information for the first time, the AMPs help bridge technical asset information and service delivery expectations, supporting the City’s ability to plan and prioritize investments in City assets. This information can be valuable to support future discussion and decisions in a way that balances cost, risk, and service delivery across the full lifecycle of municipal infrastructure.

Asset management planning is an ongoing and long-term process that allows municipalities to make the best possible investment decisions for their infrastructure assets. The AMPs are one tool that Council can use to support informed decision-making, and improve transparency around the costs of sustaining infrastructure and service into the future.

## **DISCUSSION**

The 2025 AMPs mark a significant milestone for Ottawa, representing the first-time comprehensive and standardized data on all municipal assets have been consolidated into a single, unified framework. The AMPs offer a clear view of Ottawa’s infrastructure: it is safe, in good to fair condition, and continues to serve residents reliably. The City allocates resources efficiently to the highest priorities, ensuring safety and minimizing impact to availability of services.

Ottawa is experiencing a trend seen in all Canadian municipalities – a growing infrastructure backlog, largely driven by aging assets, the effects of climate change, rising construction costs, a limited number of revenue sources, and other pressures as further described in this report. These challenges and the scale of infrastructure in Canada, Ontario and Ottawa highlights just how important a tool the continued practice of asset management can be for City staff and Council.

Eliminating the infrastructure backlogs or addressing service area gaps seen in the 2025 AMP solely through investment is not the objective. A measured backlog is expected in a large and established municipal portfolio, and the City has a strong track record of managing these challenges.

By documenting current conditions, service levels, projected funding versus forecasted need, and anticipated future risks, the AMPs help staff and Council evaluate drivers, the impact of decisions related to individual assets or service levels, as well as future financial and non-financial strategies. They are also a communications tool to support productive dialog with the community regarding the appropriate balance between service expectations, affordability and risk of service disruption.

While the 2025 AMPs analysis points to gradually growing challenges, they establish a clear foundation to measure progress, prioritize investments, and support evidence-informed decision-making to address challenges in the years ahead. Using the City's enterprise risk management framework, ongoing asset management practices, and a commitment to purposeful next steps, the 2025 Asset Management Plans offer a strong baseline.

This report seeks Council's approval of the 12 Service Area AMPs (attached as Documents 1 – 12 and as described in this report), as required under Ontario Regulation 588/17. The next section of the report outlines the asset considerations and summarizes the AMPs.

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

Over the next 10 years, many external drivers will increase challenges to the operation, renewal, maintenance, acquisition and divestment of municipal assets in an established, growing, and evolving city.

Some of the global and interconnected factors that Ottawa faces in managing its large inventory of existing assets, and the addition of new infrastructure to support growth, include:

- Much of Ottawa's infrastructure was built in the post-war era, through various economic periods, with different standards and funding models from pre-amalgamation municipal entities and other orders of government. This large asset base is critical to the delivery of City services and requires continued investment 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.

- Ontario Regulation 588/17, [Asset Management Planning for Municipal Infrastructure](#), requires more comprehensive and detailed asset reporting, including all existing assets.
- Ottawa's 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 replace assets earlier due to premature rates of deterioration, to implement mitigation of future impacts, to reduce GHG emissions and to recover from extreme weather events.

The 2025 AMPs show service delivery is stable today but sustained long-term financial and non-financial strategies are required to maintain this stability as infrastructure ages, costs rise, and community expectations continue to evolve.

### **Summary: Asset Management Plans**

The following section provides high-level findings and key insights drawn from across the 12 asset management plans. The full AMPs can be found in Documents 1 – 12.

### **Approach and Methodology**

City staff collaborated across all departments and used multiple data sources, to assemble a comprehensive overview of all City-owned assets, including their replacement value, condition, and the forecasted needs and service trends. These data sources included multiple databases of various City assets, the various development charges studies and by-laws, asset lifecycle forecast models, operating and capital budget forecasts, alignment with other initiatives, and climate change cost estimates based on City studies and a provincial costing study.

### **State of Local Infrastructure**

The regulation requires that for each asset category a summary of the replacement costs, average age of the assets, information available on the condition and a

description of the municipality’s approach to assessing condition is provided (found in Section 2.0, State of Local Infrastructure, in each of the AMPs).

Overall, the 2025 AMPs show City-owned assets on average are in good to fair condition. The City’s assets are safe and support their respective services and there is no immediate service risk across the 12 service areas.

Table 1.1 below summarizes overall current asset condition ratings, and the distribution of assets by condition category (poor to very poor, fair, good to very good) across the 12 service areas:

**Table 1.1: Condition Ratings by Service Areas**

<b>Service</b>	<b>Overall Condition</b>	<b>Per cent of Assets in Poor to Very Poor Condition</b>	<b>Per cent of Assets in fair condition</b>	<b>Per cent of Assets in good to very good Condition</b>
<b>Transportation Services</b>	Fair	15%	41%	44%
<b>Drinking Water Services</b>	Good	5%	34%	61%
<b>Wastewater Services</b>	Good to Fair	14%	30%	56%
<b>Stormwater Services</b>	Good	9%	22%	69%
<b>Community and Social Services</b>	Good	2%	15%	83%
<b>Emergency and Protective Services</b>	Good to Fair	15%	47%	38%

<b>Government Services and Information Technology</b>	Good to Fair	16%	45%	40%
<b>Greenspace and Forest Services<sup>1</sup></b>	Fair	58%	10%	32%
<b>Recreation and Cultural Services</b>	Good to Fair	15%	33%	52%
<b>Library Services</b>	Good to Fair	8%	32%	60%
<b>Solid Waste Services</b>	Good to Fair	14%	16%	70%
<b>Transit</b>	Good to Fair	22%	20%	59%

The condition ratings represent a consistent method of reporting on the physical condition of various classes of assets. These are derived using best available information, including technical assessments using recognized industry practices and supplemented by subject matter expert input.

**Service Area Gap**

This section summarizes the service area gap, presented in Section 6.1 of the AMPs, which was calculated as a snapshot in time (2024) based on past decisions regarding service level expectations and how the City invests in and manages assets.

The service area gaps have been separated into categories that characterize how municipalities manage their asset portfolio to sustain municipal services and support long-term goals, and the distinct funding strategies traditionally available to meet these needs.

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<sup>1</sup> Asset condition was only available for the Forestry Fleet assets.

To meet the July 1st, 2025 regulatory deadline, the financial analysis supporting the AMPs is based on the City's 2024 financial strategy. Future AMPs will incorporate new funding strategies, such as the Long Range Financial Plans (LRFPs), as they are approved by Council.

It is important to note that the service area gaps in the AMPs present a summation of all needs if the City were to implement everything today and not a prioritized list based on approved direction. The AMPs do not prescribe which capital projects should proceed or when; rather, they quantify the total needs based on Council-approved policies, masterplans, studies and prescribed regulatory requirements. The service area gap is not a funding strategy or a list of priority projects.

Infrastructure needs have been defined by the Regulation into three primary categories:

- **Growth (or expansion)** refers to activities that introduce entirely new assets or expand the capacity of existing ones to accommodate the city's development. The sources for the calculation of these needs included the most recent and available at the time of writing development charges background studies, development plans and master plans. For example, growth-related needs for drinking water and wastewater services were identified through multiple sources, including the Infrastructure Master Plan, Water Purification Plant Comprehensive Development Plan, Wastewater Collection System and Pumping Station Master Plan, Design Guidelines, MECP permits and licenses, DWQMS risk assessments, and theoretical capacity analyses. Functional designs, project bundling requirements, and business case reviews further refined these estimates.
- **Enhancement (or upgrade)** refers to modifying and improving existing assets to meet a higher service level, such as backup power supply, improved operational controls, and public safety and security upgrade, to meet new policy objectives, such as active transportation, or to comply with other requirements. Regulatory needs are also included in this category and refer to investments required to comply with regulatory requirements, such as the Accessibility for Ontarians with Disabilities Act. This information was provided by subject matter experts in the applicable regulatory frameworks. The sources for the calculation of these needs included accessibility audits and building condition assessments, supplemented by input from service delivery leads. Examples include watermain extensions to support system looping and fire flow improvements, as well as targeted upgrades to facilities and equipment.
- **Renewal** involves the rehabilitation of 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. It also includes other activities that do not contribute directly to improvements in asset condition but which require capital investment (such as planning, condition assessment, inspections, and so on) and opportunistic renewal works coordinated as part of other projects. Example calculations of renewal needs include building condition audits for facilities, while renewal forecasts based on established lifecycle models reviewed and verified by engineering staff were used for assets like bridges and culverts.

This thorough review and analysis methodology was applied across the \$90 billion in City-owned assets and reflects a transparent, evidence-informed foundation for understanding long-term infrastructure needs.

The total calculated service area gap for 12 AMPs over the next 10 years is \$10.8 billion. These forecasted needs represent a snapshot in time of the level of investment predicted to support growth, and renewal and enhancement of existing assets, at target service levels, and to account for the projected costs of climate change on assets. The forecasted budget allotment is based on a 10-year extrapolation of the 2024 annual capital budget from 2024 to 2034. It is important to note the service area gaps presented in the 2025 AMPs include figures previously reported to Council, Development Charge Background Study, Infrastructure Master Plan, Climate Change Master Plan, Transit Long Range Financial Plan and Solid Waste Long Range Financial Plan. This is the first time information is presented comprehensively for all assets. The prescribed scope of the 2025 AMPs, the service area gap identified in the 2025 AMPs is not directly comparable to information presented in previous asset management reports (in 2012 and 2017).

This service area gap has been updated since the 2022 and 2024 AMPs. Several factors contributed to this difference, including a more complete inventory of assets, the addition of cost estimates related to growth within the transportation, drinking water, wastewater and stormwater asset portfolios and update of renewal estimates, higher replacement costs driven by construction inflation and supply chain pressures, and the integration of climate change adaptation and resiliency investments based on updated modelling.

The service area gaps, reflect an expected outcome of proactive asset management practices, enhanced data collection, and expanded asset evaluations rather than signaling an immediate need for intervention.

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.

### **Expected and Target Level of Service**

As required by Ontario Regulation 588/17, the City's 2022, 2024, and now 2025 AMPs establish and report on levels of service to show not only asset condition but how infrastructure supports service delivery. Section 3.0 of each AMP presents current and historical service levels, while Section 6.2 introduces target and expected service levels over a 10-year horizon, informed by 2024 budget forecasts.

Given the limited timeframe between the publication of the 2024 AMPs and the July 1, 2025 regulatory deadline, there was insufficient opportunity to undertake the level of education and consultation required to establish new target levels of service across all 12 service areas. As a result, target performance expectations were based on existing Council-endorsed directions, policies, strategies, master plans, and regulatory requirements. The AMPs define three service level measures:

1. Current (based on existing data and reporting),
2. Expected (projected under current funding),
3. Target (based on policy and strategy, regardless of budget).

The level of service trends presented in the AMPs provide a citywide snapshot of how infrastructure is supporting service delivery and how the City's current (2024) funding forecasts might be expected to impact the delivery of service.

Summary conclusions of the level of service trends include:

- all legislated service levels are met;
- high-risk services are prioritized;
- a lower score doesn't always mean worse user experience;
- investment needs differ by service; and
- some gaps stem from low-risk, still-functional assets.

There are no changes recommended to targets at this time, but future refinements can be considered based on data, affordability, and evolving priorities. Staff will continue

applying risk-based, data-driven capital planning to ensure safety, function, and reliable service.

## **Risk Areas and Mitigation Strategies**

In accordance with Ontario Regulation 588/17, the 12 2025 Asset Management Plans:

- Provide an overview of the risks associated if investment needs over the next 10 years exceed total planned budgets.
- Assess how risk may affect the delivery of services.
- Propose strategies for managing those risks over the lifecycle of municipal assets.

The 2025 AMPs identify several interrelated risk areas, including the potential for underfunding across renewal, growth, and enhancement needs, which could result in elevated long-term costs, deferred investment, and changes to service reliability. This information is described in the AMPs in Section 6.3 – Risk Management.

Additional risks identified include inflationary pressures, delayed implementation of climate mitigation and adaptation measures, extended time for implementation of enhancement policy targets, and increased reliance on staff to develop contingency plans to minimize service disruption and sustain operational capacity.

To respond to and manage these risks, the City employs a risk-based asset management framework that aligns with the Enterprise Risk Management approach. This includes prioritizing investments based on asset condition, service impact, criticality and safety while working within affordability constraints.

As observed, not all assets are in good or very good condition, and there continues to be a distribution of assets across all condition ratings. This remains consistent with a sound asset management approach, as it is neither realistic nor cost-effective to maintain all assets in good or very good condition at all times. The ongoing effort is to ensure that assets in poor or very poor condition receive the attention they require before they deteriorate to the point where they significantly impact service levels and, by extension, the quality of life for the citizens of Ottawa.

Examples of ongoing risk mitigation strategies identified across the 2025 AMPs include:

- Coordinated maintenance, capital planning, and long-term financial strategies.

- Regular updates to master plans, the Development Charges By-law and the Climate Change Master Plan.
- Using prioritization frameworks to identify highest risk assets, essential services, adapting to changing needs, and incorporating public input.

As part of the risk approach, the City of Ottawa does not treat all assets equally. The City prioritizes investment based on the likelihood that an asset will fail and the potential consequences if it does. This ensures that resources are directed to the areas where they will have the greatest impact on service reliability and safety.

Prioritization is determined using a range of technical inputs: asset condition based on condition assessment and monitoring, regulatory codes and accepted industry practices (including infrastructure designated as critical or with high occupant loads), mission-critical function (such as emergency response facilities), and other asset specific factors. These assessments are supported by asset-level data, allowing staff to assess asset safety and analyze how one area would affect the broader system.

Given this structured approach to prioritization, the City recognizes that even with proactive investment, not all infrastructure risks can be fully eliminated. The concept of residual risk, meaning the level of service or asset risk of failure that remains after planned investments, reflects this reality. All municipalities, including Ottawa, accept some level of residual risk and manage within practical tolerances.

Ottawa's 2025 AMPs provide a basis for assessing residual risk and risk tolerance by identifying needs, connecting asset condition with service delivery, and disclosing financial and service delivery risks linked to funding shortfalls.

### **Summary: 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 O.588/17 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 2025 AMPs separately forecast capital and operating costs related to climate change. These potential costs include:

- 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.
- Increased capital costs to implement climate change mitigation actions, based on the Energy Evolution study and, where available, subsequent studies related to emissions reduction actions.

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 \$1.86 billion in capital and operating costs. This includes \$681 million in climate change adaptation costs and \$1.18 billion in climate change mitigation costs.

Of these projected costs, \$163 million is forecasted operating costs and \$1.70 billion is forecasted capital costs. For the \$1.70 billion forecasted capital costs, the City’s 2024 10-year capital budget forecast includes \$246 million dedicated specifically to address climate change, resulting in a gap of \$1.45 billion. The 2025 budget forecast allocated \$155 million less than the 2024 budget, over 10 years. Costs associated with proactive climate adaptation and resiliency strategies will be incorporated into subsequent 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.

## **Alignment Between Asset Management Plans and Long-Range Financial Plans**

Ottawa's approach to infrastructure planning is supported by strong alignment between Asset Management Plans (AMPs) and Long-Range Financial Plans (LRFPs). Since amalgamation funding targets have been established to maintain critical infrastructure in a safe and functional condition while balancing long-term affordability and sustainability. The City continues to invest responsibly in maintaining infrastructure and has been increasing its capital investments to align with approved LRFPs.

The 2025 AMPs continue to be an input into this alignment. The updated Rate LRFP and updated Tax LRFP, used the 2025 AMPs as the starting point for developing a ten-year funding strategy, but only addressed those essential needs where the risk could not be mitigated by any other means than investment. While the AMPs do not prescribe specific funding levels, they help establish the need for strategic financial planning to address service area backlog in a responsible and sustainable manner. Together, these documents present a ten-year, phased approach to funding that provide predictability and structure to support Council's decisions through the annual capital budget process.

As part of the City's ongoing financial planning efforts, the upcoming updates to the rate-supported and tax-supported Long Range Financial Plans (LRFPs) will serve as the key vehicle for identifying funding strategies to respond to priority funding requirements within affordable parameters to mitigate some of the risk outlined in the AMPs. These plans will incorporate the data and needs identified in the AMPs as inputs, helping to inform an affordable and risk-based funding approach. The updated LRFPs are expected to reflect the affordability constraints while advancing investments that prioritize safety and essential service delivery.

The data assembled in the AMPs informs long-term financial planning, ensuring the City continues to make informed, transparent, evidence-based decisions that balance affordability, safety, and service delivery. Future work to better understand the connection between asset condition and service delivery, relative full cost of service delivery and perceived value of City services, and evolution of service delivery will impact the long-term needs. Continued collaboration with senior levels of government and future infrastructure funding opportunities will also be key in supporting municipal needs moving forward.

## **Non-Financial Strategies**

The strength of asset management lies in its balance. While funding is one tool, it cannot be the only solution. The City can explore a range of non-financial strategies to

modify the delivery of services to make them less asset dependent, make use of assets owned by others, to repurpose or extend the life of existing assets and to deliver reliable services in a way that is affordable, reliable and sustainable.

The 2025 Asset Management Plans (AMPs) support the ongoing use and development of non-financial strategies that contribute to the long-term performance and sustainability of City assets. Each AMP includes non-financial strategies for the service.

These various strategies may include but are not limited to:

- Rationalization and optimizing the use of existing assets
- Changing service provisions
- Service Delivery Review initiatives
- Public outreach and education
- Innovative delivery approaches

Given the current 10-year trends projected in the 2025 AMPs, service-level adjustments should be considered as reasonable and practical changes, following LRF updates, to help address service area gaps and reduce long-term infrastructure risk. This work will inform future staff recommendations and Council decision-making to ensure that the City's assets remain affordable, responsive, and aligned with community priorities, today and throughout the assets' lifecycle.

### **Asset Management in Action**

Asset management is not a one-time exercise, it is embedded in how the City of Ottawa plans, budgets, and delivers services. The 2025 Asset Management Plans (AMPs) align with several key initiatives that demonstrate the City's ongoing commitment to responsible infrastructure stewardship and the decisions that continually adjust the balance of costs, risks and service.

For example:

- The 2025 draft budget proposed a combined capital investment of \$1.68 billion, with targeted funding for critical infrastructure such as water, wastewater, and integrated roadwork projects ensuring that Ottawa continues to meet service expectations while advancing safety, sustainability, and resilience.

- Additional funding through the Province’s New Deal in operating supports and \$346 million in capital funding over ten years, will support rehabilitation efforts such as Ottawa Road 174 and other capital projects.
- 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 \$80 million in infrastructure-related funding to support 200 projects. Applying to programs, such as the Housing-Enabling Water Systems Fund, Canada Housing Infrastructure Fund, Community Sport and Recreation Infrastructure Fund.
- Departments continue to advance complementary reports that align their asset decisions with broader strategic priorities, supporting the City’s coordinated approach to infrastructure planning and sustained service delivery.

Consideration of the wholistic picture presented in the asset management plans is fundamental for implementing and developing effective strategies to address infrastructure needs before associated risks and costs become unmanageable.

## **Next Steps**

### **Annual Asset Management Progress Reports and 2028 Asset Management Plans**

As per Ontario Regulation 588/17, beginning in 2026, Council will receive an annual asset management progress report which will assess:

- a) The municipality’s progress in implementing actions impacting cost, risk, service trends;
- b) Factors impeding the municipality’s ability to improve trends seen in the asset management plans; and
- c) Strategies to address the factors impeding the municipality’s ability to improve trends seen in the asset management plans.

This ongoing evaluation ensures that asset management remains present, responsive, transparent, and integrated into corporate decision-making.

The regulation requires the AMPs demonstrate the municipality’s commitment to continuous improvement and the adoption of appropriate practices in asset management planning. A number of specific areas of improvement are provided in

Section 6.0 Improvement and Monitoring Plan. Improvements will be reflected in future versions of the AMPs as they are implemented over time.

While the regulation requires a full update every five years, staff recommend returning with an Asset Management Plan update in 2028 and every four years after. This would allow Council to access information early in a Term to provide any direction to staff and to allow time for changes to be assessed and implemented, including public input. The four-year timeframe aligns with the Term of Council cycle and allows every Council to receive an update on the AMPs and provide an opportunity to adapt to ever changing factors.

Staff anticipate reviewing a number of options to address service area gaps identified in the AMPs. These would include assessing the appropriate mix of assets, levels of service, and options to better align service delivery with evolving needs, costs, and risks. While approval would come through various reports to Committee and Council, the summary of any changes to policy, service delivery or risk would be reflected in AMPs updates.

To support this proposed work, it is recommended that the Corporate Asset Management (CAM) Steering Committee members lead their respective service areas in formally identifying, assessing, and prioritizing service level adjustments, cost-recovery and asset options, as well as non-financial service delivery strategies.

The Annual Asset Management Progress Report could provide an opportunity for staff to present a range of options, allowing Council to determine which areas should be prioritized for further analysis and action. This approach ensures ongoing oversight, alignment with Council priorities, and for public consultation. No changes will be proposed or implemented without first seeking Council direction or without public consultation.

Potential options could consider public perception of the relative value or criticality of City services, willingness to pay for enhanced service, the City's current mix and levels of service, and explore options to better align delivery with evolving needs, costs and risks. These include optimizing existing processes to make better use of current assets (e.g. using an asset to delivery multiple services), managing user demand to reduce the need for additional infrastructure, and extending the life of assets through timely renewal or upgrade, and evaluating opportunities to divest or dispose of assets that no longer align with service delivery needs or affordability thresholds. There is no single option to address service area gaps or trends, rather the City will need to take a

phased, decades long approach and a series of incremental steps informed by Council direction.

### **Program, Policy and Education Updates**

To enhance the City's asset management practices, this report recommends:

- Approving an update to the Corporate Asset Management (CAM) Policy attached as Document 13 (recommendation 3).
- Updating the City's comprehensive asset management program and governance framework
- Directing staff to change the asset management implications section of Committee and Council reports as mandatory as part of the consultations for the 2026 – 2030 Term of Council Governance Review Report

While the AMPs present a comprehensive, service-focused summary of what the City owns, its condition, and what it will take to sustain services over time at a moment in time, the Comprehensive Asset Management Policy sets the vision, purpose, application, roles, and principles which help guide day-to-day decision-making.

The proposed changes ensure the policy is consistent with the regulatory requirements under Ontario Regulation 588/17 and streamlines the policy for clearer understanding and interpretation.

Staff will include AMPs training as part of the 2026 Term of Council Councillor orientation, to support their understanding of asset management principles, the legislative requirements, the policy, Council's and staff's role in asset management and to provide an overview of the AMPs. This is another way to support good asset management planning.

In addition, to ensure asset management principles are consistently applied in decision-making, staff recommend a mandatory asset management implications section in Council reports be included in the 2026 – 2030 Term of Council Governance Review report. This will provide greater visibility into the long-term impacts of recommendations on the City's assets, support compliance with Ontario Regulation 588/17, and strengthen Council's ability to make informed, service- and risk-based decisions.

### **A New Municipal Growth Framework**

Canada's municipalities are at the forefront of the country's population growth, responsible for delivering the infrastructure and services that Canadians rely on every day, including roads, water and wastewater systems, public transit, and emergency services. However, the municipal revenue framework supporting these services remains outdated, and no longer reflects the scale or complexity of modern infrastructure demands or responsibilities. Without meaningful reform, municipalities will be unable to meet the infrastructure and service demands tied to rapid population growth, economic development, housing expansion, and climate change.

The scale of the current challenge is well documented. Municipalities own more than 60% of Canada's core public infrastructure yet only collect between eight and ten cents of every tax dollar. The [Financial Accountability Office \(FAO\) of Ontario](#) projects that Ontario municipalities alone face a 52 billion dollar infrastructure investment shortfall over the next decade, with twenty one billion dollars required for roads. This estimate does not include the additional costs needed for climate mitigation and adaptation. Adapting municipal infrastructure to the impacts of climate change will require approximately 5.3 billion dollars annually until at least 2030.

Without a modernized fiscal framework, municipalities risk deferring critical capital projects, delaying housing development, hindering economic development and falling short of delivering essential services at the scale Canadians expect. Council has already recognized the need for funding changes to support the municipality's long term economic health. This position is consistent with its ongoing advocacy for a more sustainable and equitable approach to how municipalities are funded, including Association of Municipalities of Ontario and the Federation of Canadian Municipalities, amongst others.

A new municipal growth framework, coupled with the prudent Council-led application of non-financial strategies, is needed to close the gap between municipal responsibilities and available revenues. Such a framework would provide sustainable, predictable, and equitable funding tools that align with the realities of twenty-first century growth. A renewed partnership among all orders of government is important to deliver the prosperous, inclusive, and sustainable communities Canadians deserve.

## **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 Rate will be presented to Committee and Council for approval alongside

2025 Asset Management Plans. The Transit and Tax LRF and will be updated in Q3 of 2025.

## **LEGAL IMPLICATIONS**

There are no legal impediments to adopting the recommendations in this report which would allow the City to meet its continuing legal obligations pursuant to Ontario Regulation 588/17 under the Infrastructure for Jobs and Prosperity Act, 2015

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

This is a citywide Report.

## **CONSULTATION**

There were no public consultations associated with this report as it is administrative in nature.

The 12 AMPs were developed through the extensive collaboration of over 100 staff from every department in the City, 40 directors, all General Managers each representing management of City assets at every stage of their lifecycle. Information was collected, analyzed, presented and reviewed by service-specific teams, representing expertise in both the City's assets and the delivery of service, iteratively through the preparation of each section of the AMPs. Through this coordinated effort, each AMP reflects a detailed assessment of lifecycle renewal, growth-related infrastructure, service enhancements, and climate mitigation and adaptation needs.

This approach ensured that the information presented in the AMPs is grounded in both technical analysis and operational insight, based on best and most current available data, and remains consistent with Council approved plans and established data sources.

## **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 of the Accessibility with Ontarians with Disabilities Act, 2005

- Including the requirements under the Provincial Design of Public Spaces Standard as well as all accessibility-related requirements under the Ontario Building Code and the Canadian Standards Association in the City's Accessibility Design Standards;
- Ensuring that all people with disabilities can access City facilities and infrastructure through accessible and inclusive design

## **ASSET MANAGEMENT IMPLICATIONS**

The implementation of asset management principles results in timely decisions that minimize lifecycle asset costs and support the long-term affordability of service delivery.

Supporting the recommendations of this report ensures the City of Ottawa complies with the mandatory Provincial regulation and remains eligible for funding from provincial and federal sources.

## **CLIMATE IMPLICATIONS**

Provincial regulation O.588/17 requires that climate change considerations be included as an integral part of the development of any municipal asset management plans.

The City's asset management plans were developed from their inception through collaboration between staff from the City's asset management and climate change teams to ensure level of service metrics, performance measures, costing sources and approaches aligned with Council approved direction regarding climate change.

In the calculation of the service area gap related to climate change, needs were compared with the City's 2024 10-year capital budget forecast. The 2025 budget forecast allocated \$155 million less than the 2024 budget, over 10 years, suggesting a change in the trends represented within these sections of the AMPs.

For more detailed information, please see the Climate Change Summary present in the body of this report.

## **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 Drinking Water Services

Document 2 Stormwater Services

Document 3 Transportation Services

Document 4 Wastewater Services

Document 5 Community and Social Services

Document 6 Emergency and Protective Services

Document 7 Government Services and Information Technology

Document 8 Greenspace and Forest Services

Document 9 Recreation and Culture Services

Document 10 Solid Waste Services

Document 11 Transit Services

Document 12 Library Services

Document 13 Comprehensive Asset Management Policy

## **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.

Note: A Minor correction was made to this report further to the City Clerk's Delegated Authority, as set out in Schedule C, Section 8 of Delegation of Authority By-Law 2024-265. The report and Document 13 was corrected to fix a couple of typos.