Staff Report



То	Committee of the Whole	
Service Area	Infrastructure, Development and Environment	
Date	Tuesday, June 3, 2025	
Subject	2025 Corporate Asset Management Plan and Levels of Service	

Recommendation

That Council approve the 2025 Corporate Asset Management Plan, including the targeted asset levels of service, for submission to the Ministry of Infrastructure on or before July 1, 2025.

Executive Summary

Purpose of Report

The purpose of this report is to seek Council approval of the updated 2025 Corporate Asset Management Plan (AMP) and the targeted levels of service (LOS) for all assets. LOS describe the outcomes customers experience through the delivery of services the City of Guelph provides. Every day people use City assets to travel safely, get clean drinking water and access many other public services. Typically, residents are more focused on the services they receive, but behind the scenes the City is making investments, delivering operations and maintenance and weighing tradeoffs between cost and risk that ensure the best possible customer service is received.

Key Findings

The 2025 AMP is due to the Provincial Ministry of Infrastructure by July 1, 2025, per the *Infrastructure for Jobs and Prosperity Act* and specifically O.Reg 588/17.

In 2024, Council approved an AMP that's primary purpose was to identify Guelph's "existing" LOS and replacement value for the City's assets. The 2025 AMP is an extension of the work presented in 2024 and now includes the *targeted* LOS for the City's assets. As a recap, the <u>2024 City of Guelph Corporate AMP</u> reported on over 200K City-owned assets with a total replacement value of approximately \$7.7B. A total of \$1.9B in infrastructure renewal needs was estimated as required in the tenyear period from 2025-2034. This includes an estimated backlog of deferred work in 2025 of \$355M. Now, when compared to the forecast funding available in the same time period, the backlog is predicted to grow to \$388M by the end of 2034. Assets in the backlog are at risk of providing unacceptable LOS.

To address the risk created by the backlog, the City would need to prioritize reaching sustainable funding targets. The previously Council-approved strategy of increasing tax supported infrastructure renewal funding by one per cent of the tax levy annual plus inflation is no longer factored into future capital budget assumptions. Non-tax supported services are on track to reach sustainable funding before 2031. Tax-supported services are expected to reach sustainable funding before 2043. This is all dependent on if the capital infrastructure renewal funding forecast resulting from the 2025 budget confirmation does not change.

Through the 2025 budget confirmation, tax supported capital funding increases were reduced as part of overall budget reductions in service of a more affordable tax levy impact. In addition to infrastructure renewal needs, tax funding supports the City's growth and service enhancement strategies and the 100RE program. Development charge (DC) exemptions and discounts are diverting a significant amount of tax supported capital capacity from infrastructure renewal, estimated at just under \$98M over 10 years in the 2025 budget update. The diversion of tax funding away from the renewal needs means that it will take longer to close the gap on sustainable funding levels. This leads to lower asset condition ratings and can mean higher operating costs for regular maintenance, along with a higher risk of unplanned failures.

The infrastructure backlog and associated risks will continue to grow until the City reaches sustainable funding levels for the replacement needs of each asset type. It is important to continue investing in our existing infrastructure to reduce risks and maintain LOS to the community.

The LOS reported in 2024 were based on the City's existing performance: through this updated 2025 plan staff are setting the targeted LOS based on affordability and the projected funding available. The baseline LOS were our existing levels, and the targeted LOS are based on the City delivering on the planned 10-year fully funded capital forecast which is illustrated in

Figure 1. Until the City reaches sustainability, the City is unable to set increased LOS targets that will increase over time as they will not be achievable. Once sustainability is met, there will be no backlog, and then set targets can be created.



Figure 1: LOS Target (based on current funding assumptions)

The projects within the 10-year Capital Budget and Forecast updated through the 2025 Budget Confirmation will impact service delivery to the community. If projects

in the existing capital budget and forecast are deferred, the City's expected LOS will decline. On the contrary, if projects are advanced sooner than currently projected, the City's LOS will improve. Ultimately, the City faces complex trade-off challenges between the cost, risk and level of service to be delivered.

Said plainly, the target LOS are expected to decrease over the next 10 years (when compared to existing LOS); over time with the currently projected levels of funding for infrastructure renewal, the condition of our assets will continue to decline, indicating that we need to keep investing in and prioritizing our existing infrastructure to the maximum extent possible. The target is to ensure the LOS do not decline further than forecasted. This will require continued investment in infrastructure renewal.

Strategic Plan Alignment

This report aligns with 4.2 – Update the Corporate Asset Management Plan to achieve the greatest benefit to our community. The Corporate Asset Management Plan is the tool used to document asset LOS and to understand the condition, replacement needs, scheduling, and funding for all City-owned assets.

Future Guelph Theme

Foundations

Future Guelph Objectives

Foundations: Maintain the City's healthy financial position

Financial Implications

This report includes no specific financial requests. However, the 2025 AMP is a tool used to support corporate budgeting and long-term financial planning. The plan outlines the financial resources required to carry out the required LOS, maintenance, renewal, and replacement of the assets used to deliver services for the community. The AMP is used in the capital budgeting process to help prioritize projects across the organization to make the best use of available funding. It also determines the long-term level of sustainable infrastructure renewal funding required compared with the projected funding available through the Infrastructure Renewal financial strategy, and communicates the resulting impact on LOS.

This plan confirms that continued infrastructure renewal investment is required to support both tax supported and non-tax supported services to reduce the backlog and achieve sustainable funding targets. Balancing investment in infrastructure renewal funding requirements with other legislated requirements and organizational priorities is outside the scope of this plan and resides with the budget process. Accessible formats are available as per the Accessibility for Ontarians with Disabilities Act, contact Monica Silva, Engineering and Transportation Department at 226-821-4015. TTY 519-826-9771.

Report

Introduction

The City of Guelph contributes to a high quality of life for the community by providing municipal services including safe drinking water, wastewater treatment, solid waste collection, public transit, transportation networks, culture, recreation, stormwater management, and emergency services. These services rely on

thousands of different assets to function. Asset management provides the framework that allows City staff from multiple departments to manage such a complex set of services and different types of assets. Built infrastructure is expensive to construct, expensive to operate, and will eventually stop working no matter how well it is looked after. The asset management (AM) processes and strategies used by City staff are designed to make sure that each asset will be able to deliver its intended function to the maximum lifecycle possible, thereby maximizing the benefit of every dollar invested in those assets.

If the assets that support City services were to be replaced today, it would cost approximately \$7.7B, or \$50,278 per resident. In the 10-year period until 2034 an estimated \$1.9B in renewal needs are identified as required to ensure those assets can continue to deliver the existing levels of service. However, when compared against the available funding forecast in the next 10 years, not all the needed renewal work will be able to be completed - there is a predicted backlog of infrastructure renewal work of \$388M at the end of the 10-year capital forecast period. This is a common situation among nearly all municipalities: in 2021 the Financial Accountability Office of Ontario estimated that across the province there was an estimated \$52B backlog in municipal infrastructure work. The value of the work backlog in Guelph highlights the need for continued investment to reach sustainable funding levels and maintain the current LOS. To help prioritize the work within the financial constraints facing the City, and to comply with the requirements of O. Reg 588/17, the City must submit a Council-approved asset management plan (AMP) to the Provincial Ministry of Infrastructure by July 1, 2025, identifying the City's level of service (LOS) targets. Refer to the 2025 Corporate Asset Management Plan for more details.

Asset Management Program Progress

Since being first established in 2017 Guelph's AM program has greatly moved forward with improvements in the accuracy of asset information, adoption of wholelife planning for asset needs and improved collaboration among all the City departments and staff. This work will continue and as the program continues to mature the City will meet the goal of attaining an *advanced* AM maturity rating by 2030.

As work continues towards reaching the advanced AM maturity level the Corporate Asset Management Program has improved the level of sophistication and detail in both the funding allocation, data and project optimization, and the integration between asset management planning and capital budgeting will continue to be strengthened. Overall, this will help ensure the best possible decisions are being made regarding our City's assets and LOS, using evidence-based data to develop business cases, project needs and long term financial forecasts supporting sustainability.

2024 AMP Recap and Changes in 2025

The City of Guelph's 2024 AMP was an in-depth review of the state of the City's assets and future needs across all service areas. The 2024 AMP included considerations for future infrastructure renewal needs required to maintain the status quo LOS. Many of the forecast needs represent work required to mitigate potential risks to the infrastructure resulting from the changing climate. The 2024 AMP analysis was done using the City's asset inventory and available information on the forecast future balances in the City's Reserve Funds. The 10-year capital budget

through the 2024-2027 Multi Year Budget had been presented to Council, but did not have a balanced forecast at the time the 2024 AMP was completed and delivered to the Ontario Ministry of Infrastructure per the requirements of O.Reg-588/17. The 2025 budget confirmation was prepared following a thorough prioritization of all capital projects with updated (decreased) funding assumptions over the 10 year-period. This version of the budget has been used to re-review the impact on the forecast infrastructure renewals against the available funding and to prepare forecast LOS that the various City Services will be able to deliver. Medium and high priority asset renewal work was prioritized to work within forecast available funding, and a number of projects were deferred beyond 2034, but the need for these renewal projects remains and so will eventually become part of the deferred work backlog if they are not eventually funded.

State of the Assets Condition

As with the asset replacement values, the condition ratings of the assets from 2024 were reused in 2025 for most of the City's assets¹. The one improvement in the 2025 AMP is updated roads pavement condition data, this data was collected in the fall of 2024. The comparison between the 2019 and 2024 data illustrated that the City's roads are overall in better condition. This is due to many factors, but primarily the improvements within the roads reconstruction program that is coordinated with the asset management program.

Overall, the average condition of the City's assets is considered "fair" and are meeting the expected levels of service delivery. This is a trend that has remained steady since the City's first Corporate AMP in 2017. However, because this is an average rating there are both positive and negative exceptions to this status.

Importantly about 63 per cent of the City's assets are considered in "fair", "good" or "very good" condition. The counter to this is that there remains 30 per cent in less than "fair" condition, including about \$1B worth of assets assessed in "very poor" condition, and another \$355M assessed as "past due" or alternatively "deferred" from being completed in previous years. A "past due" condition rating does not define an asset that is no longer functional, but it does identify a potential value of work that should be planned for as it represents assets that are at higher risk of unplanned failures and generally require more regular maintenance. Assets with a "not applicable" rating do not have a defined condition rating.

¹ Information on updated condition rating information is detailed in the appropriate service area chapters when required.



Figure 2: Condition of the City Assets by Replacement Value

Levels of Service (LOS)

LOS are a critical component of asset management, in that they define the standards and expectations for the performance and guality of assets. The 2025 AMP quantifies the LOS provided by infrastructure systems through a series of performance metrics for each service area. Overall, the City strives to provide services to the community that are accessible, cost efficient, provide customer satisfaction, demonstrate environmental stewardship and function reliably and safe with suitable scope. As shown in Figure 2, the City of Guelph, like all municipalities, faces a complex trade-off challenge in delivering public services which include three primary parameters: cost, LOS, and risk. A high level of service is desirable for public satisfaction but may involve elevated costs and resource allocation. Cost constraints require efficient allocation of resources, yet reduction on capital and operating budgets could compromise service guality. Meanwhile, mitigating riskssuch as asset failures or service disruptions—is crucial but also financially demanding. Ultimately, the trade-off involves a multi-criteria decision-making process that requires cost-benefit analysis and risk assessments to achieve a balanced approach.

Future Levels of Service Targets

To meet the requirements of O.Reg 588/17 regarding future LOS targets, the City determined that representing the projected future condition of the assets based on the current capital plan and funding assumptions as presented through the 2025 Budget Confirmation was the best methodology to use. Each separate service area has its own LOS metrics related to the specifics of the assets used to deliver that service but at an overall or "whole city" level asset condition is a common metric.

The future LOS values were developed by using the 10-year capital forecast and comparing the available annual funding against the forecast annual renewal needs of the asset inventory, thus predicting how the condition profile of the inventory would change over time. Simply, the future LOS targets are based on affordability represented by the 2025 Budget Confirmation. If the funding were to increase, the LOS would increase, if the funding decreases, the LOS decreases. However, the City balances many priorities in the 2025 Budget Confirmation beyond asset renewal including growth and service enhancement which makes this calculation more

complicated. In balancing these needs, the speed at which sustainability is reached may change.

It is important that the City stabilizes or reduces the size of the infrastructure renewal backlog to allow the City to provide consistent and sustainable service for the community and pursue other priorities responsibly. The analysis below is based on the current approved 10-year forecast and it shows that by the end of 2034 and compared to 2025 there is a projected increase in the value assets in the lower condition rating categories, with a related decrease in the value and quantity of assets in the higher conditions. Said plainly, the target LOS are expected to decrease over the next 10 years. Over time, with our existing funding strategy the condition of our assets will continue to decrease, indicating that we need to keep investing and prioritizing our existing infrastructure or they will continue to deteriorate and impact the services to the community. In addition, as the overall condition portfolio slowly decreases, there will be a higher risk of failure and a higher need for increased maintenance costs. As assets deteriorate, they can lead to failure, impacting residents through service disruptions. Some examples of service interruptions are a bridge closure impacting resident's routes of travel, a pool closure impacting residents planned recreational activities or a road closure due to a failing culvert impacting travel and water flow. All of these potential risks due to failing assets have a major impact on the community. This can be seen graphically in

Figure 3 which represents the forecast LOS targets for the City as a whole (i.e. all City Services).



Figure 3: Target LOS

The baseline LOS were our existing levels, and the targeted LOS are based on the City delivering on the planned 10-year fully funded capital forecast. The City is not able to set new targets for increased levels of service within the projected available funding envelope. In the future, if the budget includes an increased infrastructure renewal funding strategy or once sustainability is met, new targets could be set.

Figure 4 is a hypothetical scenario to illustrate the target LOS, which is an ideal state of infrastructure with no past due assets. To achieve this target, an additional

\$390M is required to eliminate the backlog over the next ten years. This does not account for the assets within very poor or poor condition that are also at risk of failure or can incur increased maintenance costs. With no assets in the backlog the risk of failure would be reduced and then the City has the ability to direct funding toward continuously renewing assets in the very poor or poor categories.



Figure 4: Future LOS Target

Infrastructure Backlog and Sustainability Analysis

The renewal needs vs. funding analysis was completed by predicting the estimated annual renewal needs using the current condition of the assets to estimate a future year when renewal of each asset will be required. This results in a renewal forecast that fluctuates year to year, with some years showing a higher value than the average. The results predict a cumulative funding gap at the end of the 10-year period of approximately \$388M needed renewal work that will be deferred as a result of insufficient funding.

10-Year Total Renewal Forecast	10-Year Total Funding Forecast	10-Year Forecast Total Gap
\$1,894,674,759	\$1,525,379,016	-\$387,886,180
(\$1.89B)	(\$1.53B)	(-\$388M)

For many years Guelph has been working to attain a state of financial sustainability in its asset management practices, meaning the available funding matches the expected renewal needs. To complete this analysis an average of the total ten-year renewal forecast was used to set the sustainable renewal target value in 2025, and then this value was inflated in each subsequent year. This represents a balanced approach that is more likely to match the actual annual renewal needs that will be required compared to the theoretical model described above. Comparing the renewal needs to the funding strategies approved in the 2025 confirmed budget for both the tax supported and non-tax supported service completes the analysis of when the City might reach the point of sustainability. For the tax-funded services the result predicts that the sustainable target funding will be reached around 2043 or 2044. This is the point when the revenue from municipal taxes will equal the forecast renewals for that year will continue to be greater than the forecast needs in future years. This is shown in

Figure 5 where the grey line represents the forecast renewal needs and the orange line the forecast funding.



Figure 5: Annual Sustainable Funding Level Gap - Tax-funded Services

The prediction for the non-tax funded services is more optimistic. For these services it is estimated that the sustainable target may be reached around 2031, as can be seen in

Figure 6.

Figure 6: Annual Sustainable Funding Level Gap - Non-tax Services



In combination, the results of the analysis are predicting that the sustainability target funding for all city services assets will be reached around 2039. Refer to

Figure 7.

In all three scenarios the forecast renewal needs increase year by year but at a slower rate than the forecast funding levels, thus allowing the funding gap to close and sustainability to be reached. These results are based on the current funding assumptions included in the 2025 Budget Confirmation. Should there be any future reduction in the funding values compared to that strategy the funding gap will take longer to close, and reaching financial sustainability will be delayed, and asset conditions and levels of service will continue to decrease. It is best to avoid this possibility by at least ensuring that the infrastructure renewal needs continue to be funded following the strategy approved in the 2025 budget confirmation.

Figure 7: Annual Sustainable Funding Level Gap for the Whole City



To summarize, non-tax funded assets (water, wastewater, etc) are on track for reaching sustainability in 2031, whereas, tax funded assets (roads, recreation centres, facilities, vehicles, etc) are at a higher risk of deteriorating as reaching sustainability is much further out (2043/2044). This can lead to increased service disruptions and higher maintenance costs.

Infrastructure That Supports New Housing

People rely on City services every day. We install pipes and deliver water so they can turn on the tap. We build sewers so they can flush toilets. We provide roads, active transportation and public transit so they can travel where they need to go. If someone calls 911, we ensure emergency services are there when people need them most.

These vital programs are part of our municipal AMP. With the City expecting to grow to 208K people and 116K jobs by 2051, this plan is especially important to meet the rising need for more housing and improved affordability. As we plan for 26K more housing units, we'll need to invest in the infrastructure and facilities to support them. This means upsized pipes and renewed infrastructure to help housing reach the market more quickly. The AMP supports growth indirectly, as it is based upon the renewal of the existing infrastructure, however it includes the 10-year forecast which incorporates housing enabling infrastructure. For clarity, the initial construction of infrastructure needed to support growth is not included in the AMP, but since the AMP is a long-term policy document, the future expected renewal of new assets implemented over the next 10-years to support growth are factored into the plan. Effective municipal asset management will be crucial to meet future housing needs in Guelph.

Climate Change and Natural Assets

O. Reg 588/17. requires the AMP to address the issues related to the changing climate and how that will impact the City's assets. Guelph has been ahead of trends on this subject: many of the recommended actions identified in the <u>Climate</u>

Adaptation Plan (CAP) that was prepared and approved in 2023 were adapted into the renewal needs included in the AMP. Areas where infrastructure will potentially be adversely affected by more extreme weather conditions were identified and adaptation measures were developed. In total the Climate Adaptation Plan identifies 163 adaptation measures for the City to pursue. Just over half of these measures are already part of programs and plans the City is already acting on in response to climate-related risk. Future asset management work including AMP documents will contain even more specifics identifying the needs of the assets with attention to the climate change issues. As work continues towards reaching the advanced asset management maturity level, the Corporate Asset Management Program has improved the level of sophistication and detail in both the funding allocation, data and project optimization, and the integration between asset management planning and capital budgeting will continue to be strengthened. Overall, this will help ensure the best possible decisions are being made regarding our City's assets, using evidence-based data to develop business cases, project needs and long-term financial forecasts supporting sustainability.

Financial Implications

This report includes no specific financial requests, however, the 2025 AMP is a tool used to support corporate budgeting and long-term financial planning. The plan outlines the financial resources required to carry out the required maintenance, renewal, and replacement of the assets used to deliver services for the community. The AMP and the data analysis completed in the preparation of the AMP is used in the capital budgeting process to help prioritize projects across the organization to make the best use of available funding. It also determines the long-term level of sustainable infrastructure renewal funding required, which is the basis for the Infrastructure Renewal financial strategy.

Prior to the 2025 budget confirmation, tax-supported capital funding increases for infrastructure renewal were projected to increase at the rate of inflation plus 1.0 per cent of the annual tax levy based on a strategy approved by Council in 2017. Through the 2025 budget confirmation, tax supported capital funding increases were reduced as part of overall budget reductions in service of a more affordable tax levy impact, and forecast assumptions were updated to cap annual tax supported capital funding increases at an approximately 1.3 per cent tax levy impact annually. The annual increase supports all of the City's financial strategies. When we step back and look at where tax supported capital funding is projected to go over the 10-year period from 2025 to 2034, we can see the following:

- Infrastructure renewal \$514.0M
- Growth strategy \$111.6M
- Service enhancement strategy \$75.9M
- 100RE \$71.5M

After infrastructure renewal, the second largest allocation of tax supported capital funding is to the growth strategy, which supports growth related capital costs that are not eligible to be funded using dedicated growth revenues. The most significant cost is development charge (DC) exemptions and discounts, which were estimated at just under \$98M over the 10 years from 2025 to 2034 in the 2025 budget update (tax supported portion only). This represents a significant diversion of property tax capacity that could otherwise be supporting progress toward sustainable funding for asset management. In addition to updating and reducing the forecast tax supported

capital funding assumptions, all of the projects in the capital budget and forecast were prioritized in alignment with established criteria.

Capital projects that remained in the budget served medium or high priority state of good repair, housing-enabling infrastructure in priority areas, mandated or legislated projects, projects eliminating safety concerns, and projects with a grant commitment or specific funding source. It is also notable that many of the City's capital projects support both growth and asset renewal. A significant portion of asset renewal work is related to integrated roadway reconstructions, which are funded by a combination of property tax (for the road renewal and enhancement portions), utility rates (for the underground pipes), and DC reserve funds (for the growth-enabling components of road and pipe replacements). When property tax funds are diverted to paying for growth through DC exemptions and discounts, it limits the tax supported funds available for these integrated projects. That means that even if the DC funding is available, projects will still need to be deferred because tax capital is the limiting factor. The greatest risk is to the assets and services funded from tax revenue. Though not yet at a sustainable level, infrastructure renewal needs for the water, wastewater and stormwater services funded directly from user fees – are predicted to reach sustainability sooner. The legislated and life safety requirements associated with these services also mean that any needs that do arise are given the highest priority attention. Reduced funding for tax supported infrastructure renewal means that it will take longer to close the gap on sustainable funding levels. This leads to lower asset condition ratings and can mean higher operating costs for regular maintenance, along with a higher risk of unplanned failures resulting in service interruption.

Conclusion

The City has established itself as an industry leader in asset management practices. Over the past 5 years there has been significant progress in the Asset Management Program, and the program is positioned to move from a core to an advanced rating by 2030. As the City's Asset Management Program continues to mature there are growing improvements in the confidence of data, which improves the accuracy of calculations including the City's backlog and sustainable funding targets.

The 2025 AMP establishes the City's LOS targets based on the fully funded 10-year capital forecast, which is based on affordability. The target is to ensure the LOS do not decline further than forecast. This will require continued investment in infrastructure renewal. In the future, if the City's capital budget increases, the LOS will increase. With the funding forecast for capital work in the 2025 budget confirmation the LOS targets predicted in ten-years' time show a decrease in the number and value of assets in better than "fair" condition and a corresponding increase in the number and value of assets in "poor" or very poor condition, as well as an increase in deferred work (assets in "past due" condition). The practical implications of this are an increased risk of services not being available due to asset failure and repair and maintenance needs and increasing costs as needed renewal work continues to be delayed. Each year staff will need to assess the cost, risk and LOS and identify the trade-offs. Overall, target LOS are lower than the existing due to decreases in funding, the goal is to slow the growth of the backlog and get to sustainability which eliminates the backlog.

The data presented through the Asset Management Plan clearly indicates that the City must continue investing in our existing infrastructure: reducing the infrastructure gap must be a priority to reduce the chances of failure of any asset or infrastructure service. The consistent use of asset management guidelines and principles, with an effort placed on continuous improvement, will lead to an optimized balance between asset performance and asset risks, creating real value for the City of Guelph and its current and future citizens.

Consultations and Engagement

The process to prepare the AMP has been a collaborative effort

with participation from staff in all City service areas. Internal consultation has occurred with each asset owner/operator to collect and review asset data, establish level of service metrics, and review the fiscal analysis. The General Manager of each asset area has reviewed and signed off on their services respective chapters of the AMP. Finance and asset management staff have been working closely throughout the preparation of the AMP and the sustainable funding analysis. Further, progress on and information about the AMP has been presented to the Capital and Asset Management Steering Committee, which has acted as the program steering committee for this work.

The Community was engaged through a survey on "Have your Say" to gather data to support the targeted LOS. This engagement was both informative on Asset Management principles as well as providing an opportunity for residents to give feedback.

The AMP is not the budget, nor is Council asked to make any budgetary decisions by approving this report. However, it is an important tool used during the budget process and can help Council, and the public understand the current state of the assets, the predicted impacts to the services provided by the assets with the current funding strategies in place, and the associated risks of limiting funding. It is also critical in staff's prioritization of budgeting capital and maintenance needs.

Attachments

Attachment-1 2025 Corporate Asset Management Plan and Levels of Service Presentation

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