

Municipality of Chatham-Kent
Infrastructure and Engineering Services
Asset and Quality Management

To: Mayor and Members of Council
From: Sean Hilderley, Manager Asset and Quality Management
Date: April 28, 2025
Subject: Core Infrastructure Detailed Asset Management Plans

Recommendations

It is recommended that:

1. The Detailed Asset Management Plans be adopted by Council.
2. The proposed levels of service for the core infrastructure plans be adopted by Council and the funding implications of those levels of service be implemented into the 2028-2031 Multi-Year Budget process.
3. Finance and Asset & Quality Management create and execute a Long-Term Financial Plan (LTFP) that links the Detailed Asset Management Plans to the 2028-2031 Multi-Year Budget. This approach ensures that levels of service and legislative requirements are prioritized and adequately funded throughout a 30-year planning timeline.
4. Administration undertakes a review of all assets and services to create a divestment strategy before the 2028-2031 Multi-Year Budget process aimed at reducing the infrastructure gap.
5. The next term of Council considers an increase to the base annual lifecycle funding of the asset management plan allocation from the current 1.5% to 2.5% property tax equivalent.
6. A detailed financial advocacy plan be developed to communicate Chatham-Kent's financial needs for municipal infrastructure investment to the public and both the Provincial and Federal governments, including advocacy at AMO, ROMA, FCM and other political and staff associations.

Background

The Municipality of Chatham-Kent is the steward of many public services which are supported by a vast network of infrastructure that has been built up over several decades. Chatham-Kent has a large registry of municipal assets that requires careful planning and coordination to ensure sufficient funds are available to operate, maintain and renew the assets at the optimal time for the optimal cost.

In 2018, the Province of Ontario passed *O.Reg 588/17, Asset Management for Municipal Infrastructure* under the *Infrastructure for Jobs, and Prosperity Act (2015)*. The purpose of the regulation is to ensure that all Ontario Municipalities implement an Asset Management (AM) program to ensure that all municipalities understand the long-term fiduciary and social responsibilities related to infrastructure used to deliver services to the public.

Historically, Chatham-Kent viewed AM from a lens of “managing assets” which involved separated but specific activities such as completing inventories, performing condition assessments, and estimating future budget needs. While those activities are essential elements of AM, if the activities are not coordinated and strategic objectives are not defined, the municipality will experience disconnects between the activities being completed and the service expectations of customers.

AM is defined as the ‘coordinated activities of an organization to achieve objectives through the balancing of costs, risks, and performance to deliver an agreed upon level of service.’ The Detailed Asset Management Plans (DAMPs) are key documents that provide an explanation of the value of the services being provided by Chatham-Kent today, and in the future.

AM will ensure that Chatham-Kent is able to create a robust, effective and data driven Asset Management System (AMS) to support informed stewardship of its infrastructure related assets that support service delivery. The AMS will ensure Chatham-Kent understands the long-term and cumulative stewardship implications and costs of its infrastructure assets.

The main objective of AM is to ensure that Chatham-Kent can:

1. Provide sustainable infrastructure and services.
2. Provide a sustainable funding model that will align with Chatham-Kent's long-term budget and planning and ensure intergenerational equity is achieved.
3. Ensure service levels are understood and communicated effectively.
4. Ensure service delivery needs are the primary driver for infrastructure.
5. Implement an integrated evidence-based decision support system to inform infrastructure decisions.
6. Ensure compliance with legislative requirements.
7. Develop and implement ‘Optimal Value’ AM practices.
8. Continually manage demand and risks in an effective manner to ensure the drivers can be mitigated and the service can remain sustainable.

Over time, the AM program will help inform the relationship between the cost of infrastructure for a particular service to the value provided for the investment dollars. The purpose of a well-run AM program is to ensure that the assets that support the delivery of a service are cared for and resourced properly over time. The DAMPs will identify if there are 'gaps' in the funding required and if a 'gap' exists, how that 'gap' that impacts the level of service and intergenerational equity over time.

The AMS is specifically designed to ensure that Council has sufficient evidence and understanding to make informed choices regarding the long-term and cumulative costs and responsibilities of delivering public infrastructure and services. Through the continued development of its overall AMS, Chatham-Kent will ensure that it has the appropriate data, education, and processes in place to implement a successful AM system.

The AM program will allow Chatham-Kent to develop and utilize a standardized and repeatable approach to regularly produce DAMPs for all municipal services. The DAMP's will allow all services to be comparable with each other in a unique format that will be utilized to inform investment decisions levels of service and budget tradeoffs.

Under O.Reg. 558/17 Chatham-Kent is required to meet certain legislative obligations for understanding their stewardship costs for delivering services utilizing a ten-year planning horizon. The legislation also compels Chatham-Kent to define the levels of service that can be realistically provided to the public within the available budget over that 10-year planning horizon by July 1, 2025.

In 2024, staff brought forth 19 non-core DAMPs to Council along with a summary document that is now publicly available on the municipal website. The initial DAMPS represented the 1st phase of implementing the AMS in Chatham-Kent, which is essential for meeting legislative requirements, creating an evidence-based decision model and developing level of service measures.

This report addresses the core assets (Roads, Bridges & Culverts, Water, Wastewater, Storm water) and defines both the current and proposed levels of service for those assets as required by legislation. These plans function as models to assist Council in making informed choices that connect their investment funds directly to tangible service level outcomes.

The Municipality of Chatham-Kent is committed to meeting the requirements of the regulation and to continuously improving its AM knowledge and practices by proactively integrating the AMS across the entire municipality, demonstrating good stewardship and proactive planning. Upper-level government grants require fully compliant DAMPs including the Canada Community Building Fund, the Ontario Community Infrastructure Fund and any other infrastructure grant available.

The plans can be reviewed on the Chatham-Kent website at the following location [Asset Management Plan](#).

Comments

Asset Management, in its simplest form, identifies what the Municipality owns, assesses its condition, estimates replacement costs, and determines the appropriate timing to make those replacements. Over the next three years, the AM program will transition from cataloging CK's assets to becoming a comprehensive, evidence-based decision-making system that will help the Council understand the ramifications of its investment choices. AM incorporates various elements such as operational needs, risk assessment, demand factors, long-term financial planning, lifecycle strategies, process enhancements, continuous improvement efforts, climate considerations, and service levels to develop a plan that supports decisions made by the Council.

Each plan offers a standardized and consistent framework that enables Council to compare distinct services in a standardized format. Each service possesses assets that differ in purpose, cost, and complexity, making it easier to evaluate them using the metrics outlined in each DAMP. These metrics include risks, total life costs, renewal timing, public demand, and service levels.

During the DAMP process certain commonalities became apparent amongst most if not all plans. These include:

Infrastructure 'Gap' – Almost every DAMP has an infrastructure 'gap,' and when viewed collectively, the importance of this 'gap' is significant. This 'gap' serves as a vital stewardship metric that directly indicates how sustainable or unsustainable Chatham-Kent is as it relates to its municipal services. The table below outlines the current infrastructure gap that exists for the Municipality of Chatham-Kent.

Table: Infrastructure Gap by Asset Class

Funding Method	Asset Plans	Replacement Cost (\$Billion)	Annual Gap (\$)	10 Year Gap (\$)	% Funded
Taxation	Bridges / Culverts	\$1.67	\$ 21,521,000	\$ 215,210,000	44%
Taxation	Roads	\$4.01	\$ 46,340,000	\$ 463,400,000	58%
Taxation	Storm Water	\$1.68	\$ 58,401,000	\$ 584,010,000	21%
Taxation	Non-Core Assets	\$1.62	\$ 48,988,000	\$ 489,880,000	74%
PUC Rates	Waste Water	\$1.75	\$ 32,284,000	\$ 322,840,000	53%
PUC Rates	Water *	\$2.47	\$ 28,789,000	\$ 287,890,000	79%
	Total	\$13.20	\$236,323,000	\$2,363,230,000	

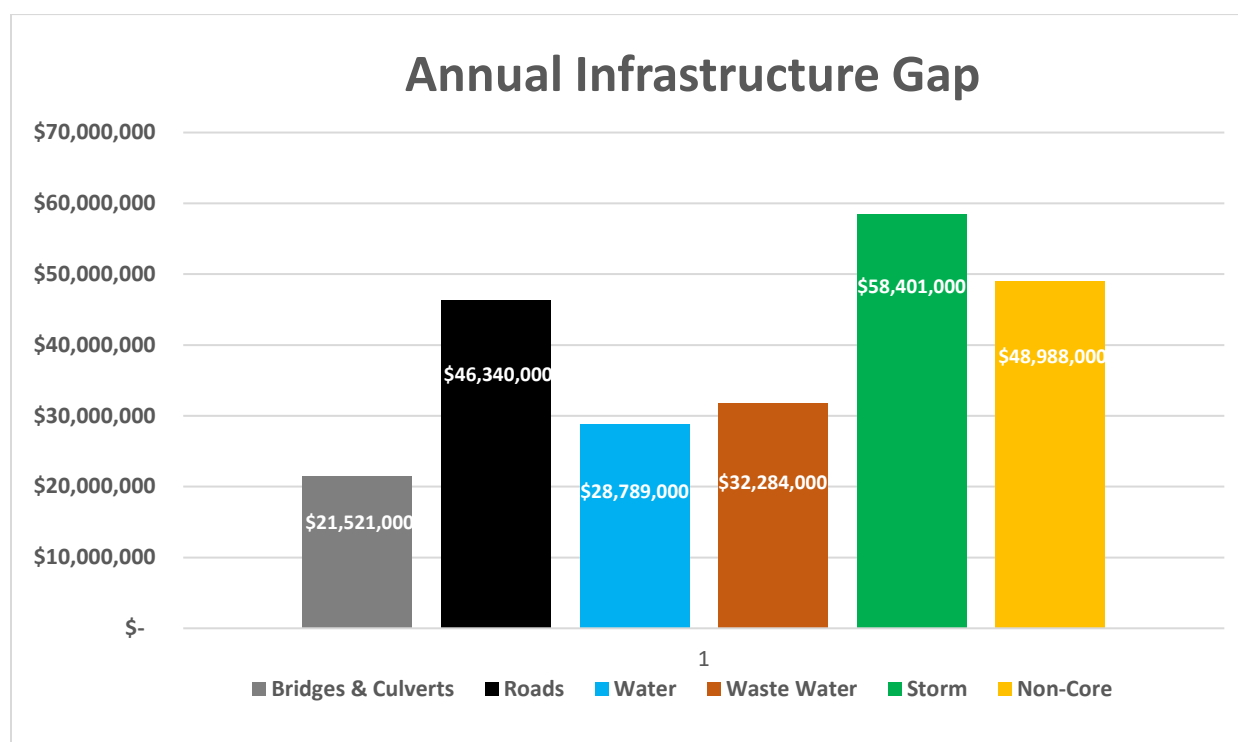
The asterisk next to the annual and ten-year gap for Water services signifies that this gap is derived from studies conducted for the water service, which expect substantial

development charge revenue that may not be achievable and would misrepresent the total and annual gap. There are significant greenhouse water DC charges included in the rate water study and the Municipality is working with the greenhouse industry and the province to look at other non-potable water source options.

Over the ten-year planning period the current **non-core 'gap'** is estimated to be **\$489,988,000** or on average **\$48,988,000** per year.

The core infrastructure gap is **\$187,300,000** per year or **\$1.873 Billion** over the ten-year planning horizon.

The core and non-core combined infrastructure gap for Chatham-Kent assets and services is approximately **\$2.363 Billion** over the ten-year planning horizon or on average, **\$236,300,000** per year.



Over time, the objective is to manage the 'gap' in a responsible and efficient way, aiming to reduce it while steering Chatham-Kent towards sustainability.

Managing the Gap

The gap cannot be fixed in a singular year. Instead, the best methodology to manage the gap is to set an annual target to reach sustainability over a longer period which is recommended to be 30 years. To achieve sustainable levels of service for the current and future generations Council will need to consider implementing all approaches to managing the gap which include:

1. **Reductions of levels of service** – setting appropriate levels of service for what is affordable.
2. **Fund the gap** – increase/reallocate funding for the gap, utilize debt, advocate for increased funding from other levels of government.
3. **Disposals or closures of assts** – reduces long term costs for operations, maintenance, and renewal.
4. **Relocate services for Co-habitation** – focus efforts on reducing costs of services at facilities by optimizing facility usage.
5. **Defer projects** – Prioritize projects to manage the infrastructure gap.

The gap represents a direct link between the quality of service provided and financial sustainability. Achieving a balance among suitable tax rates, effective use of debt, optimizing and right-sizing assets and services, along with securing funding from higher levels of government, is essential for Chatham-Kent to attain intergenerational equity and the desired service levels. It is crucial for Chatham-Kent to focus on making its services sustainable; otherwise, service levels will significantly decline over time. Some future reductions in service levels may not be intentional but rather a result of assets deteriorating to a point where the maintenance costs become unmanageable.

Long-Term Financial Plan (LTFP) – The purpose of an LTFP is to ensure the sustainability of agreed upon levels of service over time. With a significant infrastructure gap, it is critical that Chatham-Kent adopt a long-term approach to how it will fund current and future levels of service in a realistic and proactive way. Creating an LTFP will ensure that there is sustainable fund and optimize levels of service, inform budgets, manage risks, achieve strategic alignment, and demonstrate a transparent and accountable financial plan to the public.

The LTFP will function as a clear roadmap that connects day-to-day budget decisions with the broader objectives of long-term infrastructure sustainability. The LTFP will be ingrained in the budget process to clearly identify what targets Council needs to fund so that CK can be legislatively compliant and to meet the service level goals over time.

Confidence & Quality – High-quality data is a crucial component of successful AM, serving as the foundation for evidence-based decision-making. Currently, few services achieve a high standard of data quality for their infrastructure assets and services. The overall general **low to medium** data quality stems from a mix of historical practices and evolving data requirements. To enhance and develop new processes that incorporate data collection, management, and analysis into daily business operations, significant effort and resources are necessary.

It is vital to fundamentally change how data is managed for each service. Adjustments are essential to maintain data integrity and resources need to be allocated to uphold data quality.

Reserve Alignment –To enhance the overall DAMP process, Finance and Asset & Quality Management (AQM) have begun to undergo a lifecycle reserve analysis to

ensure that information about annual contributions and balances are sound prior to the start of the next four-year budget cycle. Reserves will require adjustments to their funding allocations, which should be guided by both the DAMP and the budget for each service. The appropriate contribution amounts for reserves should be based on the evidence and information outlined in the service's DAMP, in partnership with the Finance department. Additionally, reserves need clear 'cap' indicators to determine when a fund has reached adequate funding. This enables the reduction of contributions to align with necessary market-level adjustments (like inflation) or when contributions are no longer required, and the re-direction of contributions to areas of deficient reserves.





Staffing Resources – Municipal services are often people oriented in nature and require significant staff resources to ensure that service levels can be achieved. The DAMP process seeks to identify areas where staffing resources are highly constrained or insufficient to meet service levels or obligations such as legislative compliance activities. This future process will enable both staff, the Public Utilities Commission (PUC) and Council to explore various options for attaining the desired service levels while appropriately adjusting staffing to ensure that levels of service can be achieved sustainably and affordably.

There are areas where specific staffing needs are identified to either meet legislative compliance, deliver on planned expenditures, or achieve an expected service level. The AM planning process will continue to ensure that each service is striving to optimize its staffing to the appropriate level while also identifying opportunities that can guide future decisions.

As the AMS evolves, and each service optimizes its approach to service delivery; Council and the PUC may be required to consider further staffing resources when it is proven that staffing is required to support agreed upon levels of service or when it can be proven that staffing will provide an ongoing cost savings.

Council Term Priorities

This report supports the following Council Term Priorities:

			
Deliver Excellent Service	Promote Safety & Well-Being	Grow Our Community	Ensure Environmental Sustainability
5 a		3 a	

Consultation

Over the last 2 years, A&QM staff have organized 174 meetings with 26 municipal services, committing 2,900 hours to collect data necessary for the DAMPs. A&QM has conducted more than 152 educational sessions and will continue to offer training as the municipality's AM knowledge evolves and matures.

Communication

Upon Council approval, the DAMPs and accompanying overview document will be published on the Chatham-Kent municipal website for public access.

All staff engaged in AM planning have undergone training to equip them with the skills and knowledge needed to start implementing and utilizing the AMS, DAMPs, and strategy. Ongoing educational sessions will continue to be held to ensure that Service Levels are established, communicated, and integrated into every plan. Additionally, training will be extended to include specific operational staff, ensuring that Chatham-Kent maximizes service delivery and reporting through the DAMP process.

In the next three years, each service will seek feedback from the community through a structured AM survey. This survey aims to collect customer preferences regarding service levels and initiate an ongoing conversation with the community to educate and gather insights. The objective is to formally engage with the community on an annual basis, allowing the municipality to adapt and proactively meet the evolving trends and expectations for service levels.

Administration is recommending a financial advocacy plan be developed as part of the LTFP development.

The PUC should also have discussions with its Board on the recommendations and impacts in this report at a future meeting.

Diversity, Equity, Inclusion and Justice (DEIJ)

This report specifically does not have implications related to diversity, equity, inclusion, or justice. The DEIJ area will be consulted in the preparation of the public AM survey to ensure the survey considers diversity, equity, inclusion, and justice elements as appropriate.

Financial Implications

The overall financial implications are challenging to articulate however the obvious impact stems from the identified Infrastructure Gap. Over the 10-year planning horizon of the DAMPs it is estimated that the 10-year gap is **\$2.363 Billion** or on average, **\$236,300,000** per year. As the DAMPs evolve over the next 2 years and better data is gathered and incorporated, the gap accuracy will improve and increase in data confidence. There will be no Administration recommendations of adjustments to the

1.5% lifecycle AMP requirements approved by Council in the **2024-2027** Multi-Year Budget or the upcoming 2026 and 2027 Budget Updates.

The primary implications of a budget gap pertain to the sustainability of service levels. A significant discrepancy between the projected budget and the forecasted costs indicates that the current service levels are not sustainable. The consequences of operating with such a significant gap include:

1. Unsustainable maintenance activities (increased reactive maintenance costs, increased risk to human safety, reductions to availability of services).
2. Unsustainable operational activities (reductions in staff availability, reduced operating hours, reduction in efficiency).
3. Forced reductions in Levels of Service.
4. Unable to perform renewals in a timely manner.
5. Unable to afford the acquisition of new assets for services or to renew assets.
6. Reputational damage and harm.
7. Increased risk of fines, penalties, or lawsuits.
8. Reduced likelihood of receiving grants from both senior levels of government.

Recognizing the financial 'gap' allows the Council and staff to make informed decisions on how to manage this gap over time, aiming for intergenerational equity. Furthermore, it is unrealistic to expect that the gap can be closed within the 10-year planning horizon of the DAMPs. A longer-term approach is necessary to manage the gap effectively, and CK will strive to close this financial gap over a 30-year period. To assess its financial sustainability, CK will employ three key metrics: the Asset Renewal Funding Ratio, the Operating Sustainability Ratio, and the Lifecycle Funding Ratio. These metrics will serve as benchmarks and objectives, ensuring CK achieves sustainability and intergenerational equity, and will be incorporated into both the DAMP documents and the LTFP.

Another financial aspect of the DAMPs is that the Province of Ontario has begun linking the completion and sustainability of these DAMPs to access specific funds, such as the Ontario Community Infrastructure Fund (OCIF) which provides Chatham-Kent with approximately \$10 Million in annual funding.

The Federal Government also links the DAMPs to funding of the Canada Community Infrastructure Fund with approximately \$6.5 Million in annual funding and various housing funding programs. Furthermore, certain grant opportunities now rely on the specific outcomes of the DAMPs to influence Provincial or Federal funding decisions for various initiatives, including the Canada Public Transit Fund. The trend of government agencies using DAMP outcomes to shape funding allocations is expected to increase in the future and is often required in one-time grants that become available. Therefore, it is crucial for Chatham-Kent to enhance its strategies to maximize funding opportunities.

Next Steps

The next phase of the AM program will include:

1. Undertaking level of service information sessions with Council to outline the process for setting future levels of service and review the potential financial impacts of DAMPs on the next multi-year budget process.
2. Updating non-core Detailed Asset Management Plans to define the current and future levels of service for each service.
3. Completing a corporate service DAMP to consolidate multiple services.
4. Develop Long-Term Financial plan to align DAMPs with the budget process for both property tax and rate funded (PUC) areas.
5. Annual updates for current DAMPs – financial plans, demand drivers, asset data, risks, lifecycle costs, etc.
6. Develop legislatively required annual Asset Management Progress report to Council that must address:
 - a. Chatham-Kent's progress in implementing its asset management plan.
 - b. Any factors impeding Chatham-Kents ability to implement the DAMPs.
 - c. The strategy and plan to address any factors impeding the ability to implement the DAMPs.
7. Continue to develop the next phases of the Asset & Quality Management program over the next 5 years.
8. Financial Advocacy plans are developed to aid Council and PUC to both educate the public and upper-level governments.

Prepared by:

Sean Hilderley, Manager Asset & Quality Management

Reviewed by:

Edward Soldo, General Manager, Infrastructure and Engineering Services

Gord Quinton, General Manager, CFO/Treasurer – Finance, budget, Information Technology & Transformation

Darren Galbraith, General Manager, Chatham-Kent Public Utilities Commission

Consulted and confirmed the content of the consultation section of the report by:

Ryan Brown, Director, Public Works

Marissa Mascaro Amyotte, Director Engineering