Chatham-Kent

DETAILED ASSET MANAGEMENT PLAN 2024

Waste Management

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Chatham-Kent Waste Mgt Report Card

$52.11 /$100K
average curbside waste collection levy

$9.63 /$100K
average depot collection levy

Annual Funding Gap	Asset Renewal Ratio	% of 10-Year Plan Funded
$790,000	0%	93%

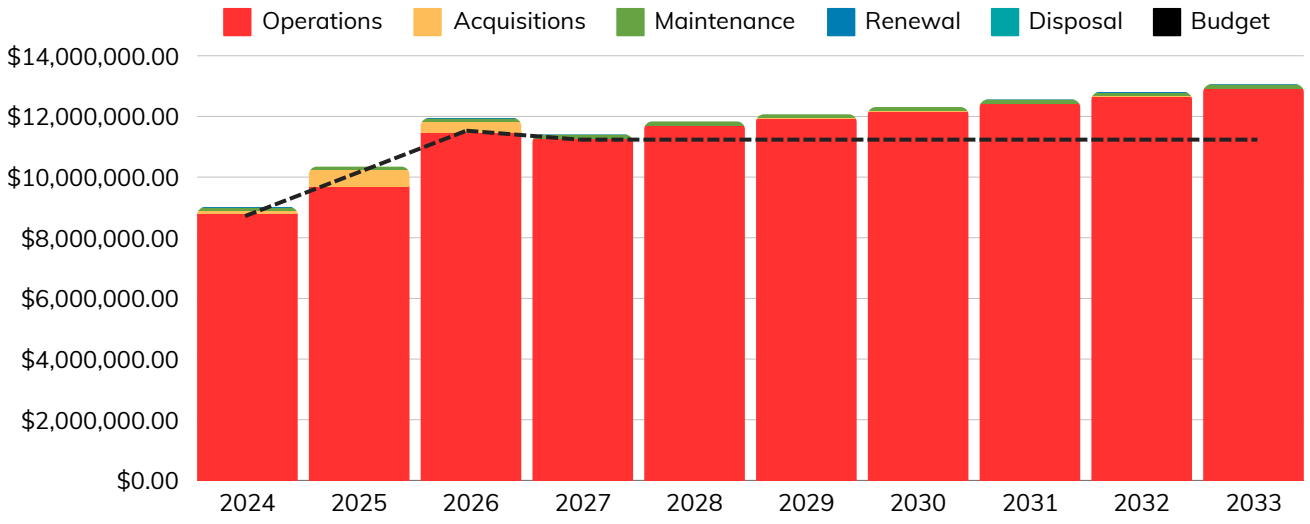
Asset Summary

Assets	Items	Replacement
	17 depot sites	$14,666,000
	8 facilities	$4,308,000
	6 vehicles	$871,000

Assets	Items	Replacement
	67 equipment	$1,632,000
	12 tech equipment	$16,800

$21M+ Total Replacement Cost

10 Year Life Cycle Forecast



Data Confidence	Low	Medium	High

2.0 INTRODUCTION

2.1 Background / Purpose of Service

The waste management division (hereafter referred to as "Waste Management (WM)") provides waste management services throughout the Municipality. It is responsible for the management of a variety of services and projects related to curbside waste collection, waste drop-off depots (including transfer stations and leaf & yard depots), household hazardous waste, brush and leaf collection and organic waste. Since January 2024, Chatham-Kent's recycling program has undergone a significant transformation, transitioning to an Extended Producer Responsibility (EPR) model. Circular Materials, a not-for-profit producer responsibility organization, now administers Chatham-Kent's curbside recycling.

Chatham-Kent's waste management service has undergone various transformations over the years. Prior to amalgamation, the level of service for garbage collection and disposal differed from one community to another. Upon amalgamation, curbside garbage collection continued to be provided in areas where the service was previously offered, and depot collection continued to be provided elsewhere. An example of a differing level of service is that curbside service is provided to rural areas of former Romney and Howard Townships rather than in Pain Court. The curbside service area has expanded over the years to include smaller communities, including Rondeau Bay Estates and Shrewsbury. The municipal drop-off depots (i.e. transfer stations) have also been inherited from the former townships, many of which are closed landfills, which pose some challenges.

In 2002, recycling collection was added to all curbside service areas. In 2015, all waste stream collection (garbage, bulk items, and recycling) was combined into one contract, moving away from the various number of contractors providing varying levels of service.

Currently, waste collection and disposal services are provided to more than **36,000** households in the curbside service area and nearly **9,000** households in non-curbside areas each week.

The areas with curbside collection are:

1. Blenheim
2. Bothwell
3. Chatham & Fringe
4. Dealtown
5. Dresden
6. Erieau and Erie Beach
7. Highgate
8. Howard (South of Hwy 401 only and includes Morpeth & Bates Subdivision)
9. Merlin
10. Ridgetown
11. Romney
12. Rondeau Bay Estates
13. Shrewsbury
14. Thamesville
15. Tilbury
16. Wallaceburg & Fringe
17. Wheatley

WM services are provided to ensure proper management of waste generated by Chatham-Kent residents. It offers an avenue for residents to eliminate or minimize the health risks associated with accumulated household waste or its accumulation. Chatham-Kent's waste diversion efforts and multiple material recycling streams offered through the municipal drop-off depots also contribute to the Province of Ontario's source recovery and waste diversion targets in addition to its waste management standards.

Chatham-Kent's municipally owned waste drop-off depots (i.e. transfer stations) have been inherited from the former townships in which curbside waste collection service was not available. These drop-off depots remain in use for the same purpose, primarily serving residents in areas outside of the Curbside Service Area. Five of the eight waste drop-off depots offer all Chatham-Kent residents the option to properly dispose of batteries, tires, used oil, automotive engine filters, scrap metal, fillable and non-fillable tanks, and automotive liquid containers. The nine leaf and yard waste drop-off depots provide residents with an option to divert this waste from the landfill stream, especially those without curbside collection services. They allow for the resource recovery of this material by grinding it into mulch for use in local agricultural applications. At each site, mulch is made available free of charge to any resident who needs it.

Apart from the essential role WM plays in residents' health and environmental advantages, reducing waste volumes at the Ridge landfill, owned by Waste Connection Canada (WCC), leads to increased rebates for the Municipality under the Host Community Agreement.

The users of WM services throughout the Municipality include the following:
Curbside Service:

- More than **36,000** households, representing about 80% of CK's population
- **17** service areas, including most urban settlements and two rural communities
- Garbage and bulk item collection from eligible residential and commercial property owners/occupants

Depot (Transfer Station) Service - garbage and recycling collection:

- About **9000** households, representing about 20% of CK's population
- Primarily rural residents, not business owners
- Small businesses/contractors can dispose of refuse only at two of the eight sites for a fee
- More than **5000** vehicles visit the eight sites weekly (based on 2021 data)

Depot Service - leaf and yard waste collection:

- Open to all CK residents, not businesses
- Most leaf and yard waste are accepted, with some size and/or volume limitations
- Customer count spikes in spring and fall

Depot Service - waste diversion/other waste collection:

- Available for all CK residents, not business owners
- Includes tires, used automotive oil, scrap metal, fillable/non-fillable tanks (e.g. propane tanks), automotive liquid containers, all kinds of batteries, electronics, and engine filters
- Not all diversion programs are available at all eight sites.

Harwich Transfer Station

Figure 1 below identifies the locations of the WM and Leaf/Yard depots throughout Chatham-Kent.

Figure 1: Waste and Leaf/Yard Depot Locations

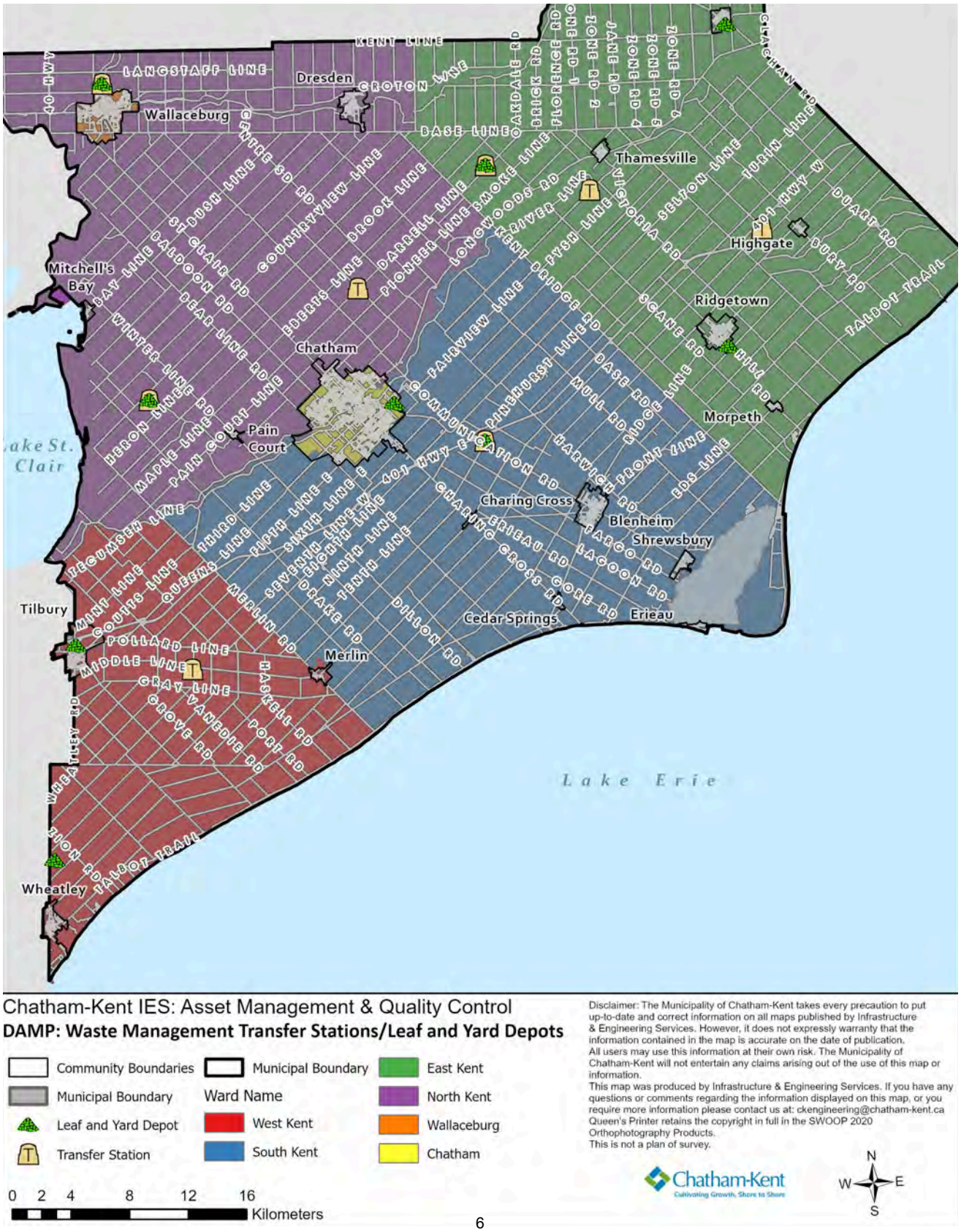


Table 2.1: Key Stakeholders in the DAMP

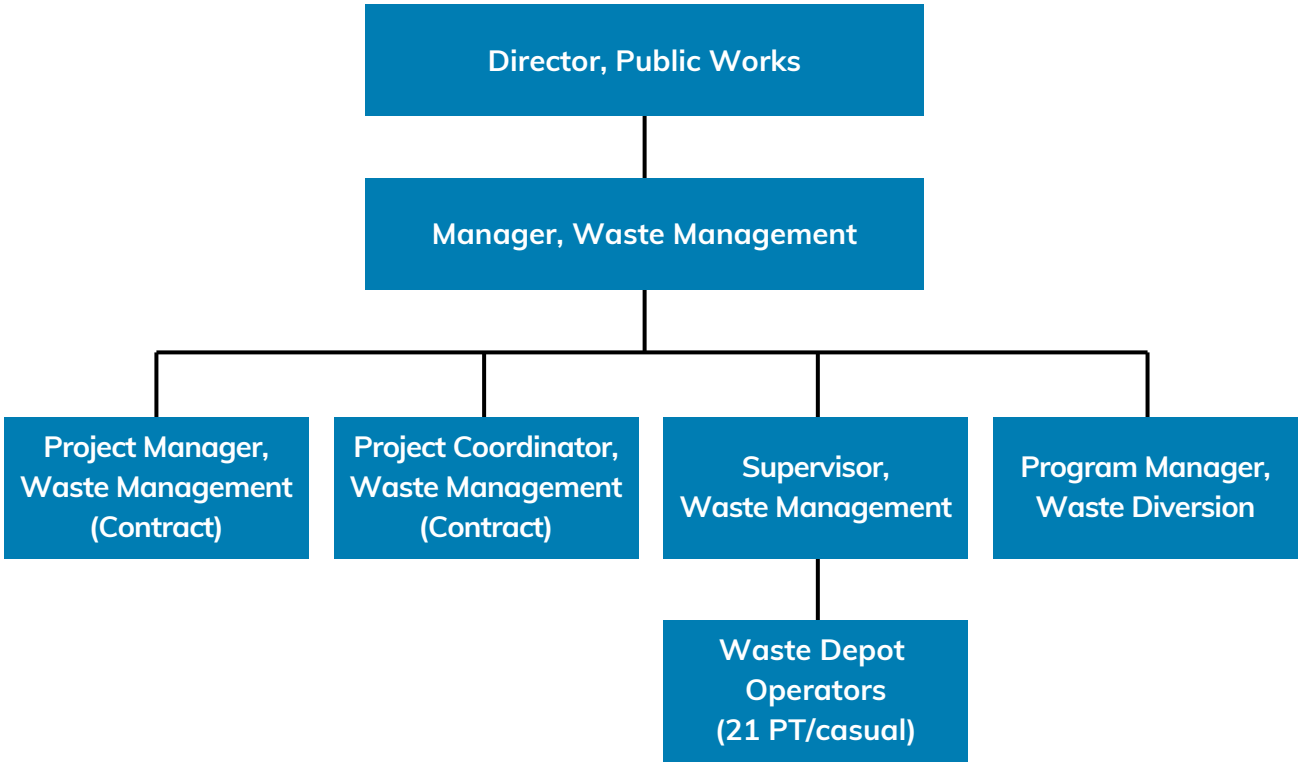
Key Stakeholder	Role in Asset Management Plan
Chatham-Kent Council	• Distribute resources to achieve planning objectives in service provision while effectively mitigating risks. • Support asset management initiatives to enhance understanding and guide decision-making. • Allocate funding to sustain the desired level of service throughout the entire life cycle.
Mayor/CAO	• Advocate for and champion the adoption of asset management principles within the organization. • Guarantee the availability of sufficient resources to foster the development of staff knowledge and skills, facilitating the implementation and ongoing enhancement of asset management practices.
General Manager, Infrastructure and Engineering Services	• Allocate resources to meet the organization's objectives in providing services while managing risks. • Overall responsibility for Asset Management, provide leadership in influencing decision-making processes related to Asset Management.
Manager, Asset and Quality Management	• Overall responsibility for Asset Management, • Ensure funds are invested appropriately to ensure best value for money is delivered to the community. • Provide leadership in influencing decision-making processes related to Asset and Quality Management.

Key Stakeholder	Role in Asset Management Plan
Director, Public Works	• Provide leadership and direction for effective Asset Management, • Ensuring Asset Management services are provided in accordance with the corporate plan and organization priorities, • Ensure the customer experience and services are a high priority, • Prepare budget submissions in accordance with the AMP, • Manage the regulatory requirements and safety management system, • Ensure the overall message and actions proposed in the AMP are achievable and are aligned with the organization's service requirements and the long-term financial plan.
Manager, Waste Management	• Provide leadership for effective Asset Management, • Ensure Asset Management services are provided in accordance with the corporate plan and organization priorities, • Ensure the customer experience and services are a high priority, • Develop Waste Management business plans that align with Council objectives and the asset management plan, • Prepare budget submissions in accordance with the AMP, • Manage the regulatory and health and safety requirements, • Deliver maintenance, renewal and upgrade projects, • Ensure assets are safe, secure, clean and well maintained, and environmental issues are effectively managed
Finance Team	• Provide financial accounting for assets.
Community	• Be aware of levels of services and costs, • Participate in consultation processes, • Provide feedback on services.

Waste Management Organizational Structure

Chatham-Kent's WM organizational structure for service delivery from infrastructure assets is detailed below in **figure 2.1**.

Figure 2.1: Service Assets



The third-party contract, including curbside waste collection, depot waste haulage, leaf and yard waste grinding, and closed landfill monitoring, is managed by the Waste Management Team. The current primary contractor, Waste Connects of Canada, provides curbside refuse and bulk item collection on behalf of the Municipality. This contract's term is set to end in December 2028, with extension options.

2.2 Asset Hierarchy & Registry

An asset hierarchy provides a framework for structuring data in an information system to assist in data collection, reporting, and decision-making. The hierarchy includes the asset class and components used for asset planning and financial reporting, as well as the service level hierarchy used for service planning and delivery.

An asset registry is a single data source containing an inventory of asset data, including attribute information for each asset. This attribute information includes a record of each asset, including condition, age, replacement cost, and asset-specific information (e.g., length, diameter, material, etc.). The WM asset registry is currently structured as an asset hierarchy, explained below.

Chatham-Kent is working towards establishing a functional asset hierarchy, which means the hierarchy has been established based on what the asset owner needs or wants the asset or system to do. Generally, assets and systems are organized according to their primary function.

The service hierarchy is shown in **Table 2.2.1.**

Table 2.2.1: Asset Service Hierarchy

Service Hierarchy	Service Level Objectives
Facilities (Waste Depots)	Provide conveniently located waste drop off depots for members of the public that require the service
Technology	Provide sufficient technology and software to enable WM to deliver services effectively

Asset Registry

WM utilizes various assets to provide WM services, most of which are related to the waste drop-off depots. These assets include the buildings and trailers located at seven locations, equipment used to compact, transport, and weigh waste, and a vehicle utilized by the Supervisor of Waste Operations.

The assets included in this DAMP are shown in **Table 2.2.2**.

Table 2.2.2: Service Assets

Asset Category	Description (average)	Age or Average Age	Average Condition	Avg Estimate Service life Remaining	Current Replacement Value
Waste Depot Sites and Site Works	Land related to the waste/leaf and yard (LYD) depots	35 years	Fair	-	**$14,666,000**
	Grounds - Milling, Gravel & Asphalt Roads	6-26 years		30-40 years	
	Asphalt and Concrete Pads	30 years		30 years	
	Gates & Jersey Barriers, Guardrails	13-28 years		10-20 years	
	Fencing	37 years	Fair	3 years	
Structures (Waste Depot facilities)	Structures (buildings, sheds, trailers, etc.) related to the waste depots	32 years	Good	25-30 years	**$4,308,000**

Asset Category	Description (average)	Age or Average Age	Average Condition	Avg Estimate Service life Remaining	Current Replacement Value
Vehicles	1 Truck	0 years	Very Good	8 years	**$871,000**
	2 Backhoes	12 years	Fair	0 years	
	1 Loader	1 year	Very Good	14 years	
	2 Lift Trucks	22 years	Fair	0 years	
Equipment	1 Weight Scale	44 years	Good	16 years	**$1,632,000**
	8 Compactors	24 years		11 years	
	58 Roll-off Bins - Open/Closed	10-30 years		10-15 years	
Technology	6 laptops, 6 cellphones	1 year	Very Good	3 years	**$16,800**
				Total Rep Value	**$21,494,000**

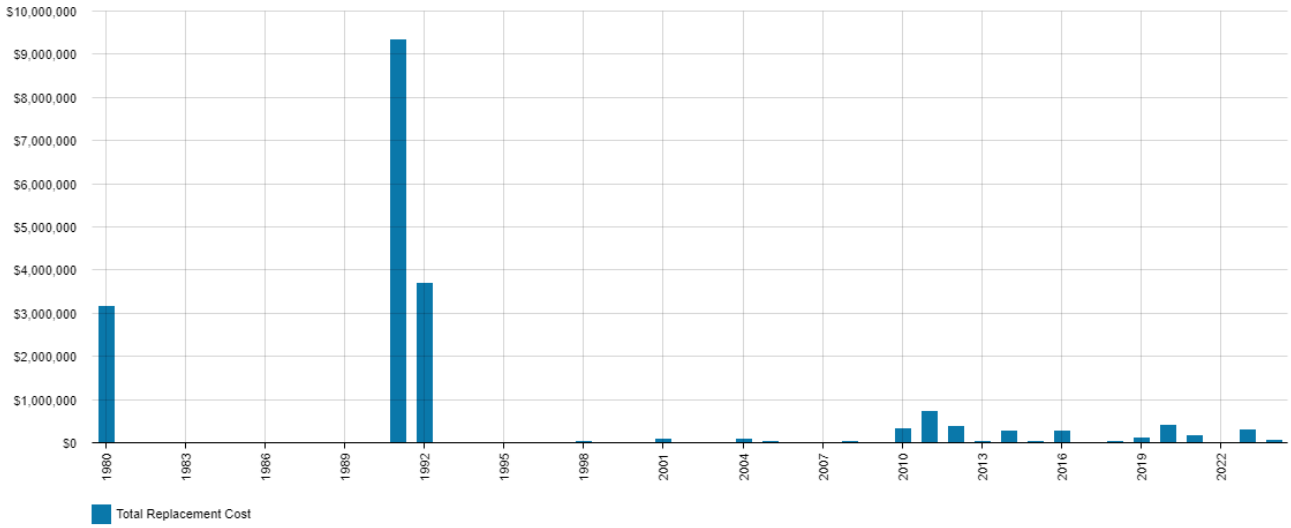
All values are shown in 2024 dollar values.

The initial plan attempts to include all assets required to deliver the WM services. However, it is acknowledged that as this is the first DAMP, additional assets will be included in the future. As the assets are acquired, disposed of, discovered, or considered material enough, they will be included in future plans. Various asset parameters such as age, condition, estimated service life, and replacement costs will be updated regularly to ensure the plan's data confidence is sufficient to support evidence-based investment decisions.

Forklift at Tilbury East Waste Depot

Waste Compactor at Tilbury East Waste Depot

Figure 2.2.3 Assets Age Profile Graph



All figure values are shown in 2024 dollar values.

The age graph demonstrates the long-lived nature of WM's assets. Most of the high-value assets that predate 1992 are the acquisitions of waste depots across Chatham-Kent. The spikes in investment dollars from 2010 onwards represent the investment made in equipment and site work improvements for the waste depots.

2.3. Asset Condition

The condition rating communicates the necessary maintenance for an asset to either return to an improved state, remain operational or achieve its expected lifespan. Condition is the leading indicator for maintenance activities.

WM currently employs multiple methods to monitor the condition of its assets. Most asset conditions are determined by age or staff knowledge. In 2024, a standardized assessment of building conditions was carried out to assess facility condition ratings. In the future, WM intends to create and implement a condition rating system for all critical assets to assist in future planning.

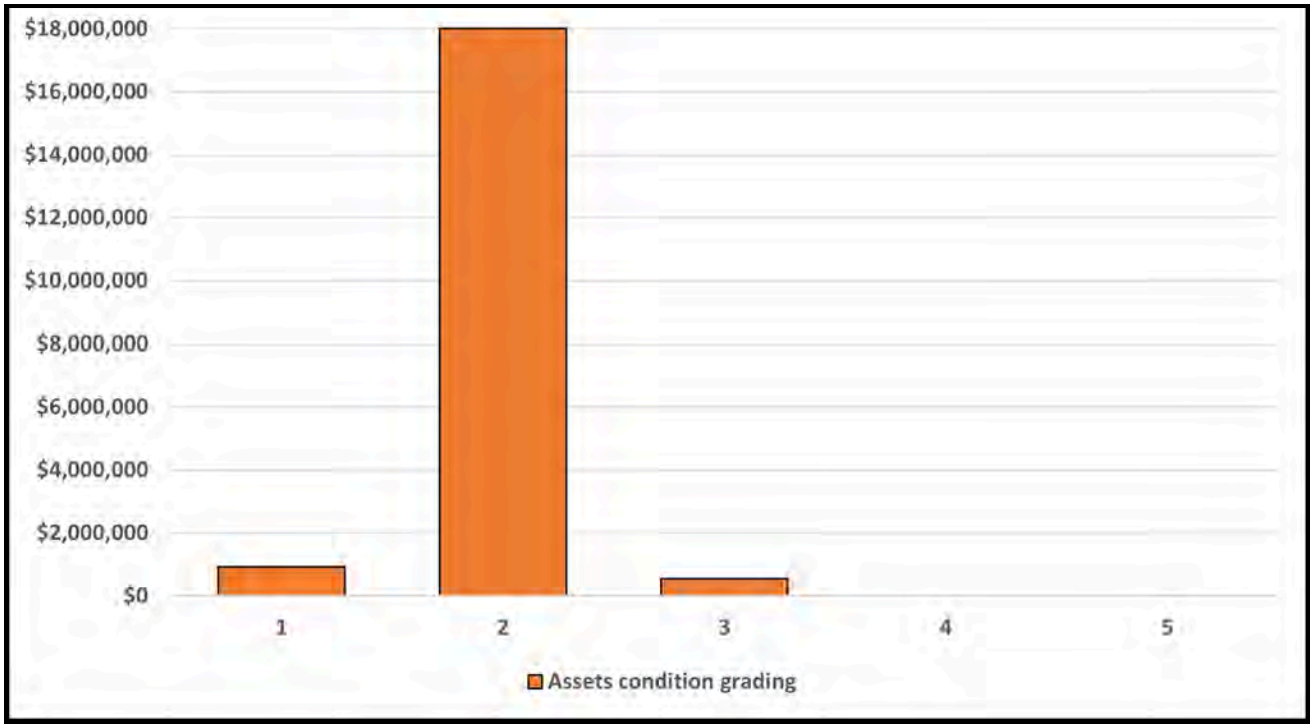
Conditions will be measured using a 1 – 5 grading system in future iterations of the plan, as detailed in **Table 2.3.1**. A consistent approach must be used in reporting asset performance, enabling adequate decision support. A finer grading system may be used at a more specific level; however, for reporting in the DAMP, results are translated to a 1 – 5 grading scale for ease of communication.

Table 2.3.1: Condition Grading System

Condition Grading	Description of Condition
1	**Very Good**: free of defects, only planned and/or routine maintenance required
2	**Good**: minor defects, increasing maintenance required plus planned maintenance
3	**Fair**: defects requiring regular and/or significant maintenance to reinstate service
4	**Poor**: significant defects, higher order cost intervention likely
5	**Very Poor**: physically unsound and/or beyond rehabilitation, immediate action required

The condition profile of WM assets is shown in Figure 2.3.2.

Figure 2.3.2: Asset Condition Profile



Currently, most WM assets are in good condition, mainly due to the long useful life of most of its assets. WM will formalize its inspections to correspond with a condition score in future iterations of the DAMP.

2.4. Asset capacity and performance

Assets are generally provided to meet design standards where available. However, there are insufficient resources to address all known deficiencies. Locations where deficiencies in service performance are known are detailed in **Table 2.4.1**.

Table 2.4.1: Known Service Performance Deficiencies

Location	Service Deficiency
Chatham Township Transfer Station	• Replacement of domestic hot water heater in washroom • Emergency lighting and illuminated exit signs are required • Chain-link fence to the north side of the property is damaged and needs replacement
Dover Transfer Station	• Domestic hot water heater replacement • Emergency lighting and illuminated exit signs are required • Fence adjacent to the east elevation is damaged and in need of repair
Harwich Transfer Station	• Domestic hot water heater replacement • Replacement of overhead/roll-up doors on east and west elevation of the building
Wallaceburg Transfer Station	• Repair required of the concrete superstructure of the building • Replace the metal siding of the building that is damaged • A steel man-door is missing and requires re-installation on the west elevation of the building • 3 Steel roll-up doors need replacement • Chain-link fencing along the northwest corner of the property is in need of repair
Howard Transfer Station	• Engineered drainage system needed to keep grounds in good condition • Operator shelter requires replacement
Orford Transfer Station	• Operator shelter requires replacement

The above service deficiencies were identified from the 2024 building condition assessments (BCAs). The above deficiencies were identified as being the most significant for 2024/2025.

Interior siding at the Wallaceburg Waste Depot

3.0 LIFECYCLE MANAGEMENT

The lifecycle management plan will detail how WM plans to operate the assets at the agreed-upon levels of service by managing their lifecycle costs. These costs are categorized by lifecycle phases: **acquisition, operations, maintenance, renewal,** and **disposal**. It is budget-based but will evolve into a full lifecycle approach by 2027, where appropriate.

Once Chatham-Kent's WM acquires an asset, the Municipality must fund the remaining lifecycle costs, such as operations, maintenance and likely inevitable renewal. These other lifecycle costs are far more significant than the initial construction or purchase cost and are often multigenerational. Since lifecycle costs are spread across multiple decades, Waste Management must approach its asset planning with a long-term view to ensure it effectively manages the asset and assists in making informed choices.

3.1 Acquisition Plan

Acquisitions are the lifecycle activities that add new assets that did not exist before or improve an existing asset's capability or function. These acquisitions may result from growth, council priorities, donations, demands, and social or environmental needs. The costs associated with acquisitions include design, training, consulting, purchase costs, and staff time to ensure the asset is ready for service and can be considered 'fit for use.'

3.1.1 Selection criteria

Proposed acquisition of new assets and upgrades of existing assets are identified from various sources such as community requests, proposals identified by strategic plans or partnerships with others. Potential upgrades and new works should be reviewed to verify that they are essential to WM's needs. The proposed upgrade and new work analysis should also include the development of a preliminary renewal estimate to ensure that the services are sustainable over the longer term. Verified proposals can then be ranked by priority and available funds and scheduled for future work programs.

The increase in the level of service criteria may be driven by Council direction, new legislative requirements, and/or customer demands. Operational improvements may be applied to currently owned services or taken on typically contracted services in-house. These include improved health and safety of staff and customers as well as improved access to WM service. Should a significant workload increase occur, an increase in staffing will be needed, which will require the acquisition of employee-related assets such as technology and fleet. The priority ranking criteria are detailed in **Table 3.1.1**.

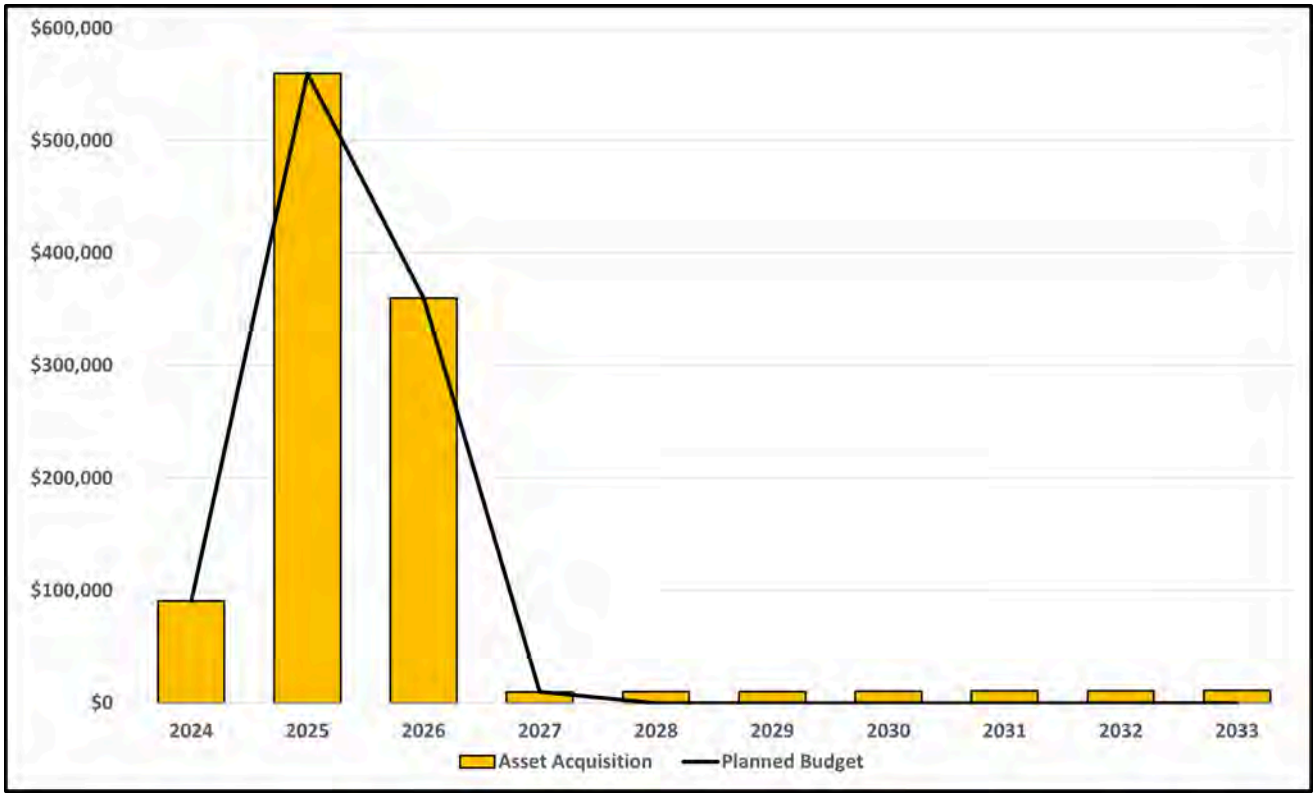
Table 3.1.1: Acquired Assets Priority Ranking Criteria

Criteria	Weighting
Increase to Level of Service	40%
Operational Improvements	40%
Increase in Staffing	20%
Total	100%

Summary of future asset acquisition costs

Forecast acquisition asset costs are summarized in **Figure 3.1.1** and shown relative to the proposed acquisition budget. At this time, the acquisitions WM will undertake during the 10-year planning period are the purchase of a truck and new computer software/ laptop in 2024, WM bins in 2025, and equipment related to the organics program starting in 2025 and 2026. Approximately **$10,000** is budgeted every year for WM to acquire waste collection equipment such as backyard composters and collection carts.

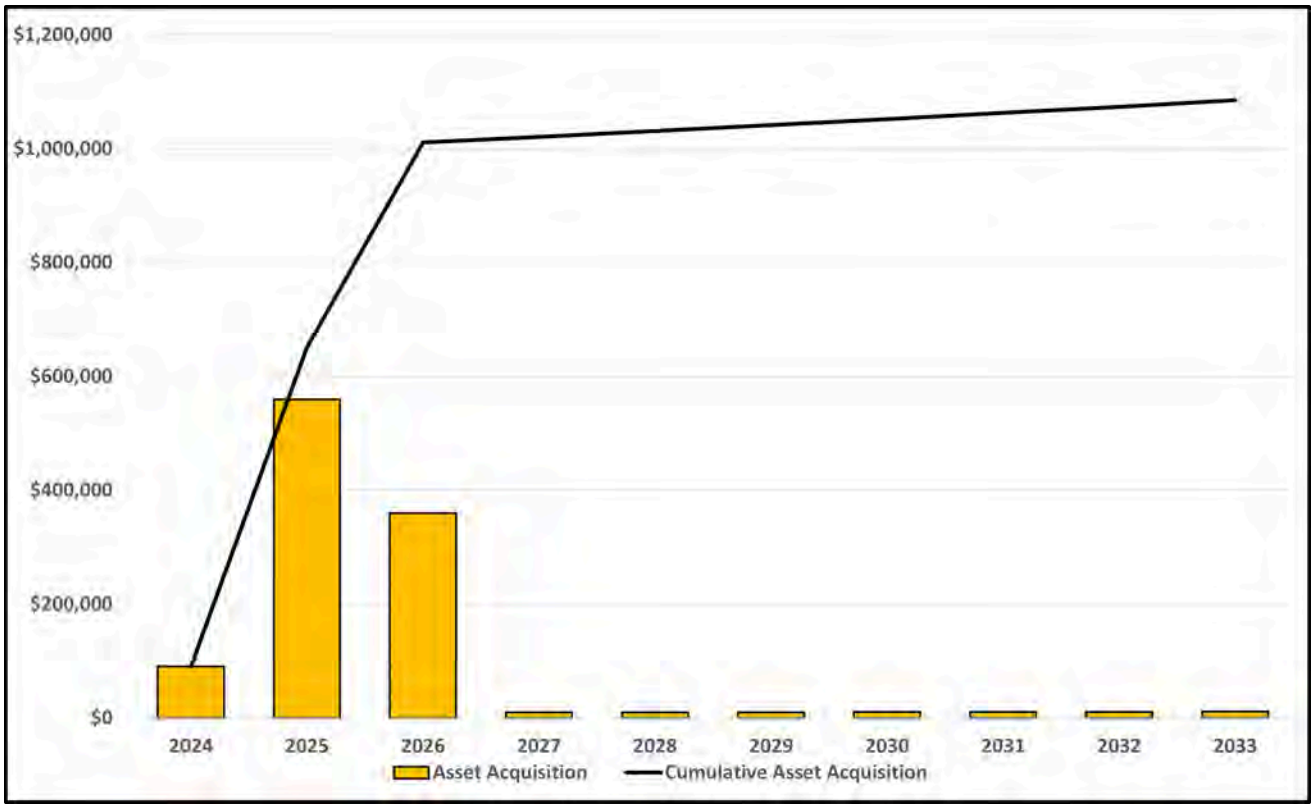
Figure 3.1.1: Acquisition (Constructed) Summary



All figure values are shown in 2024 dollar values.

When CK commits to new assets, it must be prepared to fund future operations, maintenance, and renewal costs. It must also account for future depreciation when reviewing long-term sustainability. When examining the long-term impacts of asset acquisition, it is useful to consider the cumulative value of the acquired assets being taken on by CK. The cumulative value of all acquisition work, including assets that are constructed and contributed, is shown in **Figure 3.1.2**.

Figure 3.1.2: Acquisition Summary



All figure values are shown in 2024 dollar values.

Expenditure on new assets and services will be accommodated in the long-term financial plan (LTFP), but only to the extent of available funding. At this time, there are sufficient reserves to acquire the planned acquisitions.

3.2 Operations Plan

Operations encompass routine tasks to support WM service delivery. Everyday operational activities include staff costs, contract costs, advertising, fuel, facility utility expenses, and annual software fees. These tasks are essential for the service's daily operations.

WM is a service driven by its personnel and contractors, and the costs associated with employees and contracts constitute a substantial part of the operational investment required to provide WM services. For WM to function efficiently and effectively, substantial staffing is necessary to attain the desired service level. Currently, WM has five office staff members, two of whom are on 1-2 year contracts and 21 part-time or casual waste depot operators. In addition, the Manager of WM manages the contract for the curbside waste pick-up throughout the Municipality, which is valued at more than $7.5 million per year. WM resident inquiries represent the second highest number of inquiries (in-person, email and phone) received by customer service staff, many of which are fielded by the WM team staff.

WM technical and administrative staff ensure WM services are delivered effectively and efficiently throughout the Municipality by responding to WM inquiries/complaints, conducting public education, determining the feasibility of new programs (Organics, recycling, etc.), overseeing waste site operations, and grounds maintenance and upgrades. Waste depot operators ensure that the waste drop-off depots are smoothly operated, safe, secure, and clean while applying operational policies and procedures and handling funds/payments.

Over the 10-year planning period, WM forecasts it will invest in the following:

- **$9,252,000** in staff cost
- **$104,488,000** in contract-related expenses
- **$845,000** on promotional expenses
- **$200,000** on a Waste Management Master Plan in 2025, to be completed every ten years

Regular operational activities would be beneficial for reporting on the costs each year. At the time of writing this DAMP, it was not possible to adequately separate some of the costs to detail how much is invested each year for specific programs such as community education, organics program development, etc. Over the next three years, WM will make an effort to separate those costs to ensure that they can be included in the operational explanations and connect the costs to specific technical levels of service.

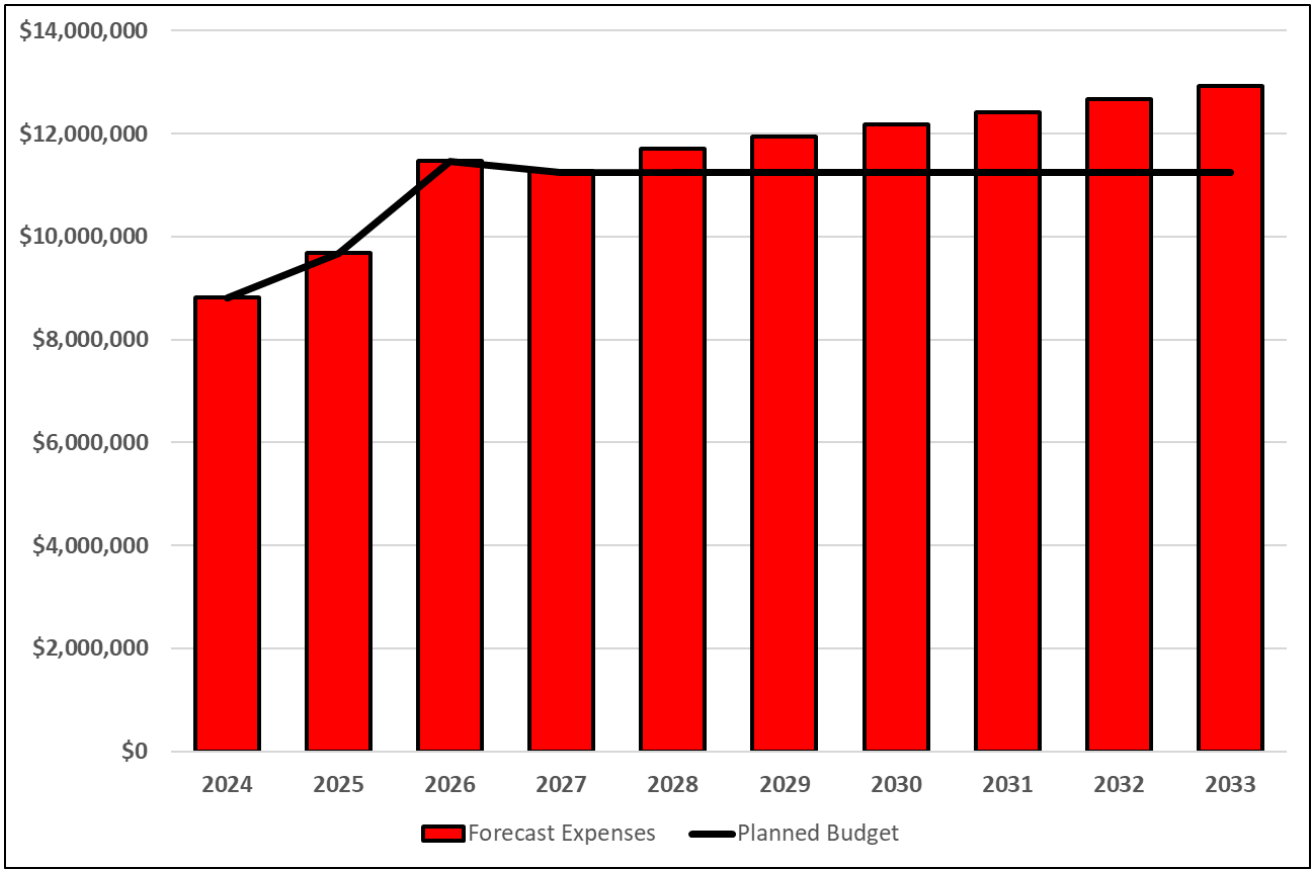
Other influences that will impact the operational budget include inflation, wage negotiations, regulatory requirement changes, and changes to levels of service. These impacts will be considered in greater detail in future DAMPs.

Summary of forecast operations costs

Forecast operations costs are expected to vary in relation to the total value of the asset stock. If additional assets are acquired, future operations costs are forecasted to increase. If assets are disposed of, forecast operations costs are expected to decrease. Changes in levels of service directed by the council will also affect the operational forecasts.

Figure 3.2.1 shows the forecast operations costs relative to the proposed operations Planned Budget.

Figure 3.2.1: Operations Summary



All figure values are shown in 2024 dollar values.

The operational budget levels are insufficient to meet the projected service levels throughout the ten-year planning horizon. This is partly due to inflationary projections of 2% each year past 2027. The WM curbside collection contract, which is typically renewed every seven years, impacts these costs and will need to be monitored for accuracy in the projections and the budget. Where operational budget allocations may lead to reduced service levels, the associated service consequences and risks, where possible, have been identified. They are emphasized in the DAMP, with service risks considered in the Infrastructure Risk Management Plan. Future iterations will more effectively communicate the consequences of an insufficient budget once the service levels are established in 2025.

Waste Management is responsible for the following activities:

- Supervising 20+ part-time operations staff
- Overseeing closed landfills' monitoring programs
- Managing waste management assets
- Managing vendors (e.g., awards, appointments, performance, payments, etc.)
- Coordinating producer responsibility organizations (PROs) and collection programs for various waste streams
- Liaising with and reporting to regulatory bodies, industry & professional organizations
- Implementing annual projects to promote proper waste disposal practices
- Managing the Division's budget and accounts
- Developing and recommending strategic direction for the Division
- Participating in corporate planning and performance-based activities
- Managing CK's waste inventories and reporting

There are eight (8) transfer stations (i.e. drop-off depots) throughout Chatham-Kent, primarily servicing residents who still need curbside collection. In an average week in 2020-2021, more than 5,000 vehicles utilize these sites to dispose of garbage, blue box recyclables, and a variety of recycled materials presented in **Figure 3.2.2** below.

Figure 3.2.2: Summary of Waste Transfer Stations and Associated Recycling Program Services

Recycling Program	Blue Box	Hazardous Waste						Electronics	Metals	Tires
Transfer Station	Residential Recycling	Empty gas tanks	Used filters	Refrigerants	Antifreeze & lubricants	Used oil	Batteries	E- Waste	Scrap metal	Tires
Camden	✓	✓		✓			✓	✓	✓	✓
Chatham Township	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Dover	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Harwich	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Howard	✓	✓		✓			✓	✓	✓	✓
Orford	✓	✓		✓			✓		✓	✓
Tilbury East	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Wallaceburg	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

Table 3.2.3: Operations Budget Trends

Year	Operations Budget
2024	$ 8,800,000
2025	$ 9,100,000
2026	$ 11,000,000
2027	$ 11,200,000

Waste bin at Orford Waste Depot

Dover waste depot, 25280 Big Pointe Road, Grande Pointe

3.3 Maintenance Plan

Maintenance should be viewed as the ongoing management of deterioration. The goal of planned maintenance is to proactively apply the appropriate interventions to assets, ensuring they achieve their intended useful life. Maintenance doesn't substantially prolong the life of an asset; it is the actions necessary to enable assets to meet their expected lifespan by restoring them to a preferred 'improved' condition.

Proactive maintenance planning dramatically diminishes the need for reactive maintenance, which carries a greater risk to human safety and incurs higher financial costs. It is crucial for Chatham-Kent to strategically plan and adequately fund its maintenance activities to guarantee the reliability of WM assets and the achievement of the expected service level.

Examples of typical maintenance activities include equipment repairs, scale repair, replacements, component replacements, and a new roof on a waste depot, along with the appropriate staffing and material resources required to perform these activities. WM will strategically plan and adequately finance its maintenance activities to maintain the desired service level.

Summary of forecast maintenance costs

Forecast maintenance costs are expected to vary in relation to the total value of the asset stock. If additional assets are acquired, future maintenance costs are forecasted to increase. If assets are disposed of, forecast maintenance costs are expected to decrease. Some of the major maintenance items that the BCAs have identified for the next few years include the following:

2024 (deferred due to current budget)

- Repair of concrete block walls at Wallaceburg waste depot
- install new steel-man door and frame on the west elevation of the building at Wallaceburg waste depot
- replace the damaged steel roll-up doors and repair any non-functional motors at the Wallaceburg waste depot

2025

- Replacement of the domestic water heater at Harwich waste depot
- Replacement of damaged metal siding on the east and south elevation of the Wallaceburg waste depot building
- Repair fencing at the Wallaceburg waste depot
- Replacement of the floor drainage conduit at the Harwich waste depot (HO: that should be on Facilities radar for 2025)
- Replacement of the operator shelter at Orford and Howard waste depots (HO: have been identified to have black mold and hence dangerous for operator safety)

2026

- Replacement of metal siding at the Chatham Township waste depot
- Repairs to a fencepost at the Chatham Township waste depot
- Sealing of cracking within the concrete floor slab at the Dover waste depot

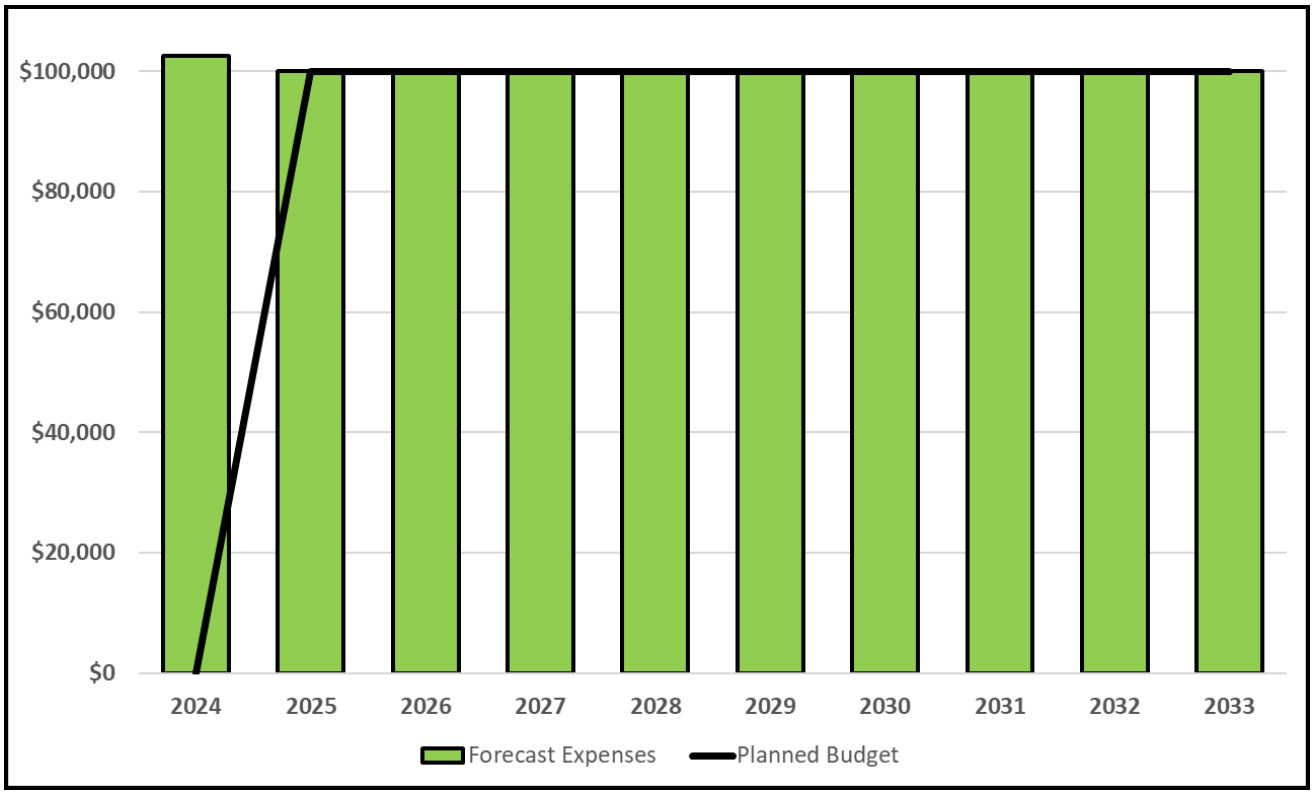
Emergency Lighting required at Dover waste depot

Replacement of domestic hot water heater required at Dover waste depot

Equipment stored at Dover waste depot

F**igure 3.3.1** shows the forecast maintenance costs relative to the proposed maintenance Planned budget. Currently, the forecasted depot maintenance costs for the next ten years are a cumulative of $557,000, based on the 2024 BCA results, which examined the structures at five of the eight waste depots. The majority of the annual $100,000 budget will be spent as per the recommendations of the WM and Public Works site assessment study, which will recommend actions to improve the layout, accessibility, health and safety, and grounds condition at the said site. In addition, this budget will be used to implement the recommendations from the BCAs. A total of $900,000 has been budgeted for WM maintenance costs for the ten years. This will cover the above-mentioned forecasted depot maintenance costs (as per the BCAs), leaving a variance of $343,000, which will be put into a reserve fund to be used for future maintenance projects.

Figure 3.3.1: Maintenance Summary



Maintenance budget levels are considered to be adequate to meet the current projected service levels with the long-term financial plan. The maintenance budget is insufficient for the first-year forecast. However, there are additional funds available throughout the 10-year planning period to cover the cost. The total maintenance costs will be known at the end of 2024 when the site assessment studies are conducted on the WM and public works sites. Additional budget may be required as a result of the studies. The DAMP highlights service risks, and the Infrastructure Risk Management Plan considers service risks. Staff assess and prioritize reactive maintenance using experience and judgment.

The total costs of vehicular maintenance and facilities maintenance will be known once further work can be done with internal staff and the information provided in the building condition assessments. Any maintenance that cannot be funded will be deferred. Deferred maintenance (i.e., works identified for maintenance activities that need to be completed due to available resources).

In future iterations of DAMP (2025—Ongoing), WM will implement lifecycle models to guide maintenance activities and report on the associated costs for those assets. This will offer enhanced clarity on expenditures, informing future acquisitions, budgeting, reserve allocations, and reporting obligations. The trend in maintenance budgets is shown in **Table 3.3.2.**

Table 3.3.2: Maintenance Budget Trends

Year	Maintenance Budget
2024	$0
2025	$100,000
2026	$100,000
2027	$100,000

3.4 Renewal Plan

Renewal is major capital work that does not significantly alter the original service provided by the asset but restores, rehabilitates, replaces, or renews an existing asset to its original service potential. Work beyond restoring an asset to its original service potential is considered an acquisition, resulting in additional future maintenance costs.

Assets requiring renewal are identified from the asset register data to project the renewal costs (replacement cost) and renewal timing (acquisition year plus updated useful life to determine the renewal year). **Table 3.4.1** shows the typical useful lives of assets used to develop projected asset renewal forecasts. Asset useful lives related to WM were last reviewed on **March 1st, 2024**.

Table 3.4.1: Useful Lives of Assets

Asset (Sub) Category	Useful Life
Grounds - Gravel & Millings	40 years
Gravel Roads	65 years
Asphalt Roads	50 years
Concrete and Asphalt Pads	60 years
Jersey Barriers	50 years
Guardrails, Gates and Fencing	20-30 years
Waste Depot Building (steel and wood framed)	60 years

Asset (Sub) Category	Useful Life
Truck	8 years
Backhoes	10 years
Loader	15 years
Lift Trucks	20 years
Weight Scale	60 years
Compactors	35 years
Roll-off Bins - Open	40 years
Roll-off Bins - Closed	25 years
Laptops and Cellphones	4 years
Office Trailer	35 years

The estimates for renewals in this DAMP are based on the asset register method. As better estimates become available, the useful life of the assets may change in future iterations of the DAMP.

Backhoe at Dover waste depot due for renewal

3.4.2 Renewal ranking criteria

Asset renewal is typically undertaken to either:

- Ensure the reliability of the existing infrastructure to deliver the service it was constructed to facilitate (e.g. replacing a Fire Hall with one of similar size and capacity) or
- To ensure the infrastructure is of sufficient quality to meet the service requirements (e.g. purchasing a backhoe or new weight scale).

WM will prioritize renewals by identifying assets or asset groups that:

- Have a high consequence of failure,
- Having high use and the subsequent impact on users would be significant,
- Have higher than expected operational or maintenance costs and
- It can potentially reduce lifecycle costs by being replaced with a modern equivalent asset that provides the equivalent service.

The ranking criteria used to determine the priority of identified renewal proposals is detailed in **Table 3.4.3.**

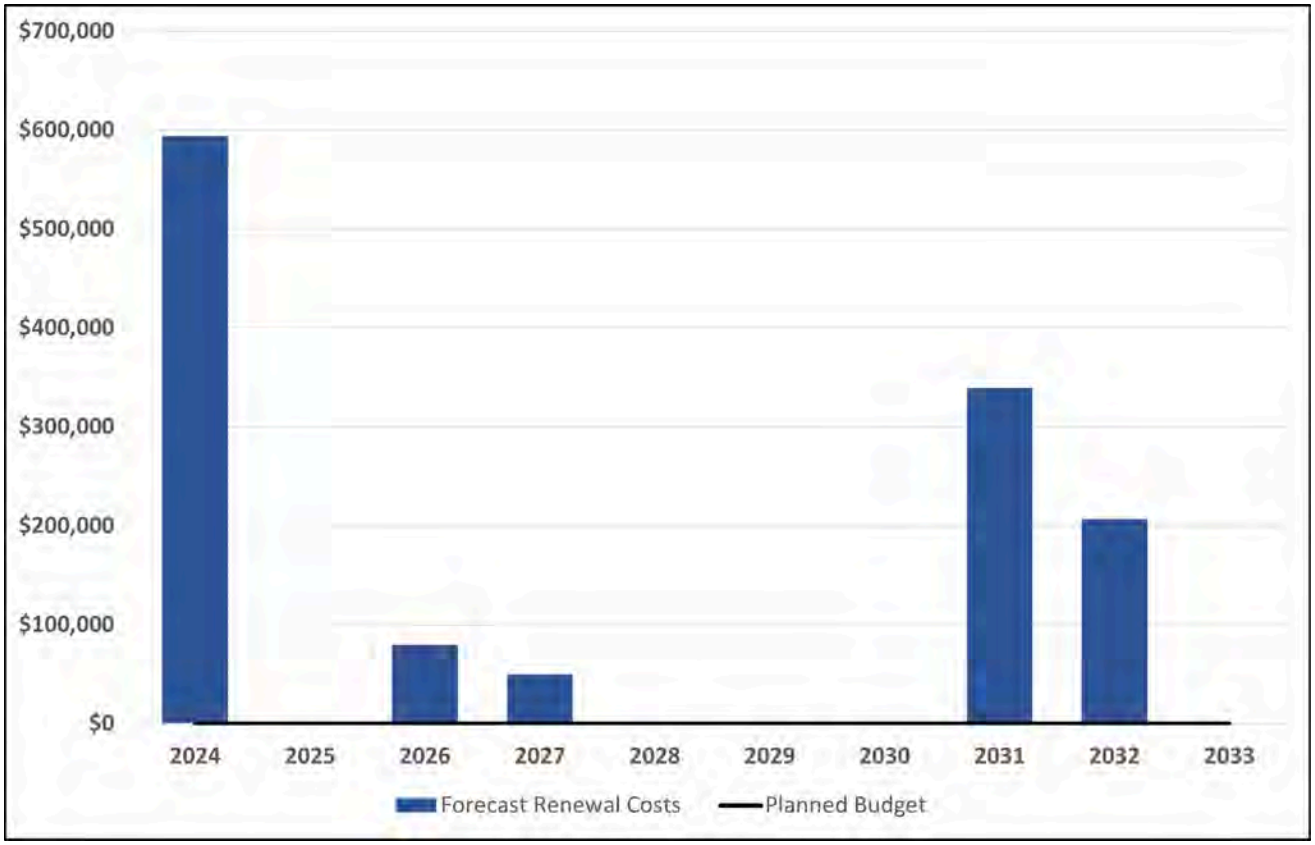
Table 3.4.3: Renewal Priority Ranking Criteria

Criteria	Weighting
Critical Asset Condition	40%
Legislative Requirements	20%
Health and Safety	20%
Lifecycle Cost Savings	10%
Council Strategic Priorities	10%
Total	**100%**

3.5 Summary of future renewal costs

Forecast renewal costs are projected to increase if the asset stock increases. In **Figure 3.5.1,** the forecast costs associated with renewals are shown relative to the proposed renewal budget.

Figure 3.5.1: Forecast Renewal Costs



All figure values are shown in 2024 dollar values.

The graph shown in **Figure 3.5.1** shows the intended renewals. At this time, there are insufficient funds allocated over the entire 10-year planning horizon to complete all planned renewals at this time.

Renewals over the next 10-year planning window include the following,

WM must invest approximately **$1,268,000** in renewals. This will include the following:

- **2024**: Compactor, fencing, gates, bin, two lift trucks and two backhoes
- **2026**: 2 compactors
- **2027:** compactor, laptops and cellphones (6 each)
- **2031** - **2033**: fencing, gates, bins (24), truck

Assets maintained beyond their expected useful life are marked as backlog items on the graph, which may increase operational and maintenance costs if their service is extended. This Estimated Service Life (ESL) plan is based on industry best practices. Lifecycle models will be developed to confirm these assets' optimal ESL and evaluate their current lifespans.

Possible strategies to mitigate costs over the planning period will be explored during continuous improvement exercises and will include the following:

- Determining if ESLs can be extended on vehicles to reduce renewal needs
- Complete Lifecycle models for each type of equipment to forecast funding requirements over the entire ESL and optimize the timing of renewal
- Coordinate the timing of renewals to reduce large spikes in renewal needs

Smoothing out the funding envelope for renewals throughout the planning process will ensure that budgeting needs can be forecasted accurately and minimize the administrative burdens on the procurement process.

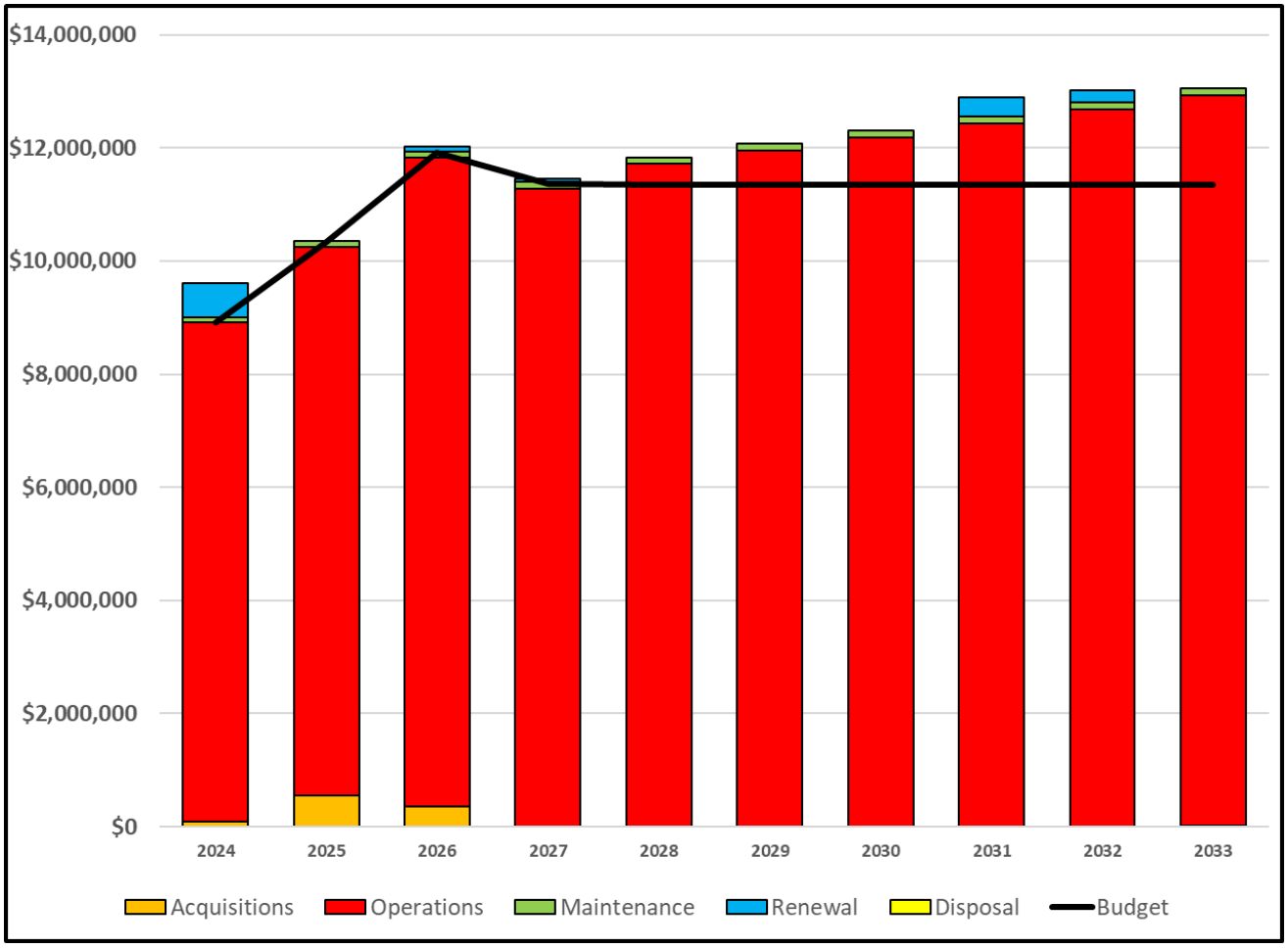
3.6 Disposal Plan

Disposal encompasses activities related to the decommissioning of assets that are not slated for renewal. These activities include the sale, demolition, environmental testing and remediation, soil and asbestos remediation, and relocation. WM has disposed of depot assets in 2024 through the sale of roll-off bins used for recycling collection as a result of the Blue Box Program transition to Extended Producer Responsibly. Presently, WM has no other disposal plans within the 10-year planning horizon. Any costs or revenues from asset disposals will be accounted for in the long-term financial plan. Should any disposals be identified in the future, they will be reported in this section of the DAMP.

3.7 Summary of asset forecast costs

The financial projections from this asset plan are shown in **Figure 3.7.1**. These projections include forecast acquisition, operation, maintenance, renewal, and disposal costs. These forecast costs are shown relative to the proposed budget.
The bars in the graphs represent the forecast costs needed to minimize the lifecycle costs associated with the service provision. The proposed budget line indicates the estimated amount of available funding. The gap between the forecast work and the proposed budget is the basis of the discussion on achieving the balance between costs, levels of service and risk to achieve the best value outcome.

Figure 3.7.1: Lifecycle Summary



All figure values are shown in 2024 dollar values.

During the majority of the planning period, there were sufficient funds to operate generally with little to no impact on the levels of service provided. However, over the life of the plan, WM will have insufficient funds to ensure all assets can be renewed in accordance with the stated ESL.

Deferring renewal costs may even further exacerbate the operational shortfalls, as deferrals often lead to higher planned and reactive maintenance costs and even operational cost increases. Lifecycle models will help to inform the lifecycle projections and will be completed between 2024 and 2027. Eventually, these tradeoffs will impact WM's levels of service, such as waste depot operating hours.

4.0 LEVELS OF SERVICE

Levels of service describe the value that WM provides to the community and are typically spoken about in 'measures.' Utilizing service measures allows decision-makers to understand the outcome of investments, allowing those making choices to clearly understand how a dollar more or less will impact Chatham Kent's ability to deliver its services. These measures also enable Chatham-Kent to communicate with the public about the cost of the services they receive today and will be able to afford in the future.

Service levels are defined in four ways: legislative compliance, customer values, customer levels of service and technical levels of service.

4.1 Legislative Requirements

Meeting legislative requirements should be the bare minimum level of service Chatham-Kent provides. These requirements often drive many lifecycle costs and staff tasks to ensure that Chatham-Kent is compliant with all legislation, from Federal to Provincial or even Chatham-Kent's bylaws. There are many legislative requirements relating to asset management. A summary of some of the most applicable legislative requirements that impact the delivery of the WM service are outlined in **Table 4.1.1**.

Table 4.1.1: Legislative Requirements

Legislation	Requirement
Ontario Health and Safety Act	• Every month staff must inspect all Fire extinguishers at buildings and equipment • Lead operator or supervisor must inspect the site at least monthly to identify hazards and implement action • Appropriate signage must be placed and maintained to ensure safe traffic flow and patron safety
Site Certificate of Approval (CofA) or Environmental Compliance Approval (ECA) under Environmental Protection Act,1990 (EPA) and Ontario Water Resouces Act (OWRA), 1990	• Staff must refuse waste that is not acceptable under the CofA or ECA • All operators must complete daily operator reports regarding site conditions, waste types, and incidents • Tires must be collected quarterly from transfer stations

Legislation	Requirement
Curbside Waste Bylaw (216-2023)	A By-law to establish and maintain a system for the curbside collection of refuse within the Municipality of Chatham-Kent
Blue Box Regulation (391/21)	• CK must satisfy the operational requirements as a contractor for the PRO in relation with the collection of blue box material at waste depots. • CK must satisfy its contract obligations with the PRO in relation to the development and distribution of promotional and education materials • As a Producer, CK must track and report its supply of blue box products, such as paper, on annual basis to RPRA. In addition, CK must retain a PRO to satisfy the collection requirements.

Environmental Protection Act, 1990

Several regulations under the EPA relate to Waste Management, both directly and indirectly. The waste depots that are owned and operated by the municipality have certificates of approval (CofA), now known as ECAs, to operate legally. The CofAs that were given to the Municipality specified what types of materials could be stored on-site (at the waste depots). This is partially the reason some waste depots accept only certain types of waste and cannot, for example, accept hazardous waste.

Groundwater and surface water sampling are conducted on an annual basis at the closed Fletcher Tile Landfill, which is still owned by the Municipality. Water sampling is conducted under the historic CofA to ensure there are no negative impacts to groundwater and surface water migrating off-site.

Curbside Waste By-law

The curbside waste bylaw (effective Jan 1, 2024) identifies,

- The level of service of curbside waste collection
- Curbside collection on private roads
- Collector (waste contractor) limitations
- Resident responsibilities
- Prohibitions (what cannot be set out at the curb for collection)
- Enforcement (notices and fees)
- Appeals (of notices) and Penalty

4.2 Customer Research and Expectations

This DAMP is prepared to facilitate consultation before WM adopts levels of service. Future revisions of the DAMP will incorporate customer consultation on service levels and costs required to provide the WM service. This will assist the Council and stakeholders in matching the necessary level of service, service risks and consequences with the customer's ability and willingness to pay for the service.

4.3 Customer Value

Service levels are defined in four ways: legislative compliance, customer values, customer levels of service and technical levels of service. **Customer Values indicate:**

- what aspects of the service are essential to the customer,
- whether they see value in what is currently provided and
- the likely trend over time based on the current budget provision

Table 4.3.1: Customer Values

Customer Values	Customer Satisfaction Measure	Current Feedback	Expected Trend Based on Planned Budget
Excellent response times to waste management concerns	% of respondents that believe the response time for resolving waste issues is adequate	81% (2022)	TBD in 2025
Clean and safe waste/leaf and yard depots	% of respondents that have positive experiences using a leaf & yard depot	95% (2022)	TBD in 2025
Appropriate Level of Service for the community (hours of operation, etc.)	% of respondents that believe the transfer stations meet their needs	55% (2022)	TBD in 2025
	% of respondents that believe waste collection is managed efficiently	77% (2022)	TBD in 2025

4.4 Customer Levels of Service

The Customer Levels of Service are considered in terms of:

Condition: How good is the service... what is the condition or quality of the service?
Function: Is it suitable for its intended purpose... Is it the right service?
Capacity/Use: Is the service over or underused... does CK Waste Management need more or less of these assets?

In **Table 4.4.1,** under each of the service measure types (Condition, Function, Capacity/Use), there is a summary of the performance measure being used, the current performance, and the expected performance based on the current budget allocation.

These measures are subjective in nature; however, they are important inputs for the DAMP as they inform the desired level of service.

Used paint cans dropped off by the public at the Annual Household Hazardous Waste Day

Table 4.4.1: Customer Level of Service Measure

Type of Measure	Level of Service	Performance Measure	Current Performance	Expected Trend Based on Planned Budget
Condition	Ensure the self-serve waste management sites are accessible	% of people who feel sites need improvement related to accessibility	TBD in 2025	TBD 2025
Condition	Waste bins at drop off sites are safe to use by users and operators	% of survey respondents who rate bins to be in good or better condition	TBD in 2025	TBD in 2025
Function	Waste drop-off depots provide a convenient collection method from residents who need them	% of respondents that believe the drop off depots are in a convenient location	TBD in 2025	TBD in 2025
Function	Reliable and timely weekly collection (via contractor)	% of respondents that have had concerns over timely and reliable collection of their curbside waste in the past year	TBD in 2025	TBD in 2025

Type of Measure	Level of Service	Performance Measure	Current Performance	Expected Trend Based on Planned Budget
Function	Convenient curbside service, garbage and bulk collection, that corresonds to residents' needs	% of respondents expressing satisfaction with WM programs	TBD in 2025	TBD in 2025
Function	Ensure waste management collection programs are providing a high value to the taxpayers while maximizing diversion from the landfill stream	% of respondents that believe the WM services are good value for their money	TBD in 2025	TBD in 2025
Function	Easily accessible information and educational materials about WM programs	% of respondents that had difficulty finding information regarding WM services in the past year	TBD in 2025	TBD in 2025

Type of Measure	Level of Service	Performance Measure	Current Performance	Expected Trend Based on Planned Budget
Capacity	Ensure waste management sites' operating hours are proportional to the demand of their users	% of respondents that have difficulty accessing drop off depots due to operating hours	TBD in 2025	TBD in 2025
Capacity	Ensure waste management sites have enough capacity to collect all eligible waste dropped from customers	% of respondents that have been turned away from a waste depot	TBD in 2025	TBD in 2025

Weigh Scale, Wallaceburg Waste Depot

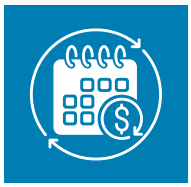
4.5 Technical Levels of Service

Technical Levels of Service – To deliver the customer values and impact the achieved Customer, Levels of Service are operational or technical measures of performance. These technical measures relate to the activities and allocation of resources to best achieve the desired customer outcomes and demonstrate effective performance. Technical service measures are linked to the activities and annual budgets covering:

Acquisition – the activities to provide a higher level of service (e.g. widening a road, sealing an unsealed road, replacing a pipeline with a larger size) or a new service that did not exist previously (e.g. a new transfer station).

Operation – the regular activities of providing services (e.g. Customer interactions, Service programs, opening hours, cleansing, mowing grass, energy, inspections, etc.

Maintenance – the activities necessary to retain an asset as near as practicable to an appropriate service condition. Maintenance activities enable an asset to provide service for its planned life (e.g. road patching, unsealed road grading, building and structure repairs),



Renewal – the activities that return the service capability of an asset up to that which it had initially been provided (e.g. road resurfacing and pavement reconstruction, pipeline replacement and building component replacement

Service and asset managers plan, implement and control technical service levels to influence the service outcomes.

Table 4.5.1 shows the activities expected to be provided under the current 10-year Planned Budget allocation and the Forecast activity requirements being recommended in this DAMP.

Table 4.5.1: Technical Levels of Service

Lifecycle Activity	Level of Service Statement	Activity Measure	Current Performance	Recommended Performance
Acquisition	Waste drop-off depots provide a convenient collection method for residents who need them	number of sites with weight scales that accept non-residential garbage	1	2
		percentage of sites with easy payment method (i.e. credit/ debit machines)	0%	100%
Acquisition	Waste drop-off depots provide a convenient collection method for residents who need them	# of WM site users per week	~5000 vehicle/week	>8000 vehicle/ week
Acquisition	Have adequate resources to provide high level of customer service, respond to unique situations and emergencies	#of staff relative to workload in WM	Less than adequate	Adequate
Operation	Waste drop-off depots provide a convenient collection method for residents who need them	Percentage of WM operators are well trained in essential operational matters, including CK values and excellent customer service	~50%	100%

Lifecycle Activity	Level of Service Statement	Activity Measure	Current Performance	Recommended Performance
Operation	Reliable and timely weekly collection (via contractor)	# of missed collections per year	~20 - 30 / year	<5/year*
Operation	Ensure waste management sites' operating hours are proportional to the demand of their users	# of vehicles/ operating hour of each site	TBD 2025	TBD 2025
Operation	Ensure waste management sites have enough capacity to collect all eligible waste dropped from customers	Number of times operators close a site before shift end	Several times a year at select sites	0
		Level of deviation of operations from existing operations procedures/policies	High (Unacceptable)	Minimal
Operation	Convenient curb side service, garbage and bulk collection, that corresponds to residents' needs	# of infractions per week	~200/week	<50/week

Lifecycle Activity	Level of Service Statement	Activity Measure	Current Performance	Recommended Performance
Operation	Easily accessible information and educational materials about WM programs	# of inquiries about common WM program	"poor to fair" ~5000 call/ year	"very good" < 1000 call/year
		Requests from education Boards/other departments	"poor to fair" a few/year	"very good" constant communications on education program development
Operation	Ensure waste management collection programs are providing a high value to the taxpayers while maximizing diversion from the landfill stream	Average Cost of Weekly Residential Curbside pickup per household	$4.70 per weekly pickup	TBD in 2025
Operation	Enough varied collection trucks (contractor's) to enable service of various waste receptacle types at the curb	% of unique circumstances that require additional resources	< 5% of collection	< 5% of collection

Lifecycle Activity	Level of Service Statement	Activity Measure	Current Performance	Recommended Performance
Operation	Maintain [contractor] collection trucks in good condition to avoid service delays or interruptions	Number of service delays or interruptions per year	8-12 times/ year	0-2 times/year
Operation	Convenient curbside service, garbage and bulk collection, that corresponds to residents' needs	% of CRM cases related to by-law infractions or curbside service complaints per week	<1%	Maintained
Operation	Mandatory groundwater sampling and reporting for closed landfill site	Annual groundwater sampling report sent to Ministry of Environment, Conservation and Parks	Completed annually $22,000 spent on sampling and reporting by consultant	Completed annually $22,000 spent on sampling and reporting by consultant
Maintenance	Waste drop-off depots provide a convenient collection method for residents who need them	% of grounds in good condition (surface, drainage, cleanliness)	~<30%	100%

Lifecycle Activity	Level of Service Statement	Activity Measure	Current Performance	Recommended Performance
Renewal	Ensure the self-serve waste management sites are accessible	# of accessible sites according to best practices/AODA standards	Poor**	Excellent
Renewal	Waste bins at drop off sites are safe to use by users and operators	# of municipal bins that may pose safety issues to users/ operators	Most*	None

It is essential to monitor the service levels regularly as circumstances can change. Current performance is based on existing resource provision and work efficiencies. It is acknowledged that changing circumstances, such as technology and customer priorities, will change over time.

E-Waste bin at Transfer Station

5.0 FUTURE DEMAND

5.1 Demand Drivers

Drivers affecting demand include population change, regulations, demographic changes, seasonal factors, consumer expectations, technological changes, economic factors, environmental awareness, etc.

5.2 Purpose Statement

This DAMP is prepared in accordance with the Municipality of Chatham-Kent's vision, mission, goals, and objectives.

Our vision is Rooted in our values, united in our actions and growing to our potential.

Our mission is: The Corporation of the Municipality of Chatham-Kent is a proud, proactive, progressive team committed to innovation and leadership. We provide services that enhance the quality of life in our community.

Chatham-Kent Council has set strategic goals. **Table 5.2.1** summarizes the relevant goals and objectives and how these are addressed in this DAMP.

Table 5.2.1: Goals and how these are addressed in this Plan

Council strategic priorities	Objectives	How Goal and Objective are addressed in the DAMP
Foster a culture of continuous improvement	Increase the level of maintenance and renewal activities as indicated in building condition assessments, and other relevant studies	Developing a program of works to increase the level of maintenance and renewal activities.

Council strategic priorities	Objectives	How Goal and Objective are addressed in the DAMP
Ensure an ample supply of available serviced land and strategic investments related to infrastructure maintenance, renewal and expansion	Ensure the levels of service and infrastructure agreed with the community are consistently maintained.	A Plan that meets the community levels of service expectations. While the Levels of Service measures have yet to be formally adopted and agreed upon with the community, this Plan has been developed to achieve consistently high levels of service.
Maintain financial sustainability	Apply lifecycle principles to asset management decisions.	While this Plan requires an increase in investment in asset maintenance and renewals, the lifecycle approach will ensure Council is making informed decisions on its investment and achieve the value for money from its investment in the long term and assist Council in achieving financial sustainability over time.

5.3 Demand Forecasts

The present position and projections for demand drivers that may impact future service delivery and use of assets have been identified and documented.

5.4 Demand Impact and Demand Management Plan

Demand for new services will be managed by managing existing assets, upgrading existing assets and providing new assets to meet demand and demand management. Demand management practices can include non-asset solutions, insuring against risks and managing failures. **Table 5.4.1.** shows the impact of demand drivers that may affect future service delivery and asset use.

In 2025, WM will begin developing its Master Plan, which will address such implications as the projected 6% population increase over the planning horizon and its effect on projected service levels. With the population expected to grow over the next decade, additional pressures may exist to acquire new services to meet that demand. Future iterations of this plan will utilize the data within the WM Master Plan to inform planning, budgeting and lifecycle decisions.

Demands will continue to change and influence Chatham-Kent, and the objective of the DAMP is to progressively measure, report, and elaborate on the impact of demand on the WM service. Opportunities for demand management identified thus far are presented in **Table 5.4.1**. Additional opportunities will be formulated in future versions of this DAMP.

Table 5.4.1: Demand Management Plan

Demand Driver	Current Position	Projection	Impact on services	Demand Management Plan
Population Growth	105,110	112,800 (source: Watson & Associates economical study)	Increased # of curbside household serviced by Municipality	Natural growth is integrated in the curbside collection contract
			Increased demand for tipping at Harwich and Wallaceburg drop-off depots	Currently investigating effective approaches to improving the levels of service at Wallaceburg and Harwich depots

Demand Driver	Current Position	Projection	Impact on services	Demand Management Plan
Regulatory Obligations - Organics	Food & Organic Waste Policy Statement requires 50% reduction in 2025 Blue Box Regulation excludes non-residential sources from recycling collection service	50% reduction & diversion target will take effect in 2025 Non-residential sources in already-serviced areas will be included in the Regulation	• Establishing a strong household organic waste collection service • Enhancing existing leaf and yard waste collection service • Advocate for inclusion of non-residential recycling sources	• Decrease supply of garbage collection when organics collection is implemented • Apply multi-faceted promotional and educational programs and campaigns, including schools • Incentivize home composters by providing them at cost to residents • Establish new organics diversion program including green bin program and bin inventory
Regulatory Obligations - Blue Box Regulation	Blue Box Regulation excludes non-residential sources from recycling collection service	Non-residential sources in already-serviced areas will be included in the Regulation	Advocate for inclusion of non-residential recycling sources	Monitor the demand and the political will in how far to advocate and/or should the Municipality implement its own solution

Demand Driver	Current Position	Projection	Impact on services	Demand Management Plan
Council Strategic Priorities: Ensure Environmental Sustainability (1. & 3.)	Limited but increasing pressure from Council to see results in this area	More awareness and more focus from Council in this area, leading to demand for implementing environmental sustainability initiatives, including in waste management.	Increased staff knowledge and capacity building efforts; more answers will be requested meaning significantly improved data analysis and more staff dedicated to these efforts.	In 2025, a WM Master Plan will be developed to get ahead of these demands and pave a long-term pathway with financial planning in order to proactively manage future demand
Council Strategic Priorities: Promote Safety & Well-Being (2. & 4.)	There are identified gaps in continuous improvement/ innovation processes, technological applications, and advocacy opportunities	More technological advances will demand that CK requires more technological applications to waste management operations	WM team will use more technology in the future than currently. This will require future investments for increased lifecycle costs. Additional assets may be required to optimize operations and the annual average cost to deliver the service.	No management plan currently. Reactive, low-cost solutions are implemented when financially feasible. The WM Facility Study will determine gaps in some of these areas and will clarify costs related with filling these gaps.

Demand Driver	Current Position	Projection	Impact on services	Demand Management Plan
Social & Cultural Outcomes	Increasing number of residents advocate for more accessibility at drop-off depots and for higher levels of service at the curb (seniors, and immigrants to CK, respectively)	These demographic groups will grow in number, increasing the demand in these areas	Investments related to enhanced drop-off depot accessibility and site conditions as well as to curbside collection services	• Educate further on what the Municipality is doing • Monitor demand and recommend solutions to Council • Undertaking a study of all WM facilities to determine issues with sites, conditions etc. and determine an action plan

5.5 Asset Programs to meet Demand

The new assets required to meet demand may be acquired, donated or constructed. Acquiring new assets, such as a new waste depot, would commit WM to ongoing operations, maintenance, and renewal costs for the period for which the service provided from the assets is required. These future costs are identified and considered in developing forecasts of future operations, maintenance and renewal costs for inclusion in the LTFP in the finance section of the report.

WM will begin developing its Master Plan in 2025 for the upcoming decade, which, upon adoption, will guide future DAMPs. The Master Plan will outline service demands, considering population growth and opportunities for asset acquisition and disposal. These opportunities will necessitate a funding analysis, which will be detailed in the 2026 DAMP.

6.0 RISK MANAGEMENT PLANNING

The purpose of infrastructure risk management is to document the findings and recommendations resulting from the periodic identification, assessment and treatment of risks associated with providing services from infrastructure, using the fundamentals of International Standard ISO 31000:2018 Risk management – Principles and guidelines.

Risk Management is defined in **ISO 31000:2018** as: **'Coordinated activities to direct and control with regard to risk'**

Chatham Kent is developing and implementing a formalized risk assessment process to identify service delivery risks and mitigate risks to tolerable levels. The assessment will identify risks that will result in:

- loss or reduction of the level of service
- personal injury
- environmental impacts
- a 'financial shock'
- reputational impacts
- other consequences

The risk assessment process identifies credible risks, the likelihood of the risk event occurring, and the consequences should the event occur. It will also include developing a risk rating, evaluating the risks, and developing a risk treatment plan for those risks deemed unacceptable.

Waste Bin at Wallaceburg Waste Depot

6.1 Critical Assets

Critical assets are defined as those with a high consequence of failure, causing significant loss or service reduction. Critical assets have been identified, and their typical failure mode and the impact on service delivery are summarized in **Table 6.1.1.** Failure modes may include physical failure, collapse, or essential service interruption.

Table 6.1.1 Critical Assets

Critical Asset(s)	Failure Mode	Impact
Waste Depots	Loss of CofA/ECA from non-compliance or required update	Unable to accept waste - would need to transport waste to alternative facilities until restored
Information Technology/Phone system	Phone system failure, ITT equipment failure or breach	Unable to respond to WM concerns via phone, unable to communicate with public effectively

By identifying critical assets and failure modes, WM can ensure that investigative activities, condition inspection programs, maintenance and capital expenditure plans are targeted at critical assets.

Harwich Waste Depot

6.2 Risk Assessment

The risk management process used by Chatham-Kent is an analysis and problem-solving technique designed to provide a logical process for selecting treatment plans and management actions to protect the community against unacceptable risks. The process is based on the fundamentals of **International Standard ISO 31000:2018**. The risk assessment process identifies credible risks, the likelihood of the risk event occurring, the consequences should the event occur, the development of a risk rating, the evaluation of the risk and the development of a risk treatment plan for non-acceptable risks.

An assessment of risks associated with service delivery will identify risks that will result in loss or reduction in service, personal injury, environmental impacts, a 'financial shock,' reputational impacts, or other consequences.

Critical risks are those assessed with 'Very High' (requiring immediate corrective action) and 'High' (requiring corrective action) risk ratings identified in the infrastructure risk management plan. **Table 6.2.1** shows the residual risk and treatment costs of implementing the selected treatment plan. These critical risks and expenses must be reported to management and the council. This list is neither exhaustive nor comprehensive of all risks associated with WM. Subsequent versions of this DAMP will elaborate on risks and associated treatment costs.

Operator's Shelter, Camden Waste Depot

Table 6.2.1: Risks and Treatment Plans

Asset Providing the Service	What can Happen	Risk Rating	Existing controls	Treatment Cost
Operations Staff Morale	Staff turnover, low morale, inadequate performance	Very High	Regular communication with management	**TBD in 2025**
Staff Turnover (past and ongoing; both operations and administrative)	Discontinuity of knowledge, service disruption and/or quality reduction	Very High	Recording of processes	**TBD in 2025**
Bidding for Waste Collection Tenders	Very high cost increases in service costs for the same or reduced service levels	Very High	Communication with neighboring municipalities regarding their experience and costs	**TBD in 2025**
Equipment (backhoes and lift trucks)	Service interruption and high maintenance costs due to breakdown	High	Reactive maintenance	**$528,000 (2 lift trucks and 2 backhoes)**
Depot Operations	Some aspects of depot operations are non-compliant with regulations or ministry approvals	High	Site Assessment Study to be completed in 2024	**TBD in 2025**
Depot Vandalism	Anything from disruption of service, health & safety risk to operators, minor to catastrophic asset vandalism like fire	Very High	Reactive maintenance	**TBD in 2025**

Damaged fencing, Chatham Township Waste Depot

Oil and coolant disposal area, Dover Transfer Station

Note *** The above list of risks is not an exhaustive list of all risks associated with Waste Management. As the DAMPs develop over time, this area will be expanded to demonstrate how much the existing controls mitigate the risk and at what cost. This will inform future budget and risk management choices.

6.3 Infrastructure Resilience Approach

The resilience of the WM critical infrastructure is vital to customer service. To adapt to changing conditions, Chatham-Kent needs to understand its capacity to 'withstand a given level of stress or demand' and respond to possible disruptions to ensure continuity of service: resilience recovery planning, financial capacity, climate change risk assessment, and crisis leadership. WM does not currently measure resilience in service delivery in alignment with the AM process. This will be included in future iterations of the DAMP as further investigations are completed.

6.4 Service and Risk Trade-Offs

The adoption of this DAMP is guided by the goal of maximizing benefits from existing resources. Given that resources are not unlimited, some risks will inevitably remain unmitigated. Chatham-Kent will continue to review its risk registry and recognize the necessary trade-offs to maintain an acceptable level of risk tolerance.

If forecast work (operations, maintenance, renewal, acquisition or disposal) cannot be undertaken due to available resources, then this will result in service consequences for users. These service consequences include:

- As the condition of vehicles and buildings continues to deteriorate, it will result in a lower level of service or a decrease in operating hours
- Increased maintenance costs for aging WM equipment if timely renewals are not funded
- Unable to expand service in-line with population growth

6.4.1 What cannot be done

Some activities and projects cannot be undertaken within the next ten years. These include:

- Increase the levels of operation, maintenance and renewal activities without increasing funding.
- Ensure that all future renewals outside the planning period can be completed, as the plan's scope is limited to a 10-year planning horizon.
- Renewing equipment in alignment with the desired ESL
- Improve the current levels of service without increased funding

6.4.2 Service trade-off

If forecast work (operations, maintenance, renewal, acquisition or disposal) cannot be undertaken due to available resources, then this will result in service consequences for users. These service consequences include:

- The condition of infrastructure assets will continue to deteriorate, resulting in a lower level of service.
- Lack of maintenance and renewal may compromise intergenerational equity.

6.4.3 Risk trade-off

The operations and maintenance activities and capital projects that cannot be undertaken may sustain or create risk consequences. These risk consequences include:

- As the condition of assets deteriorates, they may become unsafe.
- If WM assets do not meet current standards, the Authority could be at risk of litigation should an incident occur.
- We must prioritize maintenance and renewal works on components with very high safety risks and defer work on low- to medium safety risks.

These actions and expenditures are considered and included in the forecast costs and, where developed, the Risk Management Plan.

Camden Waste Depot

7.0 Climate Change Adaptation

Climate change may significantly impact the assets we manage and the services we provide. In the Asset Management Planning process, climate change can be considered a future demand and a risk.

The impacts of climate change on assets will vary depending on the location and the type of services provided, as will the way in which we respond to and manage those impacts.
At a minimum, we consider how to manage our existing assets, given the potential climate change impacts for our region.

Climate change may significantly impact the assets CK manages and its services. In the Asset Management Planning process, climate change can be considered a future demand and a risk.

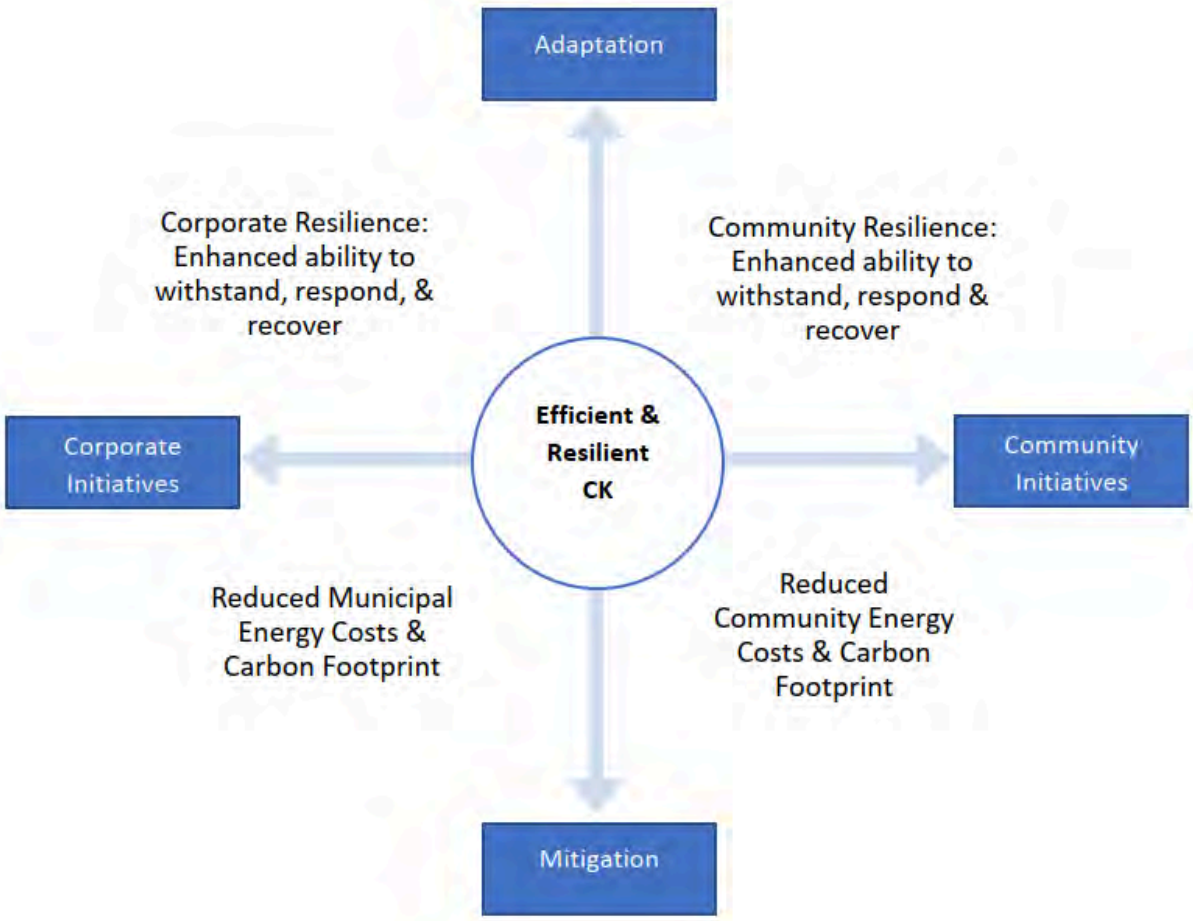
The impacts of climate change on assets will vary depending on the location and the type of services provided, as will the way in which CK responds to and manages those impacts. There have been many weather and climate-related impacts on the CK community, including the following:

- Extended summer heat waves in 2017 and 2018
- Severe rain storms of 2018 (and related flooding)
- Unseasonably wet spring and fall of 2019, which impacted crop production
- Record-breaking water levels within river systems and the Great Lakes in 2019
- Early 2020 caused significant erosion and flooding issues in the community. This included the closures of Erie Shore Drive, the Talbot Trail, and Rose Beach Line, to name a few

Recognizing these continuing climate change impacts, the Council declared a climate emergency in Chatham-Kent on July 15, 2019, and directed municipal staff to develop a climate change action plan (CCAP) to reduce CK's contribution to climate change (known as climate mitigation) and to enhance the community's resiliency to climate change (known as climate adaptation). **Figure 5** identifies the differences between climate mitigation and climate adaptation and the initiatives as they relate to CK.

The Municipality of Chatham-Kent is completing its CCAP, which will be presented to the Council and the public by the end of 2024. The CCAP actions presented in the CCAP report document will inform the Climate Section of the DAMPs in 2025. The CCAP actions will also be presented within the departments responsible for their completion.

Figure 5: Climate mitigation and adaptation initiatives in CK



Based on the Climate Atlas of Canada, historical climate patterns show that CK's climate has become hotter, wetter, and wilder over the last six decades, and this trend is expected to continue.

Hotter: Average annual temperatures have risen by 0.5°C and are expected to increase between 3.5°c and 5.8°c by the 2080s.

Wetter: Average annual precipitation has increased by 49.8mm (1.96in) and is expected to grow between 78mm and 127mm (5in) by the 2080s.

Wilder: Rainstorms have increased in frequency and severity, and seasonal precipitation patterns have changed, and this is expected to continue.

"From 1983 to 2008, insurers spent on average $400 million yearly on catastrophic claims; since 2009, the yearly average has risen to almost $2 billion. These "once in 100 years" events are happening more frequently and are becoming more severe and more costly." (Statistics Canada, 2024)

Risks and opportunities identified to date are shown in **Table 7.0.1**

Table 7.0.1 Managing the Impact of Climate Change on WM Assets and Services

Climate Impact (Assets level or Service level)	Projected Position (in 10 years)	Potential Impact on Assets & Services	Climate Management Plan
Annual Precipitation (mm) increase	+45mm annually	• Insufficient drainage system capacity to manage flood events. • Overflows can potentially cause flooding resulting in damage to equipment, accident, injury, and potential disruption of services.	Develop strategies to manage flood events and prevent overflows
Annual Very Hot Days, (+30 degrees Celsius), increase	+20 days, annually	High temperature days can impact thermal comfort of buildings, and reduce expected service life of assets	Renew or upgrade building environmental systems to ensure they adapt to temperature variations.

Additionally, how Chatham-Kent constructs new assets should recognize that there is an opportunity to build resilience to climate change impacts. Building resilience can have the following benefits:

- Assets will withstand the impacts of climate change.
- Services can be sustained, and
- Assets that can endure may lower the lifecycle cost and reduce their carbon footprint.

The impact of climate change on assets is a new and complex discussion, and further opportunities will be developed in future revisions of this DAMP.

8.0 FINANCIAL SUMMARY

8.1 Financial Sustainability and Projections

This section outlines the financial requirements derived from the data in the preceding sections of this DAMP. The financial forecasts will be refined through ongoing discussions about the desired service levels and as Asset Management expertise within Chatham-Kent matures. It is crucial to align the budgeting process, the LTFP, and the DAMPs to ensure that all the WM's needs are addressed. The Municipality establishes a definitive financial strategy with measurable goals and targets.

Effective asset and financial management will enable WM to ensure its services provide the appropriate level of service for the community to achieve its goals and objectives. Reporting to stakeholders on service and financial performance, the Municipality is transparently fulfilling its stewardship accountabilities. The LTFP is critical for WM to ensure that the network lifecycle activities, such as renewals, operations, maintenance, and acquisitions, can happen at the optimal time.

Reporting on service and financial performance to stakeholders guarantees that the Municipality is transparently fulfilling its stewardship responsibilities.

8.1.1 Sustainability of service delivery

Two key indicators of sustainable service delivery are considered in the DAMP for this service area. The two indicators are the following:

- **Asset Renewal Funding Ratio** (proposed renewal budget for the next ten years / proposed renewal outlays for the next ten years shown in the DAMP) and
- **Lifecycle Funding Ratio** (proposed lifecycle budget for the following ten years / proposed lifecycle outlays for the next ten years shown in the DAMP).

Asset Renewal Funding Ratio (ARFR) - 0%

The Asset Renewal Funding Ratio (ARFR) is an important indicator that illustrates that over the next ten years, Chatham-Kent expects to have **0%** of the funds required for optimal asset renewal.

Lower ARFR typically occurs due to:

- Chronic underinvestment
- A lack of permanent infrastructure funding from senior levels of government
- A freeze on funding allocations from senior levels of government
- Large spikes of growth throughout the years or amalgamations

The ARFR is considered a stewardship measure that indicates whether Chatham-Kent is achieving intergenerational equity. Correcting this funding ratio so that it can meet its financial target over time is essential to ensuring WM is considered sustainable.

If assets are not renewed at the appropriate timing, it will inevitably require difficult trade-off choices that could include:

- A reduction of the level of service and availability of assets;
- Increased complaints and reduced customer satisfaction;
- Increased reactive maintenance and renewal costs; and,
- Damage to WM's reputation and risk of fines or legal costs.

The shortage of renewal resources will be tackled in upcoming DAMPs to ensure alignment with the LTFP. This approach will enable staff to devise options and strategies for addressing the challenges of long-term renewal rates—Chatham-Kent plans to reassess its renewal allocations after the full inventory is verified and consolidated.

Lifecycle Funding Ratio – 10-year financial planning period -(LFR)

The current **10-year Lifecycle Financial Ratio is 93%.**

This DAMP identifies the forecast operations, maintenance, and renewal costs required to provide an agreed-upon and affordable level of service to the community over ten years. This includes input into 10-year financial and funding plans aimed at sustainably providing the required services. This forecast work can be compared to the proposed budget over the first ten years of the planning period to identify any funding shortfall.

The forecast operations, maintenance, and renewal costs over the 10-year planning period are **$11,751,000** on average per year. The proposed (budget) operations, maintenance, and renewal funding is **$10,961,000** on average per year, giving a 10-year funding shortfall or **'Gap'** of **$790,000** per year.

This indicates that 93% of the forecast costs needed to provide the services documented in this DAMP are accommodated in the proposed budget.

Funding an annual funding shortfall or funding 'gap' cannot be addressed immediately. The overall gap in funding for each of Chatham-Kents' services will require vetting, planning, and resources to begin incorporating gap management into future budgets. This gap will need to be managed over time to reduce it sustainably and limit financial shock to customers.

Options for managing the gap include:

- **Financing strategies** – increased funding, grant opportunities, envelope funding for specific lifecycle activities, long-term debt utilization
- **Adjustments to lifecycle activities** – increase/decrease maintenance or operations, increase/decrease frequency of renewals, extend estimated service life, limit acquisitions or dispose of underutilized assets
- **Influence level of service** - managing expectations or influencing demand drivers

These options and others will allow WM to manage the gap appropriately and ensure the level of service outcomes the customers desire. Providing sustainable services from infrastructure requires managing service levels, risks, forecast outlays, and financing to eventually achieve a financial indicator of **90-110%** for the first years of the DAMP and ideally over the 10-year life of the LTFP.

8.2 Forecast Costs (outlays) for the long-term financial plan

A gap between the forecast outlays and the amounts allocated in the financial plan indicates that further work is required to review service levels in the DAMP and/or financial projections in the LTFP. The initial DAMP only attempts to quantify the financial gap for the service. Future plans will focus on the methods and strategies to manage that gap over time to achieve sustainable services and intergenerational equity.

The Current Gap for a ten-year planning period is **$7,900,000** or **$790,000** annually.

Chatham-Kent will manage any ‘gap’ by developing this DAMP, which will guide future service levels and resources required to provide these services in consultation with the community. **Table 8.2.1** shows the forecast costs (outlays) required for consideration in the 10-year LTFP. Providing services in a financially sustainable manner requires balancing the forecast outlays needed to deliver the agreed service levels with the planned budget allocations in the LTFP.

Table 8.2.1: Forecast Costs (outlays) for the Long-Term Financial Plan

Year	Acquisition	Operation	Maintenance	Renewal	Disposal
2024	$90,900	$8,816,000	$102,500	$595,000	-
2025	$560,000	$9,683,000	$100,000	-	-
2026	$360,000	$11,469,000	$100,000	$80,000	-
2027	$10,000	$11,271,000	$100,000	$49,600	-
2028	$10,200	$11,704,000	$100,000	-	-
2029	$10,400	$11,940,000	$100,000	-	-
2030	$10,600	$12,179,000	$100,000	-	-
2031	$10,800	$12,423,000	$100,000	$339,600	-
2032	$11,000	$12,671,200	$100,000	$207,000	-
2033	$11,200	$12,923,500	$100,000	-	-
Total	**$1,085,000**	**$115,080,000**	**$1,002,500**	**$1,271,000**	**-**

All figure values are shown in 2024 dollar values.

8.3 Funding Strategy

The proposed asset funding is detailed in Chatham-Kent's multi-year budget and LTFP. These operational and capital budgets outline the provision of funds, which are incorporated into the DAMP. The DAMP details the expenditure timeline and associated service and risk implications. Subsequent versions of the DAMP will offer service delivery choices and alternatives to optimize the use of limited financial resources.

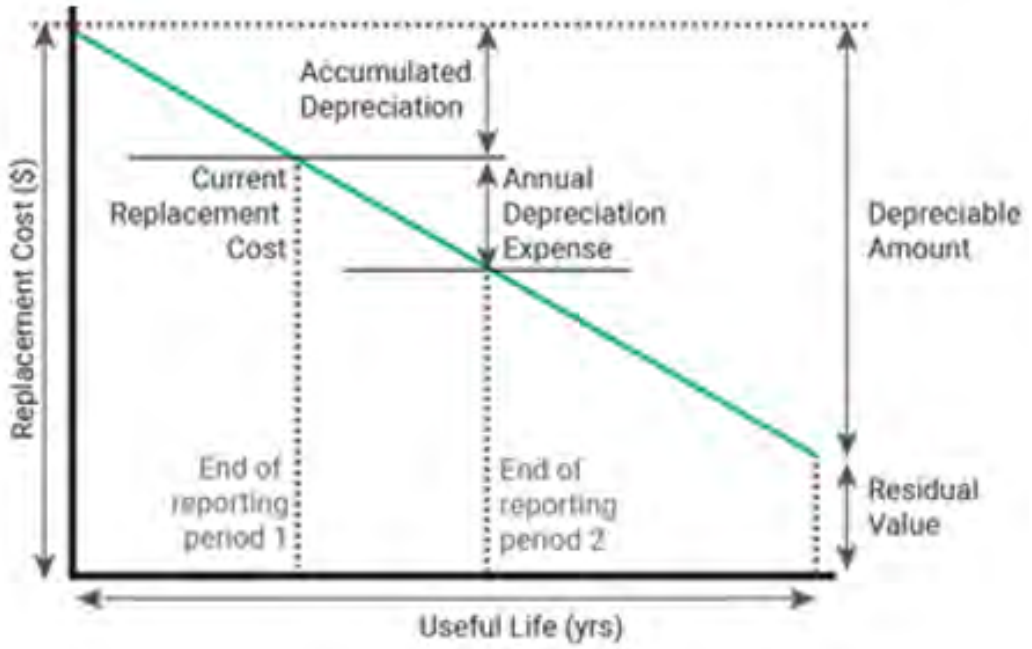
WM contributes annually to reserves to assist in long-term costs for the renewal of vehicles, depots, and equipment (compactors, etc.). Future iterations will focus on the sustainability of the WM service and determine how much is required to be contributed to the reserve and be available for future needs.

8.4 Valuation Forecasts

8.4.1 Asset valuations

Asset values are forecast to increase as additional assets are added to the service. As projections improve and are validated with market pricing, net valuations will likely increase significantly over the 10-year planning horizon. Additional assets will increase operations and maintenance costs in the longer term and future renewal costs.

Any asset disposals would decrease operations and maintenance needs in the longer term and remove the high-cost renewal obligations. At this time, it is not possible to separate the disposal costs from the renewal or maintenance costs; however, this will be improved for the next iteration of the plan. The best available estimate of the value of assets included in this DAMP is shown below.



The WM assets are valued utilizing Current Replacement Cost (Market Prices Index)

Table 8.4.2 Asset valuation table

Assets Valuation	Financial Value
Replacement Cost (Gross)	**$21,494,000**
Depreciable Amount	**$21,487,000**
Current Replacement Cost	**$13,213,000**
Annual Depreciation Expense	**$351,000**

8.5 Key Assumptions Made in Financial Forecasts

Some assumptions were necessary to compile this DAMP. This section details the key assumptions made in its development and should provide readers with an understanding of the level of confidence in the data behind the financial forecasts.

Key assumptions made in this DAMP are:

- Assumptions were made regarding the existing and planned budget for maintenance and renewal, using professional judgement.
- Budgets have been allocated based on the best available data on assets
- A 2% annual inflationary amount has been applied to the operational and maintenance forecast to reflect the projections that costs will increase over time
- Replacement costs are based on current market pricing and are determined to be a like-for-like replacement
- Maintenance forecasts are based on the current budget allocated and require further refinement to align the costs with technical levels of service
- Operational forecasts are based on current budget allocations and encompass anticipated needs that are known

Backhoe and bin at Wallaceburg Waste Depot

8.6 Forecast Reliability and Confidence

This DAMP's forecast costs, proposed budgets, and valuation projections are based on the best available data. Current and accurate information is critical for effective asset and financial management. Data confidence is classified on an A-E scale by **Table 8.6.1.**

Table 8.6.1: Data Confidence Grading System

Confidence Grade	Description
A. Very High	Data based on sound records, procedures, investigations and analysis, were documented properly and agreed as the best method of assessment. The dataset is complete and estimated to be accurate ± 2%.
B. High	Data based on sound records, procedures, investigations and analysis, is documented properly but has minor shortcomings, for example, some of the data is old, some documentation is missing and/or reliance is placed on unconfirmed reports or some extrapolation. The dataset is complete and estimated to be accurate ± 10%.
C. Medium	Data based on sound records, procedures, investigations and analysis which is incomplete or unsupported, or extrapolated from a limited sample for which grade A or B data are available. The dataset is substantially complete but up to 50% is extrapolated data and accuracy is estimated ± 25%.
D. Low	Data is based on unconfirmed verbal reports and/or cursory inspections and analysis. The dataset may not be fully complete, and most data is estimated or extrapolated. Accuracy ± 40%.
E. Very Low	None or very little data held.

The estimated confidence level for and reliability of data used in this DAMP is shown in **Table 8.6.2**.

Table 8.6.2: Data Confidence Assessment for Data used in DAMP

Data	Confidence Assessment	Comment
Demand drivers	Low	Future plans require further development to ensure drivers are known and measured appropriately
Growth projections	High	Based on historical information
Acquisition forecast	Medium	Possible growth in the future creates uncertainty and will be reviewed annually to improve quality
Operation forecast	Medium	Will improve once growth is established and continuous improvement items are completed
Maintenance forecast	Medium	Building Condition Assessment data by third party (facilities and sites)
Renewal forecast Asset value	Medium	Building Condition Assessment data by third party (facilities and sites), some is professional judgement. Some assets have not been assessed professionally.
Asset useful lives	Medium	Based on professional judgement. This will be improved and vetted annually
Condition modeling	High	Some information is from Building Condition Assessment data by third party and some is professional judgement
Disposal forecast	Low	This requires improvement to process and administration of Disposals

The estimated confidence level for and reliability of data used in this DAMP is considered to be a **low-medium** confidence level.

9.0 PLAN IMPROVEMENT AND MONITORING

Status of Asset Management Practices
ISO 55000 Refers to this as the Asset Management System

9.1. Accounting and financial data source

This DAMP utilizes accounting and financial data. The source of the data is

- Chatham-Kent 2024 - 2027 Multi-Year Budget (Capital & Operating)
- Internal Market Price Valuations
- AM Software Multi-Year Forecasting Models
- Council Reports
- Financial Exports from various systems
- Fleet procurement documents

9.2. Asset management data sources

This DAMP also utilizes asset management data. The sources of the data are;

- Asset Registers
- Insurance Data
- Tangible Capital Asset Data
- Building Condition Assessment Data
- Fleet Vehicle Data
- Inspection Logs
- Subject Matter Expert Knowledge and Anecdotal Information

9.3. Continuous Improvement Plan

It is essential that Chatham-Kent recognizes areas within the DAMP and within its planning processes that require future improvements to ensure effective asset management and informed decision-making. The tasks listed below are essential to improving the DAMP and the municipality's ability to make evidence-based and informed decisions. These improvements span from improved lifecycle activities, financial planning, and plans to improve the assets physically.

The Improvement Plan, **Table 9.3.1,** highlights proposed improvement items requiring further discussion and analysis to determine feasibility, resource requirements and alignment to current work plans. Future iterations of this DAMP will provide updates on these improvement plans. The costs and resources to complete each task have not been included in the lifecycle models to data, and resource requirements would need to be reviewed for internal resource-driven projects.

The improvement plan generated from this DAMP is shown in **Table 9.3.1.**

Table 9.3.1: Continuous Improvement Plan

Task #	Task	Responsibility	Resources Required	Timeline
1	**Complete a comprehensive site assessment including aspects of engineering soundness, layout efficiency, health and safety, and accessibility**	Waste Management, External Consultant	~$120,000	2024
2	**Create new map with historic and active waste depots to assist in managing historic and current waste sites owned by the Municipality**	WM, GIS	15 hours	2025
3	**Training of WM staff on AVL system utilized by waste contractor**	WM, WM Contractor	5 hours	2025
4	**Create lifecycle model of Municipality doing all curbside waste collection instead of a third party contractor**	WM, Asset & Quality Management (AQM), Finance	30-40 hours	2025-2026
5	**Develop system to complete regular condition assessments of WM assets**	WM, AQM	15 hours	2025-2026

Task #	Task	Responsibility	Resources Required	Timeline
6	**Determine customer satisfaction through external survey**	Facilities (all), AQM staff, Communications	20 hours staff time	2025
7	**Develop education curriculums regarding waste management to implement at local schools**	Waste Management	1.5 FTE (min 18 month contract Project Coordinator) $102,800 (Gr. 7)	2025
8	**Develop Promotion & Education campaigns materials for continuous communications re WM programs, including maximizing the use of RecycleCoach app tools/features**	Waste Management		2026
9	**Complete Condition Assessment on all municipal containers, including those at WM sites.**	Waste Management/ External Consultant	~$25,000	2026

The detailed improvements are intended to ensure that WM can achieve sustainable service over time. Some initiatives enhance the safety and security of the WM sites, and others improve service or data quality. While not legislative, some initiatives are intended to find financial efficiencies or are required for other operational improvements.

Upon Council approval, certain improvements can be accomplished within staffing capacity and should be included as work plan items for WM. Other initiatives necessitate resources beyond those allocated in the current budget. Should resources be inadequate for the identified items, the strategy is to postpone them. Annually, the DAMP will be revised to align Continuous Improvement items with the opportunities and constraints of the budgetary provisions.

9.4. Monitoring and Review Procedures

This DAMP will be reviewed during the annual budget planning process and revised to show any material changes in service levels, risks, forecast costs, and proposed budgets resulting from budget decisions.

The DAMP will be reviewed and updated annually to ensure it represents the current service level, asset values, forecast operations, maintenance, renewals, acquisition and asset disposal costs and planned budgets. These forecast costs and proposed budget are incorporated into the LTFP or will be incorporated into the LTFP once completed.

The DAMP has a maximum life of one year and will be updated annually. This plan will be completely revised and updated in 2027 to prepare WM for the 2028 four-year budget process.

9.5. Performance Measures

The effectiveness of this DAMP can be measured in the following ways:

- The degree to which the required forecast costs identified in this DAMP are incorporated into the LTFP,
- The degree to which the 1-5 year detailed works programs, budgets, business plans and corporate structures consider the 'global' work program trends provided by the DAMP,
- The degree to which the existing and projected service levels and service consequences, risks and residual risks are incorporated into the Strategic Planning documents and associated plans,
- The Asset Renewal Funding Ratio achieves the Organizational target (this target is often 90 – 100%).

Document Control

Rev No	Date	Revision Details	Author	Reviewer	Approver
1	August 2024	1st Detailed Asset Management Plan	MGray	Manager, Waste Management & Director, Public Works	Chatham-Kent Council

For more information, email
To view all the asset management plans, visit
www.chatham-kent.ca/assetplans