Chatham-Kent

DETAILED ASSET MANAGEMENT PLAN 2025

Municipal Airport

TABLE OF CONTENTS

1.0 REPORT CARD

Chatham-Kent Airport Report Card

8034 aircraft movements	239,521 litres of fuel sales	1,722 wildlife sightings	7 bird strikes

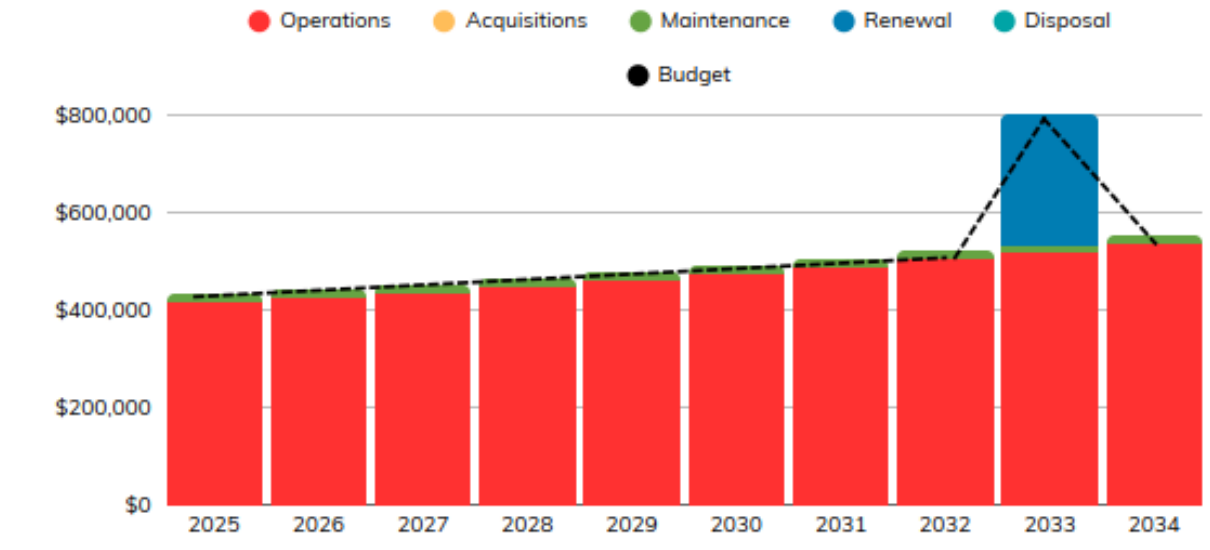
Annual Funding Gap	Asset Renewal Ratio	% of 10-Year Plan Funded
$0	100%	100%

Asset Summary

Assets	Items	Replacement
	1 runway	$5,475,977
	2 taxiways	$1,055,000
	2 aprons	$1,000,000
	1 weather observatory	$1,000,000
	airfield lighting	$1,500,000
	1 terminal building	$750,000
	2 fuel pumps	$247,000

$12.9 M Total Replacement Cost

10 Year Life Cycle Forecast



Data Confidence	Low	Medium	High

2.0 INTRODUCTION

2.1 Background / Purpose of Service

The Chatham-Kent Municipal Airport is approximately 12.5 kilometers southeast of the City of Chatham and is a certified aerodrome that caters to the Chatham-Kent community. The Municipality of Chatham-Kent owns and is responsible for all the assets listed within the Detailed Asset Management Plan (DAMP) and contracts out the airport's operational management to a 3rd party contractor. The airport's property spans approximately 426 acres, with a significant portion of that land being leased to local farmers. As a port of call for air carriers providing chartered passenger services, the airport serves private and commercial fixed-wing aircraft operators. The airport also accommodates various private hangars for individuals and businesses.

Most of the airport land at Chatham-Kent Municipal Airport is zoned as agriculture, however zoning by-laws permit aviation-related uses on land specifically designated for airport purposes. The Airport serves as a base for a few private and corporate business jets; however, currently it does not offer any scheduled commercial services.

The director of public works is responsible for overseeing airport operations and budget. The airport's Accountable Executive is the municipality’s chief Administrative Officer (CAO), who also champions the adoption of asset management principles within the organization.

The primary objective of the Airport DAMP is to document the strategic management of the municipalities’ airport infrastructure and associated airport services. This plan aims to provide direction for both new and existing infrastructure, optimize the long-term utilization of financial resources, minimize risks, and offer a prioritized perspective for ensuring service continuity and enhancements over a 10-year planning horizon.

This is the second DAMP for Chatham-Kent Airport. Future iterations of this document will see significant data improvements; as Asset Management knowledge matures across Chatham Kent, the breadth and scope of the plans will be refined to ensure they capture the full cost to deliver the airport service. The plan is updated annually to ensure data quality improves to enable and support evidence-based decisions.

This DAMP will have a minimum ten-year planning horizon and will connect fully to the Long-Term Financial Plan by 2027. This Airport DAMP will communicate the requirements for the sustainable delivery of services through asset management,

program delivery, compliance with regulatory requirements, and required funding provide the appropriate levels of service over the entire planning period.

The DAMP is to be read in combination with the other Chatham-Kent documents, which should include the Strategic Asset Management Policy, along with these other key planning documents:

- Chatham-Kent Municipal Airport Master Plan Draft
- Policies and Bylaws
- Airport Operations Manual
- Detailed Asset Management Plan 2024
- Municipality of Chatham-Kent – Strategic Plan 2022-2026
- 2024 - 2027 Multi-Year Budget
- Short-term and long-term financial plans

Understanding the DAMP within the context of these documents ensures a comprehensive perspective of the Airport's management and development for today and into the future.

The infrastructure assets covered within this DAMP include the major components required to deliver an effective airport service for the customers. The airport's infrastructure includes:

- 22 private airport hangars situated on the airport land,
- Municipal terminal building with the associated parking lot,
- Field electric building,
- Airport fuel system – Jet-A and AVGAS,
- Automated Weather observation system,
- Runways, Taxiways, Airfield Lighting and Aprons.

The DAMP addresses infrastructure assets specific to the Chatham-Kent Municipal Airport, which are essential for delivering its expected level of service. For a comprehensive overview of the assets outlined in this DAMP, please refer to **Table 2.2.2** as it provides a detailed summary.

The infrastructure assets included in this plan have a total estimated replacement value of **$12.9 Million**.

Key stakeholders in the preparation and implementation of this DAMP are shown in **Table 2.1**.

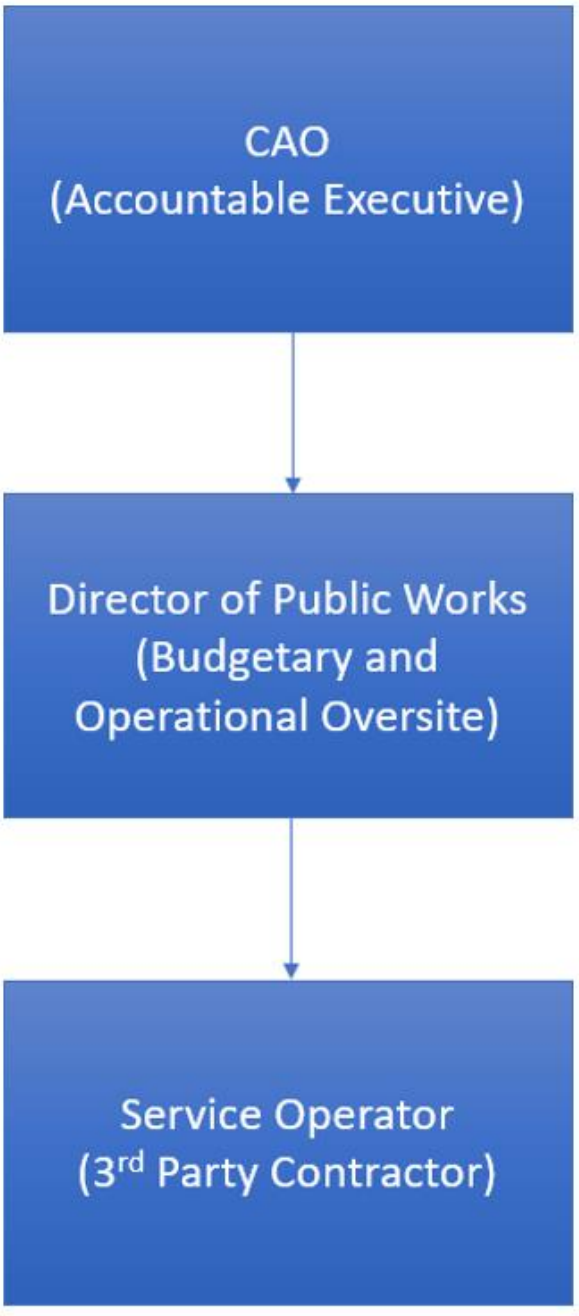
Table 2.1: Key Stakeholders in the DAMP

Key Stakeholder	Role in Asset Management Plan
Mayor & Councilors	Represent needs of community/shareholders,
	Allocate resources to meet planning objectives in providing services while managing risks,
	Ensure service is sustainable.
CAO	Allocate resources to meet the organization's objectives in providing services while managing risks.
	CAO acts as an accountable executive for the airport.
General Manager, Infrastructure and Engineering Services	Allocate resources and directs activities for the airport assets including renewals and major maintenance projects
	Overall responsibility for Asset Management, provide leadership in influencing decision-making processes related to Asset Management.
Director of Public Works (PW)	Allocate resources and directs activities for the airport assets including operational activities and maintenance projects
	Develop the Detailed Asset Management Plan and inform them of the strategies required to meet agreed upon levels of service.
Service Operator (Contractor)	Ensuring the airport is safe, secure, and compliant with its certification to remain open for business and ensure the customer experience and services are a high priority.
	Ensure assets are clean and well maintained.
Community	Be aware of levels of service and costs,
	Participate in consultation processes and provide feedback on service.

Organizational Chart

The organizational structure to support service delivery for municipal airport is detailed below in **Figure 2.1**.

Figure 2.1: Organizational Chart



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 individual asset, including condition, age, replacement cost, and asset-specific information (e.g., length, diameter, material, etc.). Currently, the airport asset registry is structured in the form of an asset hierarchy, explained below.

The asset hierarchy provides a framework for structuring data in an information system to assist in data collection, reporting, and decision-making. 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
Runway, Field Lighting, Taxiway, Apron	Provide quality, functional runway to ensure safe air travel
Communications Equipment	Provide high quality communications to ensure safe air traffic control and minimize risk of accidents
Airport Terminal & Parking Facilities	Provide clean, safe and adequate space for parking vehicles and conducting business within terminal

2.3 Asset Registry

The Airport assets covered in this plan include all facilities, runway and movement areas, vehicles, technology, parking lots, fuel sites and tools required for Chatham-Kent to deliver its Airport Service to the community and its customers. The assets included in this DAMP are shown in **Table 2.2.2.**

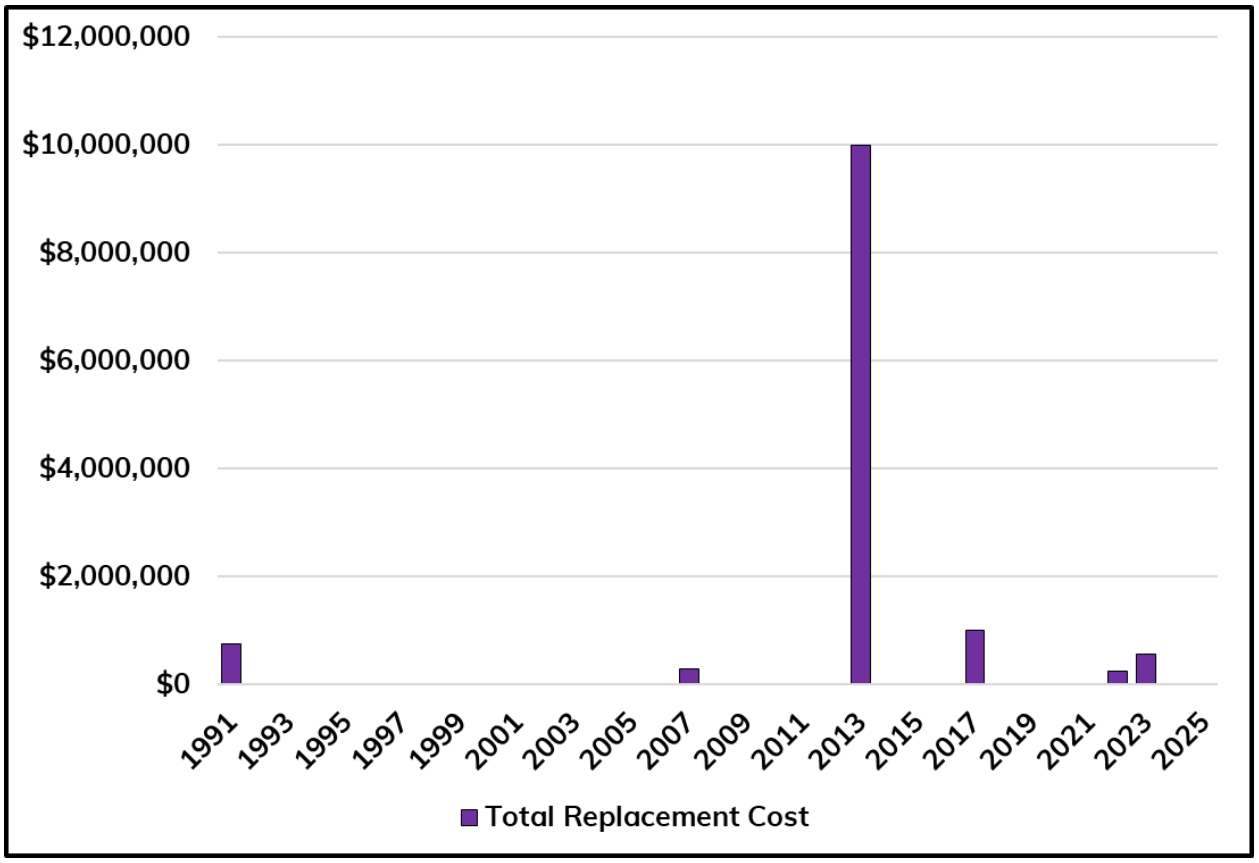
Table 2.2.2: Airport Service Assets

Asset Category	Description	Estimated Service Life in Years	Average Age in years	Average Condition	Average Remaining Service Life	Current Replacement Cost
Terminal building	One Terminal Building	45 Years	34 Years	Fair	11 Years	**$750,000**
Airport site	One Parking Lot, Perimeter Fencing, signage	20 Years	12 Years	Fair	8 Years	**$225,000**
Runway & Movement areas	Air Strip, Aprons, Taxiway A and B, Private taxiway	40 Years	2-12 Years	Good	28-38 Years	**$7,780,977**
Technology	Automated Weather Observatory, Field Electrical Centre Building	50 Years	12 Years	Good	38 Years	**$1,250,000**
Airport lighting	Airfield lighting and safety markers	30 Years	2 Years	Good	28 Years	**$1,500,000**
Fuel sites	Jet A Fuel Tank, Jet A Fuel Pumps, AVGAS Tank, AVGAS Pump	Tank 30 Years Pump 15 Years	Tanks 27 Years Pumps 15 Years	Fair	Tanks 3 Years Pumps 0 Years	**$1,300,000**
Storm infrastructure	Storm water infrastructure	40 Years	12 Years	Good	28 Years	**$10,000**
Vehicles, Equipment, Tools	Service/Inspection Vehicle, Miscellaneous tools and equipment	15 Years	11 Years	Fair	4 Years	**$40,000**
					Total	**$12.9 Million**

All values are shown in 2025-dollar values.

This plan attempts to include all assets required to deliver the airport service. However, it is acknowledged that additional assets will likely be included in the future. As 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 data confidence of the plan is sufficient to support evidence-based investment decisions. The age profile of the assets included in this DAMP is shown in **Figure 2.2.3**.

Figure 2.2.3 Assets Age Profile Graph



2.4 Asset Condition

Condition is the preferred measurement for planning lifecycle activities to ensure assets deliver the agreed-upon levels of service and reach their expected useful life. Condition is measured using a 1 – 5 grading system, as detailed in **Table 2.3.1**. It is important that a consistent approach is used in reporting asset performance, enabling effective 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.

Currently, conditions are monitored through both formal and informal methodologies. Fuel tanks, pumps and runways regularly utilize a formalized inspection program, whereas

most other assets are monitored informally or through observations and subject opinion.

For certain assets, conducting condition assessments may not be cost-effective or practical; however, for many others, routine inspections are carried out to confirm that these assets remain in good working order. For assets without known condition information or inspections that were not output in a way that could be converted, the condition was assumed based on remaining service life.

The following conversion assumptions were made:

- For assets where a condition rating was completed, but no age information was available, the age is estimated based on the conditions

For assets where a condition program exists and a condition score was output, those conditions were converted to the scale below in **Table 2.3.1**

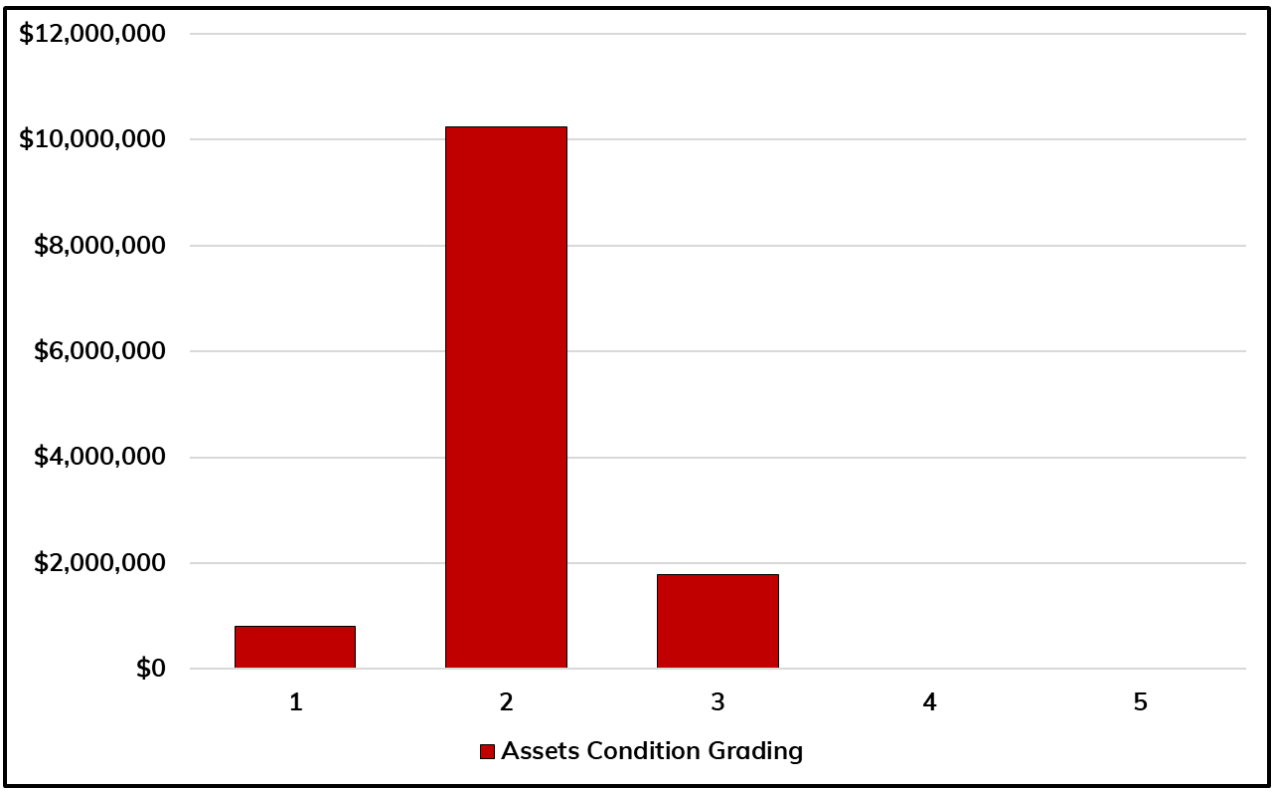
Asset conditions are measured using a 1 – 5 grading system, as detailed in **Table 2.3.1**. It is important that a consistent approach is used in reporting asset performance, enabling effective decision support. A finer grading system may be used at a more specific level. However, for reporting in the 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 airport assets is shown in **Figure 2.3.2**.

Figure 2.3.2: Asset Condition Profile in Replacement Dollars



All figure values are shown in 2025-dollar values.

Most of the airport assets are in good condition at the time of writing the DAMP.

3.0 LIFECYCLE MANAGEMENT

The lifecycle management plan will detail how the airport assets will be maintained at the agreed-upon levels of service by managing its lifecycle costs. These costs are categorized by lifecycle phases, which include **acquisition**, **operations**, **maintenance**, **renewal**, and **disposal**. At present, Chatham-Kent employs a budget-based approach to its lifecycle management; however, this approach will evolve into a comprehensive lifecycle approach as the data and organizational knowledge develop and become more suitable.

Once Chatham-Kent's airport acquires an asset, the municipality becomes obligated to 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, it is essential that the airport services approach its asset planning with a long-term view to ensure it effectively manages the assets and assist in making informed choices.

3.1 Acquisition Plan

Acquisitions are lifecycle activities that add new assets or improve an existing asset's capability or function. These acquisitions may result from growth, council priorities, donation, demand, or social or environmental needs. The costs associated with acquisitions include design, training, consulting, purchase costs, and staff time to ensure the assets are 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, development, safety standards and legislative obligations, proposals identified by strategic plans, or partnerships with others. Potential upgrades and new works should be reviewed to verify that they are essential to the communities' needs and Council's ability to fund the assets adequately enough to maintain the desired level of service.

The priority ranking criteria are detailed in **Table 3.1.1.**

Table 3.1.1: Acquired Assets Priority Ranking Criteria

Criteria	Weighting
Customer demand	75%
Regulatory requirement	5%
Council strategic priorities	20%
Total	**100%**

At the time of writing of the DAMP there are no planned acquisitions currently. The long-term financial plan will accommodate expenditure on new assets and services in the capital works program, but only to the extent that funding is available. It is acknowledged that there will also be additional assets such as the assumption of subdivisions which will be included in future iterations of the DAMP.

3.2 Operations Plan

Operations include regular activities to provide services. These activities are necessary to complete the regular day-to-day operations on the airport network. Examples of typical operational costs and activities include:

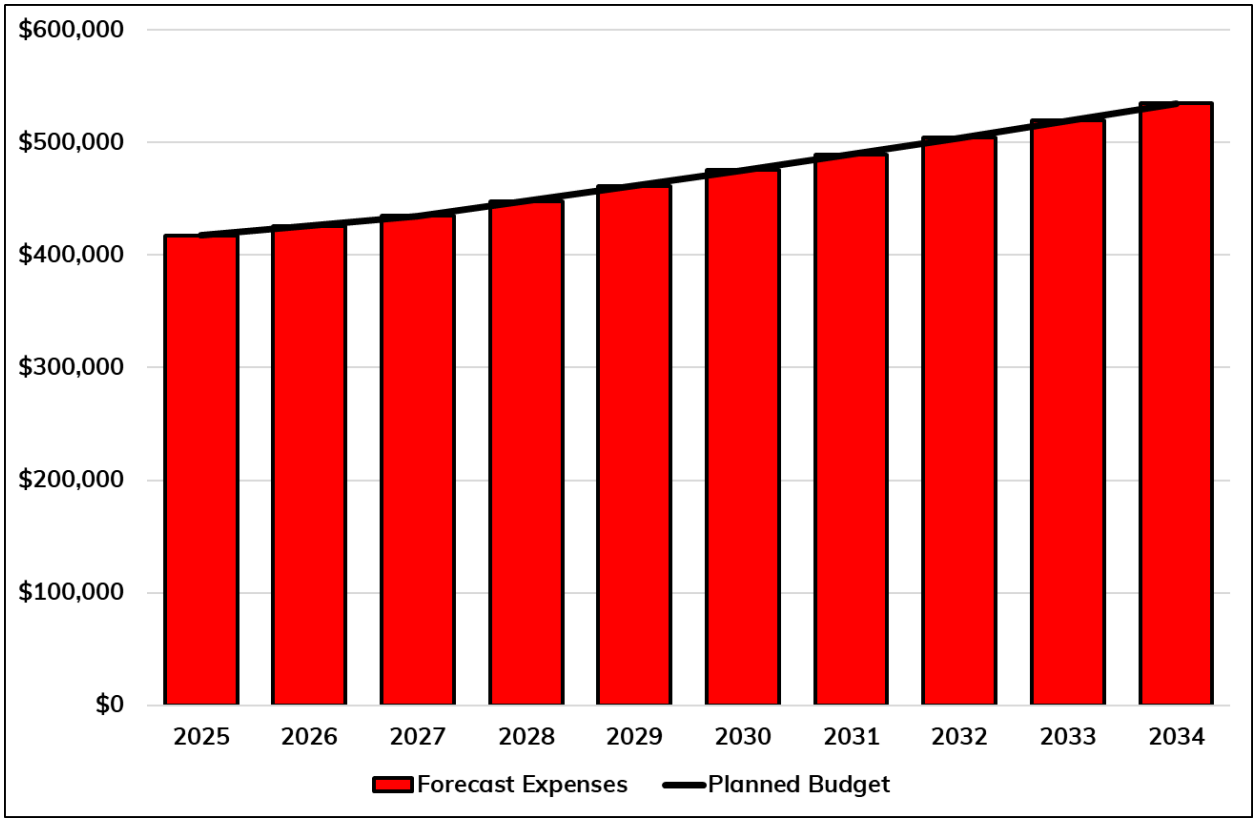
- **Airport Daily Investigations** – As part of the 3rd party operational contact, there are 2 daily inspections performed on the runway each day when the airport is operational. The legislative standard for inspections is that an inspection is performed once every 8 hours when the airport is operational. As the airport operates for 9 hours a day, it is required that the contractor inspect the movement areas and airfield light twice per day.
- **Fuel sales** – The airport owns and operates a fuel service for the convenience of its customers. The airport offers two different types of fuel: AVGAS and Jet-A fuel pumps. The AVGAS fuel sales in 2024 were **69,501** Liters and that of the Jet-A was **170,020** Liters.
- **Operation of Automated Weather Observation System (AWOS)** – The Municipality of Chatham-Kent owns an AWOS, whose maintenance is contracted out to NAV Canada. NAV Canada, a privately run non-profit corporation, oversees Canada's civil Air Navigation System (ANS). All AWOS equipment owned by the Municipality of Chatham-Kent is insured and operated by NAV Canada. The airport budget has allocated **$53,146** in 2025 for this purpose.
- **Contract Costs** – Contract costs for managing airport operations and activities are included in the modelling. The airport budget has allocated **$249,647** in 2025 for this purpose.

Other costs included in operations include master planning, grass cutting, utility costs, and cleaning services.

Summary of forecast operations costs

Forecasted operational costs are expected to vary in relation to the total value of the asset stock. When additional assets are acquired, the future costs are forecast to increase. If assets are disposed of the forecast operational costs are expected to decrease. **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 2025-dollar values.

Operational budget levels are adequate to meet projected service levels over the entire 10-year planning period. In the initial years of the plan (2025 - 2027) operations are funded adequately enough that there will be no impact on service levels. For the remaining planning horizon Airport will be required to draw upon its reserves and revenue to ensure the service is sustainable and able to complete all forecasted operational activities.

Future iterations of the DAMP will need to consider obligations to ensure that required safety and regulatory operational activities are prioritized.

Table 3.2.2: Operations Budget Trends

Year	Operational Budget
2025	**$ 417,405**
2026	**$ 425,916**
2027	**$ 434,968**

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; they are the actions necessary to enable assets to meet their expected lifespan by restoring them to a preferred 'improved' condition.

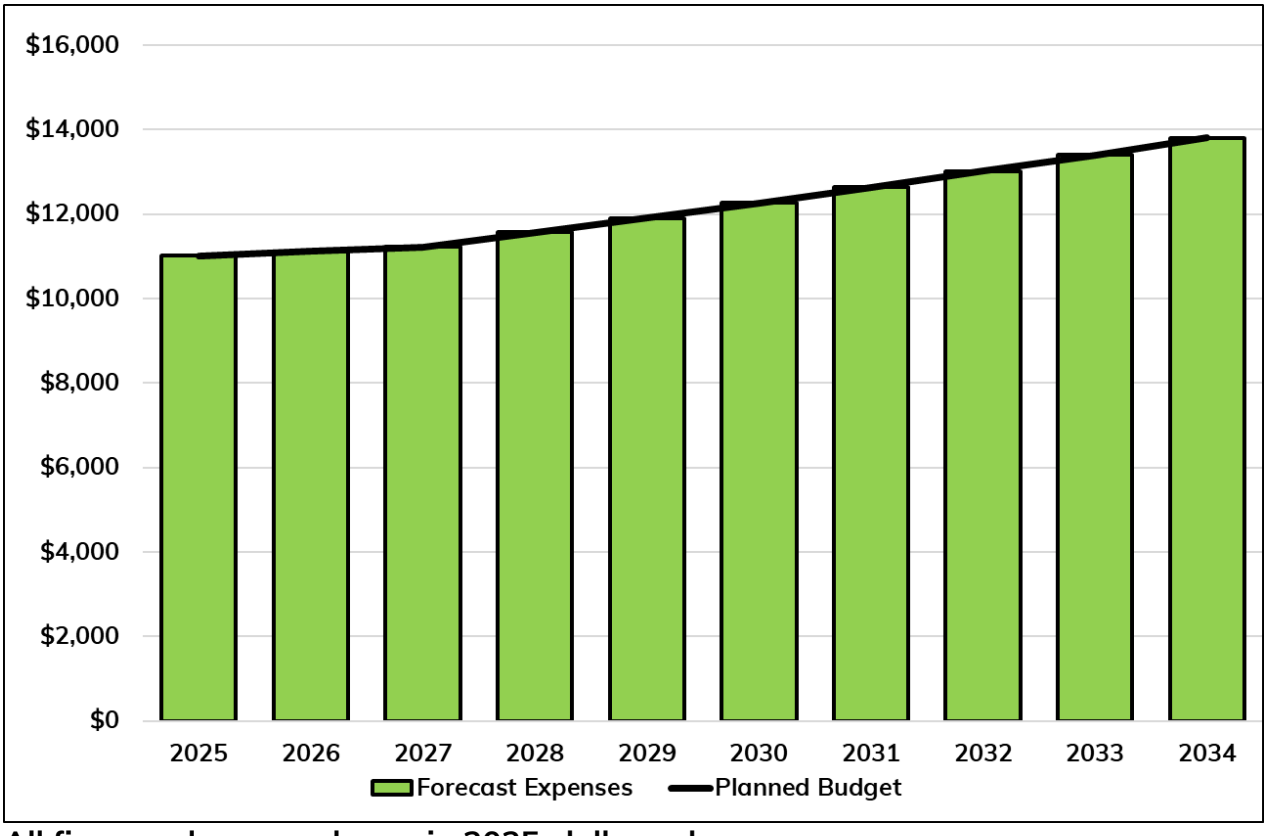
Examples of typical maintenance activities include repairing minor cracks in runway, equipment repairs, facilities repair, crack sealing of parking lot, line painting.

Planned maintenance greatly reduces the need for reactive maintenance, which is often associated with greater risks to human safety and increased financial costs.

Summary of Forecast Maintenance Costs

Forecast maintenance costs vary with the total value of the asset stock. If additional assets are acquired, future maintenance costs are forecast to increase. If assets are disposed of the forecast operation and maintenance costs are expected to decrease. **Figure 3.3.1** below shows the forecasted maintenance costs relative to the proposed maintenance planned budget.

Figure 3.3.1: Maintenance Summary



All figure values are shown in 2025-dollar values.

One consideration for maintenance is to recognize that rising costs across most if not all maintenance activities. Since 2020, prices have been rising aggressively, and careful analysis will be required to ensure that sufficient funds are put into place to ensure future maintenance activities can be completed.

Maintenance budget levels are adequate to meet projected service levels over the entire 10-year planning period. The initial years of the plan (2025 - 2027) are funded adequately enough that there will be no impact on service levels. For the remaining planning horizon Airport will be required to draw upon its reserves to ensure the service is sustainable and able to complete all forecasted maintenance activities.

Future iterations of the DAMP will need to consider obligations to ensure that required safety and regulatory maintenance is prioritized. Where maintenance budget allocations are such that they will result in a lesser level of service, the service consequences and service risks have been identified and are highlighted in this DAMP and service risks considered in the Risk Management Plan. Assessment and priority of reactive maintenance is undertaken by staff using experience and judgement. The trend in maintenance budgets is shown in **Table 3.3.2** below.

Table 3.3.2: Maintenance Budget Trends

Year	Maintenance Budget
2025	**$ 11,010**
2026	**$ 11,118**
2027	**$ 11,226**

3.4 Renewal Plan

Renewals are the major capital works which do not significantly alter the original service capacity provided by the asset, but restores, rehabilitates, replaces or renews an existing asset to its original service potential. Working over and above restoring an asset to its original service potential is an acquisition resulting in additional future operations and 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). The typical useful lives of assets used to develop projected asset renewal forecasts are shown in **Table 3.4.1.** Asset useful lives related to the airport was last reviewed on **May 1, 2025.**

Table 3.4.1: Useful Lives of Assets

Asset Sub-Category	Average Useful Life (Years)
Runway, Apron and Taxiway	**40 Years**
Terminal Building	**50 Years**
Parking Lot	**20 Years**
Fencing, Signage	**20 Years**
Vehicle	**10 Years**
Fuel Sites	**30 Years**
Airfield Lighting	**30 Years**

The estimates for renewals in this DAMP are based on the asset register method.

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 an airport terminal building)
- To ensure the infrastructure is of sufficient quality to meet the service requirements (e.g. terminal building is in suitable condition)

The airport prioritizes its renewals by identifying assets or asset groups that have:

- High consequence of failure
- High use and subsequent impact on users would be significant
- Higher than expected operational or maintenance costs
- Potential to reduce life cycle costs by replacing a modern equivalent asset that would provide the equivalent service

Every airport asset has a distinct decision point were continuing to maintenance it becomes unfeasible, financially burdensome, or legally required, and renewing it becomes the optimum choice for Chatham-Kent. For this DAMP, an asset is identified as requiring a renewal when it requires either complete or near complete (85% of total physical structure) reconstruction is required. Other actions to repair the asset (resurfacing, crack sealing etc.) are considered maintenance activities.

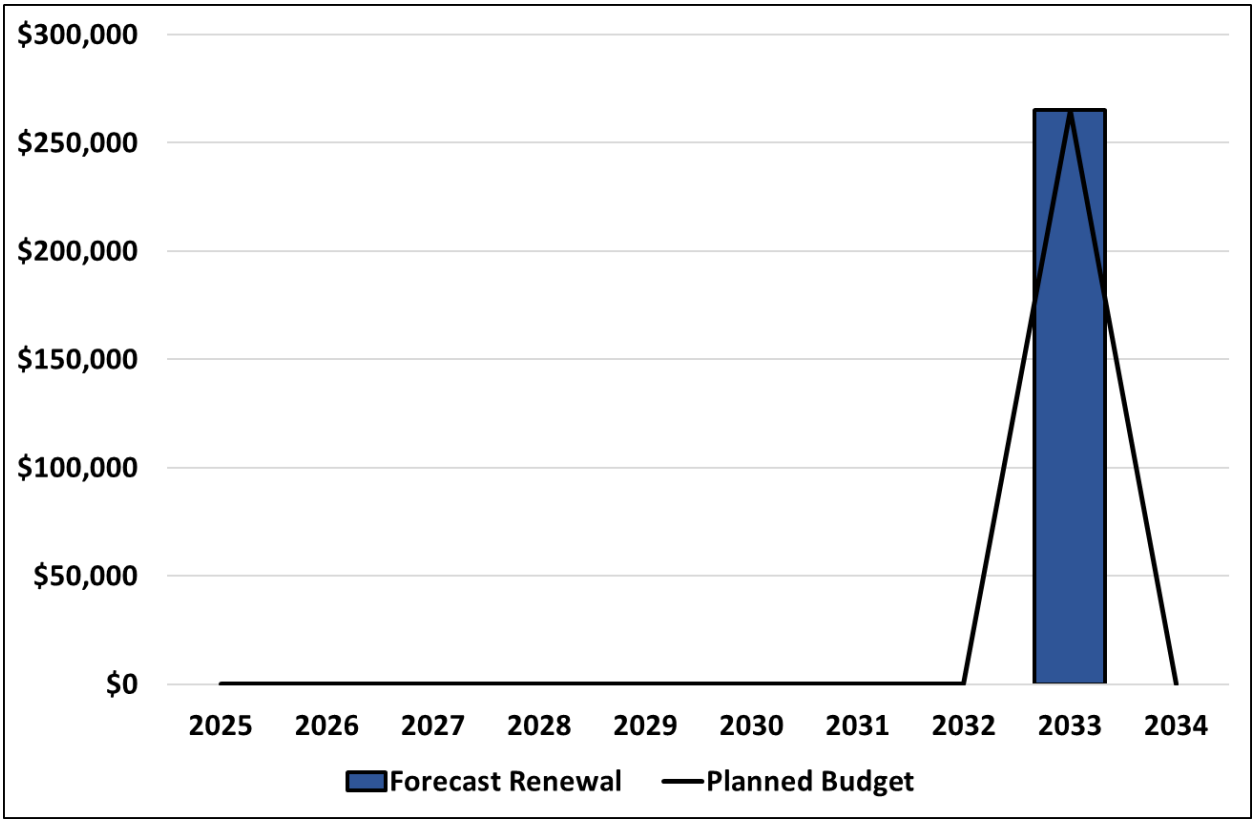
3.5 Summary of Future Renewal Costs

Over the 10-year planning horizon the airport asset class will invest approximately **$265,000** in renewal activities which will include the following:

2033 - $265,000 planned for renewal projects that include replacing the signage, fencing, miscellaneous tools used in the daily operational activities, parking lot renewal, and for the renewal of movement area inspection vehicle.

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

Figure 3.5.1: Forecast Renewal Costs (2025 - 2034)



All figure values are shown in 2025-dollar values.

Currently there are sufficient funds in the reserve to renew the airport assets at the appropriate time.

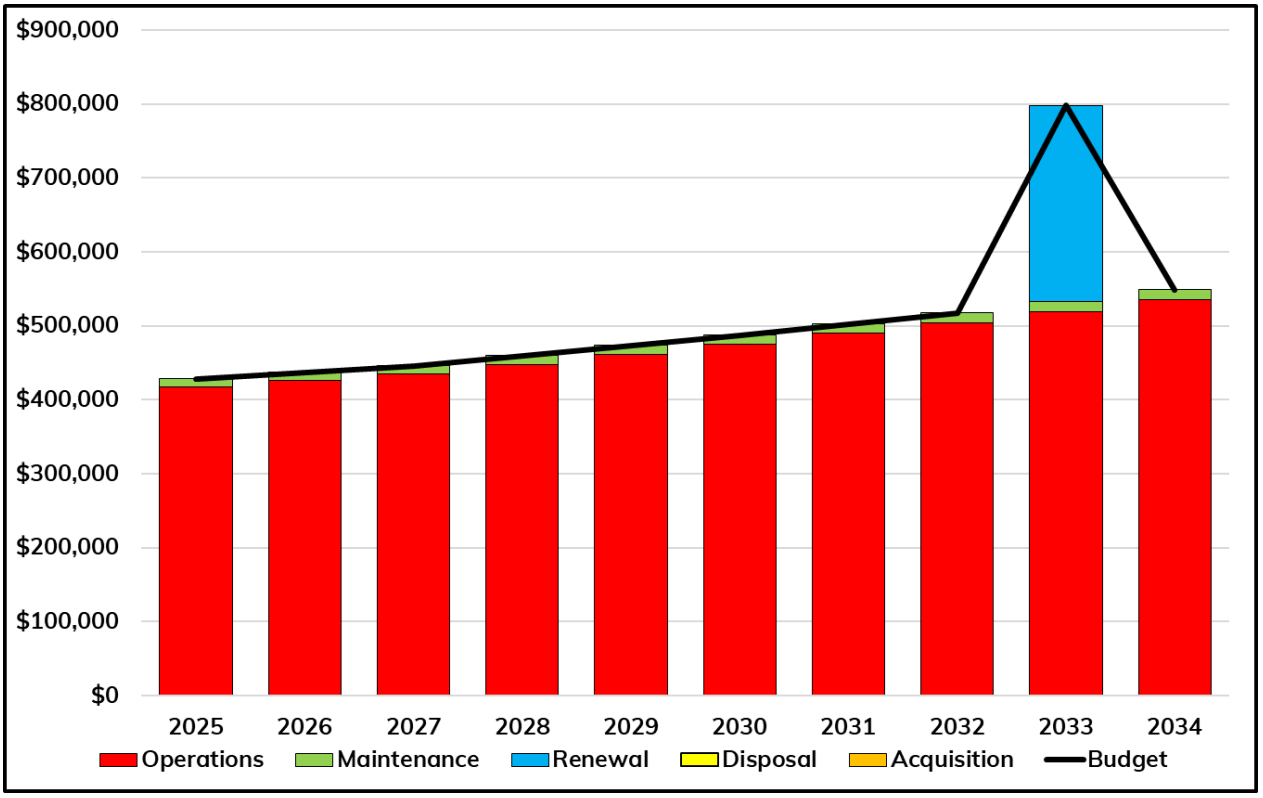
3.6 Disposal Plan

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 remediation, and relocation. Presently, Council does not have any plans to dispose of any airport assets over the 10-year planning horizon. Any expenses or revenues generated from asset disposals will be incorporated into the long-term financial plan. Should any future disposals be identified, they will be documented in this section.

3.7 Summary of Asset Forecast Costs

The summary of the financial projections for this asset plan are shown in **Figure 3.7.1**. These projections include forecast costs for acquisition, operation, maintenance, renewal, and disposal. These forecast costs are shown relative to the proposed budget. The bars in the graphs represent the forecast costs needed to minimize the life cycle costs associated with the service provision. The proposed budget line indicates the estimate of available funding. The gap between the forecast work and the proposed budget is the basis of the discussion on achieving 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 2025-dollar values.

With the current budget and available reserve funds, the Airport possesses ample resources to finance all scheduled lifecycle tasks for the entire 10-year planning period

4.0 LEVELS OF SERVICE

Levels of service describe the value that airport assets provide to the community and are typically spoken about in 'measures'. Utilizing service measures allows decision makers to understand what the outcome of investments will be to allow those making choices to clearly understand how a dollar, will impact Chatham Kent's ability to deliver its services. These measures also allow Chatham Kent to communicate with the public as to the cost of the services that they receive today and will be able to afford in the future.

Service levels are measured 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 that range from Federal to Provincial or even Chatham Kent's own bylaws. There are many legislative requirements relating to the management of airport assets. Legislative requirements that impact on the delivery of the service are outlined in **Table 4.1.1.**

Table 4.1.1: Legislative Requirements

Legislation	Requirement
Aeronautics Act	Security and Zoning Regulations and inspections of the airport area.
Canadian Aviation Regulations	Confirm airport meets the regulations - inspections/audits, training, testing, maintenance requirements, licensing requirements, and equipment requirements.
B836:22 Fueling Standard	Confirm fueling meets the standards - inspections, required equipment, licensing requirements, required signage, training, maintenance requirements.
Accessibility for Ontarians with Disabilities Act	Confirm municipal buildings meet AODA compliance
Environmental and wildlife regulations	Aim to protect ecosystems, conserve biodiversity, and manage natural resources sustainably

4.2 Customer Research and Expectations

The 2nd DAMP is intended to provide a snapshot of the current level of service provided by the airport. Consultation survey was conducted with the public on **May 6, 2025,** as a part of Airport General Meeting (AGM). Future iterations of the airport DAMP will involve more customer consultation, focusing on service levels and associated costs. This approach aims to assist Council and stakeholders in aligning the required level of service, potential service risks, and consequences for the customers' capacity and willingness to financially support the service.

There were **14** respondents to the airport customer satisfaction survey conducted on May 6, 2025. Almost all the respondents are very satisfied with the service provide at the municipal airport. Some important suggestions were regarding the limited parking space available at the airport, and customers wish to have more parking lots, non-availability of METAR/TAFs in the airport, adding a taxiway to avoid delays, and regarding the sealant coming off from the movement area.

4.3 Customer Values

Service levels are defined in three ways: customer values, customer levels of service and technical levels of service.

Customer Values indicate:

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

Current Customer Values:

Through previous public consultations, Chatham-Kent has identified elements that customers value from its airport assets.

1. **Availability** – Ensure that engineered structures are always open
2. **Condition** – Customers value a smooth parking lot surface, free from potholes
3. **Affordability** – The price customers pay through their taxes is reasonable for the quality of airport assets available to the customers
4. **Connectivity** – Customers wish to be able to get to their destinations

Consultation survey was conducted with the public on May 6, 2025, as a part of Airport General Meeting (AGM). There were 14 respondents to the airport customer satisfaction survey. This consultation will help identify expected trends in the planned budget and the values will be addressed in the future iterations of this plan.

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 the Intended purpose ... Is it the right service?

Capacity/Use - Is the service over or underused ... do we need more/less of the service?

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.

Table 4.4.1: Customer Level of Service Measure

Measure Type	Levels of Service	Performance Measure	Current Performance	Expected Trend Based on Planned Budget
Condition	Ensure airport assets are open and are from **fair** to **very good** condition	Customer Survey	100% respondents in airport customer satisfaction survey are satisfied	Expected to maintain trend
Capacity	Ensure there are sufficient parking lots to meet customer demands and for traffic volumes	Customer Survey	72% respondents are satisfied	Expected to maintain trend
Capacity	Ensure the availability of airport staff on site to help the users	Customer Survey	100% respondents in airport customer satisfaction survey are satisfied	Expected to maintain trend
Function	Ensure terminal building are designed appropriately to ensure they are fit for purpose	Customer Survey	72% respondents are satisfied (4 neutral responses)	Expected to maintain trend

Further investigation will be necessary to ensure that customer service levels are regularly measured, allowing Chatham-Kent to consider various options to meet the community's evolving needs and expectations. The goal is to consistently engage in developing baseline community measurements and to continue the process of creating trend analysis data that will guide future decisions.

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.

These represent life-cycle performance measures that gauge how the airport intends to attain desired customer outcomes, showcasing effective performance, legislative compliance, and management. These metrics should illustrate the alignment of the airport service delivery with customer value and act as potential levers to affect and influence Customer L.O.S. The airport will track specific lifecycle activities to measure service performance in meeting the desired service level and to shape customer perceptions of the services received from the assets.

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 runway, additional parking spaces) or a new service that did not exist previously (e.g., a new airport terminal building).

Operation – the regular activities to provide services (e.g., operating hours, cleaning, mowing grass, utilities, 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., crack sealing, building maintenance, equipment and tools repair etc.),

Renewal – the activities that return the service capability of an asset up to that which it had originally provided (e.g., runway resurfacing, parking lot reconstruction, and building 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 Level of Service

Lifecycle Activity	Level of Service Statement	Activity Measure	Current Performance	Recommended Performance
Operations	Airport assets will be kept in good working condition	Regular runway, apron, and taxiway inspections. Obstacles cleared as needed.	**Twice per day (Increase in Winter)**	**Twice per day (Increase in Winter)**
		Budget	**Part of 3rd Party Contract**	
Operations	Provide appropriate infrastructure for the safe and sustainable delivery of airport services	Fuel sales (in L) for the year 2024.	**Jet-A-170,020 L AVGAS-69,501 L**	**Varies**
Operations	Provide safe and secure airport operations	Number of airport movements for 2024	**8034 movements**	**Varies**
Maintenance	Provide appropriate infrastructure for the safe and sustainable delivery of airport services	Aircraft Maneuvering areas are maintained to meet Transport Canada regulations	**100% of required maintenance completed**	**100% of required maintenance completed**
		Budget		
Maintenance	Provide appropriate infrastructure for the safe and sustainable delivery of airport services	Regular maintenance works done on the terminal building to maintain good condition	**100%**	**100%**
		Budget		

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

4.6 Proposed Level of Service

O.Reg 588/17 mandates that every municipality define its proposed level of service. The chart below illustrates the existing level of service compared to the proposed level. The planned budget reflects the funds currently available, while the required budget for the proposed level indicates whether an increase in funding is necessary to achieve the desired service level.

Level of Service Statement	Current LOS	Current Budget	Proposed LOS	Required to achieve the Proposed LOS
Chatham Kent will maintain its assets in **good** conditions, on average over the 10-year planning horizon	Average conditions are **good**	**$416,000** on average annually	Average condition is **good**	**+ 2% annually**
Chatham Kent will achieve its Asset Renewal Funding Ratio (ARFR) sustainability target of 100 % the 10-year planning horizon	**100 %** (ARFR)	**$26,500** on average annually (for renewal activities only)	**100 %** (ARFR)	**1-2% of renewal cost for inflationary consideration**

5.0 FUTURE DEMAND

5.1 Demand Drivers

Drivers affecting demand include things such as population change, regulations, changes in demographics, seasonal factors, vehicle ownership rates, consumer preferences and expectations, technological changes, economic factors, agricultural practices, environmental awareness, etc.

5.2 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.

5.3 Demand Impact and Demand Management Plan

The impact of demand drivers that may affect future service delivery and use of assets are shown in **Table 5.3.1.**

Demand for new services will be managed through a combination of managing and upgrading existing assets and providing new assets to meet demand. Demand management practices can include non-asset solutions, insuring against risks and managing failures.

Opportunities identified to date for demand management are shown in **Table 5.3.1**. Further opportunities will be developed in future revisions of this DAMP.

Table 5.3.1: Demand Management Plan

Demand driver	Current position	Projection 10 Years	Impact on services	Demand Management Plan
Population	112,200 (2024)	116,848 (2034)	Expanding population will see an increase of users of the airport and its services	Monitor increase usage and expand when there are sufficient customers to afford expansion
Growing services	22 airport hangers	Increase in the future	Increase of customers requires increased operational and maintenance costs	Ensure whole life costs models are completed to ensure new hangers are affordable

Demand driver	Current position	Projection 10 Years	Impact on services	Demand Management Plan
Climate Change	Environmental obligations are compliant with legislation	Maintain compliance when growth occurs	Expanding population will likely see an impact on users of the airport and its services	Monitor increase usage and expand when there are sufficient customers to afford expansion

The rise in Chatham-Kent's population may require the airport to expand its services and will drive the demand for additional assets and staff to support the agreed upon level of service. This plan aims to anticipate and address future needs comprehensively.

The expected increase in the number of airport hangars will further highlight the need for additional acquisitions in the future. Construction of more aprons, taxiways, and other services will be essential to meet the desired serviceability levels and accommodate the increasing demand.

5.4 Asset Programs to meet Demand

The new assets required to meet demand may be acquired, donated or constructed. Acquiring new assets will commit the Chatham-Kent to ongoing operations, maintenance and renewal costs for the period that 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 long-term financial plan.

6.0 RISK MANAGEMENT PLANNING

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

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

- loss or reduction in 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. The risk assessment will also include the development of a risk rating, evaluation of the risks and development of a risk treatment plan for those risks that are deemed to be non-acceptable.

6.1 Critical Assets

Critical assets are defined as those which have a high consequence of failure causing significant loss or reduction of service. Critical assets have been identified and along with 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
Facility & Site	Degraded condition, insufficient maintenance, design flaws, overloading, erosion	Impacts on quality, increased customer complaints, reputational harm, increased maintenance or renewal costs
Maneuvering areas	Degraded condition, insufficient maintenance, design flaws, overloading, erosion	May cause a temporary closure, increased reactive maintenance costs, impact on customers
Technical or	Failure in system	increased customer complaints,

communication equipment		reputational harm, increased maintenance or renewal costs

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

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 the selection of response 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, development of a risk rating, evaluation of the risk and 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 initial asset registry risk assessment completed for the DAMP. Future iterations of the risk assessment will include residual risk and treatment costs of implementing the selected treatment plan. It is essential that these critical risks and expenses are reported to management and Council.

Table 6.2.1: Risks and Treatment Plans

Asset Providing the Service	What can Happen	Risk Rating	Possible Cause	Existing controls
Facility & Site	Deterioration of the inventory results in reduced service quality	Medium	Aging inventory and lack of preventative maintenance and renewals,	Regular inspections resulting in maintenance and renewal actions so lifecycle activities can be prioritized
Facility & Site	Aircraft incident	High	Bird strikes, weather condition, mechanical Issue	Airport emergency plan, emergency service response
Fuel system damage	Fire, accident	Medium	High winds, vehicle contact, Aging inventory and lack of preventative maintenance and renewals	Aircraft emergency plan, staff training, regular inspections resulting in maintenance and renewal actions so lifecycle activities can be prioritized
Facility & Site	The cost of maintenance and renewals is higher than expected	High	Inflation related to construction materials, fuel and wages results in additional project costs	Future budgets are prepared with conservative inflation amounts and contingencies to account for potential increases
Facility & Site	The cost of maintenance and renewals is higher than expected	Medium	Lack of contractor availability results in higher than budgeted maintenance and renewal costs	Where possible, projects are tendered with two-year construction windows to allow for flexibility in construction timing

Wildlife risk

Wildlife poses a significant risk at the airport, as outlined in the Wildlife Management Plan. Key hazards include Canada Geese, Gulls, American Crows, Hawks, White-Tailed Deer, and Coyotes. There was a slight increase in wildlife sightings from 1,517 in 2022, 1,579 in 2023, and 1722 in 2024. Bird sightings increased from 960 reports in 2022, 1,011 reports in 2023, and 1166 reports in 2024. while mammal sightings decreased from 557 reports in 2022, 568 reports and to 556 reports in 2024. Rabbits accounted for 226 in 2024 of the mammal sightings.

These hazards were identified following a risk assessment based on factors such as mass/flocking hazard, relative abundance, hazardous behavior, and aircraft types. These observations underscore the ongoing importance of wildlife management efforts to mitigate potential risks to aircraft safety.

Increase in the wildlife sighting in airport area will increase the risk of wildlife strikes and aircraft accidents. There were seven bird strikes reported in the year 2024, which was four in 2023, and one in 2022.

6.3 Infrastructure Resilience Approach

The resilience of the airport critical infrastructure is vital to the ongoing provision of services to customers. To adapt to changing conditions Chatham-Kent needs to understand its capacity to 'withstand a given level of stress or demand', and to respond to possible disruptions to ensure continuity of service.

Resilience recovery planning, financial capacity, climate change risk assessment and crisis leadership. Currently, airport does not measure resilience in service delivery. This will be included in future iterations of the DAMP.

6.4 Service and Risk Trade-Offs

The decisions made to adopt this DAMP are based on the objective of achieving the optimum benefits from the available resources.

6.4.1 What Cannot Be Done

There are some operations and maintenance activities and capital projects that are unable to be undertaken within the next 10 years. These include:

- Increase the levels of operation, maintenance and renewal activities
- Mitigate all risks
- Ensure all reactive maintenance projects can be fully funded
- Ensure that all future renewals outside of the planning period can be completed due to the scope of the plan being limited to a 10-year planning horizon

6.4.2 Service Trade-Off

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

- As the condition of the infrastructure continues to deteriorate, it will result in a lower level of service that could include temporary closures or longer-term closures.
- Limiting hours of operations if facilities fall into a poor condition
- Unable to expand the hours of operation
- Limiting future development for future customers

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:

- Over the long term without sufficient funding and as the condition of assets deteriorates, they may become unsafe
- If buildings and land improvement assets do not meet current standards, the Municipality could be at risk of litigation should an incident occur

These actions and expenditures are considered and included in the forecast costs, and where developed, the risk management plan.

7.0 CLIMATE CHANGE ADAPTATION

Climate change will have a significant impact on assets and the services they provide. In the context of the asset management planning process climate change can be considered as both a future demand and a risk. How climate change impacts

assets will vary depending on the location and the type of services provided, as well as how staff respond to and manage those impacts.

As a minimum, airport will consider how to manage its existing assets given potential climate change impacts for the region. Climate change will have a significant impact on the assets Chatham-Kent manages and the services they provide. This can include:

- Impacting asset lifecycle costs
- Affect the level of service that can be provided
- Increase demand for services
- Impact risks involved with delivery services

In the context of the asset management planning process, climate change can be both a demand and a risk. How climate change impacts on assets will vary depending on the location and the type of services provided, as well as the way in which CK responds 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 rainstorms 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 and early 2020 caused major erosion and flooding issues in the community. This included the closures of Erie Shore Drive, the Talbot Trail, and Rose Beach Line, etc.

Recognizing these continuing climate change impacts, 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).

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

Based on the Climate Atlas of Canada, historical climate patterns show that CK’s climate has become hotter, wetter and wilder over the last 6 decades and this trend is expected to continue in the future.

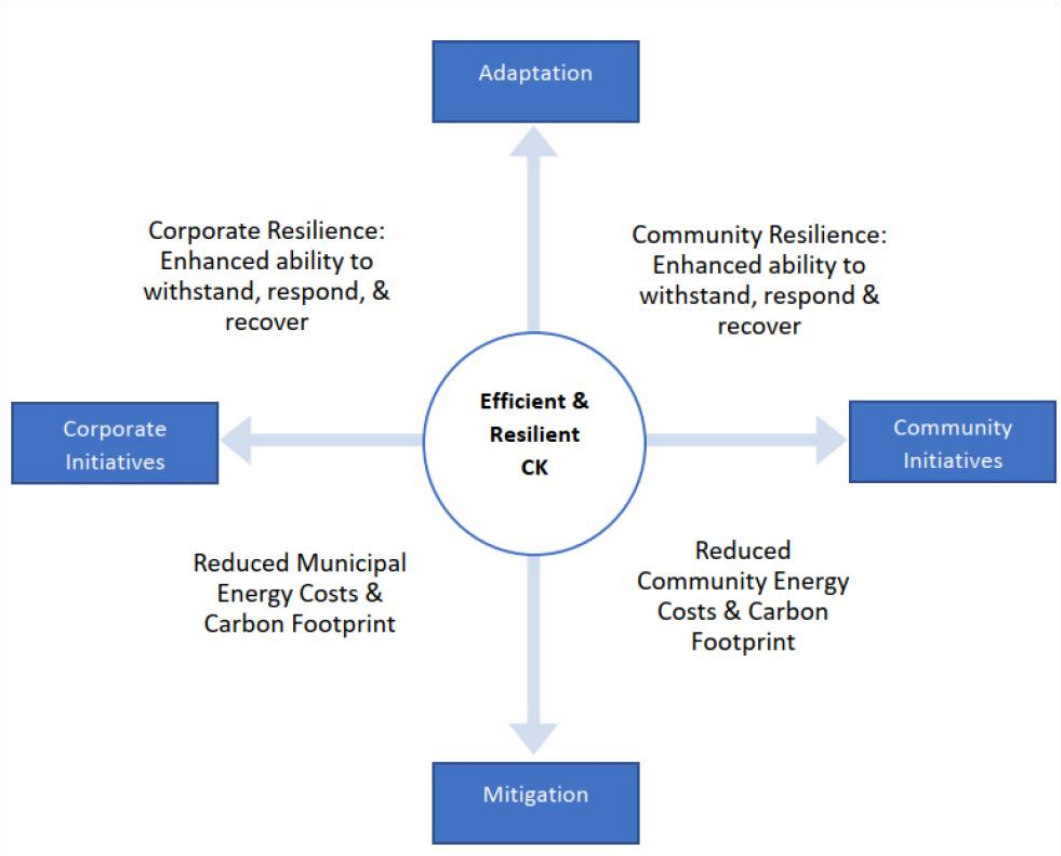
Hotter: Average annual temperatures have risen by 0.5°C and are expected to rise

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 increase 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 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	Develop strategies to manage flood events and prevent overflows
		Overflows can potentially cause flooding resulting in damage to equipment, accident, injury, and potential disruption of services	
Annual Very Hot Days, (+30 degrees Celsius), increase	+20 days, annually	High temperature days can impact thermal comfort of buildings, runway surface condition and reduce expected service life of assets	Renew or upgrade building environmental system to ensure they adapt to temperature variations.
Increased freeze/thaw cycles accelerate deterioration of movement area surface	Increased frequency	Reduced useful life, increased maintenance activities and costs, reduced levels of service	Develop a renewal schedule and continue to develop proactive maintenance schedules. Continue to increase budget to ensure sufficient funds are available

Increased precipitation increases floodings of the movement areas	+45mm annually	May require temporary closures which could impact the services	Assess design storm requirements and adjust as required

Climate change has become a pressing issue, impacting various elements of the airport network. Rising temperatures are a critical aspect of climate change. As temperatures increase, air density decreases, making it more challenging for aircraft to generate the lift needed for take-off. This may result in some runways being too short for certain aircraft to safely take off. Additionally, aircraft operators may need to reduce the take-off weight of planes and helicopters to compensate for reduced lift.

Wind patterns are also changing due to climate change, with research indicating a general slowdown in winds and shifts in prevailing directions. Lower wind speeds can affect landing and take-off distances, requiring longer runway distances or reduced aircraft weight for safe operations. Moreover, decreased wind speeds can increase turbulence and cause disruptions during flight.

Additionally, the way in which 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 levels can be sustained
- 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.

AVGAS Fuel Sites

Field Electric Centre

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 asset management expertise within Chatham-Kent matures. It is crucial to align the budgeting process, the Long-Term Financial Plan, and the DAMPs to ensure that all the airport assets' needs are addressed while the municipality establishes a definitive financial strategy with measurable goals and targets.

Effective assets and financial management will enable staff to ensure its airport services provide the appropriate level of service for the community to achieve its goals and objectives. Reporting to stakeholders on service and financial performance ensures the Municipality is transparently fulfilling its stewardship responsibilities. Long-term financial planning (LTFP) is critical to ensure the airport networks lifecycle activities such as renewals, operations, maintenance, and acquisitions can happen at the optimal time.

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:

- **Asset Renewal Funding Ratio** (proposed renewal budget for the next 10 years / proposed renewal outlays for the next 10 years shown in the DAMP)
- **Lifecycle Funding Ratio** (proposed lifecycle budget for the next 10 years / proposed lifecycle outlays for the next 10 years shown in the DAMP)

Asset Renewal Funding Ratio (ARFR) – 100%

The Asset Renewal Funding Ratio is an important indicator and illustrates that over the next 10 years Chatham-Kent has insufficient renewals funding to address its needs for the current planning period. As the DAMP evolves the planning horizon will extend from 10 years to 20 years and at that time there may be significant renewal activities identified. Each year the airport DAMP will be updated to acknowledge the financial realities of the available budget and how those realities will impact the current level of service set by Council.

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

The ARFR is a stewardship measure and is an indicator in determining if Chatham-Kent is achieving intergenerational equity. Ensuring sufficient financial resources are allocated to renewing assets is essential to achieve sustainability. Funding the ARFR over time so the airport network can meet its financial target is essential to ensure the service is considered sustainable.

If assets are not renewed at the appropriate time, 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 Chatham-Kents reputation and risk of fines or legal costs

Future airport DAMPs will align with the planned LTFP. This approach will enable staff to devise options and strategies for addressing future long-term renewal rates challenges. Chatham-Kent plans to reassess its renewal allocations after the full inventory is verified and consolidated.

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

The current **10-year Lifecycle Funding Ratio is 100%.**

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

The 10-year Lifecycle Financial Ratio evaluates the planned budget against the lifecycle forecast to ensure optimal operation, maintenance, and renewal of assets, aiming to deliver a consistent level of service over the 10 -year planning period. As with the Asset Renewal Funding Ratio (ARFR), the ideal range for this ratio is between **90- 110%.** A ratio below this range suggests that the funding for assets is not sufficient to fulfill the organization's commitments to risk management and service levels.

Financial Gap Analysis

Budget Projections	Financial Measure
Planned Budget (10 Years)	$5,098,151
Forecast Costs (10 Years)	$5,098,151
Annual Average Shortfall	0
Total Shortfall over 10-year planning horizon	0

The annual 'gap' of **$0** indicates that airport has **100 %** of the forecasted costs required in the forecasted budget to provide the services documented in this DAMP.

Any overall gap in funding for each of Chatham-Kent's services will require vetting, planning and resources to begin to incorporate 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** – Changing expectations or demand drivers

These options and others will allow the airport to ensure that the gaps would be managed appropriately to ensure the level of service outcomes the customers desire are achieved. Providing sustainable services from infrastructure requires the management of service levels, risks, forecast outlays and financing to eventually achieve a lifecycle funding ratio (LFR) of **90-110%** over the next **30** years**.**

8.2 Forecast Costs (outlays) for the Long-Term Financial Plan

Table 8.2.1 shows the forecast costs (outlays) required for consideration in the 10-year long-term financial plan (LFTP). Providing services in a financially sustainable manner requires a balance between the forecast outlays required to deliver the agreed service levels with the planned budget allocations in the long-term financial plan.

Any gap between the forecast outlays and the amounts allocated in the financial plan indicates further work is required on reviewing 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 and future plans will focus on the methods and strategies

to manage that gap over time to achieve sustainable services and intergenerational equity.

The forecast costs needed to provide airport services documented in this DAMP are accommodated in the proposed budget and available reserves, and hence there is no Current Gap for the 10-year planning period. Chatham-Kent will manage any 'gap' by developing this DAMP to provide guidance on future service levels and resources required to provide these services in consultation with the community.

Table 8.2.1: Forecast Costs (outlays) for the Long-Term Financial Plan 2025 - 2034

Year	Acquisition	Operation	Maintenance	Renewal	Disposal
2025	0	$417,405	$11,010	0	0
2026	0	$425,916	$11,118	0	0
2027	0	$434,968	$11,226	0	0
2028	0	$448,017	$11,563	0	0
2029	0	$461,457	$11,910	0	0
2030	0	$475,301	$12,267	0	0
2031	0	$489,560	$12,635	0	0
2032	0	$504,247	$13,014	0	0
2033	0	$519,374	$13,404	$265,000	0
2034	0	$534,955	$13,807	0	0

All figure values are shown in 2025-dollar values.

8.3 Funding Strategy

The proposed funding for assets is outlined in the operational budget and 10-year capital budget. These operational and capital budgets determine how funding will be provided, whereas the DAMP typically communicates how and when this will be spent, along with the service and risk consequences.

The Airport continues to add $200,000 annually to the airport reserves. If there is a lack of designated funds for the airport budget, resulting in an annual withdrawal from the reserve for planned lifecycle activities. It is recommended to review the reserve and its contributions once the Council approves the Level of Service, to determine the appropriate yearly contributions and allocations for both operational and capital budgets. Future iterations of the DAMP will provide more detailed service delivery options and alternatives to optimize limited financial resources.

8.4 Valuation Forecasts

Asset values are forecast to increase as additional assets are added into service. As projections improve and can be validated with market pricing the net valuations will increase significantly. Additional assets will add to the operations and maintenance needs in the longer term. Additional assets will also require additional costs for future renewals. Any additional assets will also be added to future depreciation forecasts. Any disposal of assets would decrease the operations and maintenance needs in the longer term and would remove the high costs of 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.

8.4.1 Asset valuations

The best estimate of the value of assets included in this DAMP are shown below. The assets are valued utilizing Current Replacement Cost (Market Prices Index).

Table 8.4.2 Asset valuation table

Assets Valuation	Financial Value
Replacement Cost (Gross)	$12,855,977
Depreciable Amount	$12,855,977
Annual Depreciation Expense	$343,774

8.5 Key Assumptions Made in Financial Forecasts

In compiling this DAMP, it was necessary to make some assumptions. This section details the key assumptions made in the development of this DAMP 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.

- Omission of select disposal assets during this budget period; small projects will have a minor impact on disposal projections.
- Budgets have been allocated based on the best available data on assets.
- An annual inflationary amount has been applied to the operational and maintenance forecast to reflect the projections that costs will increase over time. Depending on the activity the forecasted inflation ranges from 0.5% - 3%.

8.6 Forecast Reliability and Confidence

The forecast costs, proposed budgets, and valuation projections in this DAMP are based on the best available data. For effective asset and financial management, it is critical that the information is current and accurate. Data confidence is classified on an **A - E level scale** in accordance with **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. Dataset is substantially complete but up to 50% is extrapolated data and accuracy estimated ± 25%.
D. Low	Data is based on unconfirmed verbal reports and/or cursory inspections and analysis. Dataset may not be fully complete, and most data is estimated or extrapolated. Accuracy ± 40%.
E. Very Low	None or very little data was 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**	Sufficient information to provide high quality information for demand drivers.
Growth projections	**Medium**	Growth projections are reliable. Growth will be reviewed annually to ensure staff is aware and ensure it can be properly resourced.
Acquisition forecast	**Medium**	There is sufficient data to reliably forecast the acquisitions with a high level of confidence.
Operation forecast	**Medium**	The financial projections are satisfactory, but additional work is needed to provide essential metrics and technical levels of service.
Renewal forecast - Asset values	**Medium**	The valuations are updated biennially by consultants and are of high quality.
Asset useful lives	**Medium**	Several assets still need additional evaluation to confirm that their useful lives are suitable for financial modeling.
Condition modeling	**Medium**	Major assets have an age based with minimal condition inspection data
Disposal forecast	**Low**	Work will be required to improve models and determine if any assets should be considered for disposal.

The estimated confidence level for and reliability of data used in this DAMP is considered to be **medium-high** 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 Kents 2025 - 2027 Multi-Year Budget (Capital & Operating)

- Internal Market Price Valuations
- AM Software Multi-Year Forecasting Models
- Council Reports
- Financial Exports from various software and systems
- Procurement documents

9.2. Asset management data sources

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

- Asset Registers
- AM Data Collection Templates
- Insurance Data
- Tangible Capital Asset Data
- Inspection Logs and internal staff reports
- Subject matter expert knowledge and anecdotal Information

9.3. Continuous Improvement Plan

It is important 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, improved financial planning, and plans to physically improve the assets.

The improvement plan, **Table 9.3.1**, highlights proposed improvement items that will require further discussion and analysis to determine feasibility, resource requirements and alignment to current workplans. Future iterations of this DAMP will provide updates on these improvement plans. The costs and resources to complete each of these tasks have not been included in the lifecycle models to date, 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 No.	Task	Responsibility	Resources Required	Timeline
1	Identification for funding for capital projects	Airport Staff, Finance, AQ&M	15 Hours FTE Time	Ongoing
2	Assess criticality of assets	Airport Staff, AQ&M	30 Hours FTE Time	2025
3	Undertake condition assessment of all-critical assets and document in Asset Management System	Airport Staff, AQ&M	GIS Apps, Building condition assessment	2024-2025
4	Complete customer satisfaction surveys to inform levels of service	Airport Staff, AQ&M	40 Hours of FTE time (Within Existing Capacity)	2024-2025
5	Prepare Infrastructure Risk Management Plan	Airport Manager, AQ&M	8 Hours FTE time (Within Existing Capacity)	2024-2027
6	Completed Lifecycle models for movement area	Airport Staff, AQ&M	8 Hours FTE time (Within Existing Capacity)	2025
7	Link future DAMPS to the budget process and the long-term financial plan	Airport Staff, Finance, AQ&M	40 Hours of FTE (Within Existing Capacity)	2025-2027
8	Lifecycle model for Terminal building	Airport Staff, AQ&M	8 Hours FTE time (Within Existing Capacity)	2026
9	Lifecycle model for airport fuel system	Airport Staff, AQ&M	8 Hours FTE time (Within Existing Capacity)	2027

The improvements detailed above are intended to ensure that the Chatham-Kents airport assets are able to achieve a sustainable service level over the next **20 - 30 years**. Some of the initiatives are required to meet legislative requirements and other

initiatives are to improve services or data quality. All initiatives are intended to find financial efficiencies or are required to improve planning and lifecycle activities such as operational and maintenance activities.

Certain improvements can be accomplished within staffing capacity and should be included as work plan for the Airport upon council approval. 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 as a result of 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 essential to ensure the Long-Term Financial Plan can be completed.

The DAMP has a maximum life span of one year and will be updated annually. This plan will receive complete revision and update in 2027 to enable the Chatham Kent airport to be prepared 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 are identified in this DAMP are incorporated into the long-term financial plan.
- 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%).

10.0 Document Control

Rev No.	Date	Revision Details	Author	Reviewer	Approver
1	August, 2024	1st Detailed Asset Management Plan	Akshara Pallippadan	Director, Public Works	Council
2	June, 2025	2nd Detailed Asset Management Plan	Akshara Pallippadan	Director, Public Works	Council

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