Asset Management Plan – Non-core Assets

City of Kawartha Lakes

Draft

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Table of Contents

Table of Contents (Cont'd)

List of Acronyms and Abbreviations

IJPA	Infrastructure for Jobs and Prosperity Act
O. Reg. 588/17	Ontario Regulation 588/17
PSAB	Public Sector Accounting Board
ULC%	Useful Life Consumed Percentage

Report

Chapter 1
Introduction

1. Introduction

1.1 Overview

The main objective of an asset management plan is to use a Municipality's best available information to develop a comprehensive long-term plan for capital assets. In addition, the plan should provide a sufficiently documented framework that will enable continual improvement and updates of the plan, to ensure its relevancy over the long term.

The City of Kawartha Lakes (City) retained Watson & Associates Economists Ltd. (Watson) to expand on the asset management plan Watson prepared for core assets in 2022 by preparing an asset management plan for non-core assets. The intent is to bring the City into compliance with the July 1, 2024 requirements of Ontario Regulation 588/17 (O. Reg. 588/17).

The assets included in this asset management plan are most of the City's assets that are not considered core assets as defined in O. Reg. 588/17.[1] Natural assets and land will be included in future updates of the asset management plan.

The asset management plan has been structured to align with the structure of the City's capital budget. The construction, rehabilitation, replacement and upgrade of the City's non-core assets is budgeted through a total of 21 capital programs and the operating budget.[2] The 22 programs are grouped together into the six service groups as defined in Table 1-1.

[1] The City's core assets are roads, bridges, structural culverts, and assets that support delivery of water, wastewater, and stormwater services.
[2] Assets funded through the operating budget include signs, guiderails, and circulating library materials. They are funded through the operating budget because the replacement cost of individual assets is low.

Table 1-1: Description of Service Groups

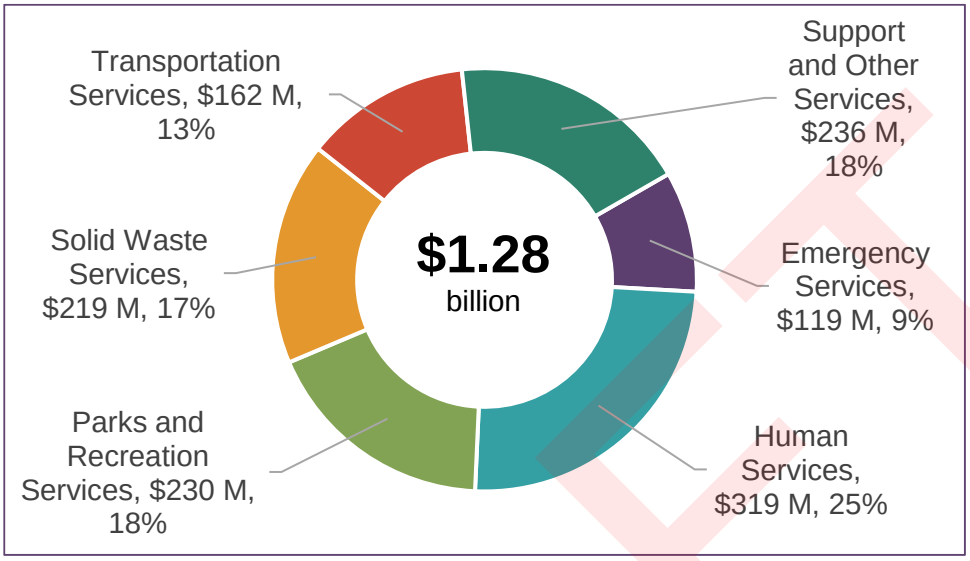
Service Group	Description
Emergency Services	Fire, police, and ambulance services
Human Services	Public housing and nursing care services
Parks and Recreation Services	Services provided by recreation centres and park amenities
Solid Waste Services	Landfill Services
Transportation Services	Airport and transit services, along with services provided by assets that support the road network (e.g., sidewalks, streetlights, etc.)
Support and Other Services	Library and culture services and services provided by assets that are not public facing (e.g., information technology, fleet, etc.)

The replacement costs of the assets included in this asset management plan has been estimated at $1.3 billion. A breakdown of the total replacement cost by service group and capital program is provided in Table 1-2 and is illustrated in Figure 1-1.

Table 1-2: Asset Replacement Cost by Service Group and Capital Program

Service Group	Capital Program Name	Capital Program Description	Replacement Cost (2024$)
Emergency Services	Fire Facilities	Construction, rehabilitation, replacement and upgrade of Fire Service facilities and related components and siteworks.	$57,000,000
	Fire Fleet and Equipment	Acquisition, rehabilitation, replacement and upgrade of Fire Service fleet and equipment.	$40,600,000
	Paramedic Facilities	Construction, rehabilitation, replacement and upgrade of Paramedic Service facilities and related components and siteworks.	$9,400,000
	Paramedic Fleet and Equipment	Acquisition, rehabilitation, replacement and upgrade of Paramedic Service fleet and equipment.	$7,300,000
	Police Fleet and Equipment	Acquisition, rehabilitation, replacement and upgrade of Kawartha Lakes Police Service fleet and equipment.	$4,200,000
Human Services	Housing	Construction, acquisition, rehabilitation, replacement and upgrade of Public Housing and related facility components, siteworks and equipment.	$263,800,000
	Victoria Manor	Construction, acquisition, rehabilitation, replacement and upgrade of Victoria Manor and related facility components, siteworks and equipment.	$55,000,000
Parks and Recreation Services	Cemetery Siteworks and Facilities	Construction, rehabilitation, replacement and upgrade of cemetery facilities, siteworks, columbaria and related infrastructure.	$600,000
	Parks and Recreation Equipment	Acquisition, rehabilitation, replacement and upgrade of non-fleet parks and recreation equipment.	$3,300,000
	Parks Siteworks and Facilities	Construction, rehabilitation, replacement and upgrade of parks facilities, siteworks and related infrastructure.	$43,000,000
	Recreation Facilities	Construction, rehabilitation, replacement and upgrade of arenas, pools, community centres and other recreation facilities and related systems, components and siteworks.	$183,200,000
Solid Waste Services	Landfill Equipment	Acquisition, rehabilitation, replacement and upgrade of non-fleet landfill equipment.	$200,000
	Landfill Siteworks and Facilities	Construction, rehabilitation, replacement and upgrade of landfill facilities, cells, internal roadways, non-facility structures and related siteworks.	$218,600,000
Transportation Services	Airport Siteworks and Facilities	Construction, rehabilitation, replacement and upgrade of airport facilities, parking lots, aprons, runways, non-facility structures and related siteworks.	$14,400,000
	Roads, Fleet and Transit Facilities	Construction, rehabilitation, replacement and upgrade of roads, fleet and transit facilities, including material storage structures and related siteworks.	$83,100,000
	Sidewalks	Construction, replacement, rehabilitation and upgrade of sidewalks not captured by road reconstruction.	$46,300,000
	Traffic Signals and Streetlights	Installation, upgrade and replacement of traffic signals and streetlights and related infrastructure not already captured by reconstruction.	$18,100,000
	Transit Siteworks	Installation, rehabilitation, replacement and upgrade of transit stops, shelters and related siteworks.	$500,000
Support and Other Services	Building and Property Facilities	Construction, rehabilitation, replacement and upgrade of Building and Property Division facilities and related components and siteworks.	$134,900,000
	Currently Funded through Operating	Replacement of signs, roadside protection (barriers), and circulating library materials.	$15,200,000
	Information Technology Systems	Acquisition, upgrade and replacement of IT systems and related equipment.	$3,300,000
	Public Works Fleet Equipment	Acquisition, rehabilitation, replacement and upgrade of fleet equipment managed by the Fleet and Transit Division.	$82,700,000
Total			**$1,284,700,000**

Figure 1-1: Distribution of Assets by Service Group



1.2 Legislative Context for the Asset Management Plan

Asset management planning in Ontario has evolved significantly over the past decade.

Before 2009, capital assets were recorded by municipalities as expenditures in the year of acquisition or construction. The long-term issue with this approach was the lack of a capital asset inventory, both in the municipality's accounting system and financial statements. As a result of revisions to section 3150 of the Public Sector Accounting Board (PSAB) handbook, effective for the 2009 fiscal year, municipalities were required to capitalize tangible capital assets, thus creating an inventory of assets.

In 2012, the Province launched the municipal Infrastructure Strategy. As part of that initiative, municipalities and local service boards seeking provincial funding were required to demonstrate how any proposed project fits within a detailed asset management plan. In addition, asset management plans encompassing all municipal assets needed to be prepared by the end of 2016 to meet Federal Gas Tax (now the Canada Community-Building Fund) agreement requirements. To help define the components of an asset management plan, the Province produced a document entitled Building Together: Guide for Municipal Asset Management Plans. This guide documented the components, information, and analysis that were required to be included in municipal asset management plans under this initiative.

The Province's *Infrastructure for Jobs and Prosperity Act, 2015* (IJPA) was proclaimed on May 1, 2016. This legislation detailed principles for evidence-based and sustainable long-term infrastructure planning. The IJPA also gave the Province the authority to guide municipal asset management planning by way of regulation. In late 2017, the Province introduced O. Reg. 588/17 under the IJPA. The intent of O. Reg. 588/17 is to establish standard content for municipal asset management plans. Specifically, the regulation require that asset management plans be developed that define the current levels of service, identify the lifecycle activities that will be undertaken to achieve these levels of service, and provide a financial strategy to support the levels of service and lifecycle activities.

This plan has been developed to address the July 1, 2024 requirements of O. Reg. 588/17. It utilizes the best information available to the City at this time.

1.3 Asset Management Plan Development

This asset management plan was developed using an approach that leverages the City's asset management principles as identified within its strategic asset management policy, capital asset database information, and staff input.

The development of the City's asset management plan is based on the steps summarized below:

1. Compile available information pertaining to the City's capital assets to be included in the plan, including attributes such as size, material type, useful life, age, and current replacement cost valuation. Update the current replacement cost valuation, where required, using benchmark costing data or applicable inflationary indices.

2. Define and assess current asset conditions, based on age.

3. Define and document current levels of service based on analysis of available data and consideration of various background reports.

4. Develop lifecycle management strategies that identify the activities required to sustain the levels of service discussed above. The outputs of these strategies are summarized in the forecast of annual capital expenditures required to achieve these levels of service outcomes.

5. Document the asset management plan in a formal report to inform future decision-making and to communicate planning to municipal stakeholders.

Chapter 2
State of Local Infrastructure and Levels of Service

2. State of Local Infrastructure and Levels of Service

2.1 Introduction

This chapter provides summary information on the City's non-core assets and the current service levels provided by those assets.

O. Reg. 588/17 requires that for each asset class included in the asset management plan, the following information must be identified:

- Summary of the assets;
- Replacement cost of the assets;
- Average age of the assets (it is noted that the regulation specifically requires average age to be determined by assessing the age of asset components);
- Information available on condition of assets; and
- Approach to condition assessments (based on recognized and generally accepted good engineering practices where appropriate).

Asset management plans must identify the current levels of service being provided for each asset class. The rest of this chapter addresses the requirements identified above, with each section focusing on an individual service group.

2.2 Emergency Services

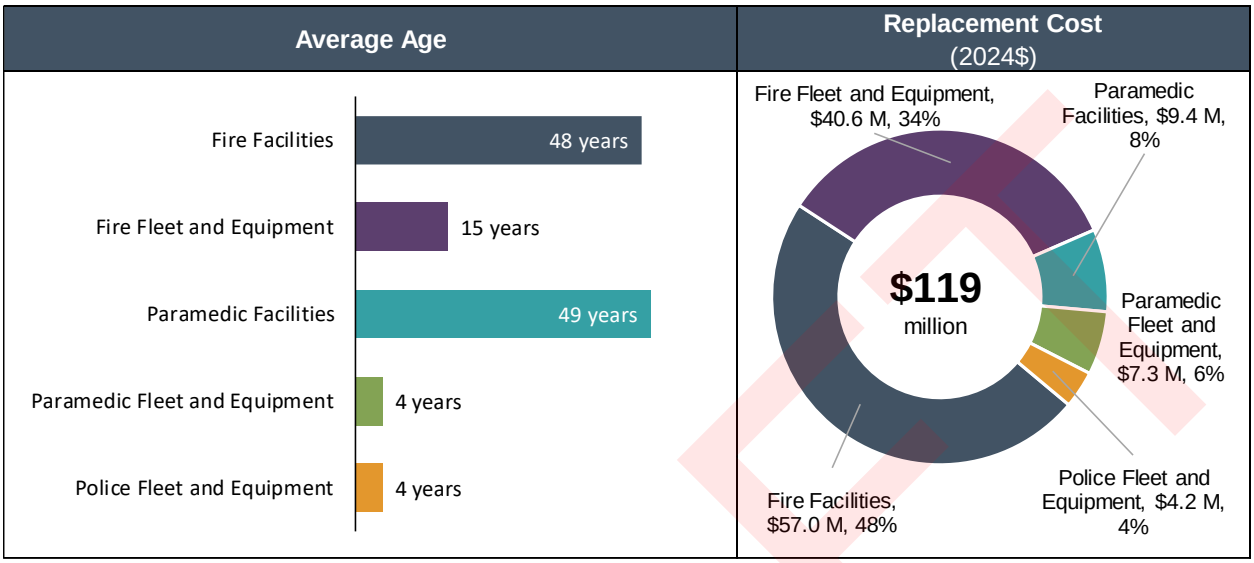
2.2.1 State of Local Infrastructure

The City owns and manages a variety of assets that support the provision of Emergency Services. The replacement cost of these assets is approximately $119 million, with Fire facilities accounting for almost half of the replacement cost (48%) and Fire fleet and equipment account for just over a third of replacement cost (34%). The remaining 18% is accounted for by Paramedic facilities (8%), Paramedic fleet and equipment (6%), and Police fleet and equipment (4%). Table 2-1 provides a breakdown of these assets by capital program, showing the quantity, average age, and replacement cost. A visual rendering of the data presented in Table 2-1 is provided in Figure 2-1.

Table 2-1: Summary of Asset Quantity, Age, and Replacement Cost by Capital Program – Emergency Services

Capital Program	Description	Average Age (years)	Replacement Cost (2024$)
Fire Facilities	**Facilities:** 20 fire buildings (8,160 m²)	47.5	$57,040,000
Fire Fleet and Equipment	**Fleet:** 1 air/light/hazmat vehicle, 7 all-terrain vehicles/utility task vehicles, 3 boats, 4 cars/sports utility vehicles, 11 pick-up trucks, 24 pumpers, 4 rescues, 19 tankers, 1 ariel truck, 1 two-ton truck **Equipment:** 40 automated external defibrillators, 403 bunker gear assets, 500 cylinders, 435 face pieces, 321 helmets, 101 rechargeable battery packs, 19 rapid intervention team packs, 1 sandbagger, 192 self-contained breathing apparatus	15.3	$40,640,000
Paramedic Facilities	**Facilities:** 5 paramedic buildings (1,660 m²)	49.0	$9,440,000
Paramedic Fleet and Equipment	**Fleet:** 14 ambulances, 9 cars/sports utility vehicles, 4 emergency response units/vehicles, 1 pick-up truck, 1 van **Equipment:** 81 automated external defibrillators, 17 cardiac monitors, 22 CPR assisters, 15 stair chairs, 38 stretchers, 20 suction units, 18 video laryngoscopes	4.4	$7,250,000
Police Fleet and Equipment	**Fleet:** 2 all-terrain vehicles/utility task vehicles, 13 Cars/sports utility vehicles, 1 pick-up truck, 3 vans, **Equipment:** 21 automated external defibrillators, 1 remotely operated device, 122 use of force equipment **Information Technology:** 93 audiovisual systems, 73 Client systems, 25 data communications, 12 power systems, 14 printer systems, 13 server hardware assets	4.4	$4,240,000
Total/Average		**32.4**	**$118,610,000**

Figure 2-1: Summary Information – Emergency Services



2.2.2 Condition

The condition of the City's Emergency Services assets has not been directly assessed through a physical condition assessment. When the age of an asset is known, the condition is evaluated based on age relative to the expected useful life (i.e., based on the percentage of useful life consumed (ULC%)). A brand-new asset would have a ULC% of 0%, indicating that zero percent of the asset's life expectancy has been utilized. On the other hand, an asset that has reached its life expectancy would have a ULC% of 100%. It is possible for assets to have a ULC% greater than 100%, which occurs if an asset has exceeded its typical life expectancy but continues to be in service. This is not necessarily a cause for concern; however, it must be recognized that assets that are near or beyond their typical life expectancy are likely to require replacement or rehabilitation in the near term.

To better communicate the condition of Emergency Services assets and other assets where ULC% will be used, the ULC% ratings have been segmented into qualitative condition states as summarized in Table 2-2. The scale is set to show that if assets are replaced around the expected useful life, they would be in the Fair condition state. Beyond 100% of useful life, the probability of failure is assumed to have increased to a point where performance would be characterized as Poor or Very Poor.

Table 2-2: Condition States Defined with Respect to ULC%

ULC%	Condition State
0% ≤ ULC% ≤ 45%	**Very Good**
45% < ULC% ≤ 90%	**Good**
90% < ULC% ≤ 100%	**Fair**
100% < ULC% ≤ 125%	**Poor**
125% < ULC%	**Very Poor**

It is noted that age-based condition ratings have not been assigned to certain types of assets covered in this asset management plan.

Firstly, age-based condition ratings were not assigned to facilities. Unless tracked at a detailed component level, age is a poor indicator of overall facility condition. Facilities can be maintained in a state of good repair for long periods of time through ongoing maintenance, rehabilitation, and replacement of individual components (e.g., roof, furnace, etc.) Inspections performed by qualified professionals are the most accurate way of understanding the condition of facilities. While the City completed condition assessments of most facilities in 2016, this information is now dated and was deemed to be of limited value for this asset management plan. The City is planning to update the building condition assessments in the near future and, once available, the updated condition data will be incorporated into the asset management plan.

Secondly, age-based condition ratings were not assigned to pooled assets. These are assets that the City does not track individually but rather in groups, typically because individually the assets have a low replacement cost. Some examples of pooled assets include laptops, park benches, and traffic signals. An age-based condition rating cannot be assigned to pooled assets because the ages of individual assets in a pool are not tracked.

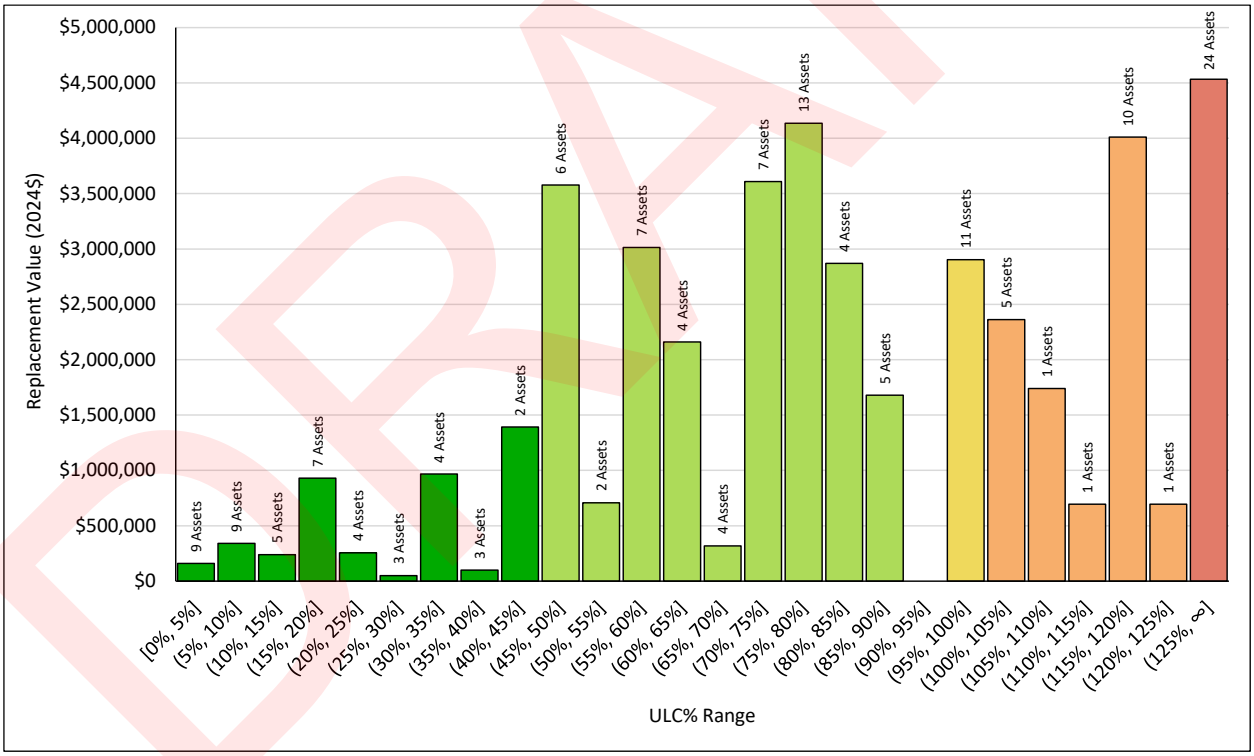
Considering these limitations, age-based condition is only reported for 37% of Emergency Services assets.

Table 2-3 shows a summary of the age-based condition of the 37% of Emergency Services assets that were rated using the age-based approach. Figure 2-2 shows the distribution of these Emergency Services assets (measured by replacement cost) by ULC%.

Table 2-3: Condition Analysis – Emergency Services

Capital Program	Percentage of Assets With Age-based Condition	Average ULC%	Average Condition Rating
Fire Facilities	0%	Not Available	Not Available
Fire Fleet and Equipment	91%	88%	Good
Paramedic Facilities	0%	Not Available	Not Available
Paramedic Fleet and Equipment	73%	88%	Good
Police Fleet and Equipment	30%	71%	Good
Total/Average	37%	**88%**	**Good**

Figure 2-2: Distribution of Emergency Services Assets by ULC%



2.2.3 Current Levels of Service

The levels of service currently provided by the City's Emergency Services are, in part, a result of the state of local infrastructure identified above. The levels of service framework presented in this subsection defines the levels of service that the City will

track over time. It is noted that O. Reg. 588/17 does not prescribe any levels of service for non-core assets.

The levels of service framework is presented as follows:

- The Service Attribute indicates the high-level attribute being addressed;
- The Level of Service Statement explains the City's intent in plain language and provides additional information about the service being provided; and
- The table with performance measures has three columns. The first column, Description of What Performance Measure Captures, indicates in plain language what the performance measure is intended to capture. The second column, Specification of Performance Measure, describes precisely how the performance measure is calculated.[1] The third column, Current Performance, shows current performance for the performance measure.

Service Attribute: Quality

Level of Service Statement: The City maintains Emergency Services facilities such that they provide a pleasant experience to staff and visitors.

Description of What Performance Measure Captures	Specification of Performance Measure	Current Performance
Complaints about Emergency Services buildings.	Number of complaints about Emergency Services buildings per 1,000 square metres of gross floor area.	Not Available
Condition of Emergency Services buildings	Percentage of Emergency Services buildings inspected in the past 5 years.	0%
	Percentage of Emergency Services buildings with overall building condition assessed as [XYZ][2] or better.	Not Available

[1] For performance measures that require monitoring events over time, the timeframe is one year.
[2] An appropriate condition threshold for this performance measure will be determined as part of the next phase of development of the asset management plan.

Service Attribute: Reliability/Availability

Level of Service Statement: The City strives to ensure its Emergency Services vehicles and equipment are reliable and available for use.

Description of What Performance Measure Captures	Specification of Performance Measure	Current Performance
Replacement backlog for Fire vehicles	Percentage of Fire vehicles that have been kept in service beyond the timeframes identified in NFPA Standards for Fire vehicles and Equipment.	Not Available
Replacement backlog for ambulance vehicles and equipment	Percentage of Ambulance vehicles and equipment that have been kept in service beyond the timeframes identified in Ministry Standards and/or Manufacturer Recommendations.	Not Available
Replacement backlog for Police vehicles	Percentage of front-line operational Police vehicles with more than 160,000 kilometres on the odometer.	7%
Age-based condition	Average age-based condition rating for assessed Emergency Services assets.	Good
Amount of time that Emergency Services vehicles are out of service over the course of a year	Average number of days out of service per Emergency Services vehicle	Not Available

2.3 Human Services

2.3.1 State of Local Infrastructure

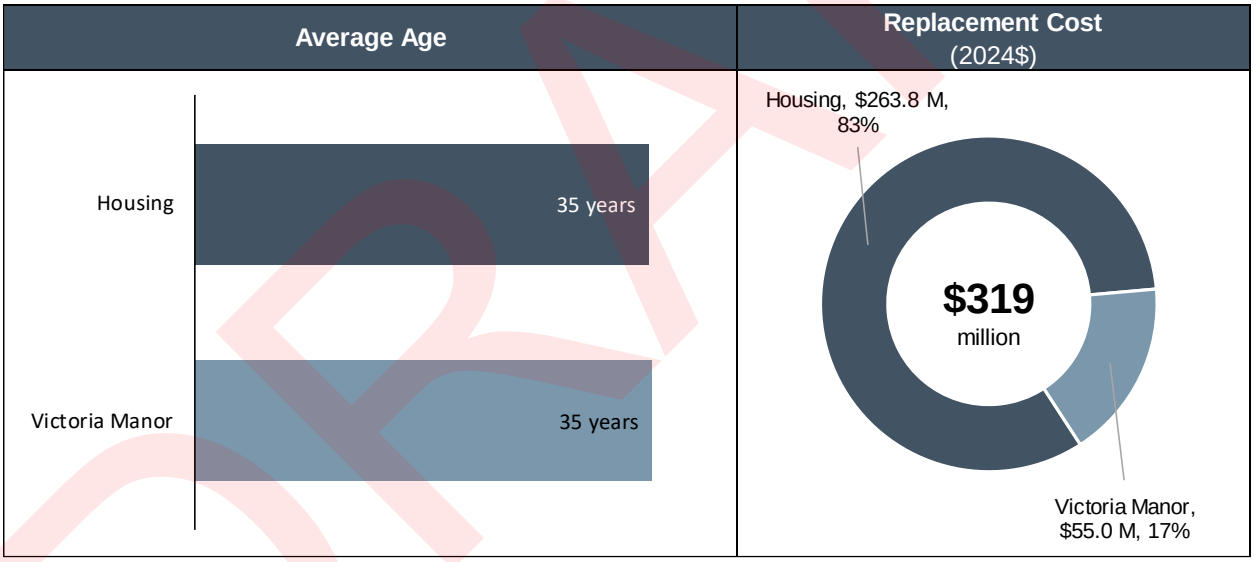
The City owns and manages a variety of assets that support the provision of Human Services. The replacement cost of these assets is approximately $319 million, with housing accounting for 83% and the Victoria Manor accounting for the remaining 17%. Table 2-4 provides a breakdown of these assets by capital program, showing the asset

quantity, average age, and replacement cost. A visual rendering of the data presented in Table 2-4 is provided in Figure 2-3.

Table 2-4: Summary of Asset Quantity, Age, and Replacement Cost by Capital Program – Human Services

Capital Program	Number of Assets	Average Age (years)	Replacement Cost (2024$)
Housing	**Facilities:** 44 buildings (72,750 m²) **Fleet:** 10 pick-up trucks, 12 tractors (mowers), 4 trailers, 1 van	34.8	$263,840,000
Victoria Manor	**Facilities:** 1 structure (10,210 m²)	35.0	$54,990,000
Total/Average		**34.8**	**$318,830,000**

Figure 2-3: Summary Information – Human Services



2.3.2 Condition

The condition of the City's Human Services assets has not been directly assessed through a physical condition assessment. When the age of an asset is known, the condition is evaluated based on age relative to the expected useful life (i.e., based on the ULC%), as explained in subsection 2.2.2. Age-based condition can only be reported for 0.4% of Human Services assets because age-based condition ratings have

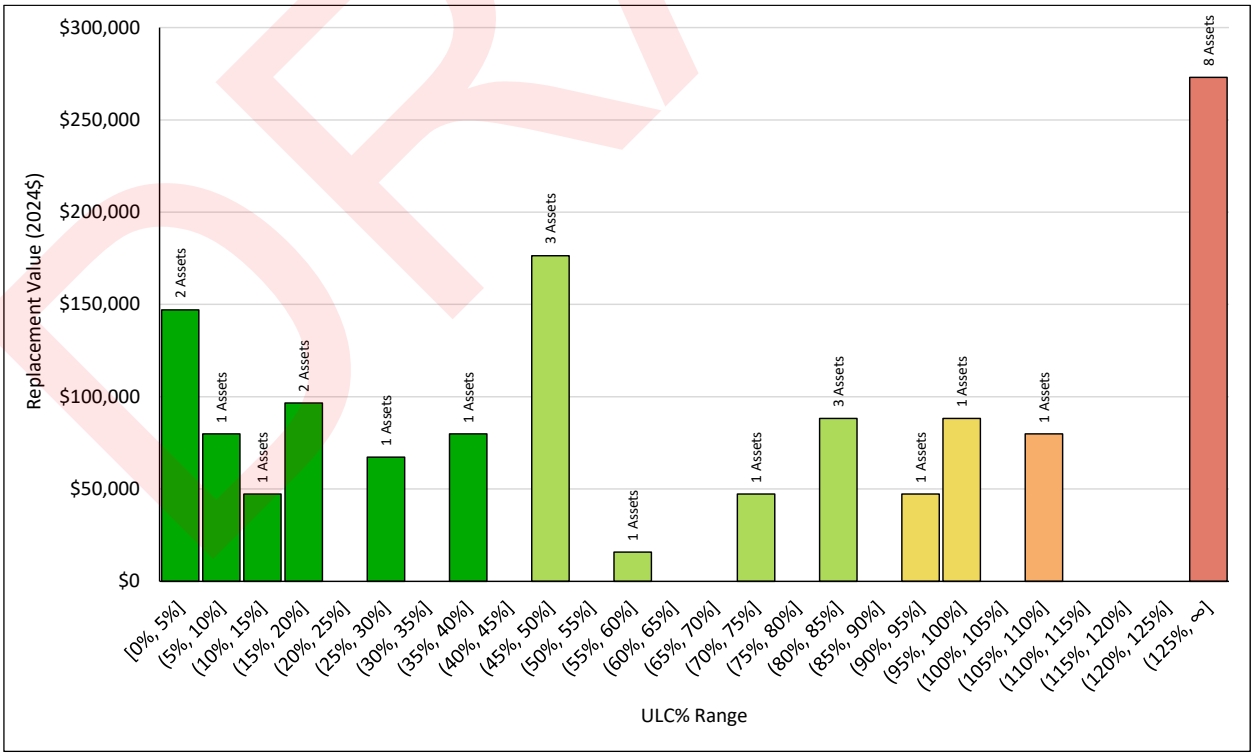
not been assigned to facilities (see subsection 2.2.2), and almost all of Human Services assets are facilities. The 0.4% of assets where age-based condition was evaluated comprise fleet assets such as pick-up trucks, trailers, lawn tractors, etc.

Table 2-5 shows a summary of the average age-based condition for the 0.4% of Human Services assets that were rated using the age-based approach. Figure 2-4 shows the distribution of these Human Services assets (measured by replacement cost) by ULC%.

Table 2-5: Condition Analysis – Human Services

Capital Program	Percentage of Assets With Age-based Condition	Average ULC%	Average Condition Rating
Housing	1%	75%	Good
Victoria Manor	0%	Not Available	Not Available
Total/Average	**0.4%**	**75%**	**Good**

Figure 2-4: Distribution of Human Services Assets by ULC%



2.3.3 Current Levels of Service

The levels of service currently provided by the City's Human Services are, in part, a result of the state of local infrastructure identified above. The levels of service framework presented in this subsection defines the levels of service that the City will track over time. It is noted that O. Reg. 588/17 does not prescribe any levels of service for non-core assets.

The levels of service framework is presented as follows:

- The Service Attribute indicates the high-level attribute being addressed;
- The Level of Service Statement explains the City's intent in plain language and provides additional information about the service being provided; and
- The table with performance measures has three columns. The first column, Description of What Performance Measure Captures, indicates in plain language what the performance measure is intended to capture. The second column, Specification of Performance Measure, describes precisely how the performance measure is calculated.[1] The third column, Current Performance, shows current performance for the performance measure.

Service Attribute: Quality

Level of Service Statement: The City maintains Human Services facilities such that they provide a pleasant experience to staff, residents, and visitors.

Description of What Performance Measure Captures	Specification of Performance Measure	Current Performance
Complaints about Human Services buildings.	Number of complaints about Human Services buildings per 1,000 square metres of gross floor area.	Not Available

[1] For performance measures that require monitoring events over time, the timeframe is one year.

Service Attribute: Condition/Deferred Maintenance

Level of Service Statement: The City keeps its Human Services facilities in a good state of repair.

Description of What Performance Measure Captures	Specification of Performance Measure	Current Performance
Condition of Human Services buildings	Percentage of Human Services buildings inspected in the past 5 years.	0%
	Percentage of Human Services buildings with overall building condition assessed as [XYZ][1] or better.	Not Available

Service Attribute: Reliability/Availability

Level of Service Statement: The City strives to ensure its Human Services vehicles and equipment are reliable and available for use.

Description of What Performance Measure Captures	Specification of Performance Measure	Current Performance
Age-based condition	Average age-based condition rating for assessed Human Services assets	Good
Amount of time that Human Services vehicles are out of service over the course of a year	Average number of days out of service per Human Services vehicle	Not Available
Replacement backlog for Human Services vehicles	Percentage of Human Services vehicles beyond their recommended useful lives	33%

[1] An appropriate condition threshold for this performance measure will be determined as part of the next phase of development of the asset management plan.

Service Attribute: Capacity

Level of Service Statement: The City strives to align capacity of Human Services facilities to service demand.

Description of What Performance Measure Captures	Specification of Performance Measure	Current Performance
Availability of City-owned affordable housing units	Average wait time (in years) for accessing community housing.	Not Available

2.4 Parks and Recreation Services

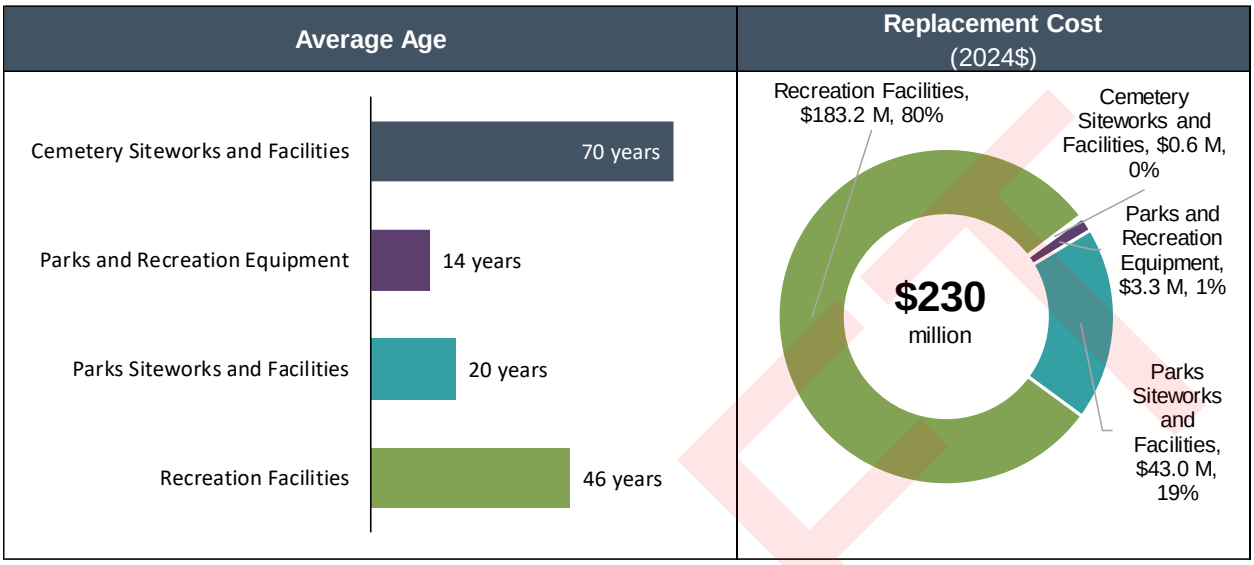
2.4.1 State of Local Infrastructure

The City owns and manages a variety of assets that support the provision of Parks and Recreation Services. The replacement cost of these assets is approximately $230 million, with recreation facilities accounting for most of replacement cost (87%) and parks siteworks and facilities accounting for most of the rest (11%). The remaining 2% of replacement cost is accounted for by cemetery siteworks and facilities and Parks and Recreation equipment. Table 2-6 provides a breakdown of these assets by capital program, showing the quantity, average age, and replacement cost. A visual rendering of the data presented in Table 2-6 is provided in Figure 2-5.

Table 2-6: Summary of Asset Quantity, Age, and Replacement Cost by Capital Program Parks and Recreation Services

Capital Program	Description	Average Age (years)	Replacement Cost (2024$)
Cemetery Siteworks and Facilities	**Cemetery siteworks:** 8 columbaria, 29 sitework assets, 4 receiving vaults	70.0	$610,000
Parks and Recreation Equipment	**Furniture**: 329 metres of benches, 300 individual benches, 267 bins/containers, 84 bleachers, 3 chess tables, 363 picnic tables, 2 historic train engines, 5 historic train cars, 90 metres of historic train track **Gear and Devices**: 1 generator	13.5	$3,260,000
Parks Siteworks and Facilities	**Facilities:** 38 smaller buildings. For example, public washrooms, concession booths, sheds etc. (2,020 m²) **General siteworks:** 1 artworks asset, 480 metres of barriers/walls, 7 bike stands, 3 columns/posts, 13,680 metres of fencing, 43 gates, 2 fountains, 14 concrete bench pads, 153 lights, 62,700 m² of parking lots, 620 metres of railings, 11,230 m² of internal roadways, 6 sheds, 99 units of sports lighting, 195 staircases, 22 utilities enclosures, 1 outdoor accessibility carpet, 7,010 metres of baseball backstops and fences, 14 baseball dugouts, 30 basketball nets, 290 m² of boardwalk, 3 boat launches, 1 dam, 5 docks/piers, 1 drinking water fountain, 6 horseshoe pits, 19,610 m² of pathways, 138 playground amenities, 3 scoreboards, 6 shelters/gazebos, 4 skateboarding ramps, 39 soccer goals, 2 splash arenas, 1 area of accessible outdoor carpeting, 16,900 m² of hard surface pads (foundations for a variety of park amenities), 357 park and picnic bench bases, 14,690 m² of soft/loose surface pads (mainly playground bases), 127.8 km of trails, 2 volleyball nets	19.6	$42,960,000
Recreation Facilities	**Facilities:** 1 aquatic centre (670 m²), 8 arenas (31,470 m²), 15 recreation centres (9,580 m²), 3 museum/galleries (400 m²), 4 other support buildings (1,510 m²)	46.1	$183,170,000
Total/Average		**38.1**	**$230,000,000**

Figure 2-5: Summary Information – Parks and Recreation Services



2.4.2 Condition

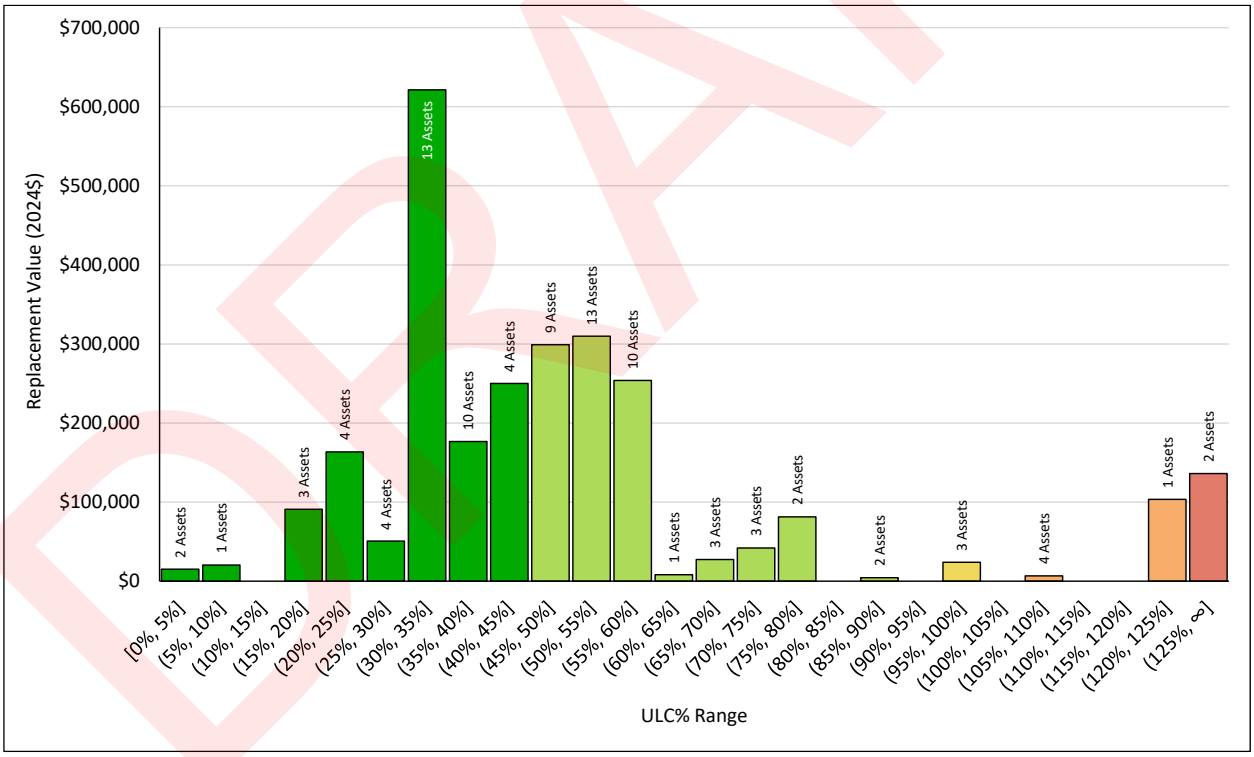
The condition of the City's Parks and Recreation Services assets has not been directly assessed through a physical condition assessment. When the age of an asset is known, the condition is evaluated based on age relative to the expected useful life (i.e., based on the ULC%), as explained in subsection 2.2.2. Age-based condition can only be reported for 1% of Parks and Recreation Services assets because age-based condition ratings were not assigned to facilities and pooled assets (see subsection 2.2.2).

Table 2-7 shows a summary of the average age-based condition for the 1% of Parks and Recreation Services assets that were rated using the age-based approach. Figure 2-6 shows the distribution of these Parks and Recreation Services assets (measured by replacement cost) by ULC%.

Table 2-7: Condition Analysis – Parks and Recreation Services

Capital Program	Percentage of Assets With Age-based Condition	Average ULC%	Average Condition Rating
Cemetery Siteworks and Facilities	12%	29%	Very Good
Parks and Recreation Equipment	17%	65%	Good
Parks Siteworks and Facilities	5%	56%	Good
Recreation Facilities	0%	Not Available	Not Available
Total/Average	**1%**	**57%**	**Good**

Figure 2-6: Distribution of Parks and Recreation Assets by ULC%



2.4.3 Current Levels of Service

The levels of service currently provided by the City's Parks and Recreation Services are, in part, a result of the state of local infrastructure identified above. The levels of service framework presented in this subsection defines the levels of service that the City

will track over time. It is noted that O. Reg. 588/17 does not prescribe any levels of service for non-core assets.

The levels of service framework is presented as follows:

- The Service Attribute indicates the high-level attribute being addressed;
- The Level of Service Statement explains the City's intent in plain language and provides additional information about the service being provided; and
- The table with performance measures has three columns. The first column, Description of What Performance Measure Captures, indicates in plain language what the performance measure is intended to capture. The second column, Specification of Performance Measure, describes precisely how the performance measure is calculated.[1] The third column, Current Performance, shows current performance for the performance measure.

Service Attribute: Quality

Level of Service Statement: The City maintains Parks and Recreation Services facilities such that they provide a pleasant experience to staff and visitors.

Description of What Performance Measure Captures	Specification of Performance Measure	Current Performance
Complaints about Parks and Recreation Services buildings.	Number of complaints about Parks and Recreation Services buildings per 1,000 square metres of gross floor area.	Not Available

[1] For performance measures that require monitoring events over time, the timeframe is one year.

Service Attribute: Condition/Deferred Maintenance

Level of Service Statement: The City keeps its facilities in a good state of repair.

Description of What Performance Measure Captures	Specification of Performance Measure	Current Performance
Condition of Parks and Recreation Services buildings	Percentage of Parks and Recreation Services buildings inspected in the past 5 years.	0%
	Percentage of Parks and Recreation Services buildings with overall building condition assessed as [XYZ][1] or better.	Not Available

Service Attribute: Reliability

Level of Service Statement: The City strives to ensure its Parks and Recreation Services vehicles and equipment are reliable and available for use.

Description of What Performance Measure Captures	Specification of Performance Measure	Current Performance
Age-based condition	Average age-based condition rating for assessed Parks and Recreation Services assets	Good

[1] An appropriate condition threshold for this performance measure will be determined as part of the next phase of development of the asset management plan.

Service Attribute: Capacity

Level of Service Statement: The City strives to align capacity of facilities to service demand.

Description of What Performance Measure Captures	Specification of Performance Measure	Current Performance
Availability of ice pads	Number of indoor ice pads per 1,000 population.	0.10 ice pads per 1,000 population

2.5 Solid Waste Services

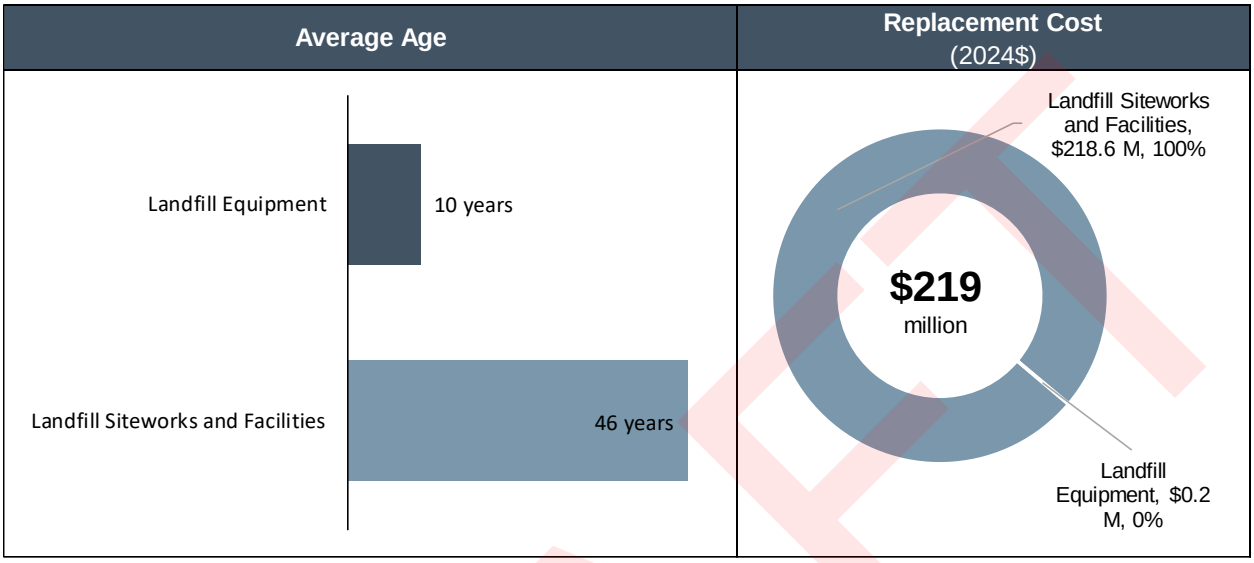
2.5.1 State of Local Infrastructure

The City owns and manages a variety of assets that support the provision of Solid Waste Services. The replacement cost of these assets is approximately $219 million, with almost all of the replacement cost accounted for by landfill siteworks and facilities (99.9%) and the remaining 0.1% being accounted for by landfill equipment. Table 2-8 provides a breakdown of these assets by capital program, showing the quantity, average age, and replacement cost. A visual rendering of the data presented in Table 2-8 is provided in Figure 2-7.

Table 2-8: Summary of Asset Quantity, Age, and Replacement Cost by Capital Program – Solid Waste Services

Capital Program	Number of Assets	Average Age (years)	Replacement Cost (2024$)
Landfill Equipment	**Gear and Devices:** 22 40yrd waste bins, 2 20yrd waste bins	10.0	$210,000
Landfill Siteworks and Facilities	**Facilities:** 5 buildings (1,820 m²) **General Siteworks:** 16,360 m² of internal roadways, 6 weight scales **Landfills:** 5 sites (1.18 million cubic metres of capacity remaining)	46.0	$218,560,000
Total/Average		**45.9**	**$218,770,000**

Figure 2-7: Summary Information – Solid Waste Services



2.5.2 Condition

The condition of the City's Solid Waste Services assets has not been directly assessed through a physical condition assessment. Age-based condition cannot be reported for any of Solid Waste Services assets because all Solid Waste assets are either facilities or pooled and age-based condition ratings have not been assigned to these assets (see subsection 2.2.2).

2.5.3 Current Levels of Service

The levels of service currently provided by the City's Solid Waste Services are, in part, a result of the state of local infrastructure identified above. The levels of service framework presented in this subsection defines the levels of service that the City will track over time. It is noted that O. Reg. 588/17 does not prescribe any levels of service for non-core assets.

The levels of service framework is presented as follows:

- The Service Attribute indicates the high-level attribute being addressed;
- The Level of Service Statement explains the City's intent in plain language and provides additional information about the service being provided; and

- The table with performance measures has three columns. The first column, Description of What Performance Measure Captures, indicates in plain language what the performance measure is intended to capture. The second column, Specification of Performance Measure, describes precisely how the performance measure is calculated.[1] The third column, Current Performance, shows current performance for the performance measure.

Service Attribute: Condition/Deferred Maintenance

Level of Service Statement: The City keeps its Solid Waste facilities in a good state of repair.

Description of What Performance Measure Captures	Specification of Performance Measure	Current Performance
Condition of Solid Waste Services buildings	Percentage of Solid Waste Services buildings inspected in the past 5 years.	0%
	Percentage of Solid Waste Services buildings with overall building condition assessed as [XYZ][2] or better.	Not Available

[1] For performance measures that require monitoring events over time, the timeframe is one year.
[2] An appropriate condition threshold for this performance measure will be determined as part of the next phase of development of the asset management plan.

Service Attribute: Reliability

Level of Service Statement: The City strives to have collection of solid waste follow the prescribed schedule.

Description of What Performance Measure Captures	Specification of Performance Measure	Current Performance
Complaints about curbside collection	Number of complaints pertaining to curbside collection resulting from collection equipment failure per 1,000 population.	Not Available
Replacement backlog for Solid Waste Services vehicles and equipment	Percentage of Solid Waste Services vehicles/equipment operating beyond their recommended useful lives.	63%

Service Attribute: Capacity

Level of Service Statement: The City strives to effectively manage its available landfill capacity.

Description of What Performance Measure Captures	Specification of Performance Measure	Current Performance
Landfill remaining capacity following planned fill rate	Remaining capacity at landfill sites as a percentage of planned remaining capacity in the City's Integrated Waste Management Strategy.	Not Available
Waste Diversion Rate	Tonnes of recycling and special waste that has been diverted as a percentage of the total tonnes of solid waste received.	Not Available
Extent of public outreach	Number of public outreach events related to solid waste.	Not Available

2.6 Transportation Services

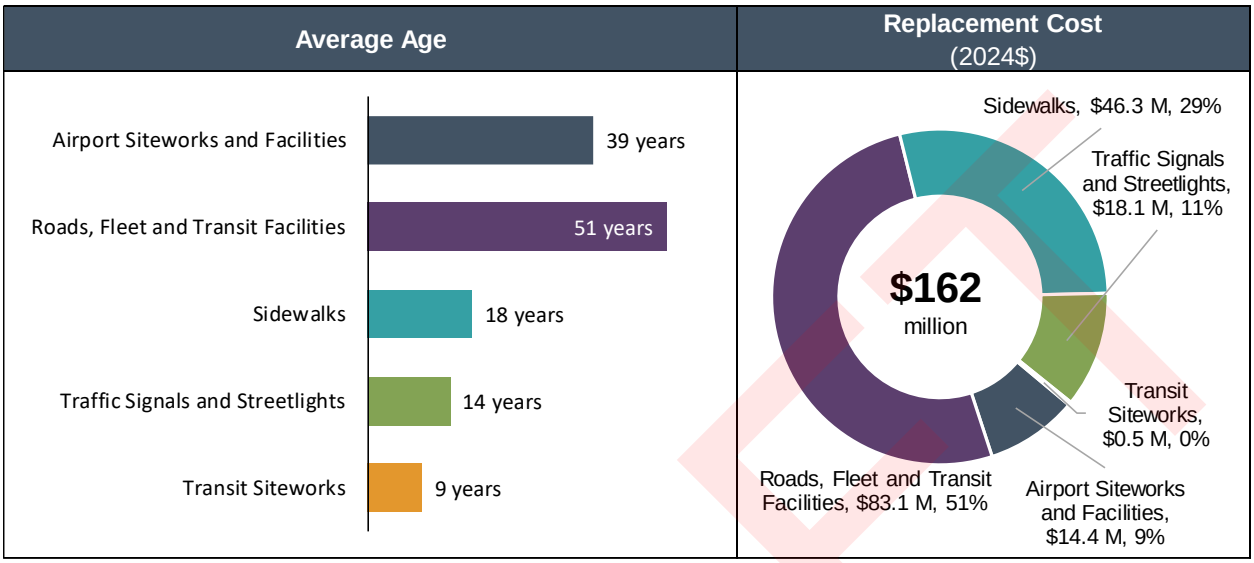
2.6.1 State of Local Infrastructure

The City owns and manages a variety of assets that support the provision of Transportation Services in addition to roads and structures (bridges and culverts with a diameter three metres or more) that are included in City's 2022 Asset Management Plan. The replacement cost of these assets is approximately $162 million, with roads, fleet, and transit facilities accounting for just over half of the replacement cost (51%) and sidewalks accounting for almost a third of replacement cost (29%). The remaining 20% of replacement cost is accounted for by traffic signals and streetlights (11%), airport siteworks and facilities (9%), and transit siteworks (0.3%). Table 2-9 provides a breakdown of non-core Transportation Services assets by capital program, showing the quantity, average age, and replacement cost. A visual rendering of the data presented in Table 2-9 is provided in Figure 2-8.

Table 2-9: Summary of Asset Quantity, Age, and Replacement Cost by Capital Program – Transportation Services

Capital Program	Description	Average Age (years)	Replacement Cost (2024$)
Airport Siteworks and Facilities	**Airport siteworks:** 1 aircraft fuel station, 9,310 m² of aircraft parking lots, 3 airport weather installations, runway/taxiway lights along 5.4 km of runway and an additional 66 individual taxiway/runway lights, 43,130 m² of runway, 22,720 m² of taxiway **Facilities:** 1 terminal (960 m²), 3 hangars (2,060 m²) **Furniture:** 5 benches, 9 picnic tables **General siteworks:** 5 columns/posts, 197 metres of drainage infrastructure, 4.25 km of fencing, 2 gates, 120 m² concrete pad, 2 lights, 3,260 m² of parking lots, 150 m² of pathways, 300 m² of roadway, 2 signs, 1 propane tank,	38.8	$14,390,000
Roads, Fleet and Transit Facilities	**Facilities:** 15 operations centres (10,970 m²), 12 salt sheds (1,120 m²), 11 sand domes (8,440 m²), 9 storage sheds (2,140 m²), 2 fabric structures (560 m²)	51.3	$83,080,000
Sidewalks	**Roads-related:** 188.6 km of sidewalks	18.0	$46,280,000
Traffic Signals and Streetlights	**Roads-related:** 5,051 streetlights, 44 intersections with traffic signals	14.2	$18,100,000
Transit Siteworks	**Roads-related:** 73 transit stop pads, 30 transit stop pads with shelters	9.4	$510,000
Total/Average		**36.4**	**$162,360,000**

Figure 2-8: Summary Information – Transportation Services



2.6.2 Condition

The condition of the City's Transportation Services assets has not been directly assessed through a physical condition assessment. When the age of an asset is known, the condition is evaluated based on age relative to the expected useful life (i.e., based on the ULC%), as explained in subsection 2.2.2. Age-based condition can only be reported for 4% of Transportation Services assets because age-based condition ratings were not assigned to facilities and pooled assets (see subsection 2.2.2).

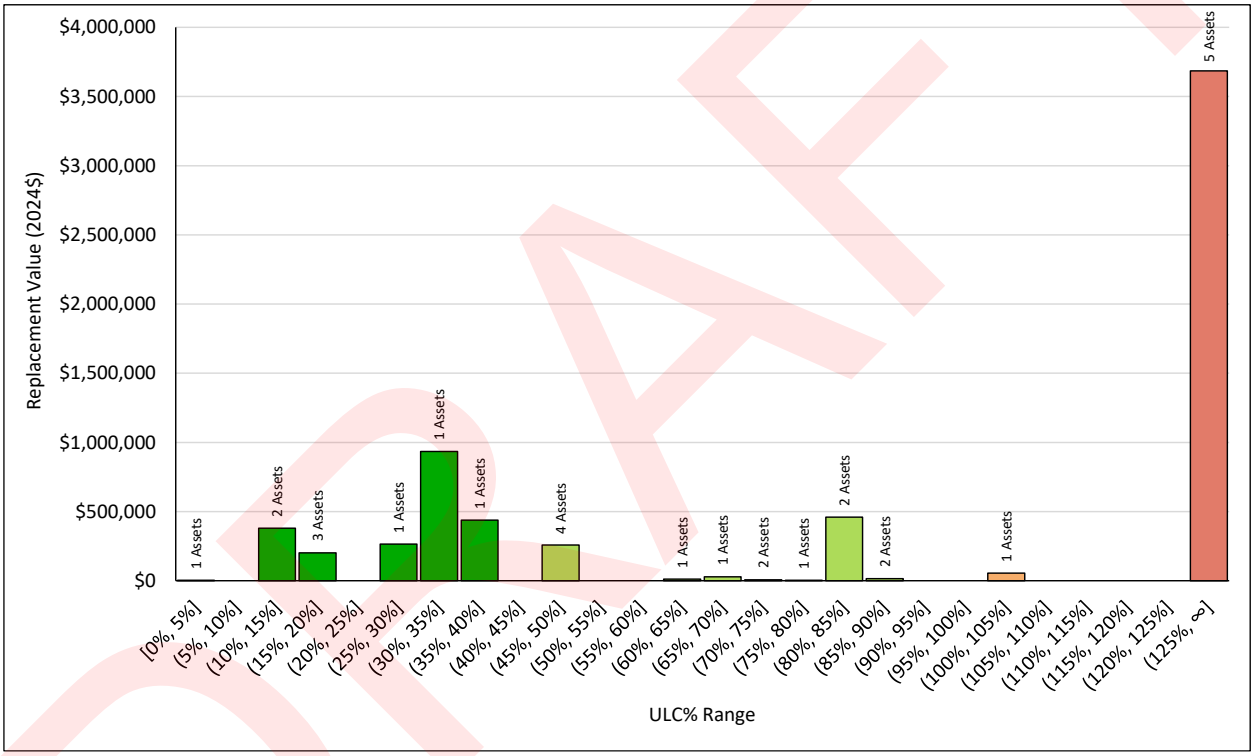
Table 2-10 shows a summary of the average age-based condition for the 4% of Transportation Services assets that were rated using the age-based approach. Figure 2-9 shows the distribution of these Transportation Services assets (measured by replacement cost) by ULC%.

Table 2-10: Condition Analysis – Transportation Services

Capital Program	Percentage of Assets With Age-based Condition	Average ULC%	Average Condition Rating
Airport Siteworks and Facilities	47%	103%	Poor

Roads, Fleet and Transit Facilities	0%	Not Available	Not Available
Sidewalks	0%	Not Available	Not Available
Traffic Signals and Streetlights	0%	Not Available	Not Available
Transit Siteworks	0%	Not Available	Not Available
Total/Average	**4%**	**103%**	**Poor**

Figure 2-9: Distribution of Transportation Services Assets by ULC%



2.6.3 Current Levels of Service

The levels of service currently provided by the City's Transportation Services are, in part, a result of the state of local infrastructure identified above. The levels of service framework presented in this subsection defines the levels of service that the City will track over time. It is noted that O. Reg. 588/17 does not prescribe any levels of service for non-core assets.

The levels of service framework is presented as follows:

- The Service Attribute indicates the high-level attribute being addressed;

- The Level of Service Statement explains the City's intent in plain language and provides additional information about the service being provided; and
- The table with performance measures has three columns. The first column, Description of What Performance Measure Captures, indicates in plain language what the performance measure is intended to capture. The second column, Specification of Performance Measure, describes precisely how the performance measure is calculated.[1] The third column, Current Performance, shows current performance for the performance measure.

[1] For performance measures that require monitoring events over time, the timeframe is one year.

Service Attribute: Condition/Deferred Maintenance

Level of Service Statement: The City keeps its Transportation Services facilities, equipment, and siteworks in a good state of repair.

Description of What Performance Measure Captures	Specification of Performance Measure	Current Performance
Condition of runway	Average runway condition.[1]	Not Available
Runway in good condition	Percentage of runway with a condition rating of [XYZ][2] or better.	Not Available
Condition of taxiway	Average taxiway condition.[1]	Not Available
Taxiway in good condition	Percentage of taxiway with a condition rating of [XYZ][2] or better.	Not Available
Airplane tie-down condition	Percentage of anchorage spots that are unavailable due to poor condition of tie-downs.	Not Available
Condition of hangars	Average condition of hangars.[1]	Not Available
Impact of hangar condition	Average number of days where a hangar is out of service per hangar.	Not Available
Condition of terminal building	Average terminal building condition.[1]	Not Available
Impact of asset condition on restaurant operations	Number of days that restaurant was out of service due to asset failures.	Not Available
Condition of radio communications equipment	Average condition of radio communications equipment	Not Available

[1] An appropriate condition scale will be determined as part of the next phase of development of the asset management plan.
[2] An appropriate condition threshold for this performance measure will be determined as part of the next phase of development of the asset management plan.

Service Attribute: Reliability/Availability

Level of Service Statement: The City strives to ensure its Transportation Services assets are reliable and available for use.

Description of What Performance Measure Captures	Specification of Performance Measure	Current Performance
Age-based condition	Average age-based condition rating for assessed Transportation Services assets	Poor
Equipment failures affecting the fuel system	The number of days that the airport fuel system was unavailable due to equipment failure.	Not Available
Age of runway and taxiway lighting	Percentage of runway/taxiway lighting that is beyond its recommended useful life.	Not Available

Service Attribute: Durability

Level of Service Statement: The City is working to improve the durability of its transit vehicles.

Description of What Performance Measure Captures	Specification of Performance Measure	Current Performance
Purpose built transit vehicles	Percentage of transit vehicles that are purpose-built for transit.	Not Available

Service Attribute: Accessibility

Level of Service Statement: The City strives to ensure that everyone can be accommodated on transit vehicles.

Description of What Performance Measure Captures	Specification of Performance Measure	Current Performance
Availability of accessible transit vehicles	Percentage of transit vehicles that are accessible.	Not Available

Service Attribute: Capacity

Level of Service Statement: The airport has the capabilities required by most of its users.

Description of What Performance Measure Captures	Specification of Performance Measure	Current Performance
Capacity to accommodate large planes	Airport critical aircraft capacity rating	Not Available
Range of fuel types available	Number of aviation fuel types available at the airport	Not Available
Capacity to store airplanes outdoors	Number of airplane anchorage spots available	Not Available
Capacity to store airplanes indoors	Number of hangar units at the airport	Not Available

2.7 Support and Other Services

2.7.1 State of Local Infrastructure

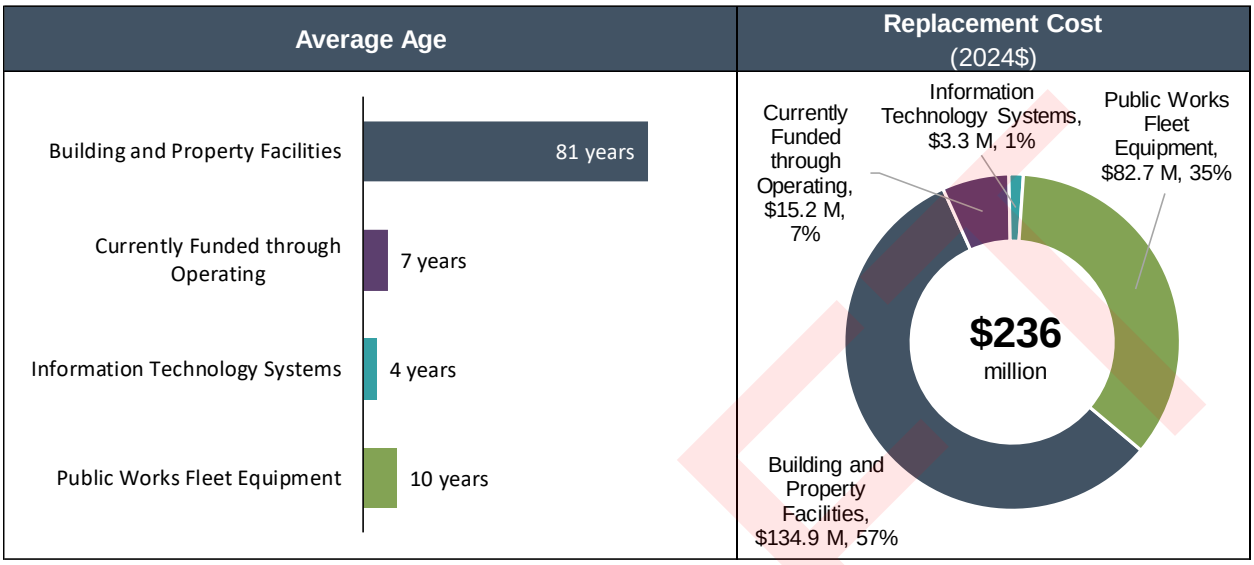
The City owns and manages a variety of assets that support the provision of Support and Other Services. The replacement cost of these assets is approximately $236

million, with Buildings and Properties facilities accounting for over half of replacement cost (57%), Public Works fleet and equipment accounting for over a third of replacement cost (35%). The remaining 8% of replacement cost is accounted for by assets funded through operating (7%) and Information Technology systems (1%). Table 2-11 provides a breakdown of these assets by capital program, showing the quantity, average age, and replacement cost. A visual rendering of the data presented in Table 2-11 is provided in Figure 2-10.

Table 2-11: Summary of Asset Quantity, Age, and Replacement Cost by Capital Program – Support and Other Services

Capital Program	Description	Average Age (years)	Replacement Cost (2024$)
Building and Property Facilities	**Facilities:** 7 libraries (4,540 m²), 1 medical centre (360 m²), 8 municipal offices (10,270 m²), 5 museums/galleries (2,760 m²), 3 offices (1,220 m²), 1 police station (1,820 m²)	80.6	$134,900,000
Currently Funded through Operating	**Library materials:** 4,298 reference materials, 96,411 circulating materials **Roads related:** 21,692 signs, 73,8 km of guiderails	6.8	$15,190,000
Information Technology Systems	**IT Systems:** 2,448 client hardware assets, 261 data communications hardware assets, 54 server hardware assets	3.8	$3,270,000
Public Works Fleet Equipment	**Fleet:** 6 attachments (mower, trackless), 3 all-terrain vehicles/utility task vehicles, 13 backhoes, 7 brush chippers, 16 buses, 19 cars/sports utility vehicles, 3 fire rescue trucks, 2 forklifts, 12 graders, 9 hot asphalt boxes, 13 ice machines, 18 loaders, 104 pick-up trucks, 12 sidewalk machines, 9 steamers, 3 street sweepers, 2 stripers, 23 tractors, 13 mowers, 39 trailers, 1 valve maintenance trailer, 2 aerial trucks, 1 hydro vac truck, 25 one-ton medium duty trucks, 18 single-axle plows, 1 tandem roll-off truck, 62 tandem axle plows, 29 vans, 18 water tanks, 2 wheeled excavators, **Gear and devices:** 6 building crane and hoist, 2 compressors, 10 generators, 2 miscellaneous tools, 4 plows, 3 pressure washers, 1 pump, 4 snow blowers, 4 sprayer/spreaders	9.5	$82,720,000
Total/Average		**49.9**	**$236,090,000**

Figure 2-10: Summary Information – Support and Other Services



2.7.2 Condition

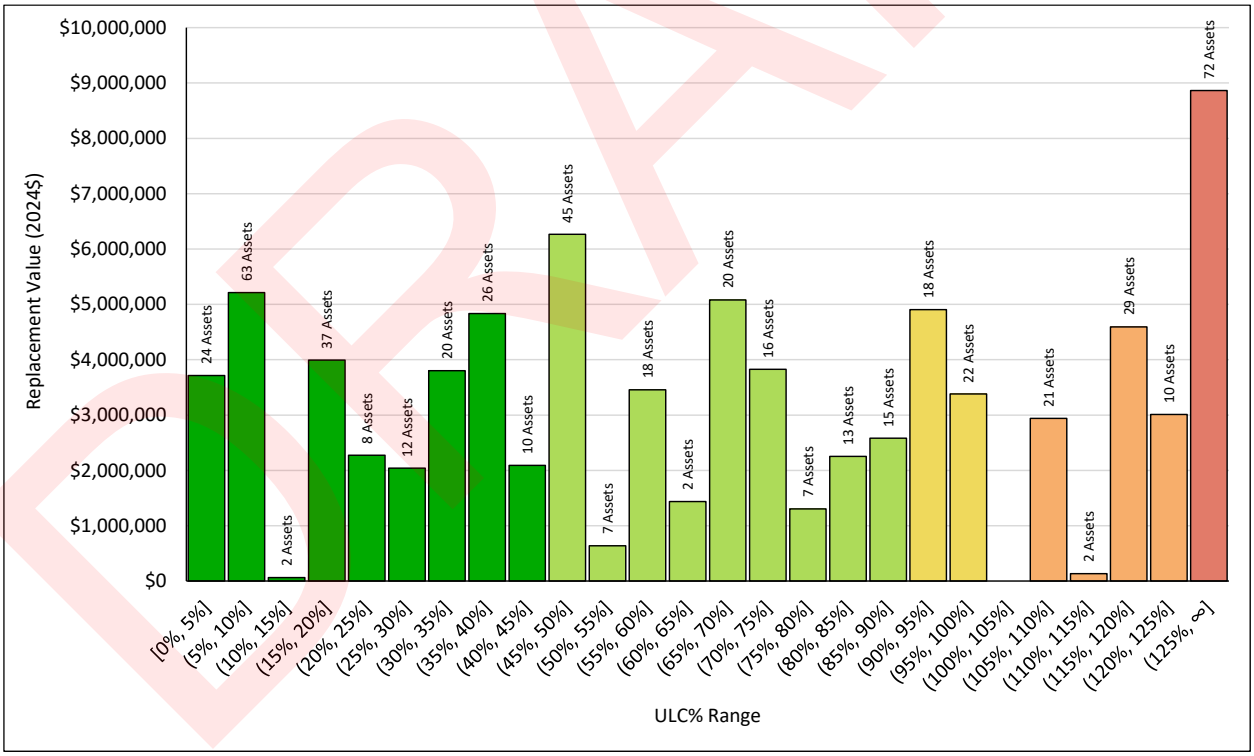
The condition of the City's Support and Other Services assets has not been directly assessed through a physical condition assessment. When the age of an asset is known, the condition is evaluated based on age relative to the expected useful life (i.e., based on the ULC%), as explained in subsection 2.2.2. Age-based condition can only be reported for 35% of Support and Other Services assets because age-based condition ratings have not been assigned to facilities and pooled assets (see subsection 2.2.2).

Table 2-12 shows a summary of the age-based condition of the 35% of Support and Other Services assets that were rated using the age-based approach. Figure 2-11 shows the distribution of these Support and Other Services assets (measured by replacement cost) by ULC%.

Table 2-12: Condition Analysis – Support and Other Services

Capital Program	Percentage of Assets With Age-based Condition	Average ULC%	Average Condition Rating
Building and Property Facilities	0%	Not Available	Not Available
Currently Funded through Operating	0%	Not Available	Not Available
Information Technology Systems	0%	Not Available	Not Available
Public Works Fleet Equipment	100%	71%	Good
Total/Average	**35%**	**71%**	**Good**

Figure 2-11: Distribution of Support and Other Services Assets by ULC%



2.7.3 Current Levels of Service

The levels of service currently provided by the City's Support and Other Services are, in part, a result of the state of local infrastructure identified above. The levels of service

framework presented in this subsection defines the levels of service that the City will track over time. It is noted that O. Reg. 588/17 does not prescribe any levels of service for non-core assets.

The levels of service framework is presented as follows:

- The Service Attribute indicates the high-level attribute being addressed;
- The Level of Service Statement explains the City's intent in plain language and provides additional information about the service being provided; and
- The table with performance measures has three columns. The first column, Description of What Performance Measure Captures, indicates in plain language what the performance measure is intended to capture. The second column, Specification of Performance Measure, describes precisely how the performance measure is calculated.[1] The third column, Current Performance, shows current performance for the performance measure.

Service Attribute: Quality

Level of Service Statement: The City maintains Support and Other Services facilities such that they provide a pleasant experience to staff and visitors.

Description of What Performance Measure Captures	Specification of Performance Measure	Current Performance
Complaints about Support and Other Services buildings.	Number of complaints about Support and Other Services buildings per 1,000 square metres of gross floor area.	Not Available

[1] For performance measures that require monitoring events over time, the timeframe is one year.

Service Attribute: Condition/Deferred Maintenance

Level of Service Statement: The City keeps its Support and Other Services facilities in a good state of repair.

Description of What Performance Measure Captures	Specification of Performance Measure	Current Performance
Condition of Support and Other Services buildings	Percentage of Support and Other Services buildings inspected in the past 5 years.	0%
	Percentage of Support and Other Services buildings with overall building condition assessed as [XYZ][1] or better.	Not Available

[1] An appropriate condition threshold for this performance measure will be determined as part of the next phase of development of the asset management plan.

Service Attribute: Reliability/Availability

Level of Service Statement: The City strives to ensure its Support and Other Services vehicles and equipment are reliable and available for use.

Description of What Performance Measure Captures	Specification of Performance Measure	Current Performance
Age-based condition	Average age-based condition rating for assessed Support and Other Services assets	Good
Computers requiring repairs	Number of service tickets submitted for computers per user.	Not Available
Replacement backlog for IT devices	Percentage of IT devices beyond their recommended useful lives.	Not Available
Amount of time that Support and Other Services vehicles are out of service over the course of a year	Number of days out of service per Support and Other Services vehicle	Not Available
Replacement backlog for Support and Other Services vehicles	Percentage of Support and Other Services vehicles beyond their recommended useful lives	27%

Service Attribute: Capacity

Level of Service Statement: The City strives to align capacity of Support and Other Services facilities and equipment to service demand.

Description of What Performance Measure Captures	Specification of Performance Measure	Current Performance
Appropriateness of library size	Percentage of City Libraries that meet the space requirements of "Guidelines For Rural/Urban Public Library Systems" published by the Administrators of Rural and Urban Public Libraries of Ontario.	Not Available

Available network storage space	Percentage of server hard drive capacity utilized.	Not Available
Internet bandwidth	Percentage of City buildings utilizing 70% or more of available bandwidth at least half of the time during business hours.	Not Available
Portability of IT equipment	Percentage of City staff equipped to work remotely.	Not Available

2.8 Population and Employment Growth

Schedule 3 of the A Place to Grow: Growth Plan for the Greater Golden Horseshoe, 2019 (the Growth Plan) establishes population and employment forecasts to 2051 for all upper- and single-tier municipalities in the Greater Golden Horseshoe. Table 2-13 below includes a summary of the population and employment forecast for the City of Kawartha Lakes.

Table 2-13: Population and Employment Forecast

2051 Population	2051 Employment
117,000	39,000

This growth in population and employment is expected to result in incremental service demands that may impact the current levels of service. The City is currently undertaking a Growth Management Strategy as part of the process of bringing its Official Plan into conformity with the Growth Plan. Subsequently the City will be identifying the incremental service demands arising from this growth. Currently, the most recent information on growth-related needs is summarized in the City's 2019 Development Charges Background Study which identifies growth-related capital expenditures to 2031. The City's 2019 Development Charges Background Study was used to inform the 10-year capital forecasts presented Chapter 3 of this report.

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Chapter 3
Lifecycle Management Strategies

3. Lifecycle Management Strategy

3.1 Introduction

The lifecycle management strategy in this asset management plan identifies the lifecycle activities that would need to be undertaken to maintain the current levels of service presented in Chapter 2.[1] Within the context of this asset management plan, lifecycle activities are the specified actions that can be performed on an asset in order to ensure it is performing at an appropriate level, and/or to extend its service life.[2] These actions can be carried out on a planned schedule in a prescriptive manner, or through a dynamic approach where the lifecycle activities are only carried out when specified conditions are met. O. Reg. 588/17 requires that all potential lifecycle activity options be assessed, with the aim of identifying the set of lifecycle activities that can be undertaken at the lowest cost to maintain current levels of service.

In accordance with the requirements of O. Reg. 588/17, municipal asset management plans must include a 10-year lifecycle expenditure forecast. This asset management plan also presents an annual lifecycle funding target for each asset class. The annual lifecycle funding target is the amount of funding that would be required annually to fully finance a lifecycle management strategy over the long-term. By planning to achieve this annual funding level, the City would be able to fully fund capital works as they arise. In practice, however, capital needs are often characterized by peaks and valleys due to the value of works being undertaken changing year-to-year. By planning to achieve this level of funding over the long-term, the periods of relatively low capital needs would allow for the building up of lifecycle reserve funds that could be drawn upon in times of relatively high capital needs.

The 10-year lifecycle expenditure forecasts were developed as follows. For assets of known age whose only capital lifecycle activity is replacement at end of life, the lifecycle expenditure forecast includes the cost of replacing the asset in the year (or years for

[1] Future updates of the City's asset management plan will include proposed levels of service and the lifecycle management strategy will identify the lifecycle activities that would need to be undertaken to provide the proposed levels of service.
[2] The full lifecycle of an asset includes activities such as initial planning and maintenance which are typically addressed through master planning studies and maintenance management, respectively.

short-lived assets) it reaches the end of its useful life. For assets where age data is not available or the useful life is not well defined, the lifecycle expenditure forecast includes an annual allowance. Examples of assets that are handled this way include pooled assets (age of individual assets is not tracked) and facilities (expected useful life is not well defined because building components such as roofs and furnaces can be replaced, extending the life of the overall facility indefinitely). The annual allowance is set based on the average annual lifecycle cost. The City's landfills are not included in the lifecycle expenditure forecast because there are no lifecycle activities for existing landfills and planning for acquisition of new landfill sites is outside of the scope of the asset management plan. The lifecycle expenditure forecast includes expenditures for growth-related enhancements and expansions identified in the City's 2019 Development Charges Background Study. The planning horizon of the City's 2019 Development Charges Background Study only extended to 2031. Recognizing that there will likely be additional growth-related enhancements and expansions required beyond 2031, the forecasts identified in this asset management plan include an estimate of these needs for 2032-2034 based on annual averages from the 2019 Development Charges Background Study.

For most asset classes, the annual lifecycle funding target is based on the average annual lifecycle cost, the sum of all capital lifecycle activities for an asset divided by its lifespan. The one exception is facilities, where the annual lifecycle funding target is estimated to be 1.7% of facility replacement cost. This estimate is the lower end of the reinvestment rate range identified for buildings in the 2016 Canadian Infrastructure Report Card.

The following sections detail the ten-year forecasts of lifecycle activities and associated costs that would be required for the City to maintain current levels of service and estimates of annual lifecycle funding targets by capital program.

3.2 Emergency Services

This section presents a preliminary estimate of the costs associated with maintaining the City's Emergency Services assets at the current level of service.

Annual lifecycle funding targets are summarized by capital program in Table 3-1. The ten-year lifecycle and growth expenditure forecast is summarized in Figure 3-1. A further breakdown of the lifecycle expenditure forecast by capital program is provided in Table 3-2.

Table 3-1: Average Annual Lifecycle Costs by Capital Program – Emergency Services

Category	Average Annual Lifecycle Cost
Fire Facilities	$970,000
Fire Fleet and Equipment	$2,300,000
Paramedic Facilities	$160,000
Paramedic Fleet and Equipment	$1,270,000
Police Fleet and Equipment	$660,000
Total	**$5,360,000**

Figure 3-1: Lifecycle and Growth Expenditure Forecast – Emergency Services

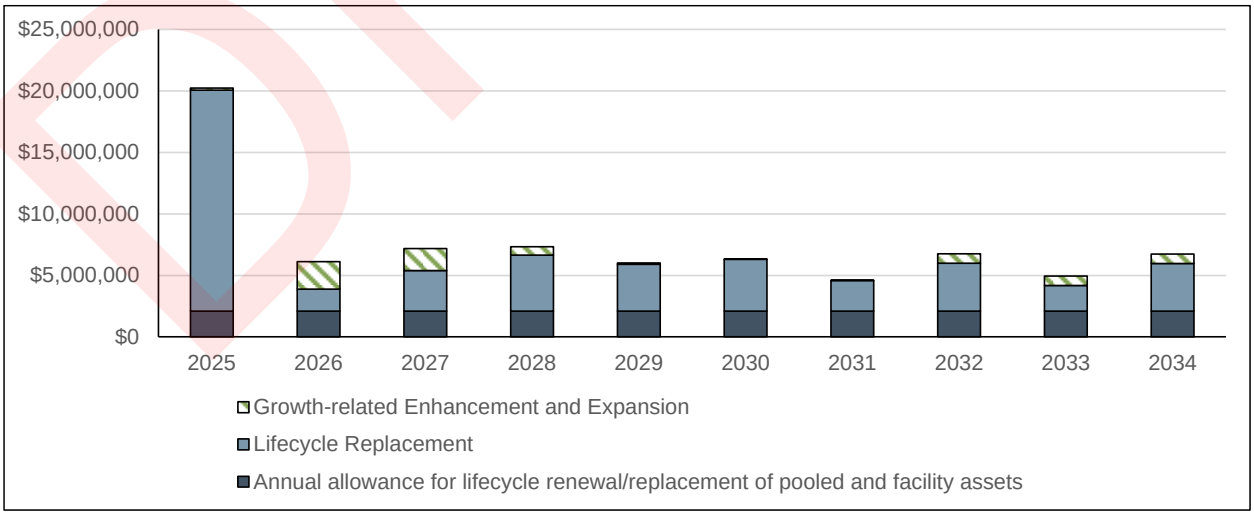

Table 3-2: Lifecycle Expenditure Forecast by Capital Program – Emergency Services

Category	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Fire Facilities	$969,644	$969,644	$969,644	$969,644	$969,644	$969,644	$969,644	$969,644	$969,644	$969,644
Fire Fleet and Equipment	$13,931,943	$1,763,142	$3,241,505	$3,721,009	$3,841,017	$450,537	$2,443,820	$3,845,787	$1,068,991	$3,937,205
Paramedic Facilities	$160,440	$160,440	$160,440	$160,440	$160,440	$160,440	$160,440	$160,440	$160,440	$160,440
Paramedic Fleet and Equipment	$4,019,100	$289,516	$397,498	$1,115,137	$289,516	$4,156,631	$370,401	$289,516	$1,404,529	$289,516
Police Fleet and Equipment	$981,131	$691,194	$630,184	$678,776	$635,583	$576,193	$646,381	$723,340	$572,683	$619,386
Growth-related Enhancements and Expansion	$182,094	$2,244,030	$1,785,214	$687,394	$120,694	$8,894	$8,894	$769,993	$769,993	$769,993
Total	**$20,244,351**	**$6,117,966**	**$7,184,485**	**$7,332,400**	**$6,016,894**	**$6,322,339**	**$4,599,580**	**$6,758,720**	**$4,946,279**	**$6,746,183**

3.3 Human Services

This section presents a preliminary estimate of the costs associated with maintaining the City's Human Services assets at the current level of service.

Annual lifecycle funding targets are summarized by capital program in Table 3-3. The ten-year lifecycle and growth expenditure forecast is summarized in Figure 3-2. A further breakdown of the lifecycle expenditure forecast by capital program is provided in Table 3-4.

Table 3-3: Average Annual Lifecycle Costs by Capital Program – Human Services

Category	Average Annual Lifecycle Cost
Housing	$4,580,000
Victoria Manor	$930,000
Total	**$5,520,000**

Figure 3-2: Lifecycle and Growth Expenditure Forecast – Human Services

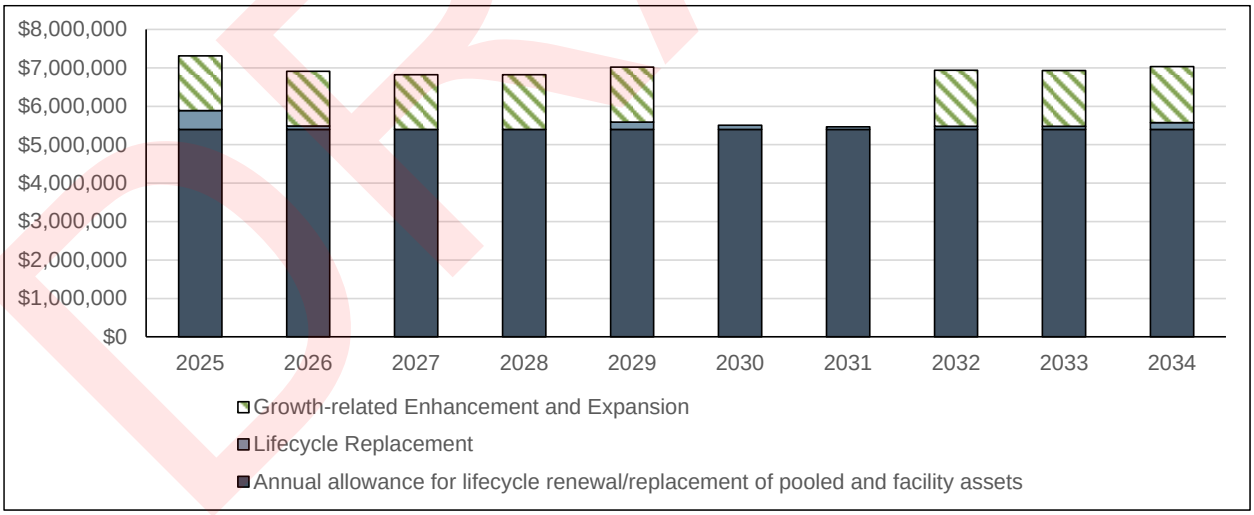

Table 3-4: Lifecycle Expenditure Forecast by Capital Program – Human Services

Category	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Housing	$4,950,965	$4,550,915	$4,462,715	$4,462,715	$4,656,965	$4,571,915	$4,529,915	$4,545,665	$4,542,515	$4,639,115
Victoria Manor	$934,745	$934,745	$934,745	$934,745	$934,745	$934,745	$934,745	$934,745	$934,745	$934,745
Growth-related Enhancements and Expansion	$1,427,200	$1,427,200	$1,427,200	$1,427,200	$1,427,200	$0	$0	$1,457,167	$1,457,167	$1,457,167
Total	**$7,312,910**	**$6,912,860**	**$6,824,660**	**$6,824,660**	**$7,018,910**	**$5,506,660**	**$5,464,660**	**$6,937,577**	**$6,934,427**	**$7,031,027**

3.4 Parks and Recreation Services

This section presents a preliminary estimate of the costs associated with maintaining the City's Parks and Recreation Services assets at the current level of service.

Annual lifecycle funding targets are summarized by capital program in Table 3-5. The ten-year lifecycle and growth expenditure forecast is summarized in Figure 3-3. A further breakdown of the lifecycle expenditure forecast by capital program is provided in Table 3-6.

Table 3-5: Average Annual Lifecycle Costs by Capital Program – Parks and Recreation Services

Category	Average Annual Lifecycle Cost
Cemetery Siteworks and Facilities	$10,000
Parks and Recreation Equipment	$210,000
Parks Siteworks and Facilities	$1,600,000
Recreation Facilities	$3,110,000
Total	**$4,930,000**

Figure 3-3: Lifecycle and Growth Expenditure Forecast – Parks and Recreation Services

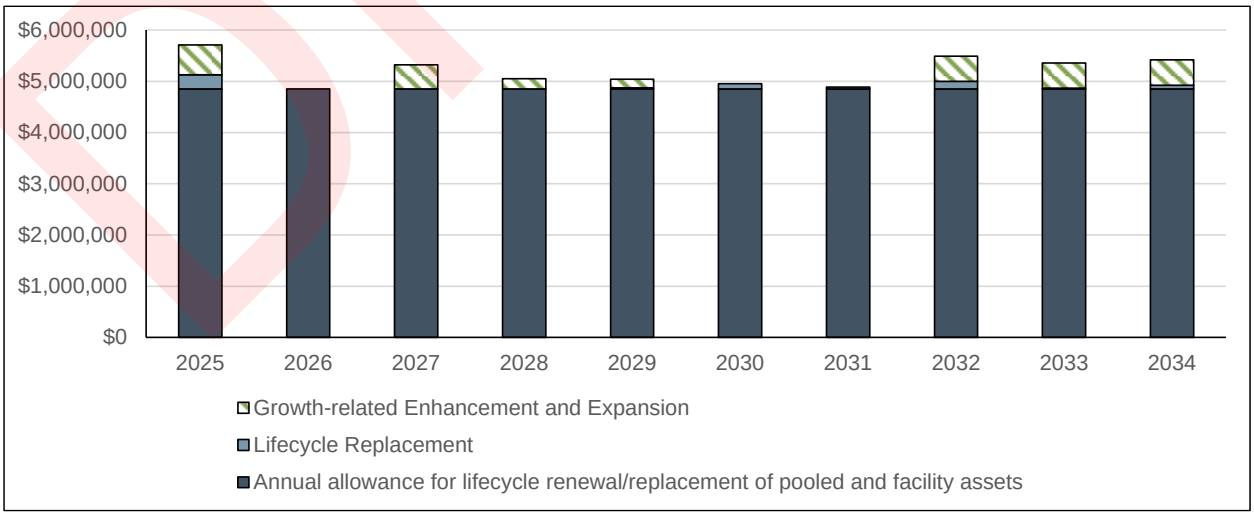

Table 3-6: Lifecycle Expenditure Forecast by Capital Program – Parks and Recreation Services

Category	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Cemetery Siteworks and Facilities	$8,808	$8,808	$8,808	$8,808	$8,808	$8,808	$8,808	$8,808	$8,808	$8,808
Parks and Recreation Equipment	$334,088	$195,121	$195,121	$195,121	$202,762	$195,121	$195,121	$290,633	$195,121	$195,121
Parks Siteworks and Facilities	$1,671,980	$1,535,715	$1,535,715	$1,535,715	$1,545,715	$1,636,876	$1,569,845	$1,583,803	$1,546,540	$1,606,079
Recreation Facilities	$3,113,898	$3,113,898	$3,113,898	$3,113,898	$3,113,898	$3,113,898	$3,113,898	$3,113,898	$3,113,898	$3,113,898
Growth-related Enhancements and Expansion	$580,000	$0	$467,593	$195,000	$169,000	$0	$0	$492,988	$492,988	$492,988
Total	**$5,708,774**	**$4,853,542**	**$5,321,135**	**$5,048,542**	**$5,040,183**	**$4,954,703**	**$4,887,672**	**$5,490,130**	**$5,357,354**	**$5,416,894**

3.5 Solid Waste Services

This section presents a preliminary estimate of the costs associated with maintaining the City's Solid Waste Services assets at the current level of service.

Annual lifecycle funding targets are summarized by capital program in Table 3-7. The ten-year lifecycle and growth expenditure forecast is summarized in Figure 3-4. A further breakdown of the lifecycle expenditure forecast by capital program is provided in Table 3-8.

Table 3-7: Average Annual Lifecycle Costs by Capital Program – Solid Waste Services

Category	Average Annual Lifecycle Cost
Landfill Equipment	$10,000
Landfill Siteworks and Facilities	$240,000
Total	**$250,000**

Figure 3-4: Lifecycle and Growth Expenditure Forecast – Solid Waste Services

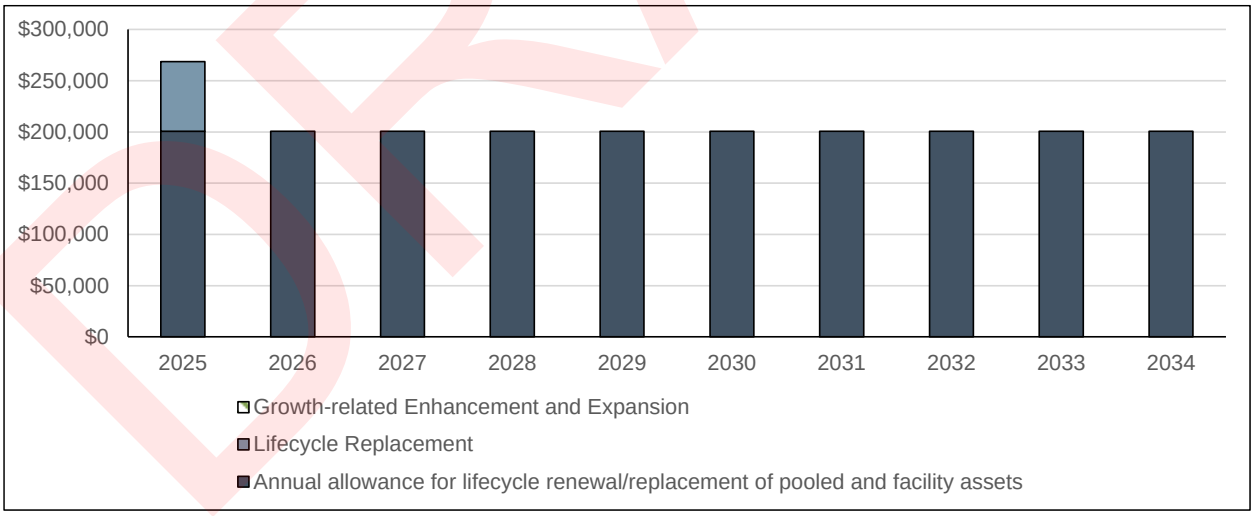

Table 3-8: Lifecycle Expenditure Forecast by Capital Program – Solid Waste Services

Category	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Landfill Equipment	$10,434	$10,434	$10,434	$10,434	$10,434	$10,434	$10,434	$10,434	$10,434	$10,434
Landfill Siteworks and Facilities	$258,195	$190,137	$190,137	$190,137	$190,137	$190,137	$190,137	$190,137	$190,137	$190,137
Growth-related Enhancements and Expansion	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total	**$268,629**	**$200,571**	**$200,571**	**$200,571**	**$200,571**	**$200,571**	**$200,571**	**$200,571**	**$200,571**	**$200,571**

3.6 Transportation Services

This section presents a preliminary estimate of the costs associated with maintaining the City's Transportation Services assets at the current level of service.

Annual lifecycle funding targets are summarized by capital program in Table 3-9. The ten-year lifecycle and growth expenditure forecast is summarized in Figure 3-5. A further breakdown of the lifecycle expenditure forecast by capital program is provided in Table 3-10.

Table 3-9: Average Annual Lifecycle Costs by Capital Program – Transportation Services

Category	Average Annual Lifecycle Cost
Airport Siteworks and Facilities	$340,000
Roads, Fleet and Transit Facilities	$1,410,000
Sidewalks	$1,320,000
Traffic Signals and Streetlights	$650,000
Transit Siteworks	$30,000
Total	**$3,760,000**

Figure 3-5: Lifecycle and Growth Expenditure Forecast – Transportation Services

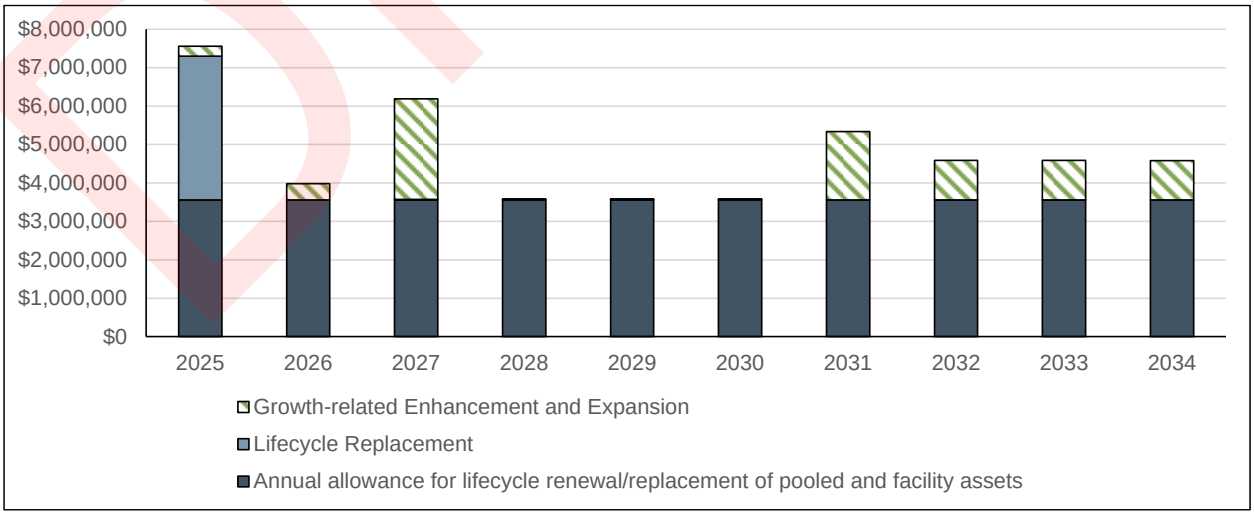

Table 3-10: Lifecycle Expenditure Forecast by Capital Program – Transportation Services

Category	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Airport Siteworks and Facilities	$3,877,515	$135,733	$150,973	$135,733	$136,272	$135,733	$135,733	$140,123	$140,123	$135,733
Roads, Fleet and Transit Facilities	$1,412,175	$1,412,175	$1,412,175	$1,412,175	$1,412,175	$1,412,175	$1,412,175	$1,412,175	$1,412,175	$1,412,175
Sidewalks	$1,322,409	$1,322,409	$1,322,409	$1,322,409	$1,322,409	$1,322,409	$1,322,409	$1,322,409	$1,322,409	$1,322,409
Traffic Signals and Streetlights	$654,009	$654,009	$654,009	$654,009	$654,009	$654,009	$654,009	$654,009	$654,009	$654,009
Transit Siteworks	$31,460	$31,460	$31,460	$31,460	$31,460	$31,460	$31,460	$31,460	$31,460	$31,460
Growth-related Enhancements and Expansion	$257,746	$427,246	$2,619,720	$31,646	$31,646	$31,646	$1,782,960	$1,028,253	$1,028,253	$1,028,253
Total	**$7,555,313**	**$3,983,032**	**$6,190,746**	**$3,587,432**	**$3,587,971**	**$3,587,432**	**$5,338,746**	**$4,588,430**	**$4,588,430**	**$4,584,040**

3.7 Support and Other Services

This section presents a preliminary estimate of the costs associated with maintaining the City's Support and Other Services assets at the current level of service.

Annual lifecycle funding targets are summarized by capital program in Table 3-11. The ten-year lifecycle and growth expenditure forecast is summarized in Figure 3-6. A further breakdown of the lifecycle expenditure forecast by capital program is provided in Table 3-12.

Table 3-11: Average Annual Lifecycle Costs by Capital Program – Support and Other Services

Category	Average Annual Lifecycle Cost
Building and Property Facilities	$2,300,000
Currently Funded through Operating	$1,920,000
Information Technology Systems	$520,000
Public Works Fleet Equipment	$6,600,000
Total	**$11,350,000**

Figure 3-6: Lifecycle and Growth Expenditure Forecast – Support and Other Services

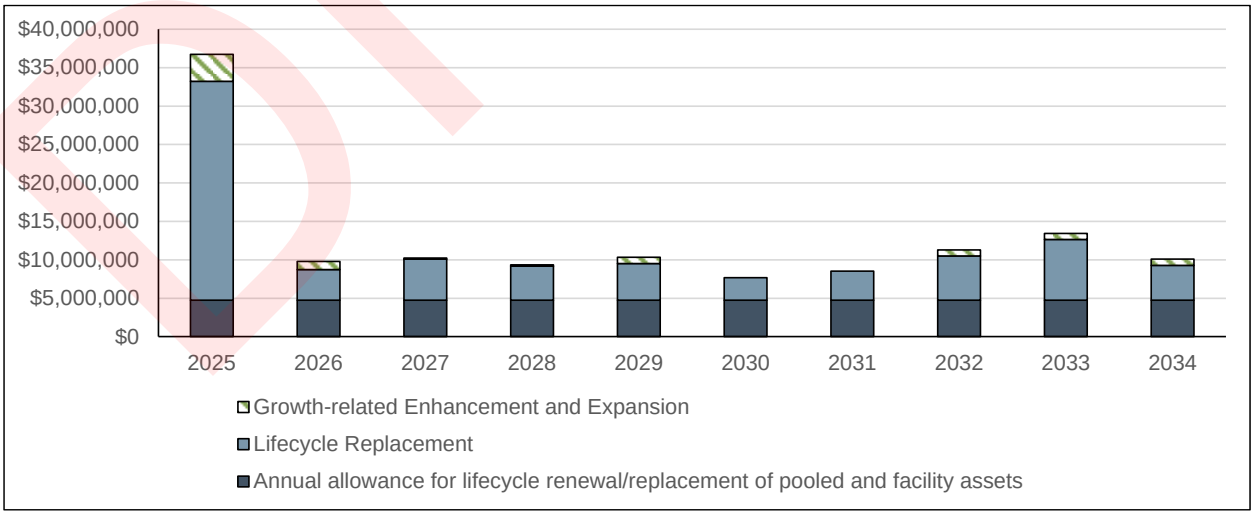

Table 3-12: Lifecycle Expenditure Forecast by Capital Program – Support and Other Services

Category	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Building and Property Facilities	$2,293,385	$2,293,385	$2,293,385	$2,293,385	$2,293,385	$2,293,385	$2,293,385	$2,293,385	$2,293,385	$2,293,385
Currently Funded through Operating	$1,924,747	$1,924,747	$1,924,747	$1,924,747	$1,924,747	$1,924,747	$1,924,747	$1,924,747	$1,924,747	$1,924,747
Information Technology Systems	$517,567	$517,567	$517,567	$517,567	$517,567	$517,567	$517,567	$517,567	$517,567	$517,567
Public Works Fleet Equipment	$28,475,777	$4,001,437	$5,362,681	$4,456,207	$4,765,007	$2,942,917	$3,778,642	$5,759,783	$7,917,812	$4,556,289
Growth-related Enhancements and Expansion	$3,520,137	$1,045,537	$144,137	$144,137	$839,137	$0	$0	$795,011	$795,011	$795,011
Total	**$36,731,612**	**$9,782,672**	**$10,242,516**	**$9,336,042**	**$10,339,842**	**$7,678,616**	**$8,514,341**	**$11,290,493**	**$13,448,522**	**$10,086,999**

Chapter 4
Summary

4. Summary

This asset management plan has been developed to address the July 1, 2024 requirements of O. Reg. 588/17. The plan provides summary information for the City's non-core infrastructure assets (including replacement cost valuation and condition), identifies current levels of service, and includes a 10-year forecast of lifecycle activities and associated costs that would be required for the City to maintain current levels of service. The plan is based on the best information available to the City at this time. The City is actively working to have targets set for levels of service performance measures, and to include a detailed financial strategy. The ongoing development of the AMP will ensure the City's compliance with the July 1, 2025 requirements of O. Reg. 588/17.

Beyond regulatory compliance, the City should continue working on integrating asset management planning with other municipal financial and planning documents. Furthermore, the City will need to establish processes for reviewing and updating assumptions underlying the asset management plan on a regular basis to keep the plan relevant and reliable.