Asset Management Plan

City of Kawartha Lakes

June 16, 2025

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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
PCI	Pavement Condition Index
BCI	Bridge Condition Index
OSIM	Ontario Structure Inspection Manual

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 develop a comprehensive asset management plan. The project has been completed in three phases. The first phase focused on complying with the July 1, 2022 requirements of Ontario Regulation 588/17 (O. Reg. 588/17) for core[1] assets and was completed in June 2022. The second phase focused on complying with the July 1, 2024 requirements of O. Reg. 588/17 for non-core[2] assets and was completed in May 2024. The third and final phase of the project built on the work completed through the previous phases, with a focus on identifying proposed levels of service and developing a financial strategy to support the asset management plan. This report is the outcome of the third phase and brings the City into full compliance with the 2025 requirements of O. Reg. 588/17.

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 assets is budgeted through a total of 35 capital programs and the operating budget.[3] The 35 programs are grouped together into seven service groups as defined in Table 1-1.

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[1] Core infrastructure assets are defined by O. Reg. 588/17 as being roads, bridges, culverts, and any asset that is utilized in the provision of water, wastewater, and stormwater services.

[2] Non-core infrastructure assets are any other assets owned and managed by a municipality that are not included within the definition of core infrastructure assets.

[3] 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
Support and Other Services	Library and culture services and services provided by assets that are not public facing (e.g., information technology, fleet, etc.)
Transportation Services	Airport and transit services, along with services provided by assets that support the road network (e.g., sidewalks, streetlights, etc.)
Water and Wastewater Services	Water treatment, wastewater treatment facilities, horizontal distribution and collection (e.g., watermains, wastewater mains, etc.) and vertical distribution and collection (e.g., reservoir, elevated tank, etc.)
Uncategorized	Aggregate pits and quarries and forests

The replacement costs of the assets included in this asset management plan has been estimated at $5.4 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	Replacement Cost (2025$)
Emergency Services	Fire Facilities	$67,784,000
	Fire Fleet and Equipment	$48,604,000
	Paramedic Facilities	$10,284,000
	Paramedic Fleet and Equipment	$8,381,000
	Police Fleet and Equipment	$4,363,000
Human Services	Housing Facilities	$272,714,000
	Housing Fleet	$1,491,000
	Victoria Manor	$58,434,000
Parks and Recreation Services	Cemetery Siteworks and Facilities	$609,000
	Parks and Recreation Equipment	$58,434,000
	Parks Siteworks and Facilities	$42,423,000
	Recreation Facilities	$247,495,000
Solid Waste Services	Landfill Equipment	$6,704,000
	Landfill Siteworks and Facilities	$34,321,000
Support and Other Services	Building and Property Equipment	$775,000
	Building and Property Facilities	$148,934,000
	Currently Funded through Operating	$12,771,000
	Information Technology Systems	$3,656,000
	Public Works Fleet Equipment	$90,289,000
Transportation Services	Airport Siteworks and Facilities	$14,400,000
	Bridges and Culverts	$482,109,000
	Gravel Resurfacing	$463,456,000
	Parking Lots	$5,775,000
	Paved Roads[1]	$1,561,946,000
	Roads, Fleet and Transit Facilities	$96,282,000
	Sidewalks	$40,053,000
	Stormwater Siteworks	$67,752,000

[1] Storm Mains and culverts are included in the replacement cost of paved roads.

Service Group	Capital Program Name	Replacement Cost (2025$)
	Traffic Signals and Streetlights	$25,536,000
	Transit Siteworks	$628,000
Water and Wastewater Services	Horizontal Distribution and Collection	$645,417,000
	Vertical Distribution and Collection	$173,421,000
	Wastewater Treatment	$14,999,000
	Water Treatment	$27,113,000
Uncategorized	Aggregate Pits and Quarries	$171,654,000
	Forests	$424,448,000
Total		**$5,382,767,000**

Figure 1-1: Distribution of Assets by Service Group
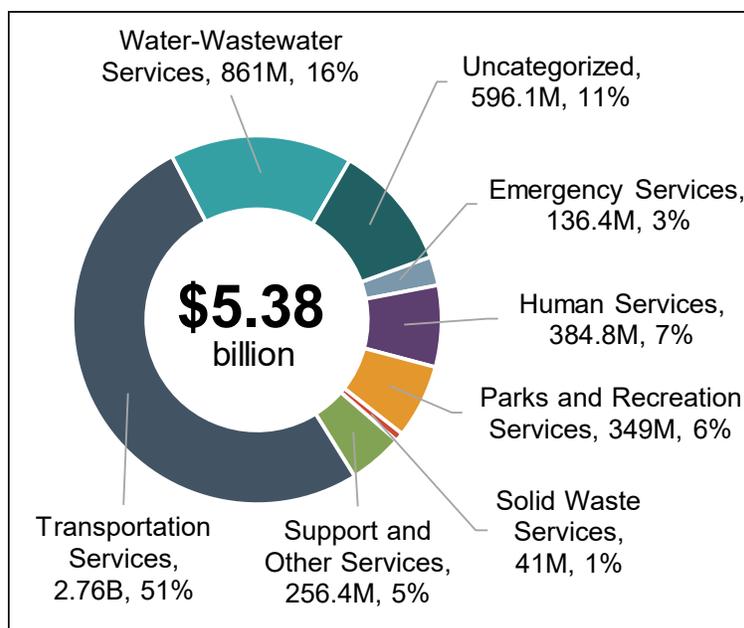
1.2 Legislative Context for the Asset Management Plan

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.

As noted earlier, the asset management plan presented herein brings the City into full compliance with the 2025 requirements of O. Reg. 588/17.

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 asset information into complete inventories that contain relevant asset attributes such as size, quantity, age, useful service life expectations, and replacement cost.

2. Define and assess the current condition of assets using a combination of staff input, existing background reports and studies (e.g. Road Needs Study, OSIM Bridge Inspections), and age-based condition analysis.

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

4. Identify proposed levels of service for all performance measures.

5. Compile a forecast of lifecycle expenditures required to achieve these levels of service outcomes.

6. Develop a financial strategy to support the lifecycle management strategy. The financial strategy informs how the capital and operating expenses arising from the asset management strategy will be funded over the forecast period, and how any existing funding gaps will be managed.

7. Document the comprehensive 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 Emergency Services

2.1.1 State of Local Infrastructure

The City owns and manages a variety of assets that support the provision of Emergency Services. The estimated replacement cost of these assets is approximately $136 million. Fire facilities represent the largest share of replacement cost at $64.8 million (47%), followed by, fire fleet and equipment at $48.6 million (36%). Paramedic facilities at $10.3 million (8%), paramedic fleet and equipment at $8.4 million (6%). Lastly, police fleet and equipment at $4.4 million (3%). The average of emergency services assets is 33.0 years.

Table 2-1 provides a breakdown of these assets by capital program, showing the 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: Emergency Services Capital Programs – Average Age and Replacement Cost

Capital Program	Average Age (years)	Replacement Cost (2025$)
Fire Facilities	48.5	$64,784,000
Fire Fleet and Equipment	16.2	$48,604,000
Paramedic Facilities	49.1	$10,284,000
Paramedic Fleet and Equipment	5.4	$8,381,000
Police Fleet and Equipment	5.1	$4,363,000
Total	**33.0**	**$136,416,000**

Figure 2-1: Emergency Services Capital Programs – Average Age and Replacement Cost
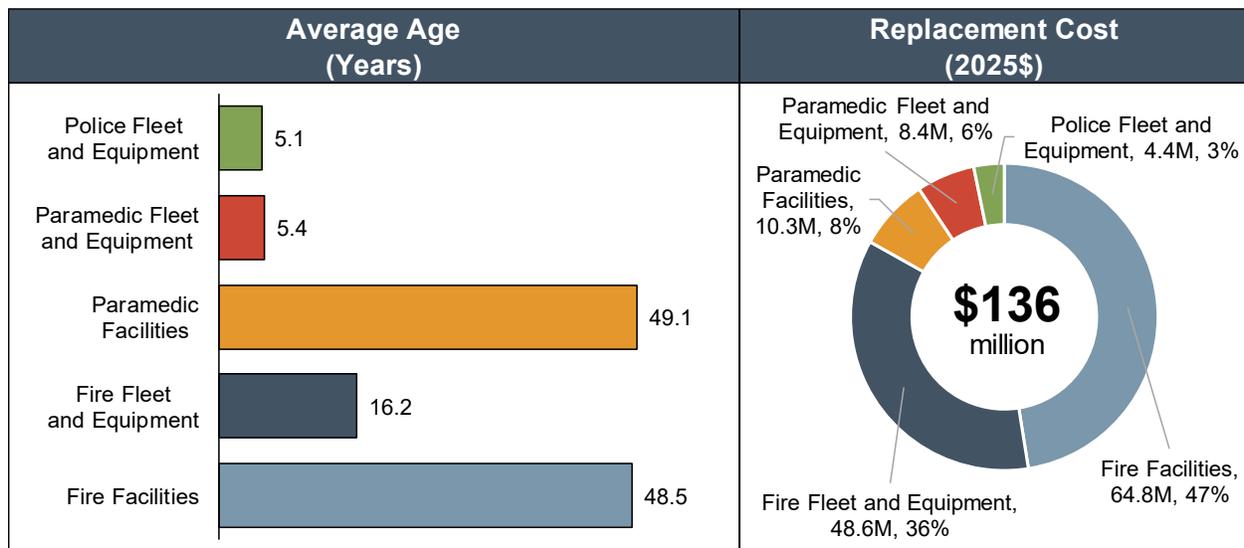
2.1.2 Condition

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

Based on their current age profile, assets within the Emergency Services group are, on average, in a 'Good' condition state. The average ULC% rating of the City's fire facilities is 80.8%, which indicates that, on average, fire facilities are in a 'Good' condition state. Similarly, the average ULC% rating of the City's fire fleet and equipment is 87.1%, which indicates that, on average, fire fleet and equipment are in a 'Good' condition state. The average ULC% rating of the City's paramedic facilities is 81.8%, which indicates that, on average, paramedic facilities are in a 'Good' condition state. The average ULC% rating of the City's paramedic fleet and equipment is 96.8%, which indicates that, on average, paramedic fleet and equipment are in a 'Good' condition state. Lastly, the average ULC% rating of the City's police fleet and equipment is 66.1%, which indicates that, on average, police fleet and equipment are in a 'Good' condition state.

Table 2-3 summarizes the average ULC% rating and associated condition states of the City's Emergency Services assets.

Table 2-3: Condition Summary – Emergency Services

Capital Program	Average ULC%	Average Condition State
Fire Facilities	80.8%	Good
Fire Fleet and Equipment	87.1%	Good
Paramedic Facilities	81.8%	Good
Paramedic Fleet and Equipment	96.8%	Fair
Police Fleet and Equipment	66.1%	Good
Average	**83.6%**	**Good**

The distribution of the replacement cost of all Emergency Services assets by condition state is illustrated in Figure 2-2. The distribution of the replacement cost of Emergency Services assets by ULC% rating range is illustrated Figure 2-3.

Figure 2-2: Distribution of Emergency Services Assets by Condition State
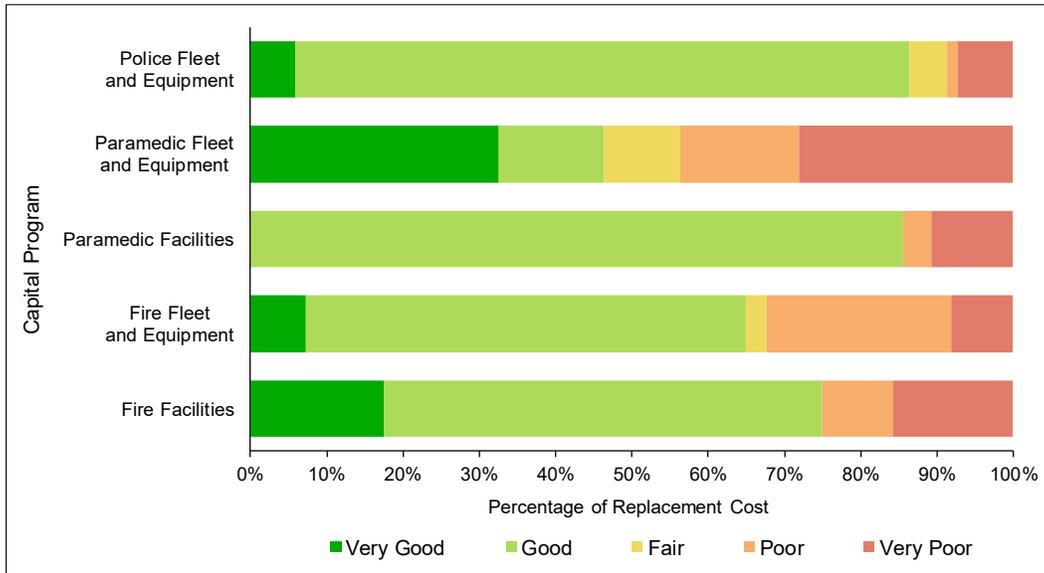
Figure 2-3: Distribution of Emergency Services Assets by ULC% Rating
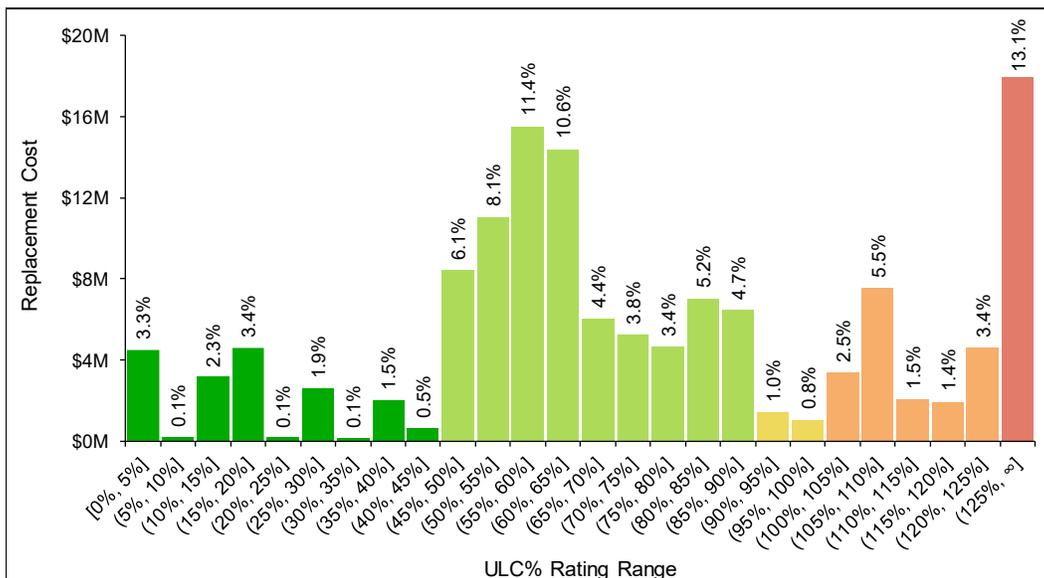
2.1.3 Levels of Service

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 identifies both the levels of service that assets are currently providing as well as the proposed levels of service (target performance) that the City is striving for.

The levels of service framework is presented as follows:

- The Service Attribute headings and columns indicate the high-level attribute being addressed;

- The Community Levels of Service column in Table 2-4 explains the City's intent in plain language and provides additional information about the service being provided;

- The Performance Measure column in Table 2-5 describes the performance measure(s) connected to the identified service attribute;

- The Current Performance column in Table 2-5 identifies the current level of service with respect to each performance measure based on the best available data; and

- The Target Performance column in Table 2-5 identifies the proposed level of service with respect to each performance measure.

It is noted that the performance measures included in Table 2-5 only include ones for which data is currently available. The City has identified several other performance measures of interest, as reported in the City's 2024 Asset Management Plan for Non-Core Assets. These additional performance measures will be incorporated into future iterations of this asset management plan once the City collects the required data.

Table 2-4: Emergency Services – Community Levels of Service

Service Attribute	Community Levels of Service
Quality	The City maintains Emergency Services facilities such that they provide a pleasant experience to staff and visitors.
Reliability/ Availability	The City strives to ensure its Emergency Services vehicles and equipment are reliable and available for use.

Table 2-5: Emergency Services – Technical Levels of Service

Service Attribute	Performance Measure	Current Performance (2025)	Target Performance (2035)
Quality	Average condition rating for Fire Facilities	Good (ULC% of 81%)	Good
	Average condition rating for Paramedic Facilities	Good (ULC% of 82%)	Good
Reliability/ Availability	Average condition rating for Fire Fleet and Equipment	Good (ULC% of 87%)	Good
	Average condition rating for Paramedic Fleet and Equipment	Fair (ULC% of 97%)	Fair
	Average condition rating for Police Fleet and Equipment	Good (ULC% of 66%)	Good

2.2   Human Services

2.2.1   State of Local Infrastructure

The City owns and manages a variety of assets that support the provision of Human Services. The estimated replacement cost of these assets is approximately $384.8 million. Housing facilities represent the largest share of replacement cost at $272.7 million (70.9%), followed by Victoria Manor at $111 million (28.7%) and lastly, housing fleet at $2 million (0.4%). The average of human services assets is 36.0 years.

Table 2-6 provides a breakdown of these assets by capital program, showing the average age and replacement cost. A visual rendering of the data presented in Table 2-6 is provided in Figure 2-4.

Table 2-6: Human Services Capital Programs – Average Age and Replacement Cost

Capital Program	Average Age (years)	Replacement Cost (202$)
Housing Facilities	36.1	$272,714,000
Housing Fleet	9.1	$1,491,000
Victoria Manor	36.0	$110,579,000
Total	**36.0**	**$384,784,000**

Figure 2-4: Human Services Capital Programs – Average Age and Replacement Cost
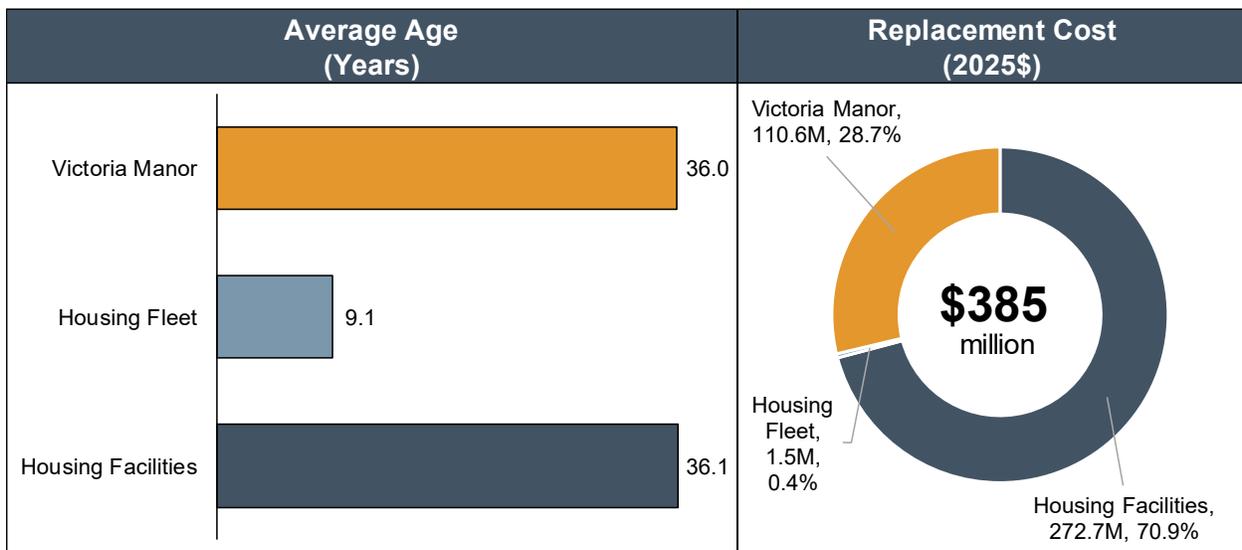
2.2.2 Condition

The condition of the City's Human Services assets has not been directly assessed through a physical condition assessment. For the purposes of this asset management plan, the condition of Human Services assets is assessed based on age relative to useful service life (i.e., based on the percentage of useful service life consumed – ULC%). To better communicate the condition of Human Services assets, ULC% ratings have been segmented into qualitative condition states as summarized previously in Table 2-2. Please refer to Section 2.1.2 for further information on this condition assessment methodology.

Based on their current age profile, assets within the Human Services group are, on average, in a 'Good' condition state. The average ULC% rating of the City's housing facilities is 57.5%, which indicates that, on average, housing facilities are in a 'Good'

condition state. Similarly, the average ULC% rating of the City's housing fleet is 76.2%, which indicates that, on average, housing fleet assets are in a 'Good' condition state. Lastly, the average ULC% rating of the City's Victoria Manor is 90%, which indicates that, on average, Victoria Manor assets are in a 'Good' condition state.

Table 2-7 summarizes the average ULC% rating and associated condition states of the City's Human Services assets.

Table 2-7: Condition Summary – Human Services

Capital Program	Average ULC%	Average Condition State
Housing Facilities	57.5%	Good
Housing Fleet	76.2%	Good
Victoria Manor	60.0%	Good
Average	**58.3%**	**Good**

The distribution of the replacement cost of all Human Services assets by condition state is illustrated in Figure 2-5. The distribution of the replacement cost of Human Services assets by ULC% rating range is illustrated Figure 2-6

Figure 2-5: Distribution of Human Services Assets by Condition State
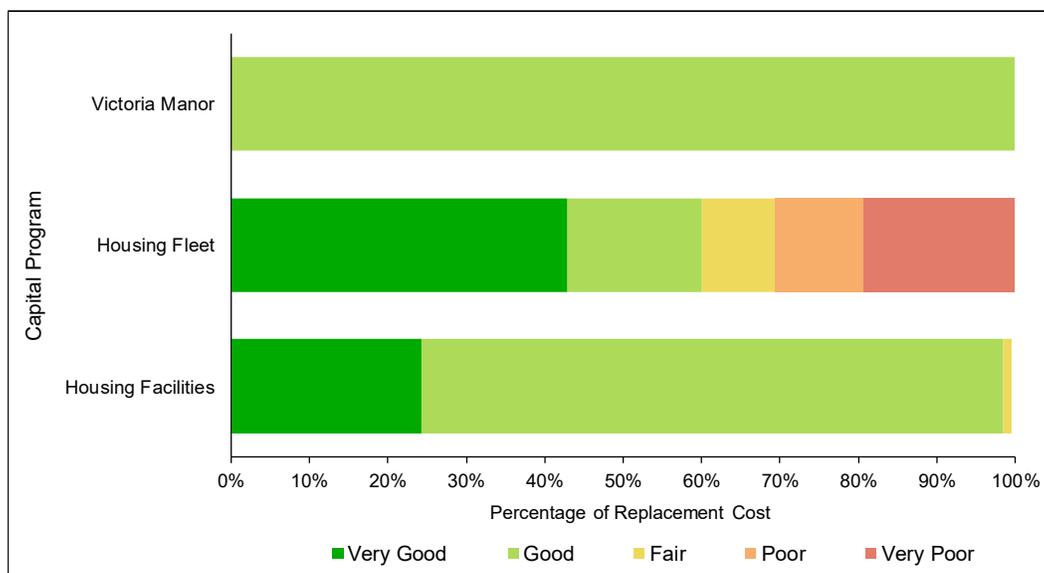
Figure 2-6: Distribution of Human Services Assets by ULC% Rating
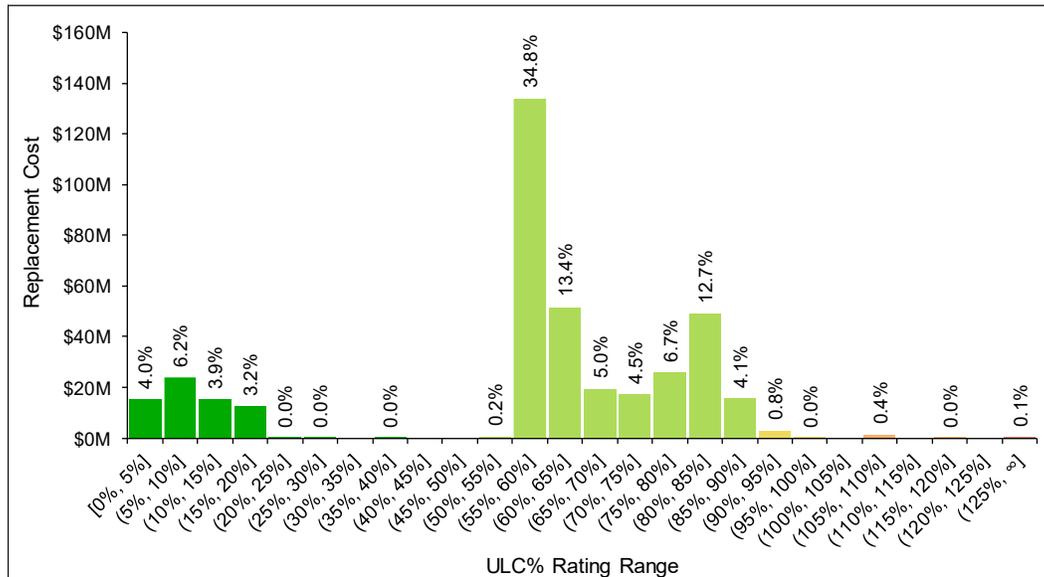
2.2.3 Levels of Service

This subsection presents the City's levels of service framework for its Human Services assets. Table 2-8 presents the City's Service Attributes and Community Levels of Service for its Human Services assets while Table 2-9 presents the City's Technical Levels of Service (i.e., performance measures) for its Human Services assets, including their current and target performance. Please refer to Section 2.1.3 for further details on the City's levels of service framework.

It is noted that the performance measures included in Table 2-9 only include ones for which data is currently available. The City has identified several other performance measures of interest, as reported in the City's 2024 Asset Management Plan for Non-Core Assets. These additional performance measures will be incorporated into future iterations of this asset management plan once the City collects the required data.

Table 2-8: Human Services – Community Levels of Service

Service Attribute	Community Levels of Service
Quality	The City maintains Human Services facilities such that they provide a pleasant experience to staff, residents, and visitors.
Reliability/ Availability	The City strives to ensure its Human Services vehicles and equipment are reliable and available for use.

Table 2-9: Human Services – Technical Levels of Service

Service Attribute	Performance Measure	Current Performance (2025)	Target Performance (2035)
Quality	Average condition rating for Housing Facilities	Good (ULC% of 58%)	Good
	Average condition rating for Victoria Manor	Good (ULC% of 60%)	Good
Reliability/ Availability	Average condition rating for Housing Fleet	Good (ULC% of 76%)	Good

2.3 Parks and Recreation Services

2.3.1 State of Local Infrastructure

The City owns and manages a variety of assets that support the provision of Parks and Recreation Services. The estimated replacement cost of these assets is approximately $349 million. Recreation facilities represent the largest share of replacement cost at $247.5 million (70.9%), followed by, parks and recreation equipment at $58.4 million (16.7%), parks siteworks and facilities at $42.4 million (12.2%), and lastly cemetery siteworks and facilities at $609,000 (0.2%). The average age of parks and recreation services assets is 39.4 years.

Table 2-10 provides a breakdown of the average age and replacement cost information of Parks and Recreations Services assets by capital program. A visual rendering of the data presented in Table 2-10 is provided in Figure 2-7.

Table 2-10: Parks and Recreation Services Capital Programs – Average Age and Replacement Cost

Capital Program	Average Age (years)	Replacement Cost (2025$)
Cemetery Siteworks and Facilities	22.4	$609,000
Parks and Recreation Equipment	12.8	$58,434,000
Parks Siteworks and Facilities	19.6	$42,423,000
Recreation Facilities	49.1	$247,495,000
Total	**39.4**	**$348,961,000**

Figure 2-7: Parks and Recreation Services Capital Programs – Average Age and Replacement Cost
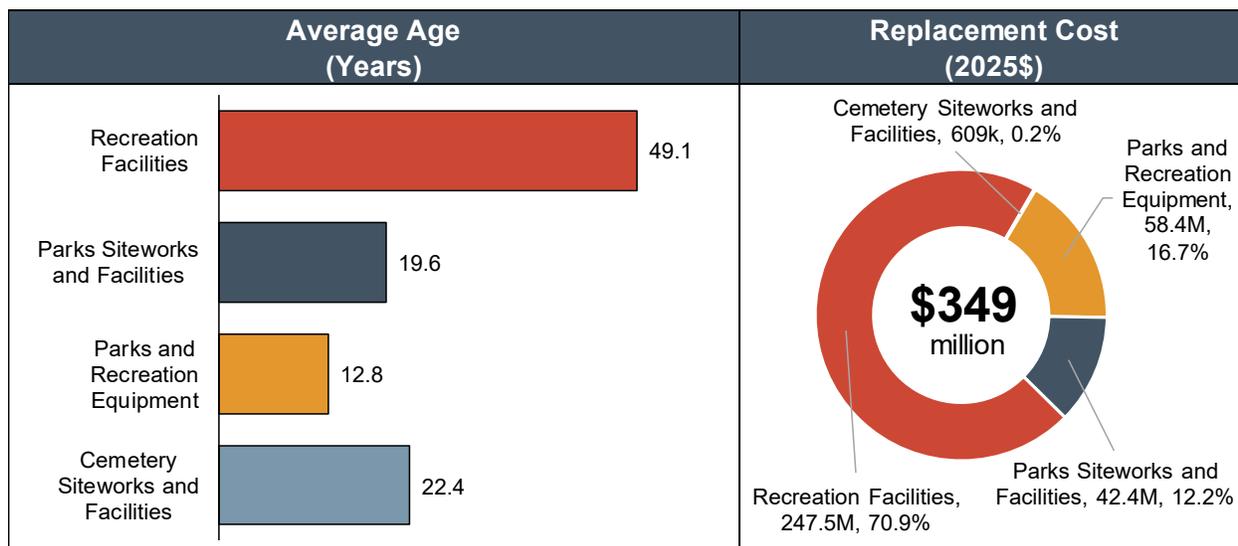
2.3.2 Condition

The condition of the City's Parks and Recreation Services assets has not been directly assessed through a physical condition assessment. For the purposes of this asset management plan, the condition of Parks and Recreation Services assets is assessed based on age relative to useful service life (i.e. based on the percentage of useful service life consumed – ULC%). To better communicate the condition of Parks and Recreation Services assets, ULC% ratings have been segmented into qualitative condition states as summarized previously in the Table 2-2. Please refer to Section 2.1.2 for further information on this condition assessment methodology.

Based on their current age profile, assets within the Parks and Recreation Services group are, on average, in a 'Good' condition state. The average ULC% rating of the City's cemetery siteworks and facilities is 36.8%, which indicates that, on average, cemetery siteworks and facilities are in a 'Very Good' condition state. Similarly, the average ULC% rating of the City's parks and recreation equipment is 36.7%, which indicates that, on average, parks and recreation equipment are in a 'Very Good' condition state. The average ULC% rating of the City's parks siteworks and facilities is 55.3%, which indicates that, on average, parks siteworks and facilities are in a 'Good' condition state. Lastly, the average ULC% rating of the City's recreation facilities is 83.8%, which indicates that, on average, recreation facilities are in a 'Good' condition state.

Table 2-11 summarizes the average ULC% rating and associated condition states of the City's Parks and Recreation Services assets.

Table 2-11: Condition Summary – Parks and Recreation Services

Capital Program	Average ULC%	Average Condition State
Cemetery Siteworks and Facilities	36.8%	Very Good
Parks and Recreation Equipment	36.7%	Very Good
Parks Siteworks and Facilities	55.3%	Good
Recreation Facilities	83.8%	Good
Average	**72.4%**	**Good**

The distribution of the replacement cost of all Parks and Recreation assets by condition state is illustrated in Figure 2-8. The distribution of the replacement cost of Parks and Recreation assets by ULC% rating range is illustrated Figure 2-9.

Figure 2-8: Distribution of Parks and Recreation Assets by Condition State
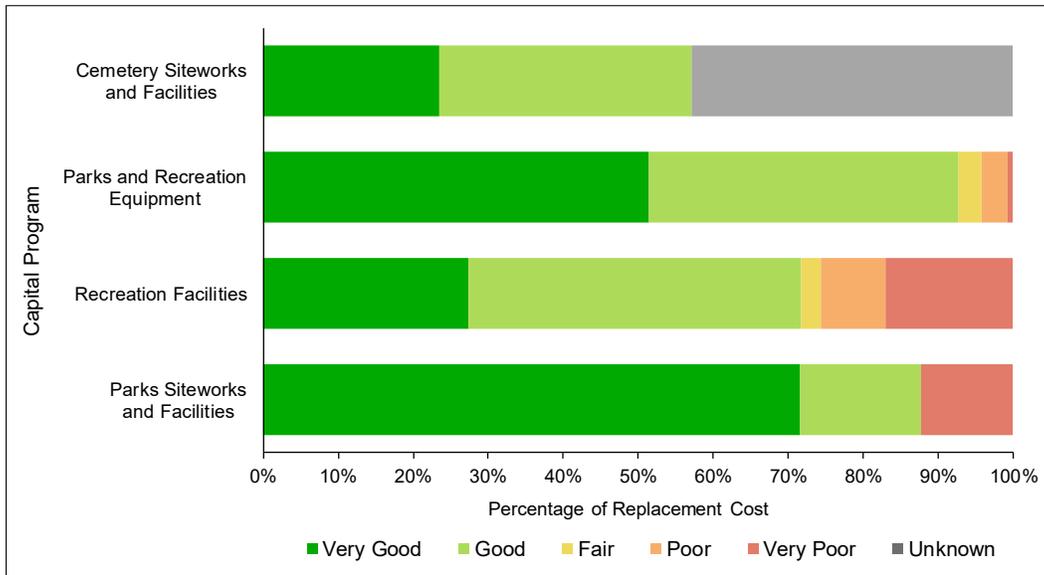
Figure 2-9: Distribution of Parks and Recreation Assets by ULC%
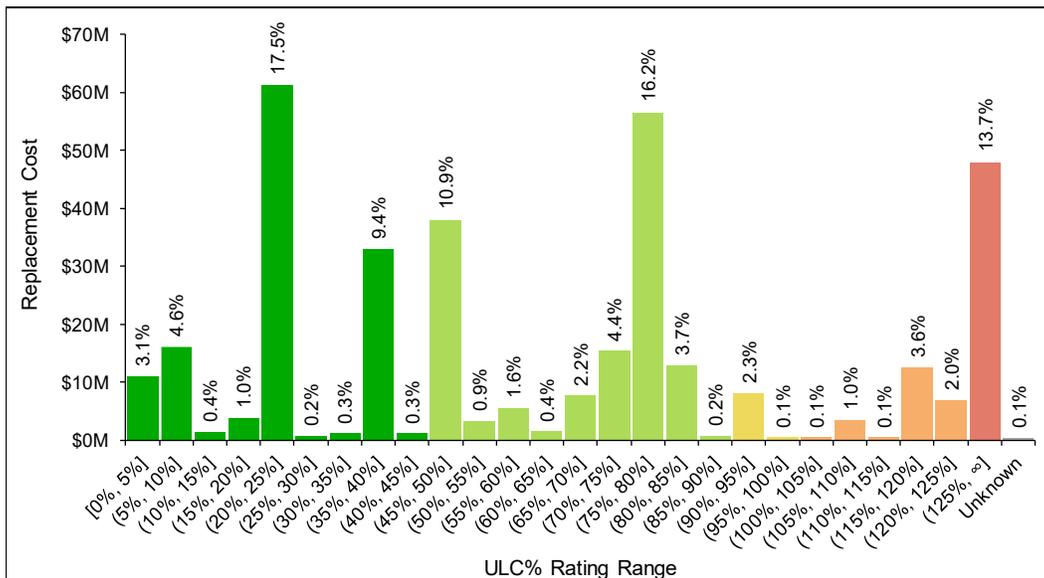
2.3.3 Levels of Service

This subsection presents the City's levels of service framework for its Parks and Recreation assets. Table 2-12 presents the City's Service Attributes and Community Levels of Service for its Parks and Recreation assets while Table 2-13 presents the City's Technical Levels of Service (i.e., performance measures) for its Parks and

Recreation assets, including their current and target performance. Please refer to Section 2.1.3 for further details on the City's levels of service framework.

It is noted that the performance measures included in Table 2-13 only include ones for which data is currently available. The City has identified several other performance measures of interest, as reported in the City's 2024 Asset Management Plan for Non-Core Assets. These additional performance measures will be incorporated into future iterations of this asset management plan once the City collects the required data.

Table 2-12: Parks and Recreation Services – Community Levels of Service

Service Attribute	Community Levels of Service
Quality	The City maintains Parks and Recreation Services facilities such that they provide a pleasant experience to staff and visitors.
Reliability	The City strives to ensure its Parks and Recreation Services vehicles and equipment are reliable and available for use.

Table 2-13: Parks and Recreation Services – Technical Levels of Service

Service Attribute	Performance Measure	Current Performance (2025)	Target Performance (2035)
Quality	Average condition rating for Cemetery Siteworks and Facilities	Very Good (ULC% of 37%)	Very Good
	Average condition rating for Parks Siteworks and Facilities	Good (ULC% of 55%)	Good
	Average condition rating for Recreation Facilities	Good (ULC% of 84%)	Good
Reliability	Average condition rating for Parks and Recreation Equipment	Very Good (ULC% of 37%)	Very Good

2.4 Solid Waste Services

2.4.1 State of Local Infrastructure

The City owns and manages a variety of assets that support the provision of Solid Waste Services. The estimated replacement cost of these assets is approximately $41 million. Landfill siteworks and facilities represent the largest share of replacement cost

at $34.3 million (84%), followed by landfill equipment at $6.7 million (16%). The average age of solid waste services assets is 17.4 years. Table 2-14 provides a breakdown of the average age and replacement cost information for Solid Waste Services assets by capital program. A visual rendering of the data presented in Table 2-14 is provided in Figure 2-10.

Table 2-14: Solid Waste Services Capital Programs – Average Age and Replacement Cost

Capital Program	Average Age (years)	Replacement Cost (2025$)
Landfill Equipment	17.6	$6,704,000
Landfill Siteworks and Facilities	16.6	$34,321,000
Total	**17.4**	**$41,025,000**

Figure 2-10: Solid Waste Services Capital Programs – Average Age and Replacement Cost
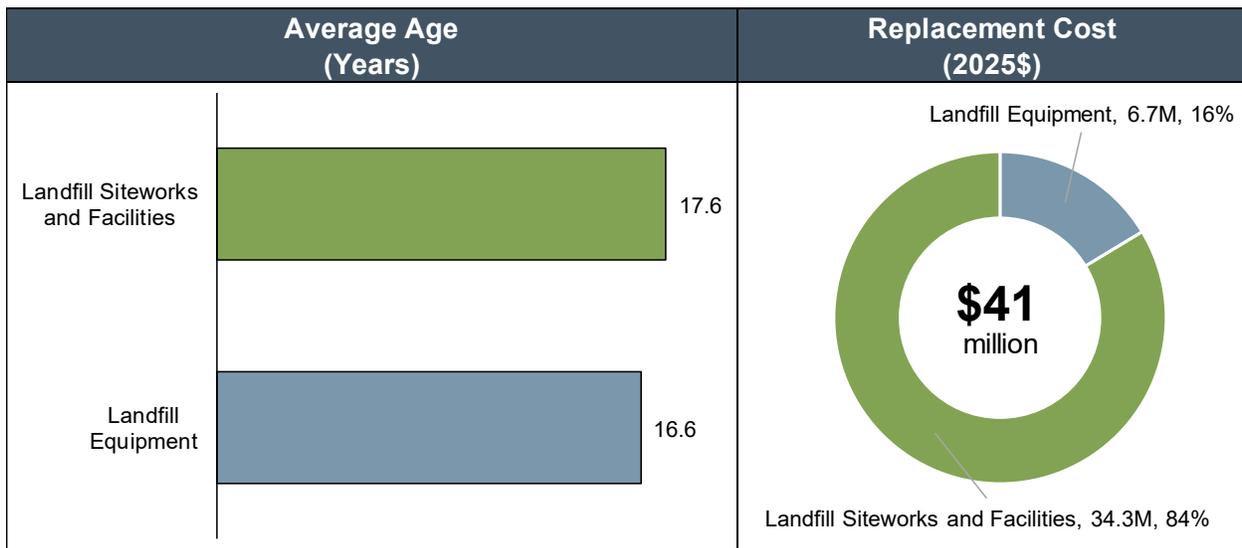
2.4.2 Condition

The condition of the City's Solid Waste Services assets has not been directly assessed through a physical condition assessment. For the purposes of this asset management plan, the condition of Solid Waste Services assets is assessed based on age relative to useful service life (i.e., based on the percentage of useful service life consumed – ULC%). To better communicate the condition of Solid Waste Services assets, ULC%

ratings have been segmented into qualitative condition states as summarized previously in the Table 2-2. Please refer to Section 2.1.2 for further information on this condition assessment methodology.

Based on their current age profile, assets within the Solid Waste Services group are, on average, in a 'Poor' condition state. The average ULC% rating of the City's landfill equipment is 114.3%, which indicates that, on average, landfill equipment are in a 'Poor' condition state. Similarly, the average ULC% rating of the City's landfill siteworks and facilities is 101.9%, which indicates that, on average, landfill siteworks and facilities are in a 'Poor' condition state.

Table 2-15 summarizes the average ULC% rating and associated condition states of the City's Solid Waste Services assets.

Table 2-15: Condition Summary – Solid Waste Services

Capital Program	Average ULC%	Average Condition State
Landfill Equipment	114.3%	Poor
Landfill Siteworks and Facilities	101.9%	Poor
Average	**103.9%**	**Poor**

The distribution of the replacement cost of all Solid Waste assets by condition state is illustrated in Figure 2-11. The distribution of the replacement cost of Solid Waste assets by ULC% rating range is illustrated Figure 2-12.

Figure 2-11: Distribution of Solid Waste Assets by Condition State
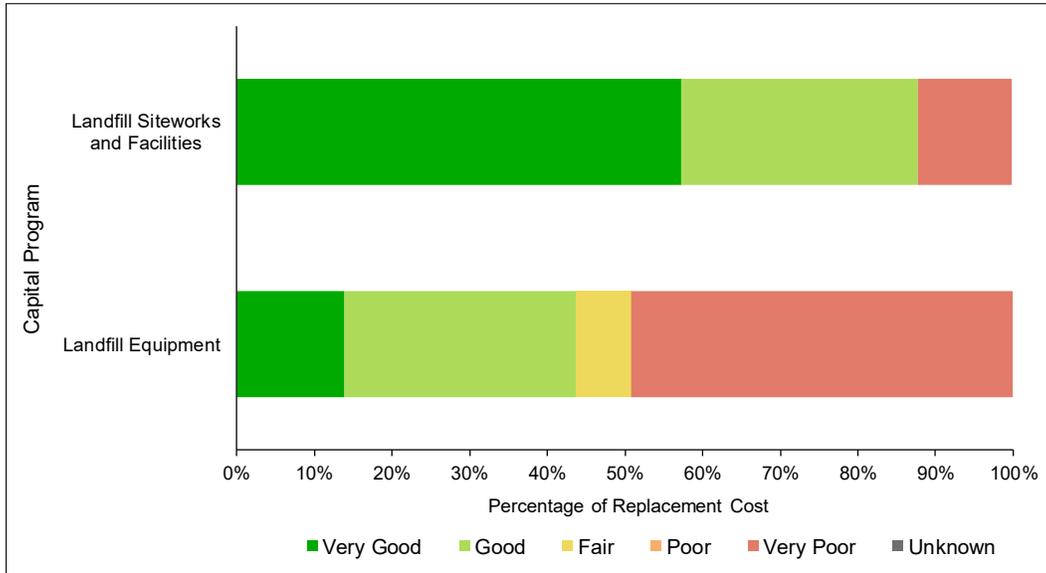
Figure 2-12: Distribution of Solid Waste Assets by ULC%
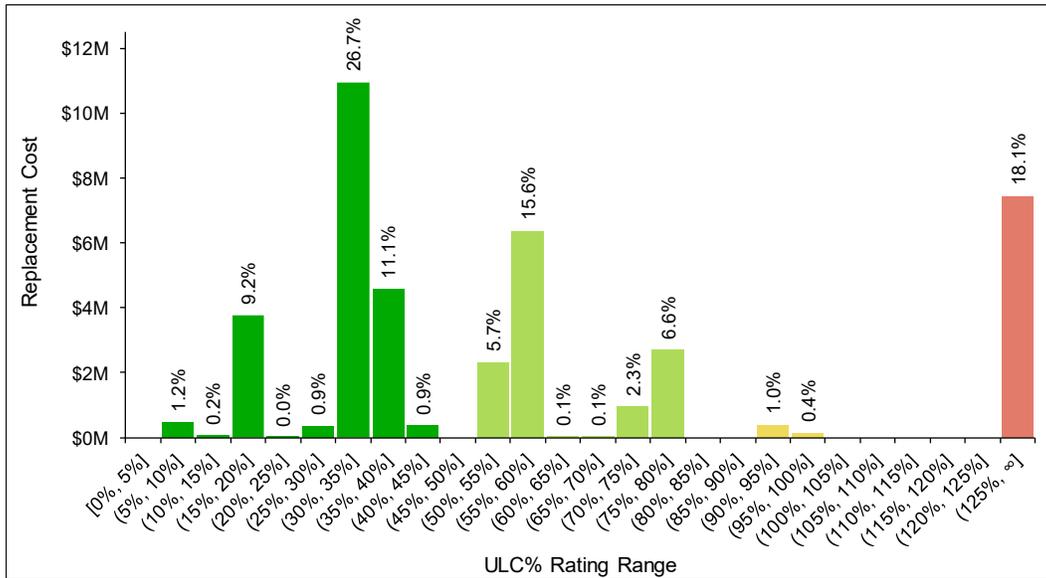
2.4.3 Levels of Service

This subsection presents the City's levels of service framework for its Solid Waste assets. Table 2-16 presents the City's Service Attributes and Community Levels of Service for its Solid Waste assets while Table 2-17 presents the City's Technical Levels of Service (i.e., performance measures) for its Solid Waste assets, including their

current and target performance. Please refer to Section 2.1.3 for further details on the City's levels of service framework.

It is noted that the performance measures included in Table 2-17 only include ones for which data is currently available. The City has identified several other performance measures of interest, as reported in the City's 2024 Asset Management Plan for Non-Core Assets. These additional performance measures will be incorporated into future iterations of this asset management plan once the City collects the required data.

Table 2-16: Solid Waste Services – Community Levels of Service

Service Attribute	Community Levels of Service
Reliability	The City strives to ensure its landfill assets are reliable and available for use.

Table 2-17: Solid Waste Services – Technical Levels of Service

Service Attribute	Performance Measure	Current Performance (2025)	Target Performance (2035)
Reliability	Average condition rating for Landfill Equipment	Poor (ULC% of 114%)	Poor
	Average condition rating for Landfill Siteworks and Facilities	Poor (ULC% of 102%)	Poor

2.5 Support and Other Services

2.5.1 State of Local Infrastructure

The City owns and manages a variety of assets that enable the provision of Support and Other Services. The estimated replacement cost of these assets is approximately $256 million. Building and property facilities represent the largest share of replacement cost at $148.9 million (58.1%), followed by public works fleet and equipment at $90.3 million (35.2%), assets currently funded through the operating budget[1] at $12.8 million

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[1] Assets whose replacements are funded through the operating budget include signs, guiderails, and circulating library materials.

(5.0%), information technology systems at $3.7 million (1.4%) and, lastly, building and property equipment at $775,000 (0.3%). The average age of assets within the Support and Other Services category is 51.2 years.

Table 2-18 provides a breakdown of the average age and replacement cost information for Support and Other Services assets by capital program. A visual rendering of the data presented in Table 2-18 is provided in Figure 2-13.

Table 2-18: Support and Other Services Capital Programs – Average Age and Replacement Cost

Capital Program	Average Age (years)	Replacement Cost (2025$)
Building and Property Equipment	4.6	$775,000
Building and Property Facilities	82.0	$148,934,000
Currently Funded through Operating	7.0	$12,771,000
Information Technology Systems	3.8	$3,656,000
Public Works Fleet and Equipment	9.1	$90,289,000
Total	**51.2**	**$256,425,000**

Figure 2-13: Support and Other Services Capital Programs – Average Age and Replacement Cost
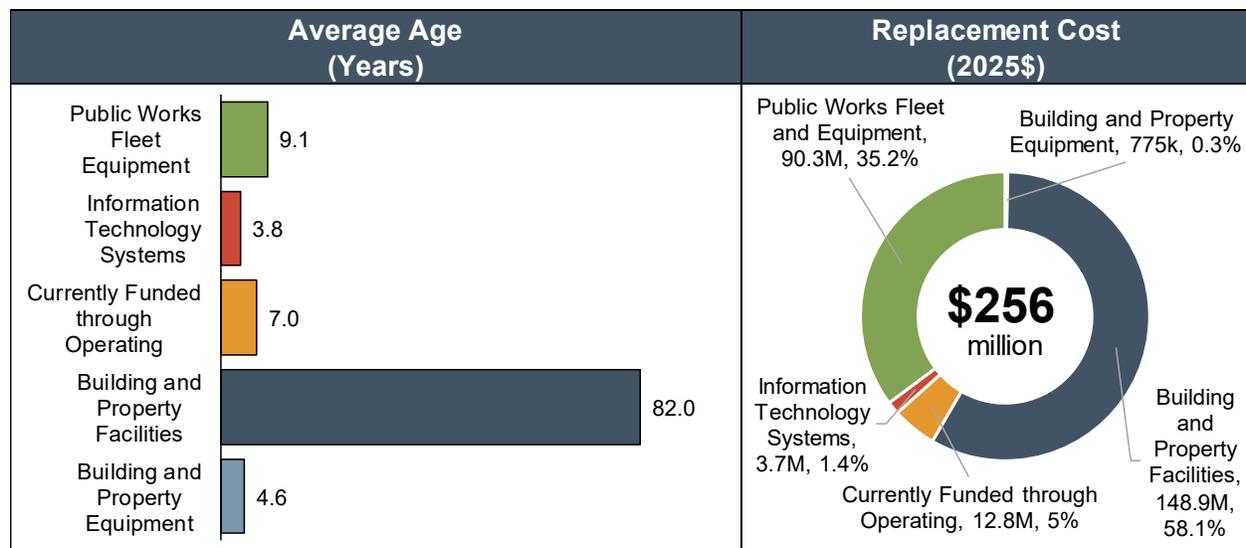
2.5.2 Condition

The condition of the City's Support and Other Services assets has not been directly assessed through a physical condition assessment. For the purposes of this asset management plan, the condition of Support and Other Services assets is assessed based on age relative to useful service life (i.e. based on the percentage of useful service life consumed – ULC%). To better communicate the condition of Support and Other Services assets, ULC% ratings have been segmented into qualitative condition states as summarized previously in the Table 2-2. Please refer to Section 2.1.2 for further information on this condition assessment methodology.

Based on their current age profile, assets within the Support and Other Services group are, on average, in a 'Poor' condition state. The average ULC% rating of the City's building and property equipment is 45.9%, which indicates that, on average, building and property equipment are in a 'Good' condition state. The average ULC% rating of the City's building and property facilities is 136.6%, which indicates that, on average, building and property facilities are in a 'Very Poor' condition state. The average ULC% rating of the assets currently funded through operating is 54.9%, which indicates that, on average, currently funded through operating are in a 'Good' condition state. The average ULC% rating of the City's information technology systems is 56.9%, which indicates that, on average, information technology systems are in a 'Good' condition state. Lastly, the average ULC% rating of the City's public works fleet and equipment is 67.4%, which indicates that, on average, public works fleet and equipment are in a 'Good' condition state.

Table 2-19 summarizes the average ULC% rating and associated condition states of the City's Support and Other Services assets. It is noted that there are 11 facilities within the Building and Property Facilities capital program that were constructed prior to 1950. The ULC% of these assets is over 125% and therefore they are categorized as "Very Poor". However, the actual condition of these assets may be better than their age indicates. The City is planning to complete formal building condition assessments for all of it facilities over the coming years. These assessments will provide a more accurate picture of the current condition of the City's facilities.

Table 2-19: Condition Summary – Support and Other Services

Capital Program	Average ULC%	Average Condition State
Building and Property Equipment	45.9%	Good
Building and Property Facilities	136.6%	Very Poor
Currently Funded through Operating	54.9%	Good
Information Technology Systems	56.9%	Good
Public Works Fleet Equipment	67.4%	Good
Average	**106.8%**	**Poor**

The distribution of the replacement cost of all Support and Other assets by condition state is illustrated in Figure 2-14. The distribution of the replacement cost of Support and Other assets by ULC% rating range is illustrated Figure 2-15.

Figure 2-14: Distribution of Support and Other Services Assets by Condition State
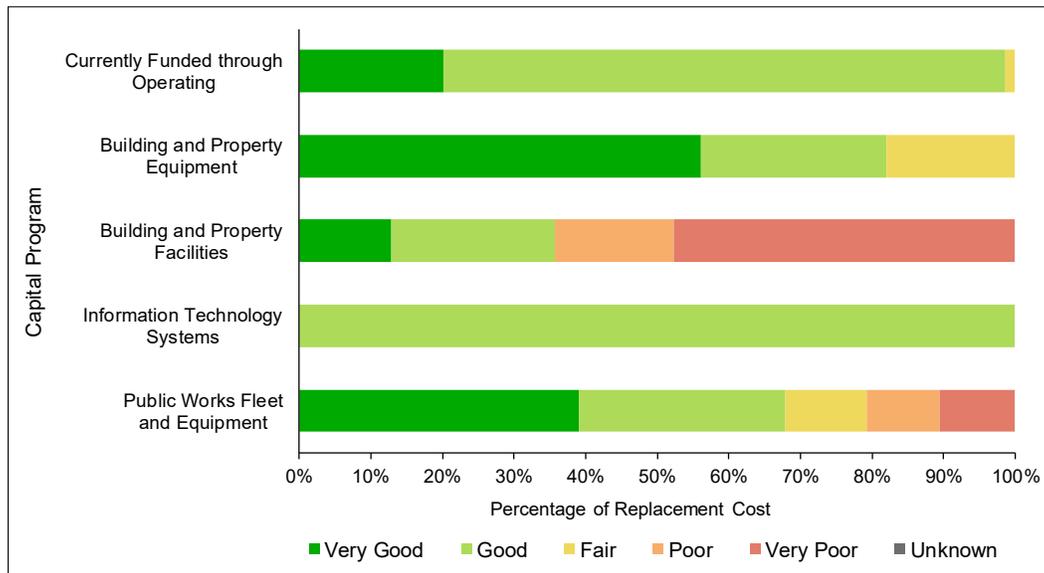
Figure 2-15: Distribution of Support and Other Services Assets by ULC%
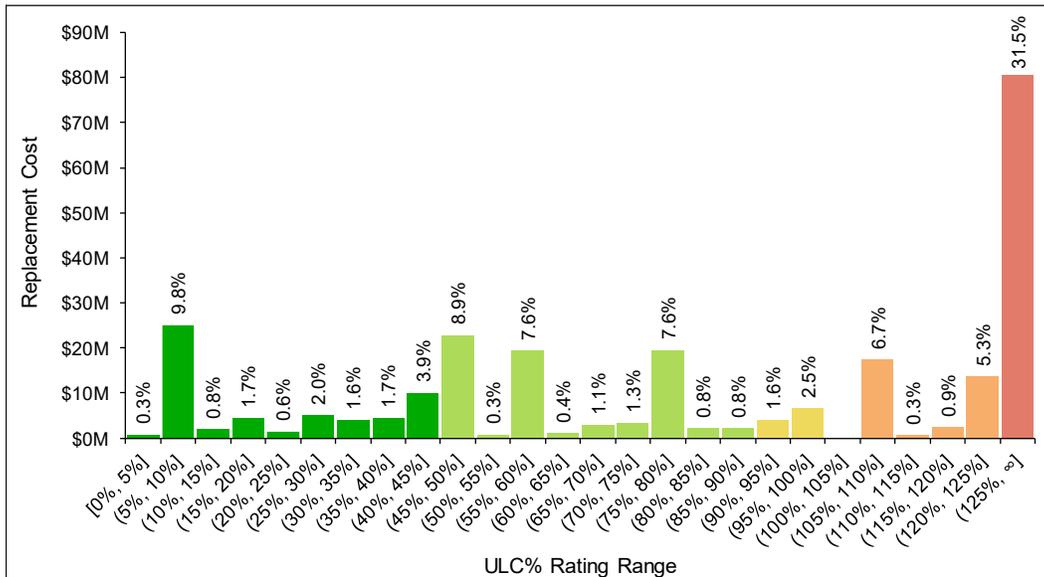
2.5.3 Levels of Service

This subsection presents the City's levels of service framework for its Support and Other assets. Table 2-20 presents the City's Service Attributes and Community Levels of Service for its Support and Other assets while Table 2-21 presents the City's Technical Levels of Service (i.e., performance measures) for its Support and Other assets, including their current and target performance. Please refer to Section 2.1.3 for further details on the City's levels of service framework.

It is noted that the performance measures included in Table 2-21 only include ones for which data is currently available. The City has identified several other performance measures of interest, as reported in the City's 2024 Asset Management Plan for Non-Core Assets. These additional performance measures will be incorporated into future iterations of this asset management plan once the City collects the required data.

Table 2-20: Support and Other Services – Community Levels of Service

Service Attribute	Community Levels of Service
Quality	The City maintains Support and Other Services facilities such that they provide a pleasant experience to staff and visitors.
Reliability	The City strives to ensure its Support and Other Services vehicles and equipment are reliable and available for use.

Table 2-21: Support and Other Services – Technical Levels of Service

Service Attribute	Performance Measure	Current Performance (2025)	Target Performance (2035)
Quality	Average condition rating for Building and Property Facilities	Very Poor (ULC% of 137%)	Very Poor
Reliability	Average condition rating for Building and Property Equipment	Good (ULC% of 46%)	Good
	Average condition rating for Information Technology Systems	Good (ULC% of 57%)	Good
	Average condition rating for Public Works Fleet and Equipment	Good (ULC% of 67%)	Good

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. Transportation services assets comprise roadways, bridges, stormwater mains and road-related assets (e.g., parking lots, transit siteworks, sidewalks, etc.). The estimated replacement cost of these assets is approximately $2.76 billion.

The City's road network comprises road segments with three surface types: high-class bituminous (HCB), low-class bituminous (LCB), and gravel. The estimated current

replacement cost of the City's roads is $1.9 billion[1]. HCB represent the largest share of replacement cost at $868.8 million (46%), followed by LCB at $572.1 million (30%) and lastly, gravel at $463.5 million (24%). The average age of roads is 20.3 years[2].

The City's paved roads are further segregated by roadside environment and class (i.e., urban, rural arterial and rural local/collector). Table 2-22 provides a breakdown of length, average age, and replacement cost information for roads by roadside environment and class. A visual rendering of the data presented in Table 2-22 is provided in Figure 2-16. A spatial illustration of the City's roads by surface type is provided in Map 2-1.

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[1] Storm mains and culverts are excluded from the replacement cost of paved roads, these will be presented separately within this section.
[2] Average age of the road surface.

Table 2-22: Roads – Quantity, Average Age and Replacement Cost by Surface Type and Roadside Environment and Class

Surface Type	Road Environment and Class	Length (km)	Average Age (years)	Road Surface – Replacement Cost (2025$)	Road Base – Replacement Cost (2025$)	Replacement Cost (2025$)
HCB	Urban	232	32.3	$258,963,000		
	Rural Arterial	135	28.9	$43,204,000		
	Rural Local/Collector	491	23.6	$164,687,000		
Sub-total HCB		**858**	**29.0**	**$466,854,000**	**$419,974,000**	**$886,828,000**
LCB	Urban	165	18.7	$18,400,000		
	Rural Arterial	15	16.0	$1,943,000		
	Rural Local/Collector	779	17.1	$82,940,000		
Sub-total LCB		**959**	**17.4**	**$103,283,000**	**$468,553,000**	**$572,136,000**
Gravel		899	7.2	$23,425,000	$440,031,000	$463,456,000
Total		**2,716**	**20.3**	**$593,562,000**	**$1,328,858,000**	**$1,922,420,000**

Figure 2-16: Roads – Quantity, Average Age and Replacement Cost

Length	Average Age (Years)	Replacement Cost (2025$)
Gravel (899km)	Gravel — 7.2	Gravel, 463.5M, 24%
HCB (858km)	LCB — 17.4	HCB, 886.8M, 46%
LCB (959km)	HCB — 29.0	LCB, 572.1M, 30%
2,716 kilometers		$1.9 billion
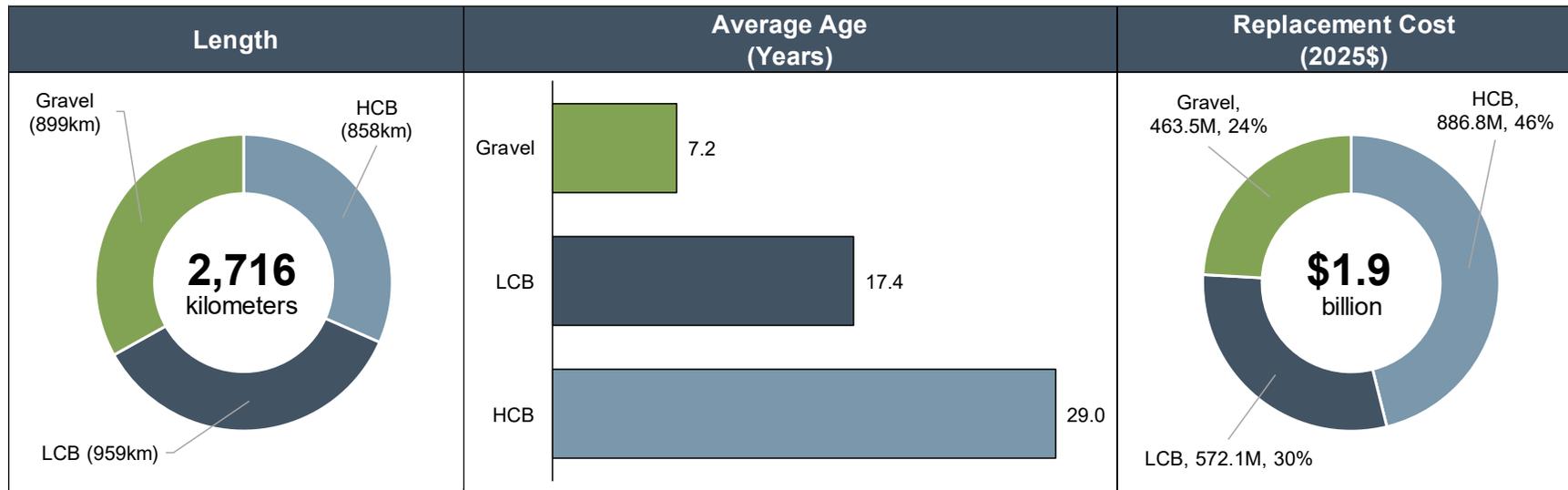
Map 2-1: Roads by Surface Type
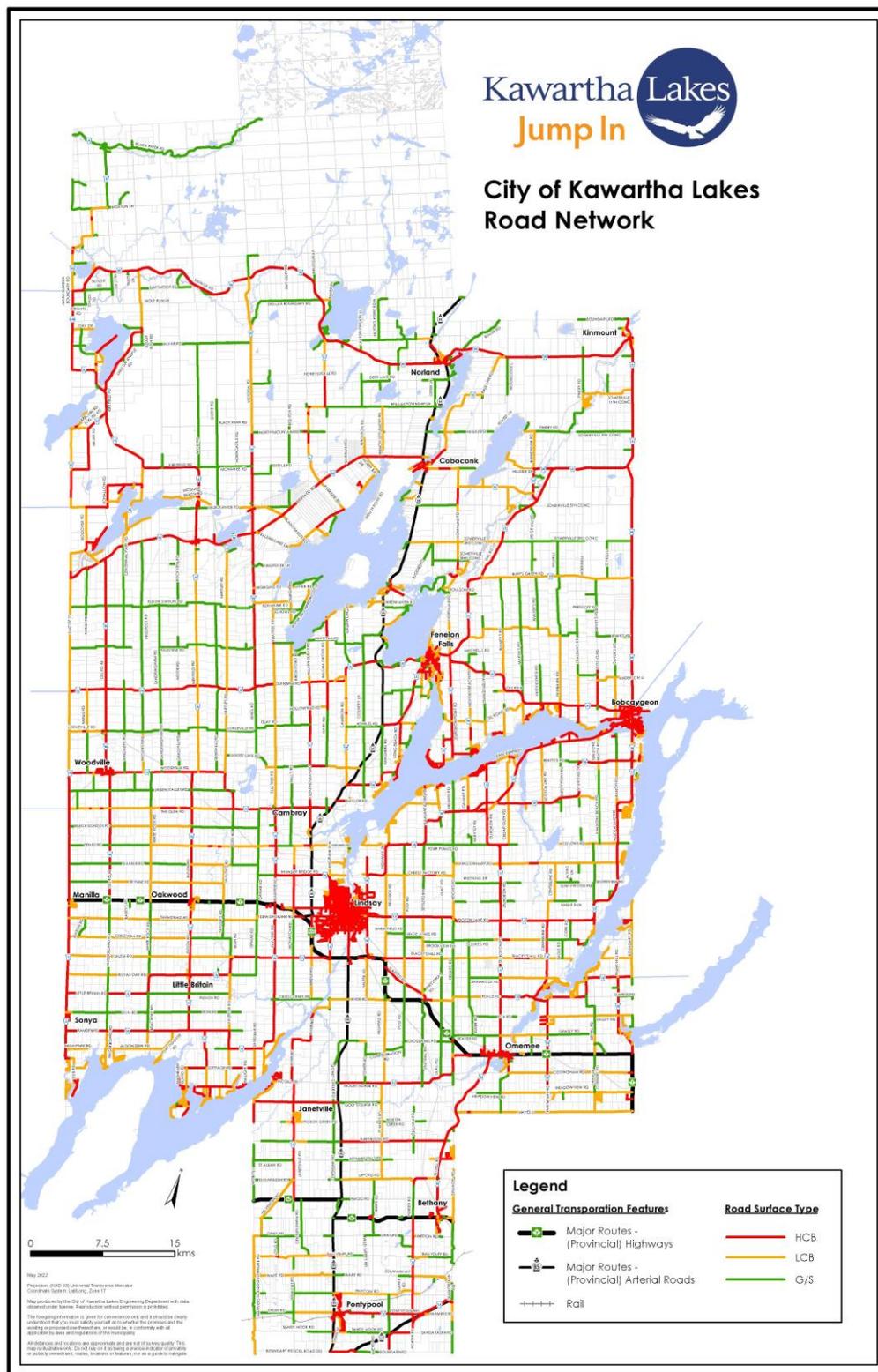
The City owns and manages 148 vehicle bridges, 11 pedestrian bridges and 215 structural culverts.   The estimated replacement cost of the City's structures is $482.1 million. Vehicle bridges represent the largest share of replacement cost at $289.4 million (60%), followed by structural culverts at $177.4 million (37%) and lastly, pedestrian bridges at $15.3 million (3%). The average age of structures is 60.0 years.

Table 2-23 provides a breakdown of quantity, average age, and replacement cost information for structures by structure type. A visual rendering of the data presented in Table 2-23 is provided in Figure 2-17. A spatial illustration of the City's structures is provided in Map 2-2.

Table 2-23: Structures – Quantity, Average Age and Replacement Cost

Structure Type	Quantity	Average Age (years)	Replacement Cost (2025$)
Vehicle Bridges	148	62.1	$289,443,000
Pedestrian Bridges	11	101.9	$15,300,000
Structural Culverts	215	52.9	$177,366,000
Total	**374**	**60.0**	**$482,109,000**

Figure 2-17: Structures – Quantity, Average Age and Replacement Cost

Quantity	Average Age (Years)	Replacement Cost (2025$)

Quantity

Structural Culverts (215)
Vehicle Bridges (148)
374 structures
Pedestrian Bridges (11)

Average Age (Years)

Structural Culverts — 52.9
Pedestrian Bridges — 101.9
Vehicle Bridges — 62.1

Replacement Cost (2025$)

Structural Culverts, 177.4M, 37%
Vehicle Bridges, 289.4M, 60%
$482 million
Pedestrian Bridges, 15.3M, 3%
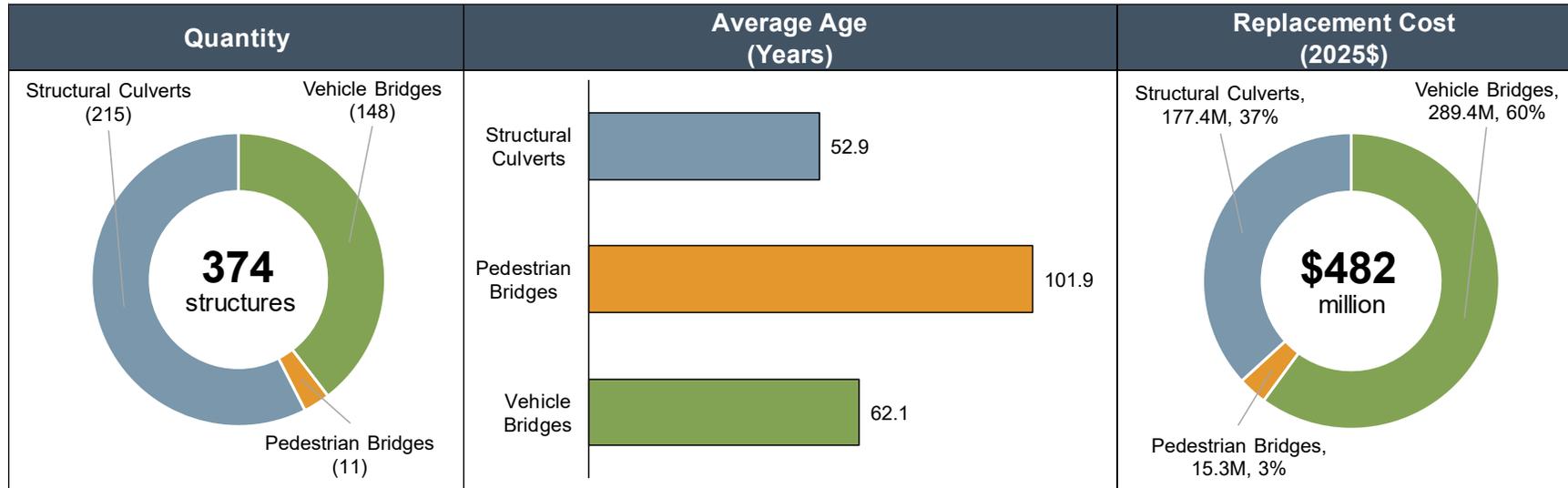
Map 2-2: Structures
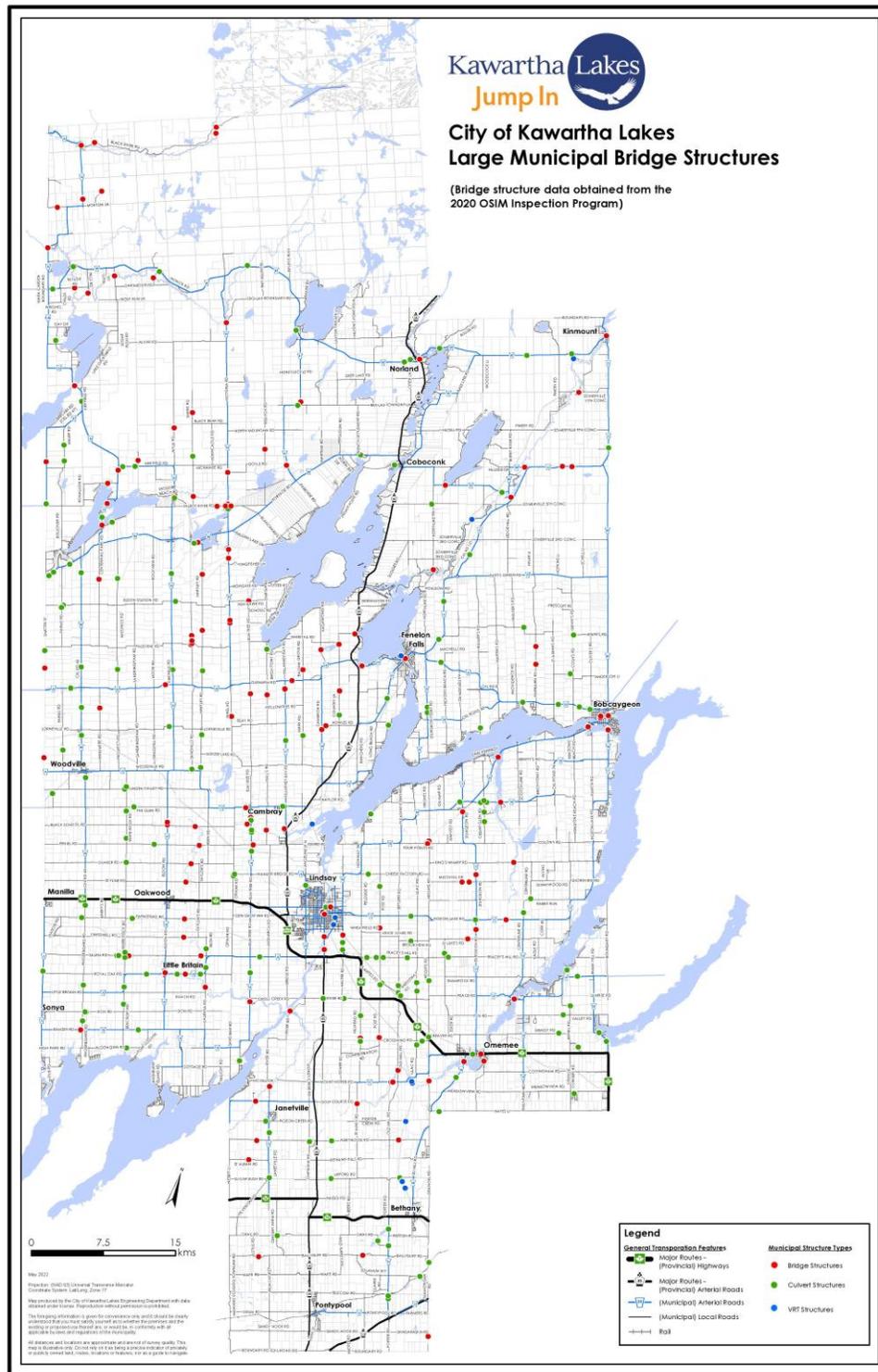
The City's stormwater network supports the management of stormwater runoff within settlement areas. Stormwater assets comprise stormwater mains and stormwater culverts. The estimated replacement cost of the City's stormwater assets is $103 million. Stormwater mains represent the largest share of replacement cost at $97.2 million (94%) and stormwater culverts at $5.8 million (6%). The average age of stormwater mains is 70.1 years.

Table 2-24 provides a breakdown of quantity, average age, and replacement cost information for stormwater assets by type. A visual rendering of the data presented in Table 2-24 is provided in Figure 2-18. A spatial illustration of the stormwater service area is provided in Map 2-3.

Table 2-24: Stormwater – Quantity, Average Age and Replacement Cost

Asset Category	Quantity (km)	Average Age (years)	Replacement Cost (2025$)
Stormwater Mains	149	70.1	$97,159,000
Stormwater Culverts	5	N/A[1]	$5,824,000
Total	**154**		**$102,983,000**

Figure 2-18: Stormwater – Quantity, Average Age and Replacement Cost

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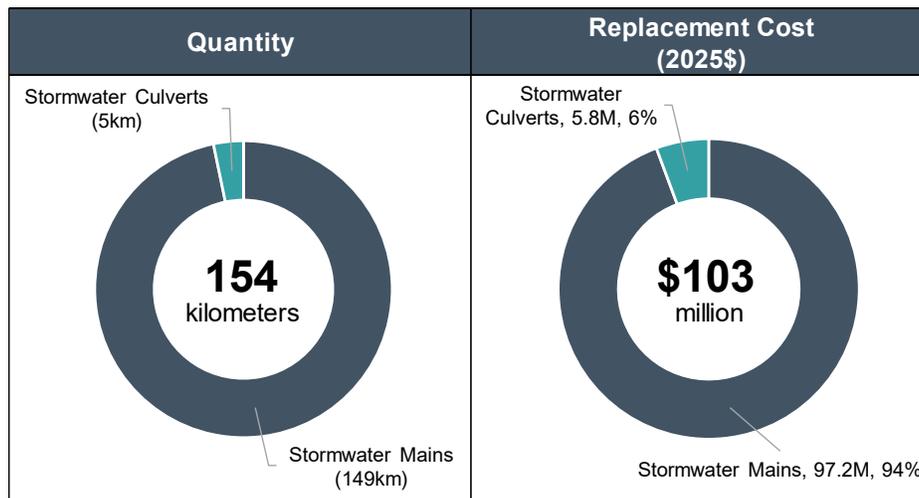
[1] Average age of stormwater culverts is not available because age information is currently not available for approximately 94% of these assets.

Map 2-3: Stormwater Service Area
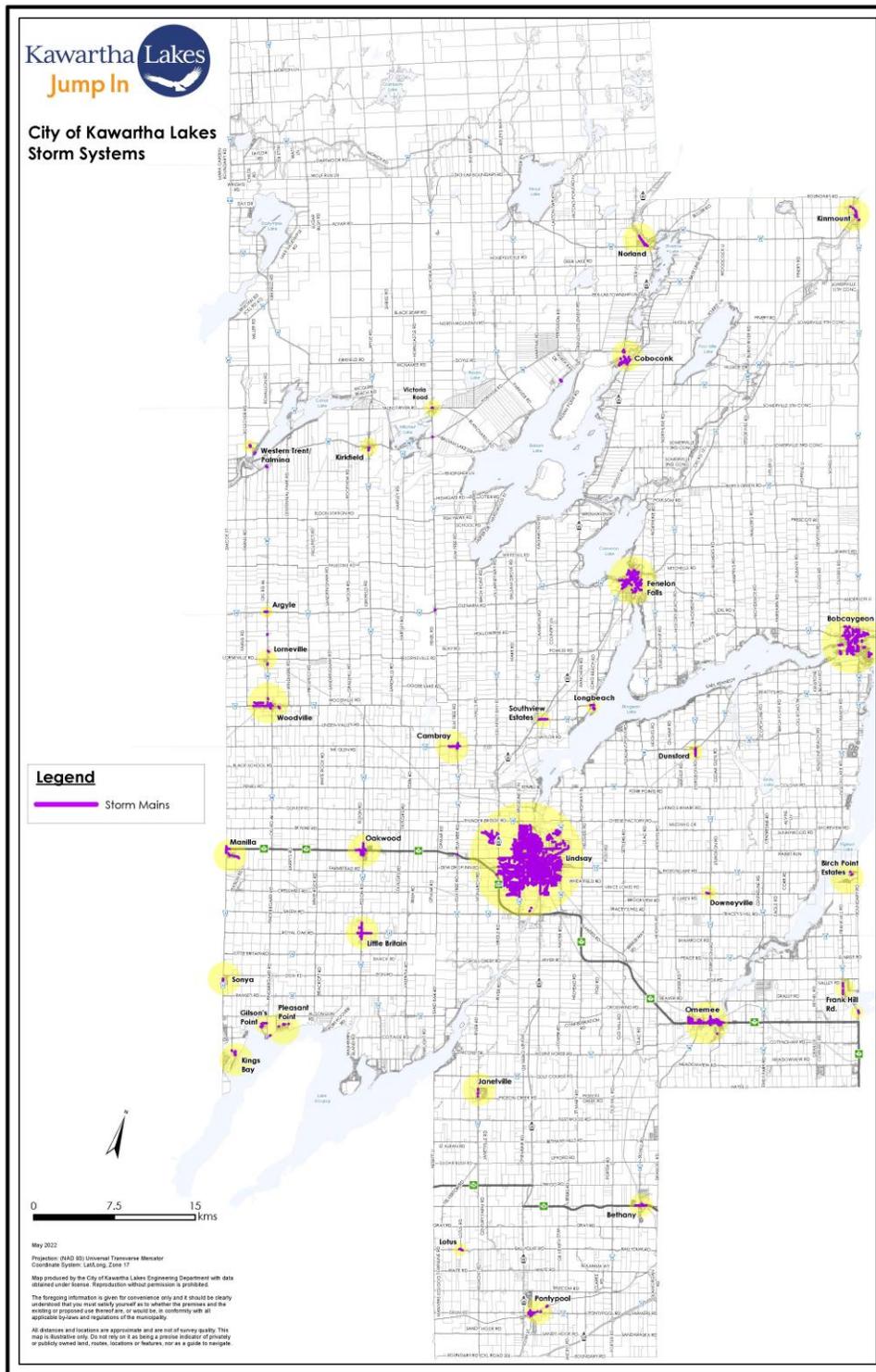
The City also owns and manages a number of other assets that support the provision of Transportation Services. The estimated current replacement cost of the City's other Transportation Services assets is $250.6 million. Roads, fleet and transit facilities represent the largest share of replacement cost at $96.3 million (38.4%), followed by stormwater siteworks at $67.8 million (27.0%), sidewalks at $40.1 million (16.0%), traffic signals and streetlights at $25.5 million (10.2%), airport siteworks and facilities at $14.6 million (5.8%), parking lots at $5.8 million (2.3%) and lastly, transit siteworks at $628,000 (0.3%). The average age of these other Transportation Services assets is 28.4 years.

Table 2-25 provides a breakdown of other Transportation Services assets showing the average age and replacement cost by capital program. A visual rendering of the data presented in Table 2-25 is provided in Figure 2-19.

Table 2-25: Road-related Assets – Average Age and Replacement Cost

Capital Program	Average Age (years)	Replacement Cost (2025$)
Airport Siteworks and Facilities	40.3	$14,567,000
Parking Lots	15.3	$5,775,000
Roads, Fleet and Transit Facilities	52.2	$96,282,000
Traffic Signals and Streetlights	20.9	$25,536,000
Transit Siteworks	10.5	$628,000
Stormwater Siteworks	N/A[1]	$67,752,000
Sidewalks	21.9	$40,053,000
Total	**28.4**	**$250,593,000**

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[1] Average age of stormwater siteworks is not available because age information is currently not available for approximately 96% of these assets.

Figure 2-19: Road-related Assets – Average Age and Replacement Cost
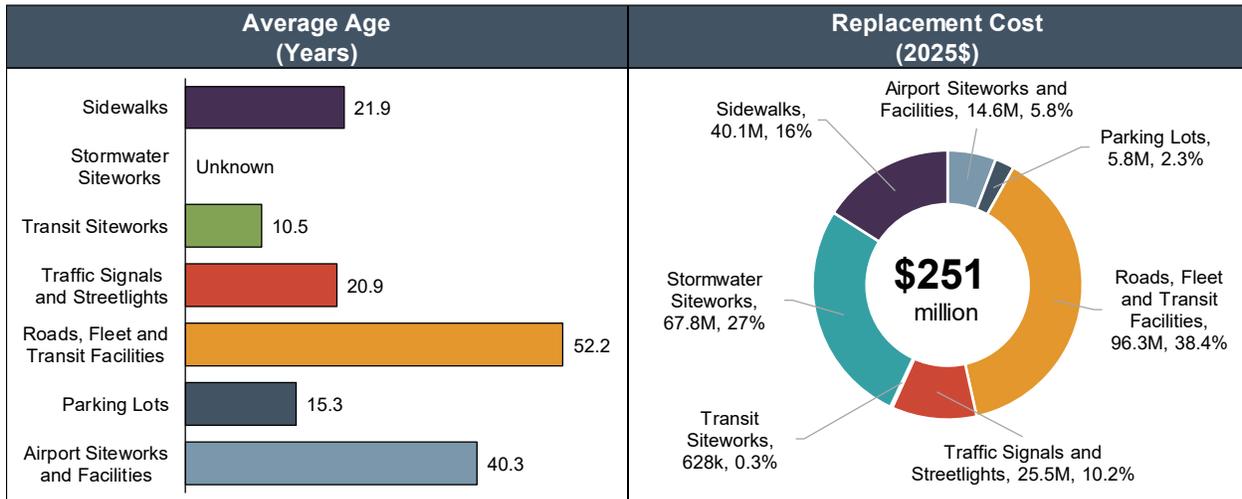
2.6.2 Condition

The City assesses the condition of its paved roadways by assigning a Pavement Condition Index (PCI) rating to each road segment. PCI ratings are calculated by assigning weighted values to observed base-related distresses (e.g., rutting, fatigue cracking, etc.), surface-related distresses (e.g., raveling, shoving, etc.), and the overall ride condition of the segment. Thus, PCI ratings also provide an indication of the structural integrity of the road segment and an objective rationale for forecasting upcoming lifecycle requirements. To better communicate the condition of the City's paved roads, PCI ratings have been segmented into qualitative condition states as summarized in Table 2-26.

Table 2-26: Road Condition States Defined with Respect to Pavement Condition Index

Pavement Condition Index (PCI) Range	Condition State	Example Photos	Description[1]
85 ≤ PCI ≤ 100	Excellent		A very smooth ride. Pavement is in excellent condition with few cracks.
70 ≤ PCI < 85	Very Good		A smooth ride with just a few bumps or depressions. The pavement is in good condition with frequent very slight or slight cracking.
55 ≤ PCI < 70	Good		A comfortable ride with intermittent bumps or depressions. The pavement is in fair condition with intermittent moderate and frequent slight cracking, and with intermittent slight or moderate alligatoring and distortion.
40 ≤ PCI < 55	Fair		An uncomfortable ride with frequent to extensive bumps or depressions. Cannot maintain the posted speed at lower end of the scale. The pavement is in poor to fair condition with frequent moderate cracking and distortion, and intermittent moderate alligatoring.
25 ≤ PCI < 40	Poor		A very uncomfortable ride with constant jarring bumps and depressions. Cannot maintain the posted speed and must steer constantly to avoid bumps and depressions. The pavement is in poor condition with moderate alligatoring and extensive severe cracking and distortion.
10 ≤ PCI < 25	Very Poor		The pavement is in poor to very poor condition with extensive severe cracking, alligatoring and distortion.
0 ≤ PCI < 10	Failed		
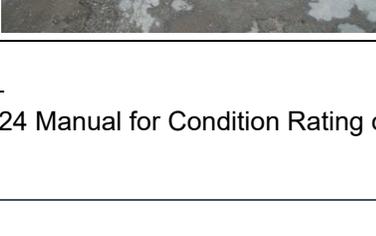
[1] Descriptions are from the SP-024 Manual for Condition Rating of Flexible Pavements (Ontario Ministry of Transportation, 2016).

The City formally assessed the PCI ratings of its road segments through a Road Needs Study completed in 2021. The overall average PCI rating of all paved road segments in the City is estimated to be 81.0, indicating that the City's roadways are in an overall 'Very Good' condition state. The City's HCB roadways are estimated to have an average PCI rating of 83.7, indicating that they are in a 'Very Good' condition state. Similarly, the City's LCB roadways are estimated to have an average PCI rating of 78.5, indicating that they are also in a 'Very Good' condition state.

The condition of gravel roads is estimated to be Fair to Good based on the expected outcomes of the gravel resurfacing program and ongoing maintenance activities. Maintenance activities include grading, ditching, brushing, and calcium chloride application multiple times per year. The gravel resurfacing program occurs on a 10-year cycle to bring each gravel road back to Very Good condition every 10 years.

Table 2-27 summarizes the average PCI rating and associated condition states of the City's roadways by surface type.

Table 2-27: Road Network – Average Condition Rating by Surface Type

Surface Type	Average PCI Rating[1]	Average Condition State
HCB	83.7	Very Good
LCB	78.5	Very Good
Gravel	N/A	Fair to Good

The distribution of road length of the City's paved roads by condition state and surface type is illustrated in Figure 2-20. The distribution of road length of the City's paved roads by PCI rating is illustrated in Figure 2-21.

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[1] Weighted average utilizing length of road segments as weights.

Figure 2-20: Distribution of Paved Roads by Condition State and Surface Type
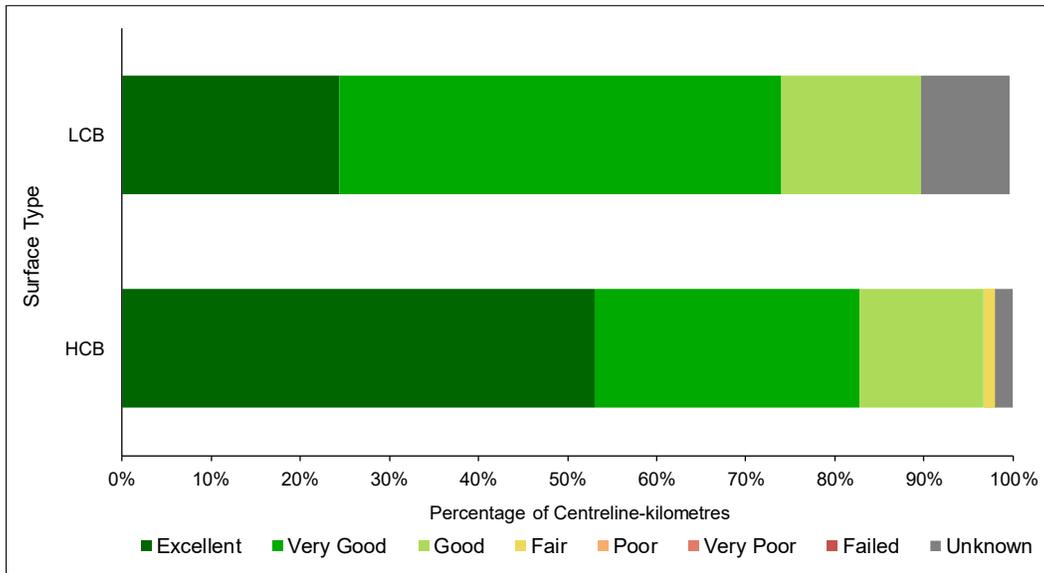
Figure 2-21: Distribution of Paved Roads by PCI Rating
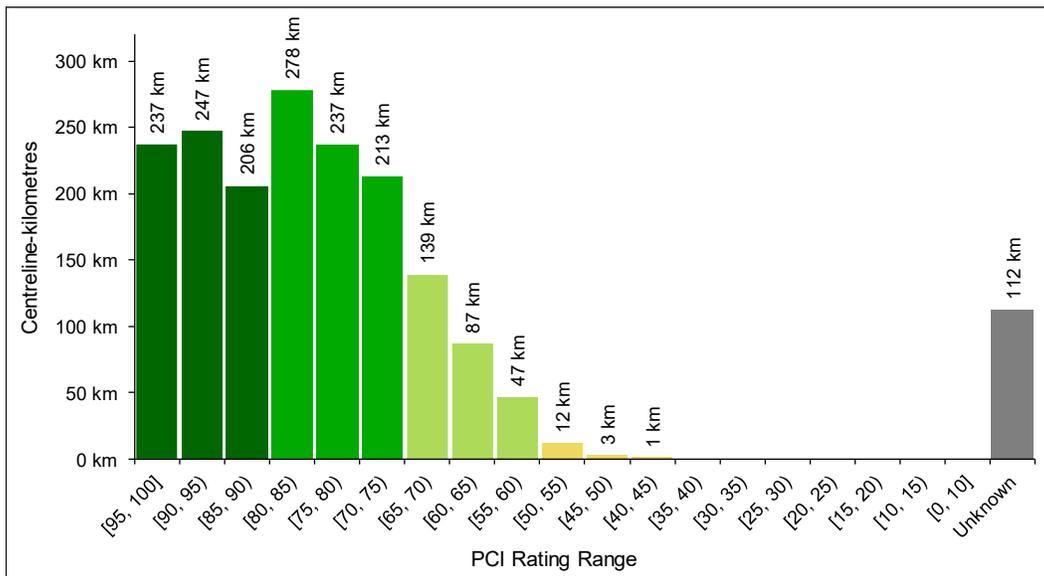
In accordance with Ontario Regulation 104/97: Standards for Bridges (O. Reg. 104/97), the City completes biennial inspections of its bridges and structural culverts based on the Ontario Structure Inspection Manual (OSIM). To provide an overall measure of the condition of bridges and structural culverts, Bridge Condition Index (BCI) ratings are calculated for each inspected structure. BCI ratings are calculated by assigning weighted values to the condition of various structural elements (e.g., deck, foundation,

superstructure, substructure, girders/beams, bearings, etc.) and non-structural elements (e.g., sidewalks, curbs, handrails, barriers, signage, etc.) of the structure being assessed. BCI ratings are typically represented on a scale of 0 to 100, with 100 being a structure in new or as-new condition. To better communicate the condition of the City's structures, BCI ratings have been segmented into qualitative condition states as summarized in Table 2-28.

Table 2-28: Descriptions of Structure Condition States

Condition State	Bridge Photos	Culvert Photos	Description
Good 70 ≤ BCI < 100			Maintenance is not usually required within the next five years
Fair 60 ≤ BCI < 70			Maintenance work is usually scheduled within the next five years. This is the ideal time to schedule major structure repairs to get the most out of bridge spending.
Poor 0 ≤ BCI < 60			Maintenance work is usually scheduled within one year. Structure may be at increased risk of requiring a loading restriction to be posted.

The City most recently assessed the BCI ratings of its structures through an OSIM report completed in 2024. The overall average BCI rating of all structures in the City is estimated to be 70.2, indicating that the City's structures are currently in an overall 'Good' condition state. The City's vehicle bridges are estimated to have an average BCI rating of 72.4, indicating that they are currently in a 'Good' condition state. Similarly, the City's pedestrian bridges are estimated to have an average BCI rating of 70.1, indicating

that they are also currently in a 'Good' condition state. Lastly, City's structural culverts are estimated to have an average BCI rating of 66.5, indicating that they are currently in a 'Fair' condition state.

Table 2-29 summarizes the average BCI rating and associated condition states of the City's structures by structure type.

Table 2-29: Structures – Average BCI Rating by Structure Type

Structure Type	Average BCI Rating	Average Condition State
Vehicle Bridges	72.4	Good
Pedestrian Bridges	70.1	Good
Structural Culverts	66.5	Fair
Total	70.2	Good

The distribution of replacement cost of the City's structures by condition state and structure type is illustrated in Figure 2-22. The distribution of replacement cost of the City's structures by BCI rating is illustrated in Figure 2-23.

Figure 2-22: Distribution of Structures by Condition State and Structure Type
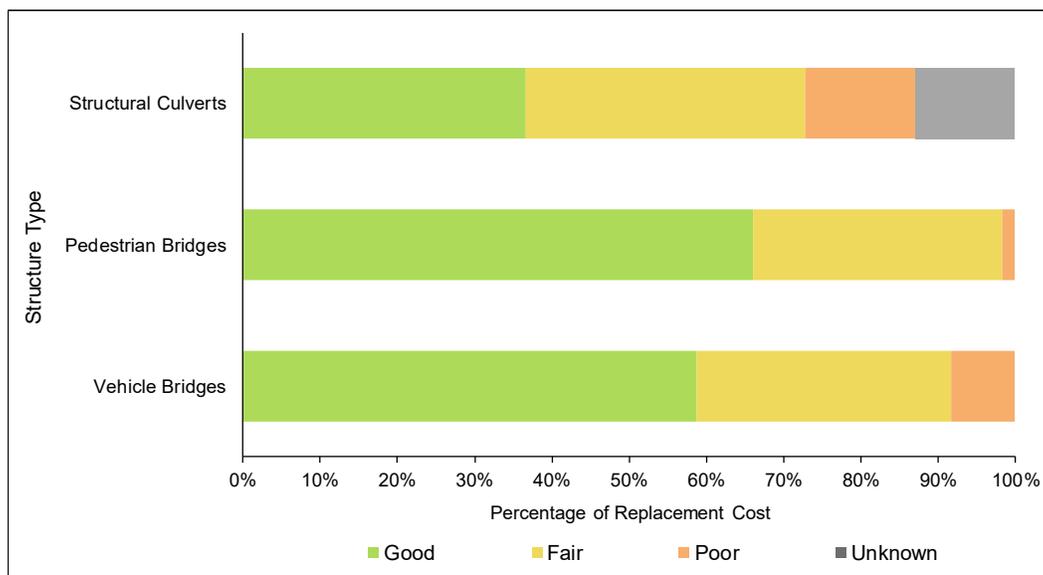
Figure 2-23: Distribution of Structures by BCI Rating
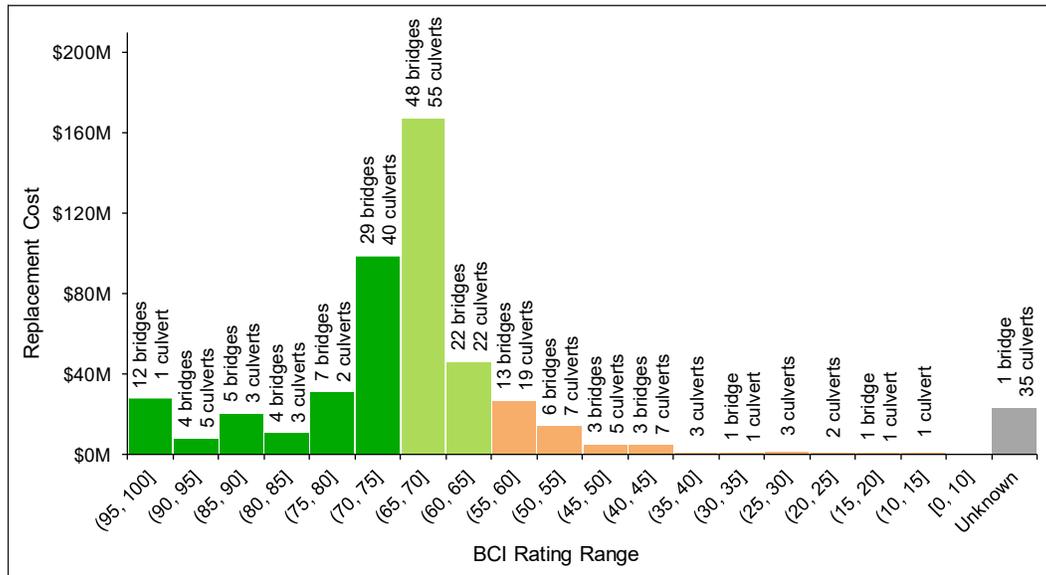
The condition of the City's stormwater assets has not been directly assessed through a physical condition assessment. For the purposes of this asset management plan, the condition of stormwater assets is assessed based on age relative to useful service life (i.e., based on the percentage of useful service life consumed – ULC%). To better communicate the condition of stormwater assets, ULC% ratings have been segmented into qualitative condition states as summarized previously in the Table 2-2. Please refer to Section 2.1.2 for further information on this condition assessment methodology.

Based on their current age profile, the average ULC% rating of the City's stormwater mains is 92.6%, which indicates that, on average, stormwater mains are in a 'Fair' condition state. Average ULC% rating for the City's stormwater culverts is not reported because age information is currently not available for approximately 94% of these assets.

Table 2-30 summarizes the average ULC% rating and associated condition states of the City's stormwater assets.

Table 2-30: Condition Summary – Stormwater

Asset Category	Average ULC%[1]	Average Condition State
Stormwater Mains	92.6%	Fair
Stormwater Culverts	N/A	Unknown

The distribution of the mains length of stormwater mains by ULC% rating range is illustrated Figure 2-24.

Figure 2-24: Distribution of Stormwater Mains by ULC%
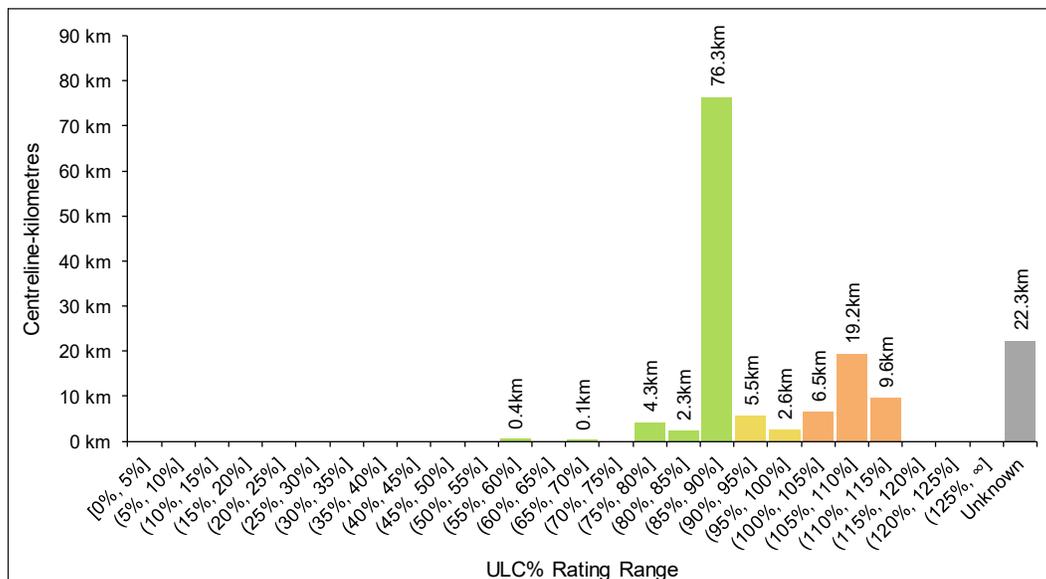
The condition of the City's sidewalks was formally assessed through a condition assessment in 2021. To better communicate the condition of sidewalks, condition ratings have been segmented into qualitative condition states, generally aligned with PCI ratings as summarized previously in the Table 2-26. The overall average condition rating of sidewalks in the City is estimated to be 73.2, indicating that the City's sidewalks are in an overall 'Very Good' condition state.

The distribution of length of sidewalks by condition rating range is illustrated Figure 2-25.

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[1] Weighted average utilizing length of stormwater mains as weights.

Figure 2-25: Distribution of Sidewalks by Condition Rating
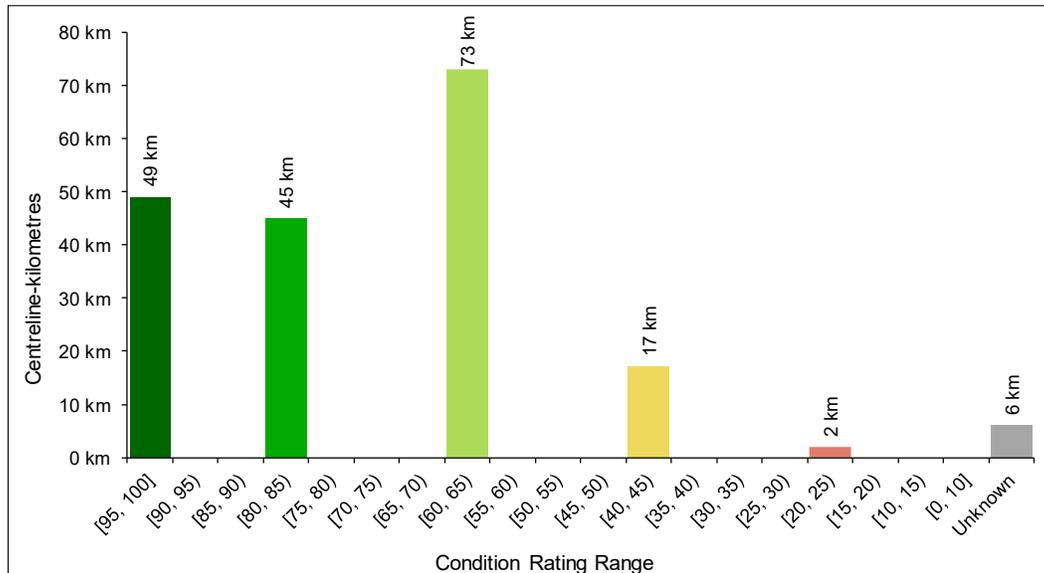
The condition of the City's other Transportation Services assets has not been directly assessed through a physical condition assessment. For the purposes of this asset management plan, the condition of other Transportation Services assets is assessed based on age relative to useful service life (i.e. based on the percentage of useful service life consumed - ULC%). To better communicate the condition of other road-related assets, ULC% ratings have been segmented into qualitative condition states as summarized previously in the Table 2-2. Please refer to Section 2.1.2 for further information on this condition assessment methodology.

Based on their current age profile, other Transportation Services assets are, on average, in a 'Good' condition state[1]. The average ULC% rating of the City's airport siteworks and facilities is 90.1%, which indicates that, on average, airport siteworks and facilities are in a 'Fair' condition state. The average ULC% rating of the City's parking lots is 55.0%, which indicates that, on average, parking lots are in a 'Good' condition state. The average ULC% rating of the City's roads, fleet and transit facilities is 87.2%, which indicates that, on average, roads, fleet and transit facilities is in a 'Good' condition state. The average ULC% rating of the City's traffic signals and streetlights is 70.3%, which indicates that, on average, traffic signals and streetlights is in a 'Good' condition

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[1] Average condition state of stormwater siteworks is not available because age information is currently not available for approximately 96% of these assets.

state. Lastly, the average ULC% rating of the City's transit siteworks is 58.4%, which indicates that, on average, transit siteworks is in a 'Good' condition state.

Table 2-31 summarizes the average ULC% rating and associated condition states of the City's other road-related assets.

Table 2-31: Condition Summary – Other road-related assets

Capital Program	Average ULC%	Average Condition State
Airport Siteworks and Facilities	90.1%	Fair
Parking Lots	55.0%	Good
Roads, Fleet and Transit Facilities	87.2%	Good
Traffic Signals and Streetlights	70.3%	Good
Transit Siteworks	58.4%	Good
Stormwater Siteworks	N/A	Unknown
Average	**83.0%**	Good

The distribution of the replacement cost of other Transportation Services assets by condition state is illustrated in Figure 2-26. The distribution of the replacement cost of other Transportation Services assets by ULC% rating range is illustrated Figure 2-27.

Figure 2-26: Distribution of Other Transportation Services Assets by Condition State
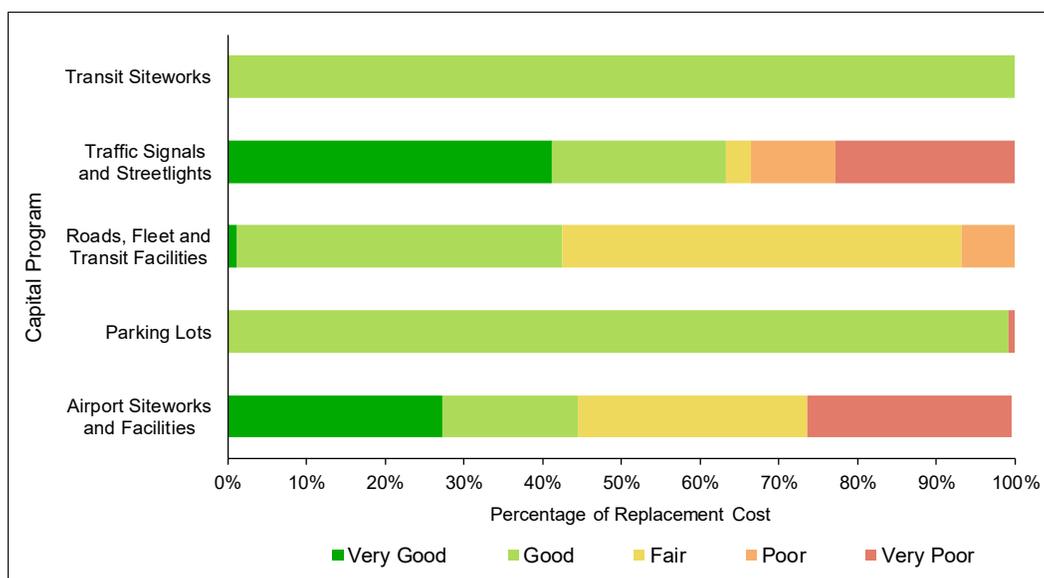
Figure 2-27: Distribution of Other Transportation Services Assets by ULC%
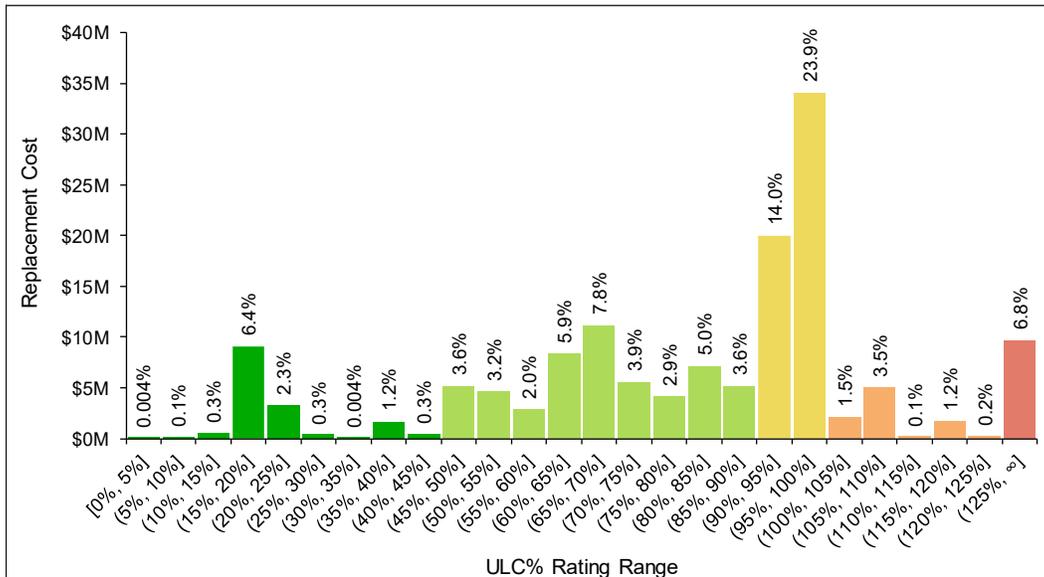
2.6.3 Levels of Service

This subsection presents the City's levels of service framework for its Transportation assets. Table 2-32 presents the City's Service Attributes and Community Levels of Service for its Transportation assets while

Table 2-33 presents the City's Technical Levels of Service (i.e., performance measures) for its Transportation assets, including their current and target performance. Please refer to Section 2.1.3 for further details on the City's levels of service framework.

Table 2-32: Transportation Services – Community Levels of Service

Service Attribute	Community Levels of Service
Scope	The City's transportation assets enable the movement of people and goods within the City and provide connectivity to regional roads. The City's transportation assets are used by pedestrians, cyclists, horse-drawn buggies, passenger vehicles, heavy transport vehicles, all-terrain vehicles, and emergency vehicles. The Victoria Rail Trail and its pedestrian bridges are used by pedestrians, cyclists, horse riders, all-terrain vehicles, and snowmobiles.
	The scope of the City's transportation network is illustrated by Map 2-1 and Map 2-2. The maps show the geographical distribution of the City's roads and identify locations of the City's structures.

Service Attribute	Community Levels of Service
	Stormwater service is provided in the following communities: Bethany (Manorview), Bethany (Woodfield), Birch Point, Bobcaygeon, Bolsover (Palmina), Bolsover (Western Trent), Canadiana Shores, Chambers Corner, Coboconk, Fenelon Falls, Janetville, Kings Bay, Kinmount, Lindsay, Manilla, Mariposa, Norland, Oakwood, Omemee (Victoria Glen), Pleasant Point, Pontypool (Pinewood), Sonya, Southview Estates, Victoria Place, and Woodville.
Quality	The City strives to maintain road and bridge surfaces to a level that supports comfortable passage of vehicles.
	The City keeps its Transportation Services facilities, equipment, and siteworks in a good state of repair.
	To aid in interpreting condition states, photos of roads, bridges, and culverts in different condition states are provided in Table 2-26 and Table 2-28. A general description of how each condition state may affect the use of these assets is also provided in these tables.
Reliability/ Availability	The City strives to ensure its Transportation Services assets are reliable and available for use.

Table 2-33: Transportation Services – Technical Levels of Service

Service Attribute	Performance Measure	Current Performance (2025)	Target Performance (2035)
Scope	Number of lane-kilometres of arterial roads as a proportion of square kilometres of land area of the municipality.	0.147 km/km^2	0.147 km/km^2
	Number of lane-kilometres of collector roads as a proportion of square kilometres of land area of the City.	0.026 km/km^2	0.026 km/km^2
	Number of lane-kilometres of local roads as a proportion of square kilometres of land area of the City.	1.567 km/km^2	1.567 km/km^2
	Percentage of bridges in the City with loading or dimensional restrictions.	6.1% (9 out of 148)	6.1% (9 out of 148)

Service Attribute	Performance Measure	Current Performance (2025)	Target Performance (2035)
	Percentage of properties in municipality resilient to a 100-year storm.	Not Available	Not Available
	Percentage of the municipal stormwater management system resilient to a 5-year storm.	Not Available	Not Available
Quality	For paved roads in the City, the average pavement condition index value.	81	81
	For unpaved roads in the City, the average surface condition (e.g. excellent, good, fair or poor).	Fair to Good	Fair to Good
	For bridges in the City, the average bridge condition index value.	72.4	72.4
	For structural culverts[1] in the City, the average bridge condition index value.	66.5	66.5
	Average condition rating for sidewalks	73.2	73.2
	Average condition rating for Airport Siteworks and Facilities	Fair (ULC% of 90%)	Fair
	Average condition rating for Parking Lots	Good (ULC% of 55%)	Good
	Average condition rating for Roads, Fleet and Transit Facilities	Good (ULC% of 87%)	Good
	Average condition rating for Transit Siteworks	Good (ULC% = 58%)	Good
Reliability/ Availability	Average condition rating for Traffic Signals and Streetlights	Good (ULC% of 70%)	Good

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[1] Structural culverts are culverts with a diameter greater than or equal to three metres.

2.7 Water and Wastewater Services

2.7.1 State of Local Infrastructure

The City owns and manages a variety of assets that support the provision of Water and Wastewater Services. The estimated replacement cost of these assets is approximately $861 million. Horizontal distribution and collection (e.g., watermains, wastewater mains, hydrants, etc.) represent the largest share of replacement cost at $645.4 million (75%), followed by vertical distribution and collection (e.g., storage systems, process equipment, etc.) at $173.4 million (20%), water treatment at $27.1 million (3%) and, lastly, wastewater treatment at $15 million (2%). The average age of water and wastewater assets is 42.5 years.

Table 2-34 provides a breakdown of these assets by capital program, showing the average age, and replacement cost. A visual rendering of the data presented in Table 2-34 is provided in Figure 2-28. A spatial illustration of the water service area and wastewater service area is provided in Map 2-4 and Map 2-5, respectively.

Table 2-34: Water and Wastewater Services Capital Programs – Average Age and Replacement Cost

Capital Program	Average Age (years)	Replacement Cost (2025$)
Vertical Distribution and Collection	25.6	$173,421,000
Horizontal Distribution and Collection	48.2	$645,417,000
Water Treatment	26.5	$27,113,000
Wastewater Treatment	23.9	$14,999,000
Total	**42.5**	**$860,951,000**

Figure 2-28: Water and Wastewater Services Capital Programs – Average Age and Replacement Cost

Average Age (Years)	Replacement Cost (2025$)

Average Age (Years):
- Wastewater Treatment: 23.9
- Water Treatment: 26.5
- Horizontal Distribution and Collection: 48.2
- Vertical Distribution and Collection: 25.6

Replacement Cost (2025$): $861 million
- Wastewater Treatment, 15M, 1.7%
- Water Treatment, 27.1M, 3.1%
- Vertical Distribution and Collection, 173.4M, 20.1%
- Horizontal Distribution and Collection, 645.4M, 75%
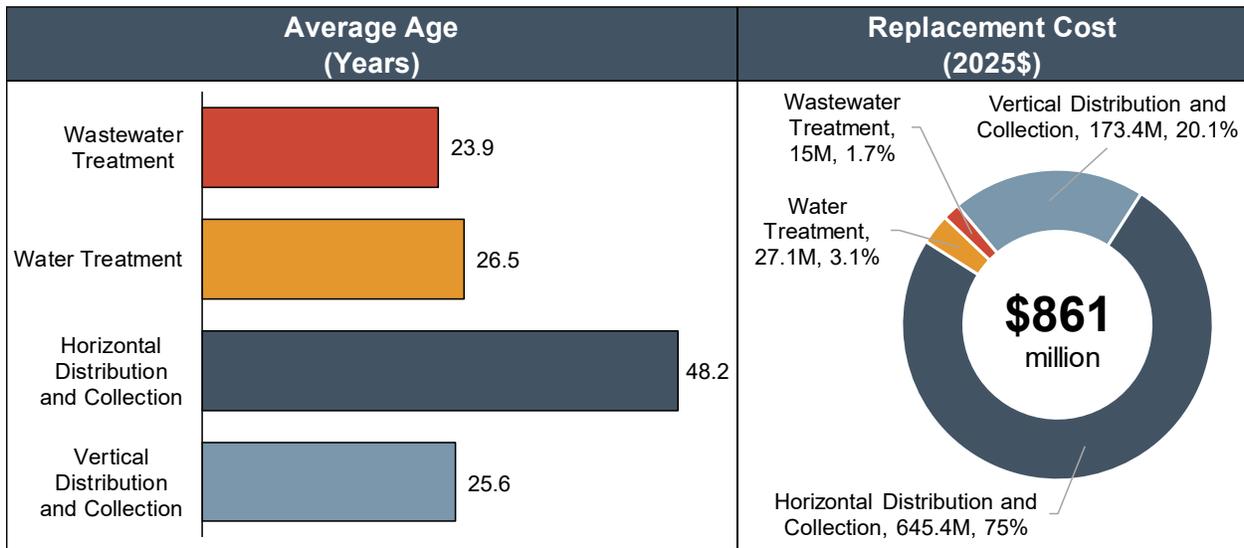
Map 2-4: Water Service Area
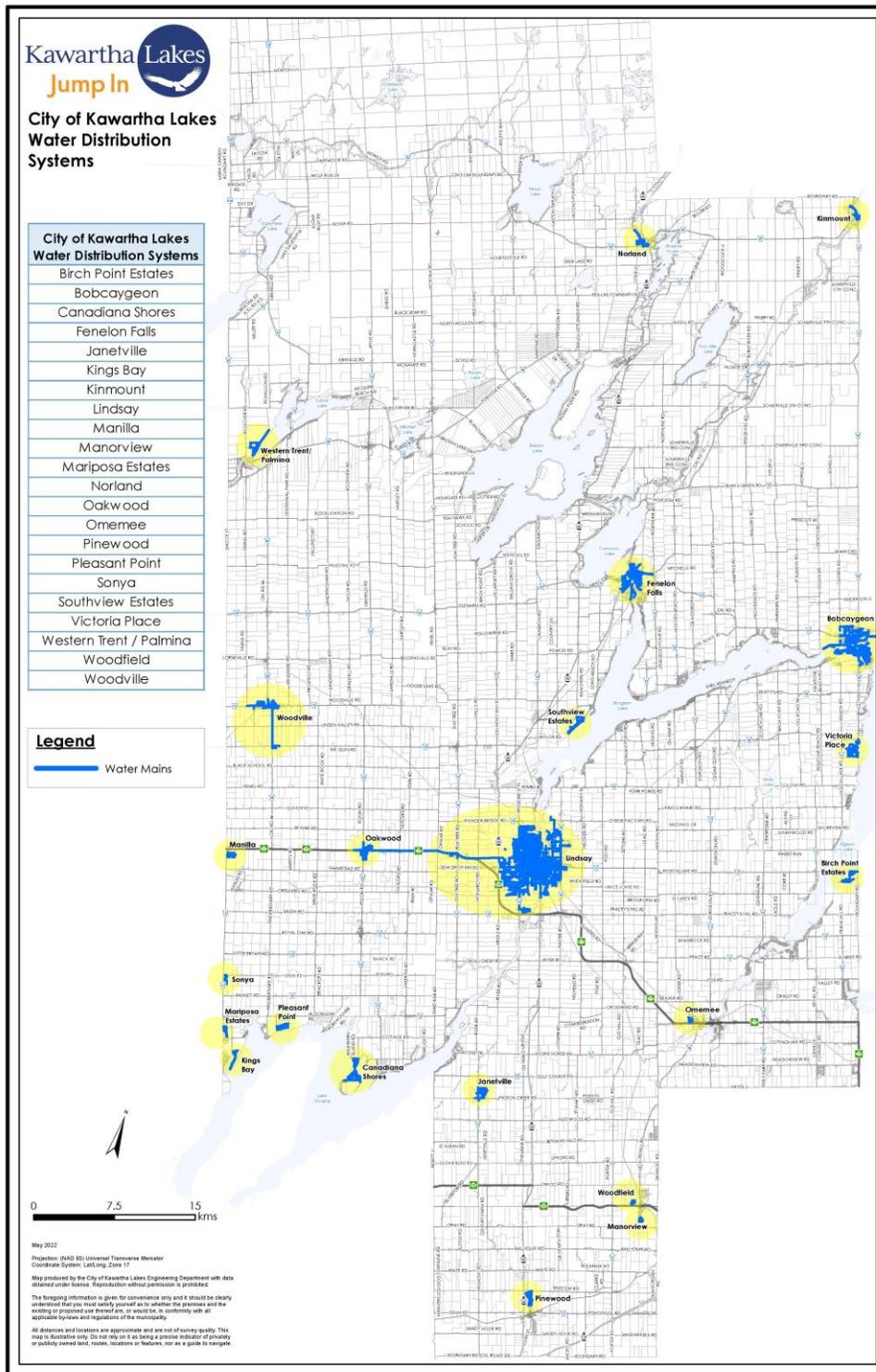
Map 2-5: Wastewater Service Area
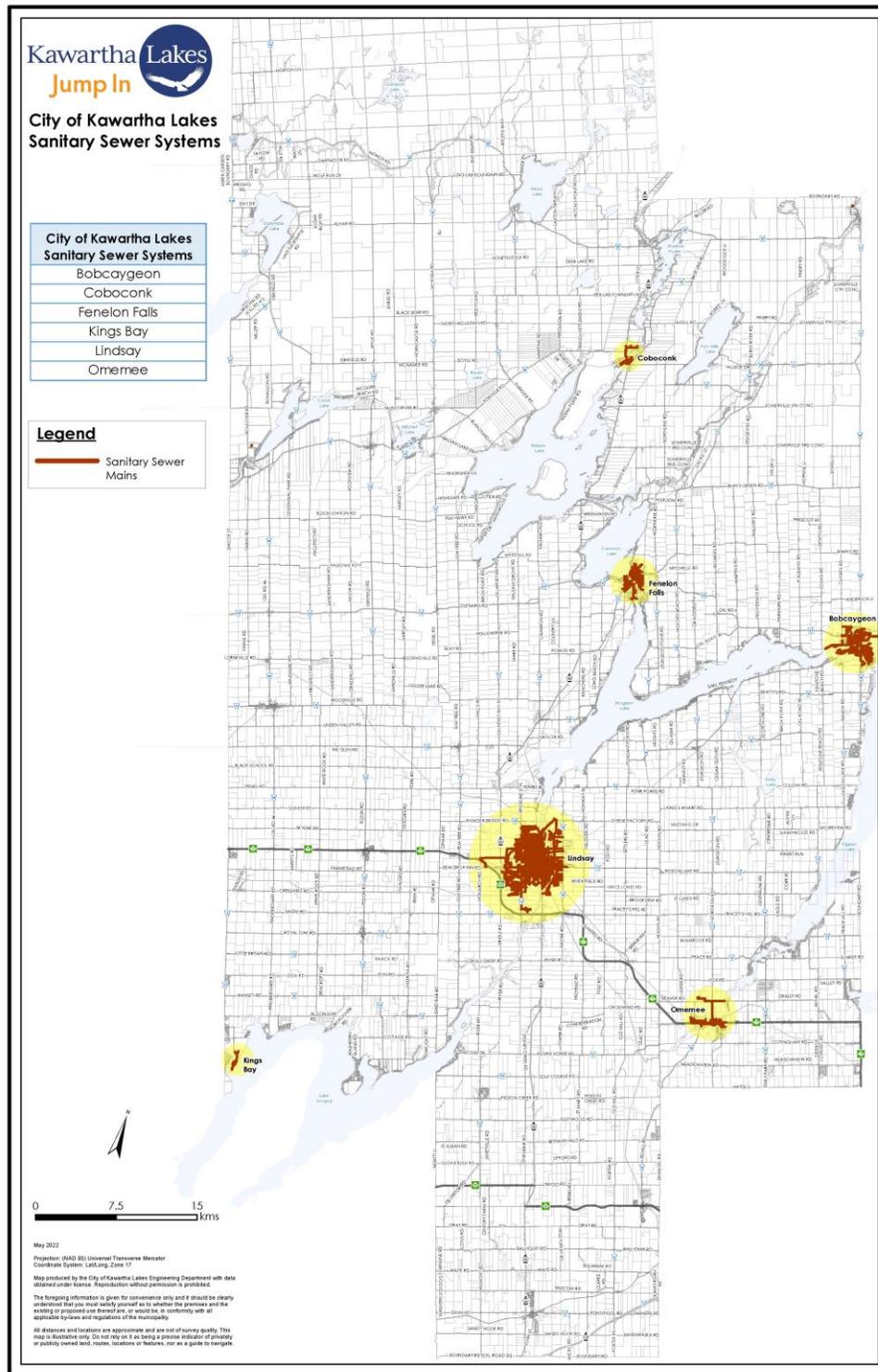
2.7.2 Condition

The condition of the City's Water and Wastewater Services assets has not been directly assessed through a physical condition assessment. For the purposes of this asset management plan, the condition of Water and Wastewater Services assets is assessed based on age relative to useful service life (i.e., based on the percentage of useful service life consumed – ULC%). To better communicate the condition of Water and Wastewater assets, ULC% ratings have been segmented into qualitative condition states as summarized previously in the Table 2-2. Please refer to Section 2.1.2 for further information on this condition assessment methodology.

Based on their current age profile, assets within the Water and Wastewater Services group are, on average, in a 'Good' condition state. The average ULC% rating of the City's vertical distribution and collection assets is 58.9%, which indicates that, on average, these assets are in a 'Good' condition state. Similarly, the average ULC% rating of the City's horizontal distribution and collection assets is 47.1%, which indicates that, on average, horizontal distribution and collection assets are in a 'Good' condition state. The average ULC% rating of the City's water treatment assets is 44.1%, which indicates that, on average, water treatment assets are in a 'Very Good' condition state. Lastly, the average ULC% rating of the City's wastewater treatment assets is 39.9%, which indicates that, on average, wastewater treatment assets are in a 'Very Good' condition state.

Table 2-19 summarizes the average ULC% rating and associated condition states of the City's Water and Wastewater Services assets.

Table 2-35: Condition Summary – Water and Wastewater Services

Capital Program	Average ULC%	Average Condition State
Vertical Distribution and Collection	58.9%	Good
Horizontal Distribution and Collection	47.1%	Good
Water Treatment	44.1%	Very Good
Wastewater Treatment	39.9%	Very Good
Average	**49.3%**	**Good**

The distribution of the replacement cost of all Water and Wastewater assets by condition state is illustrated in Figure 2-29. The distribution of the replacement cost of Water and Wastewater assets by ULC% rating range is illustrated Figure 2-30.

Figure 2-29: Distribution of Water and Wastewater Services Assets by Condition State
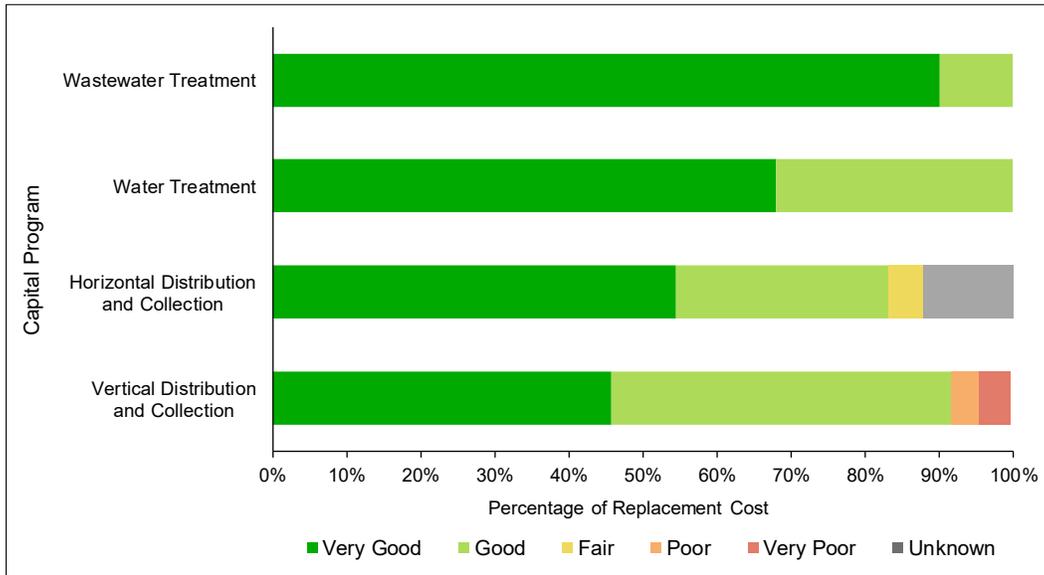
Figure 2-30: Distribution of Water and Wastewater Services Assets by ULC%
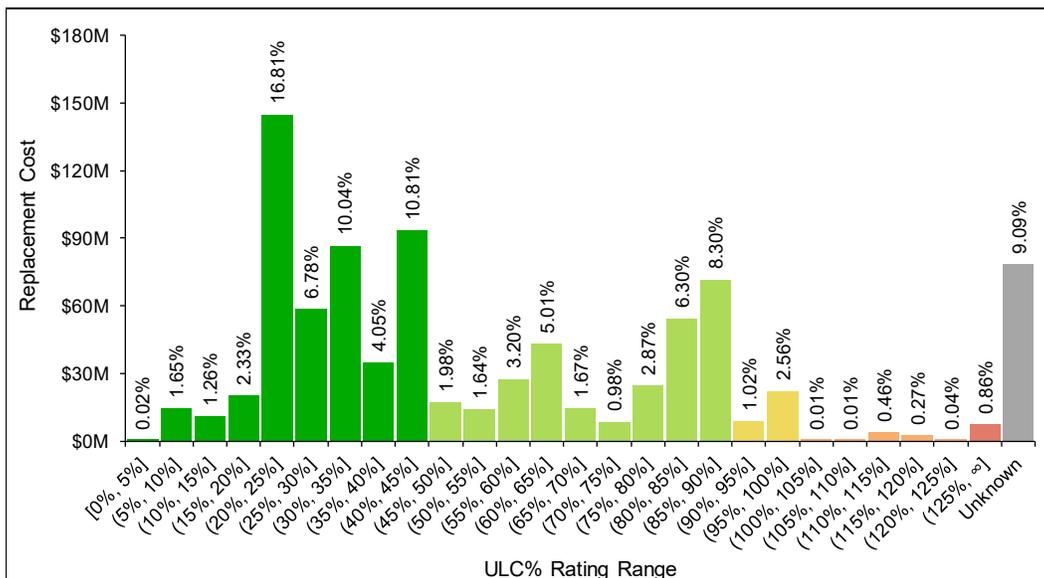
2.7.3 Levels of Service

This subsection presents the City's levels of service framework for its Water and Wastewater assets. Table 2-36 presents the City's Service Attributes and Community Levels of Service for its Water and Wastewater assets while Table 2-37 presents the City's Technical Levels of Service (i.e., performance measures) for its Water and Wastewater assets, including their current and target performance. Please refer to Section 2.1.3 for further details on the City's levels of service framework.

Table 2-36: Water and Wastewater Services – Community Levels of Service

Service Attribute	Community Levels of Service
Scope	Water service is provided to customers in the following communities: Bethany (Manorview), Bethany (Woodfield), Birch Point, Bobcaygeon, Bolsover (Palmina), Bolsover (Western Trent), Canadiana Shores, Chambers Corner, Coboconk, Fenelon Falls, Janetville, Kings Bay, Kinmount, Lindsay, Manilla, Mariposa, Norland, Oakwood, Omemee (Victoria Glen), Pleasant Point, Pontypool (Pinewood), Sonya, Southview Estates, Victoria Place, and Woodville.
	Wastewater service is provided to customers in the following communities: Bobcaygeon, Coboconk, Fenelon Falls, Kings Bay, Kinmount, Lindsay, Omemee, and Western Trent / Palmina.
Reliability	The City strives to minimize disruptions to water service.

Boil water advisories are triggered by adverse water quality reports from routine water testing or from ad hoc tests done after events, such as watermain breaks, that may have allowed contaminants into the system. The City has a standard operating procedure documented for handling boil water advisories (SOP RC 03).

Service interruptions can be caused by routine municipal work, including watermain replacements, water distribution system repairs, service connection repairs, and maintenance of water system facilities. Customers are informed in advance when feasible of service interruptions, including details regarding the location and timeline of the interruption. Customers are instructed to ensure they have sufficient water supplies on hand, hot water tanks are turned off, and to run their water taps until any discolouration in the water clears once the interruption ends. If the period of interruption is prolonged, a temporary water service may be installed to minimize the impact on customers. |

Service Attribute	Community Levels of Service
Reliability (continued)	The City strives to minimize disruption to wastewater service. Stormwater enters sanitary sewers by two routes: inflow and infiltration. Inflow refers to stormwater flows entering into sanitary sewers via manhole cover holes, connected foundation and roof drains, unsealed openings in construction sites, and cross-connections. Infiltration refers to groundwater entering sanitary mains through cracks, holes, failed joints, and incorrect or faulty connections. Wet weather events can significantly and rapidly increase stormwater flows into the wastewater systems through both inflow and infiltration pathways, leading to capacity related issues with sewer mains, pumping stations, and wastewater treatment plants. Several strategies are used to prevent sewage from overflowing into streets and backing up into homes when there are wet weather events. The system has capacity to handle flows significantly higher than average daily flows to help address peak flows. If a facility if overwhelmed by excess flows, detention tanks, partial or full bypasses, and/or overflow procedures are used to relieve pressure on overwhelmed facilities. This is done in accordance with the related Environmental Compliance Approval and the operating design of the affected facility. The City has a Backwater Valve Subsidy Program. It allows eligible property owners to apply for a 50% cost recovery on the purchase and installation of a backwater valve. Backwater valves can help prevent basements from flooding.

Table 2-37: Water and Wastewater Services – Technical Levels of Service

Service Attribute	Performance Measure	Current Performance (2025)	Target Performance (2035)
Scope	Percentage of properties connected to the municipal water system.	30%	30%
	Percentage of properties where fire flow is available.	24%	24%
	Percentage of properties connected to the municipal wastewater system.	26%	26%
Reliability	The number of connection-days per year where a boil water advisory notice is in place compared to the	0.0921	Minimize

Service Attribute	Performance Measure	Current Performance (2025)	Target Performance (2035)
	total number of properties connected to the municipal water system.		
	The number of connection-days per year lost due to water main breaks compared to the total number of properties connected to the municipal water system.	0.0036	Minimize
	The number of connection-days per year lost due to wastewater backups compared to the total number of properties connected to the municipal wastewater system.	0.0025	Minimize
	The number of effluent violations per year due to wastewater discharge compared to the total number of properties connected to the municipal wastewater system.	0	0

2.8 Uncategorized (Natural Assets)

In addition to the assets summarized in the preceding sections, the City owns and manages a variety of natural assets that are currently not categorized under a service group. These assets comprise aggregate pits and quarries, and forests. The estimated replacement cost of these assets is approximately $596 million. Forests represent the largest share of replacement cost at $424.4 million (71%), followed by aggregate pits and quarries at $171.7 million (29%). Additionally, the City also owns a significant amount of land.

Because these assets generally do not require lifecycle rehabilitation or replacement, they are only noted here for information purposes. However, they are excluded from the levels of service and lifecycle management strategy aspects of this asset management plan.

2.9 Population and Employment Growth

The City is expected to grow to 117,000 people and 39,000 jobs by 2051. To plan for this growth, the City is preparing a Growth Management Strategy. The Growth Management Strategy will inform the incremental service demands arising from growth and the associated infrastructure investments to the year 2051.

The City collects development charges to fund its growth-related capital expenditures. 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 is currently undertaking a new Development Charges Background Study which will identify the anticipated capital expenditures to 2035 and beyond. Following the completion of the new Development Charges Study, the forecast of growth-related infrastructure expansion and upgrades will be incorporated into a future iteration of this asset management plan.

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Chapter 3
Lifecycle Management Strategies

3. Lifecycle Management Strategy

3.1 Introduction

The lifecycle management strategies in this asset management plan identify the lifecycle activities that would need to be undertaken to sustain the level of service targets identified in Chapter 2. 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.[1] 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. Asset management plans must include a ten-year capital forecast, identifying the lifecycle activities resulting from the lifecycle management strategy.

The following sections detail the ten-year forecasts of lifecycle activities and associated costs that would be required for the City to achieve and sustain the proposed levels of service identified in Chapter 2.

3.2 Tax Supported Assets

This section presents an estimate of the costs associated with achieving and sustaining the proposed level of service for the City's tax supported assets. The ten-year lifecycle expenditure forecast is summarized in Figure 3-1. A further breakdown of the lifecycle expenditure forecast by service group is provided in Table 3-1.

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[1] 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.

Figure 3-1: Tax Supported – Lifecycle Expenditure Forecast (inflated $)
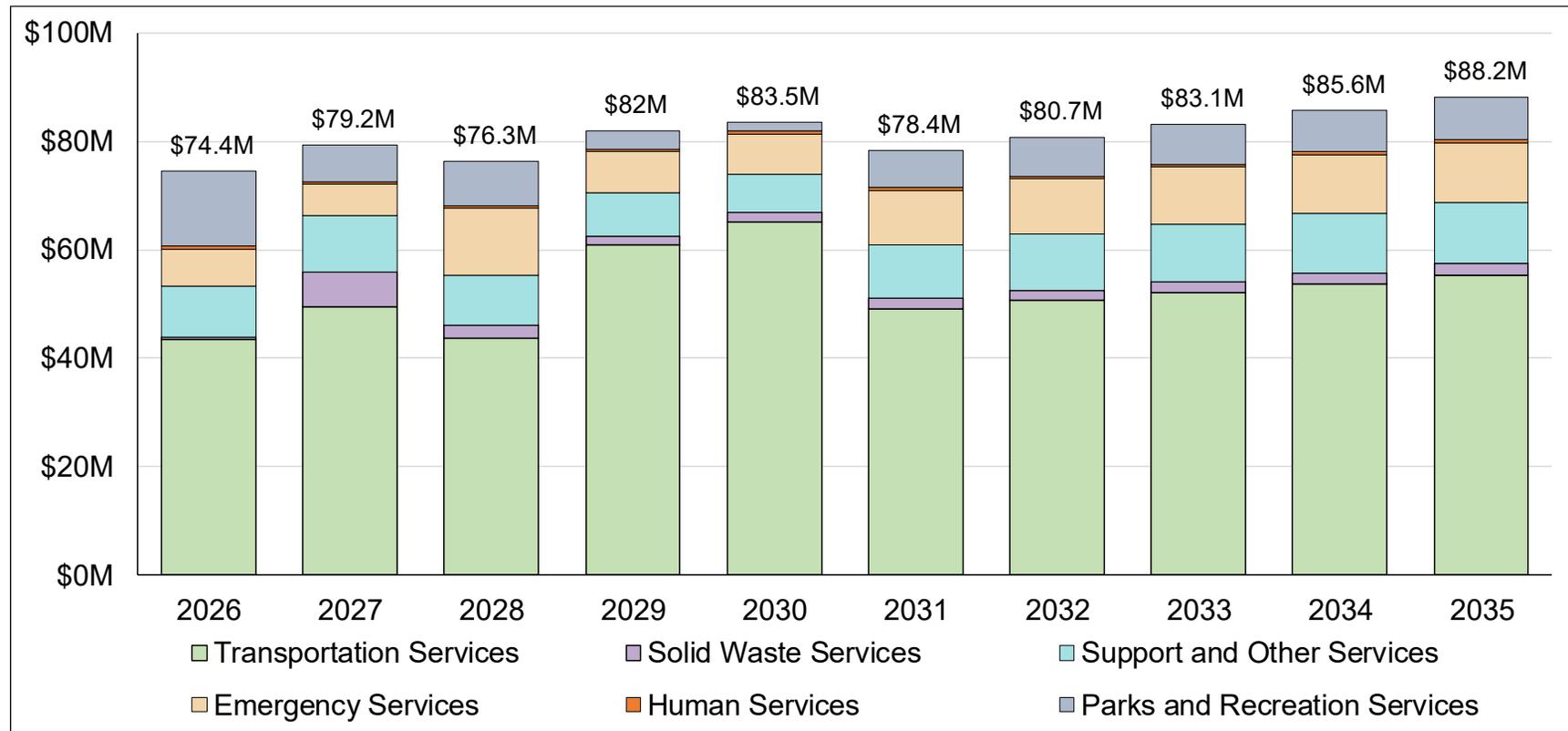
Table 3-1: Tax Supported – Lifecycle Expenditure Forecast (inflated $)

Service Group	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Transportation Services	$43,427,000	$49,484,000	$43,780,000	$60,861,000	$65,170,000	$49,175,000	$50,652,000	$52,171,000	$53,737,000	$55,348,000
Solid Waste Services	$390,000	$6,356,000	$2,251,000	$1,717,000	$1,757,000	$1,850,000	$1,906,000	$1,963,000	$2,022,000	$2,083,000
Support and Other Services	$9,404,000	$10,443,000	$9,268,000	$7,923,000	$6,998,000	$9,970,000	$10,577,000	$10,577,000	$10,894,000	$11,221,000
Emergency Services	$6,925,000	$5,850,000	$12,332,000	$7,635,000	$7,400,000	$9,925,000	$10,529,000	$10,529,000	$10,844,000	$11,170,000
Human Services	$542,000	$377,000	$549,000	$408,000	$520,000	$510,000	$526,000	$542,000	$558,000	$574,000
Parks and Recreation Services	$13,743,000	$6,733,000	$8,124,000	$3,425,000	$1,653,000	$6,940,000	$7,148,000	$7,363,000	$7,583,000	$7,810,000
Total	**$74,431,000**	**$79,243,000**	**$76,304,000**	**$81,969,000**	**$83,498,000**	**$78,370,000**	**$80,723,000**	**$83,145,000**	**$85,638,000**	**$88,206,000**

3.3   Rate Supported Assets (Water and Wastewater)

This section presents an estimate of the costs associated with achieving and sustaining the proposed level of service for the City's rate supported assets (i.e., Water and Wastewater assets). The ten-year lifecycle expenditure forecast is summarized in Figure 3-2. A further breakdown of the lifecycle expenditure forecast by capital program is provided in Table 3-2.

Figure 3-2: Rate Supported – Lifecycle Expenditure Forecast (inflated $)
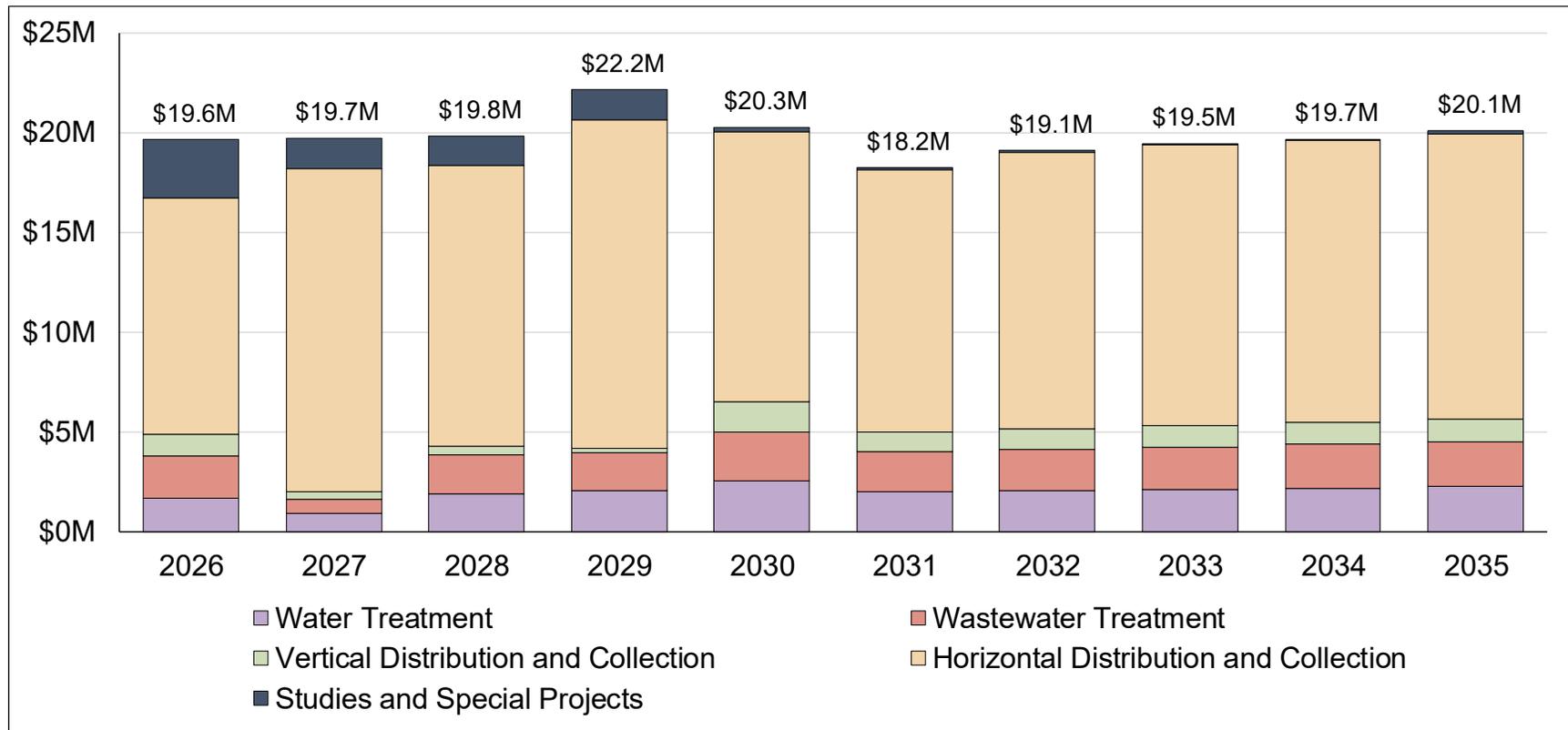
Table 3-2: Rate Supported – Lifecycle Expenditure Forecast (inflated $)

Capital Program	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Water Treatment	$1,675,000	$940,000	$1,900,000	$2,055,000	$2,555,000	$2,000,000	$2,060,000	$2,122,000	$2,185,000	$2,251,000
Wastewater Treatment	$2,095,000	$675,000	$1,955,000	$1,900,000	$2,443,000	$2,000,000	$2,060,000	$2,122,000	$2,185,000	$2,251,000
Vertical Distribution and Collection	$1,130,000	$370,000	$400,000	$220,000	$1,500,000	$1,000,000	$1,030,000	$1,061,000	$1,093,000	$1,126,000
Horizontal Distribution and Collection	$11,804,000	$16,214,000	$14,125,000	$16,484,000	$13,519,000	$13,132,000	$13,844,000	$14,057,000	$14,123,000	$14,300,000
Studies and Special Projects	$2,945,000	$1,530,000	$1,455,000	$1,500,000	$260,000	$100,000	$100,000	$100,000	$100,000	$170,000
Total	**$19,649,000**	**$19,729,000**	**$19,835,000**	**$22,159,000**	**$20,277,000**	**$18,232,000**	**$19,094,000**	**$19,462,000**	**$19,686,000**	**$20,098,000**

Chapter 4
Financial Strategy

4. Financial Strategy

4.1 Introduction

This chapter outlines the financial strategy that would sustainably fund the lifecycle management strategies presented in Chapter 3. This financial strategy focuses on examining how the City can fund the lifecycle activities required to achieve the proposed levels of service, as identified in Chapter 2. The strategy presented is a suggested approach which should be examined and re-evaluated during the annual budgeting process to ensure the sustainability of the City's financial position as it relates to its assets.

O. Reg. 588/17 requires, at minimum, a 10-year capital plan that forecasts the costs of implementing the lifecycle management strategy and the lifecycle activities required therein. The financial strategy in this asset management plan has been developed for a 10-year forecast period to be in compliance with this requirement.

Various financing options, including reserve funds, debt, and grants, were considered during the process of developing the financial strategy and are described in more detail in section 4.4 below.

4.2 Lifecycle Funding Target

An annual lifecycle funding target represents the amount of funding that would be required annually to fully fund a lifecycle management strategy over the long term. By planning to achieve this annual funding level, the City would theoretically be able to fully fund capital works as they arise. In practice, capital expenditures often fluctuate year-to-year based on the asset replacement and renewal/rehabilitation projects being undertaken in a particular year. By planning to achieve the lifecycle funding target over the long term, however, 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. A breakdown of the lifecycle funding target for tax supported assets by service group is provided in Table 4-1.

Table 4-1: Tax Supported - Average Annual Lifecycle Cost by Service Group

Service Group	Average Annual Lifecycle Cost (2025$)
Transportation Services	$48,727,000
Solid Waste Services	$2,424,000
Support and Other Services	$10,329,000
Emergency Services	$6,099,000
Human Services	$6,382,000
Parks and Recreation Services	$7,564,000
Total	**$81,525,000**

A breakdown of the lifecycle funding target for rate supported assets by capital program is provided in Table 4-2.

Table 4-2: Rate Supported - Average Annual Lifecycle Cost by Capital Program

Capital Program	Average Annual Lifecycle Cost (2025$)
Water Treatment	$452,000
Wastewater Treatment	$250,000
Vertical Distribution and Collection	$4,164,000
Horizontal Distribution and Collection	$6,134,000
Total	**$11,000,000**

4.3   Capital Expenditure Forecast

The 10-year (2026 to 2035) capital expenditure forecasts for the City's tax-supported and rate-supported assets are presented in Table 3-1 and Table 3-2, respectively. The expenditure forecasts include a capital inflation factor of 3%.

4.4 Funding

Table A-1 and Table A-7 in Appendix A summarize the capital expenditures and recommended strategy to finance those expenditures for tax-supported and rate-supported assets, respectively. The funding forecast was based on the funding sources identified in the City's Long-Term Financial Plan.

The lifecycle costs required to sustain established level of service targets are being partially recovered through several external funding sources:

- OCIF formula-based funding is maintained based on the City's 2025 allocation (i.e., approximately $6.7 million). It is noted that the Ministry of Infrastructure recently shifted from using historical costs to using replacement costs in the formula used for calculating annual OCIF funding allocations. As a result of this formula change, the City's OCIF allocation may continue to change in the coming years. The amount of OCIF funding will need to be monitored by City staff and, if a significant variance occurs relative to the estimate provided in this asset management plan, the financial strategy may need to be updated.
- CCBF funding has been shown as a stable and long-term funding source for eligible capital projects. Annual funding estimates are based on the City's scheduled allocations for 2026-2028, and increasing by 4% for every two-year interval thereafter.
- Ministry of HLTC Grant has been maintained at current levels (i.e., approximately $300,000 annually) until 2028, and subsequently increasing to $600,000 annually from 2029 onwards. The increase in funding coincides with the anticipated completion of the new Paramedic Headquarters and Fleet Centre.

This financial strategy has been developed to be fully funded, and therefore no funding shortfall has been identified. This means, however, that if identified grants are not received at expected amounts, shortfalls may present themselves. In such an event, the difference could be made up through increases to the tax levy/user rates over and above those presented hereafter.

It is noted that this fully funded financial strategy phases in annual contributions towards capital such that the City reaches full lifecycle funding levels by 2035.

4.5   Tax Levy Impact

As discussed in section 4.2, while the extent of capital expenditures will fluctuate from year to year, it is important for the City to implement a consistent, yet increasing, annual investment in capital so that the excess annual funds can accrue in capital reserves.

In order to fund the recommended lifecycle management strategy using the City's own available funding sources (i.e., using taxation, CCBF funding, OCIF funding, Ministry of HLTC funding, and other stable and predictable funding sources[1]), the annual contribution to the Asset Management Reserve would need to increase from $17.4 million budgeted in 2025 to $65.8 million by 2035. The financial strategy projects higher increases at the beginning of the forecast period, in alignment with the City's Long Term Financial Plan. Additionally, annual contributions to the Public Works and Fire Service fleet reserves would need to increase from the 2025 budgeted amounts (i.e., $6.3 million and $2.0 million, respectively) by 3% annually over the forecast period.

Consideration for cash flow and positive reserve fund balances has been included in setting the capital reserve transfer amounts. Detailed continuity schedules for the Asset Management Reserve, the Public Works Fleet Reserve, and the Fire Service Fleet Reserve can be found in tables A-3 through A-5 in Appendix A. It should be noted that the Fire Service Fleet Reserve is projected to be in a deficit position for most of the forecast period. However, given the projected balances of the Asset Management Reserve and the Public Works Fleet Reserve, these deficits could be mitigated through inter-fund borrowing.

4.6   Rate Revenue Impact

As discussed in section 4.2, while the extent of capital expenditures will fluctuate from year to year, it is important for the City to implement a consistent, yet increasing, annual investment in capital so that the excess annual funds can accrue in capital reserves.

In order to fund the recommended lifecycle management strategy for Water and Wastewater assets using the City's water and wastewater rate revenues, the amount of

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[1] Other sources of funding included in the financial strategy include the Haul Routes Reserve, Parkland Reserve, KLPS Capital reserve, Victoria Manor Reserve, Housing Reserve, Wilson Estate, and contributions from other municipalities for capital expenditures related to assets with shared funding arrangements.

capital funding (including debt servicing and transfers to reserves) supported by the City's water and wastewater rates would need to increase by 3.27% annually between 2026 and 2035 (i.e., increasing from $10.7 million as of 2025 to $14.8 million by 2035).

Consideration for cash flow and positive reserve fund balances has been included in setting the capital reserve transfer amounts. A detailed continuity schedule for water and sewer infrastructure renewal reserves can be found in Table A-9 in Appendix A.

Chapter 5
Recommendations and Next Steps

5.   Recommendations and Next Steps

5.1   Recommendations

The following recommendations are provided for the City's consideration:

- That the City of Kawartha Lakes Asset Management Plan be received and approved by Council; and

- That consideration be made as part of the annual budgeting process to ensure sufficient capital funding is available to implement the asset management plan.

5.2   Next Steps

Following the approval of this asset management plan by Council, the City's asset management journey will transition from developing the plan to its operationalization. The City will need to establish processes and implement systems to keep asset information (e.g., condition, replacement costs, etc.) updated and relevant, so that it can be relied on to identify capital priorities and inform the annual budget process. Furthermore, the City will need to establish a format and process for the annual updates to Council on asset management progress, as required by O. Reg. 588/17.

The asset management plan should be updated as the strategic priorities and capital needs of the City change. This can be accomplished in conjunction with specific legislative requirements (i.e., five-year review of the asset management plan as required by O. Reg. 588/17), as well as the City's annual budget process.

Appendix A
Financial Strategy Tables

Service Group/Capital Program	Total	Forecast									
		2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Transportation Services											
Multiyear Capital Projects	4,765,000	3,165,000	400,000	400,000	400,000	400,000	-	-	-	-	-
Bridges and Culverts	76,618,000	3,750,000	6,234,000	6,014,000	14,972,000	14,325,000	5,900,000	6,077,000	6,259,000	6,447,000	6,640,000
Urban/Rural Reconstruction	153,632,000	13,565,000	13,416,000	11,316,000	21,281,000	15,480,000	14,800,000	15,244,000	15,701,000	16,172,000	16,657,000
Urban/Arterial Resurfacing	142,242,000	9,495,000	15,616,000	12,736,000	11,750,000	20,441,000	13,600,000	14,008,000	14,428,000	14,861,000	15,307,000
Rural Resurfacing	77,880,000	7,195,000	7,824,000	6,930,000	6,190,000	7,800,000	7,900,000	8,137,000	8,381,000	8,632,000	8,891,000
Gravel Resurfacing	24,710,000	2,242,000	2,263,000	2,269,000	2,257,000	2,406,000	2,500,000	2,575,000	2,652,000	2,732,000	2,814,000
Lifecycle Management	27,154,000	2,362,000	2,435,000	2,509,000	2,584,000	2,661,000	2,750,000	2,833,000	2,918,000	3,006,000	3,096,000
Sidewalks	4,596,000	405,000	404,000	443,000	449,000	452,000	460,000	474,000	488,000	503,000	518,000
Traffic Signals and Streetlights	3,850,000	424,000	249,000	312,000	293,000	501,000	390,000	402,000	414,000	426,000	439,000
Parking Lots	866,000	150,000	-	186,000	-	-	100,000	103,000	106,000	109,000	112,000
Airport Siteworks and Facilities	3,509,000	350,000	309,000	321,000	330,000	339,000	350,000	361,000	372,000	383,000	394,000
Roads, Fleet and Transit Facilities	3,713,000	324,000	334,000	344,000	355,000	365,000	375,000	386,000	398,000	410,000	422,000
Transit Siteworks	270,000	-	-	-	-	-	50,000	52,000	54,000	56,000	58,000
Solid Waste Services											
Landfill Siteworks and Facilities	22,295,000	390,000	6,356,000	2,251,000	1,717,000	1,757,000	1,850,000	1,906,000	1,963,000	2,022,000	2,083,000
Support and Other Services											
Information Technology Systems	6,637,000	819,000	514,000	361,000	652,000	734,000	670,000	690,000	711,000	732,000	754,000
Administrative Facilities and Libraries	36,232,000	1,830,000	3,400,000	3,504,000	3,608,000	3,716,000	3,800,000	3,914,000	4,031,000	4,152,000	4,277,000
Public Works Fleet	54,098,000	6,755,000	6,529,000	5,403,000	3,663,000	2,548,000	5,500,000	5,665,000	5,835,000	6,010,000	6,190,000
Emergency Services											
Fire Facilities	8,383,000	820,000	693,000	772,000	794,000	819,000	845,000	870,000	896,000	923,000	951,000
Fire Fleet and Equipment	43,370,000	5,272,000	3,209,000	7,674,000	1,899,000	1,956,000	4,400,000	4,532,000	4,668,000	4,808,000	4,952,000
Paramedic Facilities	6,535,000	220,000	618,000	642,000	660,000	678,000	700,000	721,000	743,000	765,000	788,000
Paramedic Fleet and Equipment	29,803,000	373,000	1,063,000	2,405,000	3,958,000	3,423,000	3,500,000	3,605,000	3,713,000	3,824,000	3,939,000
Police Fleet and Equipment	4,741,000	240,000	267,000	839,000	324,000	524,000	480,000	494,000	509,000	524,000	540,000
Human Services											
Victoria Manor	1,012,000	142,000	68,000	123,000	80,000	69,000	100,000	103,000	106,000	109,000	112,000
Housing Facilities	3,454,000	300,000	309,000	319,000	328,000	338,000	350,000	361,000	372,000	383,000	394,000
Housing Fleet	640,000	100,000	-	107,000	-	113,000	60,000	62,000	64,000	66,000	68,000
Parks and Recreation Services											
Parks Siteworks and Facilities	19,124,000	4,018,000	1,104,000	1,882,000	1,179,000	854,000	1,900,000	1,957,000	2,016,000	2,076,000	2,138,000
Recreation Facilities	47,135,000	9,410,000	5,181,000	5,865,000	1,856,000	402,000	4,600,000	4,738,000	4,880,000	5,026,000	5,177,000
Parks and Recreation Equipment	2,962,000	168,000	274,000	283,000	293,000	298,000	310,000	319,000	329,000	339,000	349,000
Cemetery Siteworks and Facilities	1,301,000	147,000	174,000	94,000	97,000	99,000	130,000	134,000	138,000	142,000	146,000
Total Capital Expenditures	**811,527,000**	**74,431,000**	**79,243,000**	**76,304,000**	**81,969,000**	**83,498,000**	**78,370,000**	**80,723,000**	**83,145,000**	**85,638,000**	**88,206,000**

Service Group/Capital Program	Total	Forecast									
		2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Capital Financing											
Development Charges Reserve	15,363,200	1,356,500	1,341,600	1,131,600	2,128,100	1,548,000	1,480,000	1,524,400	1,570,100	1,617,200	1,665,700
CCBF Grant	57,355,000	5,191,000	5,398,000	5,398,000	5,614,000	5,614,000	5,839,000	5,839,000	6,073,000	6,073,000	6,316,000
OCIF Grant	66,870,000	6,687,000	6,687,000	6,687,000	6,687,000	6,687,000	6,687,000	6,687,000	6,687,000	6,687,000	6,687,000
Provincial Transit Grant	-	-	-	-	-	-	-	-	-	-	-
Ministry of HLTC Grant	5,100,000	300,000	300,000	300,000	600,000	600,000	600,000	600,000	600,000	600,000	600,000
Haul Routes Reserve	10,565,000	1,010,000	1,020,000	1,030,000	1,040,000	1,050,000	1,061,000	1,072,000	1,083,000	1,094,000	1,105,000
Library Reserve	-	-	-	-	-	-	-	-	-	-	-
Parkland Reserve	6,506,000	567,000	584,000	602,000	620,000	639,000	658,000	678,000	698,000	719,000	741,000
KLPS Capital Reserve	4,741,000	240,000	267,000	839,000	324,000	524,000	480,000	494,000	509,000	524,000	540,000
Victoria Manor Reserve	1,012,000	142,000	68,000	123,000	80,000	69,000	100,000	103,000	106,000	109,000	112,000
Housing Reserve	4,094,000	400,000	309,000	426,000	328,000	451,000	410,000	423,000	436,000	449,000	462,000
Wilson Estate	550,000	55,000	55,000	55,000	55,000	55,000	55,000	55,000	55,000	55,000	55,000
Other Municipality / Owner	6,185,500	2,545,000	82,500	3,558,000	-	-	-	-	-	-	-
Asset Management Reserve	426,673,000	21,147,000	25,480,000	30,206,000	35,355,000	40,959,000	47,054,000	53,678,000	55,567,900	57,657,800	59,568,300
Fleet Reserve - Public Works	54,098,000	6,755,000	6,529,000	5,403,000	3,663,000	2,548,000	5,500,000	5,665,000	5,835,000	6,010,000	6,190,000
Fleet Reserve - Fire Service	30,257,000	3,226,000	1,030,000	6,000,000	176,000	182,000	3,700,000	3,811,000	3,925,000	4,043,000	4,164,000
Non-Growth Related Debenture Requirements	122,157,300	24,809,500	30,091,900	14,545,400	25,298,900	22,572,000	4,746,000	93,600	-	-	-
Total Capital Financing	**811,527,000**	**74,431,000**	**79,243,000**	**76,304,000**	**81,969,000**	**83,498,000**	**78,370,000**	**80,723,000**	**83,145,000**	**85,638,000**	**88,206,000**

Table A-2
City of Kawartha Lakes
Tax-supported Assets
Schedule of Non-Growth Related Debenture Repayments
Inflated $

Debenture	Principal	Forecast									
Year	(Inflated)	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
2026	24,809,500				1,673,129	1,673,129	1,673,129	1,673,129	1,673,129	1,673,129	1,673,129
2027	30,091,900					2,029,368	2,029,368	2,029,368	2,029,368	2,029,368	2,029,368
2028	14,545,400						980,928	980,928	980,928	980,928	980,928
2029	25,298,900							1,706,133	1,706,133	1,706,133	1,706,133
2030	22,572,000								1,522,234	1,522,234	1,522,234
2031	4,746,000									320,066	320,066
2032	93,600										6,312
2033	-										
2034	-										
2035	-										
Total Annual Debt Charges	**122,157,300**	-	-	-	1,673,129	3,702,497	4,683,425	6,389,558	7,911,792	8,231,857	8,238,170

Table A-3
City of Kawartha Lakes
Tax-supported Assets
Asset Management Reserve Continuity
Inflated $

Description	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Opening Balance	1,166,326	1,166,326	1,166,326	1,166,326	1,166,326	1,166,326	1,166,326	1,166,326	3,800,426	8,004,132
Transfer from Operating	21,147,000	25,480,000	30,206,000	35,355,000	40,959,000	47,054,000	53,678,000	58,202,000	61,861,506	65,751,106
Transfer to Capital	21,147,000	25,480,000	30,206,000	35,355,000	40,959,000	47,054,000	53,678,000	55,567,900	57,657,800	59,568,300
Transfer to Operating	-	-	-	-	-	-	-	-	-	-
Closing Balance	**1,166,326**	**1,166,326**	**1,166,326**	**1,166,326**	**1,166,326**	**1,166,326**	**1,166,326**	**3,800,426**	**8,004,132**	**14,186,937**

Table A-4
City of Kawartha Lakes
Tax-supported Assets
Public Works Fleet Reserve Continuity
Inflated $

Description	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Opening Balance	896,146	631,692	787,954	2,270,775	5,700,170	10,457,336	12,481,658	14,566,709	16,714,262	18,926,292
Transfer from Operating	6,490,546	6,685,262	6,885,820	7,092,395	7,305,167	7,524,322	7,750,051	7,982,553	8,222,030	8,468,690
Transfer to Capital	6,755,000	6,529,000	5,403,000	3,663,000	2,548,000	5,500,000	5,665,000	5,835,000	6,010,000	6,190,000
Transfer to Operating	-	-	-	-	-	-	-	-	-	-
Closing Balance	**631,692**	**787,954**	**2,270,775**	**5,700,170**	**10,457,336**	**12,481,658**	**14,566,709**	**16,714,262**	**18,926,292**	**21,204,982**

Table A-5

City of Kawartha Lakes

Tax-supported Assets

Fire Service Fleet Reserve Continuity

Inflated $

Description	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Opening Balance	219,918	(946,082)	145,718	(3,668,828)	(1,593,810)	542,738	(769,158)	(2,120,410)	(3,511,870)	(4,945,323)
Transfer from Operating	2,060,000	2,121,800	2,185,454	2,251,018	2,318,548	2,388,105	2,459,748	2,533,540	2,609,546	2,687,833
Transfer to Capital	3,226,000	1,030,000	6,000,000	176,000	182,000	3,700,000	3,811,000	3,925,000	4,043,000	4,164,000
Transfer to Operating	-	-	-	-	-	-	-	-	-	-
Closing Balance	**(946,082)**	**145,718**	**(3,668,828)**	**(1,593,810)**	**542,738**	**(769,158)**	**(2,120,410)**	**(3,511,870)**	**(4,945,323)**	**(6,421,491)**

Table A-6

City of Kawartha Lakes

Tax-supported Assets

Tax-Supported Capital Funding Forecast

Inflated $

Description	Forecast									
	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Existing Debt Servicing (P&I) - Non-Growth Related	10,746,012	9,128,945	10,876,863	10,496,428	10,381,604	9,454,934	9,187,338	9,086,347	8,761,263	7,799,630
New Debt Servicing (P&I) - Non-Growth Related	-	-	-	1,673,129	3,702,497	4,683,425	6,389,558	7,911,792	8,231,857	8,238,170
Transfer to Asset Management Reserve	21,147,000	25,480,000	30,206,000	35,355,000	40,959,000	47,054,000	53,678,000	58,202,000	61,861,506	65,751,106
Transfer to Public Works Fleet Reserve	6,490,546	6,685,262	6,885,820	7,092,395	7,305,167	7,524,322	7,750,051	7,982,553	8,222,030	8,468,690
Transfer to Fire Service Fleet Reserve	2,060,000	2,121,800	2,185,454	2,251,018	2,318,548	2,388,105	2,459,748	2,533,540	2,609,546	2,687,833
Total Capital Related Funding	**40,443,558**	**43,416,007**	**50,154,138**	**56,867,969**	**64,666,816**	**71,104,785**	**79,464,695**	**85,716,231**	**89,686,202**	**92,945,429**

Table A-7

City of Kawartha Lakes

Water and Wastewater Assets

State-of-Good-Repair Capital Forecast Summary

Inflated $

Capital Program	Total	Forecast									
		2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Capital Expenditures											
Water Treatment	19,743,000	1,675,000	940,000	1,900,000	2,055,000	2,555,000	2,000,000	2,060,000	2,122,000	2,185,000	2,251,000
Wastewater Treatment	19,686,000	2,095,000	675,000	1,955,000	1,900,000	2,443,000	2,000,000	2,060,000	2,122,000	2,185,000	2,251,000
Vertical Distribution and Collection	8,930,000	1,130,000	370,000	400,000	220,000	1,500,000	1,000,000	1,030,000	1,061,000	1,093,000	1,126,000
Horizontal Distribution and Collection	141,602,000	11,804,000	16,214,000	14,125,000	16,484,000	13,519,000	13,132,000	13,844,000	14,057,000	14,123,000	14,300,000
Studies and Special Projects	8,260,000	2,945,000	1,530,000	1,455,000	1,500,000	260,000	100,000	100,000	100,000	100,000	170,000
Total Capital Expenditures	**198,221,000**	**19,649,000**	**19,729,000**	**19,835,000**	**22,159,000**	**20,277,000**	**18,232,000**	**19,094,000**	**19,462,000**	**19,686,000**	**20,098,000**
Capital Financing											
Grants	2,536,000	2,536,000	-	-	-	-	-	-	-	-	-
Water/Wastewater Reserves	75,573,634	15,962,601	5,931,715	6,448,286	7,291,790	7,075,389	6,989,685	6,607,645	6,446,216	6,433,239	6,387,068
Non-Growth Related Debenture Requirements	120,111,366	1,150,399	13,797,285	13,386,714	14,867,210	13,201,611	11,242,315	12,486,355	13,015,784	13,252,761	13,710,932
Total Capital Financing	**198,221,000**	**19,649,000**	**19,729,000**	**19,835,000**	**22,159,000**	**20,277,000**	**18,232,000**	**19,094,000**	**19,462,000**	**19,686,000**	**20,098,000**

Table A-8

City of Kawartha Lakes

Water and Wastewater Assets

Schedule of Non-Growth Related Debenture Repayments

Inflated $

Debenture	Principal	Forecast									
Year	(Inflated)	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
2026	1,150,399				77,582	77,582	77,582	77,582	77,582	77,582	77,582
2027	13,797,285					930,475	930,475	930,475	930,475	930,475	930,475
2028	13,386,714						902,787	902,787	902,787	902,787	902,787
2029	14,867,210							1,002,630	1,002,630	1,002,630	1,002,630
2030	13,201,611								890,304	890,304	890,304
2031	11,242,315									758,171	758,171
2032	12,486,355										842,068
2033	13,015,784										
2034	13,252,761										
2035	13,710,932										
Total Annual Debt Charges	**120,111,366**	**-**	**-**	**-**	**77,582**	**1,008,057**	**1,910,844**	**2,913,474**	**3,803,778**	**4,561,949**	**5,404,017**

Table A-9

City of Kawartha Lakes

Water and Wastewater Assets

Water and Sewer Infrastructure Renewal Reserve Continuity

Inflated $

Description	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Opening Balance	10,790,596	-	-	-	-	-	-	-	-	-
Transfer from Operating	5,172,005	5,931,715	6,448,286	7,291,790	7,075,389	6,989,685	6,607,645	6,446,216	6,433,239	6,387,068
Transfer to Capital	15,962,601	5,931,715	6,448,286	7,291,790	7,075,389	6,989,685	6,607,645	6,446,216	6,433,239	6,387,068
Transfer to Operating	-	-	-	-	-	-	-	-	-	-
Closing Balance	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**

Table A-10

City of Kawartha Lakes

Water and Wastewater Assets

Water and Wastewater Rate-supported Capital Funding Forecast

Inflated $

Description	Forecast									
	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Existing Debt Servicing (P&I) - Non-Growth Related	5,893,180	5,495,474	5,352,749	4,817,741	4,502,374	4,097,042	3,901,675	3,611,933	3,320,240	2,992,681
New Debt Servicing (P&I) - Non-Growth Related	-	-	-	77,582	1,008,057	1,910,844	2,913,474	3,803,778	4,561,949	5,404,017
Transfer to Water and Sewer Infrastructure Renewal Reserve	5,172,005	5,931,715	6,448,286	7,291,790	7,075,389	6,989,685	6,607,645	6,446,216	6,433,239	6,387,068
Total Capital Related Funding	**11,065,185**	**11,427,189**	**11,801,035**	**12,187,112**	**12,585,820**	**12,997,572**	**13,422,794**	**13,861,928**	**14,315,428**	**14,783,765**