



Asset Management Plan – Non-Core Assets

Municipality of Mississippi Mills

Final Report

July 25, 2024

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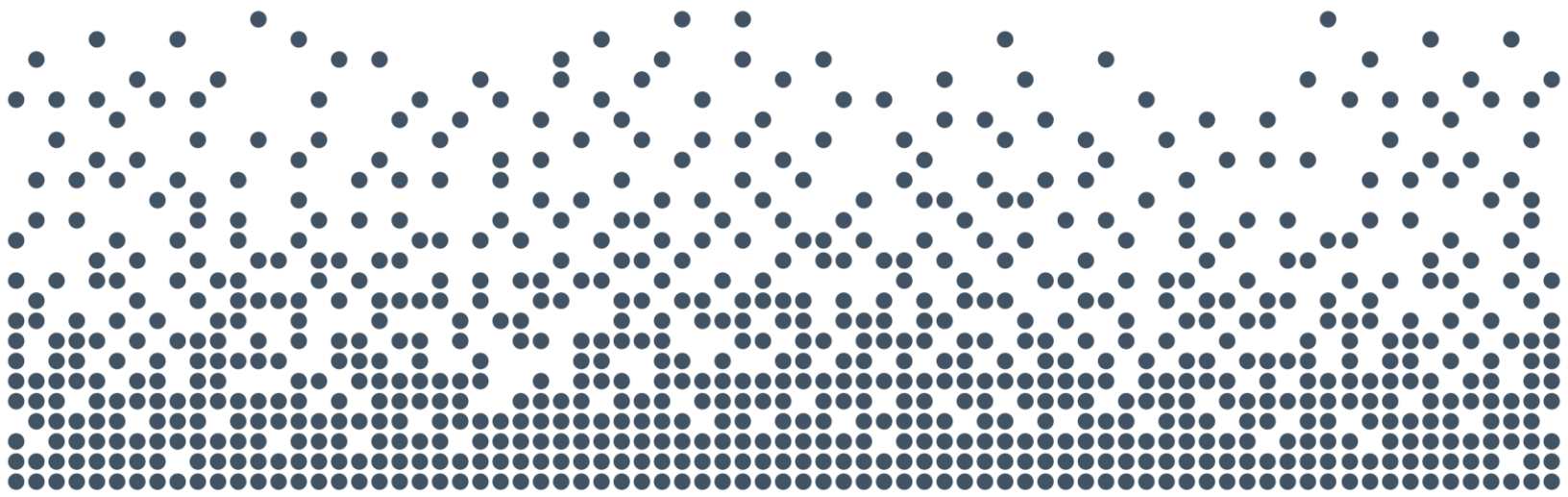
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Report



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 Municipality of Mississippi Mills (Municipality) retained Watson & Associates Economists Ltd. (Watson) to assist in developing this asset management plan, which serves as a tool for the Municipality to optimize asset management outcomes for its non-core assets in a cost-effective manner and brings the Municipality in compliance with the July 1, 2024 requirements of *Ontario Regulation 588/17: Asset Management Planning For Municipal Infrastructure* (O. Reg. 588/17). Watson previously assisted the Municipality with the development of its 2022 Asset Management Plan for core assets. Following the completion of this asset management plan for non-core assets, the Municipality will shift its focus to developing a comprehensive asset management plan for all of the Municipality's assets to meet the July 1, 2025 requirements of O. Reg. 588/17, building upon the asset management work that has been completed to date. Core elements of the comprehensive asset management plan will include filling remaining data gaps, identifying proposed levels of service, establishing lifecycle management strategies to achieve those service levels, developing a financial strategy that incorporates financial sustainability and affordability factors specific to the Municipality, and assessing asset criticality through a risk management lens.

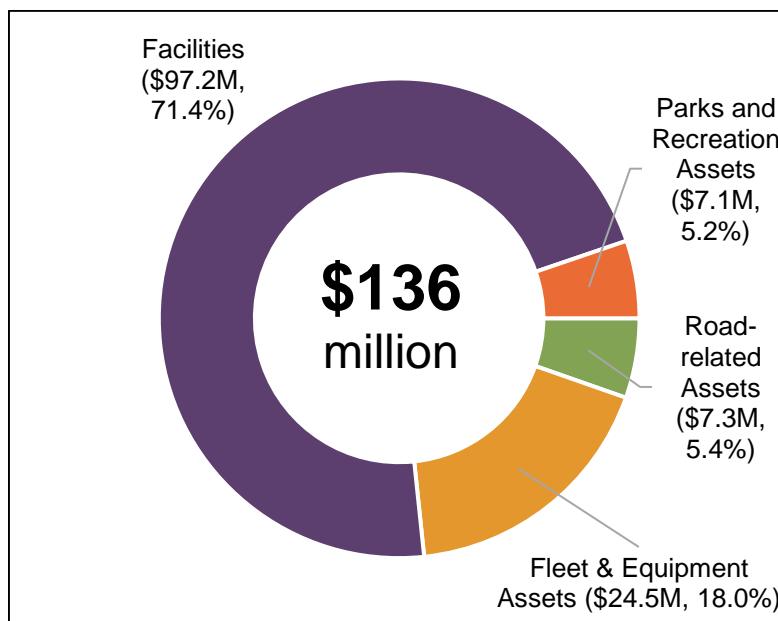
The total replacement cost for the Municipality's non-core assets is estimated to be approximately \$136.1 million. A breakdown of the total replacement cost by asset class is provided in Table 1-1 and is illustrated in Figure 1-1. Facilities comprise the largest share of this replacement cost at approximately \$97.2 million (71.4%), followed by fleet and equipment assets at approximately \$24.5 million (18.0%), road-related assets at approximately \$7.3 million (5.4%), and lastly, parks and recreation assets at approximately \$7.1 million (5.2%).



Table 1-1: Asset Classes and Replacement Costs

Asset Class	Replacement Cost (2024\$)
Road-related Assets	\$7,316,000
Fleet & Equipment Assets	\$24,448,000
Facilities	\$97,210,000
Parks & Recreation Assets	\$7,131,000
Total	\$136,105,000

Figure 1-1: Distribution of Replacement Cost by Non-core Asset Class (2024\$)



Through its Strategic Asset Management Policy, which was adopted by Council on June 4, 2019, the Municipality has identified and defined its asset management goals. The policy emphasizes the Municipality's objective of managing its infrastructure assets in a manner that supports sustainable service delivery to its residents. O. Reg. 588/17 requires that municipalities review their Strategic Asset Management Policies every five years to ensure that the policy is reflective of the municipality's evolving asset management environment. The Municipality is currently undertaking a review of its Strategic Asset Management Policy.



1.2 Legislative Context for Municipal Asset Management

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

Prior to 2009, it was common municipal practice to expense capital assets in the year of their acquisition or construction. Consequently, this meant that many municipalities did not have appropriate tracking of their capital assets, especially with respect to any changes that capital assets may have undergone (i.e. betterments, disposals, etc.). Furthermore, this also meant that many municipalities had not yet established inventories of their capital assets, both in their accounting structures and financial statements. As a result of revisions to *Section 3150 – Tangible Capital Assets* of the *Public Sector Accounting Board (PSAB)* handbook, which came into effect for the 2009 fiscal year, municipalities were forced to change this long-standing practice and capitalize their tangible capital assets over the term of the asset's expected useful service life. In order to comply with this revision, municipalities needed to establish asset inventories, if none previously existed.

In 2012, the Province launched the Municipal Infrastructure Strategy, which required municipalities and local service boards seeking provincial funding to demonstrate how any proposed project fits within a broader 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 municipal asset management plans, the Province produced a document entitled *Building Together: Guide for Municipal Asset Management Plans*. This document outlined the information and analyses 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 requires that asset management plans be developed that define levels of service, identify the lifecycle activities that will be undertaken to achieve those levels of



service, and provide a financial strategy to support the levels of service and lifecycle activities.

As noted earlier, this asset management plan was developed to bring the Municipality into compliance with the July 1, 2024 requirements of O. Reg. 588/17. Over the coming months the Municipality will be developing the next phase of its asset management plan, which will identify level of service targets and a financial strategy. The next phase of the asset management plan will bring the Municipality into full compliance with the 2025 requirements of O. Reg. 588/17.

1.3 Asset Management Plan Development

The development of this asset management plan was guided by asset management principles contained with the Municipality's Strategic Asset Management Policy, asset management strategies and objectives identified through discussions with the Municipality's asset managers, information gleaned through reviews of existing long-term planning documents and studies which was further refined through staff consultations, and the Municipality's capital asset data. The key steps in the development process of this asset management plan are 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. As part of this step, replacement costs were updated, where required, using applicable inflationary indices.
2. Define and assess the current condition of non-core assets using a combination of staff input and age-based condition analyses.
3. Define and document current levels of service based on analyses of available data and review of various background reports.
4. Develop lifecycle management strategies that identify the activities required to maintain current levels of service.
5. Develop a financial summary of forecasted capital and significant operating expenditures arising from the activities identified in the lifecycle management strategies.
6. Document the asset management plan in a formal report to inform future decision-making and to communicate planning to municipal stakeholders.



Chapter 2

Structure of this Asset Management Plan



2. Structure of this Asset Management Plan

The subsequent chapters of this asset management plan are organized by asset class. Each of those chapters is further broken down into sections including state of local infrastructure, levels of service, lifecycle management strategies, and financial summary and forecasts. The contents of each section are further described in the remainder of this chapter.

2.1 State of Local Infrastructure

The State of Local Infrastructure and Condition sections contain summary information on each asset class. As required by O. Reg. 588/17, the asset management plan must include the following information:

- Summary of the assets;
- Replacement cost of the assets;
- Average age of the assets (it is noted regulation O. Reg. 588/17 specifically requires average age to be determined by assessing the age of asset components);
- Information available on the condition of the assets; and
- Approach to condition assessments (based on recognized and generally accepted good engineering practices where appropriate).

The average ages of assets presented in subsequent sections of this asset management plan are weighted by the estimated current replacement cost of each asset. Similarly, the average condition is also weighted by the estimated current replacement cost of each asset.

2.2 Levels of Service

Levels of service measure how effectively an asset meets functional or user requirements and reinforce the fact that assets inherently serve as means rather than ultimate ends. Assets play a pivotal role in delivering services to the residents and stakeholders of a municipality. Municipalities need to ensure that their infrastructure assets perform to meet their level of service goals in a manner that is affordable, achievable, and sustainable.



A fully developed levels of service framework allows a municipality to:

- Communicate its objectives to stakeholders and inform them of any planned changes.
- Track its performance against objectives to identify problem areas.
- Make budget decisions that are linked to outcomes, enabling rational trade-offs to be made.

To comply with the July 1, 2024 requirements of O. Reg. 588/17, asset management plans must identify the current levels of service being provided for each in-scope asset class. Whereas O. Reg. 588/17 prescribes several community and technical levels of service that must be included in asset management plans for core assets, it makes no such prescription for non-core assets. The Municipality has established its own levels of service frameworks for its non-core assets to describe both qualitatively and quantitatively the objectives it intends its assets to deliver. Included within the levels of service framework are performance measures that the Municipality will continue to track over time.

The Municipality's levels of service frameworks are presented for each asset class as follows:

- The Service Attribute identifies the service aspects that are important to the users and/or managers of the asset class;
- The Community Levels of Service tables describe the Municipality's intent in plain language and provide additional information on the aspects of the service that the Municipality believes are important to users; and
- The Technical Levels of Service tables describe the performance measures that quantify the Municipality's current performance with respect to the Service Attribute and Community Levels of Service. Unless noted otherwise, data used to evaluate current performance is as of December 31, 2023.

This asset management plan includes several measures that the Municipality has identified as being important to include within the levels of service frameworks even though there is insufficient data currently to quantify performance. These measures are presented in Appendix A as "Data-Deferred" measures. These measures will be incorporated directly into the asset management plan once the Municipality collects the required data.



2.3 Lifecycle Management Strategies

A lifecycle management strategy is a set of planned actions performed on assets to achieve levels of service in a sustainable manner and at the lowest overall lifecycle cost. Developing a lifecycle management strategy framework entails determining which lifecycle activities need to be planned for and performed on assets in order to optimize multiple factors including sustenance of adequate levels of service, extension of asset service life, reduction of overall lifecycle costs, mitigation of risk, and achievement of other objectives such as environmental and community goals. Municipalities need to ensure that their levels of service and lifecycle management strategies work hand-in-hand to balance the municipality's asset rehabilitation, replacement, and growth-related needs with its spending capacity.

Lifecycle management strategies form a vital part of asset management because they represent a plan for how to manage activities related to an asset over its full lifecycle. Lifecycle management strategies allow a municipality to:

- Ensure that the right intervention is made at the right time to deliver the desired levels of service at the lowest average annual cost.
- Set a foundation for medium- and long-term capital budget forecasting.
- Inform front-line decisions about managing assets.

The Municipality's lifecycle management strategies for each asset class are presented as follows:

- **Inspections and Condition Assessments:** Outlines the Municipality's approach to assessing the performance of its assets and determining asset maintenance, rehabilitation, and replacement needs;
- **Major Lifecycle Activities – Operating:** Summarizes the significant lifecycle activities that the Municipality funds through its operating budgets. These lifecycle activities generally pertain to the maintenance required to preserve asset service lives and ensure assets continue performing as intended;
- **Major Lifecycle Activities – Capital:** Summarizes the significant lifecycle activities that the Municipality funds through its capital budgets. These lifecycle activities generally pertain to rehabilitation and replacement projects undertaken to extend or renew asset service lives;



- **Prioritization of Short-term Lifecycle Needs:** Outlines how the Municipality prioritizes short-term lifecycle requirements of its assets and addresses emerging issues; and
- **Growth-related Lifecycle Needs:** Describes the Municipality's methodology for assessing the impact of population and demographic shifts on the long-term sustainability of levels of service and the lifecycle requirements of assets.

2.4 Financial Summary and Forecasts

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

2.5 Population and Employment Growth

The requirements of O. Reg. 588/17 specify that for municipalities with a population less than 25,000, as reported in the most recent census, the asset management plan needs to provide a description of assumptions regarding future changes in population or economic activity and their impact on the lifecycle activities that need to be undertaken to maintain current levels of service.

Based on the growth forecast contained in the Municipality's 2023 Development Charges Background study, the Municipality's population (excluding census undercount) is anticipated to reach approximately 19,540 by late-2033. This represents an increase of approximately 26% relative to the estimated 2023 population of 15,500. Similarly, the total number of employees within the Municipality is expected to grow to



approximately 6,235 by late-2033. This represents an increase of approximately 30% relative to the estimated 2023 employment of 4,780.

This growth in population and employment is expected to result in incremental service demands that may impact the current level of service. These growth-related needs are summarized in the Municipality's 2023 Development Charges Background Study and are funded through development charges imposed on new development. Utilizing development charges ensures that the effects of population and employment growth do not increase the cost of maintaining levels of service for existing tax and rate payers.



Chapter 3

Road-related Assets



3. Road-related Assets

3.1 State of Local Infrastructure

The Municipality's non-core road-related assets comprise sidewalks, regulatory and warning road signs, non-structural culverts, streetlights, traffic lights, and pedestrian crossing. Data available currently supports the inclusion of sidewalks and pedestrian crossings into this iteration of the Municipality's asset management plan for its non-core infrastructure assets. Regulatory and warning road signs, non-structural culverts, streetlights, and traffic lights will be more closely examined and integrated into the next iteration of this asset management plan to meet the July 1, 2025 requirements of O. Re. 588/17.

The Municipality's sidewalk network comprises mainly concrete and some asphalt sidewalks. The current replacement cost of the Municipality's sidewalks is estimated to be approximately \$6.9 million. This replacement cost was derived by indexing forward the historical construction cost of sidewalk segments using applicable inflationary indices. The Municipality's concrete sidewalks have an estimated current replacement cost of approximately \$6.7 million while the Municipality's asphalt sidewalks have an estimated current replacement cost of approximately \$191,000.

The length of the Municipality's sidewalk network is approximately 39.4 kilometres and its average age is approximately 27.1 years. Table 3-1 summarizes the length, average age, and estimated current replacement cost of the Municipality's sidewalk network. This information is further illustrated in Figure 3-1.

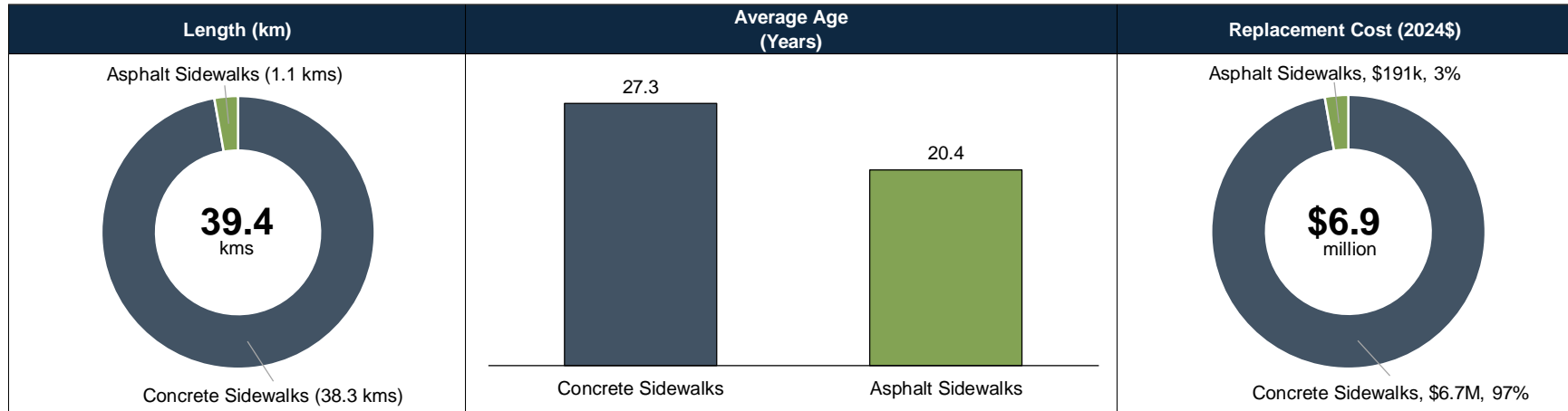


Table 3-1: Sidewalk Network – Length, Average Age, and Replacement Cost

Asset Sub-class	Length (km)	Average Age (Years)	Replacement Cost (2024\$)
Concrete Sidewalks	38.3	27.3	\$6,722,000
Asphalt Sidewalks	1.1	20.4	\$191,000
Total	39.4	27.1	\$6,913,000



Figure 3-1: Sidewalk Network – Length, Average Age, and Replacement Cost





The Municipality owns and manages 6 pedestrian crossings with an estimated combined replacement cost of approximately \$403,000. The average age of the Municipality's pedestrian crossings is approximately 9.2 years.

3.2 Condition

The condition of the Municipality's sidewalks and pedestrian crossings is assessed in this asset management plan based on age relative to useful service life (i.e. based on the percentage of useful service life consumed (ULC%)). A newly constructed sidewalk segment or pedestrian crossing would have a ULC% of 0%, indicating that none of the asset's life expectancy has been utilized. On the other hand, a sidewalk segment or pedestrian crossing that has reached the end of its life expectancy would have a ULC% of 100%. It is possible for assets to have a ULC% greater than 100%, which occurs if the 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 near or beyond their typical useful service life expectancy have a higher likelihood of failure and are likely to incur increasing repair and maintenance costs. To calculate ULC%s for the Municipality's sidewalks and pedestrian crossings, an expected useful service life of 50 years was assumed for concrete sidewalks, an expected useful service life of 25 years was assumed for asphalt sidewalks, and an expected useful service life of 30 years was assumed for pedestrian crossings. Upcoming iterations of this asset management plan will look to integrate data from on-the-ground condition assessments to establish condition ratings for the Municipality's sidewalk network.

To better communicate the condition of sidewalks and pedestrian crossings, ULC% ratings have been segmented into qualitative condition states as summarized in Table 3-2. The scale is set to show that if assets are reconstructed or replaced at the end of their expected useful service life, they would be in a "Fair" condition state. For assets that remain in service beyond their useful service life (i.e., ULC% > 100), the probability of failure is assumed to have increased to a point where performance would be characterized as "Poor" or "Very Poor".



Table 3-2: Definition of Condition States with Respect to ULC%

Condition State	ULC%
Very Good	$0\% \leq \text{ULC}\% \leq 45\%$
Good	$45\% < \text{ULC}\% \leq 90\%$
Fair	$90\% < \text{ULC}\% \leq 100\%$
Poor	$100\% < \text{ULC}\% \leq 125\%$
Very Poor	$125\% < \text{ULC}\%$

The distribution of the Municipality's sidewalk network by condition state and surface type is illustrated in Figure 3-2.

Figure 3-2: Sidewalks – Distribution of Assets (Replacement Cost) by Condition State

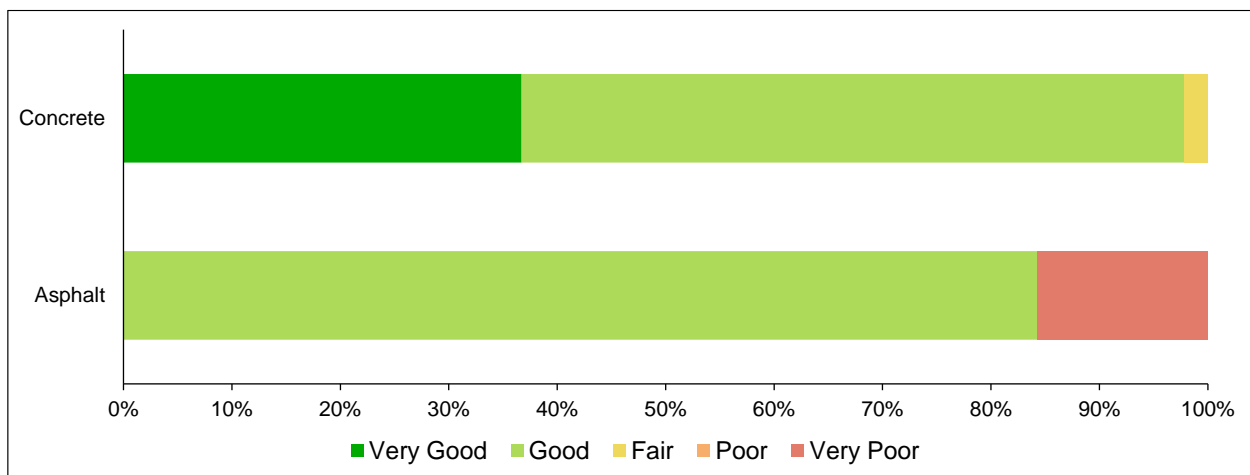
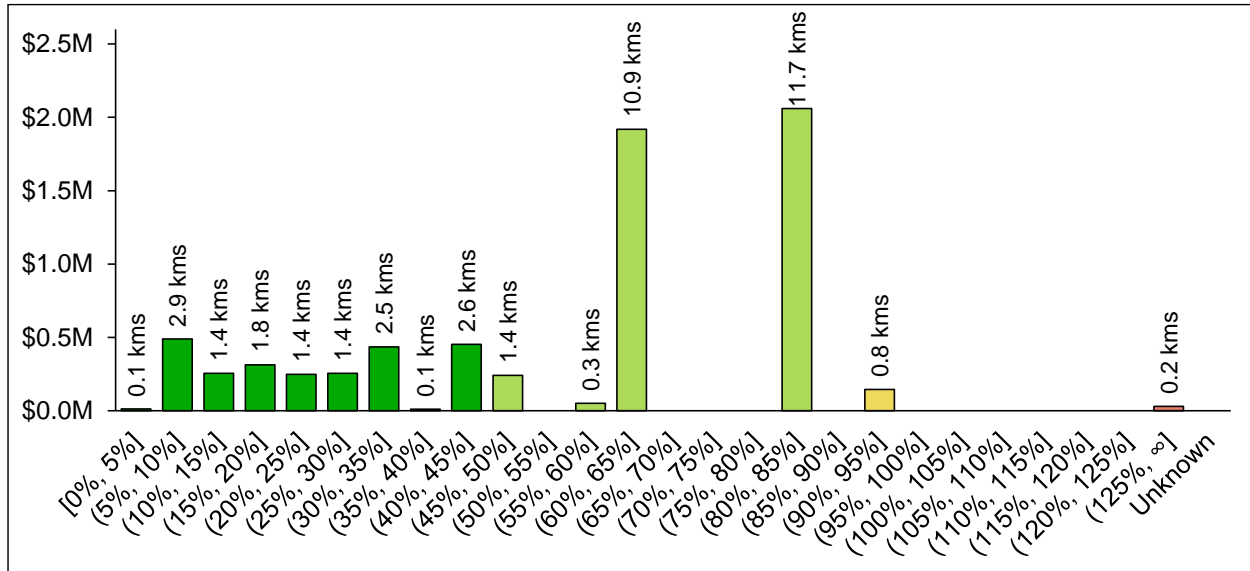


Figure 3-3 illustrates the distribution of sidewalk segments (by replacement cost) based on ULC%.



Figure 3-3: Sidewalks – Distribution of Assets (Replacement Cost) by ULC%



The replacement cost of the Municipality’s pedestrian crossings by condition state is illustrated in Figure 3-4.

Figure 3-4: Pedestrian Crossings – Distribution of Assets (Replacement Cost) by Condition State

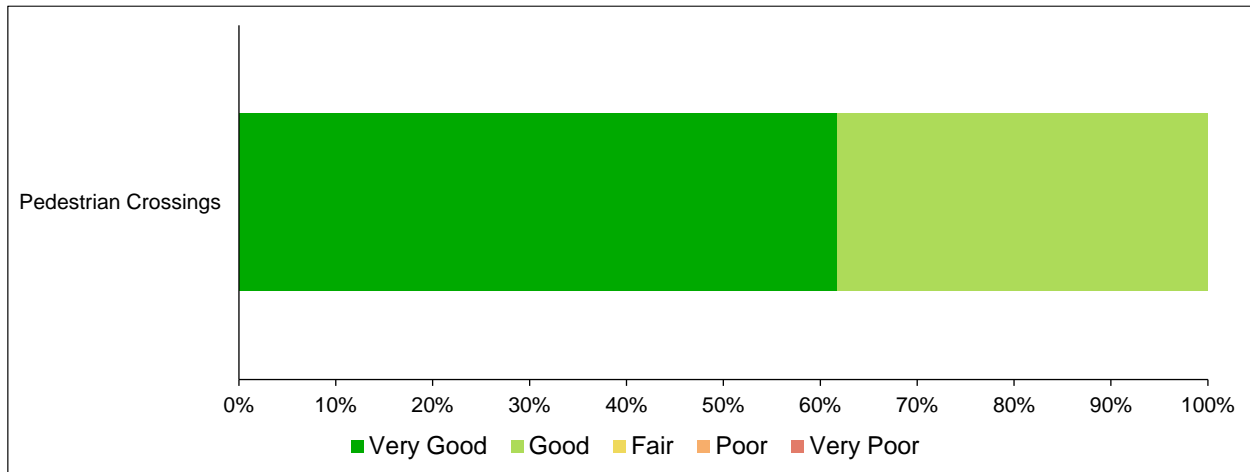
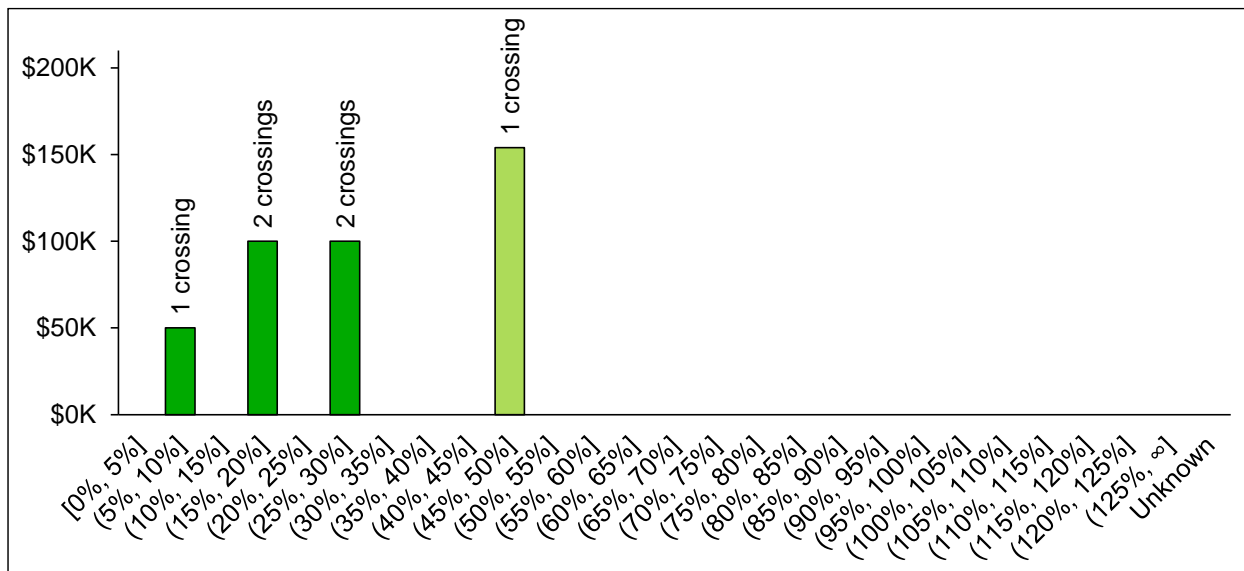


Figure 3-5 illustrates the distribution of sidewalk segments (by replacement cost) based on ULC%.



Figure 3-5: Pedestrian Crossings – Distribution of Assets (Replacement Cost) by ULC%



The Municipality assesses the condition of its regulatory and warning road signs annually by conducting retro-reflectivity testing to ensure compliance with *Ontario Regulation 239/02: Minimum Maintenance Standards for Municipal Highways* (O. Reg. 239/02). Any signs that fail retro-reflectivity testing are replaced as soon as possible and generally prior to the completion of the next annual inspection.

The Municipality assesses the condition of its non-structural culverts, streetlights, and traffic lights through regular staff inspections and by evaluating complaints from residents. All non-structural culverts are inspected prior to construction and upon their initial emplacement to ensure that they are in good working order. Larger non-structural culverts are typically inspected once per calendar year and smaller non-structural culverts are typically inspected in coordination with roads construction projects to evaluate whether replacements are needed. If so, those replacements are bundled within the road construction project. The Municipality is currently developing a formalized inspection and condition assessment protocol for its traffic lights and pedestrian crossings to enable the use of observed condition in the determination of condition ratings as opposed to the age-based condition ratings presented herein.



3.3 Levels of Service

This section provides an overview of the Municipality’s level of service framework for its road-related assets. Table 3-3 summarizes the community levels of service and Table 3-4 summarizes the technical levels of service for this asset class. Additional levels of service measures for the Municipality’s sidewalk network as well as levels of service measures for the Municipality’s other road-related assets are included in Appendix A as “Data-Deferred” measures as there is insufficient data available at this time to quantify current performance. These measures will be incorporated directly into future iterations of this asset management plan.

Table 3-3: Road-related Assets – Community Levels of Service

Service Attribute	Community Levels of Service
Safety	The Municipality prioritizes the safety of its sidewalk network.
Reliability	The Municipality strives to maintains its road-related assets in adequate condition to continue performing as intended.

Table 3-4: Road-related Assets – Technical Levels of Service

Service Attribute	Technical Levels of Service	Current Performance
Safety	Percentage of sidewalk repairs that met the requirements of O. Reg. 239/02.	100%
Reliability	Percentage of sidewalk segments (by replacement cost) in “Fair” or better condition.	99.6%
	Percentage of pedestrian crossings (by replacement cost) in “Fair” or better condition.	100%



3.4 Lifecycle Management Strategy

Table 3-5 summarizes the Municipality’s lifecycle management strategy for its sidewalk network.

Table 3-5: Sidewalk Network – Lifecycle Management Strategy

Sidewalk Network	
Inspections and Condition Assessments	The Municipality identifies sidewalk deficiencies by through regular assessments made by staff and by evaluating comments received from the public.
Major Operating Lifecycle Activities	The Municipality engages in the following maintenance activities to ensure its sidewalks continue to perform as intended: <ul style="list-style-type: none">• Marking of deficiencies: identified deficiencies are immediately marked with paint to alert users’ attention to the deficiency.• Treatment of minor deficiencies: minor deficiencies include trip hazards, cracks and asphalt repairs, over-vegetation, and pathway obstructions. Trip hazards are treated by grinding down the trip edges.
Major Capital Lifecycle Activities	The Municipality replaces sidewalks to treat sidewalk segments beyond repair. Replacements of sidewalk segments are typically coordinated with major road construction projects and/or major construction projects for underground infrastructure.
Prioritization of Short-Term Lifecycle Needs	The Municipality prioritizes short-term lifecycle needs for its sidewalks based on assessments of risk, with trip hazards exceeding 2 cm in vertical height being given the highest priority.



Sidewalk Network	
Identification of Growth-Related Lifecycle Needs	The Municipality analyzes growth forecasts through its Development Charges background study and Transportation Master Plan to determine the need to construct new sidewalks or extend existing sidewalk segments. Direct engagement with residents through public consultations is also conducted as part of the master planning process to understand community requirements.

3.5 Financial Summary and Forecast

Based on the lifecycle activities outlined in the previous section, an estimate of the annual funding requirement and forecast of lifecycle expenditures was developed for the Municipality’s road-related assets.

The total average annual lifecycle cost for the Municipality’s road-related assets is estimated to be approximately \$155,000. Concrete sidewalks represent the largest share of this average annual lifecycle cost at approximately \$134,000, followed by pedestrian crossing at approximately \$13,000, and lastly, asphalt sidewalks at approximately \$8,000. These average annual lifecycle costs represent the long-term annual funding target for the Municipality to achieve full lifecycle funding levels for this asset class.

Table 3-6 lists the average annual lifecycle cost for the Municipality’s road-related assets. This information is further illustrated in Figure 3-6.



Table 3-6: Road-related Assets – Average Annual Lifecycle Cost

Asset Sub-Class	Replacement Cost (2024\$)	Avg. Annual Lifecycle Cost (2024\$)
Concrete Sidewalks	\$6,722,000	\$134,000
Pedestrian Crossings	\$403,000	\$13,000
Asphalt Sidewalks	\$191,000	\$8,000
Total	\$7,316,000	\$155,000

Figure 3-6: Road-related Assets – Average Annual Lifecycle Cost (2024\$)

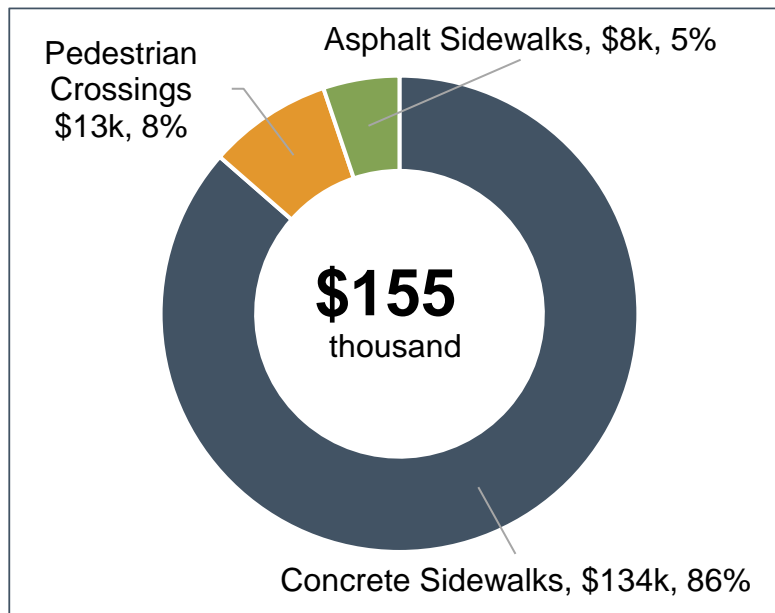


Table 3-7 provides a summary of the 10-year lifecycle expenditure forecast for the Municipality’s road-related assets and this information is further illustrated in Figure 3-7. This forecast includes an annual allowance which is based on the average annual lifecycle cost for this asset class. The lifecycle expenditure requirement for the Municipality’s sidewalk network over the next 10 years is forecasted to total approximately \$1.6 million. Based on the best information available on the Municipality’s assets, the current backlog for the Municipality’s road-related assets is estimated at approximately \$30,000. This represents the current replacement value of assets that have been identified as being in use past their useful service life expectations. There is currently insufficient information available to develop a financial forecast for the Municipality’s regulatory and warning road signs, non-structural culverts,



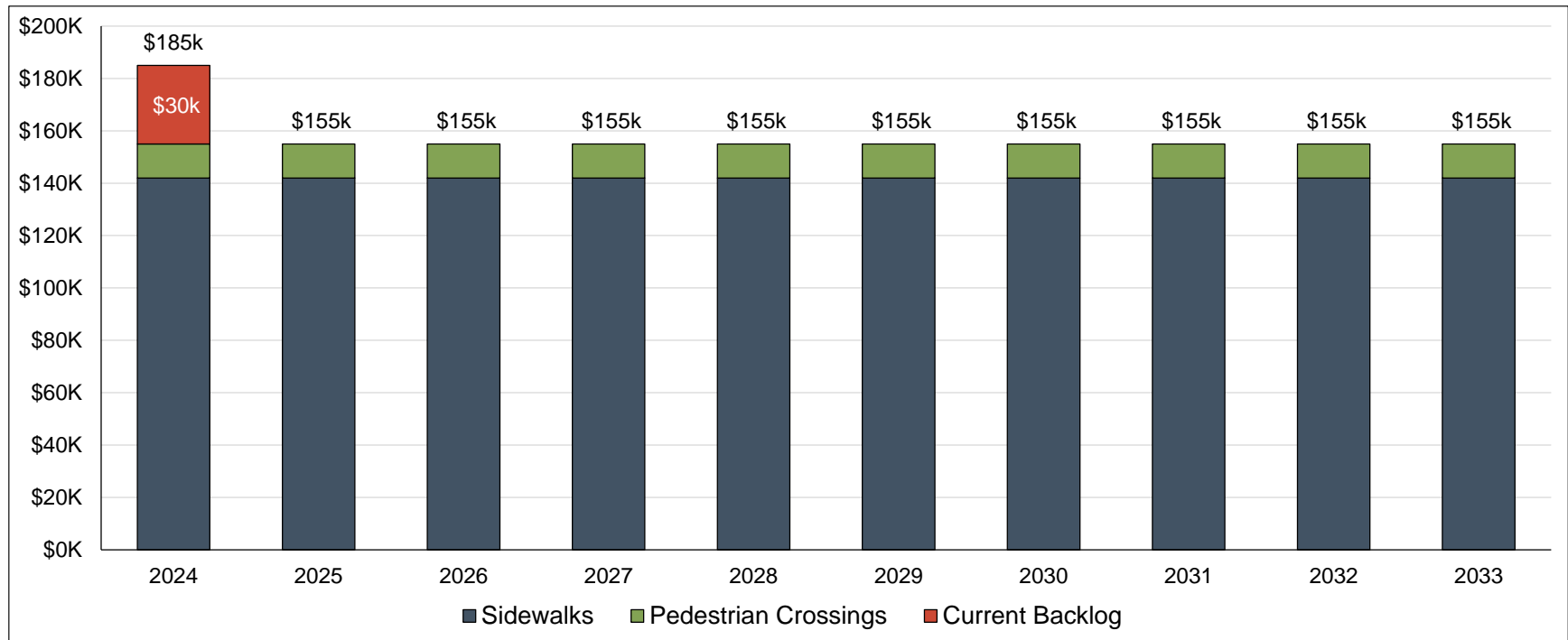
streetlights, and traffic lights. These assets will be examined more closely in the development of the Municipality's upcoming comprehensive asset management plan to meet requirements of the July 1, 2025 deadline of O. Reg. 588/17.



Table 3-7: Road-related Assets– Financial Forecast (2024\$)

	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Sidewalks	\$142,000	\$142,000	\$142,000	\$142,000	\$142,000	\$142,000	\$142,000	\$142,000	\$142,000	\$142,000
Pedestrian Crossings	\$12,000	\$12,000	\$12,000	\$12,000	\$12,000	\$12,000	\$12,000	\$12,000	\$12,000	\$12,000
Backlog	\$30,000	-	-	-	-	-	-	-	-	-
TOTAL	\$185,000	\$155,000	\$155,000	\$155,000	\$155,000	\$155,000	\$155,000	\$155,000	\$155,000	\$155,000

Figure 3-7: Road-related Assets – Financial Summary (2024\$)





Chapter 4

Fleet and Equipment



4. Fleet and Equipment

4.1 State of Local Infrastructure

The Municipality's inventory of fleet assets comprises plated vehicles ranging from small passenger vehicles and pickup trucks to large dump trucks and fire apparatus such as tankers, pumpers, and rescue vehicles. The Municipality's inventory of equipment assets comprises heavy equipment such as graders, tractors, commercial mowers, and smaller pieces of equipment such as generators, steamers, sidewalk machines, landfill weigh scales, ice resurfacers, trailers, and electronics utilized in arenas. The inventory also includes equipment utilized by the Fire Department such as bunker gear, boots, helmets, hoses, radios, extrication equipment, etc. The Municipality currently owns and manages a total of 817 fleet and equipment assets.

The current replacement cost of the Municipality's fleet and equipment assets is estimated at approximately \$24.4 million. Assets utilized by the Public Works Department represent the largest share of total replacement cost at approximately \$9.8 million, followed by assets utilized by the Fire Department at approximately \$8.8 million, assets utilized by the Parks and Recreation Department at approximately \$4.2 million, and assets utilized in the delivery of water and wastewater services at approximately \$783,000. The combined replacement cost of assets utilized by other departments in the Municipality is approximately \$901,000. The average age of all of the Municipality's fleet and equipment assets is approximately 14.3 years.

Error! Reference source not found. summarizes the quantity, average age, and estimated current replacement cost of the Municipality's fleet and equipment assets by department. This information is further illustrated in **Error! Reference source not found.**

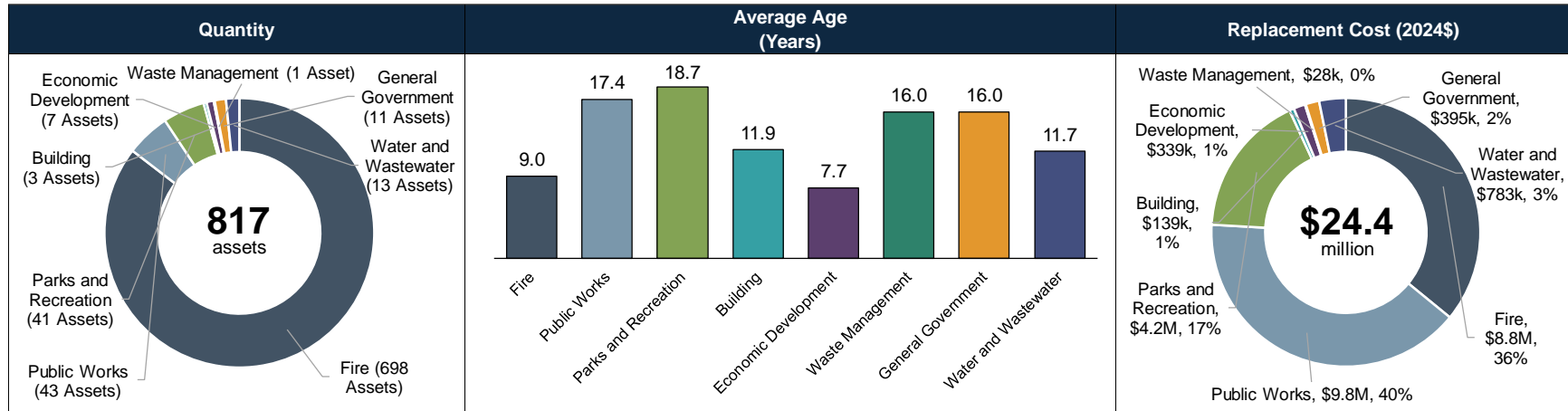


Table 4-1: Fleet and Equipment – Quantity, Average Age, and Replacement Cost

Department	Quantity	Average Age (Years)	Replacement Cost (2024\$)
Public Works	43	17.4	\$9,778,000
Fire	698	9.0	\$8,781,000
Parks and Recreation	41	18.7	\$4,205,000
Water and Wastewater	13	11.7	\$783,000
General Government	11	16.0	\$395,000
Economic Development	7	7.7	\$339,000
Building	3	11.9	\$139,000
Waste Management	1	16.0	\$28,000
Total	817	14.3	\$24,448,000



Figure 4-1: Fleet and Equipment – Quantity, Average Age, and Replacement Cost





4.2 Condition

The condition of the Municipality’s fleet and equipment assets is assessed based on age relative to useful service life (i.e. based on the percentage of useful service life consumed (ULC%)). A brand-new vehicle or piece of equipment would have a ULC% of 0%, indicating that none of the asset’s life expectancy has been utilized. On the other hand, a vehicle or piece of equipment that has reached the end of its life expectancy would have a ULC% of 100%. It is possible for vehicles and pieces of equipment to have a ULC% greater than 100%, which occurs if the 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 near or beyond their typical useful service life expectancy are likely to require replacement or rehabilitation in the near term and may have increasing repair and maintenance costs.

To better communicate the condition of vehicles and equipment, ULC% ratings have been segmented into qualitative condition states as summarized in the Table 4-2. The scale is set to show that if assets are replaced at the end of their expected useful service life, they would be in a “Fair” condition state. For assets that remain in service beyond their useful service life (i.e., $ULC\% > 100$), the probability of failure is assumed to have increased to a point where performance would be characterized as “Poor” or “Very Poor”.

Table 4-2: Definition of Condition States with Respect to ULC%

Condition State	ULC%
Very Good	$0\% \leq ULC\% \leq 45\%$
Good	$45\% < ULC\% \leq 90\%$
Fair	$90\% < ULC\% \leq 100\%$
Poor	$100\% < ULC\% \leq 125\%$
Very Poor	$125\% < ULC\%$

The replacement cost of the Municipality’s fleet and equipment assets by condition state and department is illustrated in Figure 4-2.



Figure 4-2: Fleet and Equipment – Distribution of Assets (Replacement Cost) by Condition State and Department

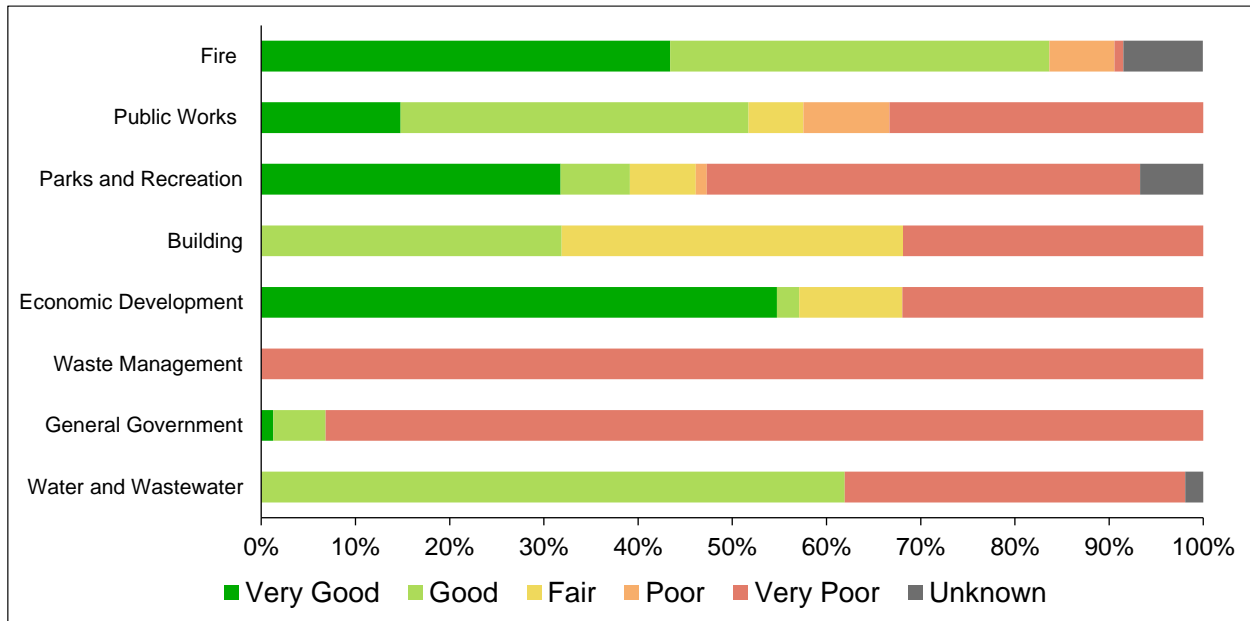
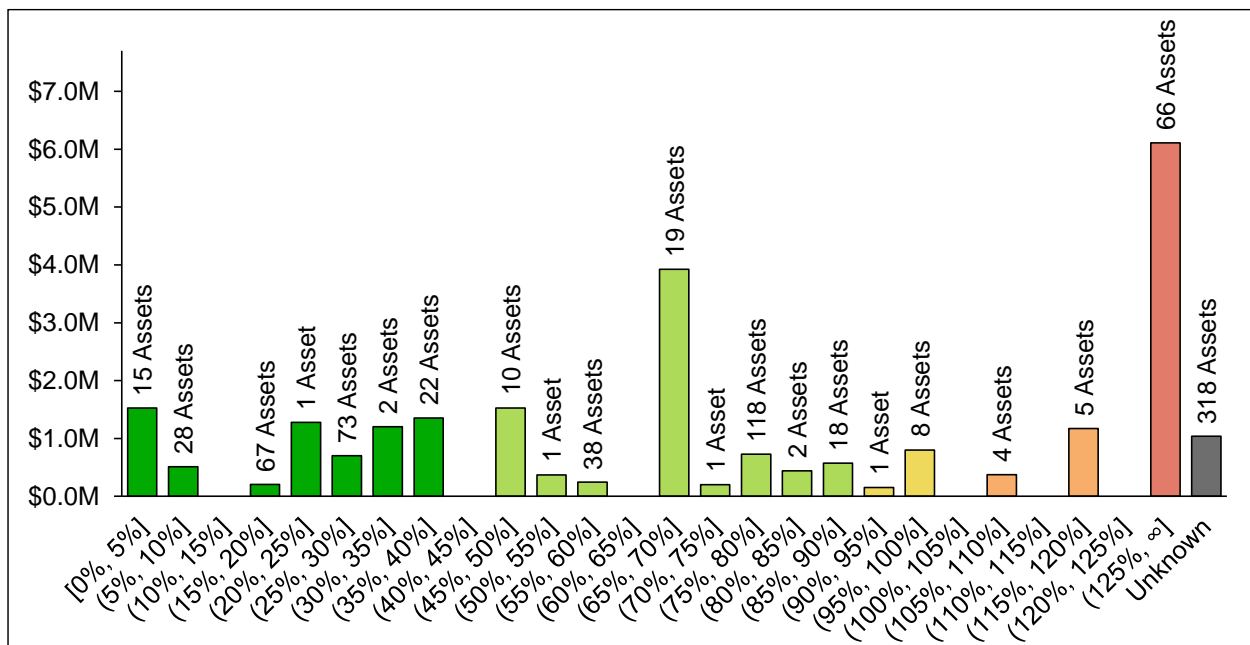


Figure 4-3 illustrates the distribution of fleet and equipment assets (by replacement cost) based on ULC%.

Figure 4-3: Fleet and Equipment – Distribution of Fleet Assets (Replacement Cost) by ULC%





4.3 Levels of Service

This section provides an overview of the Municipality’s level of service framework for fleet and equipment. Table 4-3 summarizes the community levels of service and **Error! Reference source not found.** summarizes the technical levels of service. Additional levels of service measures for the Municipality’s fleet and equipment assets are included in Appendix A as “Data-Deferred” measures as there is insufficient data available at this time to quantify current performance. These measures will be incorporated directly into future iterations of this asset management plan.

Table 4-3: Fleet and Equipment – Community Levels of Service

Service Attribute	Community Levels of Service
Safety	The Municipality regularly inspects its fleet and equipment assets to ensure they are safe for use.
Reliability	The Municipality strives to minimize the number and impact of unplanned repair/maintenance activities performed on its fleet and equipment assets.

Table 4-4: Fleet and Equipment – Technical Levels of Service

Service Attribute	Technical Levels of Service	Current Performance
Safety	Percentage of commercial fleet assets and fire apparatus that underwent at least one inspection in the calendar year.	100%
Reliability	Replacement cost of fleet and equipment assets in use beyond their optimal service life standards compared to the replacement cost of all fleet assets.	31%



4.4 Lifecycle Management Strategy

Table 4-5 summarizes the Municipality’s lifecycle management strategy for its fleet and equipment assets.

Table 4-5: Fleet and Equipment – Lifecycle Management Strategy

Fleet and Equipment	
Inspections and Condition Assessments	<p>The Municipality has several inspection programs for its fleet and equipment assets as follows:</p> <ul style="list-style-type: none">• Commercial fleet assets are inspected annually as part of their CVOR renewal requirements.• Light-duty vehicles are inspected as part of their regular servicing.• Fire apparatus and pumps are inspected annually as part of their certification requirements. Aerial devices undergo non-destructive x-ray testing every 5 years.• Non-plated heavy equipment assets undergo “circle-checks” by municipal staff prior to use.
Major Operating Lifecycle Activities	<p>The Municipality conducts regular servicing, on-going maintenance, and as-needed repairs on its fleet and equipment assets to preserve their service life. Preventative maintenance, such as periodic power-washing and undercoating, is performed on fleet assets to reduce the frequency of unplanned repairs and their impacts on service delivery.</p> <p>The following are examples of major maintenance activities the Municipality engages in to ensure its fleet and equipment assets continue to perform as intended:</p> <ul style="list-style-type: none">• Timely replacement of cutting edges on graders, snowplows, mowers, etc.• Timely replacement of worn sweeper brushes.• Timely replacement of worn tires.



Fleet and Equipment	
Major Capital Lifecycle Activities	The Municipality replaces fleet and equipment assets that have reached the end of their service lives, are unable to meet annual certification requirements, or have uneconomical repair costs.
Prioritization of Short-Term Lifecycle Needs	Highest priority is given to repairing breakdowns of critical fleet assets, such as fire apparatus and snowplows, to minimize impact on public safety. Other short-term lifecycle needs are prioritized by measuring impacts on service delivery of affected assets.
Identification of Growth-Related Lifecycle Needs	The Municipality analyzes growth forecasts through its Development Charges background study and key performance metrics, such as number of plows compared to the total lane kilometers of roadways, to determine the need for additional fleet or equipment assets. The Municipality also relies on the Fire Underwriters Survey and evolving N.F.P.A. standards to provide recommendations on upgrades to fire apparatus based on size of community and changing nature of structure fires.

4.5 Financial Summary and Forecast

Based on the lifecycle activities outlined in the previous section, an estimate of the annual funding requirement and forecast of lifecycle expenditures was developed for the Municipality's fleet and equipment assets.

Average annual lifecycle cost for the Municipality's fleet and equipment assets is estimated to be approximately \$1.6 million. Assets utilized by the Public Works Department represent the largest share of this average annual lifecycle cost at approximately \$586,000, followed by assets utilized by the Fire Department at approximately \$541,000, assets utilized by the Parks and Recreation Department at approximately \$331,000, and assets utilized in the delivery of water and wastewater services at approximately \$82,000. The combined average annual lifecycle cost of assets utilized by other departments in the Municipality is approximately \$99,000. Table



4-6 lists the average annual lifecycle cost for the Municipality’s fleet and equipment assets by department. This information is further illustrated in Figure 4-4.

Table 4-6: Fleet and Equipment – Average Annual Lifecycle Cost (2024\$)

Department	Replacement Cost (2024\$)	Average Annual Lifecycle Cost (2024\$)
Public Works	\$9,778,000	\$586,000
Fire	\$8,781,000	\$541,000
Parks and Recreation	\$4,205,000	\$331,000
Water and Wastewater	\$783,000	\$82,000
General Government	\$395,000	\$48,000
Economic Development	\$339,000	\$34,000
Building	\$139,000	\$14,000
Waste Management	\$28,000	\$3,000
Total	\$24,448,000	\$1,639,000

Figure 4-4: Fleet and Equipment – Average Annual Lifecycle Cost (2024\$)

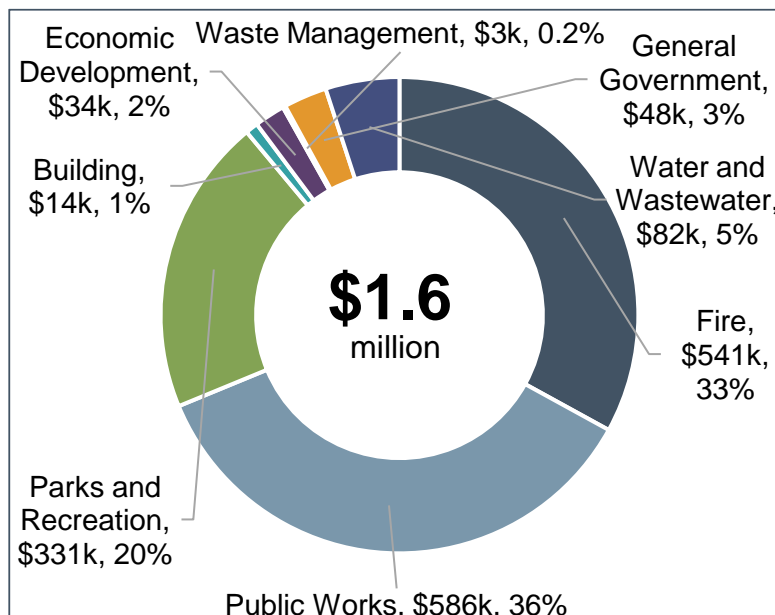


Table 4-7 provides a summary of the 10-year lifecycle expenditure forecast for the Municipality’s fleet and equipment assets this information is further illustrated in Figure



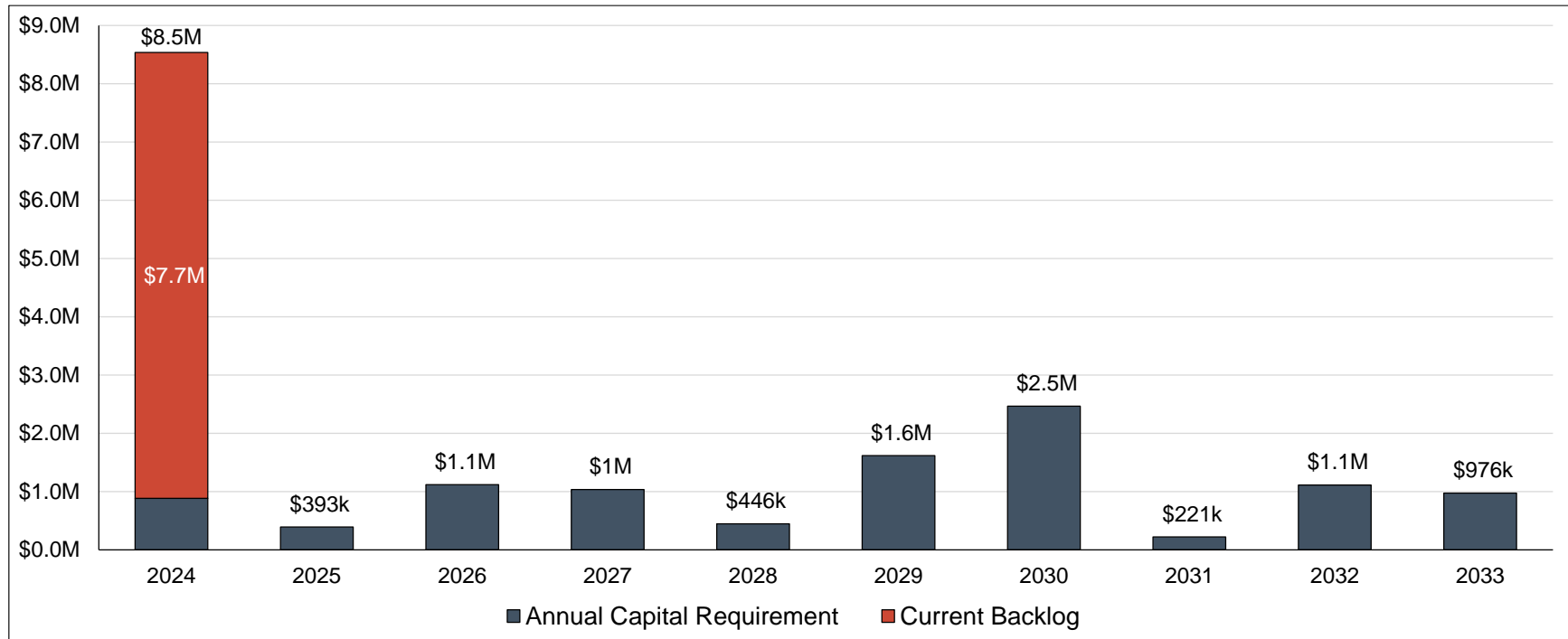
4-5. This forecast was derived by conducting age-based lifecycle modelling for all fleet and equipment assets. Based on this forecast, the non-growth related lifecycle expenditure requirement for the Municipality's fleet and equipment assets over the next 10 years is expected to total approximately \$17.9 million. Based on the best information available on the Municipality's assets, the current backlog for the Municipality's fleet and equipment assets is estimated at approximately \$7.7 million. This represents the current replacement value of all fleet and equipment assets that are in use beyond their expected useful service lives. It is important to note that this approach does not capture any rehabilitation activities that may have been performed on the assets over the course of their lifecycles. It is recommended that the Municipality re-examine the identified backlog using observed condition of assets. If assets are found to be performing adequately and as intended, they should be removed from the identified backlog. This will be addressed in the next iteration of the Municipality's asset management plan.



Table 4-7: Fleet and Equipment – Financial Forecast (2024\$)

	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Annual Capital Requirement	\$884,000	\$393,000	\$1,119,000	\$1,035,000	\$446,000	\$1,618,000	\$2,467,000	\$221,000	\$1,114,000	\$976,000
Backlog	\$7,654,000	-	-	-	-	-	-	-	-	-
Total Expenditures	\$8,538,000	\$393,000	\$1,119,000	\$1,035,000	\$446,000	\$1,618,000	\$2,467,000	\$221,000	\$1,114,000	\$976,000

Figure 4-5: Fleet and Equipment – Financial Summary (2024\$)





Chapter 5

Facilities



5. Facilities

5.1 State of Local Infrastructure

The Municipality owns 22 facilities (excluding water and wastewater facilities) that support the delivery of various municipal services. These facilities include administrative facilities, fire stations, libraries, Public Works facilities, Parks and Recreation facilities, and childcare facilities.

The current replacement cost of Municipality's facilities is estimated at approximately \$97.2 million. Parks and Recreation Facilities represent the largest share of replacement cost at approximately \$60.1 million, followed by Public Works Facilities at approximately \$11.3 million, fire stations at approximately \$9.2 million, libraries at approximately \$7.3 million, childcare facilities at approximately \$6.0 million, and lastly, administrative facilities at approximately \$3.4 million. The average age across all of the Municipality's facilities is approximately 52 years.

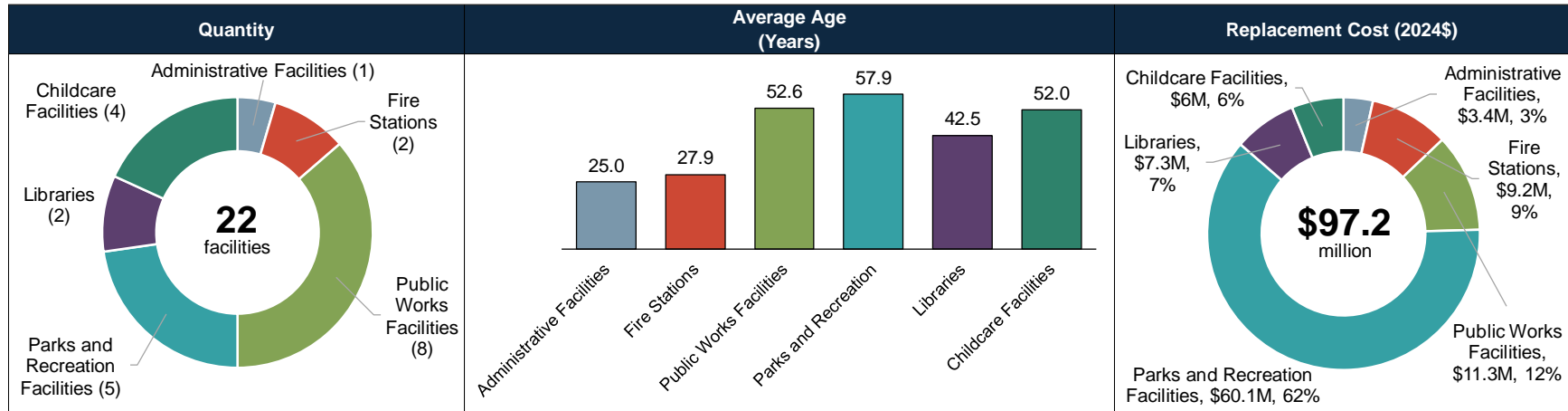
Table 5-1 summarizes the quantity, age, and estimated current replacement cost of the Municipality's facilities by service area. This information is further illustrated in Figure 5-1.

Table 5-1: Facilities – Quantity, Average Age, and Replacement Cost

Service Area	Quantity	Average Age (Years)	Replacement Cost (2024\$)
Parks and Recreation Facilities	5	57.9	\$60,101,000
Public Works Facilities	8	52.6	\$11,313,000
Fire Stations	2	27.9	\$9,151,000
Libraries	2	42.5	\$7,263,000
Childcare Facilities	4	52.0	\$5,990,000
Administrative Facilities	1	25.0	\$3,392,000
Total	22	51.8	\$97,210,000



Figure 5-1: Facilities – Quantity, Average Age, and Replacement Cost





5.2 Condition

The Municipality assesses the condition of its facilities through BCAs completed by an external service provider. The BCAs identify repair, maintenance, rehabilitation, and replacement requirements for the Municipality’s facilities at a component level over a 10-year forecast horizon. As part of the BCAs, individual facility components are inspected and the assessors assign a remaining useful life to each component based on the observed condition. Facility Condition Index (FCI) ratings are also calculated to provide an overall measure of each facility’s condition. FCI ratings are calculated by forecasting the repair, maintenance, rehabilitation, and replacement requirements for each building over a 10-year forecast horizon and expressing the sum of forecasted requirements as a percentage of the replacement cost of the facility.

The Municipality last completed BCAs on its facilities in 2014 and plans to update those BCAs following the completion of this asset management plan. Future iterations of this asset management plan will utilize the component level analyses that will be completed as part of the updated BCAs to inform the condition ratings of the Municipality’s facilities.

5.3 Levels of Service

This section provides an overview of the Municipality’s level of service framework for facilities. Table 5-2 summarizes the community levels of service and Table 5-3 summarizes the technical levels of service. Additional levels of service measures for the Municipality’s facilities are included in Appendix A as “Data-Deferred” measures as there is insufficient data available at this time to quantify current performance. These measures will be incorporated directly into future iterations of this asset management plan.

Table 5-2: Facilities – Community Levels of Service

Service Attribute	Community Levels of Service
Safety	The Municipality prioritizes the safety of all users of its facilities.



Table 5-3: Facilities – Technical Levels of Service

Service Attribute	Technical Levels of Service	Current Performance
Safety	Percentage of staffed facilities that undergo monthly health and safety inspections.	100%

5.4 Lifecycle Management Strategy

Table 5-4 summarizes the Municipality’s lifecycle management strategy for its facilities.

Table 5-4: Facilities – Lifecycle Management Strategy

Facilities	
Inspections and Condition Assessments	<p>As required by the Occupational Health and Safety Act, staffed facilities undergo monthly health and safety inspections performed by municipal staff. All life safety systems in facilities undergo annual inspections to ensure they are performing adequately.</p> <p>The Municipality also has on-going preventative maintenance programs in place with external vendors for critical equipment assets within its facilities (e.g. refrigeration plants, electrical systems, elevators, safety systems, filtration systems, etc.). Routine inspections on critical equipment assets are performed as part of these preventative maintenance programs.</p>
Major Operating Lifecycle Activities	<p>The Municipality conducts on-going maintenance and as-needed repairs to its facilities, and the equipment assets within, to sustain adequate levels of service and reduce the potential for facility closures. Minor equipment assets (e.g. floor scrubbers/cleaning machines) are replaced as required to prevent service interruptions.</p>
Major Capital Lifecycle Activities	<p>Staff review the condition of facility components on an on-going basis to identify rehabilitation and replacement needs for</p>



Facilities	
	facilities and the equipment assets within. Rehabilitation and replacement projects are undertaken to address facility components and equipment assets that have reached the end of their service lives, are not performing as originally intended, and/or have uneconomical maintenance and repair costs.
Prioritization of Short-Term Lifecycle Needs	The Municipality identifies short-term lifecycle needs through its various inspection programs and staff assessments. Highest priority is given to health and safety issues, followed by issues that significantly impact service delivery and/or affect staff's ability to perform their duties.
Identification of Growth-Related Lifecycle Needs	Through its upcoming Space Needs Analysis Study, Community Services Master Plan, and Fire Master Plan, the Municipality analyzes growth forecasts and shifts in demographics to determine whether current capacity can support the projected service demands of the community. Direct engagement with residents through public surveys is also conducted as part of the master planning process to ensure that internal priorities align with residents' expectations.

5.5 Financial Summary and Forecast

To develop an estimate of the annual funding requirement and forecast of capital and significant operating expenditures for the Municipality's facilities, an annual reinvestment rate of 2.1% was applied to the replacement cost of each facility. This annual reinvestment rate represents the mid-point of the annual reinvestment rate target range (1.7% - 2.5%) presented in the *2016 Canadian Infrastructure Report Card* and aims to ensure that sufficient funds are allocated annually to fund annual capital requirements and allow for the building up of lifecycle reserves.

Average annual lifecycle cost for the Municipality's facilities is estimated to be approximately \$2.0 million. Parks and Recreation Facilities represent the largest share of this average annual lifecycle cost at approximately \$1.3 million, followed by Public Works Facilities at approximately \$238,000, fire stations at approximately \$192,000,



libraries at approximately \$153,000, childcare facilities at approximately \$126,000, and lastly, the administrative facilities at approximately \$71,000. Table 5-5 lists the average annual lifecycle cost for the Municipality’s facilities assets by service area. This information is further illustrated in Figure 5-2.

Table 5-5: Facilities – Average Annual Lifecycle Cost

Service Area	Replacement Cost (2024\$)	Average Annual Lifecycle Cost (2024\$)
Parks and Recreation Facilities	\$60,101,000	\$1,262,000
Public Works Facilities	\$11,313,000	\$238,000
Fire Stations	\$9,151,000	\$192,000
Libraries	\$7,263,000	\$153,000
Childcare Facilities	\$5,990,000	\$126,000
Administrative Facilities	\$3,392,000	\$71,000
Total	\$97,210,000	\$2,042,000

Figure 5-2: Facilities – Average Annual Lifecycle Cost

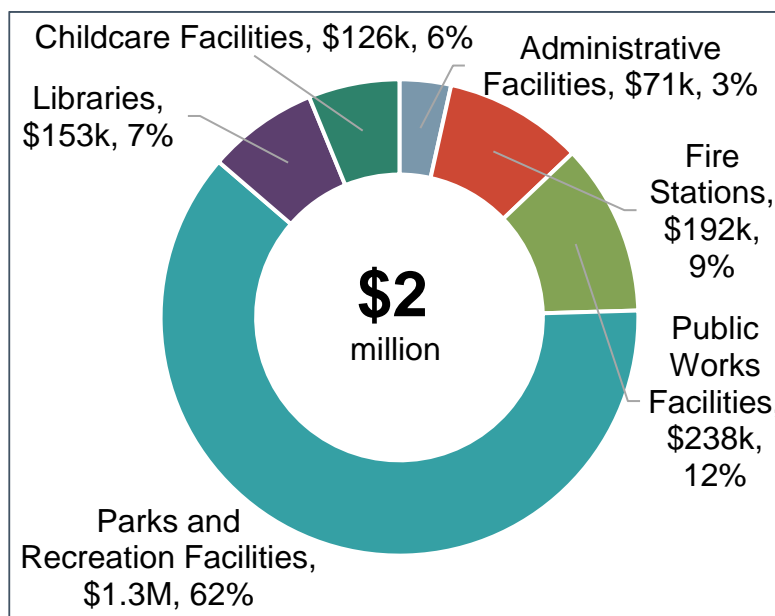


Table 5-6 provides a summary of the 10-year lifecycle expenditure forecast for the Municipality’s facilities and this information is further illustrated in Figure 5-3. This forecast was derived by allocating an annual allowance to each year of the forecast to ensure the Municipality achieves full lifecycle funding levels for its facilities. Based on



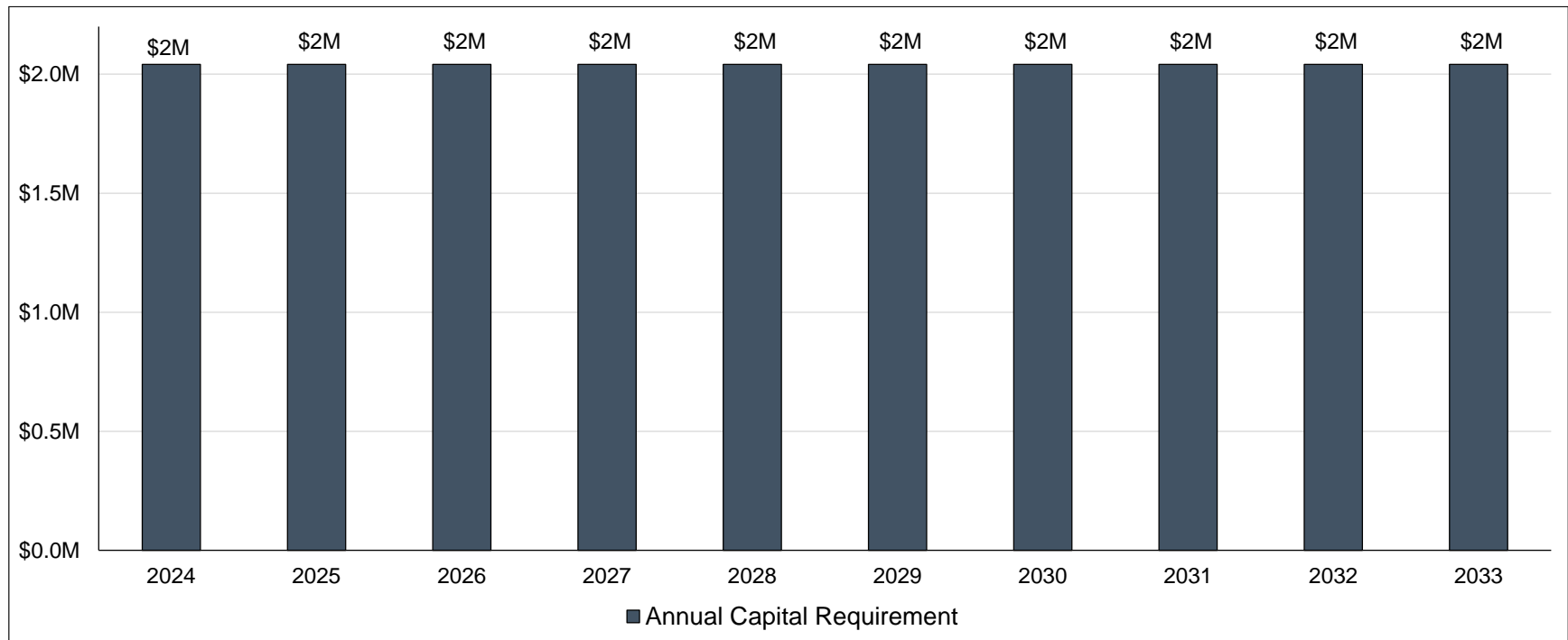
this forecast, the non-growth related lifecycle expenditure requirement for the Municipality's facilities over the next 10 years is expected to total approximately \$19.6 million. Future iterations of this asset management plan will utilize the component level forecasts developed through the BCAs to inform the 10-year forecasts of capital and significant operating needs.



Table 5-6: Facilities – Financial Forecast (2024\$)

	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Annual Capital Requirement	\$2,041,000	\$2,041,000	\$2,041,000	\$2,041,000	\$2,041,000	\$2,041,000	\$2,041,000	\$2,041,000	\$2,041,000	\$2,041,000

Figure 5-3: Facilities – Financial Summary (2024\$)





Chapter 6

Parks and Recreation



6. Parks and Recreation

6.1 State of Local Infrastructure

The Municipality's inventory of Parks and Recreation assets comprises sports fields and courts, park furnishings, play equipment, trails and boardwalks, and shelters and structures. Through its Community Services Master Plan, the Municipality is currently undergoing a process to refine its Parks and Recreation asset inventories. These refined asset inventories will be integrated into the upcoming iteration of this asset management plan.

The current replacement cost of the Municipality's Parks and Recreation assets is estimated at approximately \$7.1 million. Sports fields and courts represent the largest share of replacement cost at approximately \$3.3 million, followed by park furnishings at approximately \$1.8 million, trails and boardwalks at approximately \$1.2 million, play equipment at approximately \$613,000, and lastly, shelters and structures at approximately \$192,000. The average age of the Municipality's Parks and Recreation assets is approximately 22.1 years.

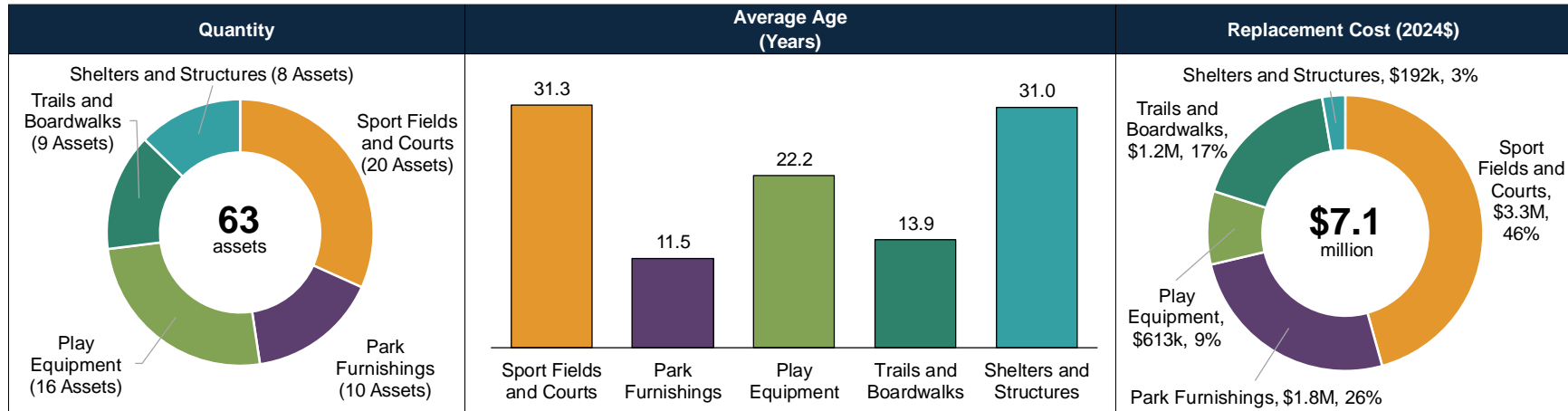
Table 6-1 summarizes the current replacement cost of the Municipality's Parks and Recreation by asset sub-class. This information is further illustrated in Figure 6-1.

Table 6-1: Parks and Recreation – Quantity, Average Age, Replacement Cost

Asset Sub-Class	Quantity	Average Age (Years)	Replacement Cost (2024\$)
Sport Fields and Courts	20	31.3	\$3,258,000
Park Furnishings	10	11.5	\$1,828,000
Trails and Boardwalks	9	13.9	\$1,240,000
Play Equipment	16	22.2	\$613,000
Shelters and Structures	8	31.0	\$192,000
Total	63	22.1	\$7,131,000



Figure 6-1: Parks and Recreation – Quantity, Weighted Average Age, and Replacement Cost





6.2 Condition

Similar to the Municipality’s fleet and equipment assets, the condition of the Municipality’s Parks and Recreation assets is based on age relative to useful service life (i.e. based on the percentage of useful service life consumed (ULC%)). A brand-new Parks and Recreation 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 the end of its life expectancy would have a ULC% of 100%. It is possible for assets to have a ULC% greater than 100%, which occurs if the 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 near or beyond their typical useful service life expectancy are likely to require replacement or rehabilitation in the near term and may have increasing repair and maintenance costs.

To better communicate the condition of Parks and Recreation assets, ULC% ratings have been segmented into qualitative condition states as summarized in Table 6-2. The scale is set to show that if assets are replaced at the end of their expected useful service life, they would be in a “Fair” condition state. For assets that remain in service beyond their useful service life (i.e., ULC% > 100), the probability of failure is assumed to have increased to a point where performance would be characterized as “Poor” or “Very Poor”.

Table 6-2: Definition of Condition States with Respect to ULC%

Condition State	ULC%
Very Good	$0\% \leq \text{ULC}\% \leq 45\%$
Good	$45\% < \text{ULC}\% \leq 90\%$
Fair	$90\% < \text{ULC}\% \leq 100\%$
Poor	$100\% < \text{ULC}\% \leq 125\%$
Very Poor	$125\% < \text{ULC}\%$

The replacement cost of the Municipality’s Parks and Recreation assets by condition state and asset sub-class is illustrated in Figure 6-2.



Figure 6-2: Parks and Recreation – Distribution of Assets (Replacement Cost) by Condition State

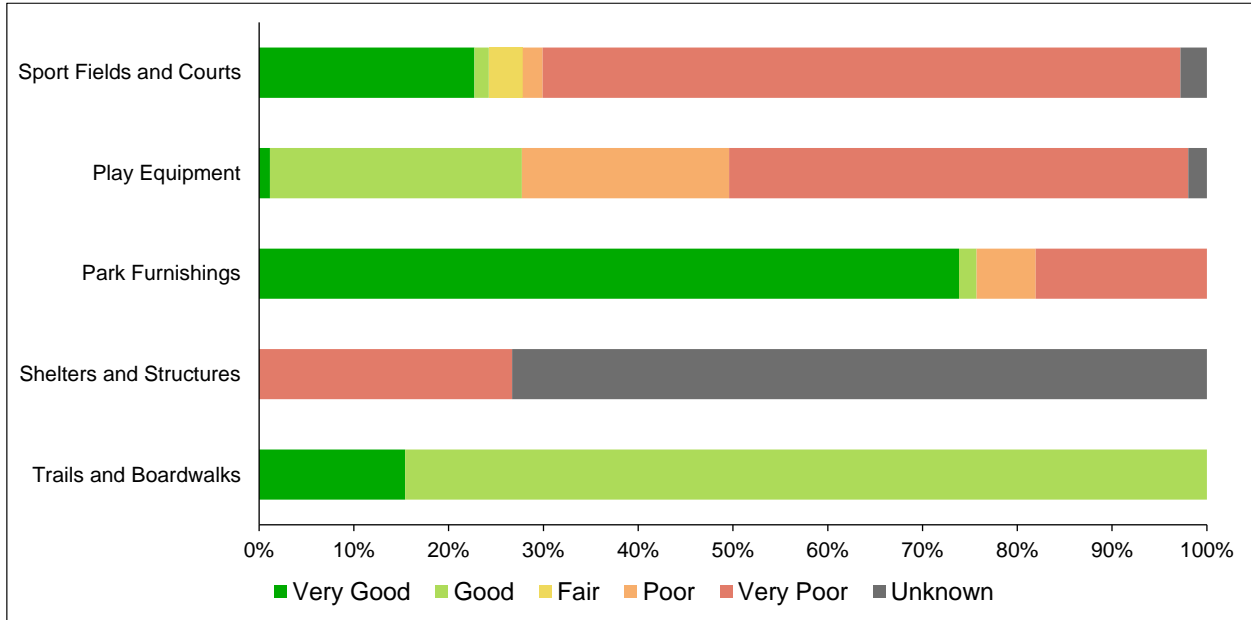
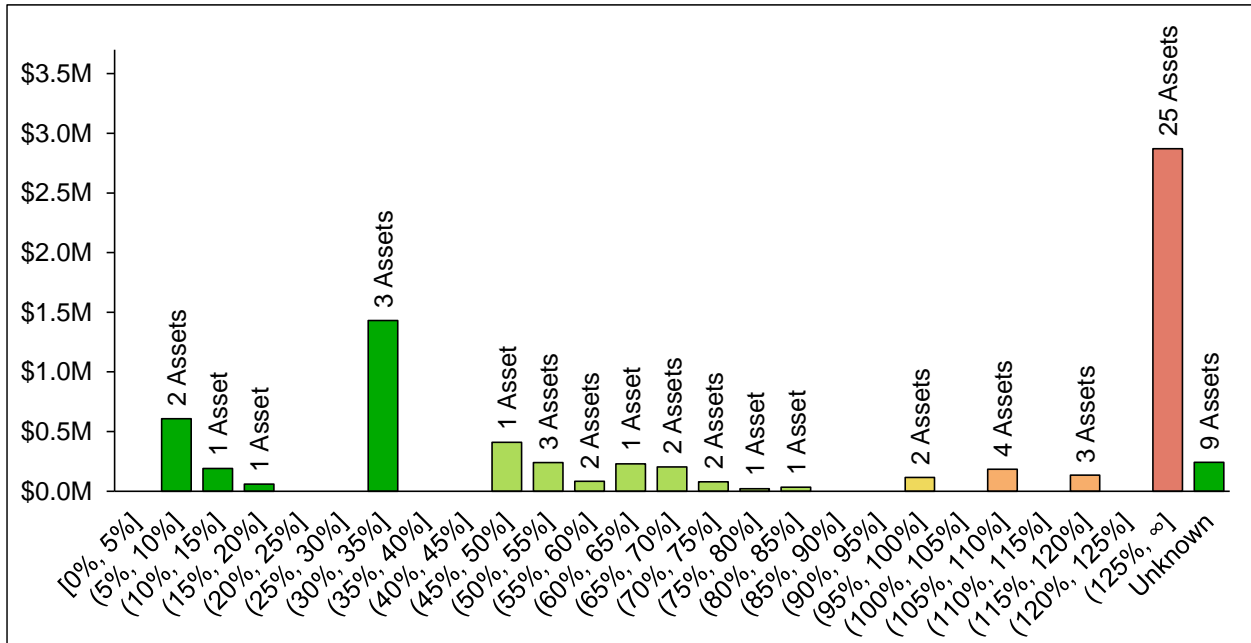


Figure 6-3 illustrates the distribution of Parks and Recreation assets (by replacement cost) based on ULC%.

Figure 6-3: Distribution of Parks and Recreation Assets (Replacement Cost) by ULC%





6.3 Levels of Service

This section provides an overview of the Municipality’s level of service framework for its Parks and Recreation assets. Table 6-3 summarizes the community levels of service and Table 6-4 summarizes the technical levels of service. Additional levels of service measures for the Municipality’s Parks and Recreation assets are included in Appendix A as “Data-Deferred” measures as there is insufficient data available at this time to quantify current performance. These measures will be incorporated directly into future iterations of this asset management plan.

Table 6-3: Parks and Recreation – Community Levels of Service

Service Attribute	Community Levels of Service
Quality	The Municipality strives to maintain its Parks and Recreation assets in adequate condition to continue providing a satisfactory user experience and performing as originally intended.

Table 6-4: Parks and Recreation – Technical Levels of Service

Service Attribute	Technical Levels of Service	Current Performance
Quality	Replacement cost of Parks and Recreation assets in use beyond their optimal service life standards compared to the replacement cost of all Parks and Recreation assets.	46%

6.4 Lifecycle Management Strategy

Table 6-5 summarizes the Municipality’s lifecycle management strategy for its parks and forestry assets.



Table 6-5: Parks and Recreation – Lifecycle Management Strategy

Parks and Forestry	
Inspections and Condition Assessments	<p>The Municipality completes regular inspections of its parks identify issues related to playground maintenance, signage, tree trunk and limb failures, trip hazards, fencing, public seating (benches, bleachers, etc.), picnic shelters, washroom facilities, pedestrian pathways and bridges, trail maintenance, garbage and recycling, etc. In addition, all pieces of playground equipment are verified to conform with Canadian Standards Association (C.S.A.) guidelines prior to their emplacement. The Municipality also evaluates comments received from the public to identify deficiencies.</p>
Major Operating Lifecycle Activities	<p>The Municipality conducts a number of on-going maintenance activities to ensure its parks and playground equipment are well-maintained and continue to meet the expectations of the community. Some of the major maintenance activities are as follows:</p> <ul style="list-style-type: none"> • Grass cutting for all maintained open spaces. • Grass maintenance (aeration, fertilization, applying top dressing, cleaning, etc.). • Grading, painting, crack-sealing, and cleaning of sports fields. • Trail maintenance (grading, brushing, cleaning, etc.). • Snow clearing. • Winterization of splashpads and facilities with running water. • Preventative maintenance to built infrastructure to avoid service interruptions.
Major Capital Lifecycle Activities	<p>The Municipality conducts rehabilitation and replacement projects for parks and playground assets that have reached the end of their service lives, are not performing as originally intended, and/or have uneconomical repair and maintenance</p>



Parks and Forestry	
	<p>costs. Replacements are generally like-for-like unless upgrades are needed to ensure design specification are appropriate to meet service demands.</p> <p>When purchasing replacement or additional playground equipment, the Municipality ensures that the requirements of the Accessibility for Ontarians with Disabilities Act, 2005 are met.</p>
Prioritization of Short-Term Lifecycle Needs	Highest priority is given to treating issues related to health and safety, followed by issues that may cause closures or significant service interruptions. Other lifecycle activities are prioritized by measuring impacts on service delivery of affected assets.
Identification of Growth-Related Lifecycle Needs	Through its Community Services Master Plan, the Municipality analyzes growth forecasts and trends in active transportation use to determine whether purchase of additional playground equipment or construction of new parks and trails is required. Direct engagement with residents through public consultations and surveys is also conducted as part of the master planning process to understand community priorities.

6.5 Financial Summary and Forecast

Based on the lifecycle activities outlined in the previous section, an estimate of the annual funding requirement and forecast of capital expenditures was developed for the Municipality's Parks and Recreation assets.

Average annual lifecycle cost for the Municipality's Parks and Recreation assets is estimated to be approximately \$369,000. Sports fields and courts represent the largest share of this average annual lifecycle cost at approximately \$175,000, followed by park furnishings at approximately \$91,000, trails and boardwalks at approximately \$49,000, play equipment at approximately \$41,000, and lastly, shelters and structures at approximately \$13,000. This average annual lifecycle cost represents the long-term funding target for the Municipality to achieve full lifecycle funding levels for its Parks and Recreation assets. Table 6-6 lists the average annual lifecycle cost for the



Municipality's Parks and Recreation assets by asset sub-class. This information is further illustrated in Figure 6-4.



Table 6-6: Parks and Recreation – Average Annual Lifecycle Cost

Asset Sub-class	Replacement Cost (2024\$)	Average Annual Lifecycle Cost (2024\$)
Sport Fields and Courts	\$3,258,000	\$175,000
Park Furnishings	\$1,828,000	\$91,000
Trails and Boardwalks	\$1,240,000	\$49,000
Play Equipment	\$613,000	\$41,000
Shelters and Structures	\$192,000	\$13,000
Total	\$7,131,000	\$369,000

Figure 6-4: Parks and Recreation – Average Annual Lifecycle Cost

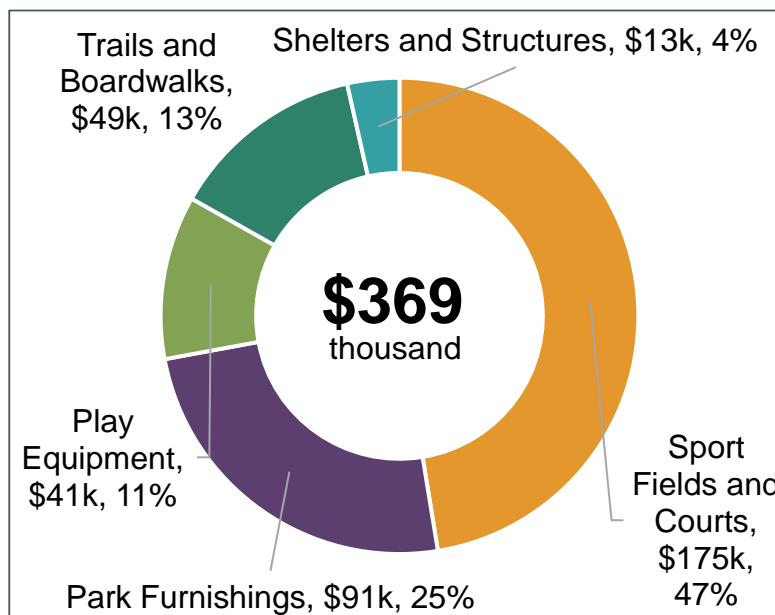


Table 6-7 provides a summary of the 10-year lifecycle expenditure forecast for the Municipality’s Parks and Recreation assets by asset sub-class and this information is further illustrated in Figure 6-5. This forecast was derived by conducting age-based lifecycle modelling for all Parks and Recreation assets. Based on this forecast, the non-growth related lifecycle expenditure requirement for the Municipality’s Parks and Recreation assets over the next 10 years is expected to total approximately \$3.9 million. The average annual expenditures over the 10-year forecast horizon are approximately \$393,000. Based on the best information available on the Municipality’s assets, the current backlog for the Municipality’s Parks and Recreation assets is estimated at approximately \$3.2 million. This represents the current replacement value of all Parks



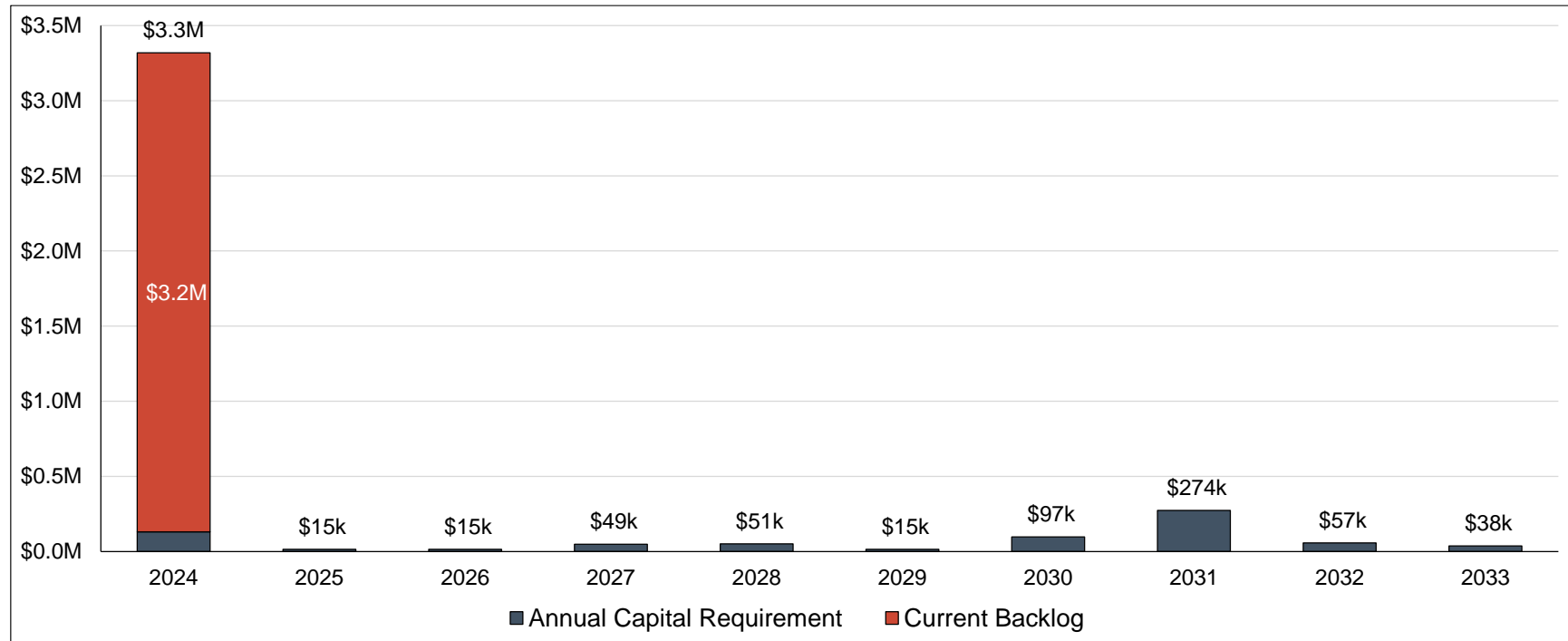
and Recreation assets that are in use beyond their expected useful service lives. It is important to note that this approach does not capture any rehabilitation activities that may have been performed on the assets over the course of their lifecycles. It is recommended that the Municipality re-examine the identified backlog using observed condition of assets. If assets are found to be performing adequately and as intended, they should be removed from the identified backlog. This will be addressed in the next iteration of the Municipality's asset management plan.



Table 6-7: Parks and Recreation – Financial Forecast (2024\$)

	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Annual Capital Requirement	\$131,000	\$15,000	\$15,000	\$49,000	\$51,000	\$15,000	\$97,000	\$274,000	\$57,000	\$38,000
Backlog	\$3,188,000	-	-	-	-	-	-	-	-	-
Total Expenditures	\$3,319,000	\$15,000	\$15,000	\$49,000	\$51,000	\$15,000	\$97,000	\$274,000	\$57,000	\$38,000

Figure 6-5: Parks and Recreation – Financial Summary (2024\$)





Chapter 7

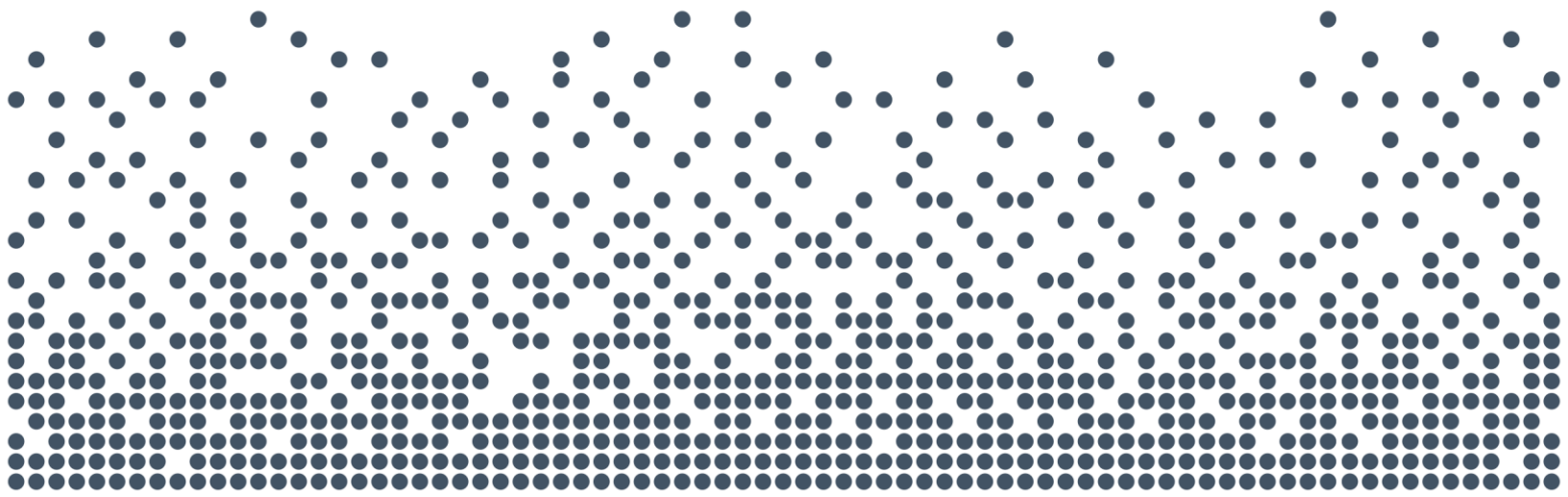
Summary and Next Steps



7. Summary and Next Steps

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

Beyond regulatory compliance, the Township should continue working on integrating asset management planning with other municipal financial and planning documents. Furthermore, the Municipality will need to establish processes for reviewing and updating assumptions underlying the asset management plan on a regular basis to keep the plan relevant and reliable. Further commentary and recommendations regarding implementation matters will be provided in the next phase of the asset management plan.



Appendices



Appendix A

Data-Deferred Technical Levels of Service



Appendix A: Data-Deferred Technical Levels of Service

Presented in this Appendix are the Municipality's Data-Deferred Technical Levels of Service. The Municipality has identified these Technical Levels of Service as being important to include within its Levels of Service framework and is currently developing data-collection protocols to be able to quantify performance in future iterations of this asset management plan.

Table A-7-1 provides an index of the Data-Deferred Technical Levels of Service tables contained in this appendix.

Table A-7-1: Non-core Assets – Data-Deferred Technical Levels of Service Table References

Asset Class	Data-Deferred Technical Levels of Service Table Reference
Sidewalks	Table A-2
Non-structural Culverts	Table A-3
Regulatory and Warning Road Signs	Table A-4
Streetlights	Table A-5
Traffic Lights and Pedestrian Crossings	Table A-6
Fleet and Equipment Assets	Table A-7
Facilities	Table A-8
Parks and Recreation Assets	Table A-9



Table A-2: Sidewalks – Data-Deferred Technical Levels of Service Table

Service Attribute	Data-Deferred Technical Levels of Service
Accessibility	Percentage of Level 1 sidewalks (by length) that meet the requirements of the <i>Accessibility for Ontarians with Disabilities Act, 2005</i> .
	Percentage of Level 2 sidewalks (by length) that meet the requirements of the <i>Accessibility for Ontarians with Disabilities Act, 2005</i> .
	Percentage of Level 3 sidewalks (by length) that meet the requirements of the <i>Accessibility for Ontarians with Disabilities Act, 2005</i> .
Reliability	Percentage of Level 1 sidewalks (by length) in “Fair” or better condition.
	Percentage of Level 2 sidewalks (by length) in “Fair” or better condition.
	Percentage of Level 3 sidewalks (by length) in “Fair” or better condition.
Safety	Number of outstanding sidewalk discontinuities, as defined by O. Reg. 239/02 (i.e. trip hazards), compared to the total length of sidewalks.

Table A-3: Non-structural Culverts – Data-Deferred Technical Levels of Service Table

Service Attribute	Data-Deferred Technical Levels of Service
Reliability	Number of work orders related to flushing activities performed on large non-structural culverts compared to the total lane kilometers of roadways.



Service Attribute	Data-Deferred Technical Levels of Service
	Number of work orders related to repairs for structural damage performed on large non-structural culverts compared to the total lane kilometers of roadways.
Cost Efficiency	Annual funding allocated ¹ for the rehabilitation and replacement of non-structural culverts compared to the total replacement cost of non-structural culverts.

Table A-4: Regulatory and Warning Road Signs – Data-Deferred Technical Levels of Service Table

Service Attribute	Data-Deferred Technical Levels of Service
Safety	Percentage of regulatory and warning road signs that passed annual retro-reflectivity testing.
	Number of regulatory and warning road sign replacements completed compared to the total number of regulatory and warning road signs.
Cost Efficiency	Annual funding allocated ¹ for the rehabilitation and replacement of regulatory and warning road signs compared to the total replacement cost of regulatory and warning road signs.

¹ Annual funding allocation includes budgeted amounts for funding rehabilitation and replacement activities, and comprises own-source revenues, transfer payment revenues (e.g. CCBF, OMPF, OCIF), and debt servicing costs. Own-source revenues include direct capital funding and contribution to fleet or equipment capital reserves.



Table A-5: Street Lights – Data-Deferred Technical Levels of Service Table

Service Attribute	Data-Deferred Technical Levels of Service
Reliability	Replacement cost of street lighting heads in use beyond their optimal service life standards compared to the replacement cost of all street lighting heads.
	Replacement cost of street lighting poles in use beyond their optimal service life standards compared to the replacement cost of all street lighting poles.

Table A-6: Traffic Lights and Pedestrian Crossings – Data-Deferred Technical Levels of Service Table

Service Attribute	Data-Deferred Technical Levels of Service
Safety	Number of traffic lights and pedestrian crossings with overhead detectors compared to the total number of traffic lights and pedestrian crossings.

Table A-7: Fleet and Equipment – Data-Deferred Technical Levels of Service Table

Service Attribute	Data-Deferred Technical Levels of Service
Reliability	Number of hours fleet assets spent out of service due to unplanned repairs ¹ compared to the total number of fleet assets.
	Replacement cost of fleet and equipment assets that had unplanned repair costs exceeding 10% of their replacement cost compared to the replacement cost of all fleet and equipment assets

¹ Unplanned repairs do not include repairs to address issues caused by operator error.



Service Attribute	Data-Deferred Technical Levels of Service
Cost Efficiency	Annual funding allocated ¹ for the rehabilitation and replacement of fleet and equipment assets compared to the total replacement cost of fleet and equipment assets.

Table A-8: Facilities – Data-Deferred Technical Levels of Service Table

Service Attribute	Data-Deferred Technical Levels of Service
Reliability	Number of outstanding deficiencies related to critical facility components.
Availability	Number of hours lost due to shutdowns of facilities, or portions within, due to unplanned repair, maintenance, rehabilitation, or replacement activities compared to the total number of facilities.
Accessibility	Percentage of facilities that meet the requirements of the Accessibility for Ontarians with Disabilities Act, 2005.
	Percentage of parking lots located at facilities that meet the requirements of the Accessibility for Ontarians with Disabilities Act, 2005.
Cost Efficiency	Annual funding allocated ¹ for the rehabilitation and replacement of facility components compared to the total replacement cost of facilities.
Environmental Sustainability	Kilowatt-hours (kWh) of electricity consumed per square feet for facilities with access to electricity.
	Cubic meters (m3) of natural gas consumed per square feet for facilities with access to natural gas.

¹ Annual funding allocation includes budgeted amounts for funding rehabilitation and replacement activities, and comprises own-source revenues, transfer payment revenues (e.g. CCBF, OMPF, OCIF), and debt servicing costs. Own-source revenues include direct capital funding and contribution to fleet or equipment capital reserves.



Service Attribute	Data-Deferred Technical Levels of Service
	Cubic metres (m3) of water consumed per square feet for facilities with access to municipal water.
	Ratio of electric vehicle charging ports available for public use to the total number of facilities.
Operational Efficiency	Number of full-time equivalents of operational staff ¹ for facilities compared to the total number of facilities.
Safety	Number of health and safety deficiencies related to facilities addressed.
	Number of outstanding critical health and safety issues exceeding \$2,500 in estimated remediation cost.

Table A-9: Parks and Recreation – Data-Deferred Technical Levels of Service Table

Service Attribute	Data-Deferred Technical Levels of Service
Quality	Number of outstanding deficiencies related to grass maintenance and garbage collection compared to hectares of parkland.
	Number of outstanding deficiencies related to splash pads compared to the total number of splash pads.
	Number of outstanding deficiencies related to play structures compared to the total number of play structures.
Proximity	Average walking distance to neighborhood parks within population centres.

¹ Operational staff is defined as the staffing complement directly involved in the day-to-day operations and on-going maintenance of facilities. This does not include staff responsible for administrative duties, oversight, and management.



Service Attribute	Data-Deferred Technical Levels of Service
Accessibility	Percentage of playgrounds that meet the requirements of the Accessibility for Ontarians with Disabilities Act, 2005.
	Percentage of parking lots located at parks that meet the requirements of the Accessibility for Ontarians with Disabilities Act, 2005.
Operational Efficiency	Number of full-time equivalents of operational staff ¹ for the maintenance of parks and recreation assets compared to hectares of parkland.

¹ Operational staff is defined as the staffing complement directly involved in the day-to-day operations and on-going maintenance of facilities. This does not include staff responsible for administrative duties, oversight, and management.
