Asset Management Plan for Non-core Infrastructure Assets

Township of South Frontenac

Final Report

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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 Township of South Frontenac (Township) retained Watson & Associates Economists Ltd. (Watson) to assist with the development of this asset management plan. The scope of this asset management plan covers the Township's non-core[1] infrastructure assets and gravel roads, as these were not included in the Township's 2023 Asset Management Plan for core assets. The completion of this asset management plan brings the Township into compliance with the July 1, 2022 and July 1, 2024 requirements of *Ontario Regulation 588/17* (O. Reg. 588/17).

Following the completion of this asset management plan, the Township will shift its focus to developing a comprehensive asset management plan to meet the July 1, 2025 requirements of O. Reg. 588/17, building upon the asset management planning 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, and developing a financial strategy.

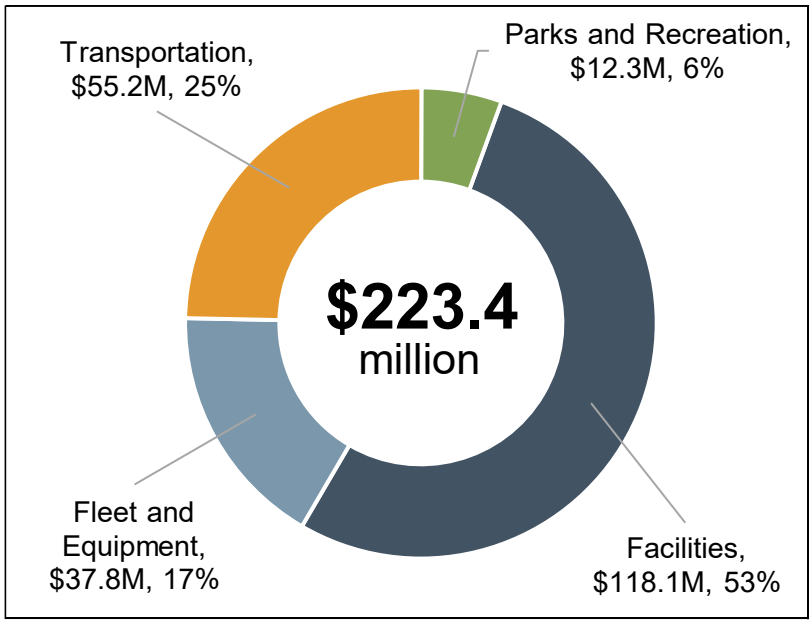
The estimated current replacement cost of the assets within the scope of this asset management plan is $223.4 million. Facilities account for the largest share of this replacement cost at $118.1 million (53%), followed by transportation assets at $55.2 million (25%), fleet and equipment at $37.8 million (17%), and lastly, parks and recreation assets at $12.3 million (6%). The distribution of replacement cost by asset category is summarized in Table 1-1 and presented graphically in Figure 1-1.

[1] Core infrastructure assets are defined by Ontario Regulation 588/17 as being roads, bridges, culverts, and any asset that is utilized in the provision of water, wastewater, and stormwater services. Any other assets owned and managed by a municipality that are not included within the definition of core infrastructure assets are classified as non-core infrastructure assets.

Table 1-1: Distribution of Replacement Cost by Asset Category

Asset Category	Replacement Cost (2025$)	Percentage of Total
Facilities	$118,090,000	53%
Fleet and Equipment	$37,777,000	17%
Transportation	$55,238,000	25%
Parks and Recreation	$12,292,000	6%
TOTAL	**$223,397,000**	**100%**

Figure 1-1: Distribution of Replacement Cost by Asset Category



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 details principles for evidence-based and sustainable long-term infrastructure planning. The IJPA also gave the Province the authority to regulate municipal asset management planning. 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 Township into compliance with the July 1, 2024 requirements of O. Reg. 588/17. Over the coming months the Township will be developing its comprehensive asset management plan, which will identify level of service targets for both core and non-core infrastructure assets and be accompanied by a financial strategy. The comprehensive asset management plan will bring the Township into compliance with the July 1, 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 in the Township's Strategic Asset Management Policy, asset management strategies and objectives identified through discussions with the Township's asset managers, and the Township'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 assets utilized data from condition assessments completed by third-party service providers, staff-led condition assessments, and, where necessary, age-based condition analyses.
3. Define and document current levels of service based on the Township's best available data.
4. Develop lifecycle management strategies that identify the activities required to maintain current levels of service.
5. Prepare a 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
State of Local Infrastructure and Levels of Service

2. State of Local Infrastructure and Levels of Service

2.1 Facilities

2.1.1 State of Local Infrastructure

The Township owns and manages 66 facilities that support General Government operations, Protection Services, Recreation and Culture Services, and Transportation Services. Examples of facilities included within each service area are provided in Table 2-1.

The estimated current replacement cost of the Township's facilities is $118.1 million. Transportation Services facilities represent the largest share of replacement cost at $48.0 million (41%), followed by Recreation and Culture Services facilities at $31.7 million (27%), Protection Services facilities at $29.9 million (25%), and lastly, General Government facilities at $8.4 million (7%). The average age of the Township's facilities is 41.4 years. Table 2-1 summarizes the quantity, gross floor area, average age, and estimated current replacement cost of the Township's facilities by service area. This information is further illustrated in Figure 2-1.

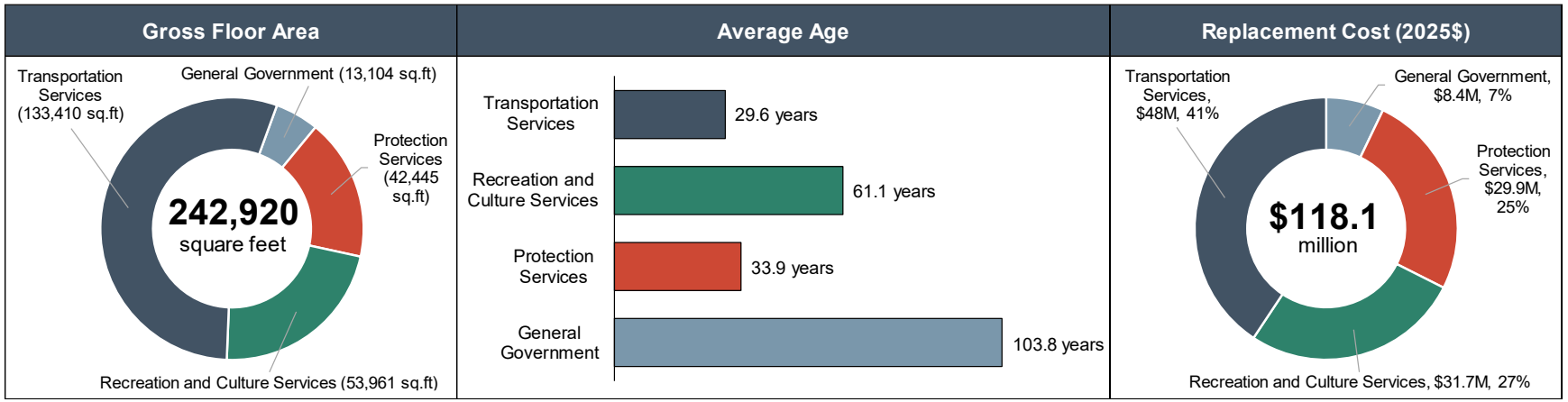
Table 2-1: Facilities – Number of Facilities, Gross Floor Area, Average Age, and Replacement Cost by Service Area

Service Area	Number of Facilities	Examples	Gross Floor Area	Average Age[1]	Replacement Cost (2025$)
General Government	7	Municipal office, public health facilities, cemetery buildings	13,104 ft^2	103.8 years[2]	$8,394,000
Protection Services	9	Fire halls and OPP station	42,445 ft^2	33.9 years	$29,919,000
Recreation and Culture Services	31	Community centres and halls, storage facilities, libraries, museum, pavilions, storage	53,961 ft^2	61.1 years	$31,728,000
Transportation Services	19	PW garages, PW offices, salt/sand storage, landfill scale house, storage	133,410 ft^2	29.6 years	$48,049,000
Total	**66**		**242,920 ft^2**	**41.4 years**	**$118,090,000**

[1]Weighted average utilizing the gross floor area (ft^2) of each facility as weights.

[2]It should be noted that the Township completed major renovations to its Municipal Office in 2012. However, the average age of General Government facilities presented herein reflects the original construction year of the Municipal Office (1874).

Figure 2-1: Facilities – Gross Floor Area, Average Age, and Replacement Cost by Service Area



2.1.2 Condition

The Township assessed the condition of its facilities through Building Condition Assessments (BCAs) completed by an external service provider. The BCAs identify repair, maintenance, rehabilitation, and replacement requirements for facilities at a component level. As part of the BCAs, individual facility components are inspected, and Facility Condition Index (FCI) ratings are 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 5-year forecast horizon and expressing the sum of these requirements as a percentage of the replacement cost of the facility (referred to as a '5-year FCI rating').

To better communicate the condition of facilities, qualitative condition states are assigned to facilities based on their respective FCI ratings as summarized in Table 2-2. The scale is set to show that if the sum of forecasted expenditures over a 5-year forecast horizon for a given facility is lower than 5.9% of the building's current replacement value, the facility would be deemed to be in a "Good" condition state. Conversely, if the sum of forecasted expenditures over a 5-year forecast horizon for a given facility is higher than 30% of the building's current replacement value, the facility would be deemed to be in a "Very Poor" condition state.

Table 2-2: Facilities – Definition of Condition States with Respect to FCI Rating

FCI Rating	Condition State
0% ≤ FCI < 5.9%	**Good**
5.9% ≤ FCI < 10.9%	**Fair**
10.9% ≤ FCI < 30%	**Poor**
30% ≤ FCI	**Very Poor**

The 5-year cumulative FCI rating for Township's facilities is 13.0%, indicating that facilities are currently in a 'Poor' condition state on average. The average FCI ratings and associated condition states of facilities within each service area are summarized in Table 2-3.

Table 2-3: Facilities – Average FCI% Rating and Condition State by Service Area

Service Area	Average FCI% Rating[1]	Average Condition State
General Government	53.2%	Very Poor
Protection Services	15.0%	Poor
Recreation and Culture Services	12.9%	Poor
Transportation Services	8.4%	Fair
Average	**13.0%**	**Poor**

The distribution of the Township's facilities is illustrated by condition state and service area in Figure 2-2 and by FCI rating range in Figure 2-3.

[1]Weighted average utilizing the gross floor area (ft^2) of each facility as weights.

Figure 2-2: Distribution of Facilities (ft^2) by Condition State and Service Area

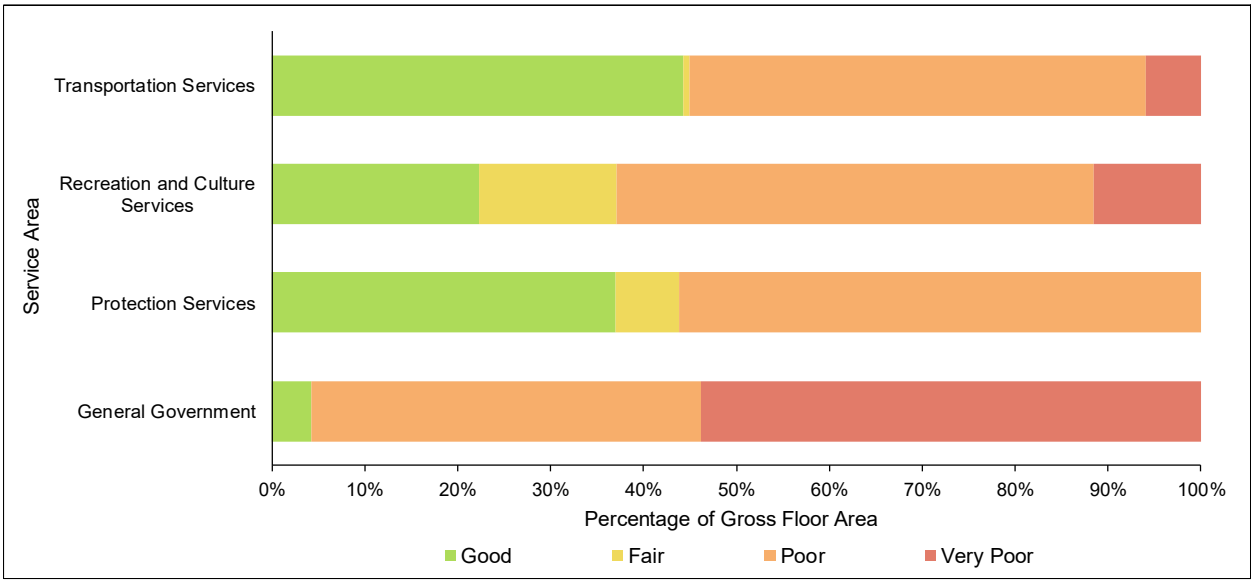
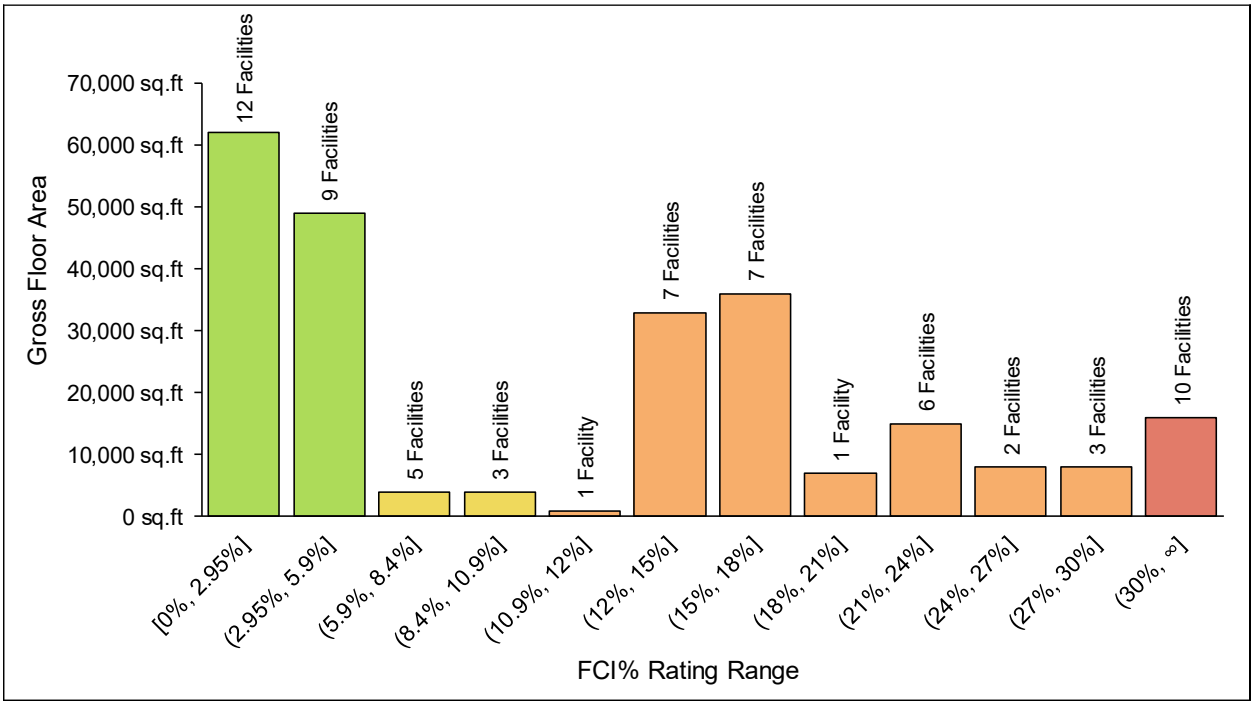


Figure 2-3: Distribution of Facilities (ft^2) by FCI% Rating Range



2.1.3 Current Levels of Service

The levels of service being provided by the Township's facilities are, in part, a result of the state of local infrastructure identified above. The levels of service framework presented in this subsection defines performance measures that will be monitored over time and reports the current performance with respect to each measure. In contrast to core infrastructure assets, O. Reg. 588/17 does not prescribe any level of service measures for non-core infrastructure assets. The levels of service presented in this asset management plan were developed through the identification of service aspects that would be of interest to facility users and in consideration of available data. In future iterations of the asset management plan, targets will be set for the performance measures presented below. The levels of service tables presented below are structured 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 Township'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; and
- The Current Performance column in Table 2-5 reports the current performance of each measure based on the best data available to the Township at this time.

Table 2-4: Facilities – Community Levels of Service

Service Attribute	Community Levels of Service
Quality	The Township strives to maintain its facilities in adequate condition to continue functioning as intended.
Capacity	The Township strives to align the capacity of its facilities with the service demands of its community.

Table 2-5: Facilities – Technical Levels of Service

Service Attribute	Performance Measure	Current Performance
Quality	Percentage of General Government facilities (by gross floor area) in a 'Very Poor' condition state.	55% (3 facilities)
	Percentage of Protection Services facilities (by gross floor area) in a 'Very Poor' condition state.	0% (0 Facilities)
	Percentage of Recreation and Culture facilities (by gross floor area) in a 'Very Poor' condition state.	9% (6 facilities)
	Percentage of Transportation Services facilities (by gross floor area) in a 'Very Poor' condition state.	3% (1 facility)
Capacity	Gross floor area (square footage) of General Government facilities per 100 residents.[1]	65 ft^2
	Gross floor area (square footage) of Protection Services facilities per 100 residents.[1]	210 ft^2
	Gross floor area (square footage) of Recreation and Culture facilities per 100 residents.[1]	267 ft^2
	Gross floor area (square footage) of Transportation Services facilities per kilometre of roadways.	166 ft^2 per km

[1]Based on 2021 Census population of 20,188 residents.

2.2 Fleet and Equipment

2.2.1 State of Local Infrastructure

The Township owns and manages numerous fleet and equipment assets that support the delivery of various services provided to the public. The Township's inventory of fleet assets comprises vehicles ranging from passenger vehicles and pickup trucks to plow trucks and fire apparatus such as tankers, pumpers, and rescue vehicles. The Township's inventory of equipment assets comprises heavy equipment assets (e.g., graders, backhoes, tractors, etc.) and smaller pieces of equipment (e.g., generators, steamers, trailers, etc.). The inventory also includes equipment utilized by Fire Services (e.g., radios, extrication equipment, self-contained breathing apparatus, etc.).

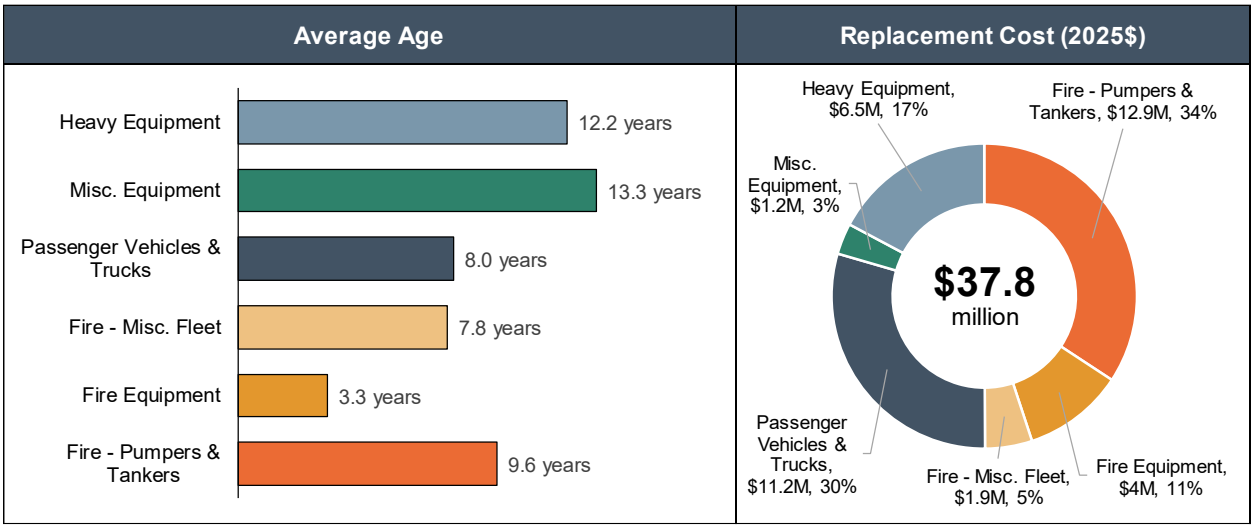
The estimated current replacement cost of the Township's fleet and equipment assets is $37.8 million. Pumpers and tankers used by Fire Services account for the largest portion of the total replacement cost at $12.9 million (34%), followed by passenger vehicles and trucks (including tandem trucks) at $11.2 million (30%). Heavy equipment assets such as bulldozers, graders, and tractors amount to $6.5 million (17%), while equipment used by Fire Services, including extrication equipment, thermal imaging cameras, and defibrillators, totals $4.0 million (11.0%). Miscellaneous fleet assets utilized by Fire Services (such as rescue vehicles and boats are valued at $1.9 million (5%), and equipment assets used by Transportation Services, such as trailers, mowers, and steamers, account for $1.2 million (3%). The average age of the Township's fleet and equipment assets is 9.0 years.

Table 2-6 summarizes the average age and estimated current replacement cost of the Township's fleet and equipment assets by asset type. This information is further illustrated in Figure 2-4.

Table 2-6: Fleet and Equipment – Average Age and Replacement Cost by Asset Type

Asset Type	Average Age[1]	Replacement Cost (2025$)
Fire Services – Pumpers & Tankers	9.6 years	$12,941,000
Fire Services – Equipment	3.3 years	$4,034,000
Fire Services – Misc. Fleet	7.8 years	$1,882,000
Passenger Vehicles & Trucks	8.0 years	$11,174,000
Transportation Services Equipment	13.3 years	$1,242,000
Heavy Equipment	12.2 years	$6,504,000
TOTAL	**9.0 years**	**$37,777,000**

Figure 2-4: Fleet and Equipment – Average Age and Replacement Cost by Asset Type



2.2.2 Condition

The condition of the majority of the Township's fleet and equipment assets has not been directly assessed through physical condition assessments. For the purposes of this asset management plan, the condition of these assets is reported based on age relative to useful service life (i.e., based on the percentage of useful service life consumed (ULC%)). A brand-new asset would have a ULC% of 0%, indicating that none of the asset's life expectancy has been utilized. Conversely, an asset that has reached the end of its life expectancy would have a ULC% of 100%. It is possible for assets to have

[1] Weighted average utilizing replacement cost of assets as weights.

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, may exhibit reduced reliability, and may have increasing repair and maintenance costs.

To better communicate the condition of fleet and equipment assets for which condition was assessed based on age relative to useful service life, ULC% ratings have been segmented into qualitative condition states as summarized in Table 2-7. 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 these assets would be characterized as being in a "Poor" or "Very Poor" condition state.

Table 2-7: Definition of Condition States with Respect to ULC%

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

The condition of all equipment assets used by Fire Services and some equipment assets used by Transportation Services has been evaluated through staff-led assessments of their observed physical condition. As part of these assessments, staff assign a qualitative condition rating to each asset utilizing a five-point scale ranging from Very Good to Very Poor. A ULC% score has not been calculated for these assets because the condition rating assigned based on physical condition is more accurate.

The overall average ULC% for fleet and equipment assets for which condition was assessed based on age relative to useful service life is 65%, indicating that, on average, these assets are currently in a 'Good' condition state. Table 2-8 summarizes the average ULC% and condition states of the Township's fleet and equipment assets.

Table 2-8: Fleet and Equipment– Average ULC% and Condition State by Asset Type

Asset Type	Average ULC%[1]	Condition State
Fire Services – Pumpers & Tankers	53%	Good
Fire Services – Equipment	N/A[2]	Good
Fire Services – Misc. Fleet	72%	Good
Passenger Vehicles & Trucks	65%[3]	Good
Transportation Services Equipment	75%	Good
Heavy Equipment	84%	Good
Average	**65%**	**Good**

The distribution of replacement cost of the Township's fleet and equipment assets by condition state is illustrated in Figure 2-5, with a further breakdown by asset type shown in Figure 2-6.

[1]Weighted average utilizing replacement cost of assets as weights.

[2]The condition of equipment assets utilized by Fire Services is determined through staff-led assessments. As such, a ULC% for these assets has not calculated.

[3]It is noted here that the Township currently has three tandem trucks that are nearing the end of their respective useful service life expectancies. These assets are included within the calculation of the average ULC% and, consequently, the average condition state of 'Passenger Vehicles & Trucks'. However, it should be noted that the Township has already purchased replacements for these assets, which are pending delivery.

Figure 2-5: Fleet and Equipment – Distribution of Replacement Cost by Condition State

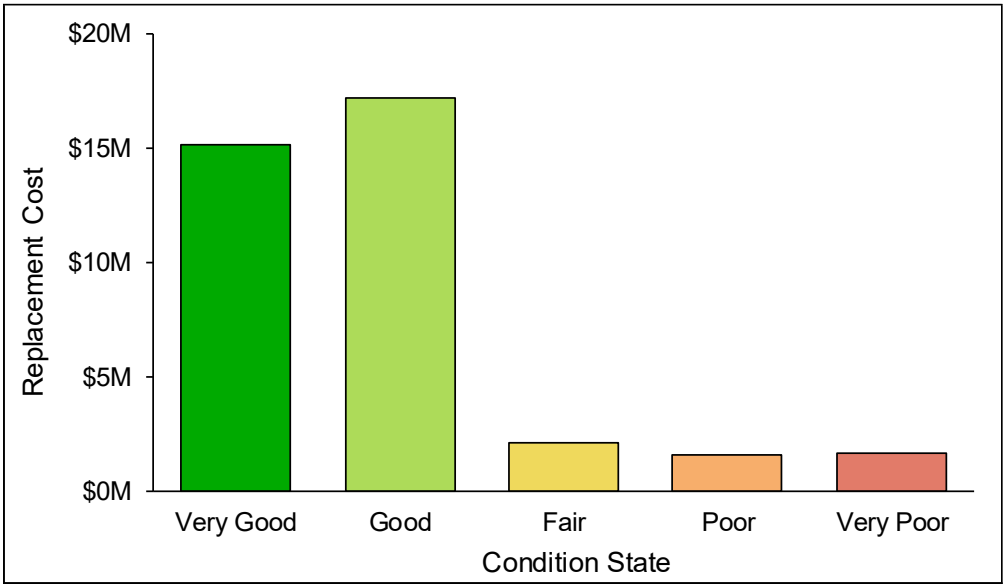
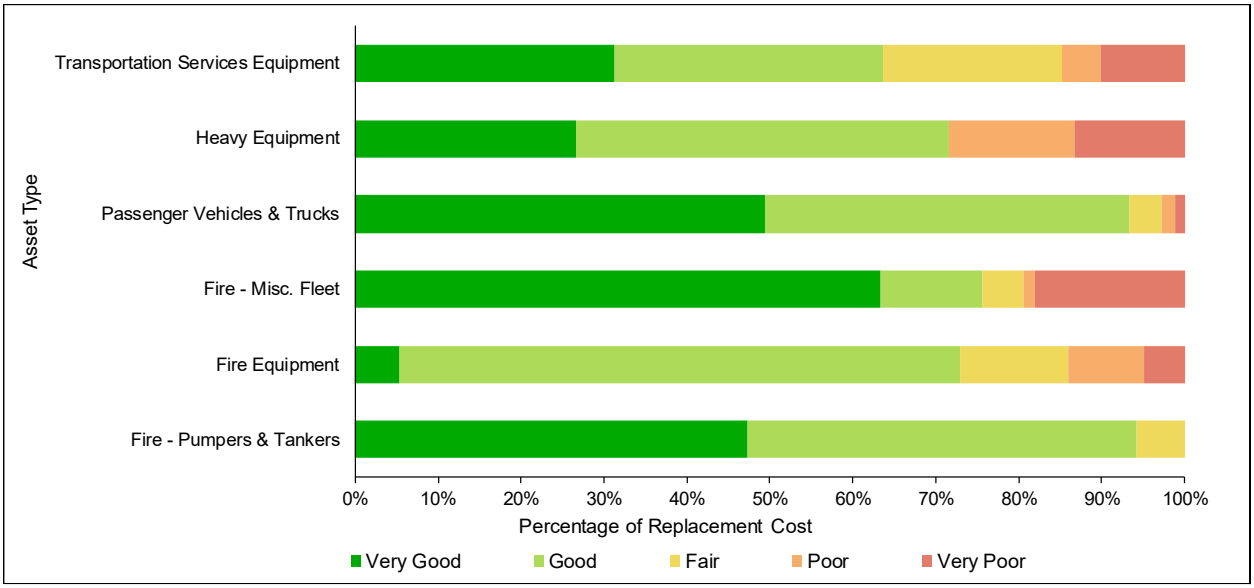


Figure 2-6: Fleet and Equipment – Distribution of Replacement Cost by Condition State and Asset Type



2.2.3 Current Levels of Service

This subsection presents the Township's levels of service framework for its fleet and equipment assets. Table 2-9 presents the service attributes and community levels of service, while Table 2-10 presents the technical levels of service (i.e., performance

measures) and their current performance. Please refer to Section 2.1.3 for further details on the structure of the Township's levels of service framework.

Table 2-9: Fleet and Equipment – Community Levels of Service

Service Attribute	Community Levels of Service
Reliability	In order to minimize service interruptions, the Township strives to maintain its fleet and equipment assets in adequate condition so that they perform reliably.

Table 2-10: Fleet and Equipment – Technical Levels of Service

Service Attribute	Performance Measure	Current Performance
Reliability	Percentage (by replacement cost) of pumpers and tankers utilized by Fire Services in a "Fair" or better condition.	100%
	Percentage (by replacement cost) of equipment assets utilized by Fire Services in a "Fair" or better condition.	86%
	Percentage (by replacement cost) of miscellaneous fleet assets utilized by Fire Services in a "Fair" or better condition.	81%
	Percentage (by replacement cost) of passenger vehicles & trucks in a "Fair" or better condition.	97%
	Percentage (by replacement cost) of heavy equipment assets in a "Fair" or better condition.	72%
	Percentage (by replacement cost) of equipment assets utilized by Transportation Services in a "Fair" or better condition.	85%

2.3 Transportation

2.3.1 State of Local Infrastructure

The Township owns and manages a number of transportation assets comprising 11 traffic control signals & beacons, 606 streetlights, 17.4 km of sidewalks, and 195.4 km of gravel roads. As noted earlier in Section 1.1, although gravel roads are classified as

core infrastructure assets by O. Reg. 588/17, they are included within this non-core asset management plan because they were previously excluded from the Township's 2023 Asset Management Plan for its core infrastructure assets

The estimated current replacement cost of the Township's transportation assets is $55.2 million. Gravel roads represent the largest share of total replacement cost at $47.8 million (87%), followed by sidewalks at $4.7 million (9%), streetlights at $1.9 million (4%), and lastly, traffic control signals & beacons at $710,000 (1%).

The average age of the Township's transportation assets included within the scope of this asset management plan is 21.1 years. It should be noted that the initial dates of construction for the Township's gravel road segments are currently unknown. As such, these assets have been excluded from the calculation of average age presented herein.

A summary of the quantity, average age, and estimated current replacement cost of the Township's transportation assets by asset type is summarized in Table 2-11 and illustrated in Figure 2-7.

Table 2-11: Transportation – Quantity, Average Age, and Replacement Cost by Asset Type

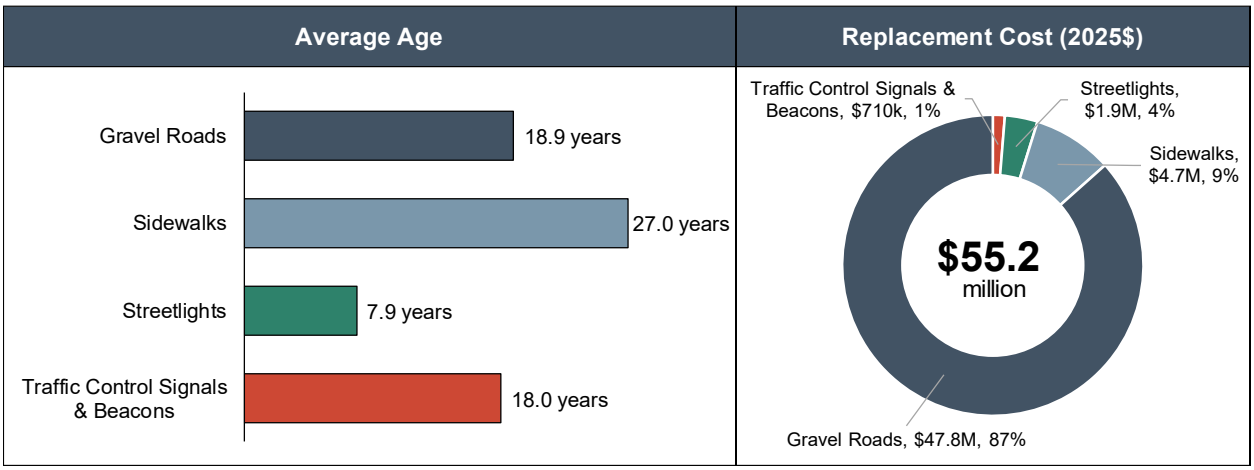
Asset Type	Quantity	Average Age[1]	Replacement Cost (2025$)
Traffic Control Signals and Beacons	11 traffic signals	18.0 years	$710,000
Streetlights	606 streetlights	7.9 years	$1,943,000
Sidewalks	17.4 km	27.0 years	$4,747,000
Gravel Roads	195.4 km	Unknown[2]	$47,838,000
TOTAL		**21.1 years[3]**	**$55,238,000**

[1] Weighted average utilizing the replacement cost of traffic control signals and streetlights and the length of individual sidewalk segments as weights.

[2] The initial construction dates of the Township's gravel roads are currently unknown. As such, a weighted average age cannot be calculated at this time.

[3] Weighted average utilizing the replacement cost of asset types as weights. Calculation excludes gravel roads since the ages of the Township's gravel road segments are currently unknown.

Figure 2-7: Transportation – Average Age and Replacement Cost by Asset Type



2.3.2 Condition

The condition of the Township's Transportation Services assets is evaluated through inspections of each asset's observed physical condition. Based on these inspections, assets are assigned a qualitative condition state utilizing a five-point scale ranging from Very Good to Very Poor. On average, the Township's Transportation Services assets are currently in a 'Fair' condition.

Table 2-12 summarizes the average condition of the Township's Transportation Services assets by asset type.

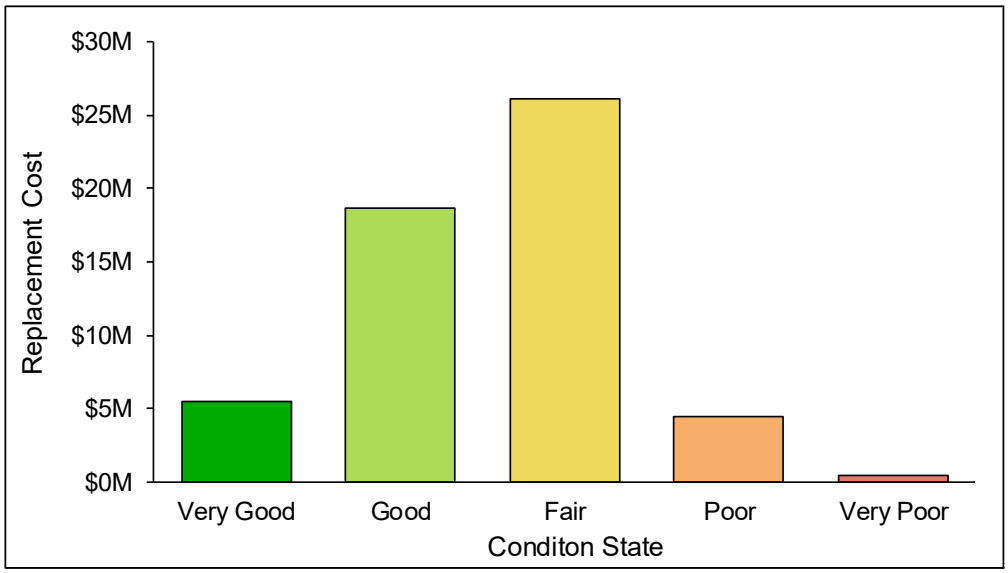
Table 2-12: Transportation – Average Condition Rating by Asset Type

Asset Type	Average Condition Rating[1]
Traffic Control Signals & Beacons	Good
Streetlights	Good
Sidewalks	Good
Gravel Roads	Fair

The distribution of the Township's Transportation Services assets by condition state is illustrated in Figure 2-8.

[1]The calculation of weighted average condition state of the Township's traffic control signals and streetlights utilizes the replacement cost of each individual asset as weights. The calculation of

Figure 2-8: Transportation – Distribution of Replacement Cost by Condition State



The distribution of the replacement cost of the Township's traffic control signals and streetlights by condition state is illustrated in Figure 2-9 and the distribution of the length of the Township's gravel roads and sidewalks by condition state is illustrated Figure 2-10.

weighted average condition state of the Township's sidewalks utilizes the length of each sidewalk segment as weights. The calculation of weighted average condition state of the Township's gravel roads utilizes the area of each road segment as weights.

Figure 2-9: Traffic Control Signals and Streetlights – Distribution of Replacement Cost by Condition State and Asset Type

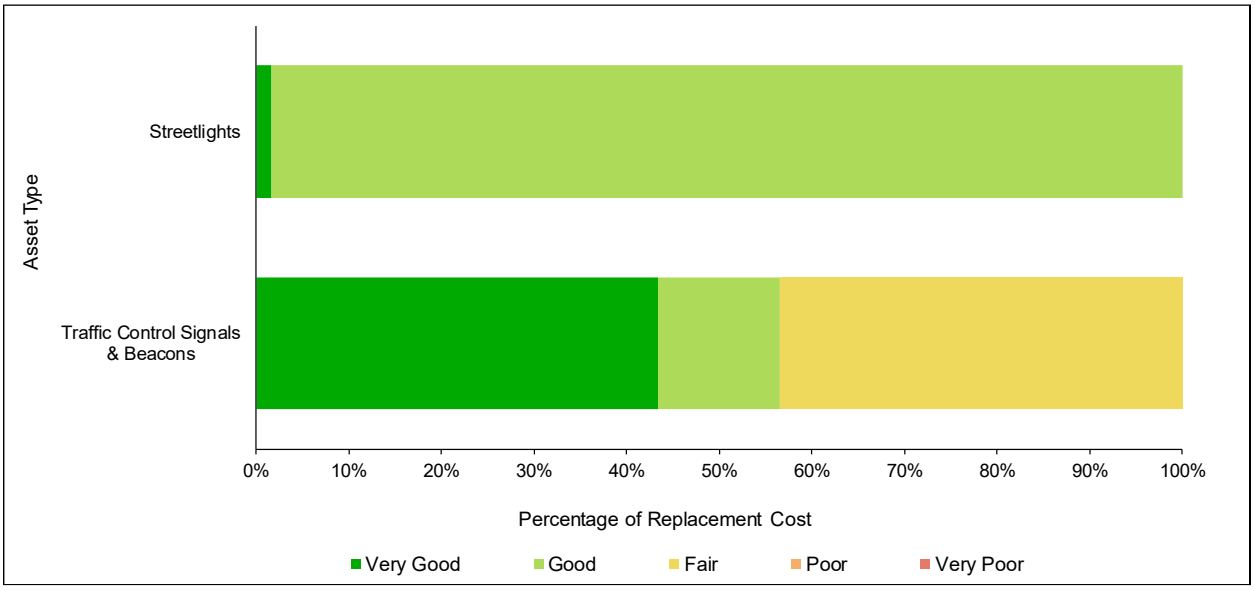
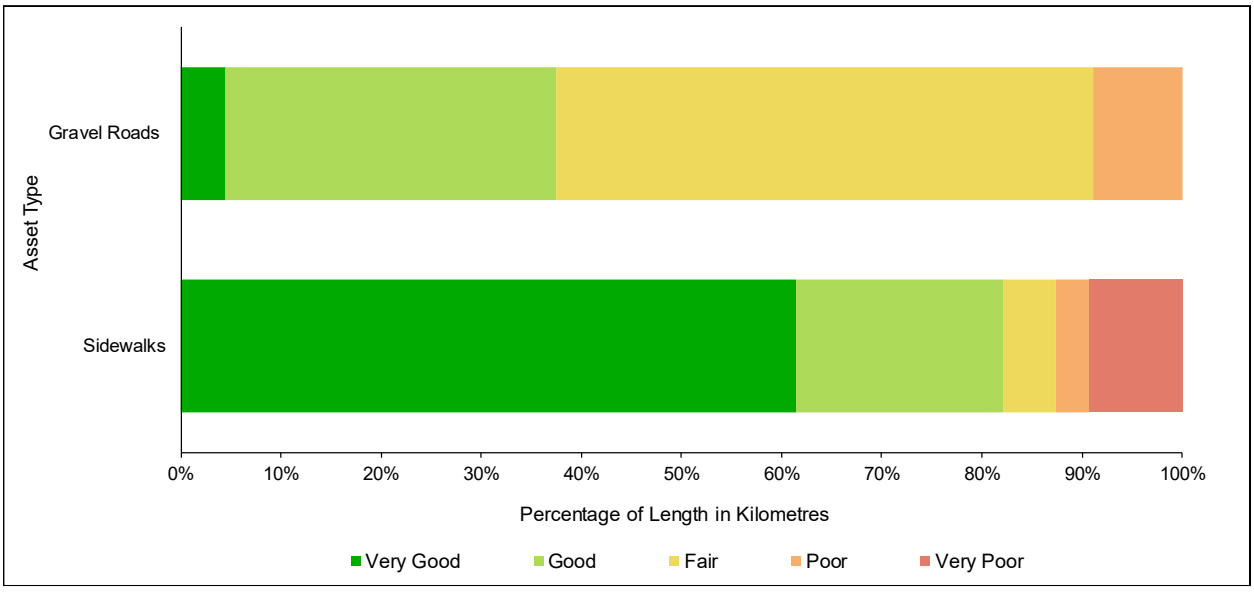


Figure 2-10: Gravel Roads and Sidewalks – Distribution of Length by Condition State and Asset Type



2.3.3 Current Levels of Service

This subsection presents the Township's levels of service framework for transportation assets. Table 2-13 presents the relevant service attributes and community levels of service, while Table 2-14 presents the technical levels of service (i.e., performance

measures) and their current performance. Please refer to Section 2.1.3 for further details on the structure of the Township's levels of service framework.

Table 2-13: Transportation – Community Levels of Service

Service Attribute	Community Levels of Service
Scope	The road network for the Township of South Frontenac includes over 1,603 lane kilometers of roadway that are predominantly located in rural residential areas. A single tier network of collector roads and arterial roads formerly managed by the County provide key connectivity to a series of hamlets and villages, the latter of which includes most commercial and industrial services. The Township's major road network provides key service for the movement of commercial traffic, public transportation, emergency services, service vehicles and motor vehicles within the County. The network is also highly integrated into the major networks serving the County of Lanark, County of Lennox and Addington, County of Lanark, Leeds and Grenville, and the City of Kingston.
Quality	The Township strives to maintain its road surfaces in adequate condition to support the comfortable and safe passage of vehicular traffic.
Reliability	The Township strives to maintain its road-related assets in adequate condition to continue performing as intended.

Table 2-14: Transportation – Technical Levels of Service

Service Attribute	Performance Measure	Current Performance
Scope	Lane-kilometres of gravel roads as a percentage of the total lane-kilometres of the road network.	21%
Quality	Average surface condition of unpaved roads.	Fair
Reliability	Percentage (by replacement cost) of traffic control signals and beacons in a "Fair" or better condition state.	100%
	Percentage (by replacement cost) of streetlights in a "Fair" or better condition state.	100%
	Percentage (by length) of sidewalks in a "Fair" or better condition state.	87%

2.4 Parks and Recreation

2.4.1 State of Local Infrastructure

The Township owns and manages a number of parks and recreation assets comprising various pieces of play equipment as well as built infrastructure emplaced at its baseball diamonds, soccer fields, sports courts, and football fields.

The estimated current replacement cost of the Township's parks and recreation assets is $12.3 million. Play equipment represents the largest share of total replacement cost at $3.85 million (31%), followed by baseball diamonds at $3.8 million (31%), sports courts at $1.9 million (16%), soccer fields at $1.9 million (16%) and lastly, the football field at $784,000 (6%). The average age of the Township's parks and recreation assets is 12.2 years.

Table 2-15 summarizes the quantity, average age, and estimated current replacement cost of the Township's parks and recreation assets by asset type. This information is further illustrated in Figure 2-11.

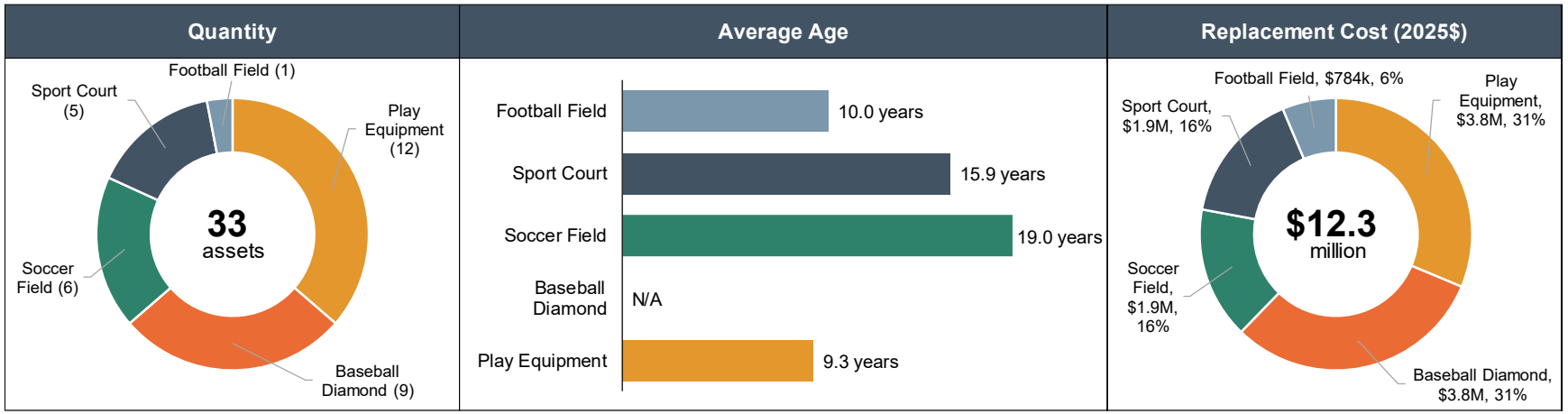
Table 2-15: Parks and Recreation – Quantity, Average Age, and Replacement Cost by Asset Type

Asset Type	Quantity	Average Age[1]	Replacement Cost (2025$)
Play Equipment	12	9.3 years	$3,848,000
Baseball Diamond	9	N/A[2]	$3,804,000
Soccer Field	6	19.0 years	$1,926,000
Sports Courts	5	15.9 years	$1,930,000
Football Field	1	10.0 years	$784,000
TOTAL	**33**	**12.2 years**	**$12,292,000**

[1]Weighted average utilizing the replacement cost of assets as weights.

[2]The in-service year of the built infrastructure emplaced at the Township's baseball diamonds is currently unknown. As such, these assets are excluded from the calculation of weighted average age presented herein.

Figure 2-11: Parks and Recreation Assets – Quantity, Average Age, and Replacement Cost by Asset Type



2.4.2 Condition

The condition of the Township's parks and recreation assets is assessed through staff-led inspections of each asset's observed physical condition. Based on these inspections, staff assign a qualitative condition rating to each asset utilizing a five-point scale ranging from Very Good to Very Poor. On average, the Township's parks and recreation assets are currently in 'Fair' condition.

Table 2-16 summarizes the average condition of the Township's parks and recreation assets by asset type.

Table 2-16: Parks and Recreation – Average Condition Rating by Asset Type

Asset Type	Average Condition Rating[1]
Play Equipment	Good
Baseball Diamond	Poor
Soccer Field	Poor
Sports Courts	Fair
Football Field	Fair

The distribution of the Township's parks and recreation assets by condition state is illustrated in Figure 2-12, with a further breakdown by asset type shown in Figure 2-13.

[1] Weighted average utilizing the replacement cost of assets as weights.

Figure 2-12: Parks and Recreation – Distribution of Replacement Cost by Condition State

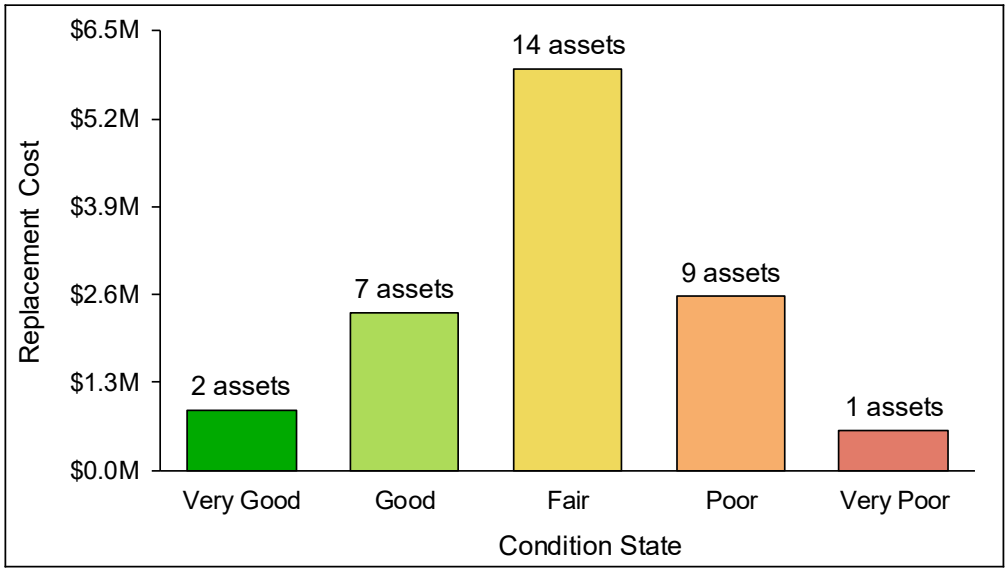
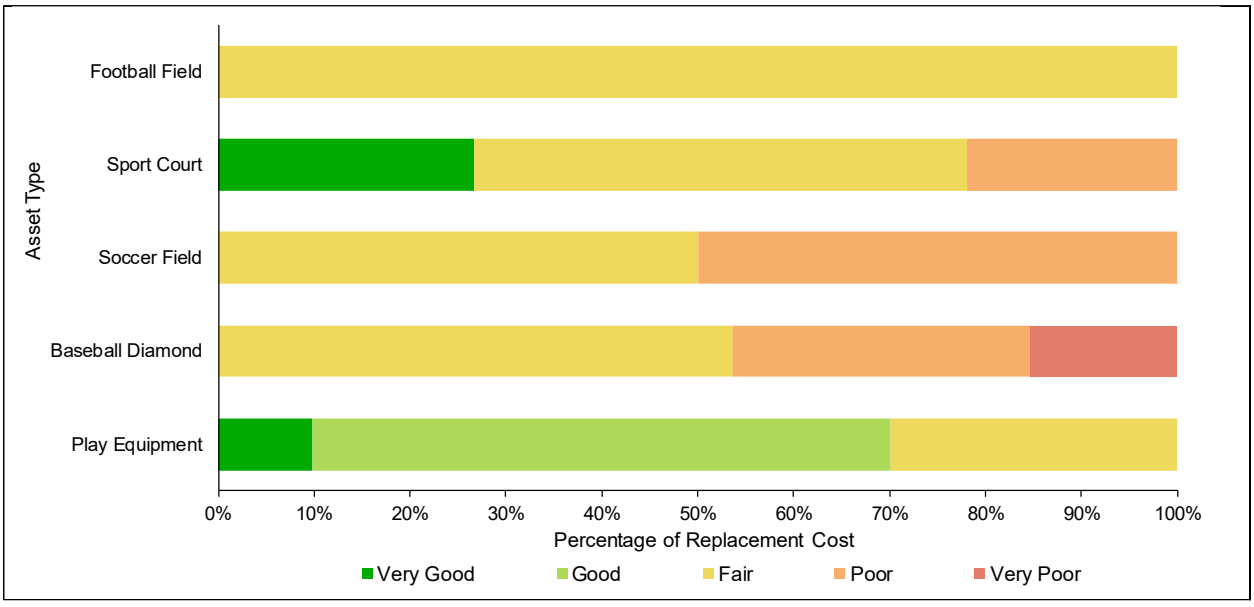


Figure 2-13: Parks and Recreation – Distribution of Replacement Cost by Condition State and Asset Type



2.4.3 Current Levels of Service

This subsection presents the Township's levels of service framework for parks and recreation assets. Table 2-17 presents the relevant service attributes and community levels of service, while Table 2-18 presents the technical levels of service (i.e., performance measures) and their current performance. Please refer to Section 2.1.3 for further details on the structure of the Township's levels of service framework.

Table 2-17: Parks and Recreation – Community Levels of Service

Service Attribute	Community Levels of Service
Reliability	The Township strives to maintain its parks and recreation assets in adequate condition to continue performing as intended.

Table 2-18: Parks and Recreation – Technical Levels of Service

Service Attribute	Performance Measure	Current Performance
Reliability	Percentage (by replacement cost) of play equipment in a "Fair" or better condition state.	100%
	Percentage (by replacement cost) of built infrastructure emplaced at baseball diamonds in a "Fair" or better condition state.	54%
	Percentage (by replacement cost) of built infrastructure emplaced at soccer fields in a "Fair" or better condition state.	50%
	Percentage (by replacement cost) of built infrastructure emplaced at sports courts in "Fair" or better condition.	78%
	Percentage (by replacement cost) of built infrastructure emplaced at football fields in "Fair" or better condition.	100%

2.5 Population and Employment Growth

O. Reg. 588/17 requires municipalities with a population less than 25,000, as reported in the most recent Census, to identify in their asset management plan 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 its 2024 Development Charges Background Study, the Township's population is expected to grow to 23,872 by 2039, representing an increase of 3,684 residents relative to its 2021 census population of 20,188. This increase represents an average annualized population growth rate of 0.94%.

Continued population growth is expected to result in incremental service demands that would impact levels of service. The investments that the Township will need to make to maintain service levels in light of the incremental service demands are summarized in the Township's 2024 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
Lifecycle Management Strategies

3. Lifecycle Management Strategies

3.1 Introduction

The lifecycle management strategies in this asset management plan identify the lifecycle activities that would need to be undertaken to maintain the current levels of service presented in Chapter 2[1]. Within the context of this asset management plan, lifecycle activities are the specified actions that can be performed on an asset in order to ensure it is performing at an appropriate level, and/or to extend its service life[2]. These actions can be carried out on a planned schedule in a prescriptive manner, or through a dynamic approach where the lifecycle activities are only carried out when specified conditions are met.

In accordance with O. Reg. 588/17, the lifecycle activities and associated costs presented in this chapter consider the full lifecycle of assets. In general terms, an asset's lifecycle starts with its initial planning and acquisition (or construction), includes both the capital and significant operating/maintenance activities the asset is expected to undergo throughout its life, and ends with its eventual disposal. Additionally, 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 provide the proposed levels of service.

The following subsections summarize the ten-year forecasts of lifecycle activities and associated costs that would be required for the Township to maintain current levels of service. Brief descriptions of the methodologies and data sources utilized to develop the forecasts are also provided in the following subsections. The 10-year lifecycle expenditure forecasts represent preliminary estimates which may be revised in the next iteration of this asset management plan relative to the Township's proposed levels of service.

[1]Upcoming iterations of the Municipality's asset management plan will include proposed levels of service and the lifecycle management strategies will identify the lifecycle activities that would need to be undertaken to provide the proposed levels of service.

[2]The full lifecycle of an asset includes activities such as initial planning and maintenance which are typically addressed through master planning studies and maintenance management, respectively.

3.2 Facilities

This section presents an estimate of costs associated with maintaining current levels of service for the Township's facilities.

Upcoming lifecycle expenditures for the Township's facilities were assessed at a component level through condition assessments conducted on each facility. The lifecycle expenditure forecast presented herein reflects the repair, rehabilitation, and replacement requirements identified through those assessments.

The 10-year lifecycle expenditure forecast is summarized in Figure 3-1 and provided in tabular form in Table 3-1. Average annual expenditures over the forecast period have been estimated at $2.8 million.

Figure 3-1: Facilities – Lifecycle Expenditure Forecast (2025$)

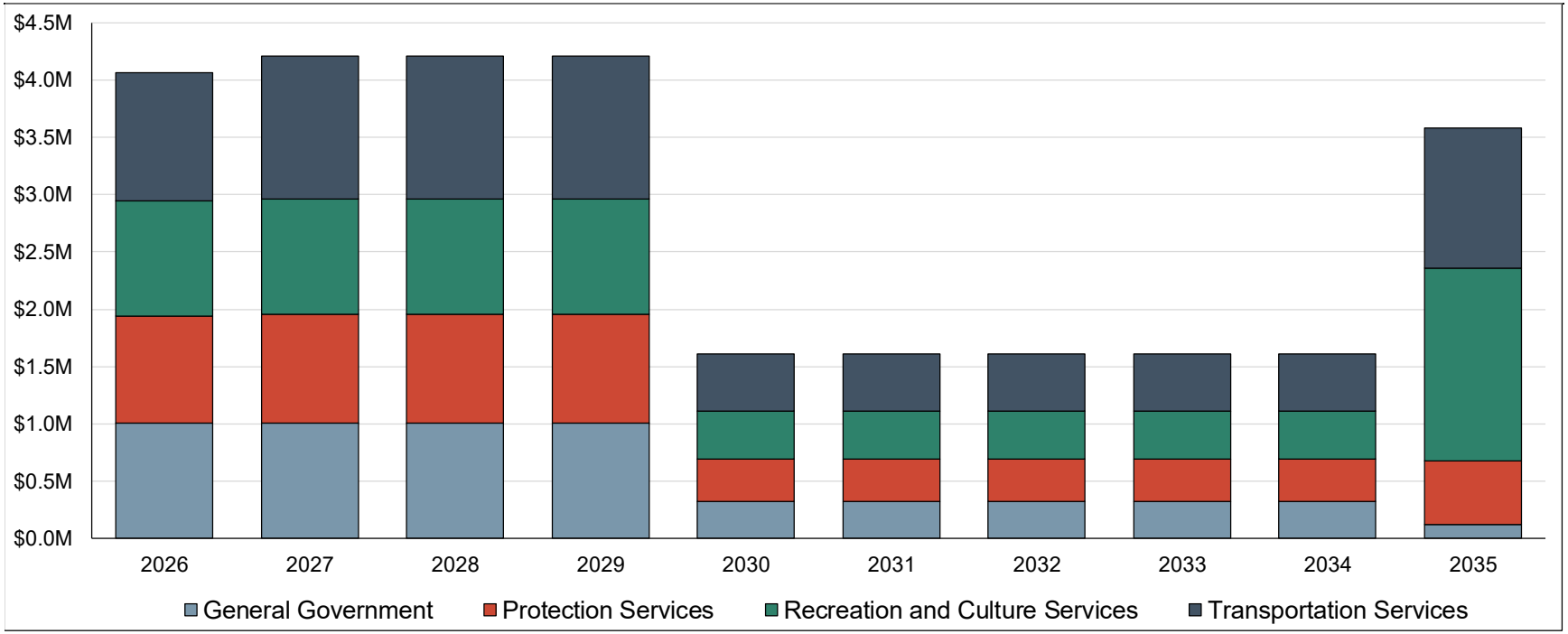


Table 3-1: Facilities – Lifecycle Expenditure Forecast (2025$)

Service Area	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
General Government	$1,004,000	$803,000	$803,000	$803,000	$320,000	$320,000	$320,000	$320,000	$320,000	$119,000
Protection Services	$933,000	$953,000	$953,000	$953,000	$370,000	$370,000	$370,000	$370,000	$370,000	$559,000
Rec. & Culture Services	$1,007,000	$1,007,000	$1,007,000	$1,007,000	$422,000	$422,000	$422,000	$422,000	$422,000	$1,681,000
Transportation Services	$1,122,000	$1,246,000	$1,246,000	$1,246,000	$499,000	$499,000	$499,000	$499,000	$499,000	$1,222,000
Total Capital Expenditures	**$4,066,000**	**$4,210,000**	**$4,210,000**	**$4,210,000**	**$1,611,000**	**$1,611,000**	**$1,611,000**	**$1,611,000**	**$1,611,000**	**$3,581,000**

3.3 Fleet and Equipment

This section presents an estimate of costs associated with maintaining the current level of service for the Township's fleet and equipment assets.

The capital expenditure forecast for the Township's fleet and equipment assets that were formally evaluated through physical condition assessments conducted by staff was developed based on the timing of replacements identified through those assessments. Please see section 2.2.2 for further details on these staff-led condition assessments. The lifecycle expenditure forecast for the remainder of fleet and equipment assets was developed based on ages and expected useful service lives of individual assets. For assets for which age is currently unknown, the lifecycle expenditure forecast includes an annual allowance based on each asset's estimated average annual lifecycle cost. This approach ensures that sufficient funds are being allocated on an annual basis to fund the asset's eventual replacement.

The ten-year lifecycle expenditure forecast is summarized in Figure 3-2 and provided in tabular form in Table 3-2. Average annual expenditures over the forecast period have been estimated at $2.5 million. Based on the best information available on the Township's assets, the current replacement backlog of fleet and equipment assets is $625,000. This represents the estimated current replacement cost of all fleet and equipment assets that are currently in-service beyond their useful service life expectancies.

Figure 3-2: Fleet and Equipment – Lifecycle Expenditure Forecast (2025$)

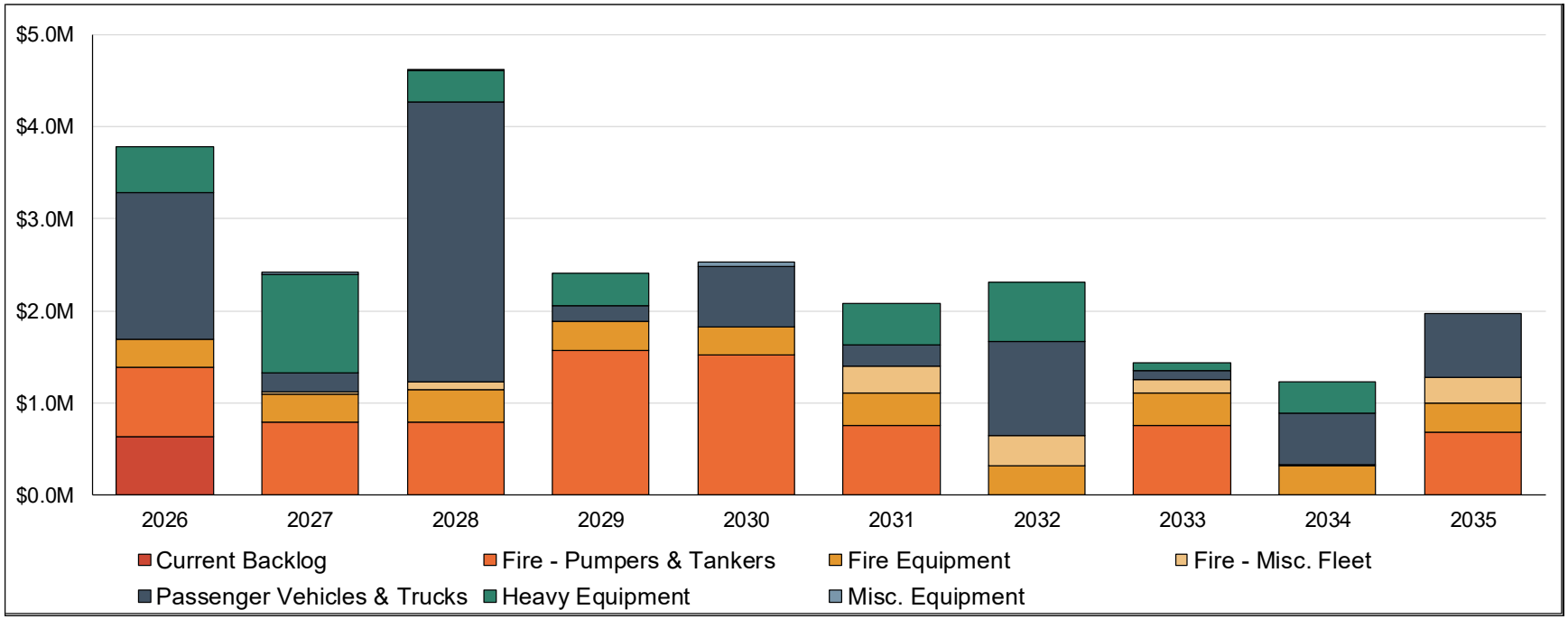


Table 3-2: Fleet and Equipment – Lifecycle Expenditure Forecast (2025$)

Asset Type	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Fire – Pumpers & Tankers	$758,000	$784,000	$784,000	$1,569,000	$1,516,000	$758,000	-	$758,000	-	$680,000
Fire – Equipment	$313,000	$313,000	$353,000	$313,000	$313,000	$353,000	$313,000	$353,000	$313,000	$313,000
Fire – Misc. Fleet	-	$26,000	$94,000	-	-	$282,000	$335,000	$146,000	$10,000	$282,000
Passenger Veh. & Trucks	$1,595,000	$199,000	$3,038,000	$173,000	$654,000	$241,000	$1,014,000	$94,000	$565,000	$701,000
Heavy Equipment	$491,000	$1,077,000	$345,000	$356,000	-	$444,000	$648,000	$84,000	$340,000	-
Misc. Equipment	-	$28,000	$10,000	-	$52,000	-	-	-	-	-
Current Backlog	$625,000									
Total Capital Expenditures	**$3,782,000**	**$2,427,000**	**$4,624,000**	**$2,411,000**	**$2,535,000**	**$2,078,000**	**$2,310,000**	**$1,435,000**	**$1,228,000**	**$1,976,000**

3.4 Transportation

This section presents an estimate of costs associated with maintaining the current level of service for the Township's transportation assets.

Similar to fleet and equipment assets, the capital expenditure forecast for the Township's road-related assets (i.e., sidewalks, streetlights, and traffic control signals) that were formally evaluated through physical condition assessments was developed based on the timing of capital lifecycle activities identified through those assessments. Please refer to Section 2.3.2 for further details on these condition assessments. The lifecycle expenditure forecast for the remainder of road-related assets was developed based on ages and expected useful service lives of individual assets. For assets with unknown age, the lifecycle expenditure forecast includes an annual allowance based on each asset's estimated average annual lifecycle cost. This approach ensures that sufficient funds are being allocated on an annual basis to fund the asset's eventual replacement.

In accordance with the Township's current lifecycle management strategy for gravel roads, the capital expenditure forecast presented herein includes an annual allowance of $340,000 for reconstruction of gravel roads, with the goal of gradually reconstructing the entire gravel road network. In addition to these reconstruction activities, which the Township plans to undertake over the short- to medium-term, the Township also completes regular maintenance activities on its gravel roads (e.g., dust suppressant applications, periodic re-grading, periodic re-application of granular, etc.) which are funded through its annual operating budgets. Following the reconstruction of its gravel road network, the Township expects to maintain its gravel roads in adequate condition over the long-term through the completion of these regular maintenance activities. As such, once fully reconstructed, the Township does not expect to incur any future capital expenditures related to its gravel road network.

The ten-year lifecycle expenditure forecast is summarized in Figure 3-3 and provided in tabular form in Table 3-3. Average annual expenditures over the forecast period have been estimated at $488,000.

Figure 3-3: Transportation Assets – Lifecycle Expenditure Forecast (2025$)

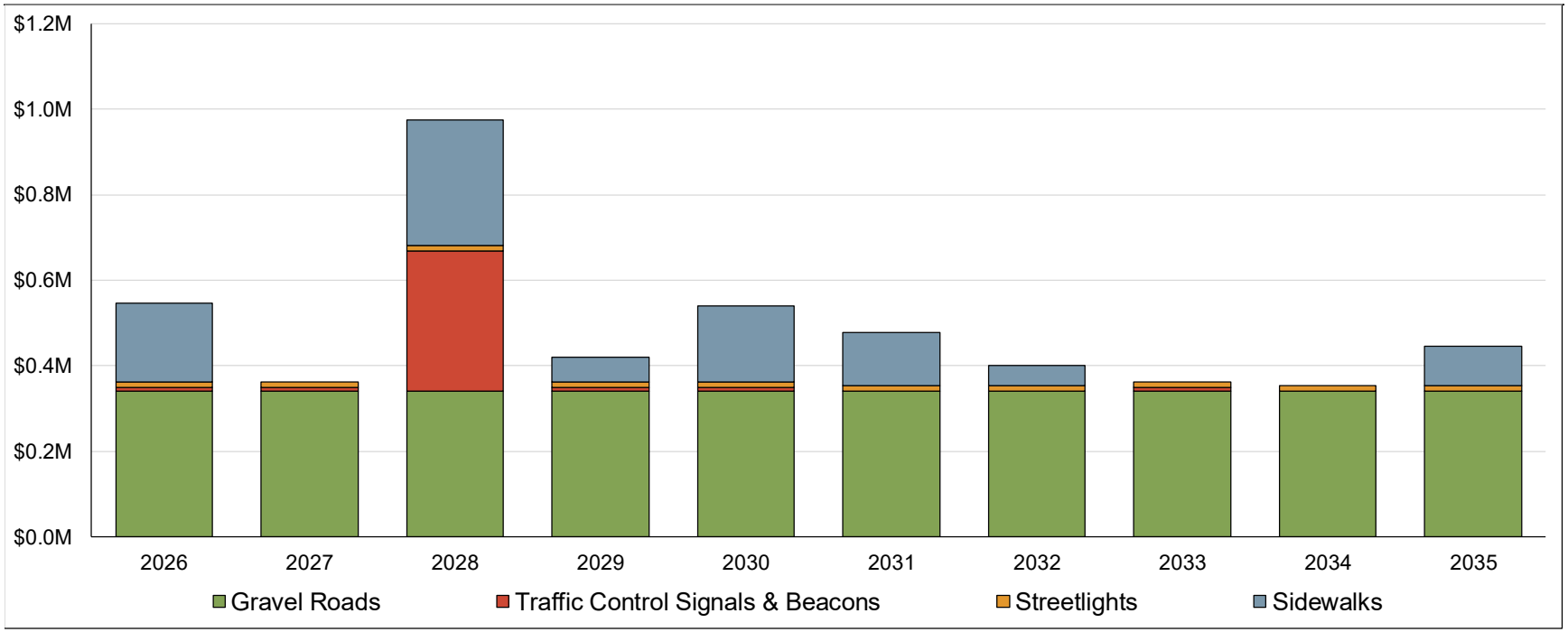


Table 3-3: Transportation Assets - Lifecycle Expenditure Forecast (2025$)

Asset Type	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Traffic Signals & Beacons	$10,000	$10,000	$329,000	$10,000	$10,000	-	-	$10,000	-	-
Streetlights	$13,000	$13,000	$13,000	$13,000	$13,000	$13,000	$13,000	$13,000	$13,000	$13,000
Sidewalks	$184,000	-	$292,000	$58,000	$176,000	$125,000	$48,000	-	-	$92,000
Gravel Roads	$340,000	$340,000	$340,000	$340,000	$340,000	$340,000	$340,000	$340,000	$340,000	$340,000
Total Capital Expenditures	**$547,000**	**$363,000**	**$974,000**	**$421,000**	**$539,000**	**$478,000**	**$401,000**	**$363,000**	**$353,000**	**$445,000**

3.5 Parks and Recreation

This section presents an estimate of costs associated with maintaining the current level of service for the Township's parks and recreation assets.

Similar to fleet and equipment as well as road-related assets, the capital expenditure forecast for the Township's parks and recreation assets that were formally evaluated through physical condition assessments conducted by staff was developed based on the timing of asset replacements identified through those assessments. Please refer to section 2.4.2 for further details on these staff-led condition assessments. The lifecycle expenditure forecast for the remainder of parks and recreation assets was developed based on ages and expected useful service lives of individual assets. For assets with unknown age, the lifecycle expenditure forecast includes an annual allowance based on each asset's estimated average annual lifecycle cost. This approach ensures that sufficient funds are being allocated on an annual basis to fund the asset's eventual replacement.

The ten-year lifecycle expenditure forecast is summarized in Figure 3-4 and provided in tabular form in Table 3-4. Average annual expenditures over the forecast period have been estimated at $488,000. Based on the best information available on the Township's assets, the current replacement backlog for parks and recreation assets is $1.0 million. This represents the estimated current replacement cost of all parks and recreation assets that are currently in service beyond their useful service life expectancies.

Figure 3-4: Parks and Recreation Assets – Lifecycle Expenditure Forecast (2025$)

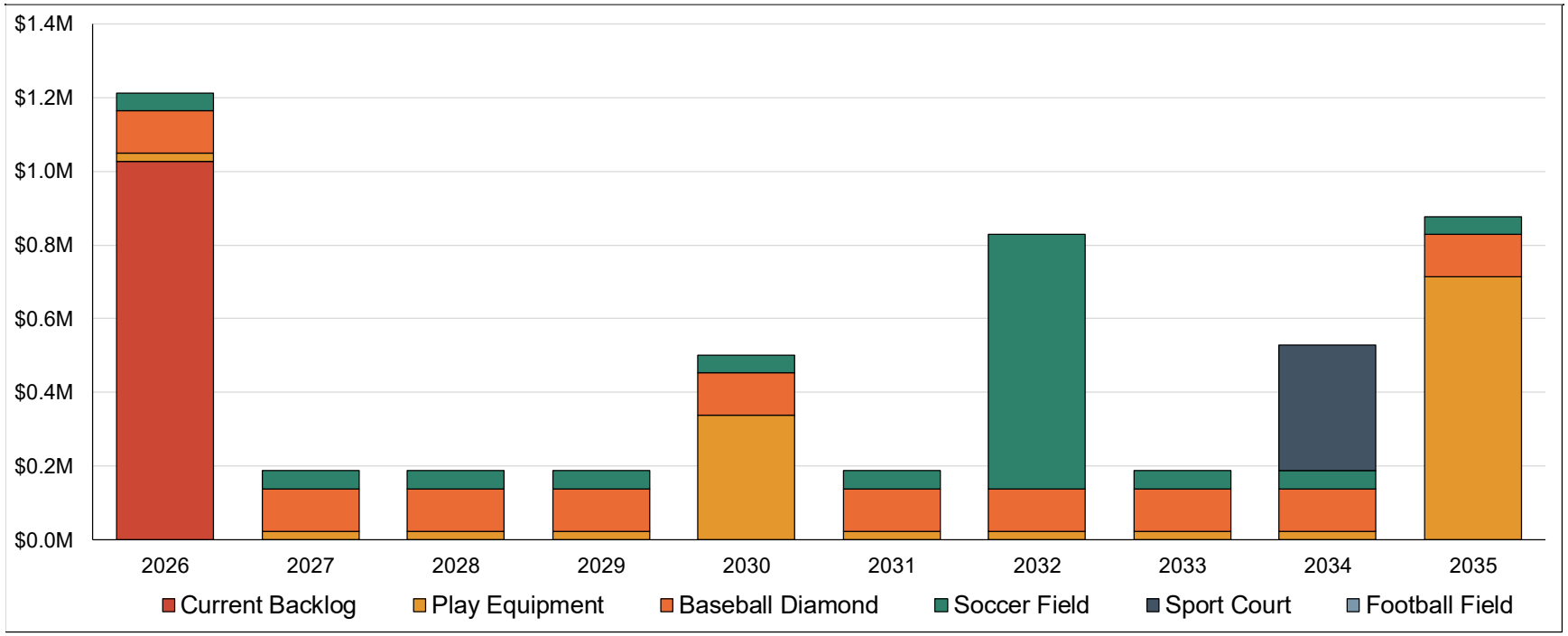


Table 3-4: Parks and Recreation Assets – Lifecycle Expenditure Forecast (2025$)

Asset Type	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Play Equipment	$23,000	$23,000	$23,000	$23,000	$337,000	$23,000	$23,000	$23,000	$23,000	$713,000
Baseball Diamonds	$115,000	$115,000	$115,000	$115,000	$115,000	$115,000	$115,000	$115,000	$115,000	$115,000
Soccer Fields	$49,000	$49,000	$49,000	$49,000	$49,000	$49,000	$691,000	$49,000	$49,000	$49,000
Sports Courts	-	-	-	-	-	-	-	-	$342,000	-
Football Field	-	-	-	-	-	-	-	-	-	-
Current Backlog	$1,026,000									
Total Capital Expenditures	**$1,213,000**	**$187,000**	**$187,000**	**$187,000**	**$501,000**	**$187,000**	**$829,000**	**$187,000**	**$529,000**	**$877,000**

Chapter 4
Summary

4. Summary

This asset management plan has been developed to address the July 1, 2024 requirements of O. Reg. 588/17. The plan provides summary information for the Township'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 Township to maintain current levels of service. The plan is based on the best information available to the Township at this time. The Township is actively working to identify proposed levels of service, and to develop a detailed financial strategy. The ongoing development of the AMP will ensure the Township'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 Township 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.