Asset Management Plan – Non-core Assets

Municipality of Meaford

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 Municipality of Meaford (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. Additionally, this asset management plan 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). 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, and developing a financial strategy that incorporates financial sustainability and affordability factors specific to the Municipality.

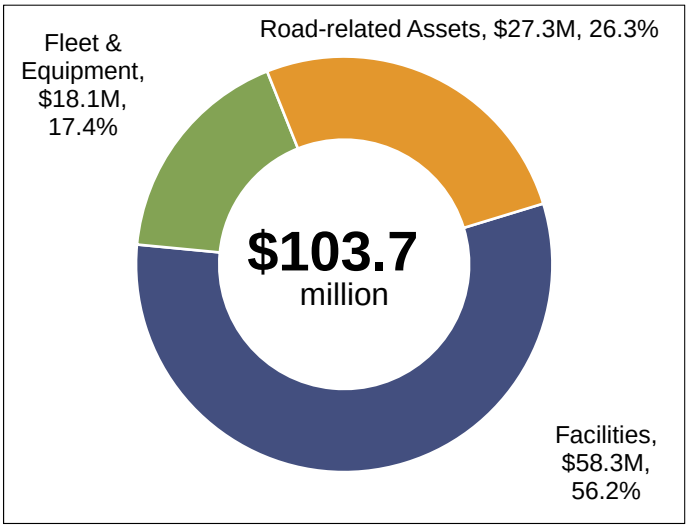
The information presented in this asset management plan is based on the best data available to the Municipality at this time. The asset inventory underlying this plan includes the Municipality's base non-core assets. Over time, this plan will be updated to include additional asset inventories that are currently being compiled. For example, the Municipality owns and manages several thousand trees. Due to data limitations, these assets have not been included in this asset management plan. However, the Municipality plans to incorporate these additional assets and to address other identified data gaps in the next iteration of this asset management plan which is due to be completed later in 2025.

The total replacement cost of the Municipality's non-core assets is estimated to be approximately $103.7 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 $58.3 million (56.2%), followed by non-core road-related assets at approximately $27.3 million (26.3%), and lastly, fleet and equipment assets at approximately $18.1 million (17.4%). Please note that any vehicles leased by the Municipality are excluded from the inventory of fleet assets and from all analyses presented in this asset management plan. Unlike vehicles that are owned by the Municipality, leased vehicles are not expected to require any future capital investments related to end-of-life replacement activities. Their lifecycle costs (i.e., monthly lease payments) are expected to be fully funded through the Municipality's base operational budgets.

Table 1-1: Replacement Cost by Asset Class

Asset Class	Replacement Cost (2024$)
Facilities	$58,326,000
Fleet & Equipment	$18,091,000
Non-core Road-related Assets	$27,290,000
TOTAL	**$103,707,000**

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



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 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, information gleaned through reviews of existing long-term planning documents and studies, and detailed analyses of 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 condition assessments completed by the Municipality and age-based condition analyses, where required.
3. Define and document current levels of service based on analyses of available data.
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
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

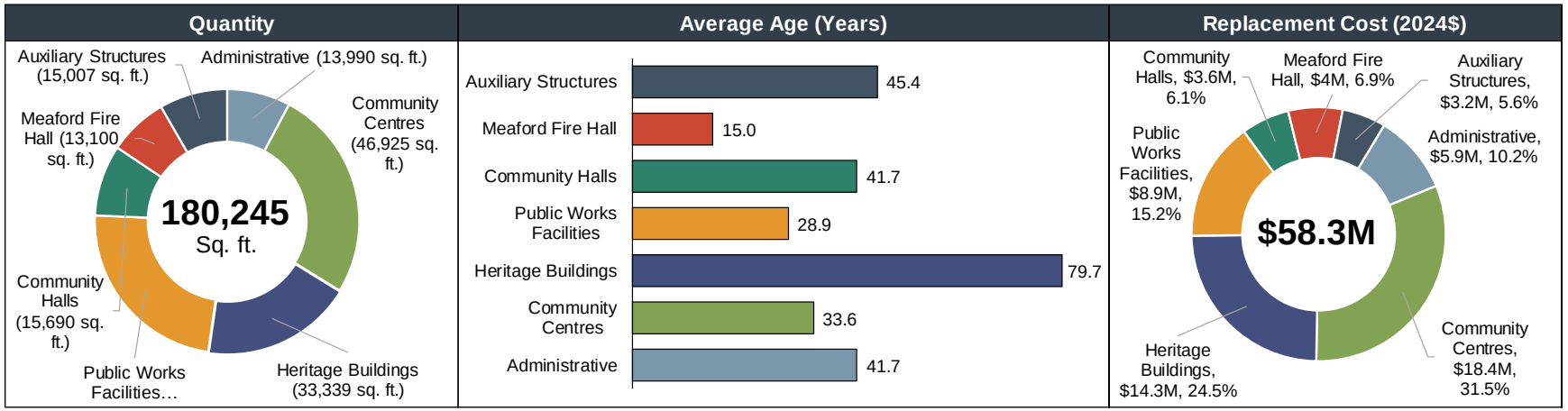
The Municipality owns and manages 45 facilities (excluding water and wastewater facilities) that support the delivery of various municipal services. These facilities include administrative facilities, community centres and halls, heritage buildings, Public Works facilities, the Meaford fire hall, and auxiliary structures such as washrooms and storage buildings. Water and wastewater facilities are not included in this asset management plan because they are considered core assets and are included in the Municipality's 2022 Asset Management Plan for core infrastructure assets.

The estimated current replacement cost of the Municipality's facilities is approximately $58.3 million. Community centres represent the largest share of replacement cost at approximately $18.4 million (31.5%), followed by heritage buildings at approximately $14.3 million (24.5%), Public Works facilities at approximately $9.0 million (15.2%), administrative facilities at approximately $6.0 million (10.2%), the Meaford fire hall at approximately $4.0 million (6.9%), community halls at approximately $3.6 million (6.1%), and lastly, auxiliary structures at approximately $3.2 million (5.6%). The average age across all of the Municipality's facilities is approximately 44.9 years. Table 2-1 summarizes the quantity, average age, and estimated current replacement cost of the Municipality's facilities by category. This information is further illustrated in Figure 2-1.

Table 2-1: Facilities – Quantity, Average Age, and Replacement Cost by Facility Category

Facility Category	Quantity	Average Age (Years)	Replacement Cost (2024$)
Administrative	5 facilities (13,990 sq. ft.)	41.7	$5,938,000
Community Centres	4 facilities (46,925 sq. ft.)	33.6	$18,379,000
Heritage Buildings	4 facilities (33,339 sq. ft.)	79.7	$14,292,000
Public Works Facilities	13 facilities (42,194 sq. ft.)	28.9	$8,866,000
Community Halls	3 facilities (15,690 sq. ft.)	41.7	$3,575,000
Meaford Fire Hall	1 facility (13,100 sq. ft.)	15.0	$4,035,000
Auxiliary Structures	15 facilities (15,007 sq. ft.)	45.4	$3,241,000
Total	**45 facilities (180,245 sq. ft.)**	**44.9**	**$58,326,000**

Figure 2-1: Facilities – Quantity, Average Age and Replacement Cost



2.1.2 Condition

The Municipality assesses the condition of its facilities through Building Condition Assessments (BCAs) completed by an external service provider. As part of the BCAs, individual facility components are inspected and qualified assessors assign a remaining useful life to each component based on its observed condition. Condition ratings are also assigned to each facility component utilizing the 7-point condition rating scale shown in Table 2-2. These condition assessments are subsequently utilized to identify upcoming repair, maintenance, rehabilitation, and replacement requirements for facilities at a component level.

Table 2-2: Facilities – Definition of Condition States with Respect to Level of Observed Deterioration

Condition State	Condition Rating	Description
New (or like-new)	0	Component is new or performing as new with at least 95% of its expected service life remaining.
Very Good	1	No noticeable defects or signs of functional deterioration.
Good	2	Minor noticeable defects with no signs of functional deterioration.
Fair	3	Deterioration is evident and function is affected.
Poor	4	Significant deterioration and component struggles to meet its functional requirements.
Very Poor	5	Component can no longer meet its functional requirements.
End of Life	6	Component has failed and can no longer be in service.

The Municipality's most recent component-level inspections, completed in 2016 and 2018, included 35 of its 45 facilities. The Municipality's remaining 10 facilities were assessed by staff on an aggregate facility-level utilizing the same condition rating scale shown in Table 2-2. On average[1], the Municipality's facilities were assessed to be in a "Good" condition state. The Municipality is currently undertaking an update of its BCAs that is due to be completed later in 2025. The updated BCAs will be utilized to inform the condition ratings of facilities in the next iteration of this asset management, due to

[1] Weighted average using replacement costs of facilities and individual components as weights.

be completed by July 1st 2025 to satisfy the July 1, 2025 requirements of O. Reg. 588/17.

The average condition ratings and associated condition states for the Municipality's facilities are summarized in Table 2-3 by facility category.

Table 2-3: Facilities – Average Condition Ratings and Condition States by Facility Category

Facility Category	Average Condition Rating	Average Condition State
Administrative	1.91	Very Good
Community Centres	2.34	Good
Heritage Buildings	2.09	Good
Public Works Facilities	2.33	Good
Community Halls	2.11	Good
Meaford Fire Hall	2.00	Good
Auxiliary Structures	2.70	Good
All Categories	**2.21**	**Good**

The distribution of replacement cost of the Municipality's facilities is illustrated in Figure 2-2 by facility category and in Figure 2-3 by condition state.

Figure 2-2: Distribution of Replacement Cost of Facility Components by Facility Category

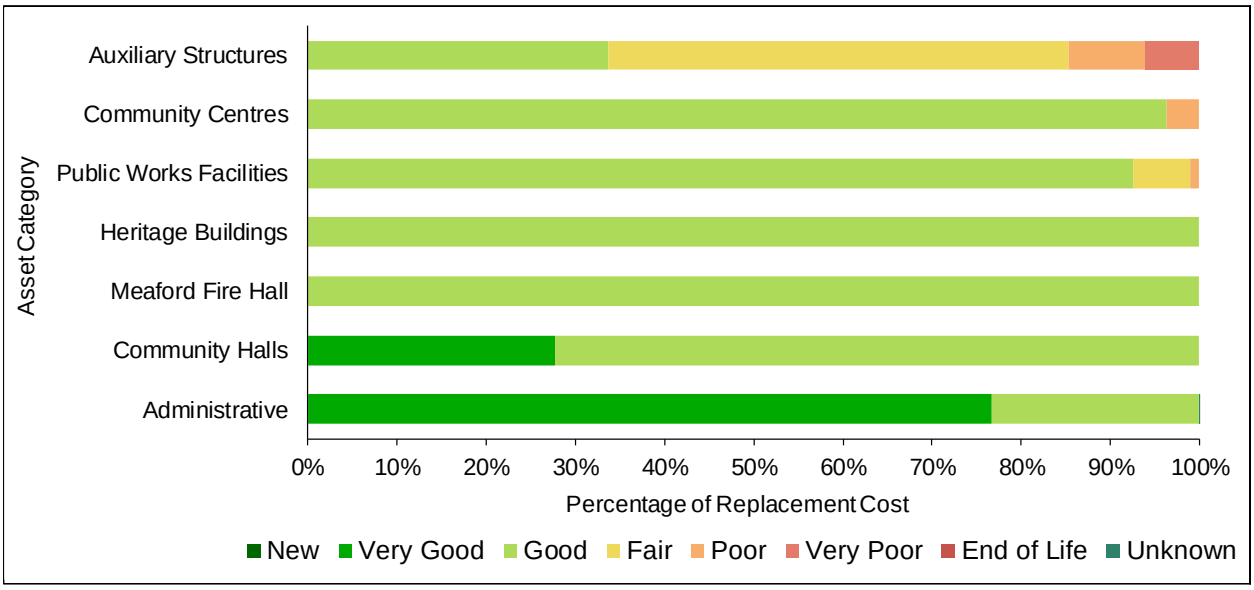
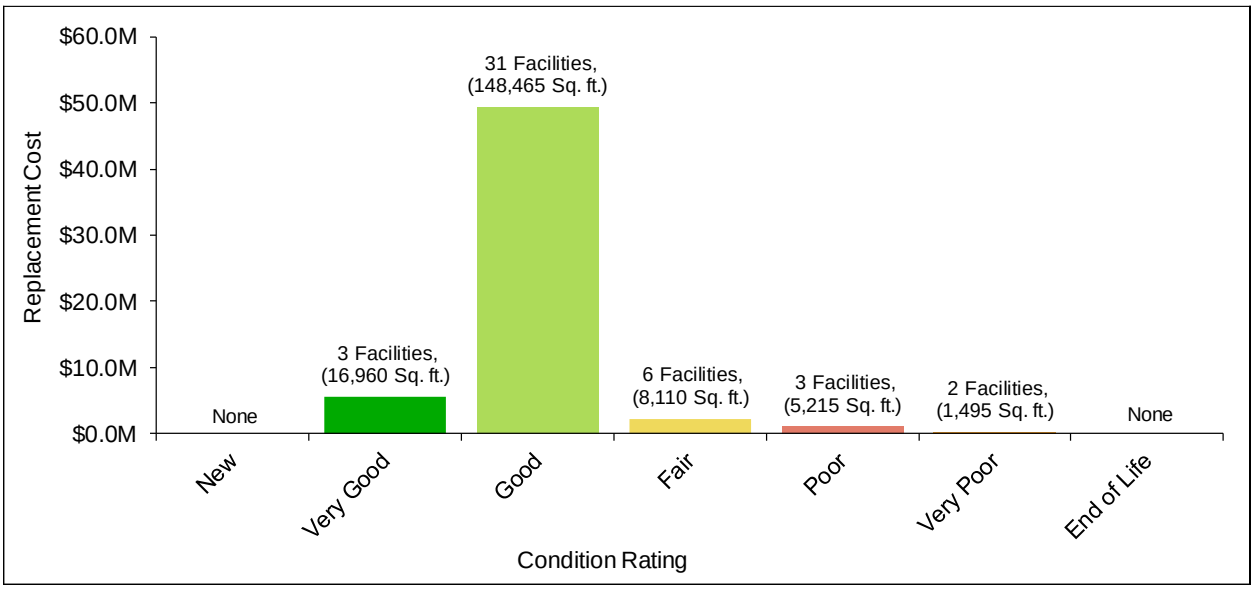


Figure 2-3: Distribution of Replacement Cost of Facilities by Condition State



2.1.3 Current Levels of Service

The levels of service being provided by the Municipality'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 the current levels of service that will be tracked over time. Please note that unlike for core infrastructure assets, O. Reg. 588/17 does not prescribe any levels of service for non-core infrastructure assets. The levels of service presented in this asset management plan were developed through 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 Municipality'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 current performance for the performance measure based on the best available data.

Table 2-4: Facilities – Community Levels of Service

Service Attribute	Community Levels of Service
Quality	The Municipality strives to maintain its facilities in adequate condition to continue functioning as intended.
Capacity	The Municipality 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 administrative facilities components (by replacement cost) in a "Fair" or better condition state	100%
	Percentage of community centre components (by replacement cost) in a "Fair" or better condition state	96%
	Percentage of heritage building components (by replacement cost) in a "Fair" or better condition state	100%
	Percentage of Public Works facility components (by replacement cost) in a "Fair" or better condition state	99%
	Percentage of community hall components (by replacement cost) in a "Fair" or better condition state	100%
	Percentage of fire hall components (by replacement cost) in a "Fair" or better condition state	100%
	Percentage of auxiliary building components (by replacement cost) in a "Fair" or better condition state	85%
Capacity	Gross floor area (square footage) of administrative facilities per 100 residents.[1]	122 ft^2
	Gross floor area (square footage) of community centres per 100 residents.[1]	409 ft^2
	Gross floor area (square footage) of heritage buildings per 100 residents.[1]	290 ft^2
	Gross floor area (square footage) of Public Works facilities per kilometre of roadways.[2]	107 ft^2
	Gross floor area (square footage) of community halls per 100 residents.[1]	137 ft^2
	Gross floor area (square footage) of fire halls per 100 residents.[1]	114 ft^2
	Gross floor area (square footage) of auxiliary structures per 100 residents.[1]	131 ft^2

[1] Based on 2021 Census population of 11,485 residents.
[2] Based on length of roadways reported in the Municipality's 2022 Asset Management Plan for core infrastructure assets.

2.2 Fleet and Equipment

2.2.1 State of Local Infrastructure

The Municipality's inventory of fleet and equipment assets comprises vehicles ranging from passenger cars to larger vehicles such as plow trucks, fire trucks, backhoes, and graders. The inventory also includes various pieces of equipment and IT assets utilized by Public Works, Fire Services, Parks and Facilities (e.g., playground equipment and cultural assets), and Administration. As mentioned earlier in Section 1.1, any vehicles that are leased by the Municipality are excluded from the inventory of fleet assets and from all analyses presented in this asset management plan. Unlike vehicles that are owned by the Municipality, leased vehicles are not expected to require any future capital investments related to end-of-life replacement activities and their lifecycle costs (i.e., monthly lease payments) are expected to be fully funded through the Municipality's base operational budgets.

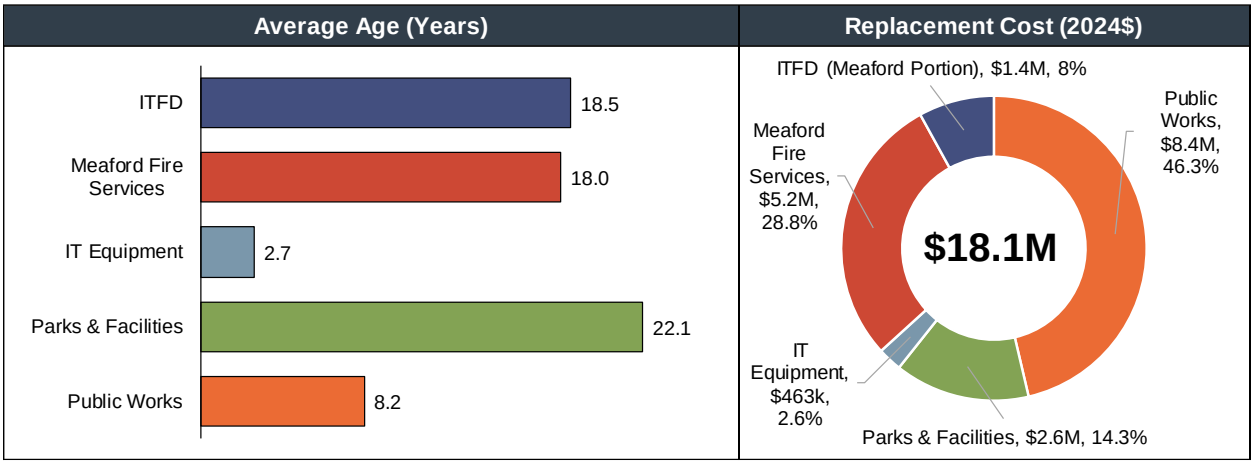
The estimated current replacement cost of the Municipality's fleet and equipment assets is approximately $18.1 million. Assets utilized by Public Works (including assets utilized in the provision of water and wastewater services) represent the largest share of total replacement cost at approximately $8.4 million (46.3%) followed by assets utilized by Meaford Fire Services at approximately $5.2 million (28.8%), Parks and Facilities at approximately $2.6 million (14.3%), the Municipality's portion of assets utilized by the Inter-Township Fire Department (ITFD) at approximately $1.5 million (8.0%), and lastly, IT equipment at approximately $463,000 (2.6%). The average age of all of the Municipality's fleet and equipment assets is approximately 13.6 years.

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

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

Service Area	Average Age (Years)	Replacement Cost (2024$)
Public Works	8.2	$8,384,000
Parks & Facilities	22.1	$2,593,000
IT Equipment	2.7	$463,000
Meaford Fire Services	18.0	$5,203,000
ITFD (Meaford Portion)	18.5	$1,448,000
TOTAL	**13.6**	**$18,091,000**

Figure 2-4: Fleet and Equipment – Average Age, and Replacement Cost



2.2.2 Condition

The condition of the Municipality's fleet and equipment assets has not been directly assessed through physical condition assessments. For the purposes of this asset management plan, condition ratings have been assigned to fleet and equipment assets 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. 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, may exhibit reduced reliability, and may have increasing repair and maintenance costs.

To better communicate the condition of assets, 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 performance would be characterized as "Poor" or "Very Poor".

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%

Table 2-8 summarizes the average ULC% and associated condition states of the Municipality's fleet and equipment assets by service area.

Table 2-8: Fleet and Equipment – Average Condition (ULC%) and Condition State by Service Area

Service Area	Average ULC%	Average Condition State
Public Works	62.7%	Good
Parks & Facilities	75.1%	Good
IT Equipment	63.9%	Good
Meaford Fire Services	93.9%	Fair
ITFD	99.0%	Fair
TOTAL	**75.7%**	**Good**

The distribution of replacement cost of the Municipality's fleet and equipment assets by condition state and service area is illustrated in Figure 2-5 and by ULC% is illustrated in Figure 2-6.

Figure 2-5: Distribution of Fleet and Equipment Assets by Condition State and Service Area

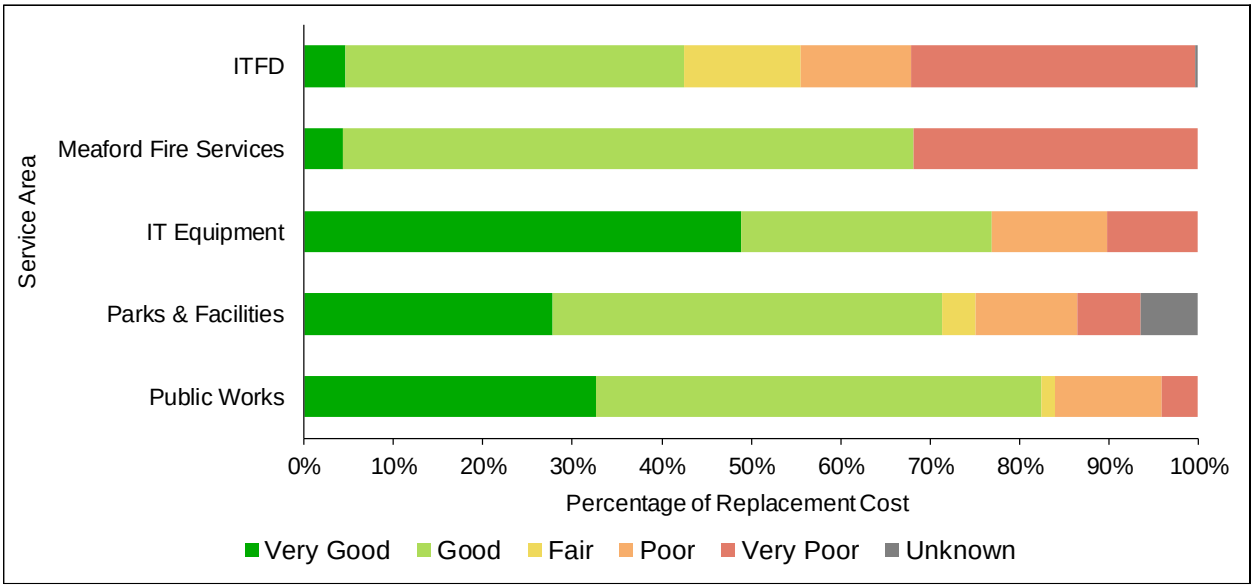
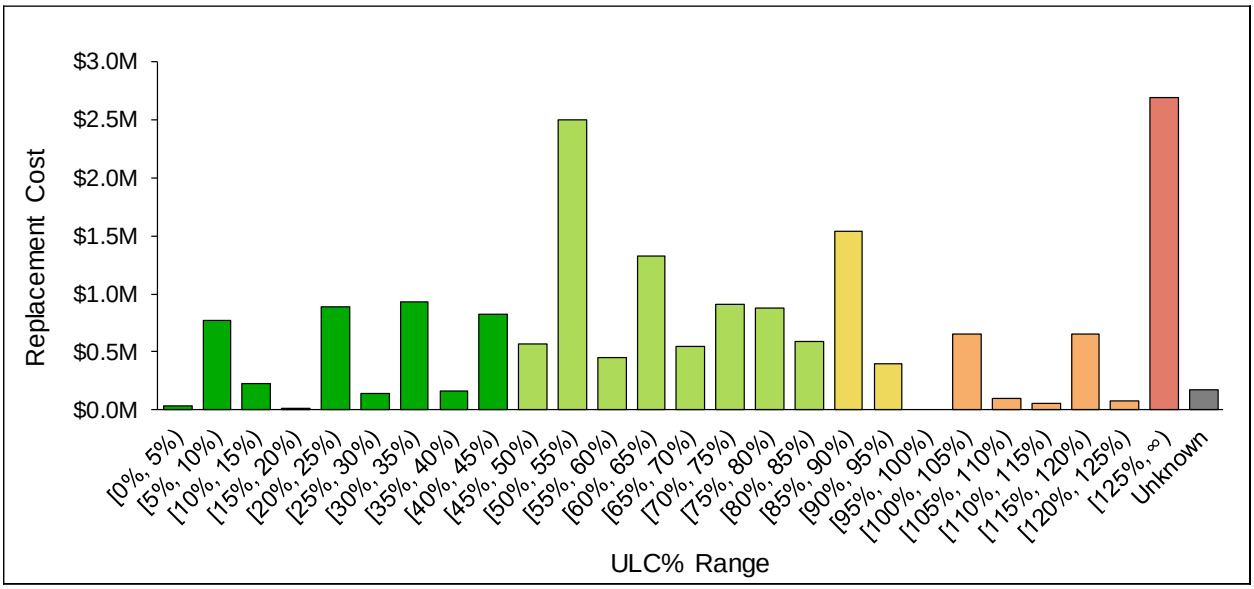


Figure 2-6: Distribution of Fleet and Equipment Assets by ULC% Range



2.2.3 Current Levels of Service

This subsection presents the Municipality's levels of service framework for its fleet and equipment assets. Table 2-9 presents the Municipality's Service Attributes and Community Levels of Service for its fleet and equipment assets while Table 2-10 presents the Municipality's 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 Municipality'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 Municipality 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 of assets utilized by Public Works (by replacement cost) in "Fair" or better condition	84%
	Percentage of assets utilized by Parks and Facilities (by replacement cost) in "Fair" or better condition	75%
	Percentage of IT equipment assets (by replacement cost) in "Fair" or better condition	77%
	Percentage of assets utilized by Meaford Fire Services (by replacement cost) in "Fair" or better condition	68%
	Percentage of assets utilized by the Inter-Township Fire Department (by replacement cost) in "Fair" or better condition	56%

2.3 Non-core Road-related Assets

2.3.1 State of Local Infrastructure

The Municipality's inventory of non-core road-related assets comprises approximately 23.3 kilometres of sidewalks, 6.6 kilometres of guiderails, 11.1 kilometres of non-structural culverts (less than 3-meter span), 737 streetlights, and 1,912 street signs.

The estimated current replacement cost of the Municipality's non-core road-related assets is approximately $27.3 million. Sidewalks represent the largest share of total replacement cost at approximately $12.2 million (44.8%) followed by non-structural

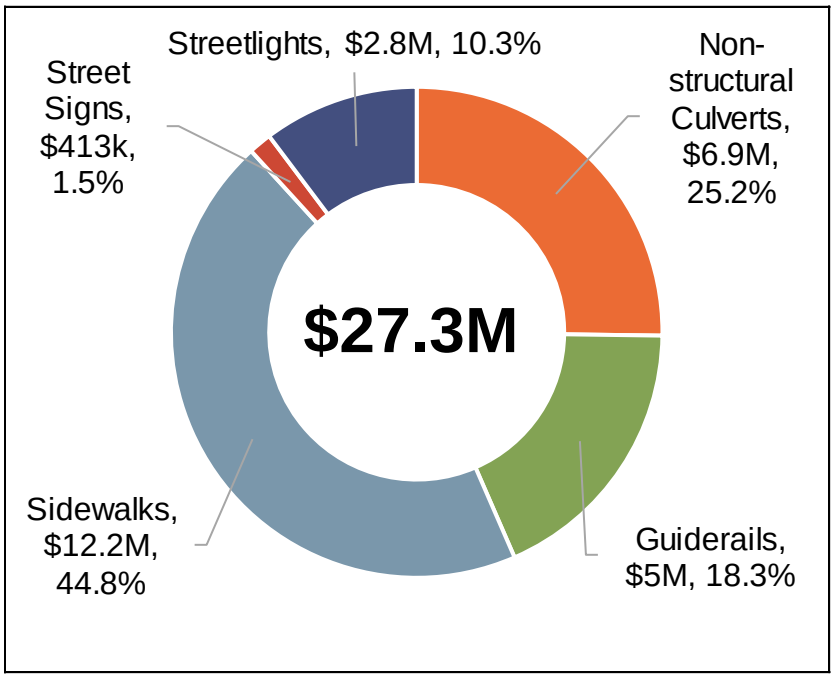
culverts at approximately $6.9 million (25.2%), guiderails at approximately $5.0 million (18.3%), streetlights at approximately $2.8 million (10.3%) and lastly, street signs at approximately $400,000 (1.5%). The municipality does not currently track the ages of its non-structural culverts, guiderails, sidewalks, and street signs. As such, average ages of those assets are not reported in this asset management plan. The average age of the Municipality's streetlights is approximately 8.7 years.

Table 2-11 summarizes the quantity, average age, and estimated current replacement cost of the Municipality's non-core road-related assets by asset sub-class. The estimated current replacement cost of assets by sub-class is further illustrated in Figure 2-7.

Table 2-11: Non-core Road-related Assets – Quantity, Average Age, and Replacement Cost by Asset Sub-class

Asset Sub-class	Quantity	Average Age (Years)	Replacement Cost (2024$)
Non-structural Culverts	11.13 kms	N/A	$6,882,000
Guiderails	6.56 kms	N/A	$4,984,000
Sidewalks	23.26 kms	N/A	$12,213,000
Street Signs	1,912 signs	N/A	$413,000
Streetlights	737 lights	8.7	$2,798,000
TOTAL		**N/A**	**$27,290,000**

Figure 2-7: Non-core Road-related Assets – Replacement Cost



2.3.2 Condition

Condition of the Municipality's sidewalks is reported using the Sidewalk Condition Index (SCI). SCI ratings are calculated to provide an overall measure of the observed condition based on visual inspections of each sidewalk segment. The Municipality updates condition ratings for its sidewalks every three years. To better communicate the condition of sidewalks, SCI ratings have been segmented into qualitative condition states as summarized in Table 2-12.

Table 2-12: Sidewalk Condition State Definitions (with respect to Sidewalk Condition Index) and Descriptions

Condition State	SCI Range	Description
Very Good	[90 – 100]	No noticeable defects
Good	[70 – 90)	Grinding of sidewalk panels recommended
Fair	[40 – 70)	Reconstruction of some sidewalk panels recommended
Poor	[0 – 40)	Reconstruction of entire sidewalk segment recommended

The Municipality assesses the physical condition of its non-structural culverts and guiderails through regular inspections. Condition ratings are assigned to individual assets on a four-point scale. To better communicate the condition of these assets, condition ratings have been segmented into qualitative condition states as summarized in Table 2-13.

Table 2-13: Non-structural Culverts and Guiderails Condition State Definitions

Condition State	Condition Rating	Description
Very Good	1	No noticeable defects
Good	2	Minor defects noticed
Fair	3	Deterioration is evident; function is limited
Poor	4	Significant deterioration; function is inadequate

The condition of the Municipality's streetlights has not been directly assessed through physical condition assessments. For the purposes of this asset management plan, the condition of streetlights is assessed based on age relative to useful service life (i.e. based on the percentage of useful service life consumed (ULC%)). Please refer to section 2.2.2 for more information on this condition assessment methodology. To better communicate the condition of these assets, ULC% ranges have been segmented into qualitative condition states as summarized in Table 2-14.

Table 2-14: Streetlights Condition State Definitions

Condition State	ULC%
Very Good	0% ≤ ULC% ≤ 25%
Good	25% < ULC% ≤ 50%
Fair	50% < ULC% ≤ 75%
Poor	75% < ULC%

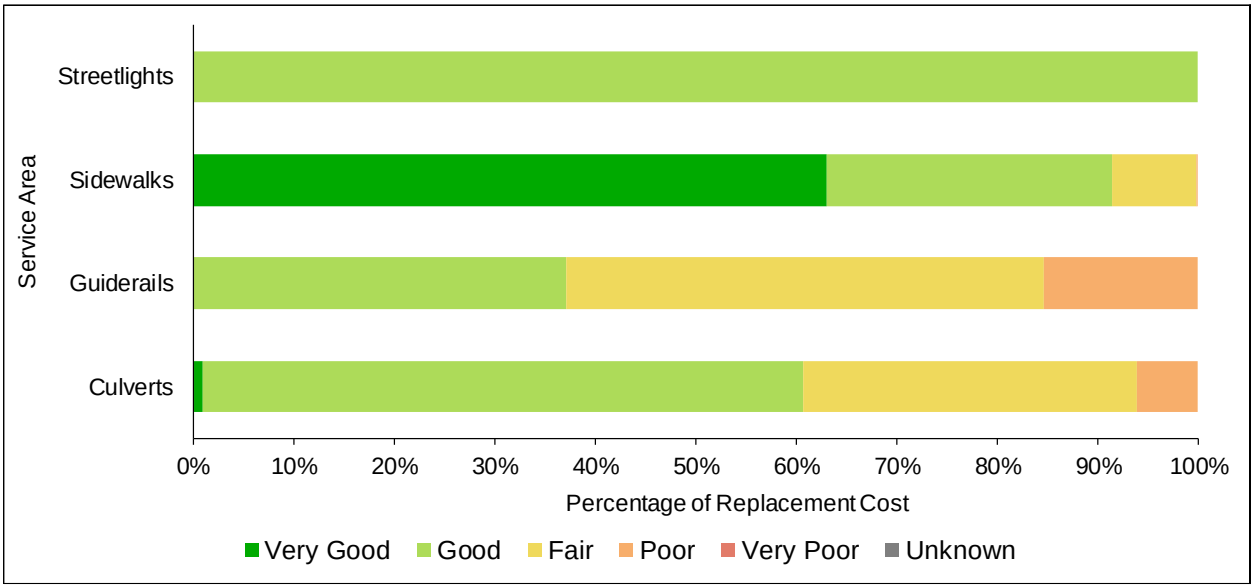
Table 2-15 summarizes the average ULC% and associated condition states of the Municipality's non-structural culverts, guiderails, sidewalks, and streetlights.

Table 2-15: Non-core Road-related Assets – Average Condition Ratings and Condition State

Asset Sub-class	Condition Assessment Scale	Average Condition Rating	Average Condition State
Non-structural Culverts	4-point Rating Scale	2.44	Good
Guiderails	4-point Rating Scale	2.78	Fair
Sidewalks	Sidewalk Condition Index Rating	89.23	Good
Streetlights	Useful Service Life Consumed %	29%	Good

The distribution of replacement cost of the Municipality's non-structural culverts, guiderails, sidewalks, and streetlights by condition state is illustrated in Figure 2-8.

Figure 2-8: Distribution of Non-core Road-related Assets by Condition State and Asset Sub-class



Lastly, the Municipality assesses the condition of its street signs by conducting annual retro-reflectivity testing in accordance with O. Reg. 239/02. The most recent retro-reflectivity testing conducted on the Municipality's street signs indicated that approximately 7.1% of signs had failed the minimum testing standards. It is worth noting that approximately 14.5% of street signs were not tested in the most recent round of retro-reflectivity testing due to various impeding factors.

2.3.3 Current Levels of Service

This subsection presents the Municipality's levels of service framework for its non-core road-related assets. Table 2-16 presents the Municipality's Service Attributes and Community Levels of Service for its non-core road-related assets while Table 2-17 presents the Municipality's 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 Municipality's levels of service framework.

Table 2-16: Non-core Road-related Assets – Community Levels of Service

Service Attribute	Community Levels of Service
Reliability	The Municipality strives to maintain its non-core road-related assets in adequate condition to continue performing as intended.

Table 2-17: Non-core Road-related Assets – Technical Levels of Service

Service Attribute	Performance Measure	Current Performance
Reliability	Percentage of non-structural culverts (by replacement cost) in a "Fair" or better condition state.	93.9%
	Percentage of guiderails (by replacement cost) in a "Fair" or better condition state.	84.6%
	Percentage of sidewalks (by replacement cost) in a "Fair" or better condition state.	99.9%
	Percentage of streetlights (by replacement cost) in "Fair" or better condition.	100.0%
	Percentage of street signs assessed in most recent retro-reflectivity testing.	85.5%
	Percentage of assessed street signs that passed retro-reflectivity testing.	91.7%

2.4 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. The Municipality recently completed its 2024 Development Charges Background Study which contains a forecast of residential and non-residential development to 2033. From 2023 to 2033, the Municipality's population is expected to grow by approximately 1,099 people. Continued population growth is expected to result in incremental service

demands that would impact levels of service. The investments that the Municipality will need to make to maintain service levels in light of the incremental service demands are summarized in the Municipality'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.

O. Reg. 588/17 requires that all potential lifecycle activity options be assessed, with the aim of identifying the set of lifecycle activities that can be undertaken at the lowest cost to maintain current levels of service. Asset management plans must include a ten-year capital forecast, identifying the lifecycle activities resulting from the lifecycle management strategy.

The following subsections show summaries of the lifecycle models developed for the Municipality's assets and detail the ten-year forecasts of lifecycle activities and associated costs that would be required for the Municipality to maintain current levels of service. The 10-year lifecycle expenditure forecasts are preliminary estimates generated based on the lifecycle management models and current condition/age profile of the assets. Further adjustments may be made in the next phase of the asset management plan when level of service targets are going to be established.

This asset management plan also presents an annual lifecycle funding target for each asset class. The annual lifecycle funding target, which is established by estimating the asset class's average annual lifecycle cost, 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

[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.

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.

3.2 Facilities

This section presents a preliminary estimate of the costs associated with maintaining current levels of service for the Municipality's facilities.

Average annual lifecycle costs for facilities that have component-level inventories established were estimated by spreading the estimated current replacement value of individual facility components over their respective expected useful service lives. This approach ensures that sufficient funds are available for the replacement of facility components as they reach the end of their service lives and can no longer fulfill their functional requirements. For facilities that do not have component-level inventories established, average annual lifecycle costs were estimated by applying an annual reinvestment rate of 2.1% to the estimated current replacement value of each facility. The annual reinvestment rate of 2.1%, informed through the *Canadian Infrastructure Report Card*, is intended to capture replacement and repair of facility components as they come due, as well as larger-scale renovations/rehabilitations. The average annual lifecycle cost of the Municipality's 45 facilities is estimated to be approximately $1.0 million. Table 3-1 provides a breakdown of the average annual lifecycle costs of facilities by facility category.

Table 3-1: Facilities - Average Annual Lifecycle Costs (2024$)

Facility Category	Replacement Cost (2024$)	Average Annual Lifecycle Cost (2024$)	Average Annual Reinvestment Rate (% of Replacement Cost)
Administrative	$5,938,000	$79,000	1.3%
Community Centres	$18,379,000	$298,000	1.6%
Heritage Buildings	$14,292,000	$275,000	1.9%
Public Works Facilities	$8,866,000	$148,000	1.7%
Community Halls	$3,575,000	$72,000	2.0%
Meaford Fire Hall	$4,035,000	$65,000	1.6%
Auxiliary Structures	$3,241,000	$63,000	1.9%
TOTAL	**$58,326,000**	**$1,000,000**	**1.7%**

The lifecycle expenditure forecast for facilities that have had component-level inspections completed was developed using the condition rating of each component to estimate its timing of replacement. The lifecycle expenditure forecasts for the remaining facilities include an annual allowance based on each facility's average annual lifecycle cost. Although this approach does not identify the specific facility components that require rehabilitation and/or replacement, it ensures that sufficient funds are allocated annually to fund lifecycle expenditure requirements as they are identified and allows for the building up of lifecycle reserves to fund future expenditures. As noted earlier, the Municipality is currently undertaking an update of its BCAs. Results form the updated BCAs will be incorporated into the next iteration of the Municipality's asset management plan, due to be completed later in 2025.

The backlog of lifecycle replacement/rehabilitation requirements for the Municipality's facilities is defined as the estimated current replacement cost of facility components that have been assessed to be in a "Poor", "Very Poor", or "End of Life" condition state. Facility components assessed to be in these condition states generally aren't able to meet their functional requirements or have already failed. Based on the most recent component-level inspections, the current backlog of lifecycle replacement/rehabilitation requirements for the Municipality's facilities is estimated to be approximately $551,000. Additionally, approximately $8.4 million worth of facility components have been assessed to be in a "Fair" condition state, indicating that those assets have deteriorated to a point where their ability to meet their functional requirements has been materially diminished. It is recommended that the Municipality increase the frequency of inspections for these components to more accurately assess the timing of their

upcoming lifecycle replacement/rehabilitation requirements. The 10-year lifecycle expenditure forecast is summarized in Figure 3-1 and Table 3-2. Average annual expenditures over the forecast period have been estimated at approximately $1 million.

Figure 3-1: Facilities: Lifecycle Expenditure Forecast (2024$)

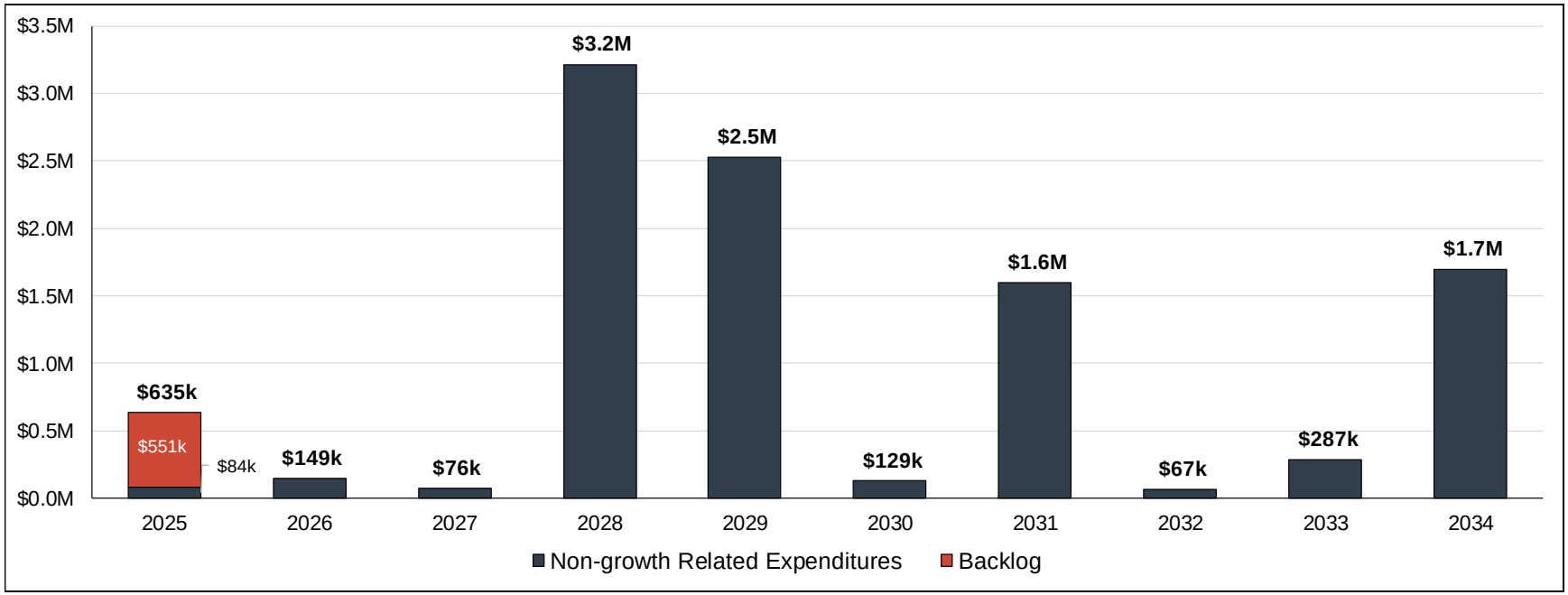


Table 3-2: Facilities – Lifecycle Expenditure Forecast (2024$)

Facility Category	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Capital Expenditures										
Administrative	$4,000	$4,000	$4,000	$4,000	$192,000	$4,000	$38,000	$4,000	$64,000	$42,000
Community Centres	$26,000	$26,000	$26,000	$2,737,000	$26,000	$26,000	$26,000	$26,000	$26,000	$62,000
Heritage Buildings	$5,000	$5,000	$5,000	$5,000	$839,000	$5,000	$1,503,000	$5,000	$57,000	$861,000
Public Works Facilities	$35,000	$39,000	$27,000	$258,000	$1,283,000	$35,000	$18,000	$18,000	$18,000	$283,000
Community Halls	$2,000	$63,000	$2,000	$36,000	$67,000	$36,000	$2,000	$2,000	$2,000	$2,000
Meaford Fire Hall	-	-	-	-	-	-	-	-	-	$185,000
Auxiliary Structures	$12,000	$12,000	$12,000	$172,000	$122,000	$23,000	$12,000	$12,000	$120,000	$260,000
Current Backlog	$551,000									
Total Capital Expenditures	**$635,000**	**$149,000**	**$76,000**	**$3,212,000**	**$2,529,000**	**$129,000**	**$1,599,000**	**$67,000**	**$287,000**	**$1,695,000**

3.3 Fleet and Equipment

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

Since the only major lifecycle activity for fleet and equipment assets has been identified as eventual replacement at the end of their expected useful service lives, average annual lifecycle costs were estimated by spreading the estimated replacement value of assets over the term of each asset's expected useful service life. The average annual lifecycle cost of the Municipality's fleet and equipment assets is estimated to be approximately $1.3 million. Table 3-3 provides a breakdown of the average annual lifecycle costs of fleet and equipment assets.

Table 3-3: Fleet and Equipment - Average Annual Lifecycle Costs (2024$)

Service Area	Replacement Cost (2024$)	Average Annual Lifecycle Cost (2024$)
Public Works	$8,384,000	$664,000
Parks & Facilities	$2,593,000	$106,000
IT Equipment	$463,000	$110,000
Meaford Fire Services	$5,203,000	$293,000
ITFD (Meaford Portion)	$1,448,000	$83,000
TOTAL	**$18,091,000**	**$1,256,000**

The lifecycle expenditure forecast for fleet and equipment assets was developed based on ages and expected useful service lives of individual assets. For assets utilized by the Inter-Township Fire Department, only the portion of lifecycle expenditures that are required to be funded by the Municipality (i.e., 25%) is included in the forecast. The ten-year lifecycle expenditure forecast is summarized in Figure 3-2 and Table 3-4. Average annual expenditures over the forecast period have been estimated at approximately $1.6 million. Based on the best information available on the Municipality's assets, the current fleet and equipment backlog is approximately $3.6 million. This represents the estimated current replacement value of all fleet and equipment assets that are in use beyond their expected useful service lives.

Figure 3-2: Fleet and Equipment: Lifecycle Expenditure Forecast (2024$)

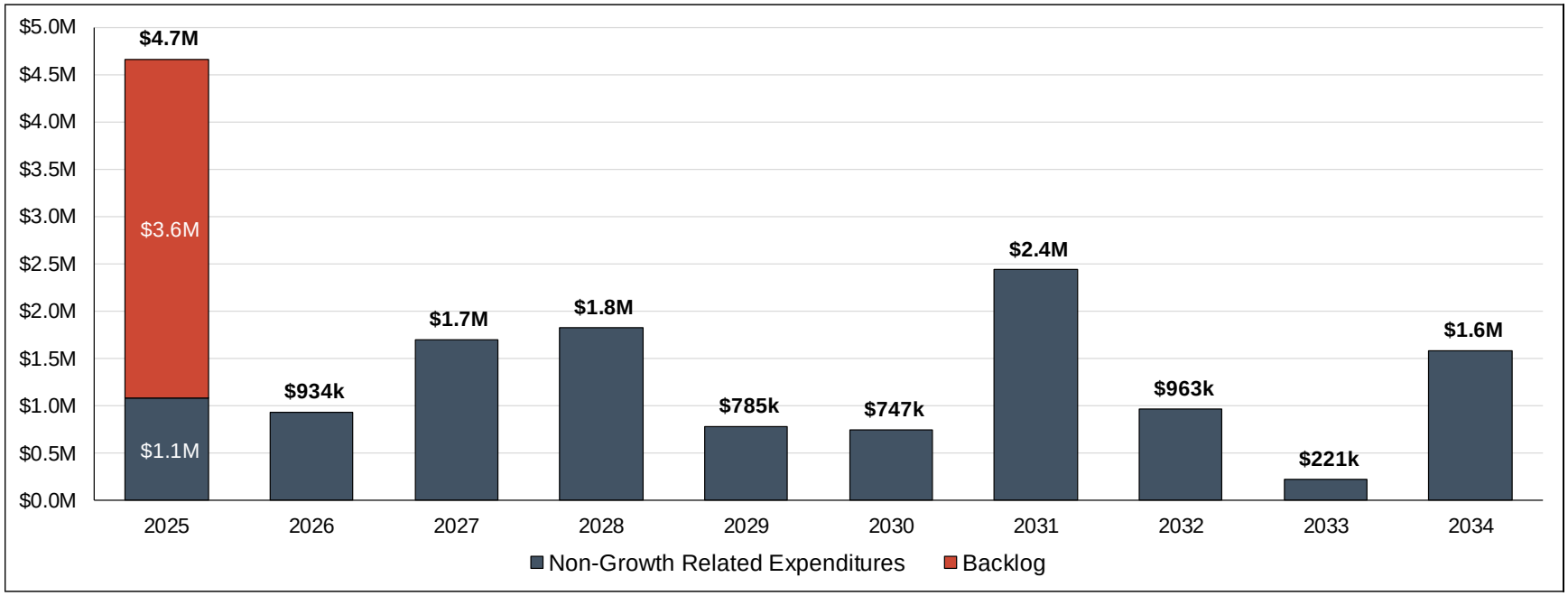


Table 3-4: Fleet and Equipment - Lifecycle Expenditure Forecast (2024$)

Service Area	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Capital Expenditures										
Public Works	$470,000	$720,000	$390,000	$1,318,000	$325,000	$410,000	$1,525,000	$747,000	-	-
Parks & Facilities	$112,000	$89,000	$123,000	$7,000	$22,000	$212,000	$147,000	$51,000	$26,000	$38,000
IT Equipment	$125,000	$38,000	$204,000	$43,000	$138,000	$86,000	$117,000	$103,000	$177,000	$25,000
Meaford Fire Services	$11,000	$87,000	$979,000	$457,000	$15,000	-	$648,000	$13,000	$18,000	$1,342,000
ITFD	$366,000	-	-	-	$285,000	$39,000	-	$49,000	-	$178,000
Public Works	$470,000	$720,000	$390,000	$1,318,000	$325,000	$410,000	$1,525,000	$747,000	-	-
Current Backlog	$3,577,000									
Total Capital Expenditures	**$4,661,000**	**$934,000**	**$1,696,000**	**$1,825,000**	**$785,000**	**$747,000**	**$2,437,000**	**$963,000**	**$221,000**	**$1,583,000**

3.4 Non-core Road-related Assets

This section presents a preliminary estimate of the costs associated with maintaining current level of service for the Municipality's non-core road-related assets.

Similar to fleet and equipment assets, the only major lifecycle activity for the Municipality's non-core road-related assets has been identified as eventual replacement at the end of their expected useful service lives. As such, average annual lifecycle costs were estimated by spreading the estimated replacement cost of assets over the term of each asset's expected useful service life. The average annual lifecycle cost of the Municipality's non-core road-related assets is estimated to be approximately $755,000. Table 3-5 provides a breakdown of the average annual lifecycle costs by asset sub-class.

Table 3-5: Non-core Road-related Assets - Average Annual Lifecycle Costs (2024$)

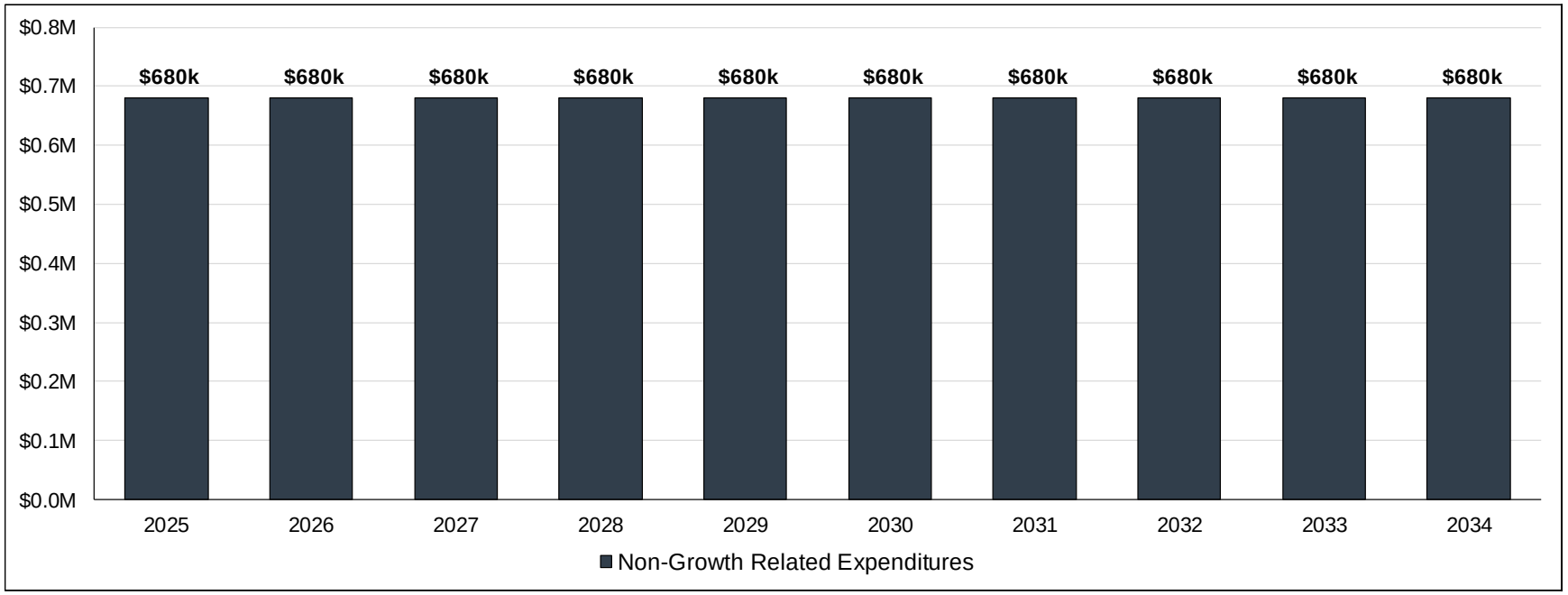
Asset Sub-class	Replacement Cost (2024$)	Average Annual Lifecycle Cost (2024$)
Non-structural Culverts	$6,882,000	$135,000
Guiderails	$4,984,000	$249,000
Sidewalks	$12,213,000	$257,000
Street Signs	$413,000	$21,000
Streetlights	$2,798,000	$93,000
TOTAL	**$27,290,000**	**$755,000**

The Municipality has implemented a culvert replacement program that is focused on systematically replacing culverts in poor condition. This program operates with an annual budget of approximately $60,000 which allows for the replacement of 10 to15 culverts annually. This culvert replacement program formed the basis of the lifecycle expenditure forecast for the Municipality's non-structural culverts presented in this subsection. The Municipality has not yet assessed the timing of upcoming lifecycle expenditures for its remaining non-core road-related assets. Therefore, the lifecycle expenditure forecasts for these assets were derived by allocating an annual allowance based on the average annual lifecycle costs identified in Table 3-5. Although this approach does not identify the specific assets which require renewal and/or replacement activities to be completed, it ensures that, over the long-term, sufficient funds are available to fund annual lifecycle requirements as they are identified, thus

ensuring that the asset sub-class is being fully funded. The ten-year lifecycle expenditure forecast is summarized in Figure 3-3.

Based on the best information available on the Municipality's non-core road-related assets, the current backlog is estimated to be approximately $1.2 million. This represents the estimated current replacement value of non-structural culverts and guiderails that have been assessed to be in Poor condition, sidewalk segments that require immediate reconstruction based on the most recent annual inspection report, and street signs that have failed the most recent retro-reflectivity testing. There is no backlog that has been currently identified for the Municipality's streetlights.

Figure 3-3: Non-core Road-related Assets – Lifecycle Expenditure Forecast (2024$)



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 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 Municipality 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.