



ASSET

MANAGEMENT

PLAN

**JUNE
2025**



Table of Contents

Table of Contents	2
Executive Summary	7
Introduction	9
Transportation	24
State of the Infrastructure	24
Levels of Service	27
Lifecycle Management Strategy	34
Financial Strategy.....	36
Data Confidence.....	39
Continuous Improvement	40
Stormwater	42
State of the Infrastructure	42
Levels of Service	45
Lifecycle Management Strategy	47
Financial Strategy.....	48
Data Confidence.....	51
Continuous Improvement	52
Corporate Facilities	54
State of the Infrastructure	54
Levels of Service	57
Lifecycle Management Strategy	58
Financial Strategy.....	60
Data Confidence.....	63
Continuous Improvement	64
Transit	66
State of the Infrastructure	66
Levels of Service	69
Lifecycle Management Strategy	70
Financial Strategy.....	71
Data Confidence.....	74
Continuous Improvement	75

Table of Contents

Recreation and Culture	77
State of the Infrastructure	77
Levels of Service	81
Lifecycle Management Strategy	82
Financial Strategy.....	84
Data Confidence.....	87
Continuous Improvement	88
Natural Assets	90
State of the Infrastructure	90
Levels of Service	91
Data Confidence.....	92
Continuous Improvement	93
Corporate Fleet	95
State of the Infrastructure	95
Levels of Service	98
Lifecycle Management Strategy	99
Financial Strategy.....	100
Data Confidence.....	103
Continuous Improvement	104
Financial Strategy	106
Financial Strategy Overview.....	106
Projected Financing Strategies.....	109
Full Funding Analysis	112
Continuous Improvement	113
Appendices	114

List Of Tables

Table 1. Objectives of Asset Management 10

Table 2. Explanation of Levels of Service 12

Table 3. Lifecycle Management Strategies 13

Table 4. Asset Condition Rating System 15

Table 5. Service Area Structure 17

Table 6. Infrastructure Report Card, 2025 20

Table 7. City of Woodstock Growth Projections 22

Table 8. Transportation Inventory 24

Table 9. Estimated Useful Life for Transportation Components, 2025 26

Table 10. O.Reg. 588/17 Levels of Service Metrics 27

Table 11. Images of Pavement Condition Index Inspections 28

Table 12. Images of OSIM Bridge Inspections 28

Table 13. Images of OSIM Culvert Inspections 29

Table 14. Lifecycle Management Strategies, Transportation 34

Table 15. Stormwater Inventory 42

Table 16. Estimated Useful Life for Stormwater Components, 2025 44

Table 17. O.Reg. 588/17 Levels of Service Metrics 45

Table 18. Lifecycle Management Strategies, Stormwater 47

Table 19. Corporate Facilities Inventory 54

Table 20. Estimated Useful Life for Corporate Facilities Components, 2025 56

Table 21. Levels of Service Metrics 57

Table 22. Lifecycle Management Strategies, Corporate Facilities 58

Table 23. Transit Inventory 66

Table 24. Estimated Useful Life for Transit Components, 2025 68

Table 25. Levels of Service Metrics 69

Table 26. Lifecycle Management Strategies, Transit 70

Table 27. Recreation and Culture Inventory 77

Table 28. Estimated Useful Life for Recreation and Culture Components, 2025 80

Table 29. Levels of Service Metrics 81

Table 30. Lifecycle Management Strategies, Recreation and Culture 82

Table 31. Natural Assets Inventory 90

Table 32. Estimated Useful Life for Natural Assets Components, 2025 91

Table 33. Levels of Service Metrics 91

Table 34. Corporate Fleet Inventory 95

Table 35. Estimated Useful Life for Corporate Fleet Components, 2025 97

Table 36. Levels of Service Metrics 98

Table 37. Lifecycle Management Strategies, Corporate Fleet 99

Table 38. Capital Budget by Service Area (000s) 108

Table 39. Operating Budget by Service Area (000s) 108

Table 40. Average Annual Investment Requirements by Service Area 109

List Of Figures

Figure 1. Asset Management Chart 9

Figure 2. Service Area Valuation Breakdown 18

Figure 3. Historical Investment in Infrastructure – All Service Areas 1971-2024 19

Figure 4. Asset Condition – Transportation, 2025 24

Figure 5. Asset Condition Breakdown – Transportation, 2025 25

Figure 6. Useful Life Remaining – Transportation, 2025 26

Figure 7. Level of Connectivity - Road Network, 2025 30

Figure 8. Pavement Condition - Road Network, 2025 31

Figure 9. Level of Connectivity - Sidewalk Network, 2025 32

Figure 10. Level of Connectivity – Bridges and Culvert, 2025 33

Figure 11. Scenario One Asset Performance – Transportation 2025-2034 36

Figure 12. Scenario One Lifecycle Costs – Transportation 2025-2034 36

Figure 13. Scenario Two Asset Performance – Transportation 2025-2034 37

Figure 14. Scenario Three Asset Performance – Transportation 2025-2034 38

Figure 15. Scenario Three Lifecycle Costs – Transportation 2025-2034 38

Figure 16. Data Accuracy – Transportation 39

Figure 17. Asset Condition – Stormwater, 2025 42

Figure 18. Asset Condition Breakdown – Stormwater, 2025 43

Figure 19. Useful Life Remaining – Stormwater, 2025 44

Figure 20. Stormwater Management System - Stormwater Network, 2025 46

Figure 21. Scenario One Asset Performance – Stormwater 2025-2034 48

Figure 22. Scenario One Lifecycle Costs – Stormwater 2025-2034 48

Figure 23. Scenario Two Asset Performance – Stormwater 2025-2034 49

Figure 24. Scenario Three Asset Performance – Stormwater 2025-2034 50

Figure 25. Scenario Three Lifecycle Costs – Stormwater 2025-2034 50

Figure 26. Data Accuracy – Stormwater 51

Figure 27. Asset Condition – Corporate Facilities, 2025 54

Figure 28. Asset Condition Breakdown – Corporate Facilities, 2025 55

Figure 29. Useful Life Remaining – Corporate Facilities, 2025 56

Figure 30. Scenario One Asset Performance – Corporate Facilities 2025-2034 60

Figure 31. Scenario One Lifecycle Costs – Corporate Facilities 2025-2034 60

Figure 32. Scenario Two Asset Performance – Corporate Facilities 2025-2034 61

Figure 33. Scenario Three Asset Performance – Corporate Facilities 2025-2034 62

Figure 34. Scenario Three Lifecycle Costs – Corporate Facilities 2025-2034 62

Figure 35. Data Accuracy – Corporate Facilities 63

Figure 36. Asset Condition – Transit, 2025 66

Figure 37. Asset Condition Breakdown – Transit, 2025 67

Figure 38. Useful Life Remaining – Transit, 2025 68

Figure 39. Scenario One Asset Performance – Transit 2025-2034 71

Figure 40. Scenario One Lifecycle Costs – Transit 2025-2034 71

Figure 41. Scenario Two Asset Performance – Transit 2025-2034 72

Table of Contents

Figure 42. Scenario Three Asset Performance – Transit 2025-2034	73
Figure 43. Scenario Three Lifecycle Costs – Transit 2025-2034	73
Figure 44. Data Accuracy – Transit	74
Figure 45. Asset Condition – Recreation and Culture, 2025	77
Figure 46. Asset Condition Breakdown – Recreation and Culture, 2025	78
Figure 47. Facilities Condition Breakdown – Recreation and Culture, 2025	79
Figure 48. Useful Life Remaining – Recreation and Culture, 2025	80
Figure 49. Scenario One Asset Performance – Recreation and Culture 2025-2034	84
Figure 50. Scenario One Lifecycle Costs – Recreation and Culture 2025-2034	84
Figure 51. Scenario Two Asset Performance – Recreation and Culture 2025-2034	85
Figure 52. Scenario Three Asset Performance – Recreation and Culture 2025-2034	86
Figure 53. Scenario Three Lifecycle Costs – Recreation and Culture 2025-2034	86
Figure 54. Data Accuracy – Recreation and Culture	87
Figure 55. Asset Condition – Natural Assets, 2025	90
Figure 56. Data Accuracy – Natural Assets	92
Figure 57. Asset Condition – Corporate Fleet, 2025	95
Figure 58. Asset Condition Breakdown – Corporate Fleet, 2025	96
Figure 59. Useful Life Remaining – Corporate Fleet, 2025	97
Figure 60. Scenario One Asset Performance – Corporate Fleet 2025-2034	100
Figure 61. Scenario One Lifecycle Costs – Corporate Fleet 2025-2034	100
Figure 62. Scenario Two Asset Performance – Corporate Fleet 2025-2034	101
Figure 63. Scenario Three Asset Performance – Corporate Fleet 2025-2034	102
Figure 64. Scenario Three Lifecycle Costs – Corporate Fleet 2025-2034	102
Figure 65. Data Accuracy – Corporate Fleet	103
Figure 66. Forecasted Annual Lifecycle Requirements to Maintain Current LOS – All Service Areas, 2025-2034	110
Figure 67. Forecasted Annual Lifecycle Requirements to Achieve Proposed LOS – All Service Areas, 2025-2034	111

Executive Summary

The 2025 Asset Management Plan (AMP) was developed by The City of Woodstock (the City) and is in compliance with O. Reg. 588/17 and O. Reg. 193/21. It offers data-driven recommendations on managing the City's vast capital asset portfolio and addresses key areas such as levels of service (LOS), lifecycle management strategies, and data confidence. This AMP discusses all capital assets, core and non-core, with service areas being split into Transportation, Stormwater, Corporate Facilities, Transit, Recreation and Culture, Natural Assets, and Corporate Fleet.

This AMP intends to strike a balance between standardization and personalization. Standardization allows decision-makers and members of the public to understand and measure the state of this municipality against others. It allows senior levels of government to make tough funding allocation decisions using comparable information. Examples of standardization include:

- Using standard definitions of asset classes and frequently used terms
- Referencing industry standards like the Inventory Manual, Ontario Structure Inspection Manual (OSIM), and the National Association of Sewer Service Companies (NASSCO)
- Improving data quality to move away from age-based condition assessments
- The manner in which data is collected and reported
- Using standard Key Performance Indicators (KPIs)

Asset management is often mistaken for a data system when in reality it is a business model, a way of thinking, and making investment decisions about physical assets. It prevents (or reduces the risk of) assets becoming liabilities. As such, every municipality's AMP should be personalized to reflect its characteristics and needs. The City should be able to coordinate and approve every capital project through its AMP. Examples of personalization include:

- The inclusion of local examples of asset conditions for each asset class
- Recommendations that are based on a holistic view of the asset portfolio rather than as individual asset classes

This AMP focuses on discussing all capital assets within the City, as well as identifying LOS, infrastructure needs, lifecycle strategies as well as different potential opportunities for the City to maintain and improve on LOS.

A scenic view of a park at dusk or dawn. In the foreground, a calm lake reflects the sky and the surrounding trees. A large, dark wooden pavilion with a multi-tiered roof stands on a stone-lined shore. To the left of the pavilion, several large weeping willow trees with long, drooping branches are prominent. The background is filled with a dense line of trees in various shades of green and yellow, suggesting autumn. A white car is parked near the pavilion. The sky is a soft, pale yellow, indicating the time is either early morning or late evening.

INTRODUCTION

Introduction

The City of Woodstock (the City) is situated in the centre of southwestern Ontario. It is the largest of eight lower-tier municipalities within the County of Oxford. The City has experienced steady growth due to a solid blend of community amenities, attractive housing, a state-of-the-art regional health care facility, and its central location. Post-secondary opportunities in the community helps broaden its appeal to families and businesses. The City is carefully planning its growth to provide and preserve a welcoming environment for residents, businesses, and visitors.

What is Asset Management?

An organization’s top management, employees, and stakeholders should implement planning, control activities (e.g., policies, processes, or monitoring actions), and monitoring activities, to exploit opportunities and reduce risks to an acceptable level.

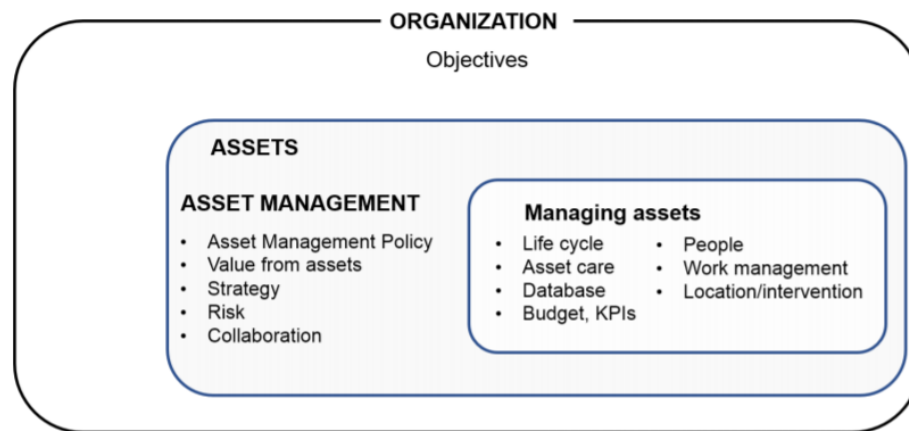
Asset management involves balancing costs, opportunities, and risks against the desired performance of assets to achieve the organizational objectives. This balancing needs to be considered over different timeframes.

Asset management enables an organization to examine the need for, and performance of, assets and asset systems at different levels. Additionally, it enables the application of analytical approaches towards managing an asset over the different stages of its lifecycle (which can start with the conception of the need for the asset, through to its disposal, and include the managing of any potential post disposal liabilities).¹

It is the coordinated activity of the City to help realize value from the assets it owns. It is also the integrated business approach within the City with the aim to minimize the lifecycle costs of owning, operating, and maintaining assets at an acceptable level of risk, while continuously delivering established levels of service for present and future customers. It includes the planning, design, construction, and operation and maintenance of infrastructure used to provide services. By implementing asset management processes, infrastructure needs can be prioritized over time, while ensuring timely investments to minimize repair and rehabilitation costs and maintain the City’s assets.

It should be noted that asset management is not synonymous with managing assets. Managing assets pertains to the things done to assets, with or without a structured strategy and context. Asset management encompasses many levels and applies to all functions or departments.

Figure 1. Asset Management Chart



Asset management allows the City to realize value from its assets through the achievement of organizational objectives.

¹ ISO 55000:2014, p.2.

Sound asset management allows for value to be realized while balancing financial, environmental, and social costs, risk, quality of service, and performance related to assets.

Some benefits of asset management are:

- **Improved financial performance and investment decisions** through enhanced ROI, cost reduction, and preserved asset value without compromising objectives.
- **Managed risk** by minimizing financial losses, boosting safety and reputation, and reducing liabilities like insurance and penalties.
- **Enhanced services** by ensuring asset performance meets or exceeds stakeholder expectations.
- **Demonstrated social responsibility** by reducing emissions, conserving resources, and adapting to climate change.
- **Demonstrated compliance** with legal and regulatory standards through transparent conformity.
- **Enhanced reputation** via improved satisfaction, stakeholder awareness, and confidence.
- **Improved sustainability** by effectively managing effects, costs, and performance.
- **Improved efficiency** and effectiveness by refining processes and asset performance to achieve objectives.²

Asset management also allows municipal decision-makers to make well-informed decisions about the assets owned and maintained by the City.

They require the following information to make informed decisions about the services:

Table 1. Objectives of Asset Management

Inventory	Capture all asset types, inventories, and historical data
Current Valuation	Calculate current condition ratings and replacement values
Life Cycle Analysis	Identify Maintenance and Renewal Strategies & Life Cycle Costs
Service Level Targets	Define measurable Levels of Service Targets
Risk & Prioritization	Integrates all asset categories through risk and prioritization strategies
Sustainable Financing	Identify sustainable Financing Strategies for all asset categories
Continuous Processes	Provide continuous processes to ensure asset information is kept current and accurate
Decision Making & Transparency	Integrate asset management information into all corporate purchases, acquisitions, and assumptions
Monitoring & Reporting	At defined intervals, assess the assets and report on progress and performance

² ISO 55000:2014, p.2.

What is an Asset Management Plan?

An asset management plan (AMP) is a strategic document that guides the City's management of infrastructure assets and other assets to deliver corporate objectives in the most cost-effective manner. It employs multi-disciplinary techniques, both technical and financial in nature, over the assets' life cycle to provide specific LOS. It details specific activities to be undertaken, resources required, responsibilities, timescales, and risks involved for the achievement of corporate objectives. The plan provides a clear line of sight for on-the-ground activities being undertaken back to the strategic plan of the City.

Assets and When are They Acquired?

An asset is an item, thing or entity that holds potential or actual value to an organization. The value will vary between different organizations and their stakeholders, and can be tangible or intangible, financial or non-financial.

In a municipality, residents request services that require assets, or infrastructure, to help meet community expectations. Therefore, infrastructure is essential to maintaining the community's standard of living, safety, and prosperity. If the service it helps provide is deemed unnecessary, the infrastructure too becomes superfluous.

Before an asset is acquired, staff must be satisfied that the City requires it to achieve its objectives or provide a service. They must consider the factors listed below:

- The nature and purpose of the asset
- The City's operating context, financial constraints and regulatory requirements
- The needs and expectations of the City and its stakeholders

The period from the creation of an asset to the end of its life is the asset life. An asset's life does not necessarily coincide with the period over which any one organization holds responsibility for it. Instead, an asset can provide potential or actual value to one or more organizations over its asset life, and the value of the asset to an organization can change over its asset life.

The City may choose to manage its assets as a group, rather than individually, according to its needs, and to achieve additional benefits. Such groupings of assets may be by service areas, asset types, asset systems, or asset portfolios.³

The total cost of ownership accounts for both the initial acquisition as well as its operations and maintenance. The initial cost of acquisition only accounts for 10-20% of the total cost of ownership. The remaining 80-90% of the total cost is attributed to operations and maintenance. Prudent asset management practices help minimize the lifecycle costs of delivering infrastructure services and manage the associated risks, while maximizing the value residents receive from the asset portfolio.

The costs of ownership can span decades and therefore require planning and foresight to ensure financial responsibility is spread equitably across generations.

An asset management plan is instrumental to the planning process. It also serves the broader municipal asset management program.

³ ISO 55000:2014, p.2.

Key Concepts in Asset Management

Effective asset management integrates several vital components, including lifecycle management, risk management, and levels of service. These concepts are applied throughout this asset management plan.

Levels of Service

A level of service (LOS) is a measure of what the City is providing to the community and the nature and quality of that service. Within each service area in this AMP, technical metrics and qualitative descriptions that measure both technical and community LOS have been established and measured as data is available. These measures include a combination of those that have been outlined in O. Reg. 588/17 in addition to performance measures identified by the City as worth measuring and evaluating.

Table 2. Explanation of Levels of Service

	Community LOS	Technical LOS
Description	Provides a simple plain language description or measure of how the community receives or experiences the service that the municipality provides.	Provides a quantitative measure of key technical attributes of the service being provided to the community. These include mostly quantitative measures.
Core Assets	The Province, through O. Reg. 588/17, has provided qualitative descriptions that are required to be included in this asset management plan.	The Province, through O. Reg. 588/17, has provided technical metrics that are required to be included in this asset management plan.
Non-Core Assets	The City has developed qualitative descriptions that are used to determine the community LOS provided and are included in this asset management plan.	The City has developed technical metrics that are used to determine the technical LOS provided and are included in this asset management plan.

Current and Proposed Levels of Service

This AMP measures the current LOS provided to the community as well as establishes proposed LOS over a 10-year period, per O. Reg. 588/17. These LOS are determined with consideration of a variety of community expectations, fiscal capacity, regulatory requirements, corporate goals, and long-term sustainability. Throughout this AMP, the City identifies a lifecycle management and financial strategy which allows these targets to be achieved. Along with creating better performing organizations, more livable and sustainable communities, the regulation is a key, mandated driver of asset management planning and reporting. It places substantial emphasis on current and proposed LOS and the lifecycle costs incurred in delivering them.

As an absolute minimum, the objective of any asset management plan, or strategy, should be to ensure that the overall condition of an asset group does not diminish over time.

Lifecycle Management Strategies

Adopting a lifecycle strategy will help determine which activities to perform on an asset and when they should be performed to maximize useful life at the lowest cost. There are several field intervention activities that are available to extend the life of an asset. These activities can be generally placed into one of three categories: maintenance, rehabilitation, and replacement. The following table describes each type of activity and the general difference in cost.

Table 3. Lifecycle Management Strategies

Event Type	Cost	Description	Example for Road Network
Maintenance	\$	Activities that prevent defects or deteriorations from occurring	Crack Sealing
Rehabilitation	\$\$	Activities that rectify defects or deficiencies that are already present and may be affecting asset performance	Asphalt Resurfacing
Replacement	\$\$\$	Asset end-of-life activities that often involve the complete replacement of asset	Full Reconstruction

Risk Management Strategies

A risk management strategy that looks beyond just hazard risk allows an organization to reduce the cost and deterrence effects of hazard risks while maximizing its profitability and ensuring its compliance with legal and regulatory risk management requirements. A holistic strategy also benefits the economy through waste reduction, the improved allocation of productive resources, and the reduction of systemic risk

Not all assets are created equal. Some are more important than others, and their failure or disrepair poses more risk to the community than that of others. Assets should be prioritized based on their importance to service delivery and their criticality, not just their physical condition. These high-value assets should receive funding before others. Pursuing a ‘worst-first’ approach to infrastructure spending is not advisable.

Risks that may seem relatively harmless or unlikely do have the potential to create significant damage or opportunity when they interact with other events. This holistic view of risk helps identify the risks that truly matter to an organization and provides a full perspective of the identified risks.

High-level categories of risk include hazard risks, operational risks, financial risks, and strategic risks. These categories can be broken down into subcategories, such as project risk, financial reporting risk, and process risk. Over time, all these risks become part of an organization’s overall risk portfolio, which has its own individual risk profile.

What is a Risk Matrix?

A risk matrix is a chart that plots the severity of an event occurring on one axis, and the probability of it occurring on the other. By visualizing existing and potential risks in this way, you can assess their impact, and also identify which ones are highest-priority. From there, you can create a plan for responding to the risks that need the most attention.

Severity: the impact of a risk and the negative consequences that would result.

- Insignificant: risks that bring no real negative consequences, or pose no significant threat to the organization or project
- Minor: risks that have a small potential for negative consequences, but will not significantly impact overall success
- Moderate: risks that could potentially bring negative consequences, posing a moderate threat to the project or organization
- Critical: risks with substantial negative consequences that will seriously impact the success of the organization or project
- Catastrophic: risks with extreme negative consequences that could cause the entire project to fail or severely impact daily operations of the organization. These are the highest-priority risks to address

Likelihood: the probability of the risk occurring.

- Unlikely: extremely rare risks, with almost no probability of occurring
- Seldom: risks that are relatively uncommon, but have a chance of manifesting
- Occasional: risks that are more typical, with about a 50/50 chance of taking place
- Likely: risks that are highly likely to occur
- Definite: risks that are almost certain to manifest. Address these risks first

Scope And Methodology

This AMP is one component of the City’s overarching corporate strategy. It was developed to support the City’s vision for its asset management practices and programs. It provides key asset attribute data, including current composition of the City’s infrastructure portfolio, inventory, and useful life, summarizes the physical health of the capital assets, assesses the current capital spending framework, and outlines financial strategies to achieve sustainability in the long-term while reducing and eventually eliminating funding gaps.

Deriving Replacement Costs

There are various methods used to determine the replacement cost of an asset, some more accurate and reliable than others.

This AMP relies on two methodologies:

- **User-Defined Cost:** based on costs provided by City staff which could include average costs from recent contracts; data from engineering reports and assessments; staff estimates based on knowledge and experience. When based on reliable sources, it can be a reasonably accurate and reliable way to determine asset replacement costs.
- **Cost Inflation:** historical cost of the asset is inflated based on the Consumer Price Index (CPI) or Non-Residential Building Construction Price Index (NBCPI). Cost inflation is typically used in the absence of reliable replacement cost data. As assets age and new products and technologies become available, cost inflation becomes a less reliable method. The City aims to continuously improve the accuracy and reliability of replacement cost data based on the best available costing.

Deriving Asset Condition

Asset condition is a metric for evaluating an asset's physical state. Reliable data is crucial to avoid premature rehabilitation, ensuring lifecycle activities enhance asset value and lifespan. A standardized rating system supports comparative benchmarking across the City's asset portfolio. In absence of field data, remaining service life estimates asset condition.

Table 4. Asset Condition Rating System

Condition	Description	Criteria	Remaining Service Life
Excellent	Fit for the future	Well-maintained, in a state of good repair, new, or recently rehabilitated.	80% - 100%
Good	Adequate for now	Acceptable, generally approaching mid-stage of expected service life.	60% - 80%
Fair	Requires attention	Signs of deterioration, some elements exhibit significant deficiencies.	40% - 60%
Poor	Increasing potential of affecting services	Approaching end of service life, condition below standard, large portion of system exhibits significant deterioration.	20% - 40%
Critical	Unfit for sustained service	Near or beyond expected service life, widespread signs of advanced deterioration, some assets may be unusable.	0% - 20%

The City favours the use of assessment-based condition rating data where possible. The value of assessed condition-based data cannot be overstated as it provides a more accurate representation of the state of infrastructure than does an age-based indicator. Age-based condition ratings tend to understate asset condition, leading to premature treatments.

The City of Woodstock’s Asset Management Journey



Asset Management Policy

Have a finalized strategic asset management policy that promotes best practices and links asset management planning within budgeting, operations, maintenance, and other municipal planning activities.

Asset Management Plan for Core Assets

Have an approved asset management plan for core assets that identifies current LOS and the cost of maintaining those LOS. This includes current LOS, inventory analysis, lifecycle activities to sustain LOS, cost of lifecycle activities, population and employment forecasts, and discussion of growth impacts.

Asset Management Policy Update & Asset Management Plan for Core and Non-Core Assets

Have an approved asset management plan for all municipal infrastructure assets that identifies current LOS and the cost of maintaining those LOS. As well as complete an update of the strategic asset management policy.

Asset Management Plan Update for Core and Non-Core Assets

Have an approved asset management plan for all municipal infrastructure assets that builds upon the requirements set out in 2024. This includes an identification of proposed LOS, what activities will be required to meet proposed LOS, and a strategy to fund these activities.

On December 27, 2017, the Province of Ontario filed Regulation 588/17, Asset Management Planning for Municipal Infrastructure (O. Reg. 588/17) under the Infrastructure for Jobs and Prosperity Act, 2015. This regulation provides the Province’s requirements for scope and content for a municipal asset management plan. Regulatory compliance is required for a successful application for a conditional grant for municipal infrastructure projects.

Asset Portfolio

This section provides a high-level summary of all service areas before analyzing each service area individually. Note that the City does not own any water or wastewater assets.

This AMP covers all City owned infrastructure assets that provide services to the community. The City’s approach is to organize assets into service areas rather than asset classes. The service areas analyzed in this AMP are outlined in the table below:

Table 5. Service Area Structure

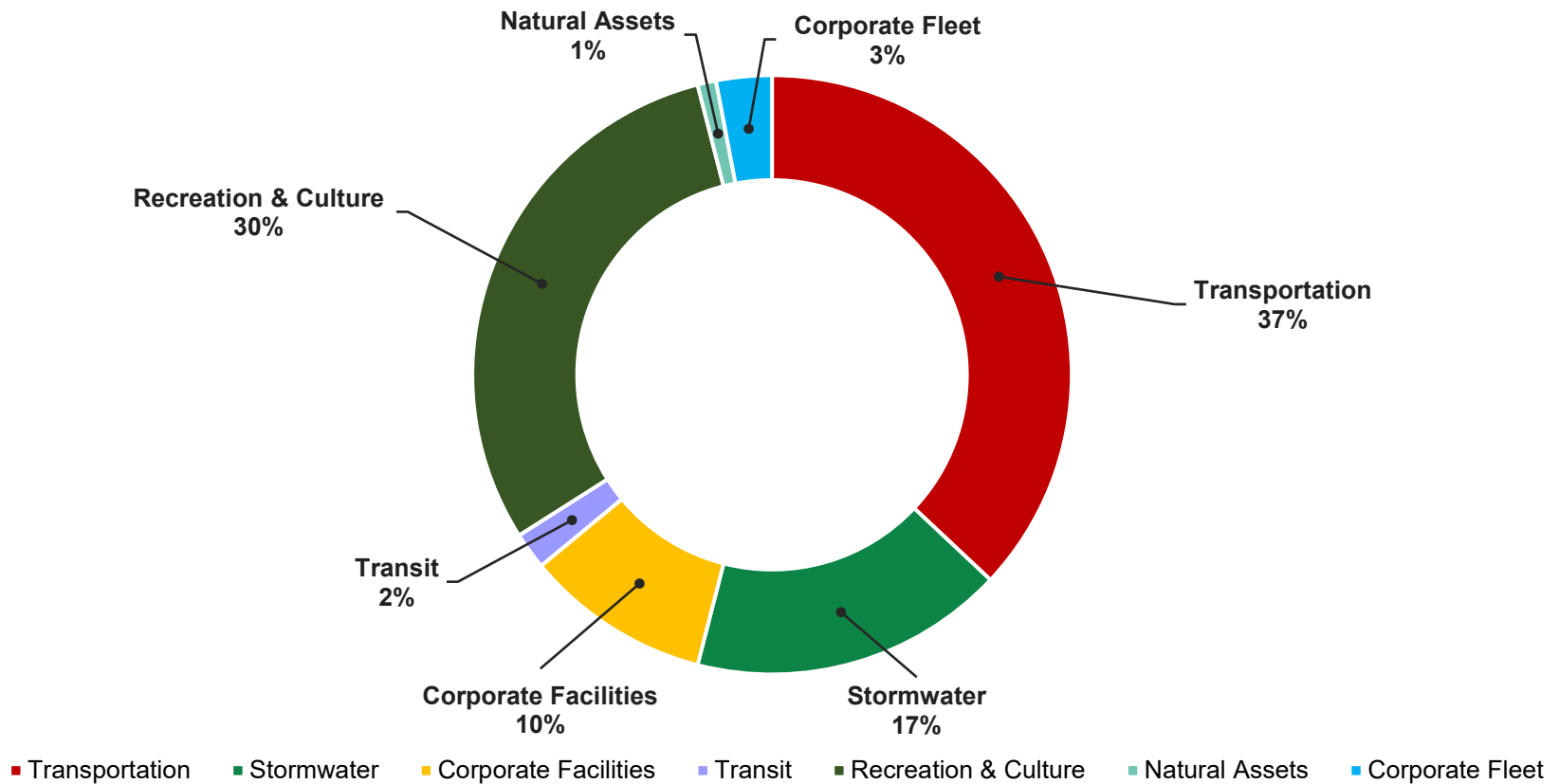
Service Area	Asset Category	Assets Included
Transportation	Road Network	Paved roads, parking lots, retaining walls, guiderails, sidewalks, streetlights and traffic signals.
	Bridges and Large Culverts	Bridges and large culverts with spans of over 3 metres.
Stormwater	Stormwater Conveyance	Catch basins, gravity mains, manholes, and small culverts with spans over under 3 metres.
	Stormwater Management	Stormwater management facilities (storm ponds).
Corporate Facilities	Facilities	Administration buildings, protection services building, and other facilities such as engineering and public works related.
Transit	Facilities	Transit terminal, transit storage building, bus shelters and bus concrete pads.
	Fleet	Rolling stock (buses) and support vehicles.
Recreation and Culture	Recreation	Parks, trails, sports fields, and playgrounds. Recreation facilities include arenas, community centres, clubhouses, pavilions, washrooms and concessions.
	Culture	Cultural facilities including art gallery, library, and museum.
Natural Assets	Forestry	Tree inventory includes street trees within road allowances, park trees, and woodlot trees.
Corporate Fleet	Vehicles	All City owned vehicles including the police fleet and fire fleet but excluding transit buses and support vehicles.
	Equipment	All City owned equipment including police and fire equipment.

Current Value of Asset Portfolio

The City owns approximately \$1.05 billion worth of assets across the seven different service areas. This total was determined based on a combination of user-defined costs and cost inflation. This estimate reflects replacement of historical assets with similar, not necessarily identical, assets available for procurement today. Each service area within this plan contains information detailing the inventory and replacement cost, asset condition, estimated useful life, levels of service, lifecycle management strategy, financial strategy, data confidence, and improvement plan.

Transportation and Stormwater service areas make up 54% of the City’s portfolio, followed by Recreation, Culture and Natural Assets at 31%. The cost per household totalled \$51,925 based on 20,299 households from MPAC’s 2024 Household Annual Report⁴.

Figure 2. Service Area Valuation Breakdown



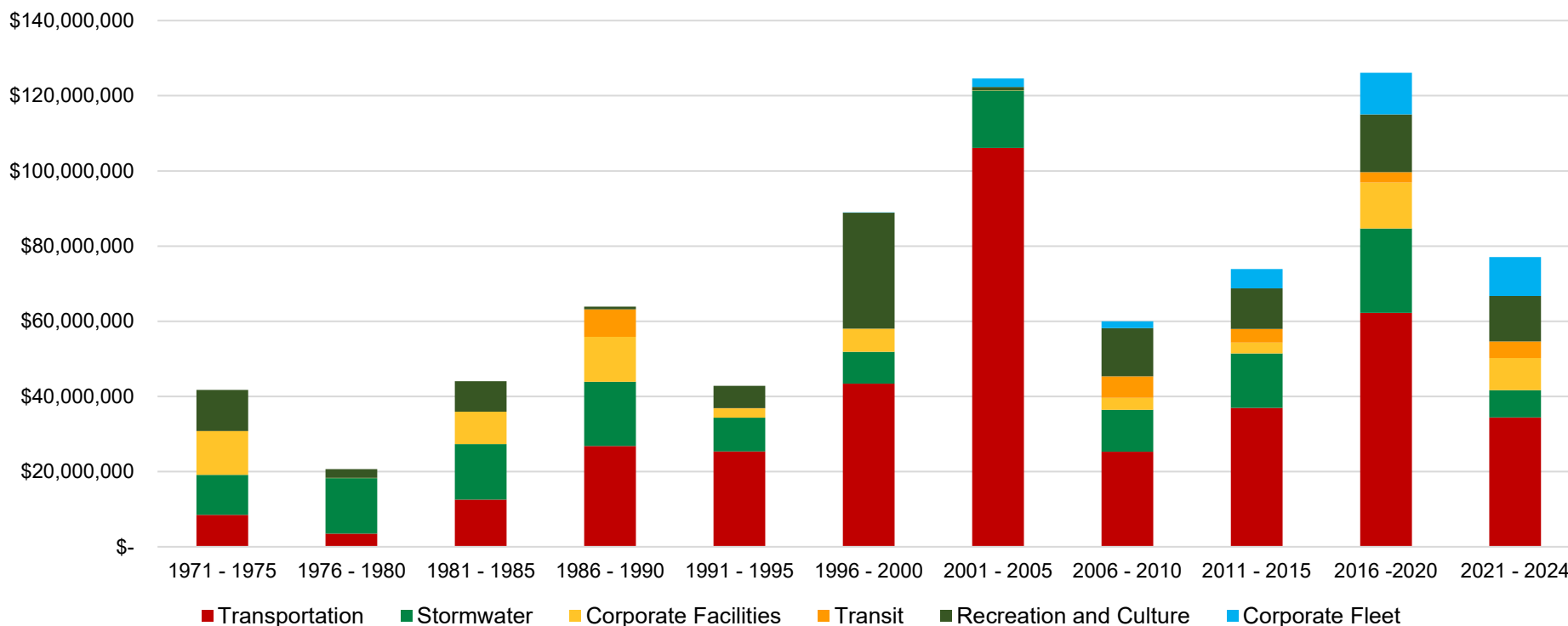
⁴ MPAC 2024 Annual Report

Historical Investments in Infrastructure

In addition to current replacement costs, a better understanding of historical infrastructure spending can help identify previous investment gaps and potential short- and medium-term spikes.

In conjunction with condition data, two other measurements can augment staff understanding of the state of infrastructure and impending and long-term infrastructure needs: installation year and useful life remaining. The graph below illustrates the historical investments in infrastructure across key service areas in current dollars. Often, investment in critical infrastructure parallels population growth or other significant shifts in demographics.

Figure 3. Historical Investment in Infrastructure – All Service Areas 1971-2024



Like other municipalities in Ontario, the City experienced a period of increasing levels of investment beginning in the 1970s, with more rapid increases in the late-1980s and 1990s. The largest investments were made between 2001 and 2005, where the majority of investment was made into roads and storm assets.

Condition of Asset Portfolio

The current condition of the assets is central to all asset management planning. This estimate relies on both age-based and field condition data. Field condition data is invaluable in asset management planning as it reflects the actual condition of the asset and its ability to perform its functions.

Service Life Remaining

While age is not a precise indicator of an asset’s health, it can serve as a meaningful approximation in the absence of condition data and can serve as a signal.

Approximately 9% of the City’s assets, with a current replacement value of \$100 million, are expected to reach the end of their estimated service life within the next ten years. 8% of assets have already reached the end of their service life and remain in service with a current replacement value of \$79.7 million.

Infrastructure Report Card

The AMP is a complex document, but one with direct implications on the public, a group with varying degrees of technical knowledge. The following infrastructure report card is based on condition data (age and assessed) and the City’s financial capacity to keeps its infrastructure in a state of good repair.

Table 6. Infrastructure Report Card, 2025

Service Area	Asset Health Grade	Financial Capacity Grade
Transportation	B	C
Stormwater	B	C
Corporate Facilities	C	D
Transit	C	B
Recreation and Culture	C	D
Corporate Fleet	C	A

Climate Adaptation Strategy

Developing visions to pave the way for socio-technical changes is critical to transition towards a more sustainable society. Once created, these visions need to be translated into local action. Municipalities have a strategic role in the operationalization of national policies. Municipal administrations are constant local institutions, meaning that they can develop long-term strategies and could be seen as anchor tenants of local sustainability efforts, particularly when it comes to efforts oriented towards a transition towards a more sustainable energy system. Many municipalities are large energy consumers (through their role as public property owners), which makes them key stakeholders in energy and climate policy discussions and gives them a significant opportunity to influence the local energy system. Compared with other levels of government, municipalities also have specific competencies for direct provision of services such as waste management and public transportation and autonomy regarding land-use planning and education. Finally, with the increased challenges associated with urbanization and the need for the modernization and extension of infrastructure systems, there is an opportunity for the City to develop new practices and to lead the way in re-thinking planning, decision-making and governance.

This, along with their local self-governance, means municipalities handle climate policy differently. Understanding how municipalities contribute to the transition to renewable energy sources and broader climate mitigation strategies is critical.

For decades, unsustainable attitudes toward investing, land use and land management have led to climate change, catastrophic declines in biodiversity, and the destruction of nature. Now, as the race to reverse this trend and philosophies shift from exploitation to sustainable regeneration, staff expect a growing demand for investment in green solutions. Green investments should aim to address climate and biodiversity crises and diversify risk.

Climate change has put significant strains on municipal infrastructure. The road network experiences unplanned deterioration due to unseasonal weather events and requires more frequent repairs. The storm system is experiencing overcapacity events more frequently and at much higher rates due to more frequent “100-year” storms causing flooding to residential properties. Heavy rainfalls causing flooding at City parks prevents residents from using these parks and increases maintenance costs for the City.

Alongside the County of Oxford, the City continues to recognize the importance of climate change mitigation, adaptation, sustainable energy use, related environmental issues, and the need for more sustainable and resilient cities.

The City of Woodstock Community Energy Plan (CEP), in conjunction with the Woodstock Environmental Advisory Committee (WEAC), has set a formative groundwork to promote further energy conservation, sustainable planning, and progressive environmental and economic development. This plan represents a conscious effort to understand better local energy use and greenhouse gas (GHG) emissions. The CEP has established a vision, goals and targets that align with the Oxford County 100% Renewable Energy Plan and Ontario’s Climate Change Action Plan objectives to move towards a low carbon future.

Growth Strategy

Understanding the key drivers of growth and demand will allow the City to plan for new infrastructure and the upgrade or disposal of existing infrastructure more effectively. The costs of growth should be considered in long-term funding strategies that are designed to maintain the current level of service

The demand for infrastructure and services will change based on internal and external factors. Increases or decreases in demand can affect what assets are needed and what level of service meets the community’s needs.

A Development Charges Background Study is undertaken every five years, which outlines the infrastructure required to maintain service levels as the City’s population and employment grow. Projects are included for the various asset classifications necessary to meet program needs for Police, Fire, Library, Recreation, Parks, Administration, Roads and Related Services, Public Works, Waste and Transit which have been identified through various Master Plan needs assessments. Project needs are re-evaluated based on actual population and employment growth development on an annual basis.

Planning for forecasted population growth may require expanding existing infrastructure and services. As growth-related assets are constructed or acquired, they should be integrated into the City’s AMP. While the addition of residential units will add to the existing assessment base and offset some of the costs associated with growth, the City will need to review the lifecycle costs of growth-related infrastructure. These costs should be considered in long-term funding strategies that are designed to, at a minimum, maintain the current levels of service. The below table indicates the level of growth expected within the City over the next 2 decades.

Table 7. City of Woodstock Growth Projections⁵

Type of Forecast	2026	2031	2036	2041	2046
Population	50,480	54,470	58,480	62,250	65,950
Households	20,750	22,330	23,870	25,220	26,510
Employment	30,040	31,690	33,720	36,050	38,730

⁵ Phase 1 Comprehensive Review – Oxford County



TRANSPORTATION

The City of Woodstock is committed to a safe, efficient, and sustainable transportation network that connects people and goods while supporting inclusive economic growth.

Transportation

State of the Infrastructure

The Transportation service area consists of the Road Network, Bridges and Large Culverts assets. The following section contains information regarding the Transportation portfolios asset inventory, replacement costs, age, and overall condition ratings.

Asset Inventory and Replacement Cost

The table below illustrates key asset attributes for the City’s Transportation portfolio. The overall value of the City’s Transportation service area is valued at over \$393 million.

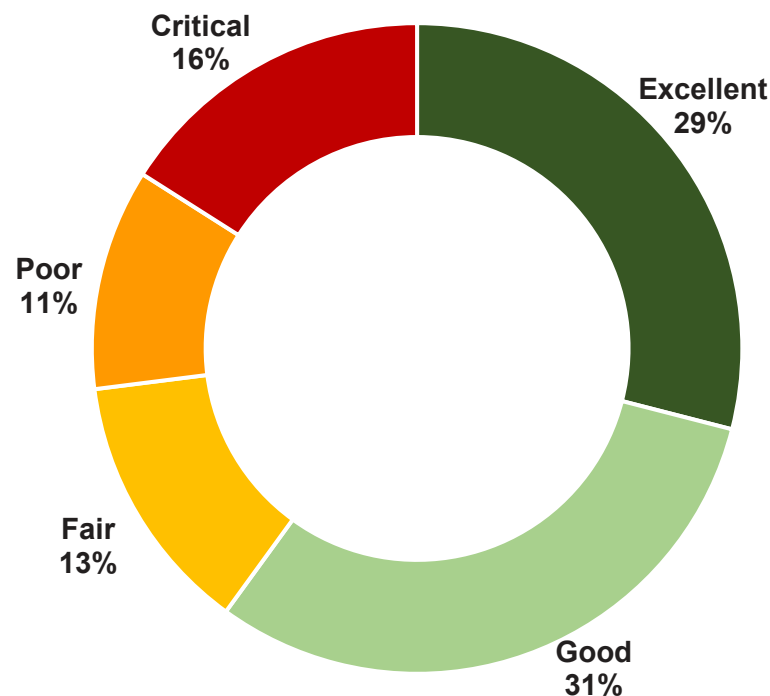
Table 8. Transportation Inventory

Asset Category	Asset Type	Quantity	Unit	Replacement Cost
Road Network	Paved Roads	222	Km	\$288,064,469
	Parking Lots	33	Each	\$12,729,710
	Retaining Walls	112	Each	\$7,800,121
	Guiderails	5.9	Km	\$1,625,564
	Sidewalks	299	Km	\$27,241,481
	Streetlights	5997	Each	\$16,550,992
	Traffic Signals	20	Each	\$5,001,299
Bridges and Large Culverts	Bridges	13	Each	\$28,432,217
	Large Culverts	8	Each	\$5,971,293
Overall Transportation Replacement Value				\$393,417,146

Current Asset Condition

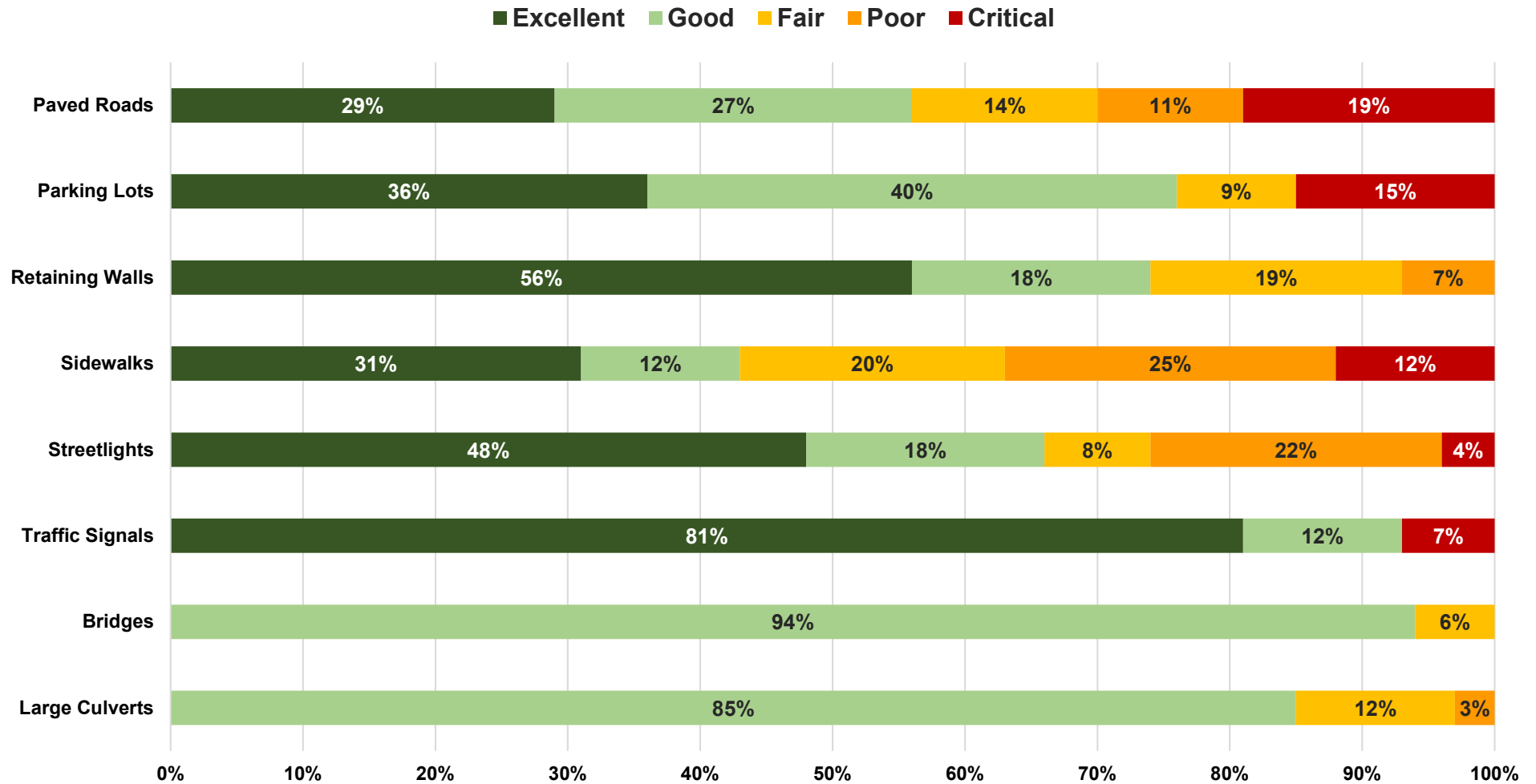
The following graph illustrates the overall conditions of the transportation service area. The average condition is a weighted value based on replacement cost.

Figure 4. Asset Condition – Transportation, 2025



Overall, 73% of the transportation assets are in fair or better condition (based on replacement value) with 27% nearing or at the critical state of good repair.

Figure 5. Asset Condition Breakdown – Transportation, 2025



Guiderails are not included in the above breakdown as asset condition data was not readily available. Condition assessments are currently planned on City owned guiderails and will be updated accordingly.

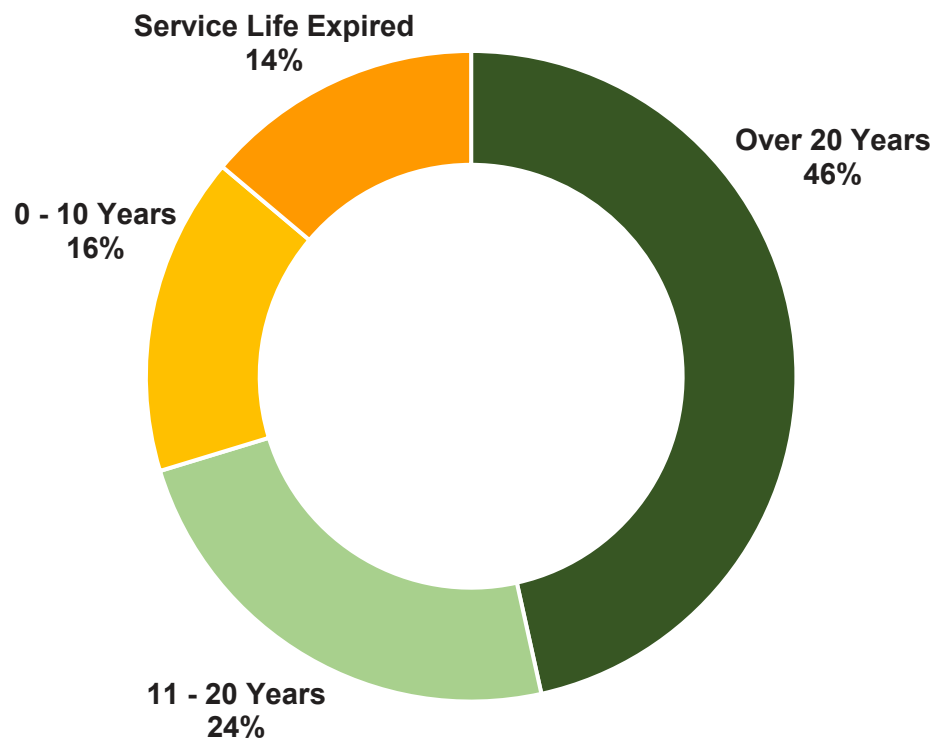
Estimated Useful Life and Average Life

The Estimated Useful Life for Transportation assets has been assigned according to a combination of established industry standards and staff knowledge. The Average Age of each asset is based on the number of years each asset has been in-service. Finally, the Average Service Life Remaining represents the difference between the Estimated Useful Life and the Average Age, except when an asset has been assigned an assessed condition rating. The assessed condition may increase or decrease the average service life remaining.

Table 9. Estimated Useful Life for Transportation Components, 2025

Asset Category	Asset Type	Useful Life (Years)
Road Network	Paved Roads	20 - 40
	Parking Lots	20 - 40
	Retaining Walls	60
	Guiderails	30 - 40
	Sidewalks	60
	Streetlights	20 - 40
	Traffic Signals	30 - 40
Bridges and Large Culverts	Bridges	75
	Large Culverts	75

Figure 6. Useful Life Remaining – Transportation, 2025



Levels of Service

The following section includes performance measures that are included in the O.Reg. 588/17 requirements. They are not the only metrics used by the City to measure the quality being delivered by any asset category.

Table 10. O.Reg. 588/17 Levels of Service Metrics

Service Attribute	Corporate Description	LOS Measure	Current Performance	Proposed Performance
Scope	Providing a transportation network with a reasonable level of connectivity.	Number (#) of lane-kilometres of arterial roads (class 1 and 2) as a proportion of square kilometres of land area of the municipality.	0.80	Maintain
		Number (#) of lane-kilometres of collector roads (class 3 and 4) as a proportion of square kilometres of land area of the municipality.	1.91	Maintain
		Number (#) of lane-kilometres of local roads (class 5 and 6) as a proportion of square kilometres of land area of the municipality.	5.80	Maintain
	Providing operational bridges with a reasonable level of connectivity.	Percentage (%) of bridges in the municipality with loading or dimensional restrictions.	7% (1)	0%
Quality	Providing a transportation network that is in a state of good repair.	For unpaved roads in the municipality, the average surface condition (e.g., excellent, good, fair, or poor).	Fair	None
		For paved roads in the municipality, the average pavement condition index (PCI) value.	74.9	80
	Providing bridges and culverts in a state of good repair.	For bridges in the municipality, the average bridge condition index (BCI) value.	75.82	> 70
		For structural culverts in the municipality, the average bridge condition index (BCI) value.	71.96	> 70
		Percentage (%) of compliance with Bridge Inspection Standard.	100%	100%
Cost Efficiency	Providing a transportation network in a cost-efficient manner.	Road Network Reinvestment Rate	1.81%	3.36%
		Bridges and Culverts Reinvestment Rate	1.16%	1.50%

Table 11. Images of Pavement Condition Index Inspections




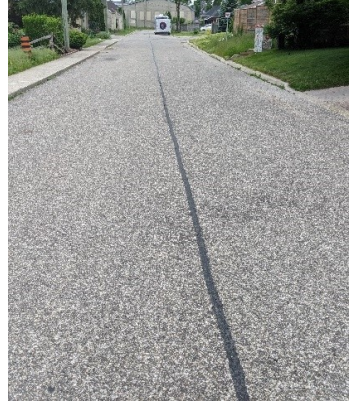

Asset	Critical Condition	Poor Condition	Fair Condition	Good Condition	Excellent Condition
Paved Road					

Table 12. Images of OSIM Bridge Inspections

Asset	Critical Condition	Poor Condition	Fair Condition	Good Condition	Excellent Condition
Bridges	N/A				

Table 13. Images of OSIM Culvert Inspections



Asset	Critical Condition	Poor Condition	Fair Condition	Good Condition	Excellent Condition
Culverts	N/A				

Figure 7. Level of Connectivity - Road Network, 2025

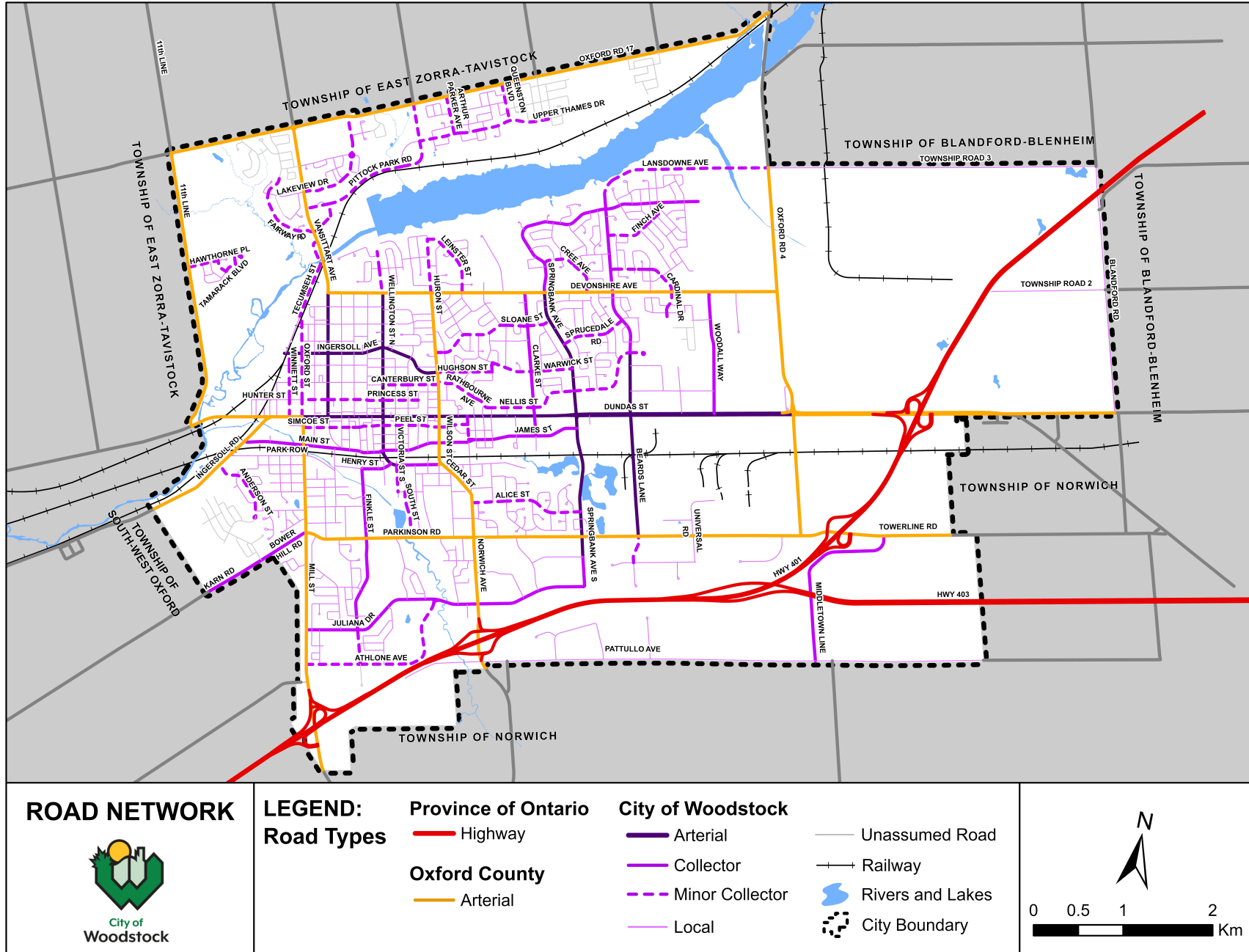


Figure 8. Pavement Condition - Road Network, 2025

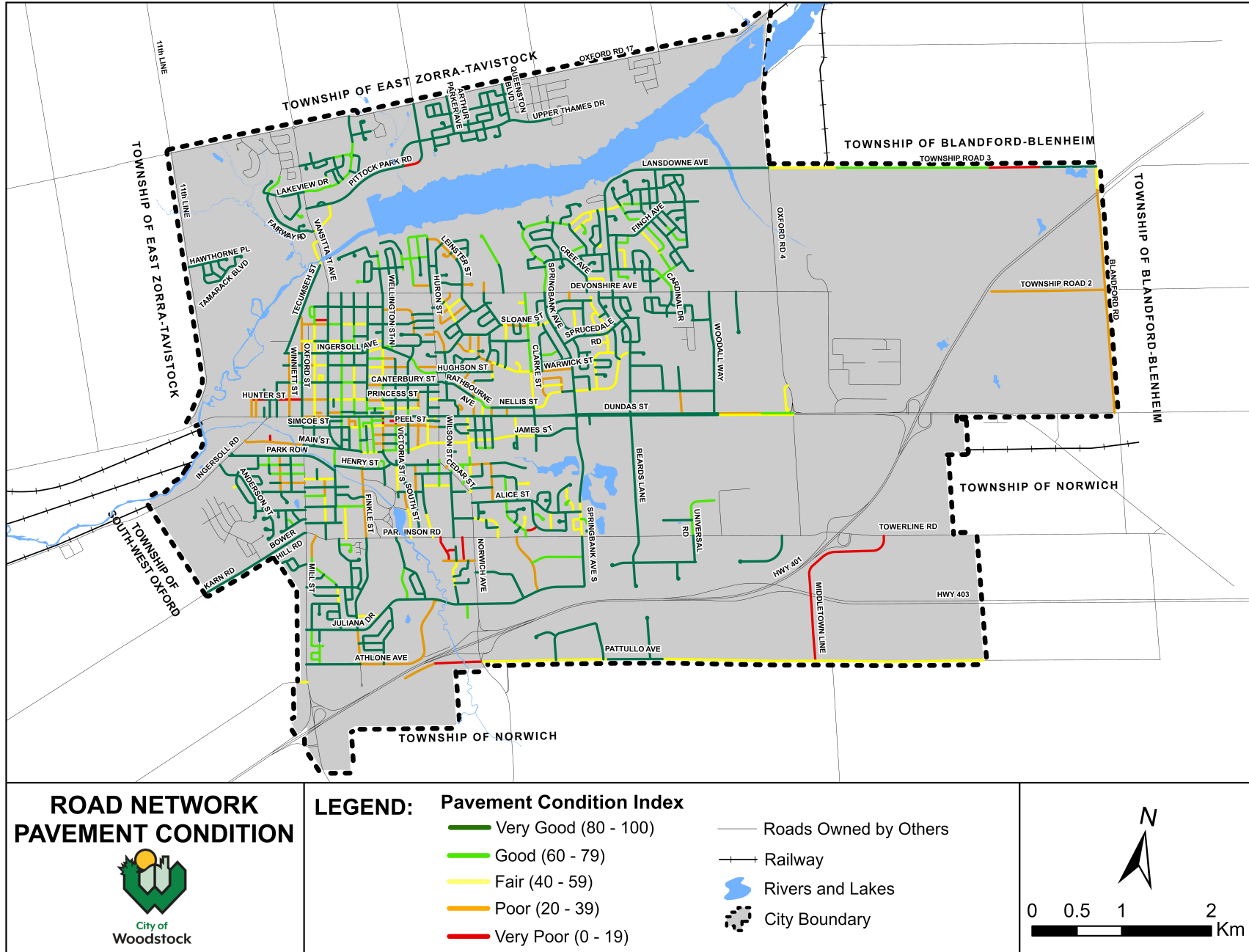


Figure 9. Level of Connectivity - Sidewalk Network, 2025

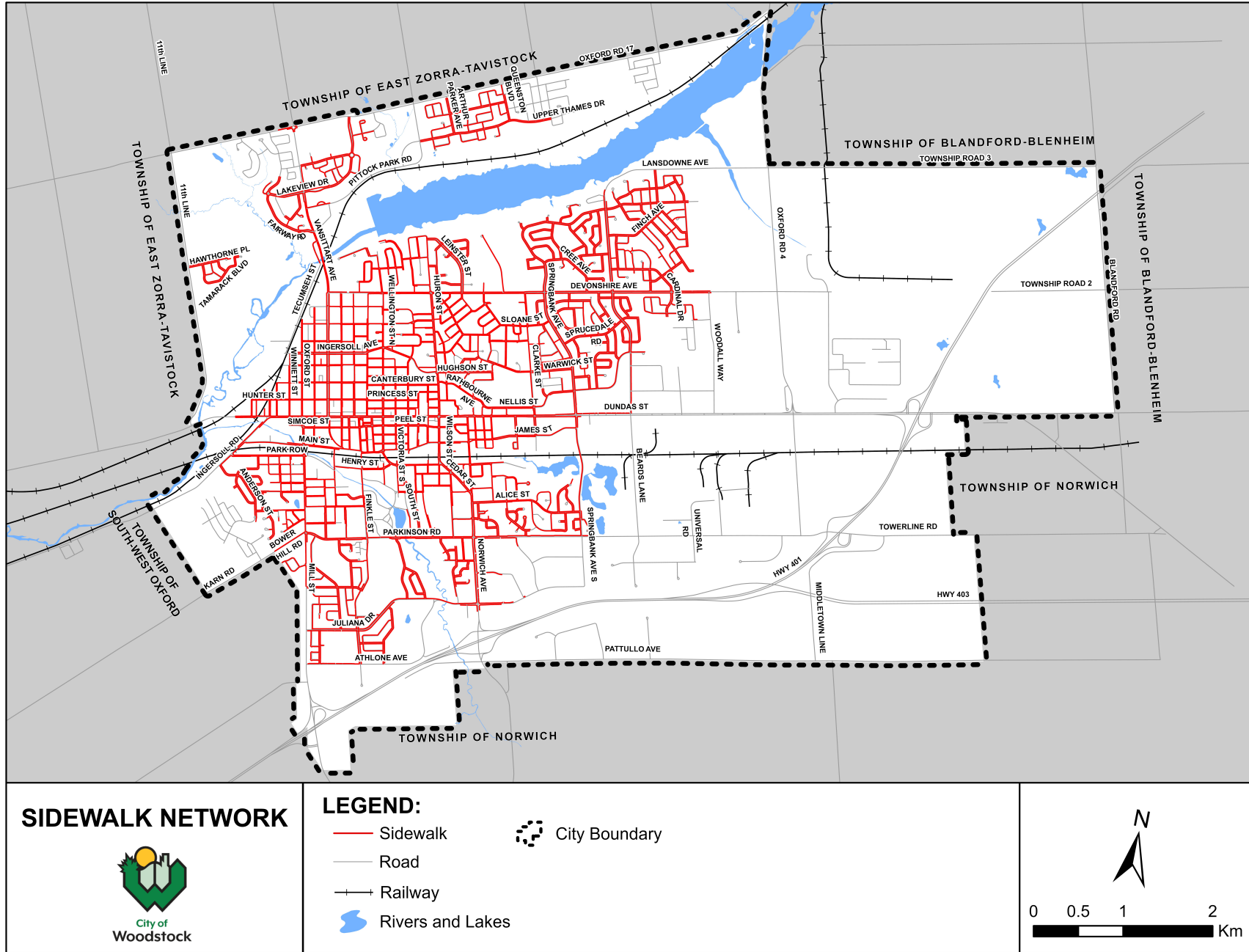
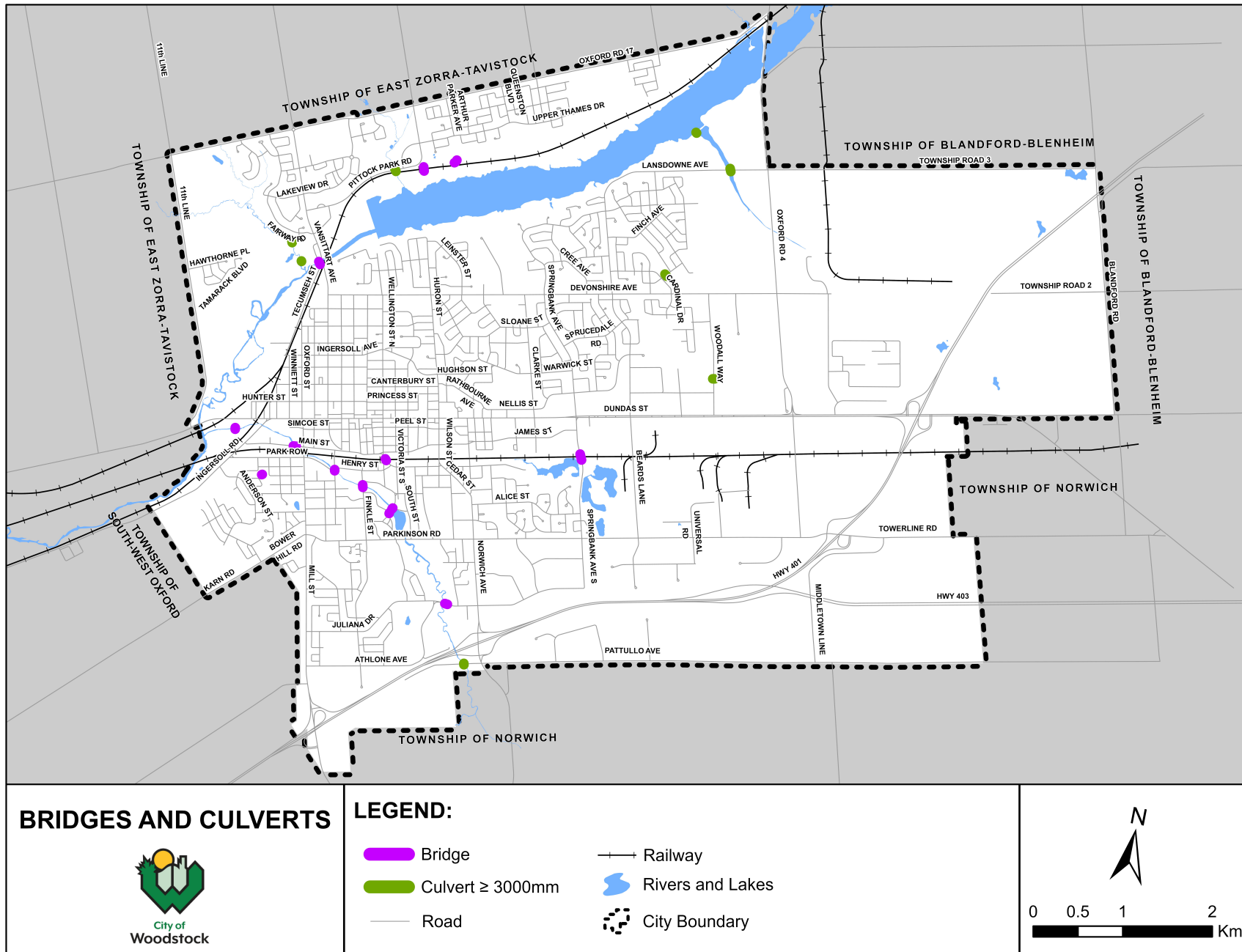


Figure 10. Level of Connectivity – Bridges and Culvert, 2025



Lifecycle Management Strategy

The condition or performance of most assets will deteriorate over time. This process is affected by various factors, including an asset’s characteristics, location, utilization, maintenance history and environment. The following lifecycle management strategies are currently being used/are recommended to ensure the Transportation portfolio remains in a state of good repair throughout its intended lifespan and to maintain current levels of service.

Table 14. Lifecycle Management Strategies, Transportation

Lifecycle Activity Type	Asset Management Practices	Risks Associated with Not Completing the Activities
Non-Infrastructure Solutions	<ul style="list-style-type: none"> • Condition assessment programs • Transportation Master Plan • Traffic count and studies • OSIM Reports • Climate change adaption and mitigation • Transit initiatives that decrease vehicle traffic and reliance 	<ul style="list-style-type: none"> • Inadequate planning leading to inaccurate forecast estimates and short- and long-term plans • Regulatory requirement • Inability to understand potential impacts of climate change on infrastructure
Maintenance	<ul style="list-style-type: none"> • Routine maintenance such as street sweeping, shoulder grading, pothole patching, etc. • Snow and ice removal maintenance • Meet Minimum Maintenance Standards • Roads Needs Study – entire network is reviewed • Scheduled preventative maintenance programs such as the crack sealing program to reduce preemptive damage to the road network due to water penetration • Structures inspected biannually 	<ul style="list-style-type: none"> • Deficiencies are not identified through patrols • Increased lifecycle costs if maintenance is not done as scheduled or incorrectly • Premature asset failure, service level drops, and health and safety risks • Customer dissatisfaction
Renewal (Rehabilitation & Replacement)	<ul style="list-style-type: none"> • Rehabilitation activities are determined based on both external expertise and internal expertise (knowledge of evolving road conditions, organizational priorities, available budget, coordination with County and other City assets). • Tar and chip roads are managed proactively and are subject to regular resurfacing activities (single and double lift) to maintain a suitable driving surface. • Paved road rehabilitation and replacement are done proactively based on the work plan provided in the road’s needs study. It is also influenced by the rehabilitation and replacement of the water assets that run under the road network. 	<ul style="list-style-type: none"> • Rehabilitation/Renewal activities may not extend asset life as expected • Increased lifecycle costs if not done properly or as scheduled • Coordination with other asset classes might delay planning forecasts
Disposal	<ul style="list-style-type: none"> • Obsolete assets are decommissioned as needed 	<ul style="list-style-type: none"> • Environmental impacts and cost overruns

Lifecycle Activity Type	Asset Management Practices	Risks Associated with Not Completing the Activities
<p>Growth</p>	<ul style="list-style-type: none"> • Transportation Master Plan identifies long term policy and programs for the City’s transportation network • New development assumptions, industrial expansion, and local improvements • Growth projects related to expansion and traffic studies/warrants 	<ul style="list-style-type: none"> • Activities delayed or cancelled resulting in inability to accommodate increased demands
<p>Service Improvement</p>	<ul style="list-style-type: none"> • Technologies that offer improved resistance to the elements and typical condition deterioration • Incorporate active transportation into the overall transportation network 	<ul style="list-style-type: none"> • Increased levels of service expectations result in increased costs

Financial Strategy

The City utilizes lifecycle management strategies, as detailed in the previous section, to facilitate planning activities and forecast future expenditure requirements for various assets within the Transportation service area. These strategies, along with the scenarios outlined below, establish a framework for identifying the financial resources necessary to manage and maintain these assets effectively.

The following scenarios illustrate the projected lifecycle requirements over a 10-year period, addressing both the maintenance of current service levels and the achievement of proposed service levels. These scenarios consider only the costs and needs related to renewal, rehabilitation and replacement lifecycle activities. These activities are essential to ensuring that infrastructure remains in a state of good repair, thereby enabling the City to continue providing services to residents.

Scenario 1: Cost to Maintain Current Levels of Service

Scenario one outlines the estimated annual cost of the renewal, rehabilitation and replacement lifecycle activities required to maintain current levels of service.

Figure 11. Scenario One Asset Performance – Transportation 2025-2034

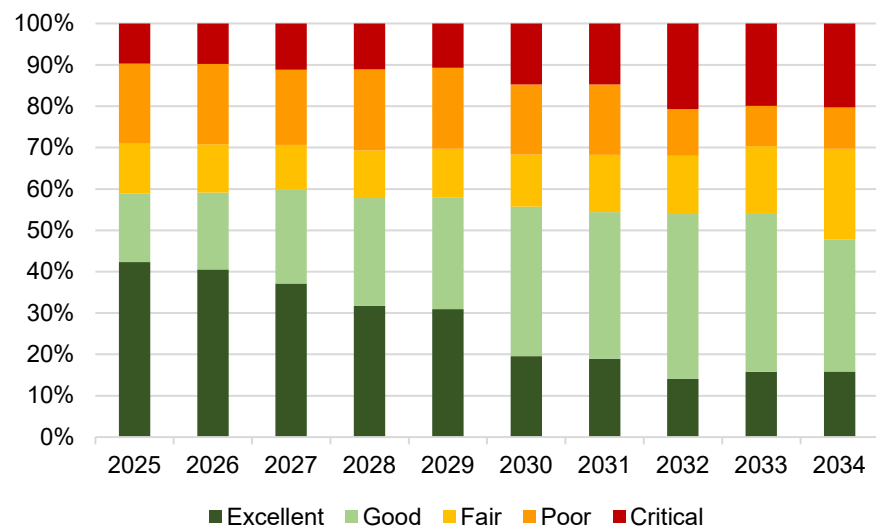
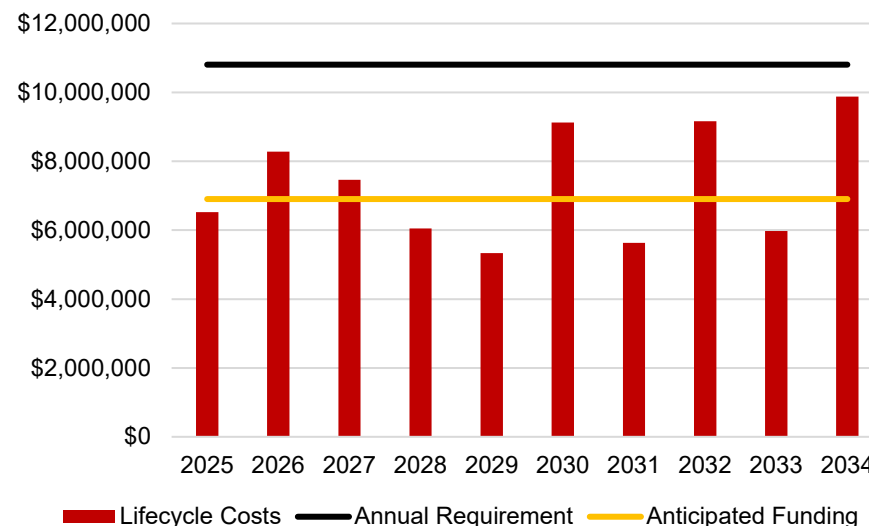


Figure 12. Scenario One Lifecycle Costs – Transportation 2025-2034

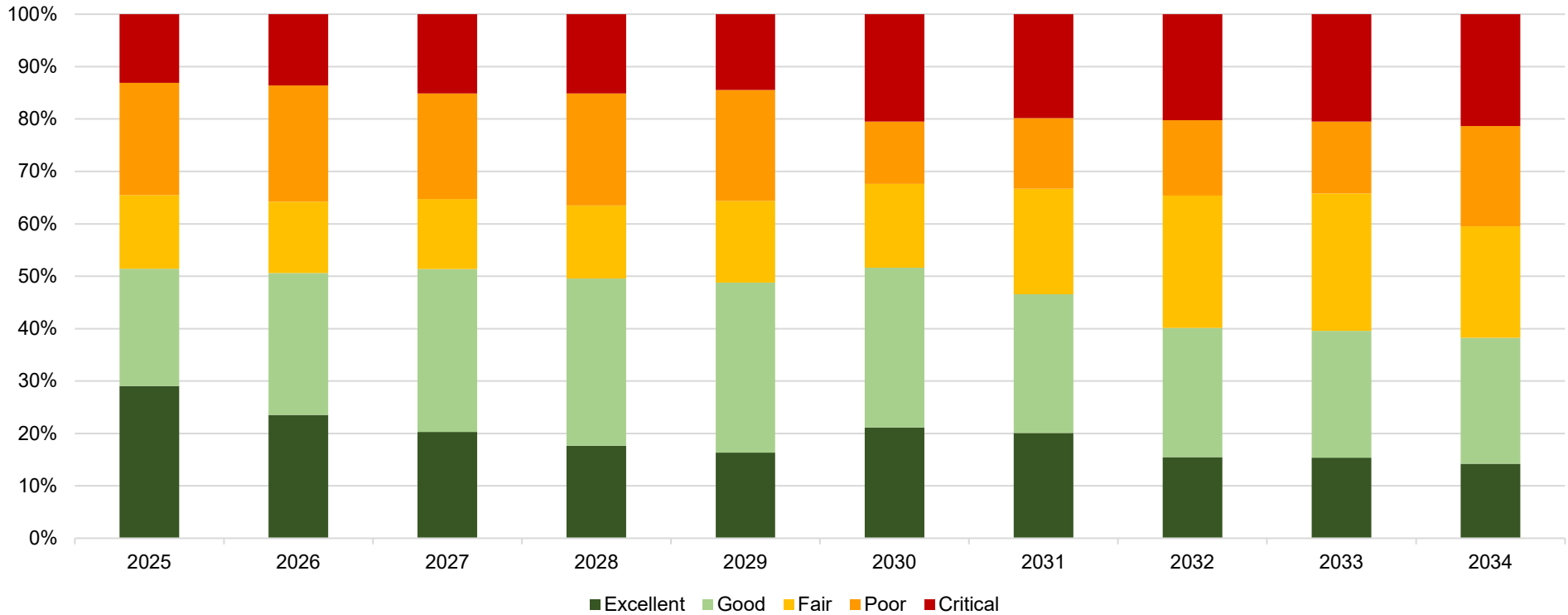


Based on this scenario, the estimated annual requirement was determined to be \$10.8M annually to ensure asset performance in perpetuity. Compared to anticipated funding, this results in a funding gap of \$3.9M.

Scenario 2: Current Funding

Scenario two outlines the impact of current anticipated funding on asset performance.

Figure 13. Scenario Two Asset Performance – Transportation 2025-2034



Based on current funding levels, the percentage of assets in the poor to critical range increases from 34% to 40% over the next 10 years. When the scenario is extended out to the 20-to-40-year forecast, the percentage of assets in poor to critical condition continues to rise.

Scenario 3: Cost to Achieve Proposed Levels of Service

Scenario three outlines the estimated annual cost of the renewal, rehabilitation and replacement lifecycle activities required to achieve proposed service level targets as well as performing the lifecycle activities needed.

Figure 14. Scenario Three Asset Performance – Transportation 2025-2034

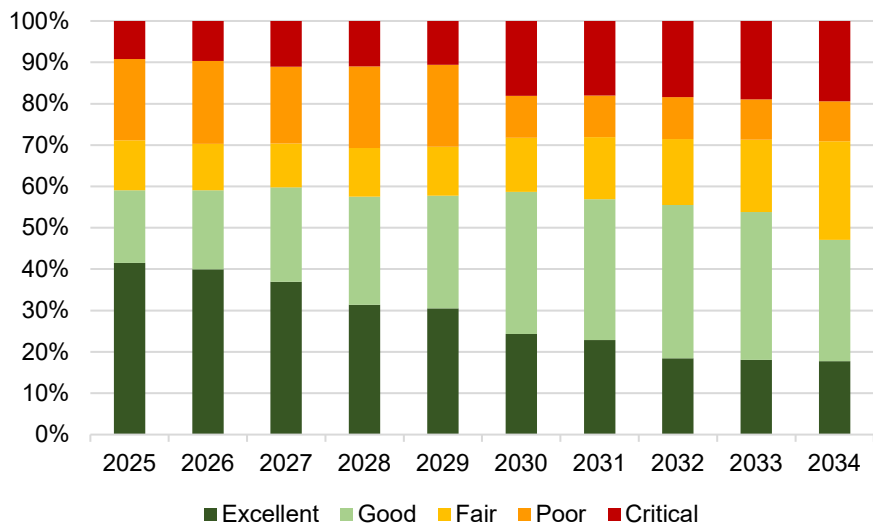
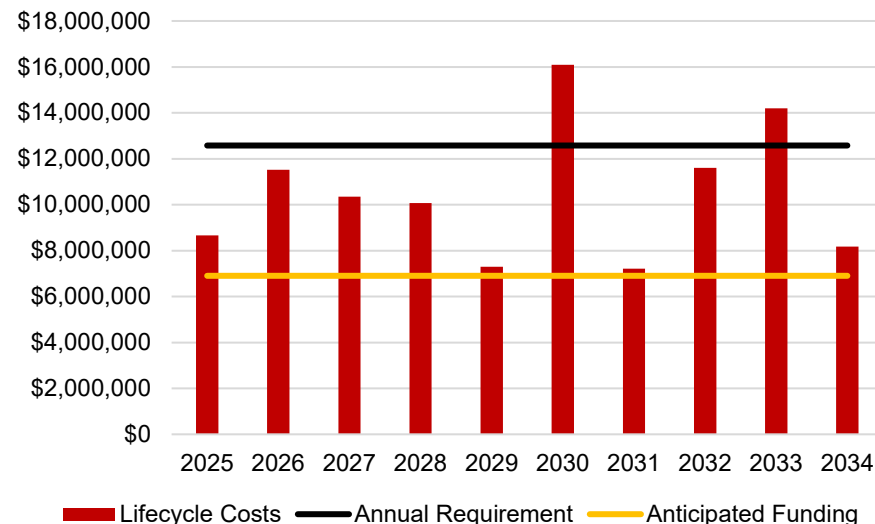


Figure 15. Scenario Three Lifecycle Costs – Transportation 2025-2034



Based on this scenario, the estimated annual requirement was determined to be nearly \$12.6M annually to ensure asset performance in perpetuity. Compared to anticipated funding, this results in a funding gap of \$5.7M.

Data Confidence

Accurate and reliable condition data allows staff to determine the remaining service life of assets and identify the most cost-effective approach to managing assets more confidently.

The City’s overall Transportation data accuracy is considered to be high with condition assessments being completed on its road network and bridges and large culvert inventory within the last two years. Data gap analysis continues to be a major project the City embarks on as it seeks to further understand its inventory and plan for the long term.

Figure 16. Data Accuracy – Transportation



Condition Assessments and Data Collection

The following describes the City’s current condition assessment programs and practices within the Transportation service area:

- A Road Needs Study that included a detailed assessment of the condition of each road segment
- Dedicated annual crack sealing program
- Biennial inspection program for all bridges, culverts, and pedestrian bridges that have a span of three (3) metres or more, as mandated by the MTO.
- Rehabilitation is prioritized using structural adequacy, cost, and Average Daily Traffic (ADT). Pavement re-surfacing is applied to deteriorating road surfaces to extend the life of road assets and prevent the need for full road reconstruction

Typical industry pavement inspections are performed by consulting firms using specialized assessment vehicles equipped with various electronic sensors and data capture equipment. The vehicles will drive the entire road network and typically collect two different types of inspection data—surface distress data and roughness data.

Surface distress data involves the collection of multiple industry standard surface distress, which are captured either electronically, using sensing detection equipment mounted on a vehicle, or visually, by the inspection crew.

Roughness data capture involves the measurement of the roughness of the road, measured by lasers that are mounted on the inspection vehicle’s bumper, calibrated to an international roughness index.

The biennial inspection program is a valuable source of information. Structures are a vital part of the transportation network in the City, and the goal of OSIM inspections is to ensure they are maintained to an acceptable standard to protect public safety and convenience. In addition, routine maintenance and inspections by City maintenance crews are essential in identifying changes to structure conditions. The report identifies current and future physical and financial needs with regards to the structures. It also includes timing recommendations for maintenance, repair, and rehabilitation work. These recommendations combined with continued biennial inspections are a tool to monitor and plan for the infrastructure needs in the City.

It is recommended that the City continue current strategic condition assessment programs and that a portion of capital funding continue to be dedicated to this.

Continuous Improvement

The City continues to advance the Asset Management Program and works towards ensuring line of sight when it comes to decision making and asset management practices. Increased quality of data and information and standardized operating procedures will improve data confidence levels and the quality of these decisions. The following recommendations will help ensure the City maintains its path and manage its growing \$393 million Transportation portfolio in a sustainable manner.

1. Align the Asset Management Plan

- a. Align the AMP with the City's budgetary processes and strategic plan
- b. Identify paths of incorporating the AMP within the capital budget
- c. Ensure the Asset Management Steering Committee continues work on corporate buy-in and maintains line of sight across the City

2. Address the Infrastructure Gap

- a. Continue to search for funding from non-tax sources of financing to address infrastructure gaps
 - i. Grant funding where applicable
- b. Create infrastructure reserves that plan for the future and eliminate the risk of "peaks and valleys" in funding requirements
 - i. Transportation Reserves
- c. Mitigate the risk of current LOS dropping
- d. Improve and build 5- and 10-year capital plans that tackle the infrastructure gap

3. Improve the Asset Management Program

- a. Ensure data inventories are accurate and condition data is recorded in a timely manner
 - i. Roads Needs Study
 - ii. OSIM Inspections
 - iii. Retaining Wall Inspections
 - iv. Guiderail Inspections
 - v. Sidewalk Inspections
- b. Standardize operating procedures where applicable
- c. Build lifecycle strategies that are representative of asset performance and achieve proposed LOS
- d. Explore opportunities for interoperability where available
 - i. Asset Management Systems
- e. Continue to pursue Risk Management strategies across the City



STORMWATER

The City of Woodstock is committed to a resilient, efficient, and sustainable stormwater network that protects the environment, supports community growth, and enhances climate adaptability.

Stormwater

State of the Infrastructure

The Stormwater service area consists of Stormwater Conveyance assets such as catch basins, manholes and gravity mains as well as Stormwater Management assets such as stormwater management facilities. The following section contains information regarding the Stormwater portfolios asset inventory, replacement costs, age, and overall condition ratings.

Asset Inventory and Replacement Cost

The table below illustrates key asset attributes for the City’s Stormwater portfolio. The overall value of the City’s Stormwater service area is valued at over \$180 million.

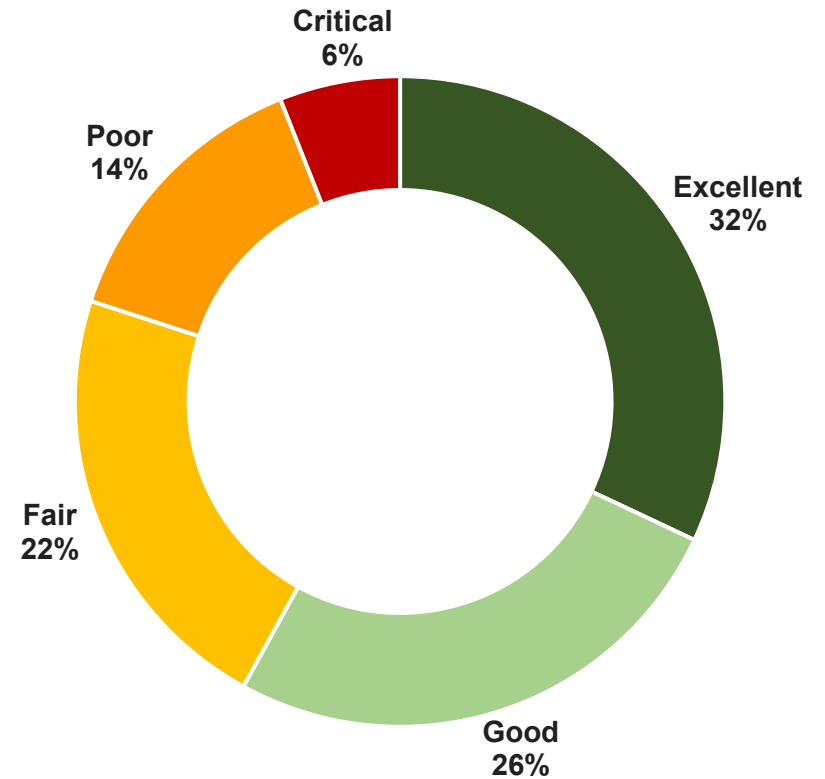
Table 15. Stormwater Inventory

Asset Category	Asset Type	Quantity	Unit	Replacement Cost
Stormwater Conveyance	Catch Basins	5120	Each	\$18,810,200
	Gravity Mains	225.5	Km	\$135,264,491
	Manholes	2289	Each	\$16,065,000
	Small Culverts	5.3	Km	\$1,476,630
Stormwater Management	Stormwater Management Facilities	28	Each	\$9,372,153
Overall Stormwater Replacement Value				\$180,988,474

Current Asset Condition

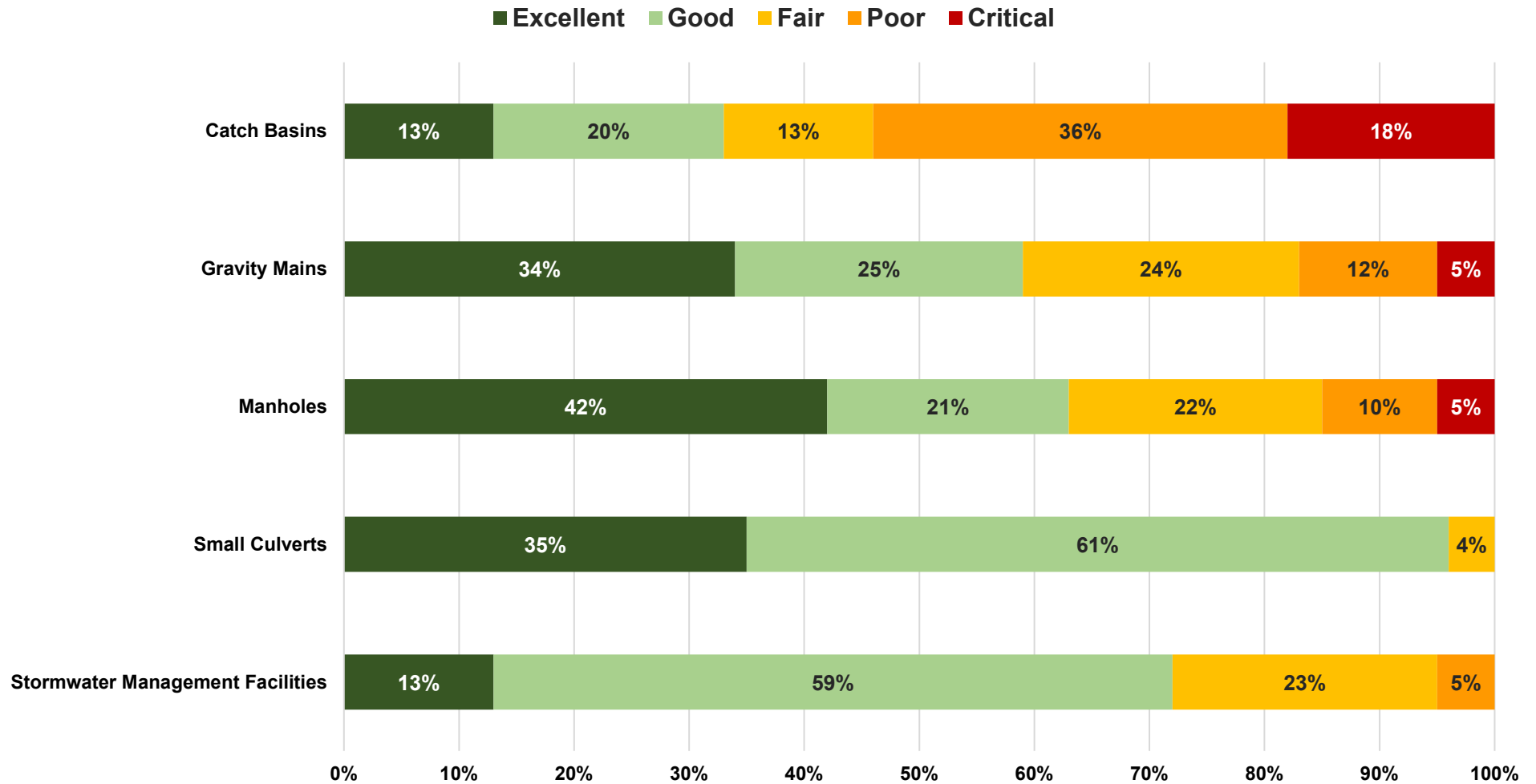
The following graph illustrates the overall conditions of the stormwater service area. The average condition is a weighted value based on replacement cost.

Figure 17. Asset Condition – Stormwater, 2025



Overall, 80% of the stormwater assets are in fair or better condition (based on replacement value) with 20% nearing or at the critical state of good repair.

Figure 18. Asset Condition Breakdown – Stormwater, 2025



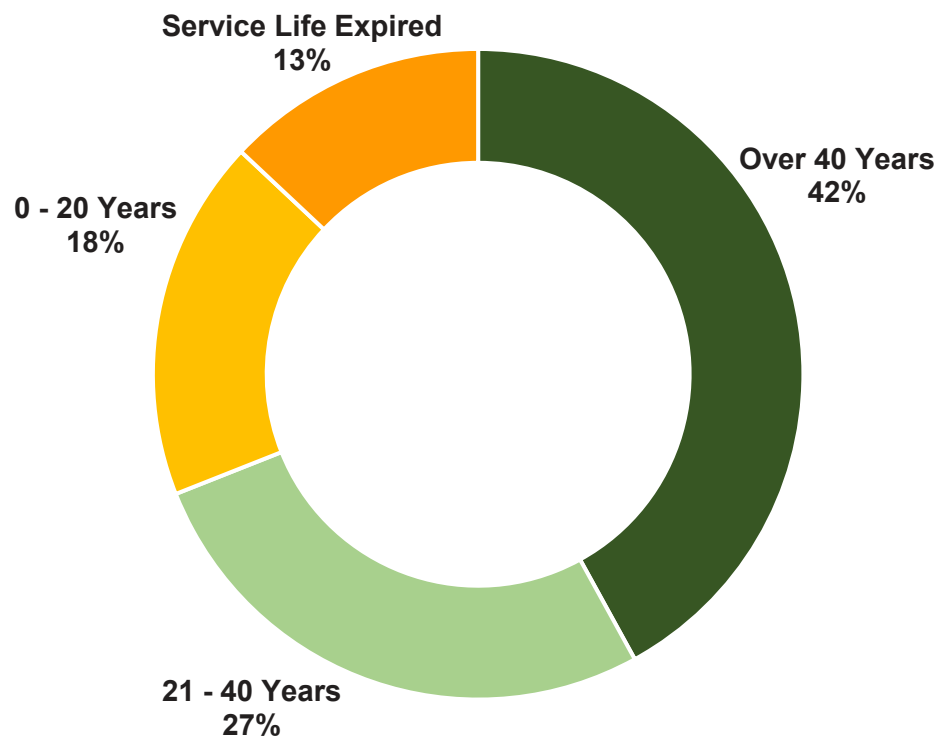
Estimated Useful Life and Average Life

The Estimated Useful Life for Stormwater assets has been assigned according to a combination of established industry standards and staff knowledge. The Average Age of each asset is based on the number of years each asset has been in-service. Finally, the Average Service Life Remaining represents the difference between the Estimated Useful Life and the Average Age, except when an asset has been assigned an assessed condition rating. The assessed condition may increase or decrease the average service life remaining.

Table 16. Estimated Useful Life for Stormwater Components, 2025

Asset Category	Asset Type	Useful Life (Years)
Stormwater Conveyance	Catch Basins	40
	Gravity Mains	50 – 100
	Manholes	80
	Small Culverts	50 - 100
Stormwater Management	Stormwater Management Facilities	80

Figure 19. Useful Life Remaining – Stormwater, 2025



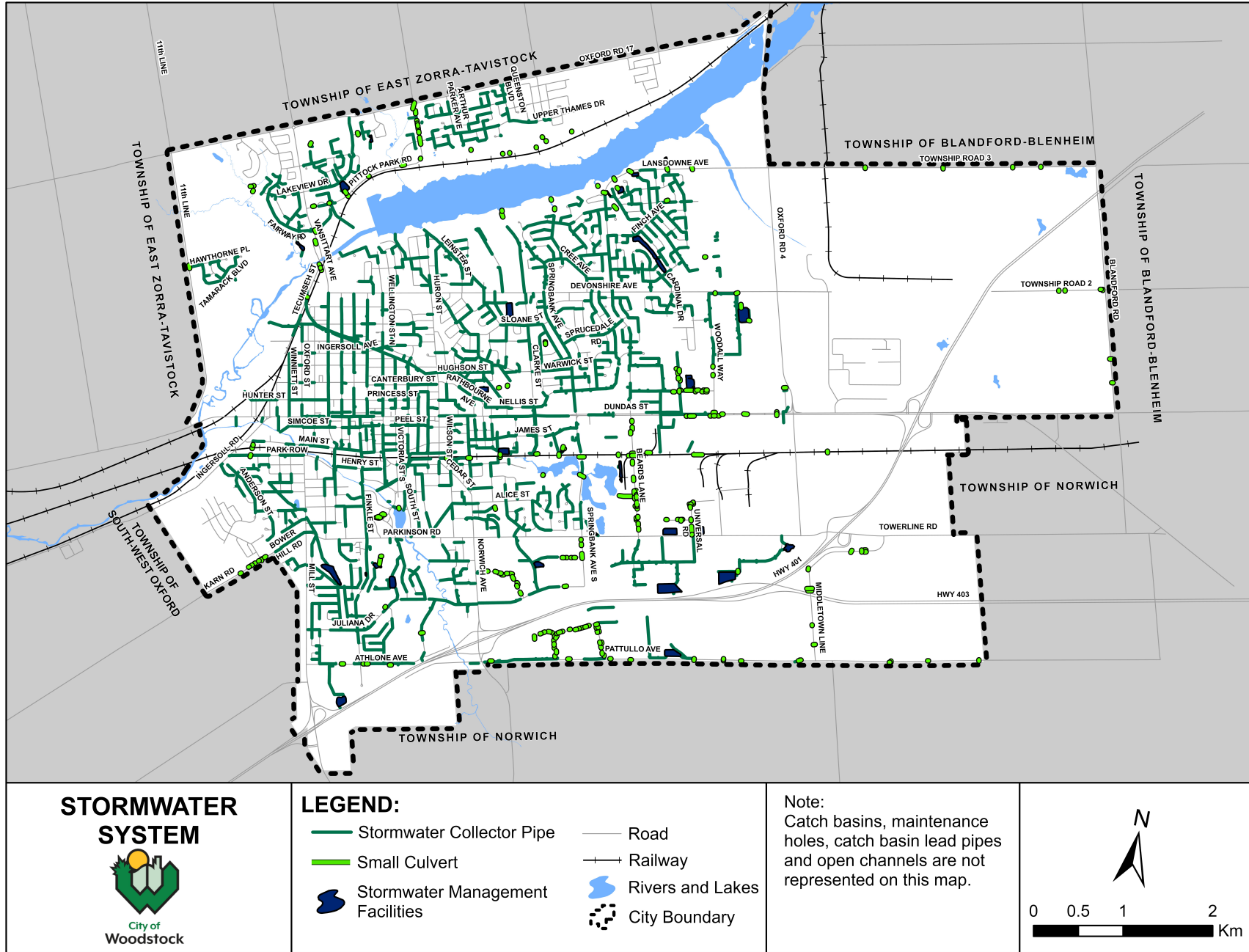
Levels of Service

The following section includes performance measures that are included in the O.Reg. 588/17 requirements. They are not the only metrics used by the City to measure the quality being delivered by any asset category.

Table 17. O.Reg. 588/17 Levels of Service Metrics

Service Attribute	Corporate Description	LOS Measure	Current Performance	Proposed Performance
Scope	Providing stormwater services that protect the community.	Percentage (%) of properties in municipality resilient to a 100-year storm.	99%	99%
		Percentage (%) of the municipal stormwater management system resilient to a 5-year storm.	100%	100%
Reliability	Providing stormwater services with minimal impact to the community.	Percentage (%) of Stormwater assets in Fair or better condition.	80%	Maintain
		Percentage (%) of Stormwater Conveyance assets in Poor or Critical condition.	22%	20%
		Percentage (%) of Stormwater Management assets in Poor or Critical condition.	6%	0%
		Percentage (%) of the Stormwater Network Inspected with CCTV.	66%	100%

Figure 20. Stormwater Management System - Stormwater Network, 2025



Lifecycle Management Strategy

The condition or performance of most assets will deteriorate over time. This process is affected by various factors, including an asset’s characteristics, location, utilization, maintenance history and environment. The following lifecycle management strategies are currently being used/are recommended to ensure the Stormwater portfolio remains in a state of good repair throughout its intended lifespan and to maintain current levels of service.

Table 18. Lifecycle Management Strategies, Stormwater

Lifecycle Activity Type	Asset Management Practices	Risks Associated with Not Completing the Activities
Non-Infrastructure Solutions	<ul style="list-style-type: none"> • Condition assessment programs • Small Culvert Inspection Program • Climate change adaption and mitigation 	<ul style="list-style-type: none"> • Inadequate planning leading to inaccurate forecast estimates and short- and long-term plans • Regulatory requirement • Inability to understand potential impacts of climate change on infrastructure
Maintenance	<ul style="list-style-type: none"> • Routine maintenance such as basic cleaning of catch basins, flushing of gravity mains, etc. • Meet Minimum Maintenance Standards • CCTV inspections • Scheduled preventative maintenance programs such as the flushing program to reduce backflow of stormwater onto roads • Small culvert inspection program 	<ul style="list-style-type: none"> • Deficiencies are not identified through inspections • Increased lifecycle costs if maintenance is not done as scheduled or incorrectly • Premature asset failure, service level drops, and health and safety risks • Customer dissatisfaction
Renewal (Rehabilitation & Replacement)	<ul style="list-style-type: none"> • Rehabilitation activities are determined based on both external expertise and internal expertise (knowledge of evolving storm network conditions, organizational priorities, available budget, coordination with County and other City assets). • Regular cleaning of stormwater pond systems 	<ul style="list-style-type: none"> • Rehabilitation/Renewal activities may not extend asset life as expected • Increased lifecycle costs if not done properly or as scheduled • Coordination with other asset classes might delay planning forecasts
Disposal	<ul style="list-style-type: none"> • Obsolete assets are decommissioned as needed 	<ul style="list-style-type: none"> • Environmental impacts and cost overruns
Growth	<ul style="list-style-type: none"> • New development assumptions, industrial expansion, and local improvements • Growth projects related to expansion and storm management needs 	<ul style="list-style-type: none"> • Activities delayed or cancelled resulting in inability to accommodate increased demands
Service Improvement	<ul style="list-style-type: none"> • Technologies that offer improved resistance to the elements and typical condition deterioration 	<ul style="list-style-type: none"> • Increased levels of service expectations result in increased costs

Financial Strategy

The City utilizes lifecycle management strategies, as detailed in the previous section, to facilitate planning activities and forecast future expenditure requirements for various assets within the Stormwater service area. These strategies, along with the scenarios outlined below, establish a framework for identifying the financial resources necessary to manage and maintain these assets effectively.

The following scenarios illustrate the projected lifecycle requirements over a 10-year period, addressing both the maintenance of current service levels and the achievement of proposed service levels. These scenarios consider only the costs and needs related to renewal, rehabilitation and replacement lifecycle activities. These activities are essential to ensuring that infrastructure remains in a state of good repair, thereby enabling the City to continue providing services to residents.

Scenario 1: Cost to Maintain Current Levels of Service

Scenario one outlines the estimated annual cost of the renewal, rehabilitation and replacement lifecycle activities required to maintain current levels of service.

Figure 21. Scenario One Asset Performance – Stormwater 2025-2034

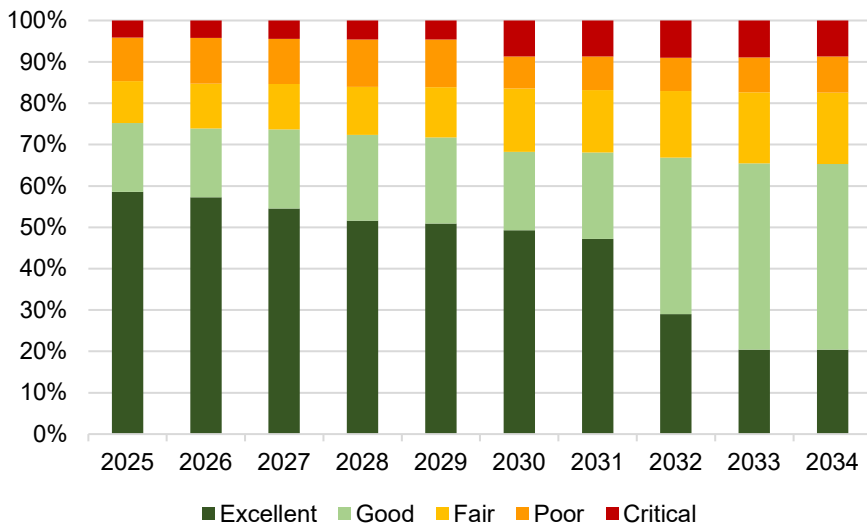
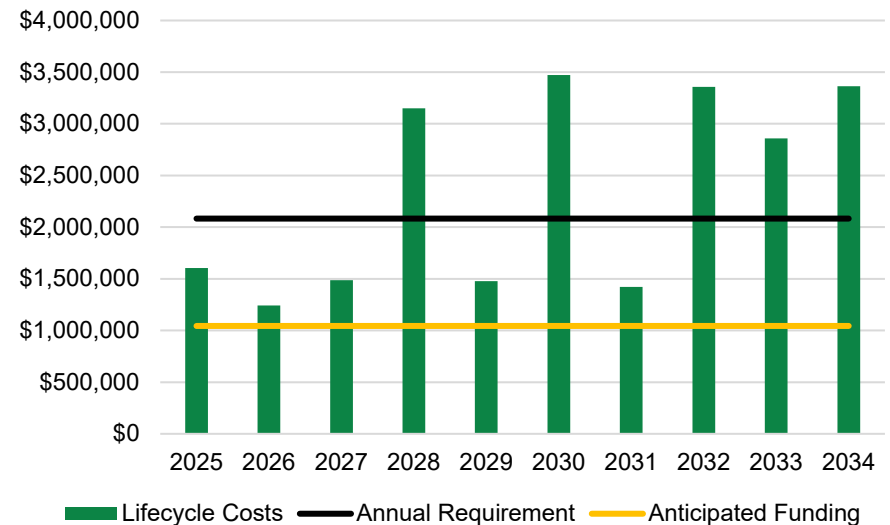


Figure 22. Scenario One Lifecycle Costs – Stormwater 2025-2034

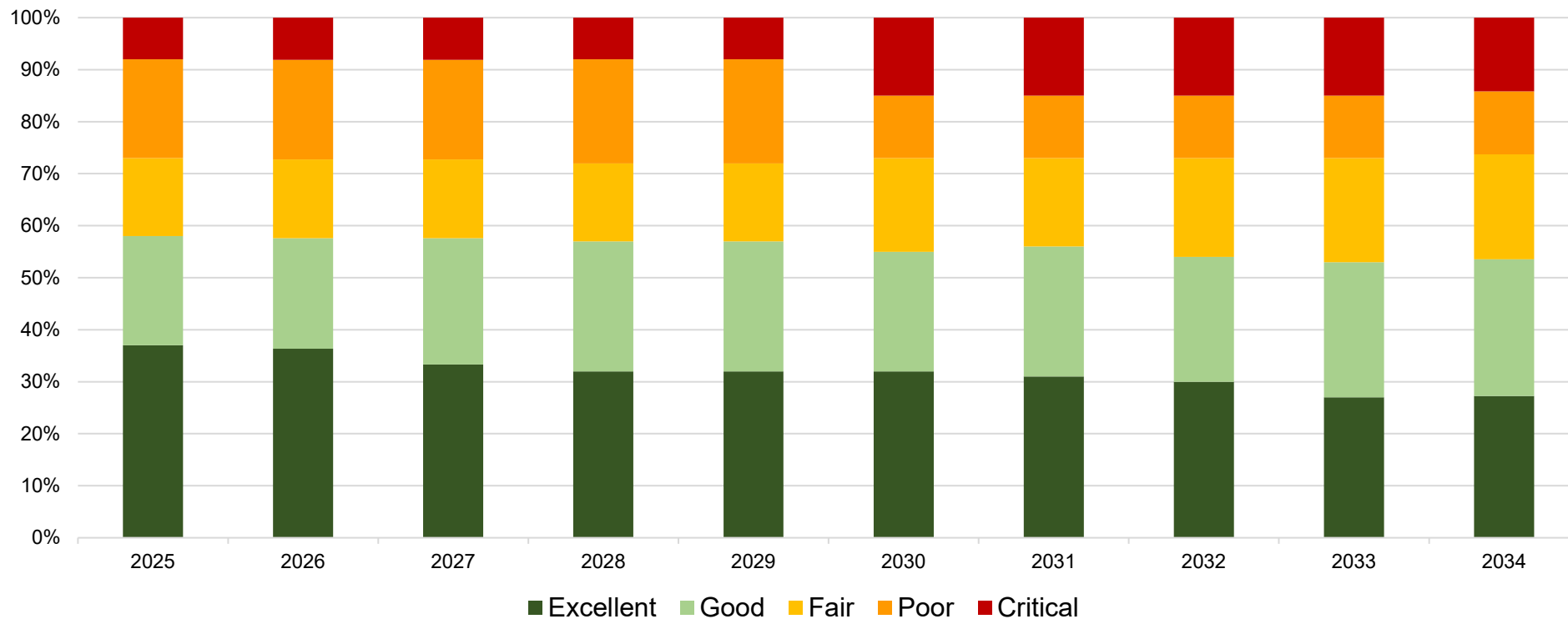


Based on this scenario, the estimated annual requirement was determined to be \$2.38M annually to ensure asset performance in perpetuity. Compared to anticipated funding, this results in a funding gap of \$1.34M.

Scenario 2: Current Funding

Scenario two outlines the impact of current anticipated funding on asset performance.

Figure 23. Scenario Two Asset Performance – Stormwater 2025-2034



Based on current funding levels, the percentage of assets in the poor to critical hovers around the 27% over the next 10 years. When this scenario is extended out to the 20-to-40-year forecast, this percentage begins to increase as the average age of stormwater assets rises.

Scenario 3: Cost to Achieve Proposed Levels of Service

Scenario three outlines the estimated annual cost of the renewal, rehabilitation and replacement lifecycle activities required to achieve proposed service level targets as well as performing the lifecycle activities needed.

Figure 24. Scenario Three Asset Performance – Stormwater 2025-2034

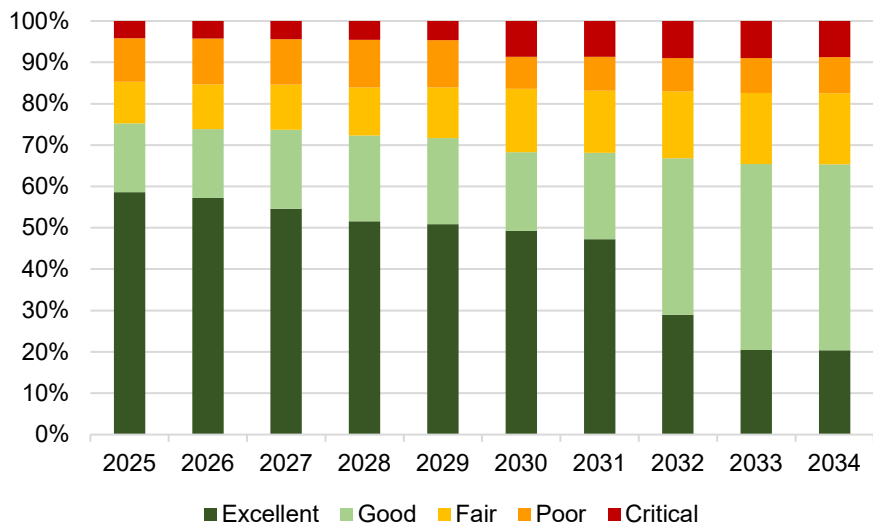
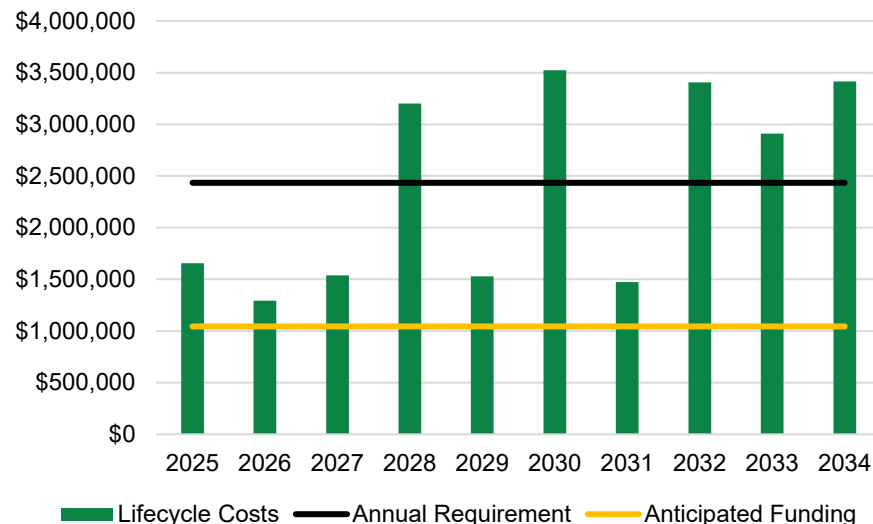


Figure 25. Scenario Three Lifecycle Costs – Stormwater 2025-2034



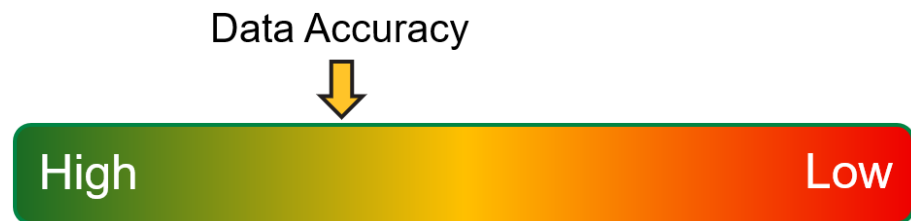
Based on this scenario, the estimated annual requirement was determined to be \$2.43M annually to ensure asset performance in perpetuity. Compared to anticipated funding, this results in a funding gap of \$1.39M.

Data Confidence

Accurate and reliable condition data allows staff to determine the remaining service life of assets and identify the most cost-effective approach to managing assets more confidently.

The City’s overall Stormwater data accuracy is considered to be medium to high with condition assessments being completed on an ongoing basis through the CCTV inspection program. Data gap analysis continues to be a major project the City embarks on as it seeks to further understand its inventory and plan for the long term. In the absence of assessed data, the City relies on age-based data as a proxy.

Figure 26. Data Accuracy – Stormwater



Condition Assessments and Data Collection

The following describes the City’s current condition assessment programs and practices within the Stormwater service area:

- Closed Circuit Television Video (CCTV) inspection work for all gravity main assets. This includes flushing when necessary
- Storm pond cleanouts
- Catch basin cleaning

CCTV inspections are a valuable source of information. All sewer segment inspections records are collected, and a corresponding GIS database is created. Upon review of inspection reports, the observations and sewer grading results

for each sewer segment are categorized and prioritized to provide a summary of potential action items for the City. This summary is used by the City to assist with its ongoing stormwater collection systems management program.

A sewer grading matrix and grading database have been developed to assist with prioritizing actions necessary to meet the desired level of service/maintenance for the stormwater collection system.

Sewer Grading Matrix

Operational and Maintenance (O&M) and Structural observations, sometimes referred to as defects, are divided into 8 general categories based on the rectifying action, severity, and likeliness to fail and/or cause an impact if not addressed. Initially, the categories of actions have been defined as follows:

- Emergency Rehabilitation
- Rehabilitation in next Capital Planning Cycle
- Rehabilitation in future Capital Planning Cycle
- Flushing
- Mechanical Cleaning
- Inspection Watchlist
- Re-inspection
- Special Review Cases

It is recommended that the City continue current strategic condition assessment programs and that funding continue to be dedicated to this. It is also recommended that the City develop formal KPI’s regarding stormwater inspections and that funding be assigned to ensure regulatory compliance and future needs.

Continuous Improvement

The City continues to advance the Asset Management Program and works towards ensuring line of sight when it comes to decision making and asset management practices. Increased quality of data and information and standardized operating procedures will improve data confidence levels and the quality of these decisions. The following recommendations will help ensure the City maintains its path and manage its growing \$180 million Stormwater portfolio in a sustainable manner.

1. Align the Asset Management Plan

- a. Align the AMP with the City's budgetary processes and strategic plan
- b. Identify paths of incorporating the AMP within the capital budget
- c. Ensure the Asset Management Steering Committee continues work on corporate buy-in and maintains line of sight across the City

2. Address the Infrastructure Gap

- a. Continue to search for funding from non-tax sources of financing to address infrastructure gaps
 - i. Grant funding where applicable
- b. Create infrastructure reserves that plan for the future and eliminate the risk of "peaks and valleys" in funding requirements
 - i. Address as part of an overall Transportation Reserve
- c. Mitigate the risk of current LOS dropping
- d. Improve and build 5- and 10-year capital plans that tackle the infrastructure gap

3. Improve the Asset Management Program

- a. Ensure data inventories are accurate and condition data is recorded in a timely manner
 - i. Formal CCTV inspection program
 - ii. Small culvert inspection program
- b. Standardize operating procedures where applicable
- c. Build lifecycle strategies that are representative of asset performance and achieve proposed LOS
- d. Explore opportunities for interoperability where available
 - i. Asset Management Systems
- e. Continue to pursue Risk Management strategies across the City



CORPORATE FACILITIES

The City of Woodstock is committed to maintaining safe, efficient, and sustainable corporate facilities that support service delivery, community well-being, and long-term operational resilience.

Corporate Facilities

State of the Infrastructure

The City’s Corporate Facilities service area consists of assets relating to City Hall, Engineering and Public Works, Woodstock Fire Department, Woodstock Police Service and Information Technology. The following section contains information regarding the Corporate Facilities portfolios asset inventory, replacement costs, age, and overall condition ratings.

Asset Inventory and Replacement Cost

The table below illustrates key asset attributes for the City’s Corporate Facilities portfolio. The overall value of the City’s Corporate Facilities service area is valued at over \$100 million.

Table 19. Corporate Facilities Inventory

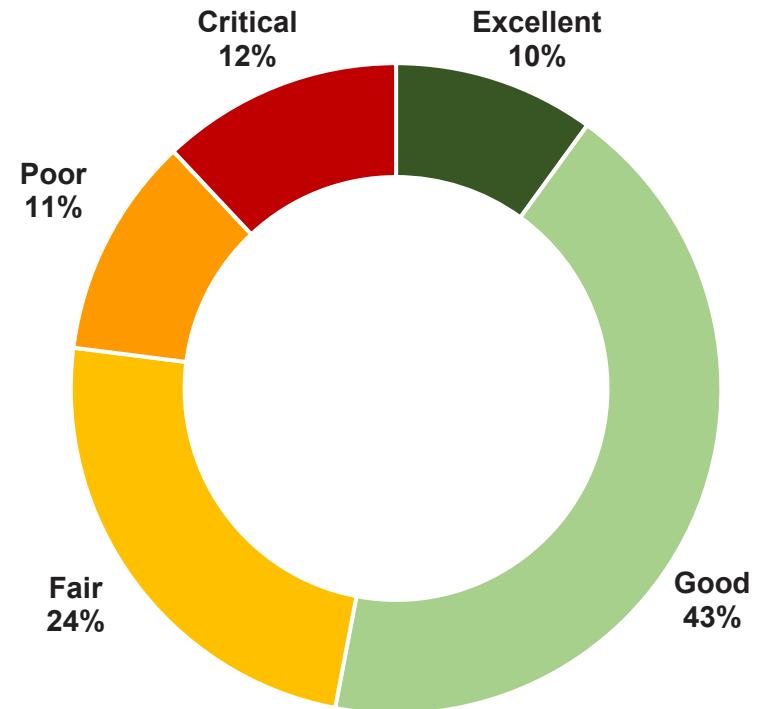
Asset Category	Asset Type	Quantity	Unit	Replacement Cost
Corporate Facilities	Administrative	3	Each	\$30,155,089
	Engineering and Public Works	7	Each	\$28,867,855
	Information Technology	344	Pooled	\$4,748,029
	Woodstock Fire Department	2	Each	\$18,356,625
	Woodstock Police Service ⁶	1	Each	\$18,466,774
Overall Corporate Facilities Replacement Value				\$100,594,372

⁶ Woodstock Police Service assets are included in this asset management plan but are not all directly managed by the City

Current Asset Condition

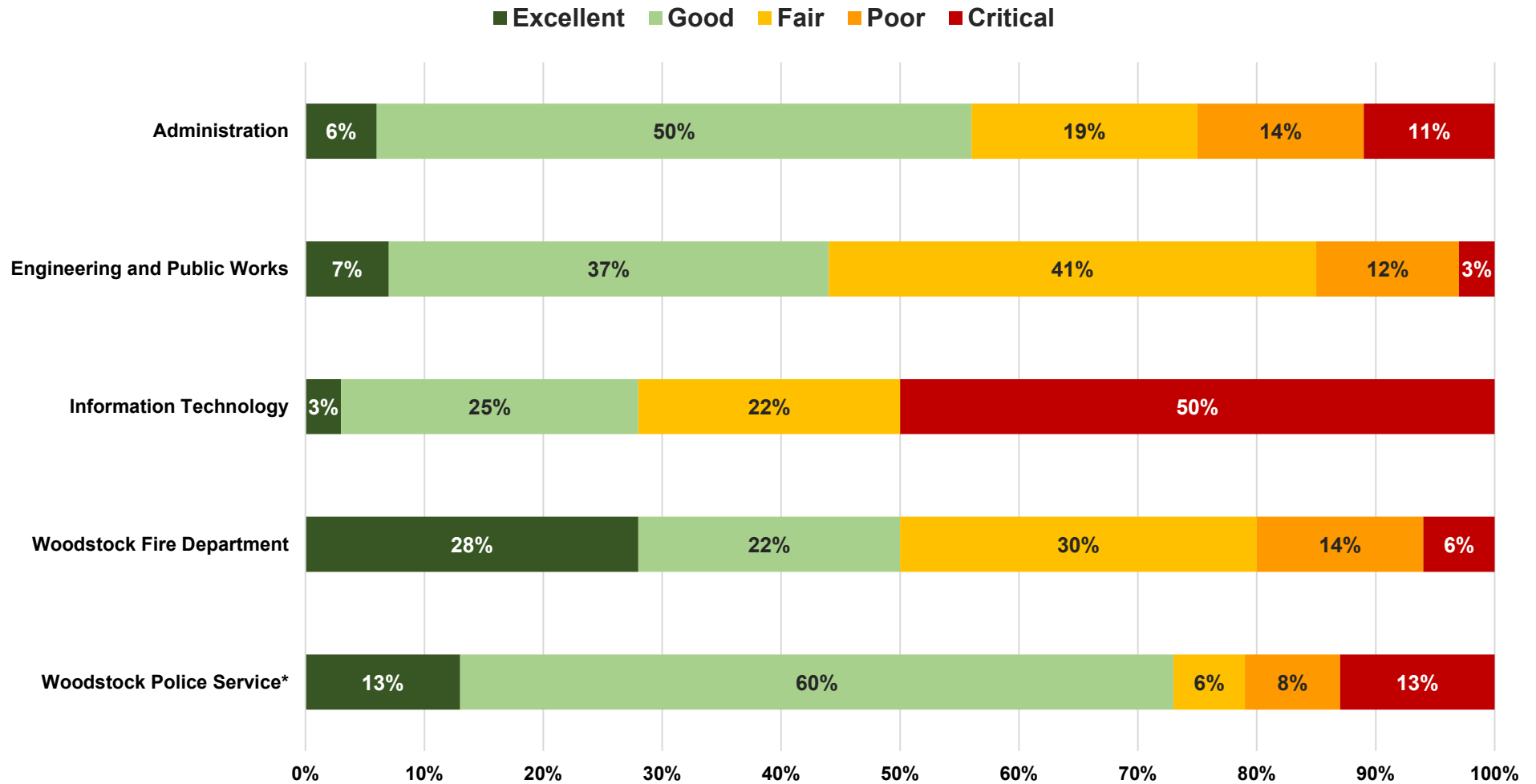
The following graph illustrates the overall conditions of the Corporate Facilities service area. The average condition is a weighted value based on replacement cost.

Figure 27. Asset Condition – Corporate Facilities, 2025



Overall, 77% of the Corporate Facilities assets are in fair or better condition (based on replacement value) with 23% nearing or at the critical state of good repair.

Figure 28. Asset Condition Breakdown – Corporate Facilities, 2025



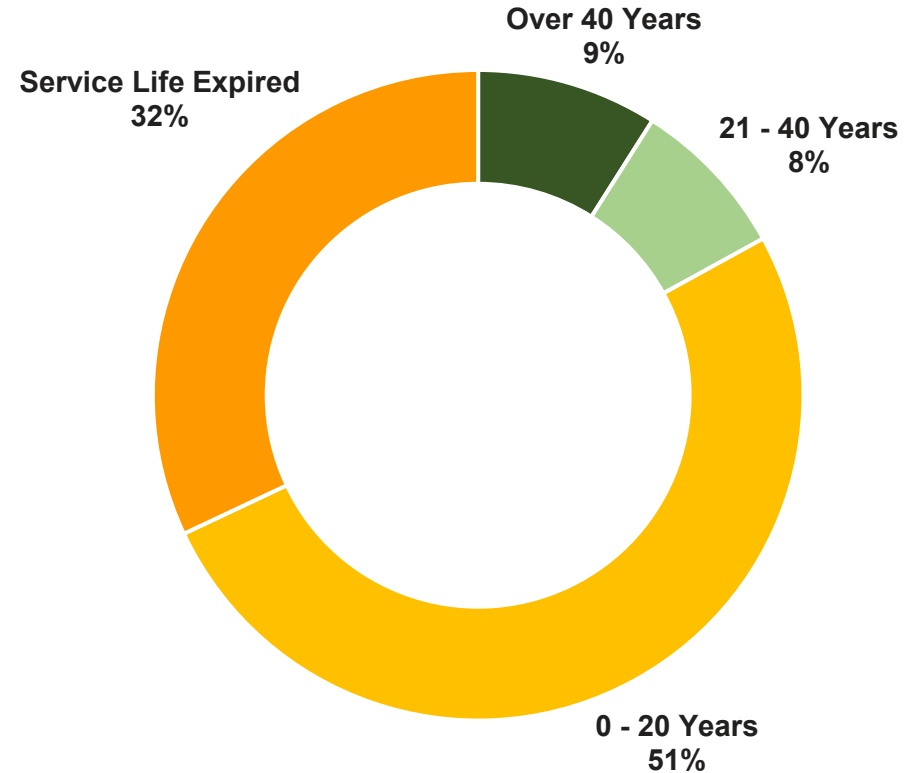
Estimated Useful Life and Average Life

The Estimated Useful Life for Corporate Facilities assets has been assigned according to a combination of established industry standards and staff knowledge. The Average Age of each asset is based on the number of years each asset has been in-service. Finally, the Average Service Life Remaining represents the difference between the Estimated Useful Life and the Average Age, except when an asset has been assigned an assessed condition rating. The assessed condition may increase or decrease the average service life remaining.

Table 20. Estimated Useful Life for Corporate Facilities Components, 2025

Asset Category	Asset Type	Useful Life (Years)
Facilities	Electrical and Mechanical	15 - 25
	Elevators	30
	HVAC	15 - 30
	Interior Finishes	15 - 25
	Roof Cover	15 - 75
	Structure	20 - 60
Information Technology	Communication Equipment	5 - 50
	Computers and Servers	5
	Software	5

Figure 29. Useful Life Remaining – Corporate Facilities, 2025



Levels of Service

The following section includes performance measures that help drive decision-making and spending on assets. They are not the only metrics used by the City to measure the quality being delivered by any asset category.

Table 21. Levels of Service Metrics

Service Attribute	Corporate Description	LOS Measure	Current Performance	Proposed Performance
Customer Service	Customer Satisfaction (via survey).	Percentage (%) of survey respondents satisfied with Corporate Facilities.	86%	Maintain
Cost Effective	Providing facilities services in a cost-effective manner.	Cost to provide facilities services per household.	\$225.38	Maintain
Accessibility	Providing adequate accessibility to facilities.	Percentage (%) of occupied Corporate Facilities that are accessibility (FADS and AODA) compliant.	100%	100%
Quality	Providing facilities in a state of good repair.	Percentage (%) of Corporate Facilities assets in Fair or better condition.	74%	Maintain
	Providing technology services in a state of good repair.	Percentage (%) of Information Technology Assets in Fair or better condition.	50%	80%
Environmental Stewardship	Providing facilities that are energy efficient and environmentally conscious.	Annual electric energy consumption kilowatt-hour per square foot.	8.55 kWh/ft ²	Trend Downward
		Annual natural gas consumption cubic meters per square foot.	1.63 m ³ /ft ²	Trend Downward

Lifecycle Management Strategy

The condition or performance of most assets will deteriorate over time. This process is affected by various factors, including an asset’s characteristics, location, utilization, maintenance history and environment. The following lifecycle management strategies are currently being used/are recommended to ensure the Corporate Facilities portfolio remains in a state of good repair throughout its intended lifespan and to maintain current levels of service.

Table 22. Lifecycle Management Strategies, Corporate Facilities

Lifecycle Activity Type	Asset Management Practices	Risks Associated with Not Completing the Activities
Non-Infrastructure Solutions	<ul style="list-style-type: none"> • Condition assessment programs • Climate change adaption and mitigation • Accessibility Plan 	<ul style="list-style-type: none"> • Inadequate planning leading to inaccurate forecast estimates and short- and long-term plans • Regulatory requirement • Inability to understand potential impacts of climate change on infrastructure
Maintenance	<ul style="list-style-type: none"> • Routine maintenance • Scheduled preventative maintenance programs • Structures inspected 	<ul style="list-style-type: none"> • Deficiencies are not identified through inspections • Increased lifecycle costs if maintenance is not done as scheduled or incorrectly • Premature asset failure, service level drops, and health and safety risks • Customer dissatisfaction
Renewal (Rehabilitation & Replacement)	<ul style="list-style-type: none"> • Rehabilitation activities should be based on both external expertise and internal expertise (knowledge of structural requirements, organizational priorities, available budget, coordination with other City assets) • Comprehensive condition assessments, which provide industry-standard Facility Condition Index (FCI) scores that accurately reflect the overall condition of the facilities, should be conducted regularly to determine the cost and timing of renewal requirements 	<ul style="list-style-type: none"> • Rehabilitation/Renewal activities may not extend asset life as expected • Increased lifecycle costs if not done properly or as scheduled • Coordination with other asset classes might delay planning forecasts
Disposal	<ul style="list-style-type: none"> • Obsolete assets are decommissioned as needed • Structure disposals are infrequent 	<ul style="list-style-type: none"> • Environmental impacts and cost overruns
Growth	<ul style="list-style-type: none"> • Space requirements will continue to change as the City continues to grow and staffing requirements to maintain levels of service increase • Expansion of new developments will further require the City to develop strategies to ensure all residents have access to City provided services 	<ul style="list-style-type: none"> • Activities delayed or cancelled resulting in inability to accommodate increased demands

Lifecycle Activity Type	Asset Management Practices	Risks Associated with Not Completing the Activities
Service Improvement	<ul style="list-style-type: none">Technologies that offer improved resistance to the elements and typical condition deteriorationPublic input and users of facilities and services would help determine service improvement needs	<ul style="list-style-type: none">Increased levels of service expectations result in increased costs

Financial Strategy

The City utilizes lifecycle management strategies, as detailed in the previous section, to facilitate planning activities and forecast future expenditure requirements for various assets within the Corporate Facilities service area. These strategies, along with the scenarios outlined below, establish a framework for identifying the financial resources necessary to manage and maintain these assets effectively.

The following scenarios illustrate the projected lifecycle requirements over a 10-year period, addressing both the maintenance of current service levels and the achievement of proposed service levels. These scenarios consider only the costs and needs related to renewal, rehabilitation and replacement lifecycle activities. These activities are essential to ensuring that infrastructure remains in a state of good repair, thereby enabling the City to continue providing services to residents.

Scenario 1: Cost to Maintain Current Levels of Service

Scenario one outlines the estimated annual cost of the renewal, rehabilitation and replacement lifecycle activities required to maintain current levels of service.

Figure 30. Scenario One Asset Performance – Corporate Facilities 2025-2034

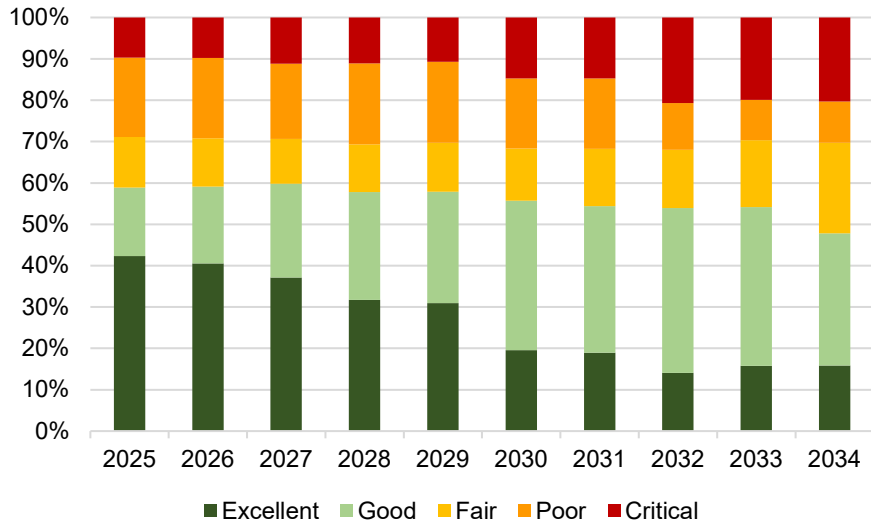
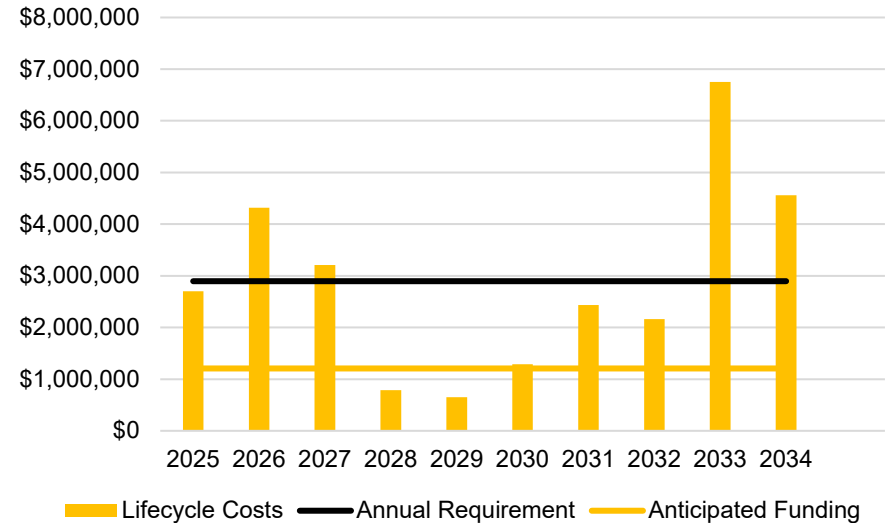


Figure 31. Scenario One Lifecycle Costs – Corporate Facilities 2025-2034

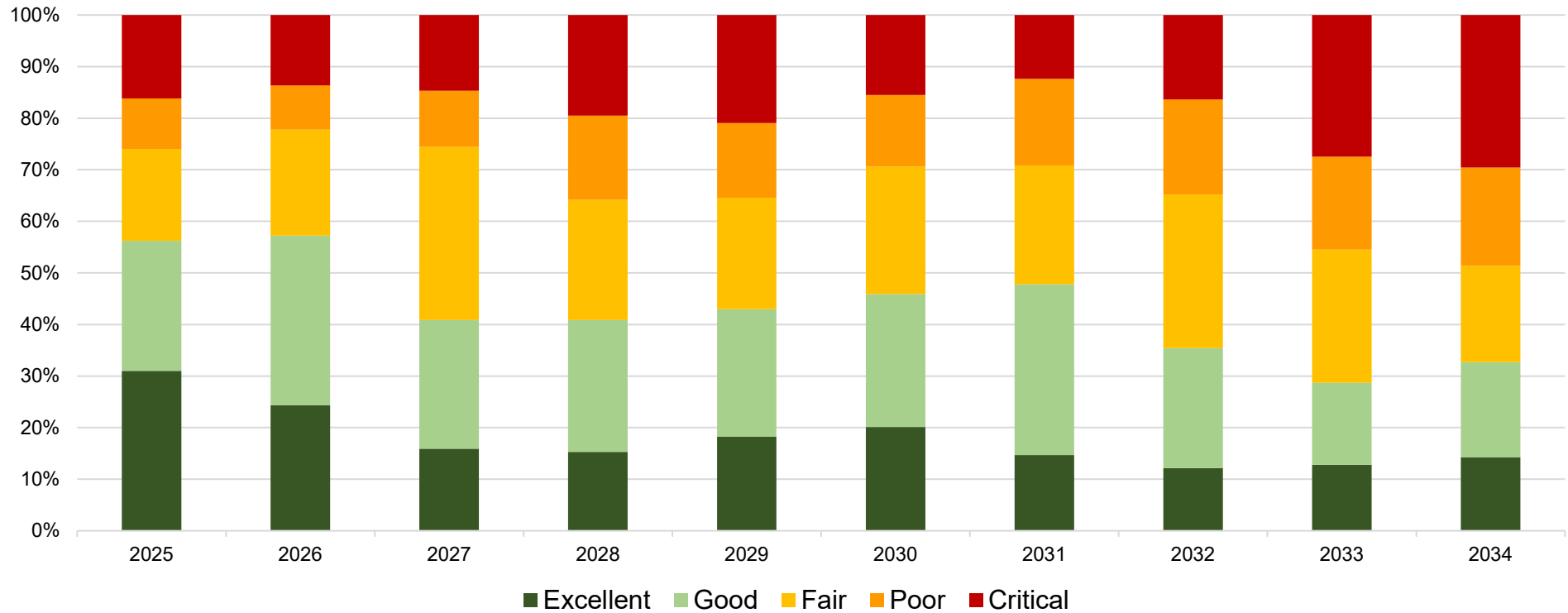


Based on this scenario, the estimated annual requirement was determined to be \$2.9M annually to ensure asset performance in perpetuity. Compared to anticipated funding, this results in a funding gap of \$1.7M.

Scenario 2: Current Funding

Scenario two outlines the impact of current anticipated funding on asset performance.

Figure 32. Scenario Two Asset Performance – Corporate Facilities 2025-2034



Based on current funding levels, the percentage of assets in poor to critical condition rises from 26% to 49% over the next 10 years. When this scenario is extended out to the 20-to-40-year forecast, this percentage continues to grow as the average age of the facilities increases.

Scenario 3: Cost to Achieve Proposed Levels of Service

Scenario three outlines the estimated annual cost of the renewal, rehabilitation and replacement lifecycle activities required to achieve proposed service level targets as well as performing the lifecycle activities needed.

Figure 33. Scenario Three Asset Performance – Corporate Facilities 2025-2034

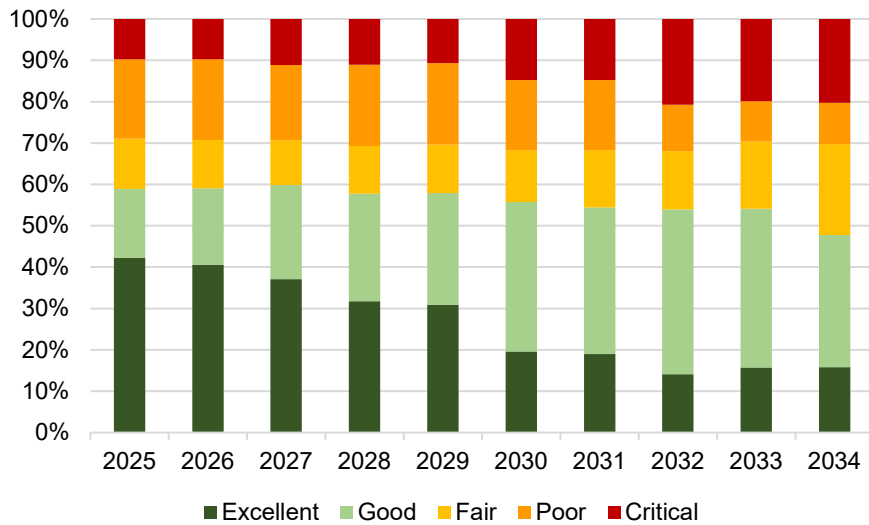
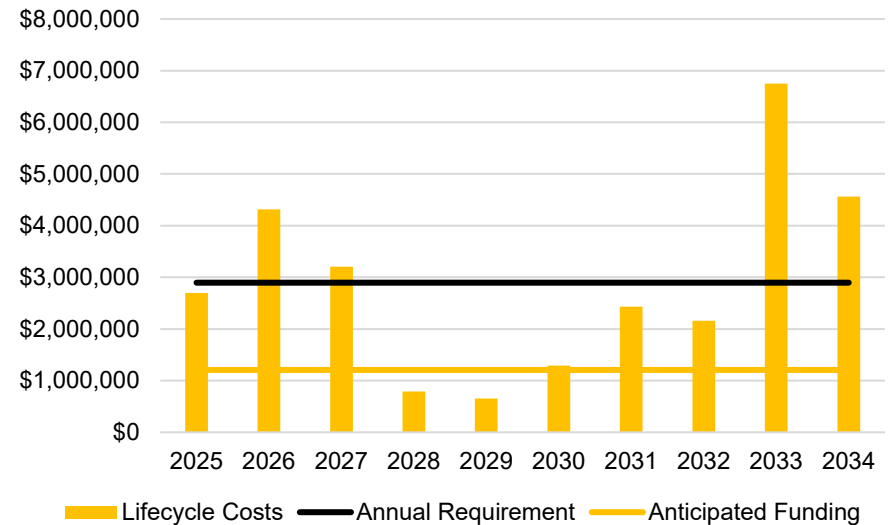


Figure 34. Scenario Three Lifecycle Costs – Corporate Facilities 2025-2034



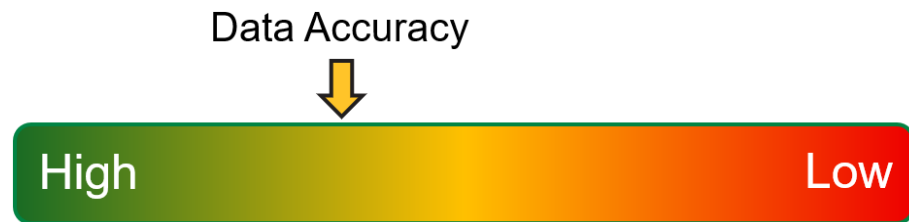
Based on this scenario, the estimated annual requirement was determined to be \$2.9M annually to ensure asset performance in perpetuity. Compared to anticipated funding, this results in a funding gap of \$1.7M.

Data Confidence

Accurate and reliable condition data allows staff to determine the remaining service life of assets and identify the most cost-effective approach to managing assets more confidently.

The City's overall Corporate Facilities data accuracy has improved year over year and is now considered to be medium to high with building condition assessments having been completed on most facilities within this service area. The primary source of data being assessed condition ratings. Data analysis continues to be a major project the City embarks on as it seeks to further understand its inventory and plan for the long term.

Figure 35. Data Accuracy – Corporate Facilities



Condition Assessments and Data Collection

The following asset classifications are typically inspected within a facility:

- Site components: property around the facility and includes the outdoor components such as utilities, signs, stairways, walkways, parking lots, fencing, courtyards and landscaping
- Structural components: physical components such as the foundations, walls, doors, windows, roofs
- Electrical components: all components that use or conduct electricity such as wiring, lighting, electric heaters, and fire alarm systems

- Mechanical components: components that convey and utilize all non-electrical utilities within a facility such as gas pipes, furnaces, boilers, plumbing, ventilation, and fire extinguishing systems
- Vertical movement components used for moving people between floors of buildings such as elevators, escalators, and stair lifts

Once collected, this type of information is uploaded into the City's asset management system for short- and long-term repair, rehabilitation, and replacement reports to be generated to assist with programming the short- and long-term maintenance and capital budgets.

The most popular and practical type of buildings and facility assessment involves qualified groups of trained industry professionals (engineers or architects) performing an analysis of the condition of a group of facilities, and their components, which may vary in terms of age, design, construction methods, and materials. This analysis can be done by walk-through inspection, mathematical modeling, or a combination of both. The most accurate way of determining the condition requires a walk-through to collect baseline data.

The City is currently progressing to improve data accuracy of its facilities having conducted building condition assessments on most City owned facilities.

It is recommended that the City continue to invest and conduct building condition assessments on a cyclical basis.

Continuous Improvement

The City continues to advance the Asset Management Program and works towards ensuring line of sight when it comes to decision making and asset management practices. Increased quality of data and information and standardized operating procedures will improve data confidence levels and the quality of these decisions. The following recommendations will help ensure the City maintains its path and manage its growing \$100 million Corporate Facilities portfolio in a sustainable manner.

1. Align the Asset Management Plan

- a. Align the AMP with the City's budgetary processes and strategic plan
- b. Identify paths of incorporating the AMP within the capital budget
- c. Ensure the Asset Management Steering Committee continues work on corporate buy-in and maintains line of sight across the City

2. Address the Infrastructure Gap

- a. Continue to search for funding from non-tax sources of financing to address infrastructure gaps
 - i. Grant funding where applicable
- b. Create infrastructure reserves that plan for the future and eliminate the risk of "peaks and valleys" in funding requirements
 - i. Building Repair Reserves
- c. Mitigate the risk of current LOS dropping
- d. Improve and build 5- and 10-year capital plans that tackle the infrastructure gap

3. Improve the Asset Management Program

- a. Ensure data inventories are accurate and condition data is recorded in a timely manner
 - i. Building condition assessments
 - ii. Lifecycle management events
- b. Standardize operating procedures where applicable
- c. Build lifecycle strategies that are representative of asset performance and achieve proposed LOS
- d. Explore opportunities for interoperability where available
 - i. Asset Management Systems
- e. Continue to pursue Risk Management strategies across the City



TRANSIT

The City of Woodstock is committed to a safe, accessible, and sustainable transit system that enhances mobility, reduces environmental impact, and supports inclusive community growth.

Transit

State of the Infrastructure

The City’s Transit service area consists of the transit terminal, bus storage building, bus shelters and pads, and fleet assets. The following section contains information regarding the Transit inventory, replacement costs, age, and overall condition ratings.

Asset Inventory and Replacement Cost

The table below illustrates key asset attributes for the City’s Transit portfolio. The overall value of the City’s Transit service area is valued at over \$24 million.

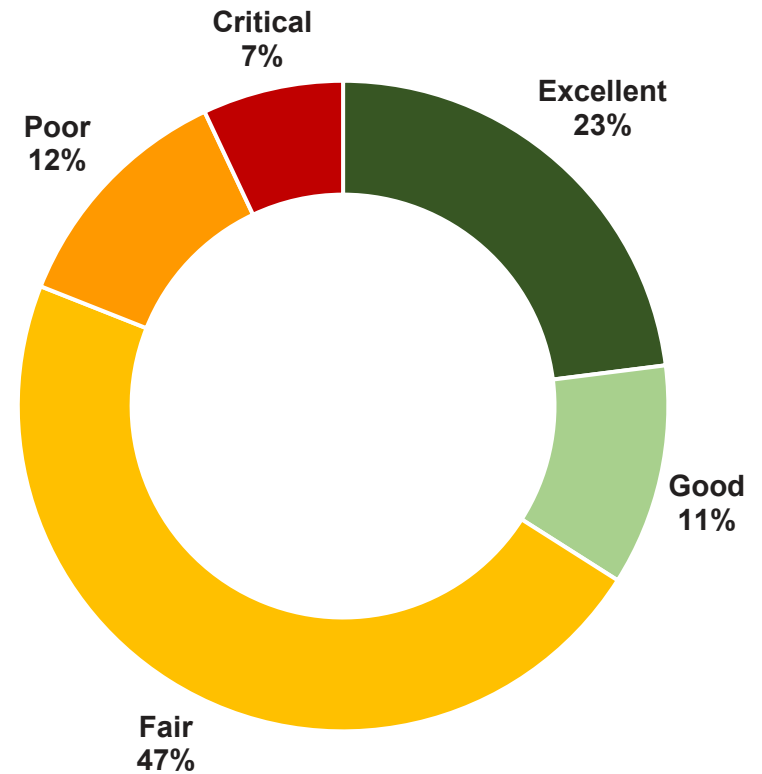
Table 23. Transit Inventory

Asset Category	Asset Type	Quantity	Unit	Replacement Cost
Facilities	Bus Shelters	34	Each	\$624,000
	Bus Pads	277	Each	\$113,490
	Transit Terminal	1	Each	\$1,357,598
	Storage Building	1	Each	\$9,723,400
Fleet	Rolling Stock	15	Each	\$12,000,000
	Support Vehicles	3	Each	\$194,664
Overall Transit Replacement Value				\$24,013,152

Current Asset Condition

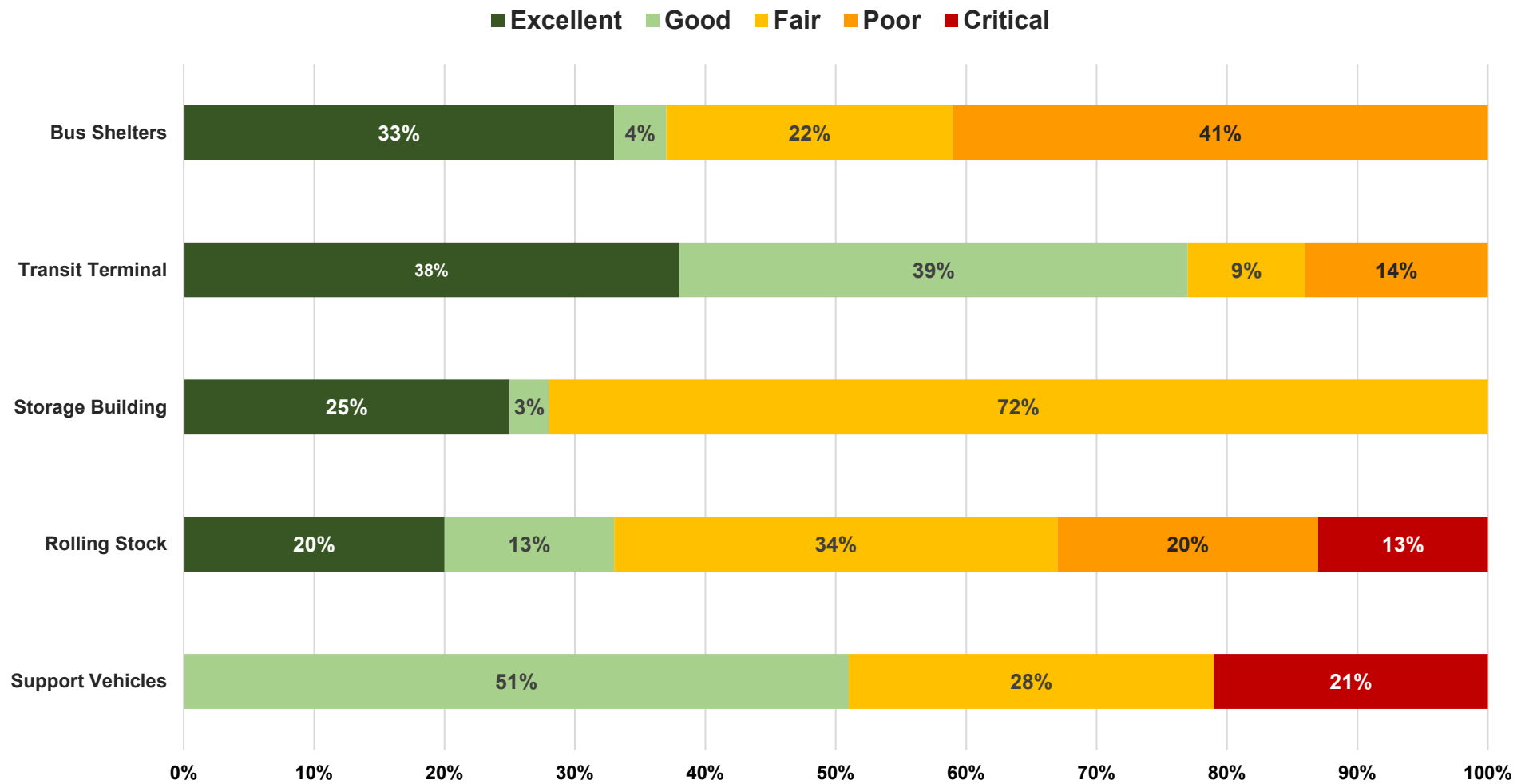
The following graph illustrates the overall conditions of the transit service area. The average condition is a weighted value based on replacement cost.

Figure 36. Asset Condition – Transit, 2025



Overall, 81% of the transit assets are in fair or better condition (based on replacement value) with 19% nearing or at the critical state of good repair.

Figure 37. Asset Condition Breakdown – Transit, 2025



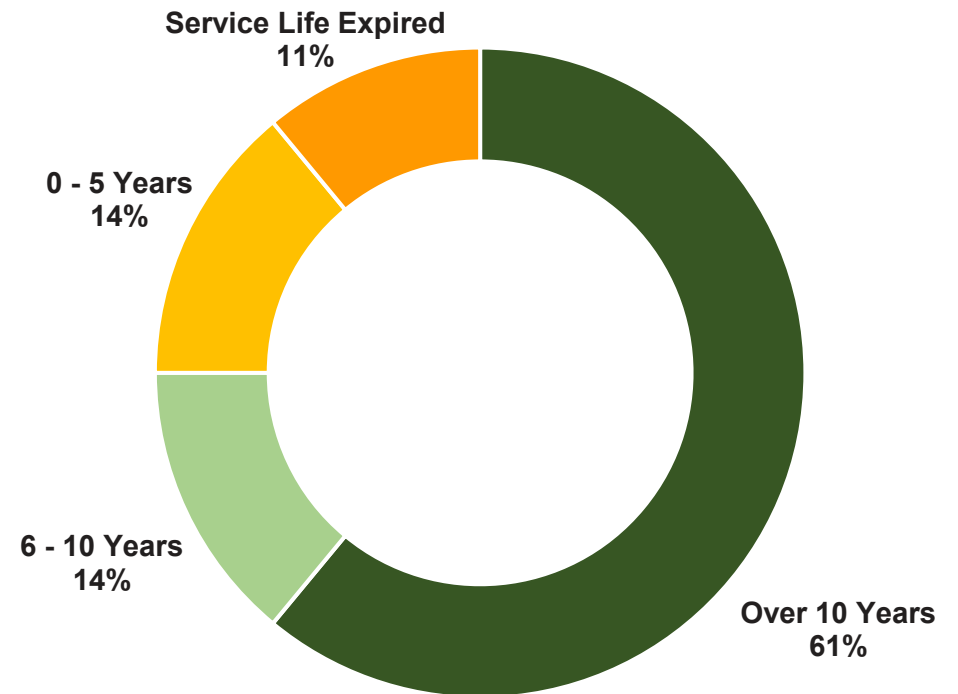
Estimated Useful Life and Average Life

The Estimated Useful Life for Transit assets has been assigned according to a combination of established industry standards and staff knowledge. The Average Age of each asset is based on the number of years each asset has been in-service. Finally, the Average Service Life Remaining represents the difference between the Estimated Useful Life and the Average Age, except when an asset has been assigned an assessed condition rating. The assessed condition may increase or decrease the average service life remaining.

Table 24. Estimated Useful Life for Transit Components, 2025

Asset Category	Asset Type	Useful Life (Years)
Facilities	Bus Shelters	20
	Bus Pads	20
	Structure	20 - 60
Fleet	Rolling Stock	18
	Support Vehicles	10

Figure 38. Useful Life Remaining – Transit, 2025



Levels of Service

The following section includes performance measures that help drive decision-making and spending on assets. They are not the only metrics used by the City to measure the quality being delivered by any asset category.

Table 25. Levels of Service Metrics

Service Attribute	Corporate Description	LOS Measure	Current Performance	Proposed Performance
Cost Effective	Providing a transit system in a cost-effective manner.	Cost to provide transit services per household	\$131.72	Maintain
Availability	Providing a transit system that serves the needs of the community.	Percentage (%) of population within 400 metres of a bus route.	90%	100%
		Percentage (%) of On Time Performance (OTP)	90%	95%
Quality	Providing a transit system that is in a state of good repair.	Percentage (%) of bus shelters that meet a target quality condition of fair or higher.	51%	80%
		Percentage (%) of fleet assets that meet a target quality condition of fair or higher.	67%	80%
Environmental Stewardship	Providing a transit system that is energy efficient and environmentally conscious.	Average greenhouse gas emissions emitted across previous 3 years.	1,212 tonnes of CO ₂	Trend Downward

Lifecycle Management Strategy

The condition or performance of most assets will deteriorate over time. This process is affected by various factors, including an asset’s characteristics, location, utilization, maintenance history and environment. The following lifecycle management strategies are currently being used/are recommended to ensure the Transit portfolio remains in a state of good repair throughout its intended lifespan and to maintain current levels of service.

Table 26. Lifecycle Management Strategies, Transit

Lifecycle Activity Type	Asset Management Practices	Risks Associated with Not Completing the Activities
Non-Infrastructure Solutions	<ul style="list-style-type: none"> • Condition assessment programs • Transportation Master Plan • Climate change adaption and mitigation • Transit initiatives that decrease vehicle traffic and reliance 	<ul style="list-style-type: none"> • Inadequate planning leading to inaccurate forecast estimates and short- and long-term plans • Regulatory requirement • Inability to understand potential impacts of climate change on infrastructure
Maintenance	<ul style="list-style-type: none"> • Routine maintenance • Scheduled preventative maintenance programs • Structures inspected biannually 	<ul style="list-style-type: none"> • Deficiencies • Increased lifecycle costs if maintenance is not done as scheduled or incorrectly • Premature asset failure, service level drops, and health and safety risks • Customer dissatisfaction
Renewal (Rehabilitation & Replacement)	<ul style="list-style-type: none"> • Rehabilitation activities are determined based on both external expertise and internal expertise 	<ul style="list-style-type: none"> • Rehabilitation/Renewal activities may not extend asset life as expected • Increased lifecycle costs if not done properly or as scheduled • Coordination with other asset classes might delay planning forecasts
Disposal	<ul style="list-style-type: none"> • Obsolete assets are decommissioned as needed • Structure disposals are rare/infrequent 	<ul style="list-style-type: none"> • Environmental impacts and cost overruns
Growth	<ul style="list-style-type: none"> • Transit Master Plan identifying long-term policy and programs for the City’s transit network • New development assumptions, industrial expansion, and local improvements 	<ul style="list-style-type: none"> • Activities delayed or cancelled resulting in inability to accommodate increased demands
Service Improvement	<ul style="list-style-type: none"> • Technologies that offer improved resistance to the elements and typical condition deterioration • Incorporate active transportation into the overall transit network 	<ul style="list-style-type: none"> • Increased levels of service expectations result in increased costs

Financial Strategy

The City utilizes lifecycle management strategies, as detailed in the previous section, to facilitate planning activities and forecast future expenditure requirements for various assets within the Transit service area. These strategies, along with the scenarios outlined below, establish a framework for identifying the financial resources necessary to manage and maintain these assets effectively.

The following scenarios illustrate the projected lifecycle requirements over a 10-year period, addressing both the maintenance of current service levels and the achievement of proposed service levels. These scenarios consider only the costs and needs related to renewal, rehabilitation and replacement lifecycle activities. These activities are essential to ensuring that infrastructure remains in a state of good repair, thereby enabling the City to continue providing services to residents.

Scenario 1: Cost to Maintain Current Levels of Service

Scenario one outlines the estimated annual cost of the renewal, rehabilitation and replacement lifecycle activities required to maintain current levels of service.

Figure 39. Scenario One Asset Performance – Transit 2025-2034

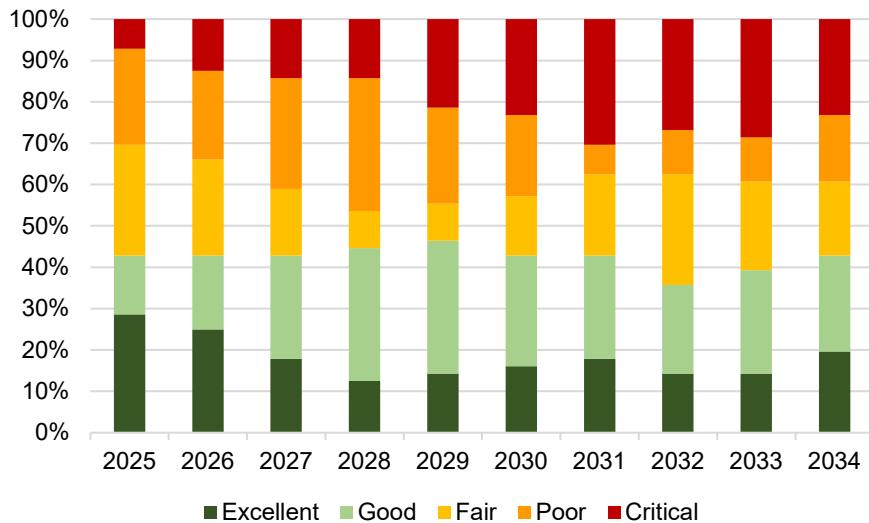
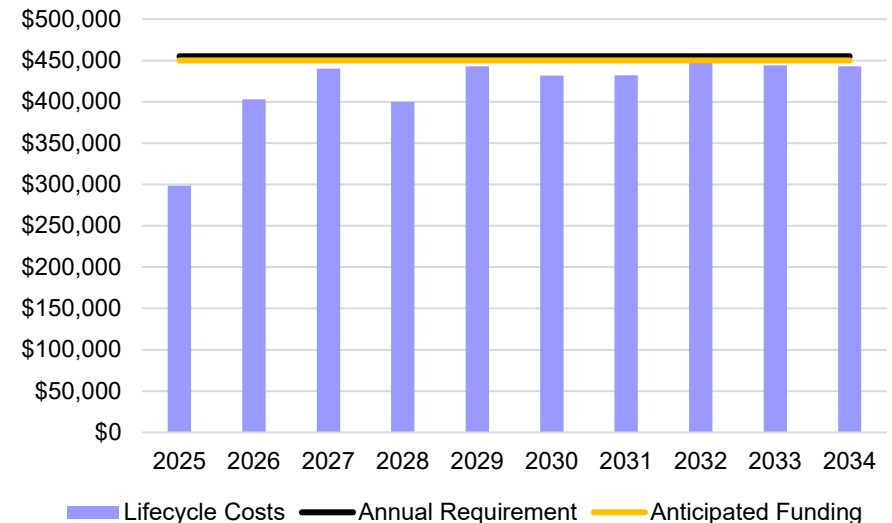


Figure 40. Scenario One Lifecycle Costs – Transit 2025-2034

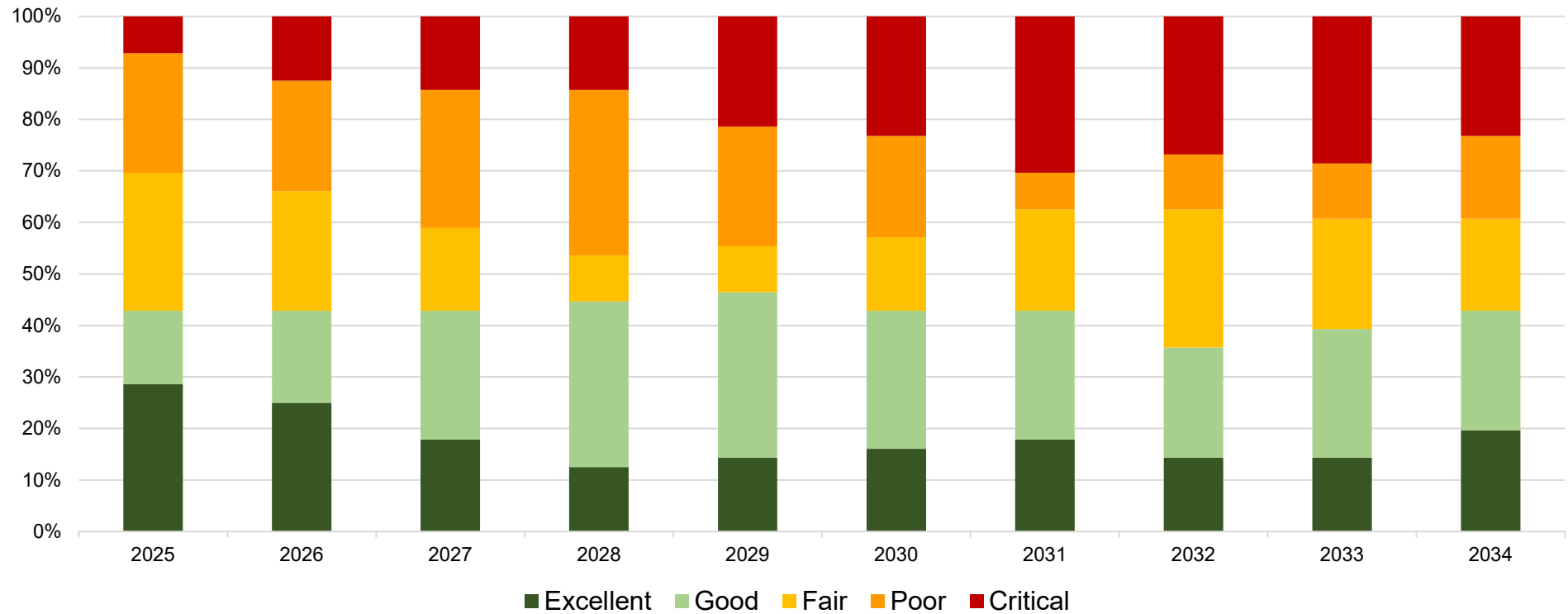


Based on this scenario, the estimated annual requirement was determined to be \$0.45M annually to maintain current asset performance in perpetuity. Compared to anticipated funding, this results in no current identified funding gap.

Scenario 2: Current Funding

Scenario two outlines the impact of current anticipated funding on asset performance.

Figure 41. Scenario Two Asset Performance – Transit 2025-2034



Based on current funding levels, the percentage of assets in the poor to critical range increases from 30% to 37% over the next 10 years. When the scenario is extended out to the 20-to-40-year forecast, the percentage of assets in poor to critical condition continues to rise. Although no current funding gap is identified to maintain asset performance, this does not mean that current funding is sustainable in the long term.

Scenario 3: Cost to Achieve Proposed Levels of Service

Scenario three outlines the estimated annual cost of the renewal, rehabilitation and replacement lifecycle activities required to achieve proposed service level targets as well as performing the lifecycle activities needed.

Figure 42. Scenario Three Asset Performance – Transit 2025-2034

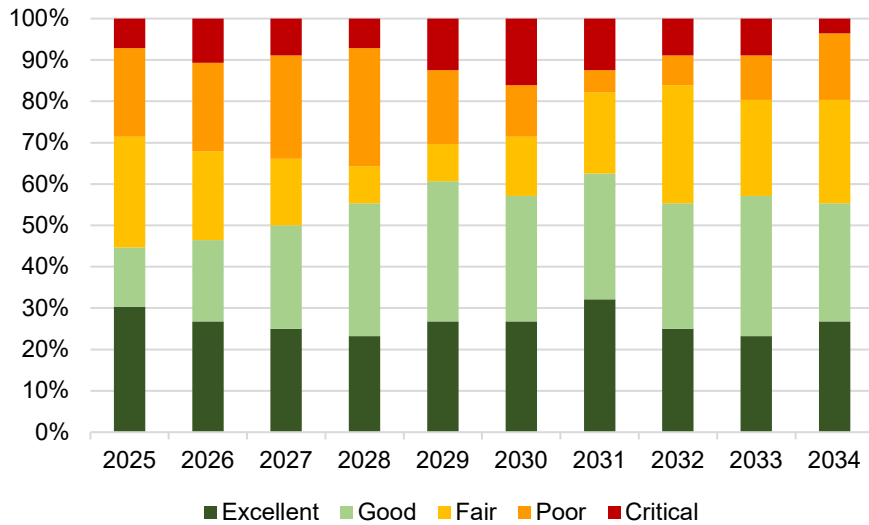
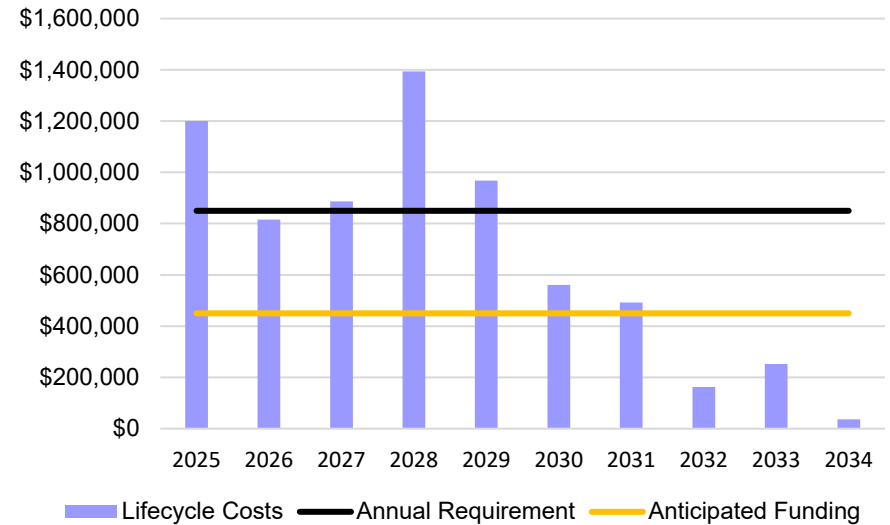


Figure 43. Scenario Three Lifecycle Costs – Transit 2025-2034



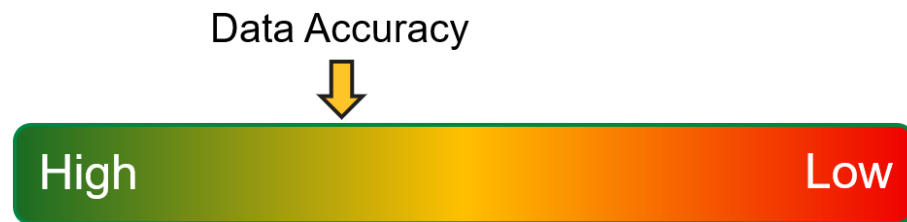
Based on this scenario, the estimated annual requirement was determined to be \$0.86M annually to ensure asset performance in perpetuity. Compared to anticipated funding, this results in a funding gap of \$0.41M.

Data Confidence

Accurate and reliable condition data allows staff to determine the remaining service life of assets and identify the most cost-effective approach to managing assets more confidently.

The City's overall Transit data accuracy is considered to be medium with the primary source of data being a mix of assessed and age-based condition ratings. Building condition assessments have been completed on most facilities including Transit related facilities. Data gap analysis continues to be a major project the City embarks on as it seeks to further understand its inventory and plan for the long term.

Figure 44. Data Accuracy – Transit



Condition Assessments and Data Collection

The City is currently progressing to improve data accuracy of its facilities having conducted building condition assessments on most City owned facilities, including Transit specific facilities.

The typical approach to optimizing the maintenance of Transit's rolling stock is through routine inspections, routine servicing, and an established routine preventative maintenance program. Most, if not all, makes and models of vehicles are supplied with maintenance manuals that define the appropriate schedules and routine for typical maintenance and servicing and also more detailed restoration or rehabilitation protocols.

It is recommended that the current preventative maintenance routine be continued for all fleet vehicles within Transit. It is also recommended that fleet services continue to be centralized so that appropriate lifecycle management strategies can occur, minimize risk and to prevent assets from being kept longer than their useful life.

It is recommended that the City continue current strategic condition assessment programs and that a portion of funding be dedicated to this.

Continuous Improvement

The City continues to advance the Asset Management Program and works towards ensuring line of sight when it comes to decision making and asset management practices. Increased quality of data and information and standardized operating procedures will improve data confidence levels and the quality of these decisions. The following recommendations will help ensure the City maintains its path and manage its growing \$24 million Transit portfolio in a sustainable manner.

1. Align the Asset Management Plan

- a. Align the AMP with the City's budgetary processes and strategic plan
- b. Identify paths of incorporating the AMP within the capital budget
- c. Ensure the Asset Management Steering Committee continues work on corporate buy-in and maintains line of sight across the City

2. Address the Infrastructure Gap

- a. Continue to search for funding from non-tax sources of financing to address infrastructure gaps
 - i. Grant funding where applicable
- b. Create infrastructure reserves that plan for the future and eliminate the risk of "peaks and valleys" in funding requirements
 - i. Transit Reserves
- c. Mitigate the risk of current LOS dropping
- d. Improve and build 5- and 10-year capital plans that tackle the infrastructure gap

3. Improve the Asset Management Program

- a. Ensure data inventories are accurate and condition data is recorded in a timely manner
 - i. Vehicle inspections
 - ii. Building condition assessments
- b. Standardize operating procedures where applicable
- c. Build lifecycle strategies that are representative of asset performance and achieve proposed LOS
- d. Explore opportunities for interoperability where available
 - i. Asset Management Systems
- e. Continue to pursue Risk Management strategies across the City



RECREATION & CULTURE

The City of Woodstock is committed to delivering accessible and sustainable recreation and cultural facilities and services that inspire community engagement, support active lifestyles, and celebrate diversity for all residents.

Recreation and Culture

State of the Infrastructure

The City’s Recreation and Culture asset portfolio consists of parks, trails, sports fields and facility assets such as Civic Centre, Reeves Community Complex, Woodstock Art Gallery, Woodstock Library and more. The following section contains information regarding the Recreation and Culture portfolios asset inventory, replacement costs, age, and overall condition ratings.

Asset Inventory and Replacement Cost

The table below illustrates key asset attributes for the City’s Recreation and Culture portfolio. The overall value of the City’s Recreation and Culture assets are valued at over \$316 million.

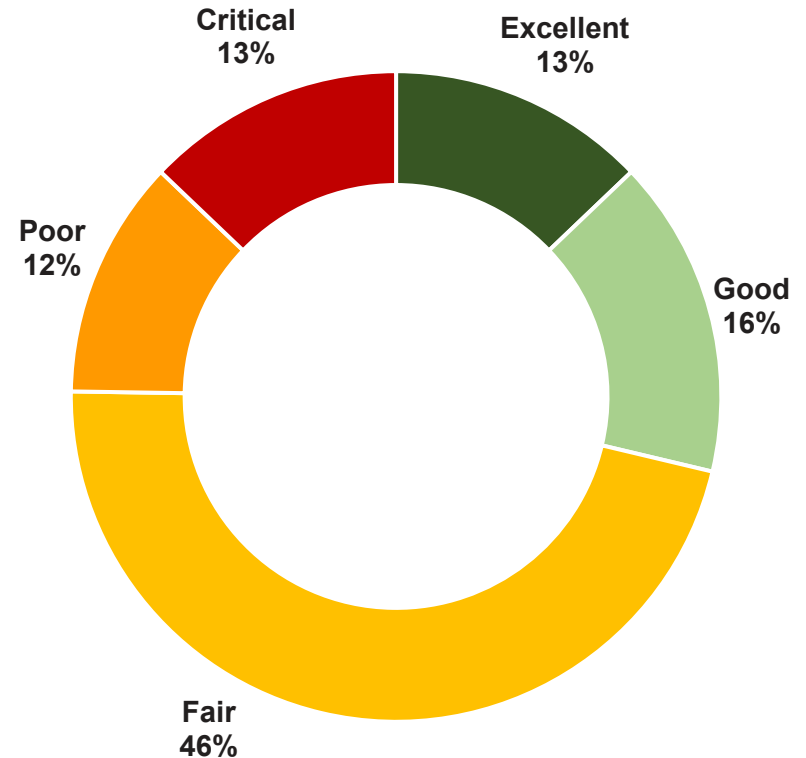
Table 27. Recreation and Culture Inventory

Asset Category	Asset Type	Quantity	Unit	Replacement Cost
Recreation	Parks	84	Each	\$6,622,825
	Trails	43	Km	\$828,343
	Sports Fields	71	Each	\$4,443,604
	Playgrounds	38	Each	\$5,225,585
	Facilities	46	Each	\$235,981,437
Culture	Facilities	3	Each	\$63,146,060
Overall Recreation and Culture Replacement Value				\$316,247,854

Current Asset Condition

The following graph illustrates the overall conditions of the Recreation and Culture service area. The average condition is a weighted value based on replacement cost.

Figure 45. Asset Condition – Recreation and Culture, 2025



Overall, 75% of the Recreation and Culture assets are in fair or better condition (based on replacement value) with 25% nearing or at the critical state of good repair.

Figure 46. Asset Condition Breakdown – Recreation and Culture, 2025

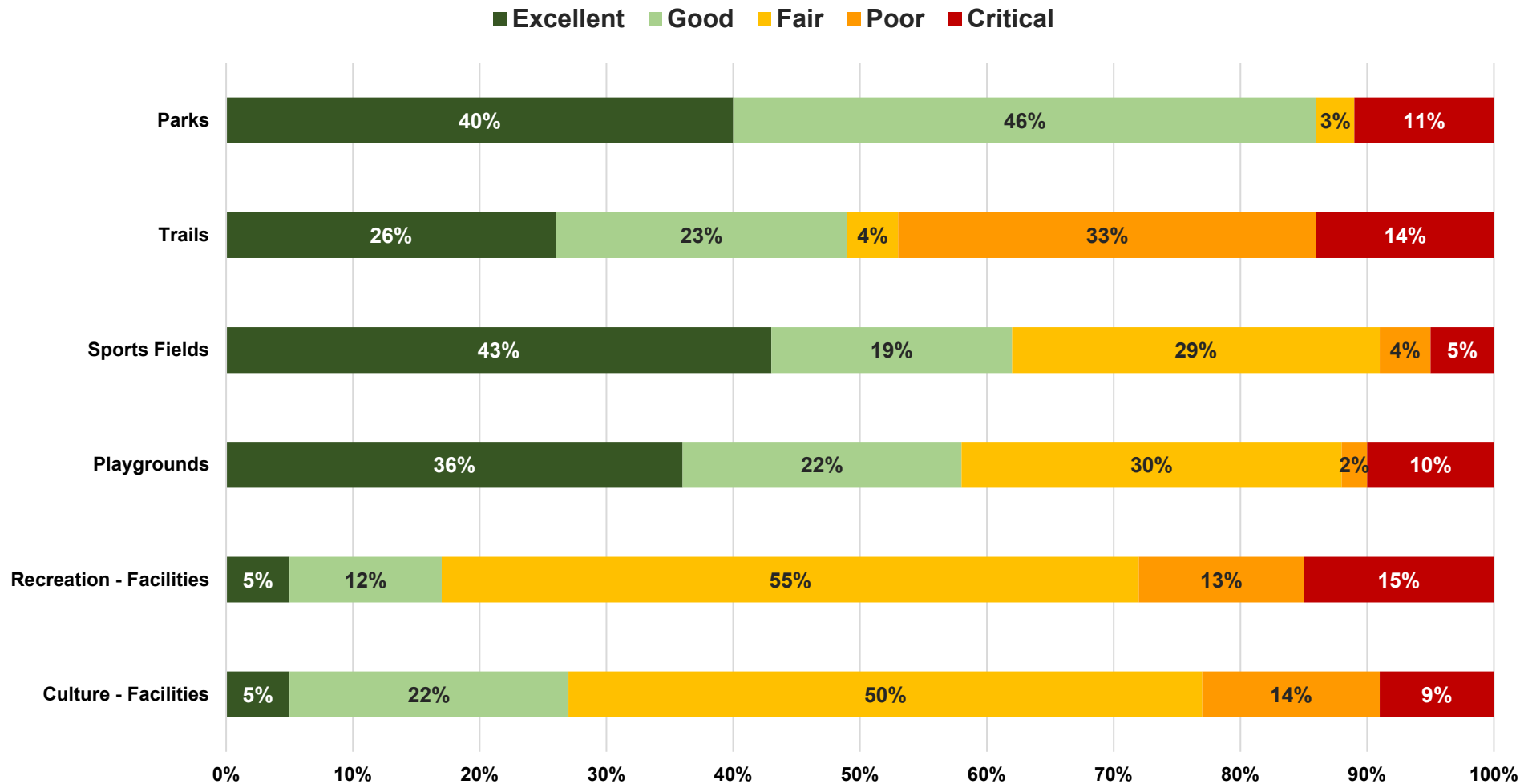
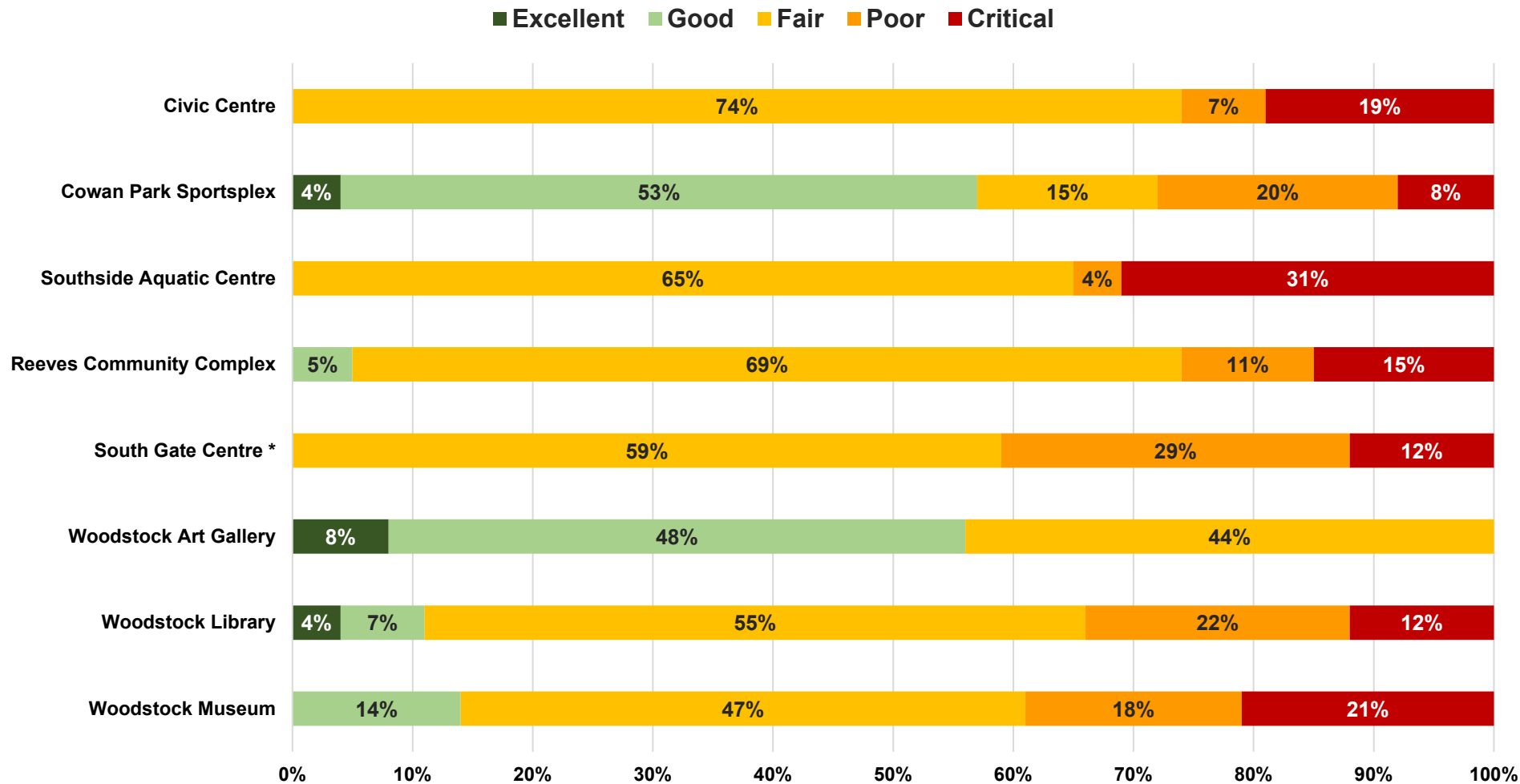


Figure 47. Facilities Condition Breakdown – Recreation and Culture, 2025



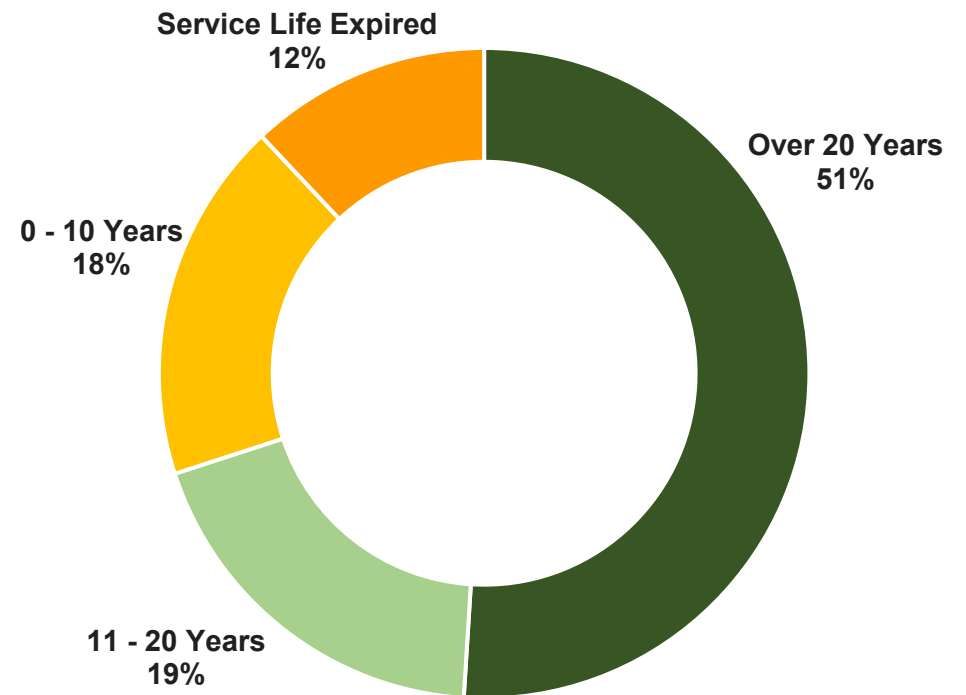
Estimated Useful Life and Average Life

The Estimated Useful Life for Recreation and Culture assets has been assigned according to a combination of established industry standards and staff knowledge. The Average Age of each asset is based on the number of years each asset has been in-service. Finally, the Average Service Life Remaining represents the difference between the Estimated Useful Life and the Average Age, except when an asset has been assigned an assessed condition rating. The assessed condition may increase or decrease the average service life remaining.

Table 28. Estimated Useful Life for Recreation and Culture Components, 2025

Asset Category	Asset Type	Useful Life (Years)
Recreation	Parks	5 - 40
	Trails	15 - 20
	Sports Fields	20 - 60
	Playgrounds	30 - 40
	Facilities	20 - 100
Culture	Facilities	20 - 100

Figure 48. Useful Life Remaining – Recreation and Culture, 2025



Levels of Service

The following section includes performance measures that help drive decision-making and spending on assets. They are not the only metrics used by the City to measure the quality being delivered by any asset category.

Table 29. Levels of Service Metrics

Service Attribute	Corporate Description	LOS Measure	Current Performance	Proposed Performance
Accessibility	Providing adequate accessibility to services.	Percentage (%) of facilities that are accessibility (FADS and AODA) compliant.	100%	100%
		Percentage (%) of properties within 800 metres of a park	89%	90%
		The supply of recreational parkland proportionate to the population.	4 ha per 1,000	4 ha per 1,000
Customer Service	Customer Satisfaction (via survey).	Percentage (%) of survey respondents satisfied with facilities.	88%	Maintain
Cost Effective	Providing services in a cost-effective manner.	Cost to provide facilities services per household.	\$176.81	Maintain
Quality	Providing facilities in a state of good repair.	Percentage (%) of Park assets in Fair or better condition.	89%	Maintain
		Percentage (%) of Facilities in Fair or better condition	73%	Maintain
		Percentage (%) of Playgrounds that meet regulated requirements	100%	100%
Environmental Stewardship	Providing facilities that are energy efficient and environmentally conscious.	Annual electric energy consumption kilowatt-hour per square foot.	11.7 kWh/ft ²	Trend Downward
		Annual natural gas consumption cubic meters per square foot.	1.49 m ³ /ft ²	Trend Downward

Lifecycle Management Strategy

The condition or performance of most assets will deteriorate over time. This process is affected by various factors, including an asset’s characteristics, location, utilization, maintenance history and environment. The following lifecycle management strategies are currently being used/are recommended to ensure the recreation and culture portfolio remains in a state of good repair throughout its intended lifespan and to maintain current levels of service.

Table 30. Lifecycle Management Strategies, Recreation and Culture

Lifecycle Activity Type	Asset Management Practices	Risks Associated with Not Completing the Activities
Non-Infrastructure Solutions	<ul style="list-style-type: none"> • Condition assessment programs • Climate change adaption and mitigation • Accessibility Plan • Recreation Facility Needs Study • Downtown Development Plan 	<ul style="list-style-type: none"> • Inadequate planning leading to inaccurate forecast estimates and short- and long-term plans • Regulatory requirement • Inability to understand potential impacts of climate change on infrastructure
Maintenance	<ul style="list-style-type: none"> • Routine maintenance • Snow and ice removal maintenance • Scheduled preventative maintenance programs • Structures inspected 	<ul style="list-style-type: none"> • Deficiencies are not identified through inspections • Increased lifecycle costs if maintenance is not done as scheduled or incorrectly • Premature asset failure, service level drops, and health and safety risks • Customer dissatisfaction
Renewal (Rehabilitation & Replacement)	<ul style="list-style-type: none"> • Rehabilitation activities should be based on both external expertise and internal expertise (knowledge of structural requirements, organizational priorities, available budget, coordination with other City assets) • Comprehensive condition assessments 	<ul style="list-style-type: none"> • Rehabilitation/Renewal activities may not extend asset life as expected • Increased lifecycle costs if not done properly or as scheduled • Coordination with other asset classes might delay planning forecasts
Disposal	<ul style="list-style-type: none"> • Obsolete assets are decommissioned as needed • Structure disposals are rare/infrequent 	<ul style="list-style-type: none"> • Environmental impacts and cost overruns
Growth	<ul style="list-style-type: none"> • Space requirements will continue to change as the City grows and staffing requirements to maintain levels of service increase • New developments will require the City to develop strategies to ensure all residents have access to City provided services 	<ul style="list-style-type: none"> • Activities delayed or cancelled resulting in inability to accommodate increased demands
Service Improvement	<ul style="list-style-type: none"> • Technologies that offer improved resistance to the elements and typical condition deterioration 	<ul style="list-style-type: none"> • Increased levels of service expectations result in increased costs

Lifecycle Activity Type	Asset Management Practices	Risks Associated with Not Completing the Activities
	<ul style="list-style-type: none"> Public input and users of facilities and services would help determine service improvement needs 	

Financial Strategy

The City utilizes lifecycle management strategies, as detailed in the previous section, to facilitate planning activities and forecast future expenditure requirements for various assets within the Recreation and Culture service area. These strategies, along with the scenarios outlined below, establish a framework for identifying the financial resources necessary to manage and maintain these assets effectively.

The following scenarios illustrate the projected lifecycle requirements over a 10-year period, addressing both the maintenance of current service levels and the achievement of proposed service levels. These scenarios consider only the costs and needs related to renewal, rehabilitation and replacement lifecycle activities. These activities are essential to ensuring that infrastructure remains in a state of good repair, thereby enabling the City to continue providing services to residents.

Scenario 1: Cost to Maintain Current Levels of Service

Scenario one outlines the estimated annual cost of the renewal, rehabilitation and replacement lifecycle activities required to maintain current levels of service.

Figure 49. Scenario One Asset Performance – Recreation and Culture 2025-2034

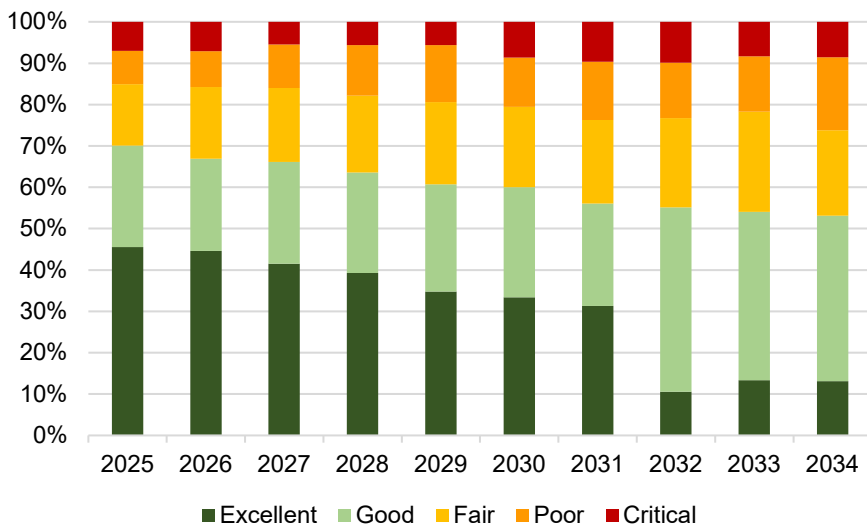
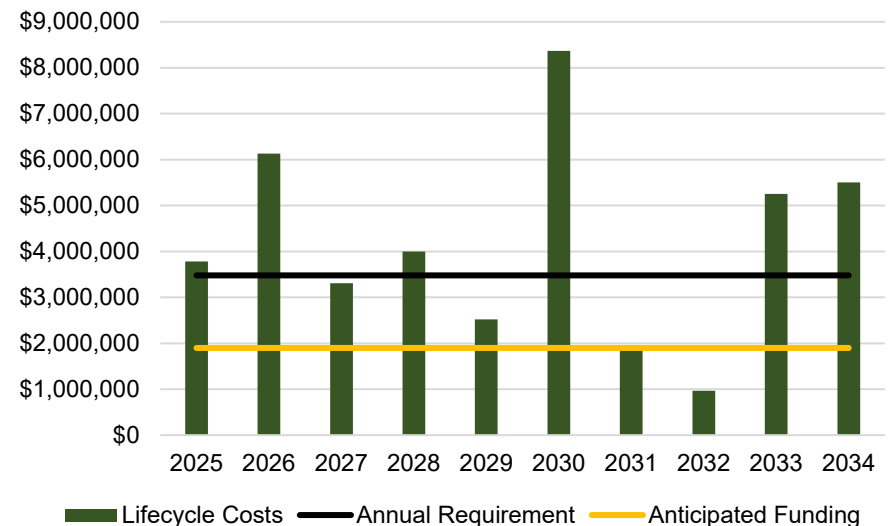


Figure 50. Scenario One Lifecycle Costs – Recreation and Culture 2025-2034

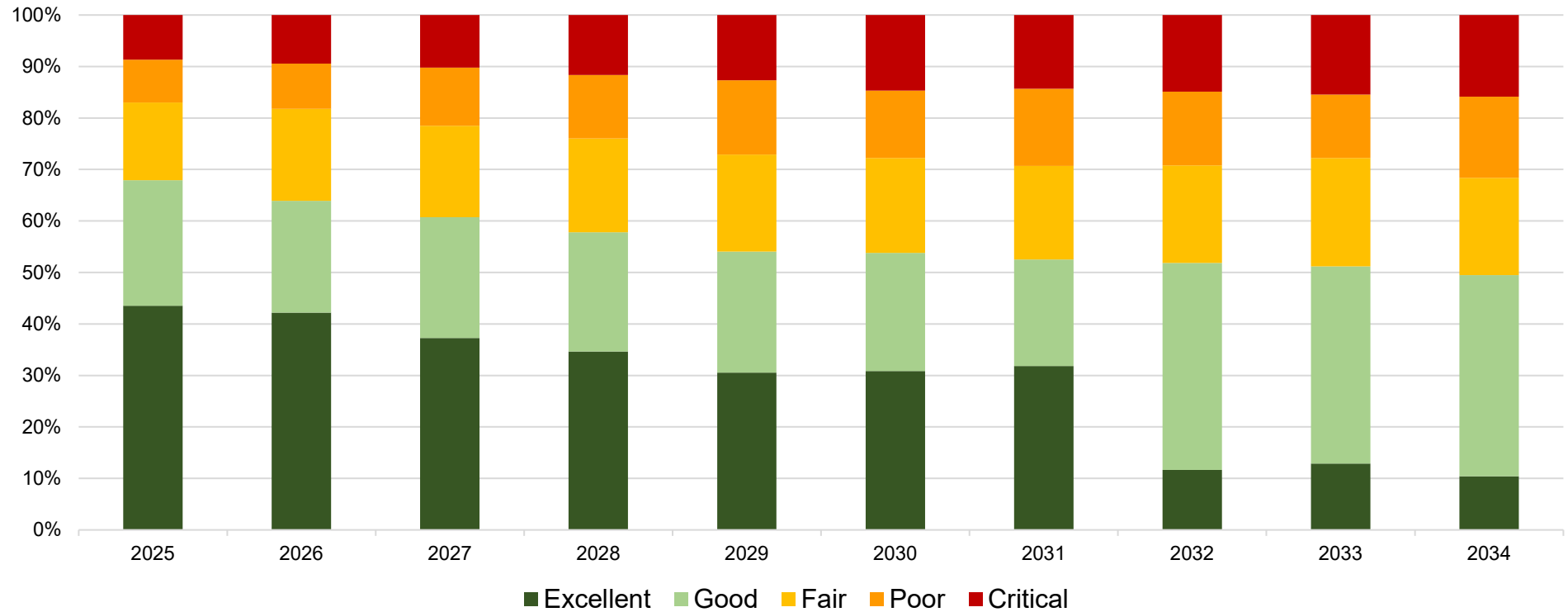


Based on this scenario, the estimated annual requirement was determined to be \$3.48M annually to ensure asset performance in perpetuity. Compared to anticipated funding, this results in a funding gap of \$1.58M.

Scenario 2: Current Funding

Scenario two outlines the impact of current anticipated funding on asset performance.

Figure 51. Scenario Two Asset Performance – Recreation and Culture 2025-2034



Based on current funding levels, the percentage of assets in the poor to critical range increases from 17% to 32% over the next 10 years. When the scenario is extended out to the 20-to-40-year forecast, the percentage of assets in poor to critical condition continues to rise.

Scenario 3: Cost to Achieve Proposed Levels of Service

Scenario three outlines the estimated annual cost of the renewal, rehabilitation and replacement lifecycle activities required to achieve proposed service level targets as well as performing the lifecycle activities needed.

Figure 52. Scenario Three Asset Performance – Recreation and Culture 2025-2034

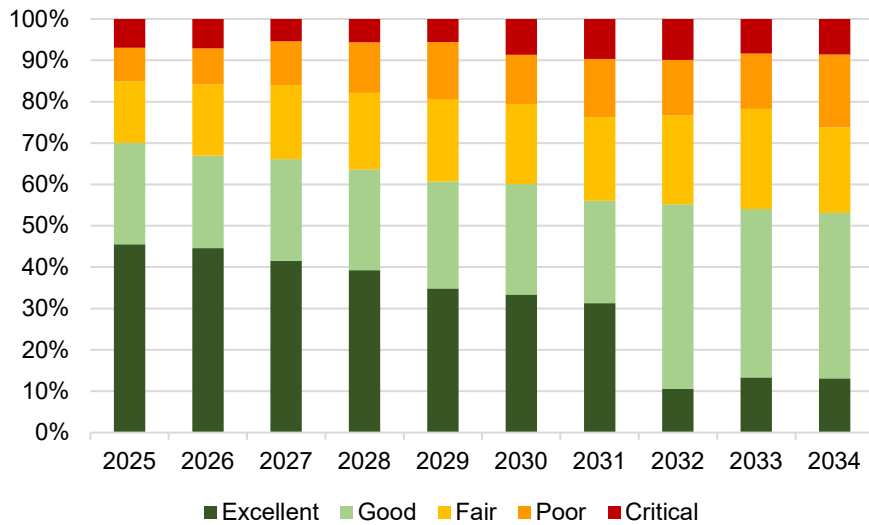
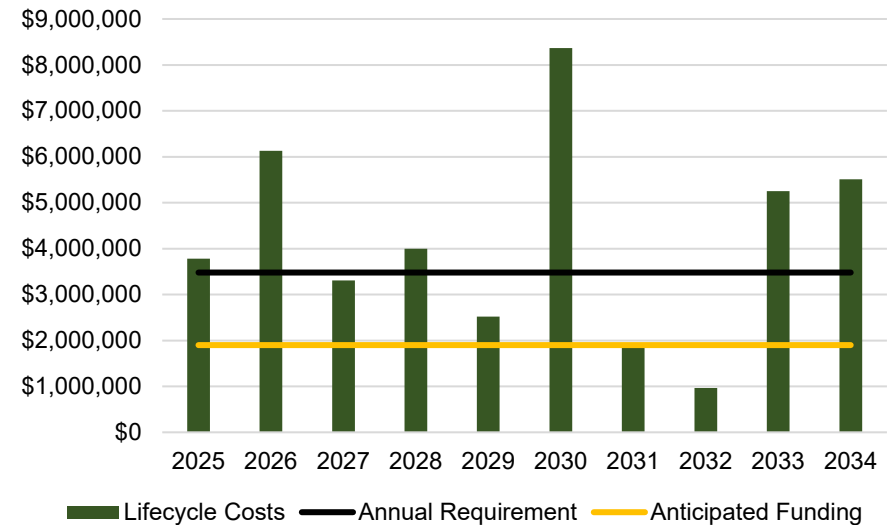


Figure 53. Scenario Three Lifecycle Costs – Recreation and Culture 2025-2034



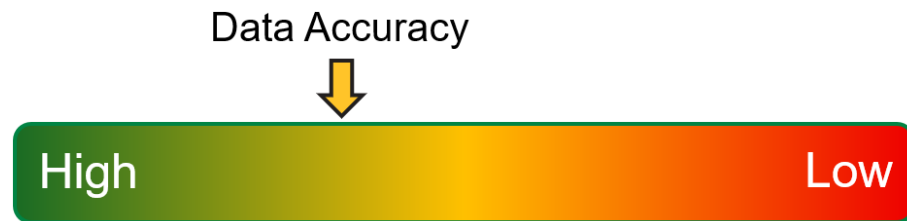
Based on this scenario, the estimated annual requirement was determined to be \$3.48M annually to ensure asset performance in perpetuity. Compared to anticipated funding, this results in a funding gap of \$1.58M.

Data Confidence

Accurate and reliable condition data allows staff to determine the remaining service life of assets and identify the most cost-effective approach to managing assets more confidently.

The City’s overall Recreation and Culture data accuracy has improved year over year and is now considered to be medium to high with building condition assessments having been completed on most facilities within this service area. The primary source of data being assessed condition ratings. Data gap analysis continues to be a major project the City embarks on as it seeks to further understand its inventory and plan for the long term.

Figure 54. Data Accuracy – Recreation and Culture



Condition Assessments and Data Collection

The following five asset classifications are typically inspected within a facility:

- Site components: property around the facility and includes the outdoor components such as utilities, signs, stairways, walkways, parking lots, fencing, courtyards and landscaping
- Structural components: physical components such as the foundations, walls, doors, windows, roofs

- Electrical components: all components that use or conduct electricity such as wiring, lighting, electric heaters, and fire alarm systems
- Mechanical components: components that convey and utilize all non-electrical utilities within a facility such as gas pipes, furnaces, boilers, plumbing, ventilation, and fire extinguishing systems

Once collected, this type of information can be uploaded into the City’s asset management system for short- and long-term repair, rehabilitation, and replacement reports to be generated to assist with programming the short- and long-term maintenance and capital budgets.

The most popular and practical type of buildings and facility assessment involves qualified groups of trained industry professionals (engineers or architects) performing an analysis of the condition of a group of facilities, and their components, which may vary in terms of age, design, construction methods, and materials. This analysis can be done by walk-through inspection, mathematical modeling, or a combination of both. The most accurate way of determining the condition requires a walk-through to collect baseline data.

In addition to facility inspections, equipment such as playground equipment are inspected monthly and biannually by a third-party consultant to ensure the equipment meets safety standards. Small equipment such as those relating to sports fields are inspected less frequently.

The City is currently progressing to improve data accuracy of its facilities having conducted building condition assessments on most City owned facilities.

It is recommended that the City continue to invest and conduct building condition assessments on a cyclical basis.

Continuous Improvement

The City continues to advance the Asset Management Program and works towards ensuring line of sight when it comes to decision making and asset management practices. Increased quality of data and information and standardized operating procedures will improve data confidence levels and the quality of these decisions. The following recommendations will help ensure the City maintains its path and manage its growing \$316 million Recreation and Culture portfolio in a sustainable manner.

1. Align the Asset Management Plan

- a. Align the AMP with the City's budgetary processes and strategic plan
- b. Identify paths of incorporating the AMP within the capital budget
- c. Ensure the Asset Management Steering Committee continues work on corporate buy-in and maintains line of sight across the City

2. Address the Infrastructure Gap

- a. Continue to search for funding from non-tax sources of financing to address infrastructure gaps
 - i. Grant funding where applicable
- b. Create infrastructure reserves that plan for the future and eliminate the risk of "peaks and valleys" in funding requirements
 - i. Building Repair Reserves
- c. Mitigate the risk of current LOS dropping
- d. Improve and build 5- and 10-year capital plans that tackle the infrastructure gap

3. Improve the Asset Management Program

- a. Ensure data inventories are accurate and condition data is recorded in a timely manner
 - i. Recreation Facility Needs Study
 - ii. Building condition assessments
 - iii. Lifecycle management events
- b. Standardize operating procedures where applicable
- c. Build lifecycle strategies that are representative of asset performance and achieve proposed LOS
- d. Explore opportunities for interoperability where available
 - i. Asset Management Systems
- e. Continue to pursue Risk Management strategies across the City

A scenic view of a park with a pond, trees, and a bench. The image shows a large, leafy tree on the left, a weeping willow tree on the right, and a pond in the background with a bench. The sky is a mix of blue and yellow, suggesting a sunset or sunrise. A green banner is overlaid on the left side of the image.

NATURAL ASSETS

The City of Woodstock is committed to protecting and enhancing its natural assets through sustainable stewardship that supports environmental health, community resilience, and quality of life for future generations.

Natural Assets

State of the Infrastructure

The City’s Natural Assets asset portfolio is a relatively new service area and work continues to further develop the City’s inventory. The following section contains high level basic information regarding the Natural Assets portfolio asset inventory, replacement costs, age, and estimated condition ratings.

As work continues in identifying Natural Assets and related asset management practices for this service area, this section will continue to be expanded. As such, lifecycle management strategies and proposed levels of service are not included in this iteration of the AMP.

Staff have completed a Natural Assets Roadmap offered by the Natural Assets Initiative (NAI) with the aim to understand deficiencies in the inventory, any factors impeding the City’s ability to gather information regarding its natural assets and to provide a timeline for completion.

Asset Inventory and Replacement Cost

The table below illustrates key asset attributes for the City’s Natural Assets portfolio. The estimated value of the City’s Natural Assets are valued at over \$7 million.

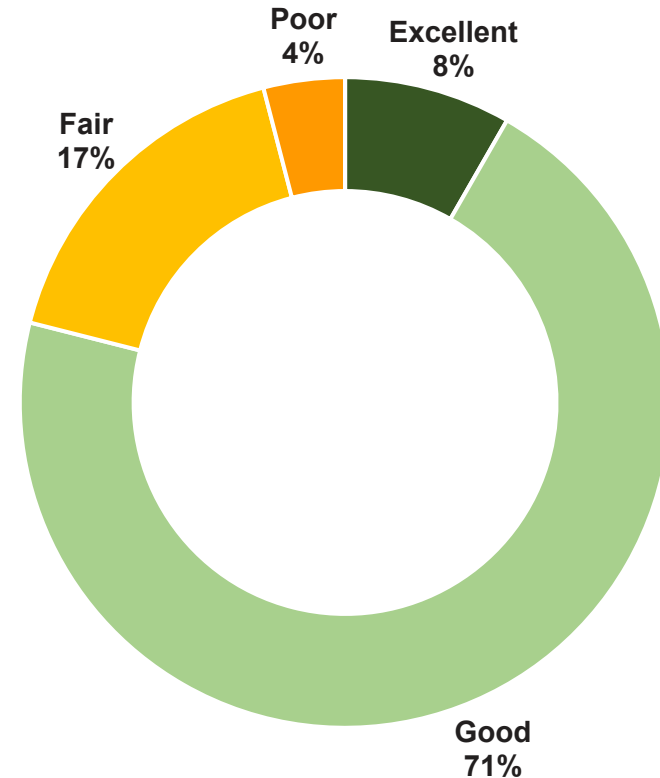
Table 31. Natural Assets Inventory

Asset Category	Asset Type	Quantity	Unit	Replacement Cost
Forestry	City Tree	17,517	Each	\$7,882,650
Overall Natural Assets Replacement Value				\$7,882,650

Current Asset Condition

The following graph illustrates the estimated conditions of the Natural Assets service area. The average condition is a weighted value based on assessed in field ratings.

Figure 55. Asset Condition – Natural Assets, 2025



Overall, 96% of the Natural Assets are in fair or better condition (based on replacement value) with 4% nearing or at the critical state of good repair.

Estimated Useful Life and Average Life

The Estimated Useful Life for Natural assets has been assigned according to a combination of established industry standards and staff knowledge. The Average Age of each asset is based on the number of years each asset has been in-service. Finally, the Average Service Life Remaining represents the difference between the Estimated Useful Life and the Average Age, except when an asset has been assigned an assessed condition rating. The assessed condition may increase or decrease the average service life remaining.

Table 32. Estimated Useful Life for Natural Assets Components, 2025

Asset Category	Asset Type	Useful Life (Years)
Forestry	Street Tree	75 - 100

Levels of Service

The following section includes performance measures that help drive decision-making and spending on assets. They are not the only metrics used by the City to measure the quality being delivered by any asset category.

Table 33. Levels of Service Metrics

Service Attribute	Corporate Description	LOS Measure	Current Performance	Proposed Performance
Quality	Providing Natural Assets at the appropriate quality.	Average Number (#) of City trees planted per year	631	TBD
		Percentage (%) of Natural Assets in fair or better condition	96%	TBD

Data Confidence

Accurate and reliable condition data allows staff to determine the remaining service life of assets and identify the most cost-effective approach to managing assets more confidently.

The City’s overall Natural Assets data accuracy is considered to be low with the primary source of data being out-dated and unconfirmed inventory and condition ratings. Data gap analysis continues to be a major project the City embarks on as it seeks to further understand its inventory and plan for the long term.

Figure 56. Data Accuracy – Natural Assets



Condition Assessments and Data Collection

The City is currently progressing to improve data accuracy of its natural assets with a tree canopy study being planned in 2025. While this may provide a starting point, there is concern regarding organizational capacity to ensure the outcomes of the planned study are achievable.

It is recommended that the City invest and conduct a full inventory and analysis on all natural assets owned by the City in order to understand any asset management implications that may be necessary.

Continuous Improvement

The City continues to advance the Asset Management Program and works towards ensuring line of sight when it comes to decision making and asset management practices. Increased quality of data and information and standardized operating procedures will improve data confidence levels and the quality of these decisions. The following recommendations will help ensure the City maintains its path and manage its growing \$7 million Natural Assets portfolio in a sustainable manner. It is also noted that the City is continuing to build out its Natural Assets portfolio and this section is still in progress.

1. Align the Asset Management Plan

- a. Align the AMP with the City's budgetary processes and strategic plan
- b. Identify paths of incorporating the AMP within the capital budget
- c. Ensure the Asset Management Steering Committee continues work on corporate buy-in and maintains line of sight across the City

2. Address the Infrastructure Gap

- a. Continue to search for funding from non-tax sources of financing to address infrastructure gaps
 - i. Grant funding where applicable
- b. Create infrastructure reserves that plan for the future and eliminate the risk of "peaks and valleys" in funding requirements
- c. Mitigate the risk of current LOS dropping
- d. Improve and build 5- and 10-year capital plans that tackle the infrastructure gap

3. Improve the Asset Management Program

- a. Ensure data inventories are accurate and condition data is recorded in a timely manner
 - i. Tree Canopy Study
 - ii. Natural Assets Study/Inventory
- b. Standardize operating procedures where applicable
- c. Build lifecycle strategies that are representative of asset performance and achieve proposed LOS
- d. Explore opportunities for interoperability where available
 - i. Asset Management Systems
- e. Continue to pursue Risk Management strategies across the City



CORPORATE FLEET

The City of Woodstock is committed to maintaining a safe, efficient, and sustainable corporate fleet that supports reliable service delivery, reduces environmental impact, and aligns with long-term operational goals.

Corporate Fleet

State of the Infrastructure

The City’s Corporate Fleet asset portfolio consists of fleet assets such as vehicles and equipment. The following section contains information regarding the Corporate Fleet portfolios asset inventory, replacement costs, age, and overall condition ratings.

Asset Inventory and Replacement Cost

The table below illustrates key asset attributes for the City’s Corporate Fleet portfolio. The overall value of the City’s Corporate Fleet assets are valued at over \$30 million.

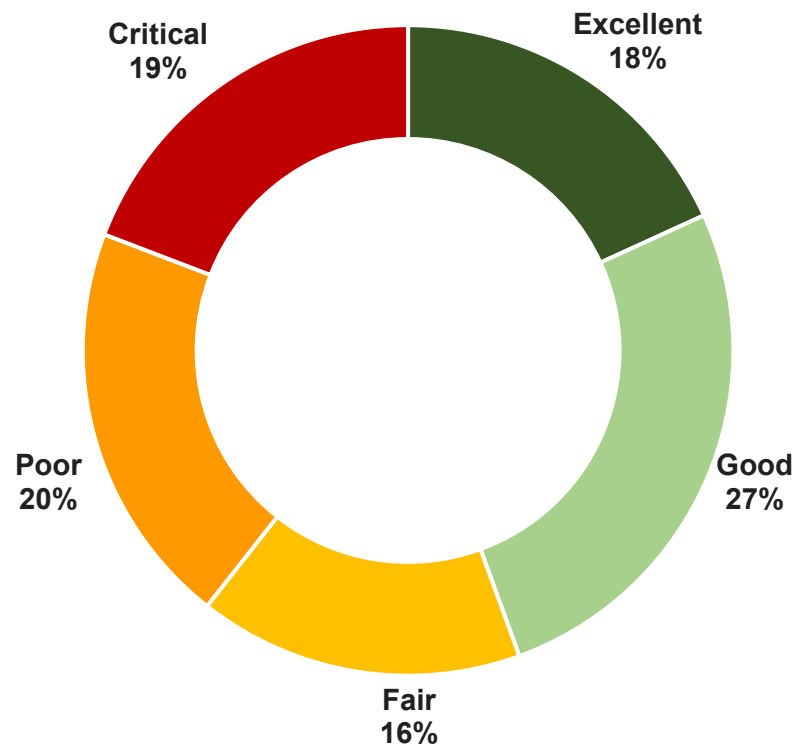
Table 34. Corporate Fleet Inventory

Asset Category	Asset Type	Quantity	Unit	Replacement Cost
Vehicles	Light (Cars, vans, pickups)	113	Each	\$5,065,977
	Medium (1.5 Ton Pickups)	15	Each	\$1,002,686
	Heavy (Plow trucks, fire engines)	30	Each	\$14,908,400
Equipment	Light (Tanks, trailers, attachments)	163	Each	\$2,324,576
	Medium (Tractors, mowers, attachments)	76	Each	\$3,229,677
	Heavy (Loaders, backhoes)	29	Each	\$4,354,452
Overall Corporate Fleet Replacement Value				\$30,885,768

Current Asset Condition

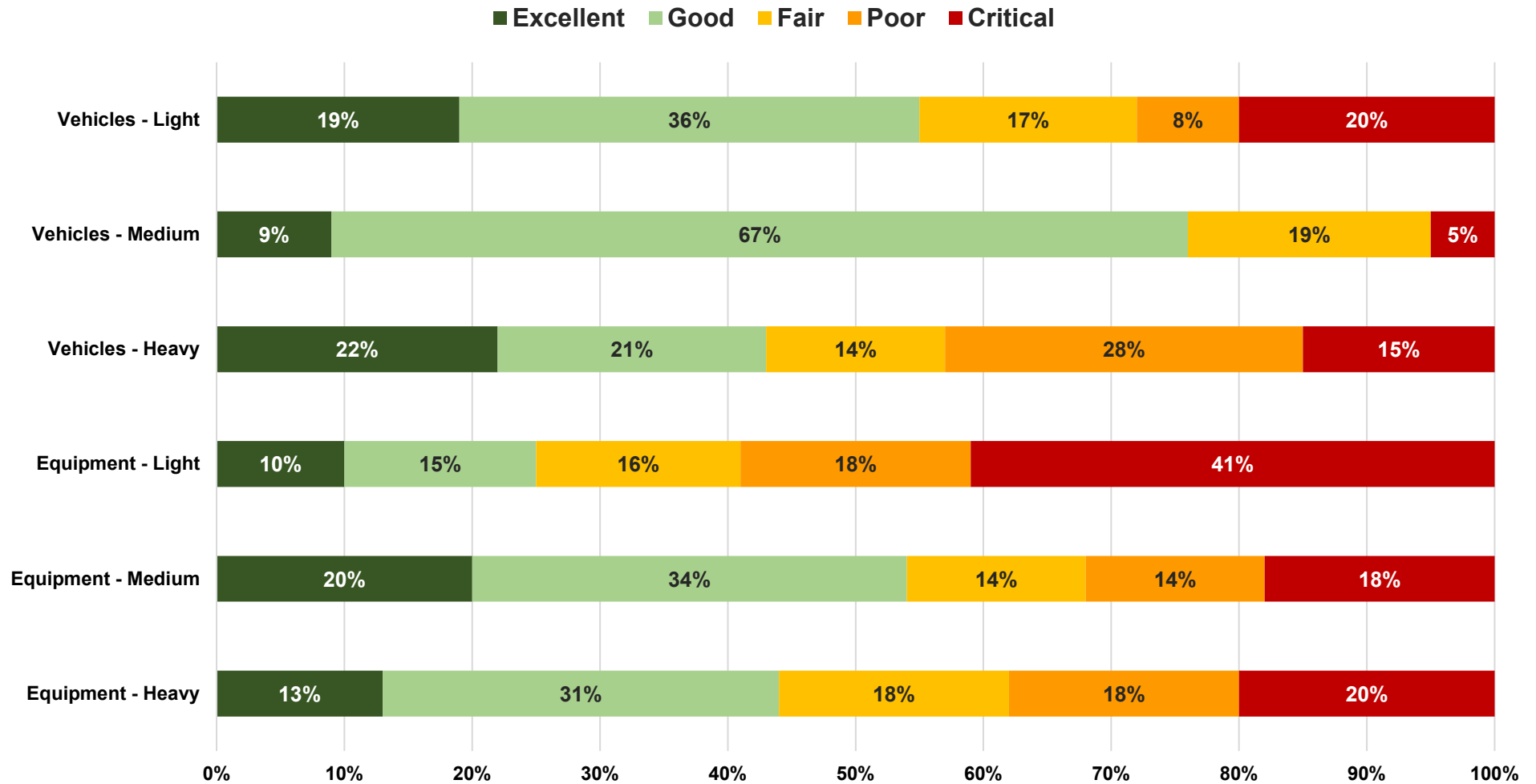
The following graph illustrates the overall conditions of the Corporate Fleet service area. The average condition is a weighted value based on replacement cost.

Figure 57. Asset Condition – Corporate Fleet, 2025



Overall, 61% of the Corporate Fleet assets are in fair or better condition (based on replacement value) with 39% nearing or at the critical state of good repair.

Figure 58. Asset Condition Breakdown – Corporate Fleet, 2025



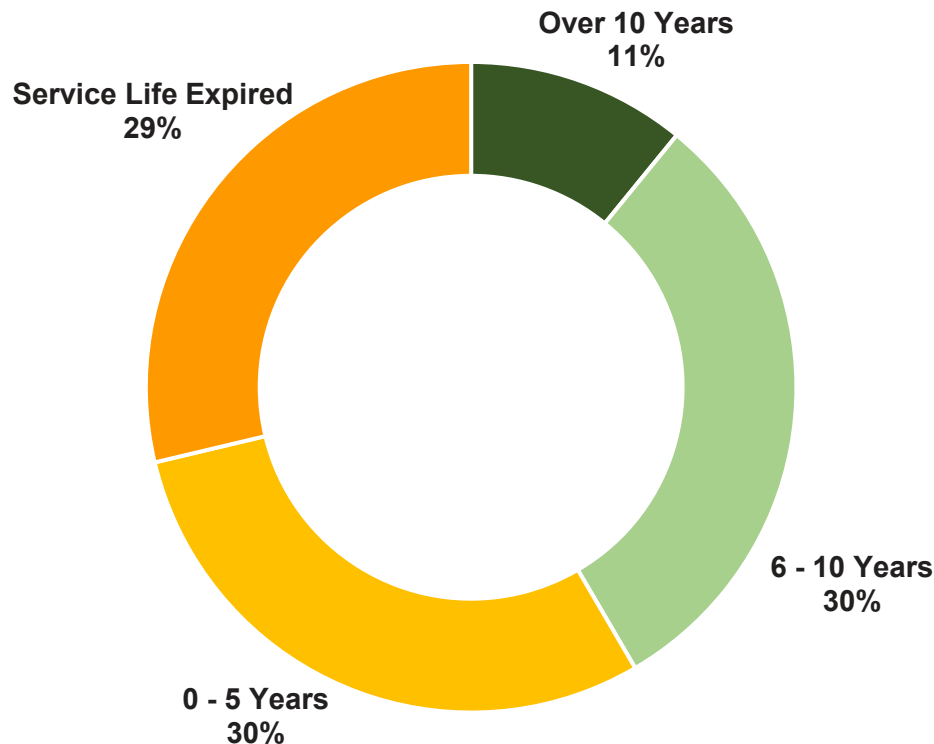
Estimated Useful Life and Average Life

The Estimated Useful Life for Corporate Fleet assets has been assigned according to a combination of established industry standards and staff knowledge. The Average Age of each asset is based on the number of years each asset has been in-service. Finally, the Average Service Life Remaining represents the difference between the Estimated Useful Life and the Average Age, except when an asset has been assigned an assessed condition rating. The assessed condition may increase or decrease the average service life remaining.

Table 35. Estimated Useful Life for Corporate Fleet Components, 2025

Asset Category	Asset Type	Useful Life (Years)
Vehicles	Light Vehicles	10
	Medium Vehicles	10
	Heavy Vehicles	8 - 20
Equipment	Light Equipment	5 - 20
	Medium Equipment	8 - 20
	Heavy Equipment	8 - 25

Figure 59. Useful Life Remaining – Corporate Fleet, 2025



Levels of Service

The following section includes performance measures that help drive decision-making and spending on assets. They are not the only metrics used by the City to measure the quality being delivered by any asset category.

Table 36. Levels of Service Metrics

Service Attribute	Corporate Description	LOS Measure	Current Performance	Proposed Performance
Cost Effective	Providing fleet services in a cost-effective manner.	Cost to provide fleet services (\$/serviced households)	\$164.09	Maintain
Quality	Providing fleet services in a state of good repair.	Percentage (%) of fleet assets in Fair or better condition	61%	Maintain
Reliability	Providing reliable fleet services.	Percentage (%) of fleet assets within optimum service life	95%	95%
		Percentage (%) of regulated MTO maintenance inspections completed	100%	100%
Environmental Stewardship	Providing fleet assets that are energy efficient and environmentally conscious.	Average greenhouse gas emissions emitted across previous 3 years	1,124 tonnes of CO ₂	Trend Downward

Lifecycle Management Strategy

The condition or performance of most assets will deteriorate over time. This process is affected by various factors, including an asset’s characteristics, location, utilization, maintenance history and environment. The following lifecycle management strategies are currently being used/are recommended to ensure the Corporate Fleet portfolio remains in a state of good repair throughout its intended lifespan and to maintain current levels of service.

Table 37. Lifecycle Management Strategies, Corporate Fleet

Lifecycle Activity Type	Asset Management Practices	Risks Associated with Not Completing the Activities
Non-Infrastructure Solutions	<ul style="list-style-type: none"> • Condition assessment programs • Climate change adaption and mitigation 	<ul style="list-style-type: none"> • Inadequate planning leading to inaccurate forecast estimates and short- and long-term plans • Regulatory requirement • Inability to understand potential impacts of climate change on infrastructure
Maintenance	<ul style="list-style-type: none"> • Routine preventative maintenance such as oil changes, rust protection, etc. • Meet Minimum Maintenance Standards 	<ul style="list-style-type: none"> • Deficiencies are not identified through inspections • Increased lifecycle costs if maintenance is not done as scheduled or incorrectly • Premature asset failure, service level drops, and health and safety risks • Customer dissatisfaction
Renewal (Rehabilitation & Replacement)	<ul style="list-style-type: none"> • Rehabilitation activities are determined based on internal expertise (organizational priorities, available budget, etc). • Asset replacement 	<ul style="list-style-type: none"> • Rehabilitation/Renewal activities may not extend asset life as expected • Increased lifecycle costs if not done properly or as scheduled • Coordination with other asset classes might delay planning forecasts
Disposal	<ul style="list-style-type: none"> • Obsolete assets are decommissioned as needed • End of life salvage value analysis • Structure disposals are rare/infrequent 	<ul style="list-style-type: none"> • Environmental impacts and cost overruns
Growth	<ul style="list-style-type: none"> • Increase size of the Fleet as the number of City staff and responsibilities increase 	<ul style="list-style-type: none"> • Activities delayed or cancelled resulting in inability to accommodate increased demands
Service Improvement	<ul style="list-style-type: none"> • Technologies that offer improved resistance to the elements and typical condition deterioration • Extended warranties and service agreements 	<ul style="list-style-type: none"> • Increased levels of service expectations result in increased costs

Financial Strategy

The City utilizes lifecycle management strategies, as detailed in the previous section, to facilitate planning activities and forecast future expenditure requirements for various assets within the Corporate Fleet service area. These strategies, along with the scenarios outlined below, establish a framework for identifying the financial resources necessary to manage and maintain these assets effectively.

The following scenarios illustrate the projected lifecycle requirements over a 10-year period, addressing both the maintenance of current service levels and the achievement of proposed service levels. These scenarios consider only the costs and needs related to renewal, rehabilitation and replacement lifecycle activities. These activities are essential to ensuring that infrastructure remains in a state of good repair, thereby enabling the City to continue providing services to residents.

Scenario 1: Cost to Maintain Current Levels of Service

Scenario one outlines the estimated annual cost of the renewal, rehabilitation and replacement lifecycle activities required to maintain current levels of service.

Figure 60. Scenario One Asset Performance – Corporate Fleet 2025-2034

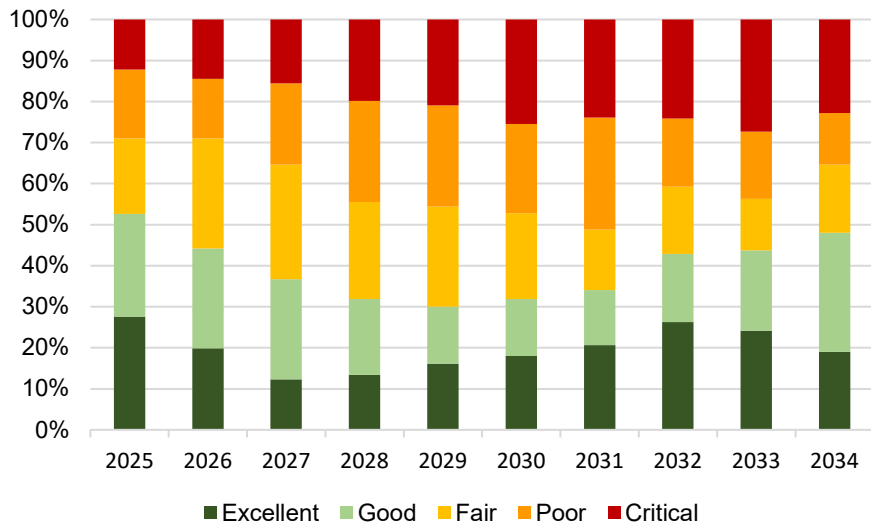
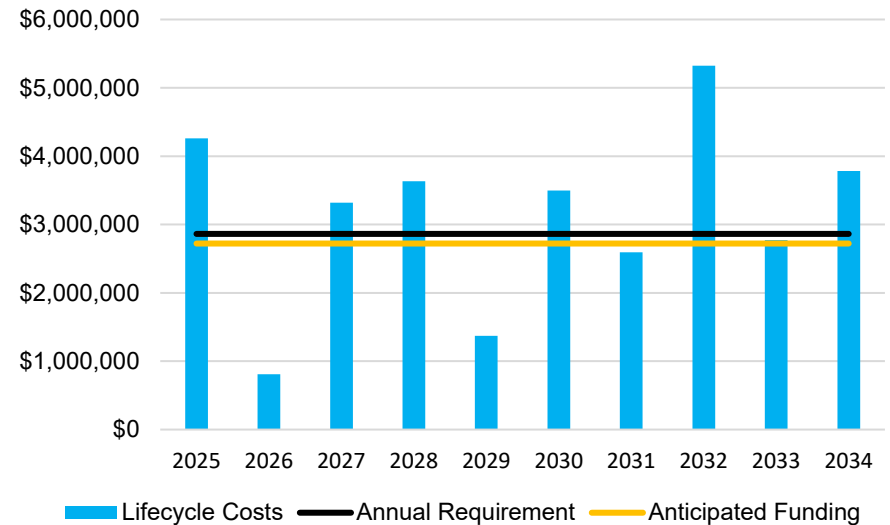


Figure 61. Scenario One Lifecycle Costs – Corporate Fleet 2025-2034

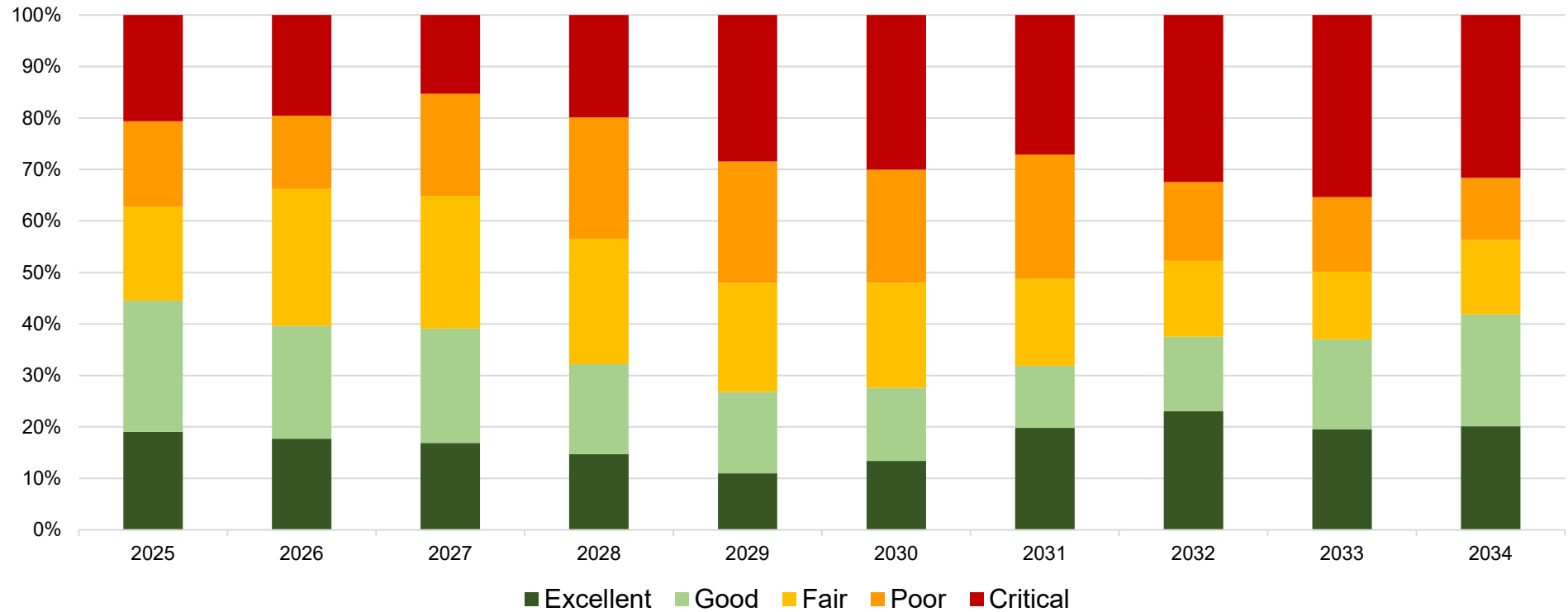


Based on this scenario, the estimated annual requirement was determined to be \$2.86M annually to ensure asset performance in perpetuity. Compared to anticipated funding, this results in a funding gap of \$0.14M.

Scenario 2: Current Funding

Scenario two outlines the impact of current anticipated funding on asset performance.

Figure 62. Scenario Two Asset Performance – Corporate Fleet 2025-2034



Based on current funding levels, the percentage of assets in the poor to critical range increases from 37% to 44% over the next 10 years. When the scenario is extended out to the 20-to-40-year forecast, the percentage of assets in poor to critical condition continues to rise .

Scenario 3: Cost to Achieve Proposed Levels of Service

Scenario three outlines the estimated annual cost of the renewal, rehabilitation and replacement lifecycle activities required to achieve proposed service level targets as well as performing the lifecycle activities needed.

Figure 63. Scenario Three Asset Performance – Corporate Fleet 2025-2034

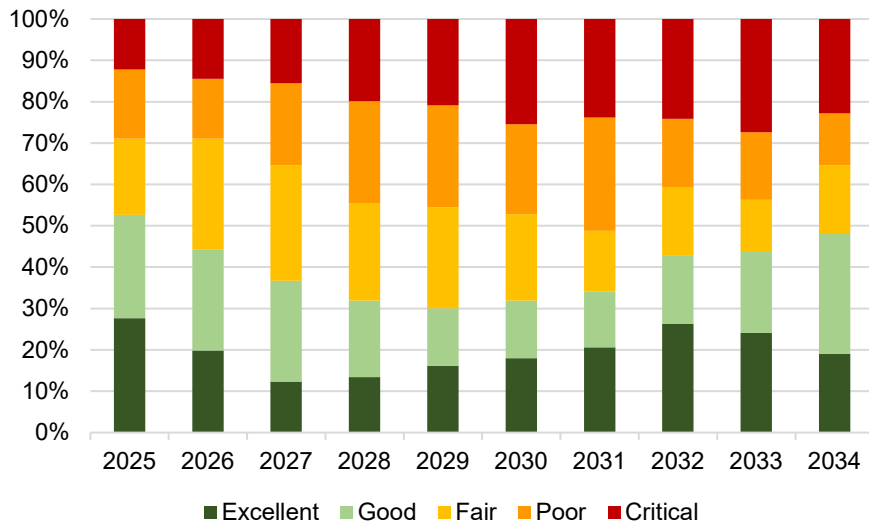
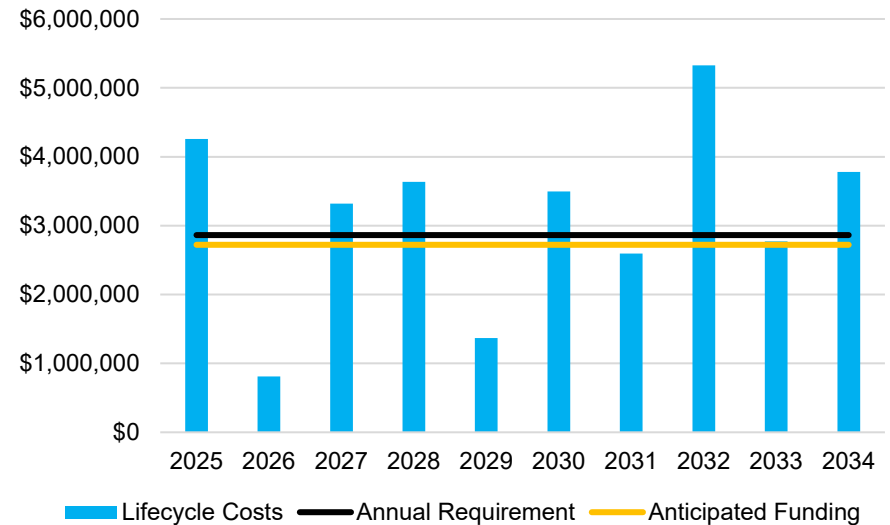


Figure 64. Scenario Three Lifecycle Costs – Corporate Fleet 2025-2034



Based on this scenario, the estimated annual requirement was determined to be \$2.86M annually to ensure asset performance in perpetuity. Compared to anticipated funding, this results in a funding gap of \$0.14M.

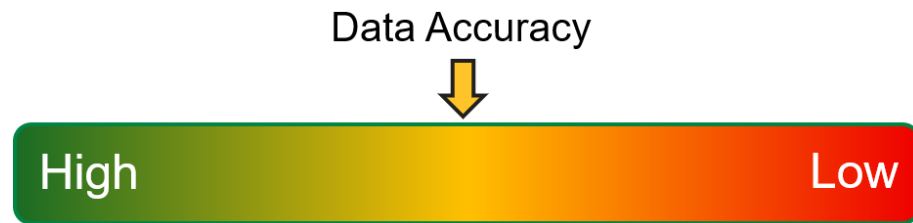
Data Confidence

Accurate and reliable condition data allows staff to determine the remaining service life of assets and identify the most cost-effective approach to managing assets more confidently.

The City’s overall Corporate Fleet data accuracy is considered to be medium with the primary source of data being age-based condition ratings. Data gap analysis continues to be a major project the City embarks on as it seeks to further understand its inventory and plan for the long term.

The City relies on staff input of its fleet assets. In the absence of such information, age-based data is used as a proxy.

Figure 65. Data Accuracy – Corporate Fleet



Condition Assessments and Data Collection

The typical approach to optimizing the maintenance of a corporate fleet of vehicles is through routine vehicle inspections, routine vehicle servicing, and an established routine preventative maintenance program. Most, if not all, makes and models of vehicles are supplied with maintenance manuals that define the appropriate schedules and routine for typical maintenance and servicing and also more detailed restoration or rehabilitation protocols.

The primary goal of good vehicle maintenance is to avoid or mitigate the consequences of failure of equipment or parts. An established preventative maintenance program serves to ensure this, as it will consist of scheduled inspections and follow up

repairs of vehicles and equipment in order to decrease breakdowns and excessive downtimes.

A good preventative maintenance program will include partial or complete overhauls of equipment at specific periods, including oil changes, lubrications, fluid changes and so on. In addition, workers can record equipment or part deterioration so they can schedule to replace or repair worn parts before they fail. The ideal preventative maintenance program would move further and further away from reactive repairs and instead towards the prevention of all equipment failure before it occurs.

It is recommended that the current preventative maintenance routine be continued for all fleet vehicles. It is also recommended that fleet services be centralized under Corporate Fleet so that appropriate lifecycle management strategies can occur, minimize risk and to prevent assets from being kept longer than their useful life.

Continuous Improvement

The City continues to advance the Asset Management Program and works towards ensuring line of sight when it comes to decision making and asset management practices. Increased quality of data and information and standardized operating procedures will improve data confidence levels and the quality of these decisions. The following recommendations will help ensure the City maintains its path and manage its growing \$30 million Corporate Fleet portfolio in a sustainable manner.

1. Align the Asset Management Plan

- a. Align the AMP with the City's budgetary processes and strategic plan
- b. Identify paths of incorporating the AMP within the capital budget
- c. Ensure the Asset Management Steering Committee continues work on corporate buy-in and maintains line of sight across the City

2. Address the Infrastructure Gap

- a. Continue to search for funding from non-tax sources of financing to address infrastructure gaps
 - i. Grant funding where applicable
- b. Create infrastructure reserves that plan for the future and eliminate the risk of "peaks and valleys" in funding requirements
 - i. Fleet Reserves
- c. Mitigate the risk of current LOS dropping
- d. Improve and build 5- and 10-year capital plans that tackle the infrastructure gap

3. Improve the Asset Management Program

- a. Ensure data inventories are accurate and condition data is recorded in a timely manner
 - i. Fleet condition assessments
- b. Standardize operating procedures where applicable
- c. Build lifecycle strategies that are representative of asset performance and achieve proposed LOS
- d. Explore opportunities for interoperability where available
 - i. Asset Management Systems
- e. Continue to pursue Risk Management strategies across the City

A close-up photograph of a person's hands working on financial documents. The person is wearing a dark jacket. One hand is holding a black pen, pointing at a line graph on a document. The other hand is holding a silver calculator, with the index finger resting on the '5' key. The documents feature various charts, including a pie chart with segments labeled 50%, 25%, and 15%, and several bar charts. A spiral-bound notebook is also visible in the foreground. The background is slightly blurred, showing a window with greenery outside.

FINANCIAL STRATEGY

Financial Strategy

The financing strategy sets out the approach to ensure that the appropriate funds are available to support the delivery of the current services.

The financing strategy is predicated on the City's current financial state – including revenues, operating and capital expenditures, debt, reserves, reserve funds, and forecasted future commitments. The financing strategy is meant to strengthen current budgeting processes by reinforcing a long-term perspective on the impact of providing higher/lower asset-related service levels and highlighting revenues required versus affordability to the community. The focus of this financing strategy is mainly on lifecycle budgets.

The City's budgets are developed to allocate the necessary funding to provide services and to maintain and replace current assets. The City allocates a portion of its revenues from property taxes to support current-year projects, contribute to reserves and reserve funds, and make debt repayments.

The City ensures continued financial sustainability through effective financial planning and risk management, which are part of the annual budget development.

This strategy summarizes the financing components, providing a financial overview as a precursor and context to the options for addressing the funding gap identified in each service area to achieve the specified current asset-related service levels. This financial strategy uses year-end 2024 as the analysis reference to achieve the determined level of service for each asset category. The financing gap analysis has been calculated based on the best available information for the next 10-year period (2025-2034).

Given the average annual capital requirement of roughly \$25.1 million, an estimated funding gap of \$10.8 million annually is based on current, sustainable funding. Historically, the City has secured additional one-time funding for capital projects and usually allocates most of the operating surplus to the capital program the following year. These funds help offset some of the funding needs the City currently faces. However, since one-time funding is not guaranteed or consistent, it is not used to reduce the funding gap.

Financial Strategy Overview

City budgets have capital and operating components:

- The capital budget plans and funds large expenditures with multi-year life spans. Debt financing and reserve funds (accumulated savings) support capital needs and help manage fluctuations.
- The operating budget supports the day-to-day operations and maintenance that provide services to the community. Staff salaries, energy bills, and fuel for vehicles are some of the expenditures funded from the operating budget.

When preparing budgets, the City must consider all its needs. The asset management plan is not isolated from these other important considerations. Financial management ensures the sustainable provision of services, which is one of the critical elements of the City's financial planning processes. Long-range financial planning is essential for ensuring future funds are available to meet anticipated needs.

An asset management plan must be integrated with financial planning and long-term budgeting to be effective and meaningful. The development of a comprehensive financial plan allows the City to identify the financial resources required for sustainable asset management based on existing asset inventories, desired levels of service, and projected growth requirements.

Integrating asset management with financial planning is as crucial as combining it with engineering. All are important when considering the value of all City assets and the reliance on them to deliver services to the community. These activities improve the link between financial planning and asset management by allowing for a data-driven decision process.

Capital Budget

The capital budget is used for significant investments like infrastructure and facilities construction, acquisition of fleet and major equipment, and supporting non-infrastructure solutions like technical studies and master plans. Long-term financial planning is essential for ensuring future funds are available to meet anticipated needs. Currently, staff prepare a one-year capital budget and a four-year capital forecast.

Council adopts the current year's capital budget and is presented with a forecast to ensure that Council is aware of any anticipated projects, however there is no requirement to maintain that forecast as presented in any given year.

The approved capital budget represents a significant investment in the development and rehabilitation of capital infrastructure and associated studies to support the provision of services to the current and future citizens of the City. The budget considers the capital requirements of growth as well as the maintenance of existing infrastructure. In the preparation of the budget, consideration is given to actual costs incurred in the past for similar projects, adjusting for inflation and, more recently, supply chain issues, current priorities, the impact on future operating budgets, feedback gathered through the public input process, availability of staff resources to undertake and adequately manage the programs, and the available sources of revenue to fund the programs.

The most recent 2025 capital budget and financial plan implement objectives and goals in the various strategic, master and other plans already approved while maintaining fiscal sustainability and ensuring adherence to budgetary policies. For further information, please refer to the City's 2025 Capital Budget.

The capital investment program is funded from a wide range of sources. There are five primary sources:

- Taxation levied in the financial year that is allocated to the capital program
- Debt – external borrowing within strict limits
- Reserves and Reserve Funds – The City maintains several reserves and reserve funds that are used to finance capital expenditures and offset peaks in expenditure
- Other levels of government – Provincial and Federal grants, subsidies and programs that may be ongoing or time-limited
- Additional third-party funds – such as developer contributions

The capital budget and forecast for each service are shown in the following table.

Table 38. Capital Budget by Service Area (000s)

Service Area	2025	2026	2027	2028	2029
Transportation	6,645	8,599	9,092	5,480	6,911
Stormwater	2,614	1,252	689	3,077	1,334
Corporate Facilities	1,405	778	1,678	421	707
Transit	457	1,416	547	875	1,655
Recreation and Culture	2,775	5,420	2,117	2,472	1,090
Natural Assets	120	110	110	90	90
Corporate Fleet	2,478	2,280	4,690	1,635	1,605

Operating Budget

The approved 2025 base operating budget totals approximately \$117 million. The base operating budget includes the operational costs for new infrastructure and programs completed as part of the capital budget and infrastructure assumed by the City as new developments are completed. For further information, please refer to the City’s 2025 Operating Budget.

Taxation revenue provides approximately 70% of the operating funding. Other considerable funding sources are user fees, rentals, and multiple grants.

The net historical and current operating budget for the service areas included in this plan are shown in the following table.

Table 39. Operating Budget by Service Area (000s)

Service Area	2023	2024	2025
Transportation	4,631	4,994	5,305
Stormwater	256	273	352
Corporate Facilities	55,403	59,852	56,659
Transit	4,493	4,708	5,245
Recreation and Culture	14,948	15,979	16,889
Natural Assets	504	525	912
Corporate Fleet	1,948	2,269	1,228

Debenture Financing

In the appropriate circumstances, debt can be a valuable financial planning tool. For example, it can advance a project that could not be accommodated until later in the capital budget. It can be used to smooth the impact of a sizeable dollar-value project over several years that would otherwise immediately draw down a City reserve, or it can be used to expand an existing capital program.

The City has a debt policy to ensure it plans for and uses debt appropriately. The policy requires the City’s debt repayments to stay within the provincial limit. The Municipal Act allows municipalities to issue debentures with a maximum term of 40 years; however, the duration of the debenture cannot exceed the life of the project for which it is used. Notwithstanding these allowances, the City’s debt policy limits debenture amortization to 10 years in most cases. The City Treasurer may occasionally evaluate and recommend a longer term for larger projects. This policy ensures that debt charges are paid through the operating

budget. Debt management is necessary to ensure the City maintains an appropriate debt level.

Capital Financing Policies and Assumptions

The 2025 capital budget and financing plan have been developed with the following financing policies and assumptions, which form the basis of the City’s financial position. They are monitored to ensure the City’s long-term financial situation is sustainable into the future:

- Debt issuance remains within the council-approved policy limits, and repayment levels remain within the City’s annual repayment limit as prescribed by the Ministry of Municipal Affairs and Housing.
- Timing of growth projects aligns with anticipated residential and non-residential development.
- Capital reserves are maintained at sufficient levels to minimize risk, support future initiatives, and provide for unknown contingencies.

Projected Financing Strategies

For the analysis, the investment needs have been assessed against the projected revenues for the next 10 years. The required annual expenditures are based on the lifecycle costing analysis outlined for each service area.

The City’s approved 2025 Capital and Operating budgets include plans to support existing infrastructure, growth activities, and service level improvements. However, as the City continues to implement improvement strategies to maintain current LOS and achieve proposed LOS, the financing strategy may require revision to address changes in priority. These could include partnerships, alterations to procurement methods and new senior government announcements related to various municipal investments.

The average annual investment requirement represents funding the City should be allocating into various reserves for lifecycle

activities to maintain current LOS and achieve proposed LOS. These estimates assume that all work can be completed, as indicated, and do not consider future changes due to environmental factors, new maintenance methods, and unidentified growth. While calculating the requirement in this manner provides an estimate of the average future funding needs, it does not mean that the City will require or spend this amount each year. In some years, the City might spend more on capital projects; in other years, it might be less.

The following table shows the City’s average annual asset investment requirements to achieve proposed levels of service, current funding positions, and financing gap.

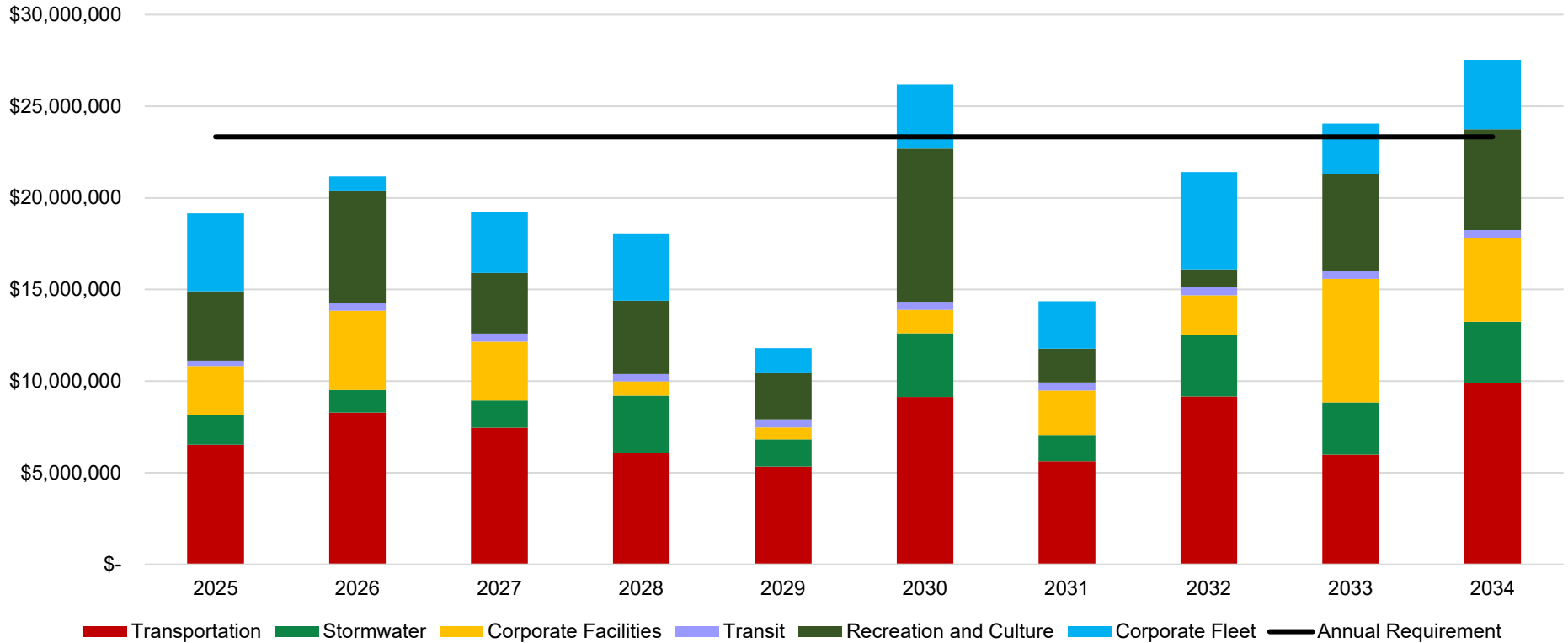
Table 40. Average Annual Investment Requirements by Service Area

Service Area	Investment Requirements	Available Funding	Financing Gap
Transportation	12,577,000	6,903,000	5,674,000
Stormwater	2,434,000	1,044,000	1,390,000
Corporate Facilities	2,896,000	1,207,000	1,689,000
Transit	858,000	450,000	408,000
Recreation and Culture	3,479,000	1,899,000	1,580,000
Corporate Fleet	2,863,000	2,722,000	141,000
Total	25,107,000	14,225,000	10,882,000

The roughly \$25.1 million annual investment requirement represents the average amount required to achieve proposed level of service targets to ensure asset performance in perpetuity.

The following chart shows the City’s anticipated annual lifecycle requirements over the 10-year period to maintain current LOS.

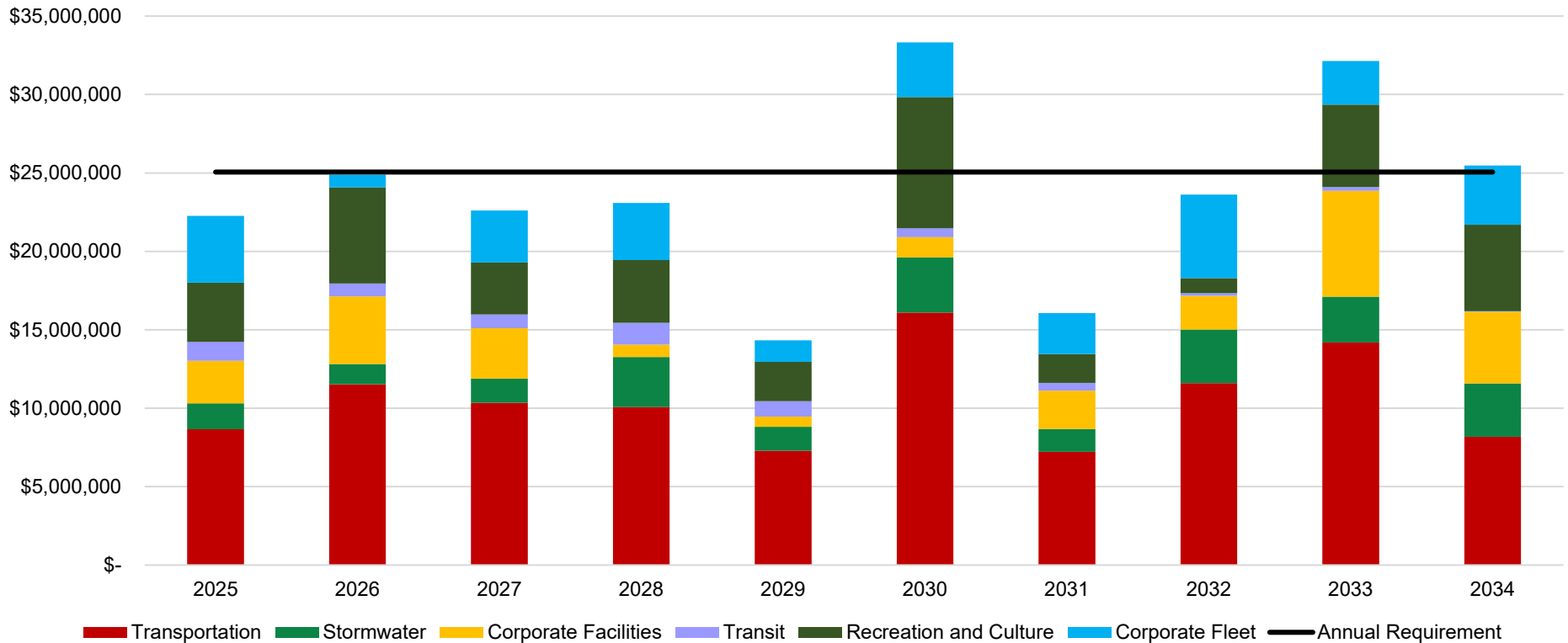
Figure 66. Forecasted Annual Lifecycle Requirements to Maintain Current LOS – All Service Areas, 2025-2034



The total investment required to maintain current LOS for the next 10 years totals roughly \$203 million or on average \$20.3 million per year. The annual anticipated funding currently allocated to these service areas for capital purposes is \$14.2 million. The estimated annual funding gap to maintain current LOS is \$6.1 million per year over the next 10 years across all service areas.

The following chart shows the City’s anticipated annual lifecycle requirements over the 10-year period to achieve proposed LOS.

Figure 67. Forecasted Annual Lifecycle Requirements to Achieve Proposed LOS – All Service Areas, 2025-2034



The total investment required to achieve proposed LOS for the next 10 years totals roughly \$238 million or on average \$23.8 million per year. The annual anticipated funding currently allocated to these service areas for capital purposes is \$14.2 million. The estimated annual funding gap to achieve proposed LOS is \$9.6 million per year over the next 10 years across all service areas.

Full Funding Analysis

The City recognizes that asset management is a continuously evolving process. The recommendations included in this plan are based on the review of current management practices, inventory, valuation, and condition analysis.

The total investment required for the next ten years totals roughly \$238 million. The annual revenue currently allocated to these assets for capital purposes is \$14.2 million. It is important to remember that the above graph is based only on the funding requirement for the next ten years. Moving into a longer time frame, the financing requirements increase considerably, so it is in the City's best interest to continue allocating as much funding as possible toward the overall capital program. Over the long term, the asset management program is only about 60% funded. Putting additional funds into dedicated reserves will help the City achieve sustainable funding over the long term. Over the next ten years, this AMP recommends significantly increasing reserve contributions, to ensure the City can attain fiscal sustainability. As in the past, periodic senior government funding will possibly be available.

Using the identified 10-year lifecycle requirements and the current anticipated funding, the City can determine if there is a funding gap in the City's asset portfolio. Consideration is then given to the existing uncommitted reserve balances to assess the residual funding gap. Opportunities for reducing this residual gap could include increases in the tax rates, utilization of grant funding opportunities, and further review of lifecycle strategies and desired service levels. As the City grows and acquires additional new assets, the contributions to various reserves must be increased to account for additional assets and their future replacement and maintenance needs.

Prioritizing future projects will require collecting and using condition-based data for asset categories that currently rely on age-based data. Although the recommendations include limited use of debt, the results of the condition-based analysis may require otherwise. Debt is available as a tool to address high-priority or emergency capital projects while annual funding is being phased in. However, one-time or occasional debt should not be a long-term solution to an annual funding gap.

To achieve the proposed levels of service, various strategic and tactical options should be considered. Development of a detailed cost analysis and a targeted funding plan to ensure sufficient resources are allocated over the future years to achieve proposed levels of service delivery. Leveraging partnerships with private entities to share the cost and risk of infrastructure projects as well as exploring joint ventures with different levels of government that align with municipal goals. Implementing policies that encourage sustainable and resilient infrastructure development. Utilizing data analytics to optimize infrastructure performance and predict future needs. Implementation of performance measurement systems to track and report on service level improvements.

Continuous Improvement

The Asset Management Plan is intended to be a “living document” that is integral and relevant to the City’s infrastructure goals and financial future. The advancement of the Asset Management Program is dependent on the continuous improvement of processes, including improvements to asset information, decision-making and strategic planning.

At an absolute minimum, the objective of any AMP, or strategy, should be to ensure that the overall condition of an asset group does not diminish over time. The AMP helps the City strategize its financial planning as to manage fluctuations and minimize overall risk while ensuring levels of service do not suffer. Asset Management should be the driving force in capital budget planning as well as being an effective and meaningful long-term policy.

For the AMP to be effective and meaningful, continuous improvement and updates are necessary as specified within the timelines below:

- Regularly monitor the progress of the AMP by providing annual status updates to Council that include how the Asset Management Program has advanced and reflect on any factors impeding implementation
- A thorough and comprehensive update and review of the AMP that occurs every five (5) years, or as required by O. Reg. 588/17
- A thorough and comprehensive update to the Strategic Asset Management Policy every five (5) years

Moving forward, the Asset Management Program will consider the following:

- Annual review of proposed levels of service to ensure alignment with strategic priorities and attainable outcomes as well as financial sustainability
- Continue to engage the public on service levels to allow for stakeholder input
- Processes to move any operation and maintenance from reactive into a preventative measure

In conclusion, this iteration of the AMP presents overall information about the City of Woodstock’s asset management approach as related to the City’s assets.

Appendices

Glossary

Asset: An asset is an item, thing or entity that holds potential or actual value to an organization. The value will vary between different organizations and their stakeholders, and can be tangible or intangible, financial or non-financial.

Asset Management: Asset Management is the coordinated activity of an organization to help realize value from the assets it owns.

Asset Management Plan (AMP): An asset management plan (AMP) is a strategic document that guides a municipality's management of infrastructure assets and other assets to deliver corporate objectives in the most cost-effective manner.

Asset System: A set of assets that interact or are interrelated.

Average Daily Traffic (ADT): The volume of traffic passing a point or segment of a road, in both directions, during a period of time, divided by the number of days in the period.

Bituminous Surface Treatments (BST): Known as a seal coat or a chip seal, a thin protective wearing surface that is applied to a pavement or base course.

Bridge Condition Index (BCI): A system developed by the Ministry of Transportation to assist in the prioritizing of bridge maintenance.

City: The Corporation of the City of Woodstock.

Core Municipal Infrastructure Asset: Defined by O.Reg 588/17, any municipal infrastructure asset that is a, Water asset that relates to the collection, production, treatment, storage, supply or distribution of drinking water; Wastewater asset that relates to the collection, transmission, treatment or disposal of wastewater, including any wastewater asset that from time to time manages stormwater; Stormwater management asset that relates to the collection, transmission, treatment, retention, infiltration, control or disposal of stormwater; Road; or Bridge or culvert.

Cost Inflation: Historical cost of the asset is inflated based on the Consumer Price Index (CPI) or Non-Residential Building Construction Price Index (NBCPI).

Level of Service (LOS): A level of service (LOS) is a measure of what the municipality is providing to the community and the nature and quality of that service.

Lifecycle: The various phases of an asset's life that are identified as planning & construction, operations, maintenance, and disposal. Each phase has its own opportunities, risks, impacts and costs.

Maintaining Level of Service: The activities that would need to be undertaken to maintain the current levels of service being provided or established by the City to meet legislation requirement.

Municipal Infrastructure Asset: An infrastructure asset (core and non-core municipal infrastructure assets), including a green infrastructure asset, directly owned by a municipality or included on the consolidated financial statements of a municipality, but does not include an infrastructure asset that is managed by a joint municipal water board.

Stakeholder: A person or organization that can affect, be affected by, or perceive themselves to be affected by a decision or activity.

Pipeline Assessment Certification Program (PACP®): A program designed for consistent assessment coding of underground infrastructure.

Public: Residential, commercial, industrial, and institutional stakeholders, and any other stakeholders that rely on City owned municipal infrastructure assets.

Replacement Value: The cost the City would incur to completely replace a municipal infrastructure asset, at a selected point in time, at which a similar level of service would be provided. This definition can also be referred to as 'Replacement Cost'.

Tangible Capital Assets (TCA): A legislative reporting requirement specified by Section PS 3150 in the Public Sector Accounting Board Handbook to identify asset inventories, additions, disposals and amortization on an annual basis.

List of Acronyms

ADT: Average Daily Traffic

BCI: Bridge Conditions Index

HCB: High Class Bituminous

LOS: Level of Service

NFPA: National Fire Protection Association

NASSCO: National Association of Sewer Service Companies

AMP: Asset Management Plan

CCTV: Closed Circuit Television Video

LCB: Low Class Bituminous

MTO: Ministry of Transportation Ontario

OSIM: Ontario Structure Inspection Manual