



# Appendix A: 2023 State of the Local Infrastructure Report

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# Acknowledgements



## Land Acknowledgement

The City of Brampton is located on the traditional territories of the Mississaugas of the Credit, Haudenosaunee, and Wendat Nations who have called this land home since time immemorial. We acknowledge the agreements made in Treaty 19—the Ajetance Purchase of 1818—and are committed to our ongoing role in reconciliation through meaningful action rooted in truth, justice, and respect. We are grateful to the original caretakers of this land who have ensured we are able to work, play, and live in Brampton now and in the future.

The City of Brampton has formally adopted the Truth and Reconciliation Commission’s Calls to Action; the United Nations Declaration on the Rights of Indigenous Peoples; the National Inquiry into Missing and Murdered Indigenous Women and Girls, and 2SLGBTQIA+ Peoples’ Calls to Justice. Through a nation-to-nation approach with our host

Nations and urban Indigenous community, the City will utilize the recommendations for municipalities within these reports and frameworks to guide its work of increasing awareness, building capacity, and collaborating on solutions.

The City’s relationships with the Indigenous community contribute to the continuing creation of processes for reconciliation that drive economic recovery, social development, and cultural inclusion of the Indigenous community. The City honours the uniqueness of Indigenous knowledge, histories, and traditions, and recognizes their importance in building and supporting an inclusive, successful, innovative, and brighter future for Brampton.

## Staff Acknowledgement

The development of the 2023 State of the Local Infrastructure Report was a significant undertaking with contributions from staff across the organization. The Corporate Asset Management Office would like to acknowledge the efforts of the City of Brampton staff and sincerely thank everyone, including the Subject Matter Experts from the City's service areas, for their continued support and guidance throughout the development of this report.

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# Key Acronyms & Abbreviations

<b>AM</b>	Asset Management
<b>AMP</b>	Asset Management Plan
<b>CAM</b>	Corporate Asset Management
<b>CAPEX</b>	Capital Expenditures
<b>CIP</b>	Capital Investment Program
<b>City</b>	The City of Brampton
<b>CLOS</b>	Current Levels of Service
<b>CMMS</b>	Computerized Maintenance Management System
<b>CRV</b>	Current Replacement Value
<b>DC</b>	Development Charges
<b>EUL</b>	Expected Useful Life
<b>FIR</b>	Financial Information Return
<b>LC</b>	Lifecycle
<b>LOS</b>	Levels of Service
<b>OPEX</b>	Operating Expenditures
<b>O&amp;M</b>	Operations and Maintenance
<b>PSAB</b>	Public Sector Accounting Board
<b>PLOS</b>	Proposed Levels of Service
<b>PM</b>	Project Management
<b>PMIS</b>	Project Management Information System
<b>QA</b>	Quality Assurances
<b>QC</b>	Quality Control
<b>SA</b>	Service Area
<b>SLA</b>	Service Level Agreement
<b>SOP</b>	Standard Operating Procedure
<b>SOLI</b>	State of Local Infrastructure
<b>SW</b>	Stormwater

# Introduction

As the fourth largest City in the province, and one of the fastest growing communities in Ontario, the City of Brampton owns and operates a substantial portfolio of assets across different service areas. These assets are essential to the well-being of the community and form an integral part of the City's long-term financial and service delivery planning.

In recent years, the City has adopted a Corporate Asset Management Plan (2021) and Service Area Asset Management Plan (2024). The City also approved the asset management plan for its Transportation and Stormwater infrastructure in 2022. These documents form the foundation of asset management planning in the City. This 2023 State of the Local Infrastructure (SOLI) Report maintains most of the key assumptions and methodology derived through the Corporate and Service Area plans.

The 2024 Service Area Asset Management Plan<sup>1</sup> (SA AMP) included an in depth look at lifecycle activities to determine the true cost of an asset over its useful life. This report was approved by Council in June 2024. Given the recent release of the 2024 SA AMP, and the continued relevance of its financing strategy, this information is omitted from the 2023 SOLI Report.

The 2023 SOLI Report acts a supporting document to the City's budgeting process and provides an overview of the following:

- **Asset Management Maturity Assessment:** The overall maturity of the City's asset management data and program.
- **State of the Local Infrastructure:** Estimated age, value and condition of the City's infrastructure.
- **Future Improvements:** An overview of the future

improvements and initiatives that will improve data quality and confidence while driving corporate change.

The estimated total current replacement value of the City's assets is \$10.0 billion (\$2024). This value is comprised of infrastructure assets from Transportation, Stormwater, Transit, Parks, Recreation, Cultural Services, Facilities, Information Technology, Fire Services, Library, Animal Services and City Support Fleet. Transportation represents the largest share at 44%, or \$4.4 billion of the total \$10.0 billion replacement value. The total asset replacement value identified in this report represents an increase in value of \$1.0 billion, or 11%, over the \$9.0 billion (\$2023) City-wide asset replacement value stated in the 2022 SOLI Report. This increase is due to refined costing information and inflation, revised inventories and the inclusion of new assets not captured previously. A comprehensive description, and comparative analysis regarding the change in valuation from the previous year for each service category, is in the service area report cards in Appendix A of this report.

The majority of the \$10.0 billion in assets currently owned and operated by the City are in Good condition. The overall "Good" condition rating is attributed to the City's infrastructure being relatively new in age combined with the sound asset management practices the City has employed to date. The current City-wide confidence for the information presented in this report for investment related decision-making is assessed as **Medium (Inspection Based)**. It is an overall goal to improve the reliability and accuracy of all information moving forward.

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<sup>1</sup>[2024 Service Area Asset Management Plan](#)

# Asset Management Maturity Assessment

This report presents the City of Brampton’s current asset management data, frameworks and progress to ensure consistent documentation and measurement of progress going forward. The 2024 SA AMP provided an in-depth analysis of the City’s asset management maturity on a service area basis. This assessment is still relevant to this 2023 SOLI Report. The results of this assessment are to further inform the Asset Management Roadmap and guide the City towards best practices in asset management. The assessment considered the following categories:

- a) Understanding and Defining the Requirements
- b) Developing Asset Management Lifecycle Strategies
- c) Asset Management Enablers

Each of these categories is further broken down into specific elements (16 total across all 3 categories) that make up the overall maturity assessment.

## Assessment of Overall Asset Management Programs

Figure 1 below provides a snapshot of the progress and overall maturity of the City’s asset management program as included in the 2024 SA AMP. This assessment was done on a service area basis. However, a number of the elements apply on a

corporate level and were scored as such.

Transportation and Stormwater were not included as part of this analysis and their independent maturity assessments are provided in their respective 2022 plans.

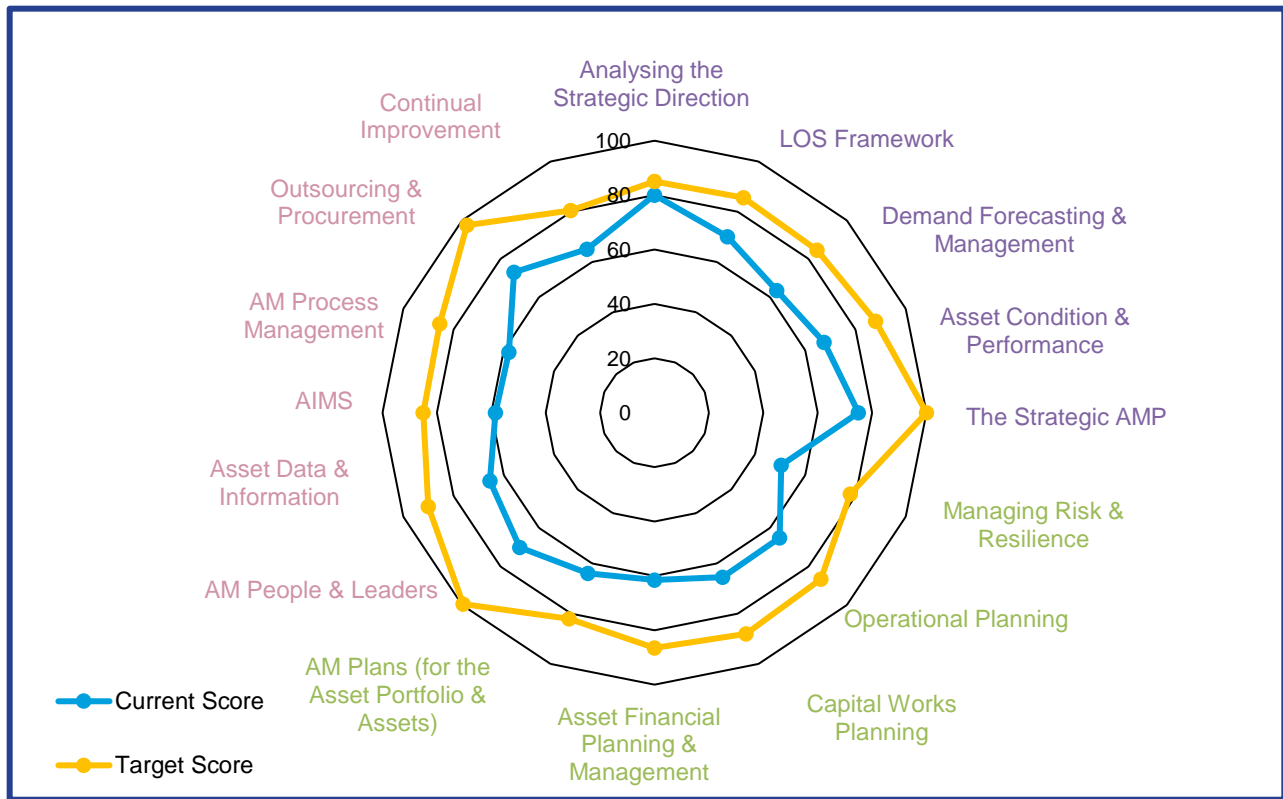
The radar graph below provides two maturity assessment scorings:

- a) **Current Score** – Several activities undertaken as part of the SA AMP further elevated the maturity of some elements. An updated score that captures those advancements is provided.
- b) **Target Score** – Target scores are generally set two maturity levels above the current score to be achieved in the next 5 years. Further adjustments were made to account for the reasonability of meeting these scores.

On an aggregate level, the overall current maturity score is at an “Intermediate” level. The target score across all service areas is to achieve an “Advanced” stage on average in the next 5 years. It is recognized that the organization will seldom have perfect processes and data with which to manage the asset portfolio. The underlying concept of continuous improvement and reliability is key, and the basis in setting out target scores to strive for in the near future.



Figure 1 – Asset Management Maturity Radar Graph by Element



## O.Reg. 588/17: Asset Management Planning for Municipal Infrastructure

Asset management planning is an essential framework for municipalities to ensure proper infrastructure management in the most sustainable way over the long term. The proclamation of *The Infrastructure for Jobs and Prosperity Act, 2015* on May 1, 2016 includes an authority for the province to regulate municipal asset management planning. Municipal asset management planning regulation O. Reg. 588/17 under the *Infrastructure for Jobs and Prosperity Act, 2015* came into effect on January 1, 2018. Building on Ontario's 2012 *Building Together: Guide for Municipal Asset Management Plans*, the regulation sets out new requirements for undertaking asset management planning.

The goal of the regulation is to promote continuous improvement in infrastructure asset management planning by requiring Ontario municipalities to develop a Strategic Asset Management Policy aligned with their strategic goals, official plan, master plans, financial planning framework, and the levels of service they intend to provide to their residents.

Municipalities are also required to develop a comprehensive Asset Management Plan in multiple phases (2022-2025) that includes inventory of all assets they own, incorporates the current and proposed levels of service, identifies investment activities and costs to maintain current service levels, and a supporting financial strategy. Figure 2 presents the requirements along with the timelines prescribed in the regulation:

Figure 2 – Regulatory O.Reg 588/17 Requirements



The annual SOLI report has been an integral part of informing the asset management plans the City has undertaken in recent years (including the 2021 Corporate AMP and 2024 Service Area AMP). As per the regulation, starting 2025, municipalities shall conduct an annual review of its asset management progress on or before July 1 of each year. This annual review must address the municipality’s progress in implementing its AMP, any factors impeding the municipality’s ability to implement its AMP, and strategies to address these factors. The annual SOLI report will serve as the City’s tool for meeting these future requirements.

### Approach to Informed Decision Making

To achieve the objectives of asset management planning, the City utilizes various types of assessments to optimize resource allocation, reduce risks and ensure the efficient and effective management of their diverse portfolio of assets. The data confidence scale outlined in Table 1 defines the various measures used to qualify the accuracy and reliability of the information used to develop this report. The assessment of condition is a key component in determining actual State of Good Repair and the projection of investment needs for asset repair and replacement.

Table 1 – Data Confidence Rating Scale

Scale	Confidence rating	Assessment Approach	Data Quality Description
	High Confidence	Risk based assessment based on comprehensive data including inspection-based condition where feasible and risk assessment	Robust data, extensive analysis, and rigorous validation. There is a high degree of certainty in the results, and they are considered highly reliable.
	Medium Confidence	Inspection-based assessments	Reasonably strong data and analysis but may have some limitations or uncertainties. The results are credible but not without some degree of risk or uncertainty.
	Low Confidence	Age based assessment not accounting for variations in asset performance.	The assessment has significant limitations or uncertainties, and there may be gaps in data or methodology. The results are less reliable and should be interpreted with caution.
	Very Low Confidence	Age based assessment without sufficient records and requiring validation	The assessment is highly unreliable, lacks sufficient data or analysis, or is subject to significant flaws or biases. The results should be viewed skeptically and may not be suitable for decision-making

Note: Slider indicates the City of Brampton's position on the confidence rating scale (Medium)

The choice of assessment depends on the type of asset. This SOLI report implemented the following condition assessment methodologies:

- **Facilities** – Facility Condition Index
- **Roads** – Pavement Condition Index
- **Bridges** – Bridge Condition Index
- **Software and Some Other IT Assets** – Adequate functionality to provide service
- **All Other Assets** – Age and Condition Based Assessment

The following provide a description of the different approaches used:

a) **Age-Based Assessment:** Relies on the assumption that asset conditions deteriorate with time, and their remaining lifespan estimated based on their age.

**Application:** Organizations often use age-based assessments as an initial step to establish a baseline understanding of asset conditions. This approach is particularly relevant for assets with well-documented deterioration patterns, allowing organizations to forecast future maintenance and replacement needs where inspection costs outweigh the benefit of actual condition data.

b) **Inspection-Based Assessment:** Involves regular inspections and data collection to assess an asset's current condition, identify maintenance requirements and guide asset management decisions.

**Application:** Provide up-to-date data on asset conditions that are crucial in targeting and performing lifecycle activities at the right time. Organizations employ this approach to manage assets with variable deterioration rates and to monitor asset health continuously.

c) **Risk-Based Assessment:** Focus on identifying

and managing assets that pose the highest risk assets to an organization, considering factors such as criticality, operational impact, safety and financial implications.

**Application:** Used to prioritize resources and efforts toward assets with the greatest potential impact on safety, service delivery and financial sustainability. This approach ensures the application of resources where needed most.

The current City-wide data confidence to use the information presented in this report for investment related decision-making is assessed as **Medium (Inspection Based)**, as indicated on the scale in Table 1. Based on the weighted replacement value of all services and their condition assessments, 80% of assets have utilized inspection-based assessments.

For certain asset classes, inspection programs with full condition assessments are not feasible and these assets will continue to use an age-based approach.

Therefore, the City is targeting a maturity rating based on inspection assessments of approximately 91%.

Over the long-term, the City will move towards the use of risk-based assessments to prioritize resources and efforts toward assets with the greatest potential impact on safety, service delivery and financial sustainability.

Table 2 below provides a detailed outline of the assessment of each service category's assets. Please note the basis of the assets classified on condition are in some instances subject to the input received from individual service area experts.

Table 2 – Condition Assessment Approach

Service Area <sup>(1)</sup>	% of Asset Portfolio <sup>(2)</sup>	Age	Inspection	Risk
<b>Transportation</b>	<b>44.36%</b>	✓	✓	
Roads (Includes Islands)	24.26%		✓	
Vertical Traffic Calming Devices	0.02%	✓		
Bike Lanes	0.11%		✓	
Roadway Bridges & Pedestrian Bridges	4.61%		✓	
Roadway Culverts	5.07%		✓	
Gateway Features	0.17%		✓	
Noise Walls	0.22%		✓	
Retaining Walls on Walkways	0.24%		✓	
Fences	0.13%		✓	
Guiderails	0.21%		✓	
Handrails	0.01%		✓	
Steps	0.01%		✓	
Sidewalks	4.22%		✓	
Walkways	0.07%		✓	
Multi-Use Paths	0.26%		✓	
Street Lighting	3.54%	✓	✓	
Traffic Signals	1.19%	✓		
Traffic Signs	0.01%		✓	
<b>Stormwater</b>	<b>18.22%</b>	✓	✓	
Stormwater Management Ponds	1.24%		✓	
FDC-WTC	0.99%	✓		
Storm Sewers	11.68%	✓		
Catchbasins	1.63%	✓		
Manholes	2.30%	✓		
FDC-WTC Manholes	0.30%	✓		
Outfalls	-		N/A	
Water Quality Units	0.08%	✓		
Minor Crossing Culverts	-		N/A	
Roadside Culverts	-		N/A	
Other Culverts	-		N/A	
Ditches	-		N/A	
LIDs	-		N/A	
<b>Facilities</b>	<b>18.97%</b>		✓	
Facilities	18.97%		✓	
<b>Transit</b>	<b>6.71%</b>	✓	✓	
Heavy Duty Vehicles (Buses)	5.31%	✓	✓	
Support Fleet	0.02%	✓		
Shelters - Conventional	0.08%	✓	✓	
Shelters - Zum	0.37%	✓		
Shelters - Bike	0.003%	✓		
Stops	0.19%	✓		
Sandalwood Transit Loop	0.01%	✓		
Video Walls	0.001%		✓	

Service Area <sup>(1)</sup>	% of Asset Portfolio <sup>(2)</sup>	Age	Inspection	Risk
CAD/AVL	0.01%		✓	
Identification Card Application Hardware	0.0004%		✓	
Bus Lift	0.26%		✓	
Communication Control	0.17%	✓		
Fare Systems	0.10%		✓	
Presto	0.06%	✓		
Maintenance/Admin Small Equipment	0.01%		✓	
Signage	0.02%		✓	
Fueling	0.02%		✓	
Electric Chargers	0.08%	✓		
<b>Information Technology</b>	<b>1.89%</b>	<b>✓</b>	<b>✓</b>	
Computers	0.07%	✓		
Monitors	0.01%	✓		
Mobile Phones	0.01%	✓		
Audio Visual Equipment	0.005%	✓		
Servers	0.03%		✓	
Storage And Back-Up	0.06%	✓		
Wireless	0.02%	✓		
Cable Plants	0.35%	✓		
Network Infrastructure	0.07%	✓		
Communication System	0.04%	✓		
Software	1.23%		✓	
<b>City Support Fleet</b>	<b>0.60%</b>	<b>✓</b>	<b>✓</b>	
Licensed Fleet	0.39%	✓	✓	
Off-Road Vehicles	0.20%	✓	✓	
Fleet Equipment	0.021%	✓	✓	
<b>Fire</b>	<b>1.00%</b>	<b>✓</b>	<b>✓</b>	
Light Duty Front Line Licensed Vehicles & Apparatus	0.26%	✓	✓	
Heavy Duty Front Line Licensed Vehicles & Apparatus	0.37%	✓	✓	
Support Vehicles & Equipment	0.04%	✓		
Spare Vehicles	0.27%		✓	
Personal Fire Equipment	0.05%		✓	
Specialty Equipment	0.01%		✓	
<b>Parks</b>	<b>7.20%</b>	<b>✓</b>	<b>✓</b>	
Parking Lots & Islands	0.54%		✓	
Small Engine Equipment	0.004%		✓	
Parks	1.06%	✓		
Natural Heritage Lands	-		N/A	
Park Furnishing	0.04%		✓	
Playgrounds	1.13%		✓	
Shade Structures	0.42%		✓	
Splash Pads & Outdoor Pools	0.06%	✓		
Fitness Equipment	0.02%		✓	

Service Area <sup>(1)</sup>	% of Asset Portfolio <sup>(2)</sup>	Age	Inspection	Risk
Skate Parks	0.02%		✓	
Sports Facilities	1.53%	✓	✓	
Pathways	0.76%		✓	
Trees	1.57%		✓	
Flower Beds	0.05%	✓		
<b>Recreation</b>	<b>0.64%</b>	<b>✓</b>	<b>✓</b>	
General Equipment	0.15%	✓		
Major Equipment	0.06%	✓		
Spray Pads & Pools	0.07%	✓		
Tennis Courts	0.02%	✓		
Fitness Equipment	0.04%		✓	
Outdoor Fitness Equipment	0.002%		✓	
Skateboard Parks	0.04%		✓	
Artificial Rinks & Tracks	0.12%		✓	
Furniture	0.13%	✓		
<b>Cultural Services</b>	<b>0.18%</b>		<b>✓</b>	
Outdoor Equipment	0.05%		✓	
Specialty Equipment	0.08%		✓	
Furniture	0.001%		✓	
Public Art	0.05%		✓	
<b>Library</b>	<b>0.23%</b>	<b>✓</b>	<b>✓</b>	
Computer Equipment	0.03%	✓		
Furniture	0.04%	✓	✓	
RFID	0.004%	✓		
Security	0.001%	✓		
Shelving	0.011%	✓		
Telecommunications Equipment	0.002%	✓		
Electronic Media	0.02%	✓	✓	
Print Media	0.12%	✓	✓	
Library Software	0.004%		✓	
<b>Animal Services</b>	<b>0.004%</b>		<b>✓</b>	
Equipment	0.004%		✓	
Note 1: Services are structured under the responsibility view				
Note 2: Numbers may not add precisely due to rounding				

# State of the Local Infrastructure (SOLI)

## Purpose

This section of the report seeks to establish an understanding of the current state of Brampton’s estimated \$10.0 billion (\$2024) in infrastructure assets. The basis of the estimated valuation is an inventory of capital assets as of year-end 2023. This baseline snapshot of Brampton’s assets will help decision-makers prioritize investments in the future; improving their ability to efficiently manage assets and deliver services.

The State of Local Infrastructure (SOLI) report is a key building block for Brampton’s future management of its infrastructure assets. This section intends to provide the following information:

- Details of the Asset Inventory – What do we own?
- Valuation of the Asset Base (Replacement Value) – What is it worth?
- Condition of the Asset Base – What Condition is it in?

This State of the Local Infrastructure analysis will lay the foundation for ongoing assessment, reporting, benchmarking of the City’s infrastructure assets while also publicly communicating the current state of assets. In this iteration of the report, the focus was on the “major service areas”, described generally, as the infrastructure owned and directly managed by the City. However, this report does include assets managed by Brampton Library, which is a governing board with the authority to make policy and govern the Library’s affairs under the authority of the Public Libraries Act.

Despite the major service area categories being consistent with the 2021 Corporate AMP, 2024 Service Area AMP and previous iterations of the SOLI Reports, the City has made significant improvements to the datasets, key inputs, assumptions, and reporting views. Please note that updates to the replacement values will continue in future years with recent data that reflects the cost pressures experienced by the City.

## City-wide Asset Representation: User View and Responsibility View

Since the 2021 Corporate Asset Management Plan, the state of the City infrastructure has been reported under two different asset representation perspectives: a “Responsibility View” and a “User View” representation. These two views are defined as follows:

- **Responsibility View:** Shows the assets under the service area that is responsible for managing the capital needs.
- **User View:** Shows the assets under the service area that is using them.

To remain consistent, the responsibility and user view is also illustrated in this 2023 SOLI report. The responsibility view:

- provides a direct line of sight to those assets managed by the service area;
- will help prioritize lifecycle activities managed by the service area;
- aligns with industry best practices; and



- provides guidance to future asset management planning practice and departmental initiatives.

The most notable difference between the responsibility view and the user view becomes evident when considering Facilities, City Support Fleet and Software. These assets play a pivotal role in service delivery and are managed by a department distinct from those utilizing them. As it pertains to facility related assets, service areas maintain their respective facilities but large scale capital is still undertaken by the City's Building Design and Construction (BDC) group. As a result, these facilities are represented under the "User

View" framework.

The table below goes through each service area's assets and their Current Replacement Value (CRV), detailing the differences in reporting based on these two views (differences highlighted in grey). The assets related to certain corporate functions, which are managed by specific service areas but benefit different users within the organization, are individually identified in the table below under the "User View". As illustrated in the total replacement value below, both views result in the same valuation of \$10.0 billion:

*Table 3 – Replacement Value Comparison (Assets Under User View and Responsibility View)*

Service Area	Assets Under Responsibility View		Assets Under User View	
	Asset Type	CRV (\$M)	Asset Type	CRV (\$M)
Transportation	Roadway Network*	\$2,440.4	Roadway Network*	\$2,440.4
	Structures (Bridges & Culverts)	\$968.9	Structures (Bridges & Culverts)	\$968.9
	Structures (Other)**	\$100.5	Structures (Other)**	\$100.5
	Walkways & Paths	\$455.4	Walkways & Paths	\$455.4
	Traffic Services	\$474.6	Traffic Services	\$474.6
			Operations Facilities	\$96.4
			Fleet	\$18.8
		Software	\$9.2	
<b>Total Transportation</b>		<b>\$4,439.8</b>		<b>\$4,564.3</b>
* Roadway network includes roads, bike lanes, and vertical traffic calming devices				
** Structures (Other) includes gateway features, noise walls, retaining walls, fences, guiderails, handrails and steps				
Stormwater	Stormwater Management Ponds	\$123.8	Stormwater Management Ponds	\$123.8
	Storm Sewer Systems - Linear KMs	\$1,268.5	Storm Sewer Systems - Linear KMs	\$1,268.5
	Storm Sewer Systems - MH/CB/Outfalls	\$423.0	Storm Sewer Systems - MH/CB/Outfalls	\$423.0
	Water Quality Units	\$7.8	Water Quality Units	\$7.8
	Culverts	-	Culverts	-
	Ditches	-	Ditches	-
	LIDS	-	LIDS	-
<b>Total Stormwater</b>		<b>\$1,823.1</b>		<b>\$1,823.1</b>
Facilities	Corporate Facilities	\$428.2	Fleet	\$2.2
	Animal Services	\$10.8	Software	\$4.2
	Cultural Services	\$114.9		
	Recreation	\$745.2		
	Parks	\$22.2		
	Transit	\$217.9		
	Library	\$107.0		
	Fire	\$156.4		
Work Operations	\$96.4			
<b>Total Facilities</b>		<b>\$1,898.9</b>		<b>\$6.4</b>

Service Area	Assets Under Responsibility View		Assets Under User View	
	Asset Type	CRV (\$M)	Asset Type	CRV (\$M)
Transit	Licensed Vehicle Assets	\$533.2	Licensed Vehicle Assets	\$533.2
	Transit Facilities (On Road)	\$65.5	Transit Facilities (On Road)	\$65.5
	Transit IT Infrastructure	\$1.4	Transit IT Infrastructure	\$1.4
	Specialty Equipment	\$71.4	Specialty Equipment	\$71.4
			Facilities	\$217.9
		Software	\$5.3	
<b>Total Transit</b>		<b>\$671.5</b>		<b>\$894.7</b>
Information Technology (IT)	End User IT	\$8.9		
	Infrastructure Assets	\$57.7		
	Software	\$122.9		
<b>Total IT</b>		<b>\$189.6</b>		<b>\$0</b>
City Support Fleet	Licensed Fleet	\$38.5	Software	\$3.9
	Off-Road Vehicles	\$19.7		
	Fleet Equipment	\$2.1		
<b>Total City Support Fleet</b>		<b>\$60.4</b>		<b>\$3.9</b>
Fire	Light Duty Front Line Licensed Vehicles & Apparatus	\$26.4	Light Duty Front Line Licensed Vehicles & Apparatus	\$26.4
	Heavy Duty Front Line Licensed Vehicles & Apparatus	\$36.6	Heavy Duty Front Line Licensed Vehicles & Apparatus	\$36.6
	Support Vehicles & Equipment	\$3.7	Support Vehicles & Equipment	\$3.7
	Spare Vehicles	\$27.5	Spare Vehicles	\$27.5
	Personal Fire Equipment	\$4.7	Personal Fire Equipment	\$4.7
	Specialty Equipment	\$0.8	Specialty Equipment	\$0.8
			Facilities	\$156.4
		Software	\$4.9	
<b>Total Fire</b>		<b>\$99.8</b>		<b>\$261.0</b>
Parks	Parking Lots & Islands	\$54.2	Parking Lots & Islands	\$54.2
	Small Engine Equipment	\$0.4	Small Engine Equipment	\$0.4
	Parks	\$105.9	Parks	\$105.9
	Natural Heritage Lands	-	Natural Heritage Lands	-
	Park Furnishing	\$3.9	Park Furnishing	\$3.9
	Playgrounds	\$112.9	Playgrounds	\$112.9
	Shade Structures	\$42.5	Shade Structures	\$42.5
	Splash Pads & Outdoor Pools	\$5.6	Splash Pads & Outdoor Pools	\$5.6
	Fitness Equipment	\$1.5	Fitness Equipment	\$1.5
	Skate Parks	\$2.1	Skate Parks	\$2.1
	Sports Facilities	\$153.4	Sports Facilities	\$153.4
	Pathways	\$76.1	Pathways	\$76.1
	Trees	\$157.6	Trees	\$157.6
	Flower Beds	\$4.5	Flower Beds	\$4.5
			Facilities	\$22.2
		Fleet	\$26.6	
		Software	-	
<b>Total Parks</b>		<b>\$720.5</b>		<b>\$769.3</b>

Service Area	Assets Under Responsibility View		Assets Under User View	
	Asset Type	CRV (\$M)	Asset Type	CRV (\$M)
Recreation	Equipment	\$50.8	Equipment	\$50.8
	Furniture	\$13.5	Furniture	\$13.5
			Facilities	\$745.2
			Fleet	\$4.5
			Software	\$3.5
<b>Total Recreation</b>		<b>\$64.2</b>		<b>\$817.4</b>
Cultural Services	Outdoor Equipment & Furniture	\$4.8	Outdoor Equipment & Furniture	\$4.8
	Specialty Equipment	\$7.6	Specialty Equipment	\$7.6
	Furniture	\$0.1	Furniture	\$0.1
	Public Art	\$5.3	Public Art	\$5.3
			Facilities	\$114.9
			Fleet	\$0.6
		Software	-	
<b>Total Cultural Services</b>		<b>\$17.9</b>		<b>\$133.5</b>
Library	Furniture and Equipment	\$8.1	Furniture and Equipment	\$8.1
	Media Collections	\$14.2	Media Collections	\$14.2
	Library Software	\$0.4	Library Software	\$0.4
			Facilities	\$107.0
			Fleet	\$0.2
<b>Total Library</b>		<b>\$22.6</b>		<b>\$129.8</b>
Animal Services	Equipment	\$0.4	Equipment	\$0.4
			Facilities	\$10.8
			Fleet	\$1.2
			Software	\$0.2
<b>Total Animal Services</b>		<b>\$0.4</b>		<b>\$12.5</b>
Corporate Functions <i>(note: not a specific service area)</i>			Licensed Fleet (Corporate Services Fleet)	\$5.3
			Off-Road Vehicles (Corporate Services Fleet)	\$1.0
			Fleet Equipment (Corporate Services Fleet)	\$0.01
			End User IT	\$8.9
			Infrastructure Assets	\$57.7
			Software (Shared Corporate Software)	\$91.7
			Corporate Facilities	\$428.2
<b>Total Corporate Functions</b>		<b>\$0.0</b>		<b>\$592.8</b>
<b>Total CRV (\$M)</b>		<b>\$10,008.7</b>		<b>\$10,008.7</b>

Note: Numbers in the table above may not add exactly due to rounding

## Age Profile Analysis

The age profile of assets is a critical aspect of any comprehensive Asset Management Plan and is required to meet regulatory requirements. In the SOLI, the age profile analysis further facilitates the understanding of the age distribution of assets. This will allow for the adaptation of strategies to address the changing needs of the portfolio.

In conjunction with condition data, an asset's age profile provides valuable insight into the lifecycle management of the City's assets. Details on the age profile of assets are included in the individual service area report cards in Appendix A.

Appendix A provides a summary of the average age (weighted based on replacement value) of the assets within each service area portfolio (under the

responsibility view). The result shows that the average age of the City's infrastructure is relatively young with the majority of infrastructure assets coming online within the last 30 years

## Asset Inventory and Valuation

As specified in the Ministry Guide, the value of the City's assets is in two different formats: 'Net Book Value' and 'Replacement Value'.

Net Book Value is consistent with the financial accounting practices defined by the Public Sector Accounting Board and is reported on the City's financial statements. The City of Brampton's reported Net Book Value covers the full scope of the City's Tangible Capital Assets, including land. This differs from the scope of assets considered under the

Corporate Asset Management program and the State of the Local Infrastructure.

The Net Book Value is the original acquisition cost less accumulated depreciation, depletion or amortization. It is reported annually in accordance with reporting standards established by the Public Sector Accounting Board (PSAB) of the Canadian Institute of Chartered Accountants. As shown in Table 4 below, the City's 2022 Consolidated Financial Statement reported the Net Book Value of the City's Tangible Capital Assets as of December 31, 2023, at \$4.0 billion inclusive of land. Under the financial accounting approach many assets may be fully depreciated yet remain in use across the City. Therefore, Net Book Value is not the appropriate methodology to be employed for infrastructure renewal planning.

*Table 4 – City of Brampton Net Book Value (In Thousands)*

FIR Functional Classification	Net Book Value Jan 1, 2023	Net Additions/ Disposals	Net Amortization Expense	Net Book Value Dec 31, 2023
General Government	\$348,685	\$8,620	\$10,184	\$347,122
Protection	\$107,349	\$13,298	\$5,789	\$114,858
Transportation	\$2,016,195	\$65,860	\$81,155	\$2,000,901
Environmental	\$596,670	\$21,878	\$19,725	\$598,823
Health	\$617	\$8	\$52	\$573
Social and Family	\$3,564	\$0	\$54	\$3,117
Recreation and Cultural Services	\$912,602	\$46,807	\$20,837	\$938,571
Planning and Development	\$6,806	(\$2,130)	(\$1,707)	\$6,383
<b>TOTAL</b>	<b>\$3,992,488</b>	<b>\$153,949</b>	<b>\$136,089</b>	<b>\$4,010,348</b>

*Note: Categories/information derived from the 2023 Financial Information Return. The net amortization figure tends to vary from year-to-year depending on in-year asset disposals.*

**Replacement Values** are used as the basis to estimate the cost of replacing an asset when it reaches the end of its engineered design life. The total replacement cost of all assets covered within this report is estimated at \$10.0 billion.

## Replacement Cost Valuation

For the purposes of this 2023 SOLI Report, the replacement cost data provided at the service area level was updated to make necessary inflationary adjustments. In most cases, the service areas had provided most recent cost estimates that correspond to the assets in service as of year-end 2023. However, in

some instances, more recent asset valuation data was not available. In such cases, the values included in the 2022 SOLI (in \$2023) were adjusted using a suitable inflation metric to bring them in line with current values, expressed in \$2024.

Table 5 below provides a summary of the inflationary factor applied to the specific asset categories. For assets with recent cost data, a 2% adjustment was

made to bring them to \$2024 values. For assets that do not have recent data, the non-residential construction price index or the machinery and equipment price index was applied. Approximately 74% of this year’s data was provided in \$2023, including Transportation and Facilities assets which represent a large share of the total asset portfolio. Statistics Canada monitors the two indices below, which will be used in future SOLI report iterations.

Table 5 – Summary of Inflationary Factors Applied to Specific Assets

Index	Inflationary Factor (Q1 2023 – Q1 2024)	Assets Adjusted
Recent Cost Data provided by the service area <sup>(1)</sup>	2.0%	<p><b>Transportation:</b> Roads, Vertical Traffic Calming Devices, Bike Lanes, Bridges &amp; Culverts, Gateway Features, Noise Walls, Retaining Walls, Fences, Guiderails, Handrails, Steps, Sidewalks, Walkways, Multi-Use Paths, Street Lighting, Traffic Signals, Traffic Signs</p> <p><b>Stormwater:</b> Water Quality Units</p> <p><b>Facilities:</b> All Facilities</p> <p><b>Transit:</b> Heavy Duty Vehicles (Buses), Support Fleet, Conventional Shelters, Signage, Communication Control (excluding AVM systems)</p> <p><b>Fire<sup>(2)</sup>:</b> Front Line Licensed Vehicles &amp; Apparatus, Support Vehicles &amp; Equipment, Spare Vehicles, Personal Fire Equipment, Specialty Equipment</p> <p><b>Parks:</b> Parking Lots, Playgrounds, Pathways, Trees</p> <p><b>Library:</b> Library Software</p>
Non-Residential Building Construction Price Index (NRCPI)	7.6%	<p><b>Stormwater:</b> Stormwater Management Ponds, FDC-WTC, Storm Sewers, Catchbasins, Manholes, FDC-WTC Manholes</p> <p><b>Transit:</b> Stops and Pads</p> <p><b>Parks:</b> Parks (Open Space), Shade Structures, Splash Pads &amp; Outdoor Pools, Skate Parks, Sports Facilities</p> <p><b>Recreation:</b> Spray Pads &amp; Pools, Tennis Courts, Skateboard Parks, Artificial Rinks &amp; Tracks</p>

Index	Inflationary Factor (Q1 2023 – Q1 2024)	Assets Adjusted
<b>Machinery &amp; Equipment Price Index (M&amp;E)</b>	2.8%	<p><b>Transit:</b> Zum Shelters, Bike Shelters, Sandalwood Transit Loop, Video Walls, CAD/AVL, Identification Card Application Software, Bus Lift, Communication Control (AVM Systems only), Fare Systems, PRESTO, Maintenance/Admin Small Equipment, Fueling, Electric Chargers</p> <p><b>IT:</b> Computers, Monitors, Mobile Phones, AV Equipment, Servers, Storage and Back-up, Wireless, Network Infrastructure, Cable Plants, Communication System, Software</p> <p><b>City Support Fleet:</b> Licensed Fleet, Off-Road Vehicles, Fleet Equipment</p> <p><b>Parks:</b> Small Engine Equipment, Park Furnishing, Fitness Equipment, Flower Beds</p> <p><b>Recreation:</b> General &amp; Major Equipment, Indoor &amp; Outdoor Fitness Equipment, Furniture</p> <p><b>Cultural Services:</b> Outdoor &amp; Specialty Equipment, Furniture, Public Art</p> <p><b>Library:</b> Equipment, Media, Software</p> <p><b>Animal Services:</b> Equipment</p>

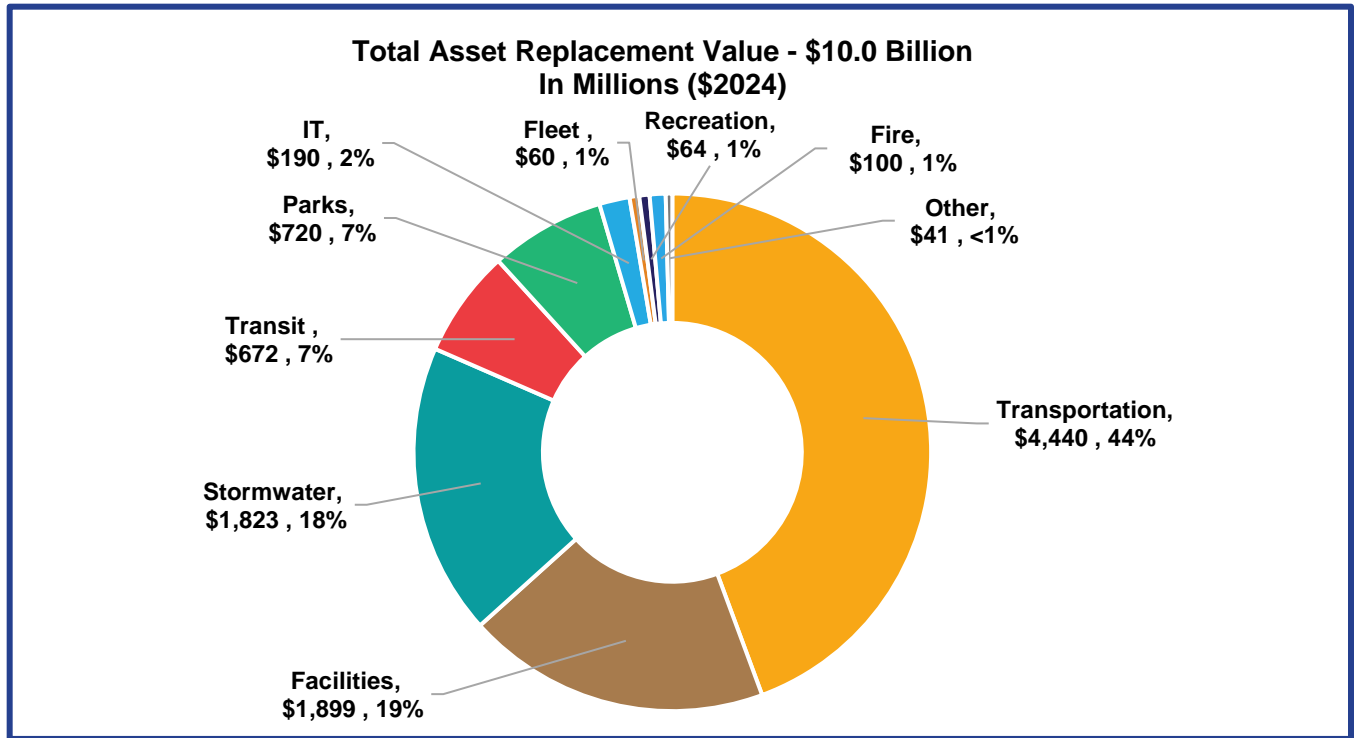
<sup>1</sup> Intended to reflect costs as of year-end 2023 and therefore only a simple inflation factor of 2.0% is applied to adjust the values to \$2024. Updated unit and replacement costs for 2024 will be provided to inform the 2024 SOLI Report.

<sup>2</sup> Under Fire, Front Line Licensed Vehicles & Apparatus, Support Vehicles & Equipment, Spare Vehicles and Bunker Gear costs were provided in \$2024 and no further adjustment was applied.

The total replacement value of all assets covered under this report is illustrated by service in Figure 3 below. Transportation, Facilities and Stormwater collectively account for over 80% of the asset portfolio by replacement value. Transportation services, with a replacement value of \$4.4 billion, constitutes the largest portion at 44% of the total \$10.0 billion. Facilities represents 19% of the portfolio, equivalent to \$1.9 billion, and serve multiple service areas (including

Animal Services, Cultural Services, Recreation, Parks, Transit, Library, Fire and other corporate services). Recreation Facilities represent the majority of the Facilities replacement value. Stormwater, valued at \$1.8 billion, constitutes 18% of the total replacement value. The replacement value reported in the below figure is represented under the “responsibility view” framework.

Figure 3 – Total Replacement Value of City Infrastructure (\$10.0 Billion)

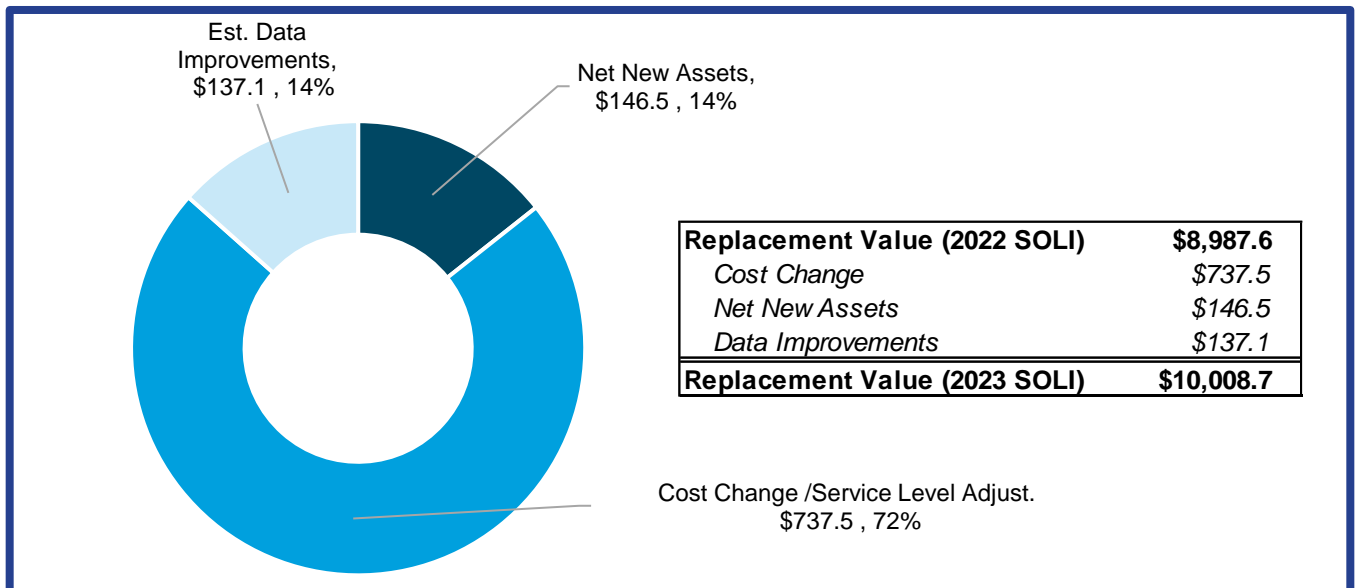


Note: "Other" includes Library (\$22.6M), Cultural Services (\$17.9M) and Animal Services (\$0.4M)

The total \$10.0 billion (\$2024) asset replacement value identified in this report represents an increase of \$1.0 billion, or 11%, over the \$9.0 billion (\$2023) City-wide asset replacement value stated in the 2022 SOLI Report. This increase is due to refined costing

information and inflation, revised inventories and data improvements, and overall general asset growth in assets. Figure 4 illustrates the breakdown of factors that contribute to the change in replacement value.

Figure 4 – Factors Driving Replacement Value Increase (In Millions)




The overall change of \$1.0 billion in costs from 2022 to 2023 are primarily driven by the effects of inflation.

This change is in line with the recent year-over-year changes observed from other statistical measurements monitoring price changes on capital expenditures, including the Non-Residential Construction Price Index or the Machinery and Equipment Price Index. Both indices have been used in this analysis to adjust 2023

costs, which were not based on most recent cost estimates.

Table 6 to Table 17 below include a more detailed breakdown of the service area valuations at the sub-asset level and the inventories of assets (as of year-end 2023). The tables represent the valuation under both the user view and responsibility view frameworks.

Table 6 – Detailed Inventory & Replacement Values for Transportation Services Assets

Service	Asset	Inventory	Unit	Total Replacement Value (\$000)	
	<b>1. Assets Managed by Transportation</b>				
	Roadway Network	Roads (Includes Islands)	3,520	Lane KM	\$2,428,157
		Vertical Traffic Calming Devices	179	Each	\$1,601
		Bike Lanes	339	Lane KM	\$10,616
	Structures	Bridges	4,056	Metres	\$461,121
		Culverts	1,264	Metres	\$507,796
	Structures (Other)	Gateway Features	2,857	Metres	\$16,678
		Noise Walls	14,799	Metres	\$22,388
		Retaining Walls	9,134	Metres	\$24,192
		Fences	56,619	Metres	\$13,328
		Guiderails	32,328	Metres	\$21,391
		Handrails	3,405	Metres	\$1,258
		Steps	85	Metres	\$1,306
	Walkways & Path	Sidewalks	1,995,092	KM	\$422,147
		Walkways	13,850	KM	\$7,457
		Multi-Use Paths	136,067	KM	\$25,828
	Traffic Services	Street Lighting	51,553	Each	\$353,918
		Traffic Signals	818	Each	\$119,177
		Traffic Signs	52,635	Each	\$1,471
	<b>Subtotal Assets Managed by Transportation - Responsibility View</b>				<b>\$4,439,829</b>
	<b>2. Assets Managed by Other Service Areas</b>				
	Operations Facilities		11	Each	\$95,375
	Fleet	Licensed Fleet	94	Each	\$13,127
Off-Road Equipment		65	Each	\$5,650	
Fleet Equipment		7	Each	\$66	
Software		20	Each	\$9,224	
<b>Subtotal Assets Managed by Other Service Areas</b>				<b>\$124,443</b>	
<b>TOTAL - USER VIEW (1+2)</b>				<b>\$4,564,272</b>	



Note: Bike lanes are repurposed through the roadway network and the replacement value is the extra cost of delineating the bike lanes from the roadway network.  
 There are 73 roadway bridges, 119 pedestrian bridges.  
 There are 163 culverts.  
 There are 309 gateway features.  
 There are 54 noise walls and 230 retaining walls.  
 There are 578 guiderails and 101 handrails.

Table 7 – Detailed Inventory & Replacement Values for Stormwater Services Assets


Service	Asset		Inventory	Unit	Total Replacement Value (\$000)
	Stormwater Management Ponds		193	Each	\$123,787
	Storm Sewer System	FDC-WTC	261,185	Metres	\$99,079
		Storm Sewers	1,752,749	Metres	\$1,169,418
		Catchbasins	40,985	Each	\$163,405
		Manholes	23,921	Each	\$229,935
		FDC-WTC Manholes	4,180	Each	\$29,676
		Outfalls	1,379	Each	-
	Water Quality Units		130	Each	\$7,793
	Culverts		2,391	Each	-
	Ditches		130	KM	-
LIDs		40	Each	-	
<b>TOTAL - USER &amp; RESPONSIBILITY VIEW</b>					<b>\$1,823,093</b>

Table 8 – Detailed Inventory & Replacement Values for Facilities Assets


Service	Asset		Inventory	Unit	Total Replacement Value (\$000)
	<b>1. Assets Used by Facilities and Managed by Other Service Areas</b>				
	Software		69	Each	\$4,215
	Fleet		4	Each	\$2,153
	<b>Subtotal Assets Used by Facilities and Managed by Other Service Areas – User View</b>				<b>\$6,367</b>
	<b>2. Assets Managed by Facilities and Used by Other Service Areas</b>				
	Corporate Facilities		38	Each	\$428,157
	Animal Services		2	Each	\$10,765
	Cultural Services		1	Each	\$114,946
	Recreation		73	Each	\$745,154
	Parks		19	Each	\$22,219
	Transit		8	Each	\$217,854
	Library		6	Each	\$107,000
	Fire		17	Each	\$156,406
	Work Operations		11	Each	\$96,375
	<b>Subtotal Assets Managed by Facilities and Used by Other Service Areas</b>				<b>\$1,898,876</b>
	<b>TOTAL – REPLACEMENT VALUE (USER + RESPONSIBILITY VIEW)</b>				

Table 9 – Detailed Inventory & Replacement Values for Transit Services Assets


Service	Asset	Inventory	Unit	Total Replacement Value (\$000)	
<b>Transit</b> 	<b>1. Assets Managed by Transit</b>				
	Licensed Vehicle Assets	Heavy Duty Vehicles Light Duty Vehicles	474 30	Each Each	\$531,420 \$1,766
	Transit Facilities (On Road)	Shelters – Conventional	930	Each	\$7,760
		Shelters – Züm	130	Each	\$37,248
		Shelters – Bike	23	Each	\$310
		Stops	2,386	Each	\$18,965
		Sandalwood Transit Loop	1	Each	\$1,192
	Transit IT Infrastructure	Video Wall	1	Each	\$76
		CAD/AVL	1	Each	\$1,308
		ID Card Application	41	Each	\$36
		Hardware			
	Specialty Equipment	Bus Lift	34	Each	\$25,804
		Communication Control	4	Each	\$17,385
		Fare Systems	498	Each	\$10,388
		PRESTO	1,082	Each	\$6,005
		Maintenance/Admin Small Equipment	9	Each	\$738
		Signage	3,117	Each	\$1,893
		Fueling	5	Each	\$1,609
		Electric Charger	5	Each	\$7,616
	<b>Subtotal Assets Managed by Transit - Responsibility View</b>				<b>\$671,518</b>
	<b>2. Assets Managed by Other Service Areas</b>				
	Facilities	Transit Facilities	8	Each	\$217,854
Transit IT Infrastructure	Software	2	Each	\$5,343	
<b>Subtotal Assets Managed by Other Service Areas</b>				<b>\$223,197</b>	
<b>TOTAL - USER VIEW (1+2)</b>				<b>\$894,716</b>	

Table 10 – Detailed Inventory & Replacement Values for IT Services Assets


Service	Asset	Inventory	Unit	Total Replacement Value (\$000)	
<b>Information Technology</b> 	<b>1. Assets Managed by Information Technology (IT)</b>				
	End User IT	Computers	3,538	Each	\$6,768
		Monitors	3,500	Each	\$1,003
		Mobile Phones	1,658	Each	\$706
		Audio Visual Equipment	237	Each	\$465
	Infrastructure Assets	Servers	76	Each	\$2,720
		Storage and Back-Up	27	Each	\$6,489
		Wireless	806	Each	\$2,223
		Cable Plants	284,723	Metres	\$34,852
		Network Infrastructure	671	Each	\$7,003
		Communication System	4,127	Each	\$4,429
Software	110	Each	\$122,909		
<b>TOTAL – REPLACEMENT VALUE (RESPONSIBILITY VIEW)</b>				<b>\$189,566</b>	

Table 11 – Detailed Inventory & Replacement Values for City Support Fleet Assets


Service	Asset	Inventory	Unit	Total Replacement Value (\$000)
<b>City Support Fleet</b> 	<b>1. Assets Managed by Other Service Areas and Used by City Support Fleet</b>			
	Software	2	Each	\$3,888
	<b>Subtotal Assets Managed by Other Service Areas and Used by City Support Fleet</b>			<b>\$3,888</b>
	<b>2. Assets Managed by Other Service Areas</b>			
	Licensed Vehicles	502	Each	\$38,534
	Off-Road Equipment	299	Each	\$19,677
	Fleet Equipment	252	Each	\$2,150
	<b>Subtotal Assets Used by Other Service Areas</b>			<b>\$60,361</b>
<b>TOTAL – REPLACEMENT VALUE (USER + RESPONSIBILITY VIEW)</b>				<b>\$64,248</b>

Table 12 – Detailed Inventory & Replacement Values for Fire Services Assets



Service	Asset	Inventory	Unit	Total Replacement Value (\$000)	
	<b>1. Assets Managed by Fire Services</b>				
		Light Duty Front Line Licensed Vehicles & Apparatus	29	Each	\$24,426
		Heavy Duty Front Line Licensed Vehicles & Apparatus	17		\$36,600
		Support Vehicles & Equipment	44	Each	\$3,741
		Spare Vehicles	25	Each	\$27,519
		Personal Fire Equipment	1,289	Each	\$4,681
		Specialty Equipment	8	Each	\$806
	<b>Subtotal Assets Managed by Fire Services - Responsibility View</b>				<b>\$99,773</b>
	<b>2. Assets Managed by Other Service Areas</b>				
		Facilities	17	Each	\$156,405
		Software	3	Each	\$4,867
	<b>Subtotal Assets Managed by Other Service Areas</b>				<b>\$161,273</b>
<b>TOTAL - USER VIEW (1+2)</b>				<b>\$261,046</b>	

Table 13 – Detailed Inventory & Replacement Values for Parks Services Assets

Service	Asset	Inventory	Unit	Total Replacement Value (\$000)	
	<b>1. Assets Managed by Parks Services</b>				
	Park Assets	Parks*	1,125	Ha.	\$105,877
		Natural Heritage Lands	1,645	Ha.	-
		Park Furnishing	4,735	Each	\$3,882
		Playgrounds	348	Each	\$112,874
		Shade Structures	303	Each	\$42,469
		Splash Pads/Pools	12	Each	\$5,648
		Fitness Equipment	43	Each	\$1,546
		Skate Parks	4	Each	\$2,052
		Sports Facilities	1,110	Each	\$153,360
		Pathways	303,795	Metres	\$76,060
	Other Assets	Parking Lots & Islands	678,428	Sq. M.	\$54,177
		Trees	257,462	Each	\$157,567
		Flower Beds	1,593	Each	\$4,542
		Small Equipment	547	Each	\$420
	<b>Subtotal Assets Managed by Park Services - Responsibility View</b>				<b>\$720,475</b>
	<b>2. Assets Managed by Other Service Areas</b>				
		Facilities	19	Each	\$22,219
		Fleet	524	Each	\$26,589
		Software	1	Each	-
<b>Subtotal Assets Managed by Other Service Areas</b>				<b>\$48,808</b>	
<b>TOTAL - USER VIEW (1+2)</b>				<b>\$769,284</b>	

\*Note: Parks sub-asset category excludes pathways, sports facilities, playgrounds, trees and other sub-asset classes reported separately as stated in the table

Table 14 – Detailed Inventory & Replacement Values for Recreation Services Assets


Service	Asset	Inventory	Unit	Total Replacement Value (\$000)	
	<b>1. Assets Managed by Recreation Services</b>				
	Recreation Equipment	General Equipment	2,198	Each	\$14,896
		Major Equipment	223	Each	\$6,436
		Spray Pads & Pools	11	Each	\$7,135
		Tennis Courts	13	Each	\$2,425
		Fitness Equipment	626	Each	\$3,792
		Outdoor Fitness Equipment	10	Each	\$182
		Skateboard Parks	5	Each	\$4,105
		Artificial Rinks & Tracks	21	Each	\$11,798
	Furniture	Pooled	N/A	\$13,475	
	<b>Subtotal Assets Managed by Recreation Services - Responsibility View</b>				<b>\$64,243</b>
	<b>2. Assets Managed by Other Service Areas</b>				
	Facilities	73	Each	\$745,154	
	Fleet	130	Each	\$4,527	
Software	3	Each	\$3,458		
<b>Subtotal Assets Managed by Other Service Areas</b>				<b>\$753,140</b>	
<b>TOTAL - USER VIEW (1+2)</b>				<b>\$817,383</b>	

Table 15 – Detailed Inventory & Replacement Values for Cultural Services Assets


Service	Asset	Inventory	Unit	Total Replacement Value (\$000)	
	<b>1. Assets Managed and Used by Cultural Services</b>				
	Outdoor Equipment	Pooled	N/A	\$4,829	
	Specialty Equipment	6,189	Each	\$7,615	
	Furniture	475	Each	\$138	
	Public Art	29	Each	\$5,336	
	<b>Subtotal Assets Managed by Cultural Services - Responsibility View</b>				<b>\$17,918</b>
	<b>2. Assets Managed by Other Service Areas</b>				
	Facilities	1	Each	\$114,946	
	Fleet	7	Each	\$620	
	Software	1	Each	-	
<b>Subtotal Assets Managed by Other Service Areas</b>				<b>\$115,565</b>	
<b>TOTAL - USER VIEW (1+2)</b>				<b>\$133,484</b>	

Table 16 – Detailed Inventory & Replacement Values for Library Services Assets



Service	Asset	Inventory	Unit	Total Replacement Value (\$000)	
<b>Library</b> 	<b>1. Assets Managed by Library Services</b>				
	Furniture and Equipment		6,278	Each	\$8,127
	Media Collections	Electronic Media	Pooled	N/A	\$1,890
		Print Media	Pooled	N/A	\$12,262
	Library Software		18	Each	\$360
	<b>Subtotal Assets Managed by Library Services - Responsibility View</b>				<b>\$22,639</b>
	<b>2. Assets Managed by Other Service Areas</b>				
	Facilities		6	Each	\$107,000
	Fleet		4	Each	\$158
	<b>Subtotal Assets Managed by Other Service Areas</b>				<b>\$107,158</b>
<b>TOTAL - USER VIEW (1+2)</b>				<b>\$129,797</b>	

Table 17 – Detailed Inventory & Replacement Values for Animal Services Assets

Service	Asset	Inventory	Unit	Total Replacement Value (\$000)	
<b>Animal Services</b> 	<b>1. Assets Managed by Animal Services</b>				
	Equipment		176	Each	\$367
	<b>Subtotal Assets Managed and Used by Animal Services - Responsibility View</b>				<b>\$367</b>
	<b>2. Assets Managed by Other Service Areas</b>				
	Facilities		2	Each	\$10,765
	Fleet		11	Each	\$1,163
	Software		1	Each	\$240
	<b>Subtotal Managed by Other Service Areas</b>				<b>\$12,168</b>
<b>TOTAL - USER VIEW (1+2)</b>				<b>\$12,535</b>	

## Asset Condition

Consistent with the Canadian National Infrastructure Report Card, as well as reporting formats of other major organizations and institutions, a five-point rating scale (as shown in Table 18 below) was used to

assign a condition to all assets. The City aims to continuously improve its assets condition assessment protocols to bring them in line with industry best practices to better reflect reliability and adequacy of the assets to provide service.

Table 18 – Five Point Infrastructure Rating Scale

Rank	Condition	Definition
1	Very Good	The infrastructure in the system is in generally good condition, typically new or recently rehabilitated. A few elements show signs of deterioration that require attention.
2	Good	The infrastructure in the system is in good condition; some elements show signs of deterioration that require attention. A few elements show sign of significant deficiencies
3	Fair	The infrastructure in the system or network is in fair condition; it shows general signs of deterioration and requires attention. Some elements exhibit significant deficiencies.
4	Poor	The infrastructure in the system or network is in poor condition and mostly below standard, with many elements approaching the end of their service life. A large portion of the system exhibits significant deterioration.
5	Very Poor	The infrastructure in the system or network is in unacceptable condition with widespread signs of advanced deterioration. Many components in the system exhibit signs of imminent failure, which is affecting service.

The following approaches were used to assess the asset condition to the State of the Local Infrastructure:

- Facility Condition Index (FCI)** – The FCI is a standard facility management benchmark that objectively assesses the current condition of a building asset. The 2023 SOLI continues the use of the Facility Condition Index (FCI) calculation as the primary method to determine the overall

condition of each facility. The facilities Condition grade (Very Good to Very Poor ratings) goes hand-in-hand with FCI and is an industry standard way of evaluating asset condition in a way that is understandable to the public and Council. Building Condition Assessment (BCA) data determined the overall condition of facility assets. Table 19 below indicates the Facilities Condition Grading System used in this SOLI Report.

Table 19 – Facilities General Condition Grading System

Grade	Description	Condition Criteria	FCI Rating
1	Very Good	Only normal maintenance required	0% - 2%
2	Good	Minor Defects only - Minor maintenance required	2% - 5%
3	Fair	Maintenance required to return to accepted Level of Service - Significant maintenance required	5% - 10%
4	Poor	Requires Renewal - Significant renewal/upgrade required	10% - 30%
5	Very Poor	Significant asset component replacement required	Over 30%

- Pavement Condition Index (PCI)** – The PCI is an industry standard benchmark used to indicate the general condition of pavement. The method to calculate the PCI is based on a technical inspection of the number and types of distresses in a pavement. Pavement distress includes low ride quality, cracking, bleeding, bumps and sags,

depressions, potholes, etc. The result of the analysis is a numerical value between 0 and 10, with 10 representing the best possible condition and 0 representing the worst possible condition.

- Bridge Condition Index (BCI)** – The BCI is a commonly used benchmark that rates the

condition of a bridge by evaluating and rating its sub-components, such as foundations, piers, deck structure, sidewalks/curbs/median, abutments or sidewalks, railings, etc. Each element of the bridge is rated from 1 (the element is on the verge of failure) to 100 (condition as new). An overall measure for the bridge is based on the rating of its elements. All bridges with a span greater than 3 Metres are inspected every two years as per the Provincial mandate.

- **Age & Expected Useful Life** – When no formal condition assessment was available, the age of the asset and its expected useful life (EUL) were used to estimate the current condition. The EUL is the average amount of time in years that an asset

is estimated to function when installed new and assuming routine maintenance is practiced.

- For most assets, the general deterioration curve presented in Table 20 has been applied to derive the condition from the remaining assets useful life and vice versa. However, for some other asset types, such as storm sewers and fleet, a more refined asset class specific deterioration curve was applied. The estimated engineered useful life of an asset is the period of time the asset is expected to provide service. The use of an asset ultimately influences the life of the infrastructure and its ability to provide service.

*Table 20 – Overall Condition Grading Standard Framework for the City*

Grade	Condition	Percentage of Remaining Useful Life
1	Very Good	80-100
2	Good	60-80
3	Fair	40-60
4	Poor	20-40
5	Very Poor	0-20

- **Expert Opinion** – Where formal condition assessment, reliable age data, or the results of the Age & EUL analysis failed to represent actual condition observed by Staff, expert opinion of the City of Brampton service area experts were used to estimate asset condition. For example, all software incorporated into the SOLI report is considered to be in Very Good condition despite the age of the asset based on opinions from staff. The opinion of the expert would override age and useful life in this circumstance.

Based on the inputs described above, Figure 5 below provides a snapshot of the overall condition of municipal infrastructure in the City of Brampton. In general, the assets considered in this report are

assessed in “Good” condition with roughly 5% of the asset base measuring “Very Poor” to “Poor” indicating some assets in these categories may require more immediate renewal/replacement considerations. The overall “Good” condition rating can largely be attributed to the City’s infrastructure being relatively new in age combined with the sound asset management practices the City has employed to date.

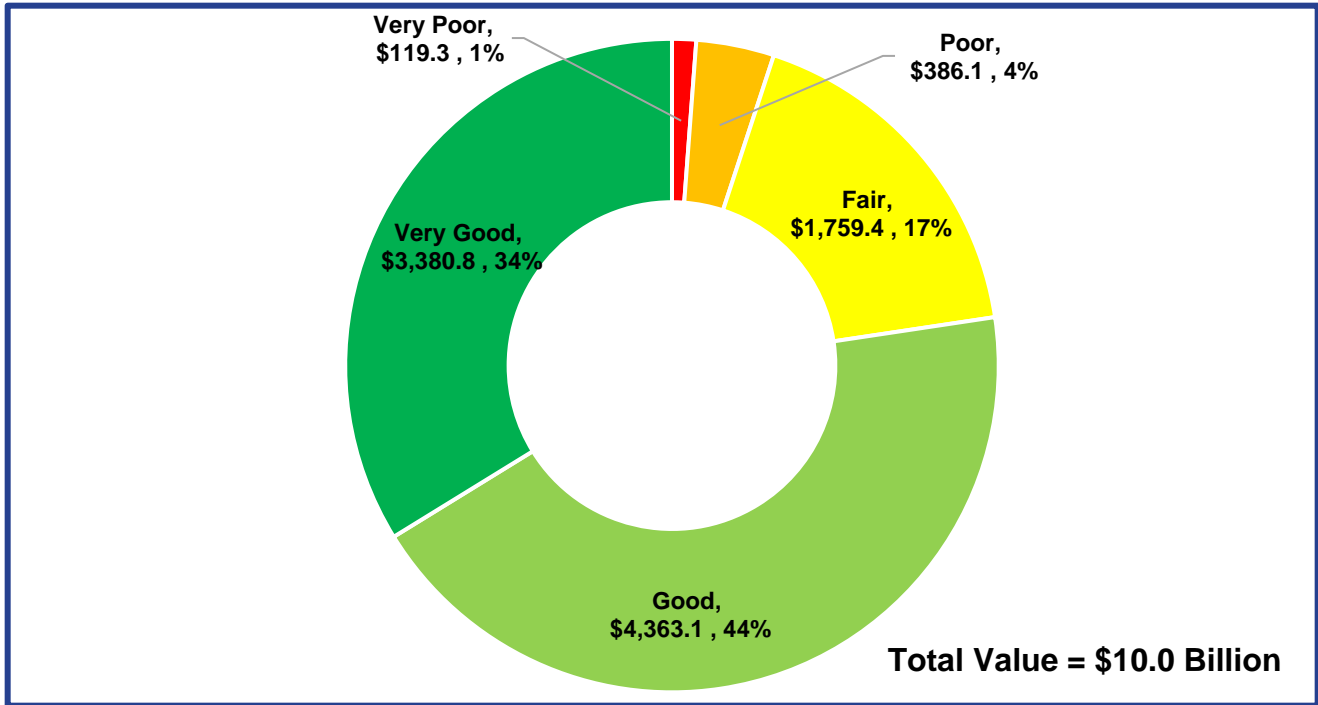
The conditions illustrated in the figure below represent the cumulative value of assets categorized in the five condition areas. As Transportation, Facilities, and Stormwater Infrastructure represent about 82% of the City’s total replacement value, the condition of these specific assets has a greater influence on the overall



condition rating identified. Another key consideration is the number of assets classified as being in Very Poor

condition. Based on the current data presented, these assets make up around 1% of the total.

Figure 5 – Summary of Assets by Condition (In Millions)



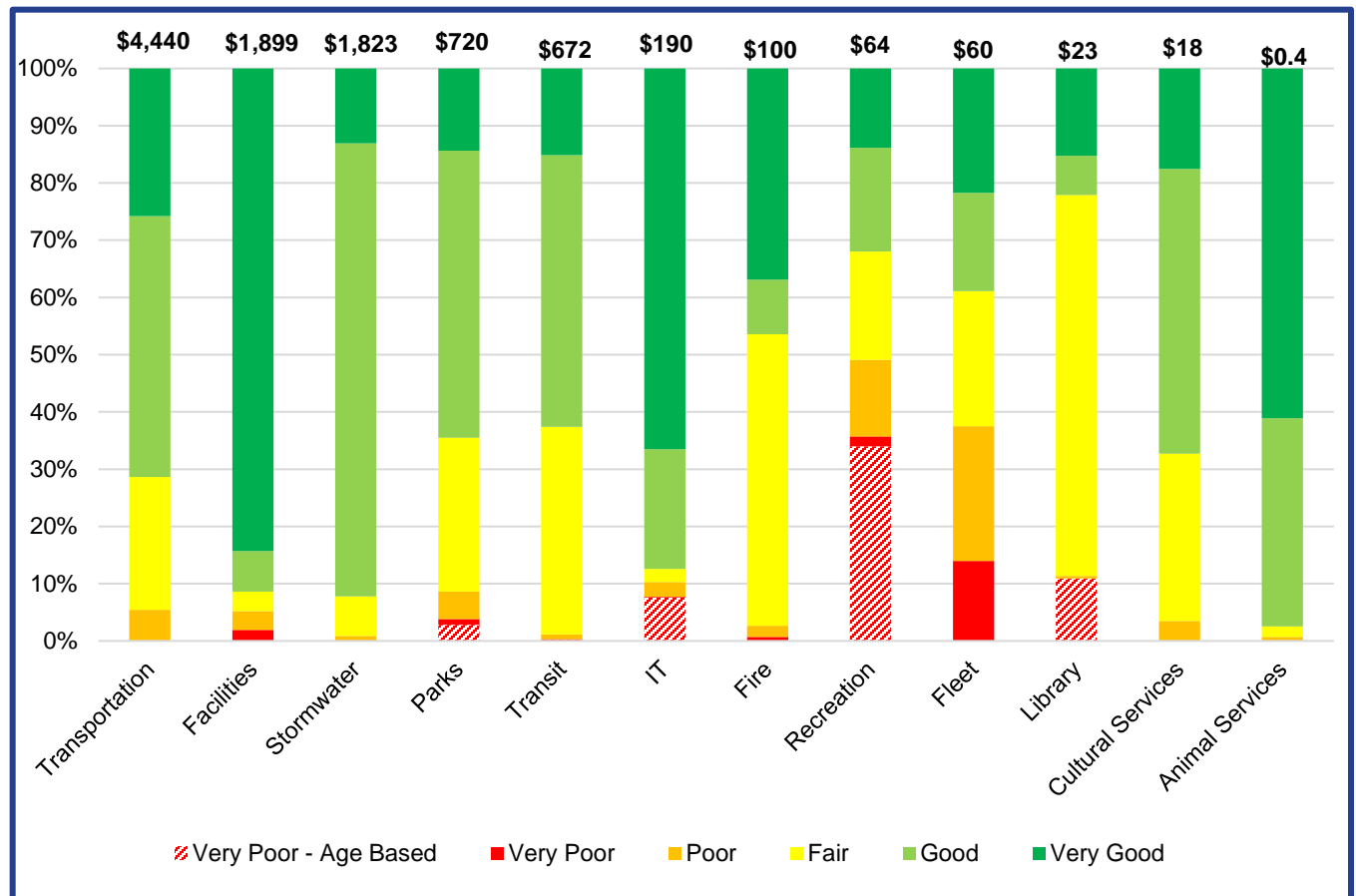
The available replacement value and condition assessment information specific to the service areas is presented in individual report cards. Each report card presents a comparison of the capital asset inventory and replacement values from the 2022 SOLI Report with the results of this 2023 SOLI Report. Please note, for comparison purposes, the valuations illustrated from the 2022 SOLI Report remain in \$2023 while the 2023 SOLI report figures are represented in constant \$2024. Figure 6 below provides a more detailed review of the condition assessment by service area. A few notes for consideration:

- The service areas are shown within the responsibility view framework. This means that all assets related to Facilities, Fleet and IT reside under the respective service areas mentioned below. For example, Recreation does not include the recreation centres themselves – the centres

would be reported under Facilities.

- The majority of assets in Very Poor condition were assessed based on the “age” of the asset relative to the useful life and may not accurately reflect actual asset condition. The assets continue to remain in service and are functional. In addition, those service areas represent a small share of the City’s overall asset portfolio.
- For some service areas, such as Fleet, an age-based assessment is used. This assessment is complimented with inspection protocols to better understand asset condition to evaluate the replacement needs.
- Please note, the service area report cards in Appendix A only illustrate the overall asset conditions and do not differentiate Very Poor assets between age and condition-based assessments.

Figure 6 – Summary of Asset Condition by Service Area



Note: Values identified at the top of each bar represents the replacement value of infrastructure under the “Responsibility View” for each service area (in millions). The red-hashed sections reflect age based Very Poor assets which may not truly reflect the condition of the asset – as the City matures its practices, progress is expected in better reporting of these assets condition where feasible

Table 21 below provides qualifications of the assets within each service area that are in Very Poor condition.

Table 21 – Qualification of Very Poor Assets

Service Area	Description	Action Plan
Transportation (\$4.2M)	<ul style="list-style-type: none"> <li>Only 5 lane KM of roadway, some bike lanes, noise walls, retaining walls, fences, guiderails, sidewalks, and multi-use paths</li> <li>Mostly condition based assessments</li> <li>Very Poor assets represent a small portion of the total base (less than 1%)</li> </ul>	<ul style="list-style-type: none"> <li>Very Poor assets are either being renewed or will be addressed through upcoming budgets</li> </ul>
Facilities (\$36.2M)	<ul style="list-style-type: none"> <li>5 Corporate Facilities, 9 Recreation Facilities, 3 Parks Facilities and 1 Work Operations Facility</li> <li>Conditions developed using an FCI based calculation</li> </ul>	<ul style="list-style-type: none"> <li>None of the facilities represent a safety issue or preclude Facilities from delivering services</li> <li>Future budgets to address the condition through individual repair or replacement</li> </ul>

Service Area	Description	Action Plan
Transit (\$2.1M)	<ul style="list-style-type: none"> <li>Largely related to fleet support vehicles, transit facilities (on road) and Specialty Equipment (bus lift and maintenance/ small equipment)</li> </ul>	<ul style="list-style-type: none"> <li>Conditions for some assets are evaluated based on “age” relative to the useful life of the asset and does not necessarily reflect the actual asset condition</li> <li>Most Very Poor assets are monitored by the Transit staff and addressed through the budget</li> </ul>
IT (\$14.7M)	<ul style="list-style-type: none"> <li>Related to end-user information technology and infrastructure assets</li> <li>Frequent replacements due to short asset UL and to keep pace with emerging technology</li> </ul>	<ul style="list-style-type: none"> <li>Condition of majority of the IT assets is evaluated based on “age” relative to the useful life of the asset and does not necessarily reflect the actual asset condition</li> <li>Very Poor IT assets will be upgraded through the future budgets</li> <li>Some assets (i.e. monitors) are replaced upon their failure</li> </ul>
City Support Fleet (\$8.4M)	<ul style="list-style-type: none"> <li>Mostly related to licensed fleet and off-road vehicles (a small portion is fleet equipment)</li> <li>Licensed fleet based on vehicle useful life, high mileage and engine hours</li> <li>Maintained in good and safe working order with increased maintenance costs</li> </ul>	<ul style="list-style-type: none"> <li>Due to budgetary pressures, some Very Poor assets will be replaced through upcoming budgets and the remaining will receive enhanced maintenance to provide delivery of services.</li> <li>Very Poor assets are replaced through the multi-year capital budgeting and in line with the recommendations of the Brampton Sustainable Fleet Strategy.</li> </ul>
Fire (\$0.7M)	<ul style="list-style-type: none"> <li>Mostly related to fire support vehicles</li> <li>Condition assigned for these assets are based on Age</li> </ul>	<ul style="list-style-type: none"> <li>Conditions for support vehicles are evaluated based on “age” relative to the useful life of the asset and does not necessarily reflect the actual asset condition</li> <li>Very Poor assets are monitored by the Fire staff and addressed through the budget</li> </ul>
Parks (\$27.5M)	<ul style="list-style-type: none"> <li>Very Poor assets represent a small portion of the total base (4%)</li> <li>None of the playgrounds, shade structures or fitness equipment are in VP condition</li> <li>Mostly age-based assessments with limited data on actual asset upgrades. All assets are safe and working condition.</li> </ul>	<ul style="list-style-type: none"> <li>Condition of the majority of the Park assets is evaluated based on “age” relative to the useful life of the asset and does not necessarily reflect the actual asset condition</li> <li>Trees in very poor condition continue to be monitored by our Forestry staff and are either already removed or will be removed when required</li> </ul>

Service Area	Description	Action Plan
Recreation (\$22.9M)	<ul style="list-style-type: none"> <li>• Related to furniture, general and major equipment (including some spray pads and fitness equipment)</li> <li>• Very Poor condition is based on estimated age and useful life of category, not necessarily reflective of the actual asset condition</li> <li>• No safety issues or effect on levels of service</li> </ul>	<ul style="list-style-type: none"> <li>• Condition reporting of Very Poor assets is based on best available information and needs to be matured for completeness and accuracy</li> <li>• Assets continue to be replaced through multi-year capital budgeting</li> </ul>
Library (\$2.5M)	<ul style="list-style-type: none"> <li>• Related to furniture/equipment but about 76% of the Very Poor value attributed to computer equipment</li> <li>• Frequent replacements due to short asset UL. All assets are in safe and working order</li> <li>• Age based assessment</li> </ul>	<ul style="list-style-type: none"> <li>• No safety issue or effect on levels of service</li> <li>• Very Poor assets are either being replaced or will be addressed through upcoming budgets</li> </ul>

## Financing Strategy

The City of Brampton manages assets across various service areas using distinct lifecycle strategies, which are currently a mix of formal and informal procedures.

Consistent with the recommendations of the City's Corporate Asset Management Plan (Corporate AMP) and regulatory requirements, the recently completed 2024 Service Area Asset Management Plan categorizes the City's asset related work into the different lifecycle action categories. These categories represent the actions undertaken throughout the lifecycle of assets to ensure they provide desired

levels of service.

As the 2024 Service Area AMP was recently completed and financing strategy outlined in this plan incorporating 2024 budget information, no update has been prepared in this SOLI Report despite the change in asset valuation. However, it is expected that the 2024 SOLI Report prepared in 2025 will include a revised financing strategy which will also be informed by the departmental AMPs for Transportation and Stormwater Assets currently underway and projected to be complete by Q2 2025.

# Future Improvements

The City’s Corporate Asset Management Office aims to collaborate with stakeholders to enhance various aspects of overall asset management practices. These initiatives will improve data quality and confidence while driving corporate change. The 2024 SA AMP included detailed future improvement initiatives. These initiatives (including estimated timeline and priority) covered:

- Levels of Service

- Risk Management Strategy
- Climate Change Integration
- Governance
- Asset Information
- Lifecycle Management Strategy
- Financing Strategy

Table 22 below outlines the SOLI-specific improvement plan initiatives.

*Table 22 – SOLI Improvement Plan Initiatives*

Area of Improvement	Action	Outcome	Timeline	Priority	Notes
Data Enhancement	Improve <b>condition</b> data through inspection programs and condition assessments	Improved data confidence and ability to transition into a risk-based approach, allowing for better maintenance and replacement decisions.	Medium	High	For certain asset classes, inspection programs with full condition assessments are not feasible. When considering assets that will continue to use an age-based approach, the City is targeting a maturity rating based on condition of approximately 91%.
	Improve <b>useful life</b> reliability by continual validation of useful life assumptions	More reliable data and better understanding of asset management needs.	Short	Medium	The basis of the useful life of the assets is benchmarking, manufacturer recommendations, and history of the City’s owned assets and/or expert opinion.

Area of Improvement	Action	Outcome	Timeline	Priority	Notes
<b>Data Enhancement</b>	Refined <b>replacement valuations</b> through desegregation of larger complex assets to increase granularity of inventories and costing, benchmarking against local price indices, inclusion of whole life cycle costs and improved methodologies for perpetual asset valuation.	Further refinement and reporting of the total asset inventory and better alignment of budget allocations with actual replacement needs.	Medium	High	Currently, two approaches are used to identify current replacement value of assets. The first is updating cost information based on recent data from service areas (74% of the replacement value reported under the 2023 SOLI were provided in current dollars). If no recent data is available, inflation factors based on varying indices are applied to historical costs (as identified in Table 5).
	Include any missing asset categories and add new assets to <b>inventory</b> to ensure complete and accurate asset registries.	Comprehensive asset data that supports better planning, tracking, and evidence-based decision making across all service areas.	Short	High	Asset inventory growth is largely driven by the addition of new assets and improved accuracy of data related to existing assets. The City is continually improving its data collection and validation processes which are aimed towards improving data confidence.
<b>Governance</b>	Establish governance frameworks, build staff capacity through training, and support coordination of efforts and standardization	Informed decision making at the corporate level.	Long	Medium	It is important that City staff within the Corporate Asset Management Office lead this process of change.

Area of Improvement	Action	Outcome	Timeline	Priority	Notes
<b>Tools and Technology</b>	Upgrade and integrate asset management software tools to centralize asset tracking and decision-making data	Enhanced ability to manage asset data, supporting informed decision-making and efficient asset management	Medium	High	The City is studying the feasibility of adopting a Decision Support Solution (DSS). The goal is to potentially implement a DSS that links asset management activities across departments in a holistic manner. The DSS will improve decision-making processes, driving better outcomes in asset planning and investment decisions.



Appendix

# A

# Infrastructure Report Cards

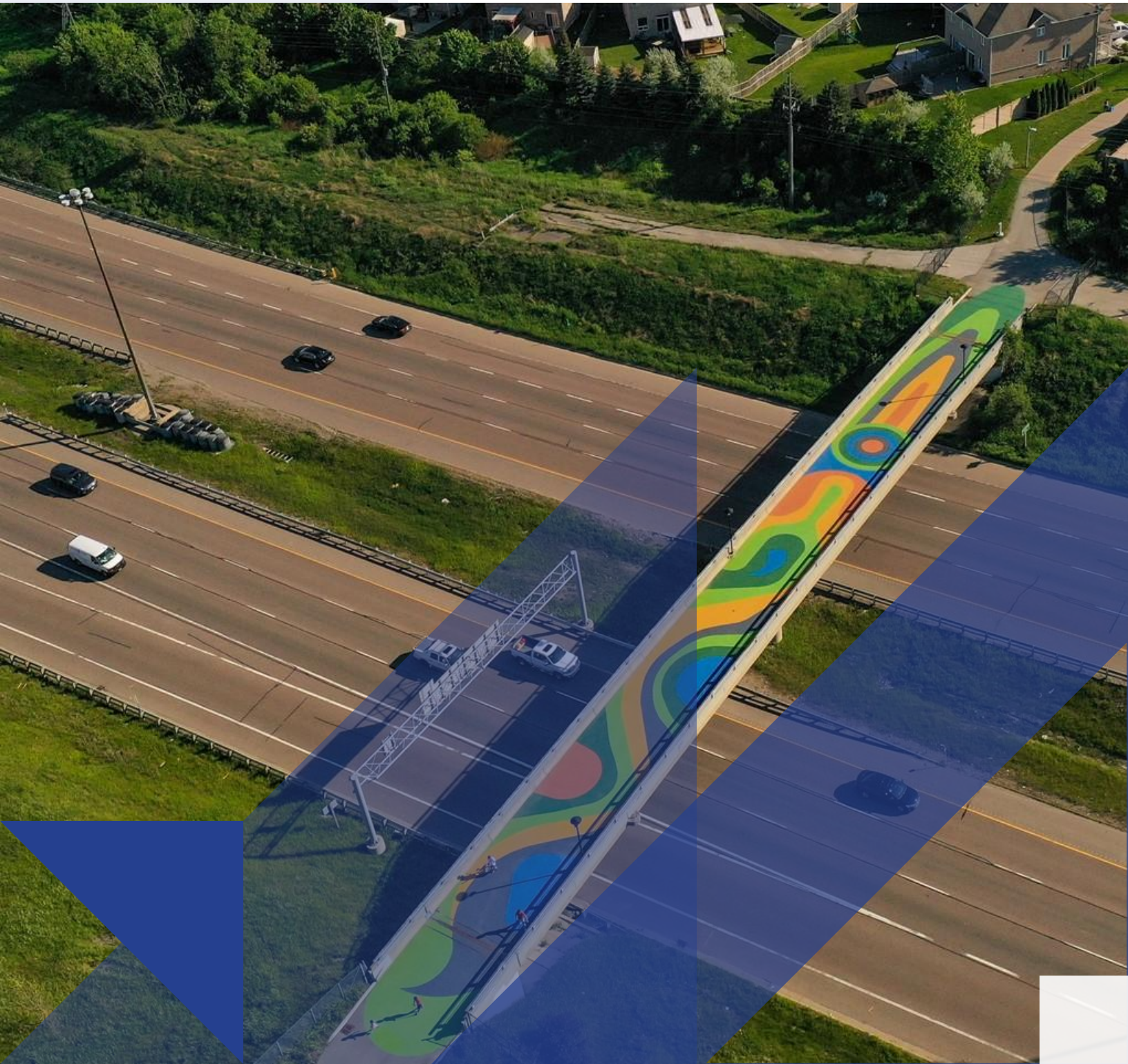




Appendix

# A.1

## Transportation





<b>Total Asset Replacement Value:</b>	\$4.4 Billion
<b>Total Asset Replacement Value Including Facilities, Fleet and Software:</b>	\$4.6 Billion
<b>Future Condition Trend (Next 10 Years):</b>	Declining - As assets age they require close monitoring in the future
<b>Data Confidence &amp; Reliability:</b>	Age and Condition Based

The 2023 SOLI analysis continues to report assets under two different asset representation perspectives: "**Responsibility View**" and "**User View**" representation

**Responsibility View:** Shows the assets under the service area that is responsible for managing the capital needs

**User View:** Shows the assets under the service area that is using them

While the User View shows the use of assets, the Responsibility View:

- ✓ provides a direct line of sight to those assets managed by the service area;
- ✓ will help prioritize lifecycle activities managed by the service area;
- ✓ aligns with industry best practices; and
- ✓ provides guidance to future asset management planning practice and departmental initiatives.

The table below illustrates the replacement value (in \$2024) under the two different views.

Asset Type	Replacement Value (\$Millions)	Asset Inventory
<b>Assets Managed by Transportation Services</b>		
Roadway Network (Includes Islands)*	\$2,429.8	3,520 Lane KM
Roadway Network (Bike Lanes)**	\$10.6	339 Lane KM
Structures (Bridges & Culverts)	\$968.9	5 KM
Structures (Other)***	\$100.5	119 KM
Walkways & Paths	\$455.4	2,145 KM
Traffic Services	\$474.6	105,006 Each
<b>Subtotal Assets Managed by Transportation Services (Responsibility View)</b>	<b>\$4,439.8</b>	<b>-</b>
<b>Assets Managed by Other Service Areas</b>		
Operations Facilities	\$96.4	11 Each
Fleet	\$18.8	166 Each
Software	\$9.2	20 Each
<b>Total Replacement Value (User View)</b>	<b>\$4,564.3</b>	<b>-</b>

\* Includes 179 Vertical Traffic Calming Devices (Speed Bumps)

\*\* Bike Lanes are repurposed roadway network and the replacement value is the extra cost of delineating the bike lane from the roadway network

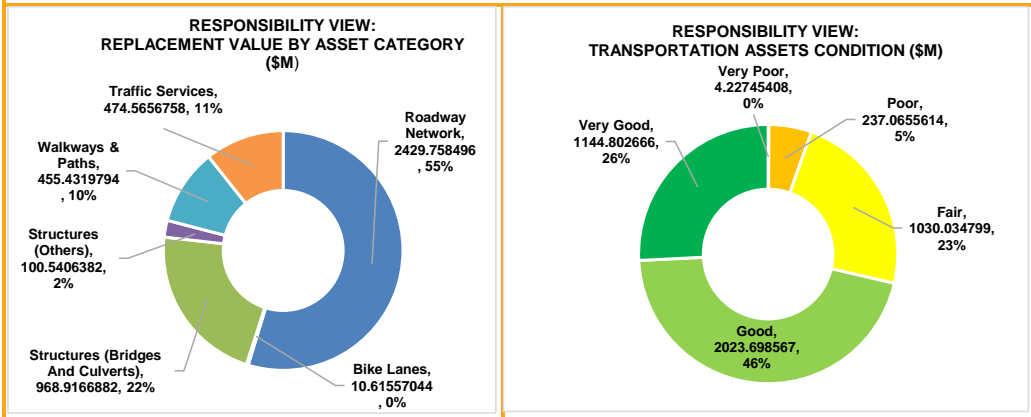
\*\*\* Other structures include: gateway features, noise walls, retaining walls on walkways, fences, guiderails, handrails and steps





**Major Types of Assets within Transportation Services - Responsibility View**

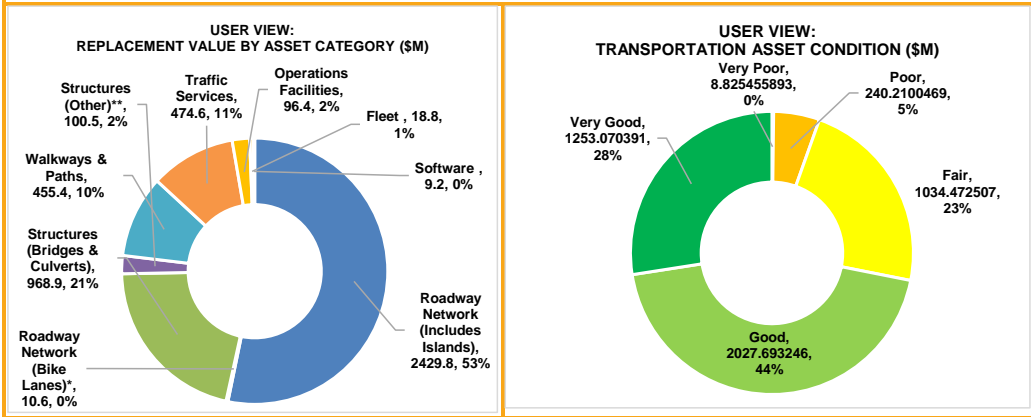
The figure below illustrates the replacement value and condition of Transportation Services assets under the responsibility view. Under this view, the total replacement value of assets is \$4.4 billion. Of this total, roughly 55% is related to the roadway network (including islands and bike lanes). About 72% of the assets are considered to be in Good to Very Good condition. Approximately 5% of assets are in Poor condition and less than 1% of assets are in Very Poor condition.



Data Source: Pavement and Bridge Management System, Departmental Inventories, dTIMS BA, GIS (Geographical Information System), PSAB, Parametric Estimating Guide of MTO 2016, City Works

**Major Types of Assets within Transportation Services - User View**

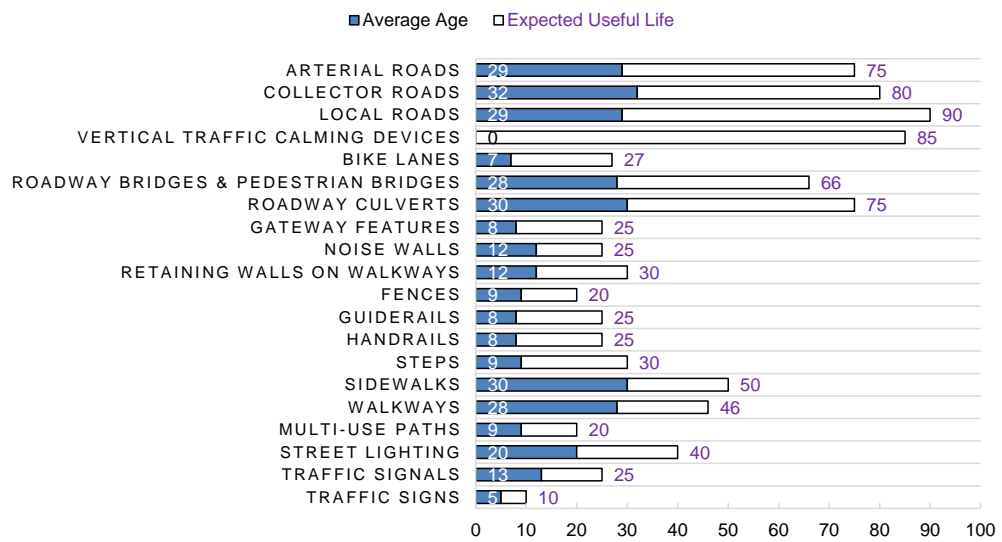
The figures below illustrate the replacement value and condition of Transportation Services assets under the user view. Under the user view illustration which also captures facilities, fleet and software, the replacement value is about \$4.6 billion. Approximately 72% of the assets are considered to be in Good to Very Good Condition.





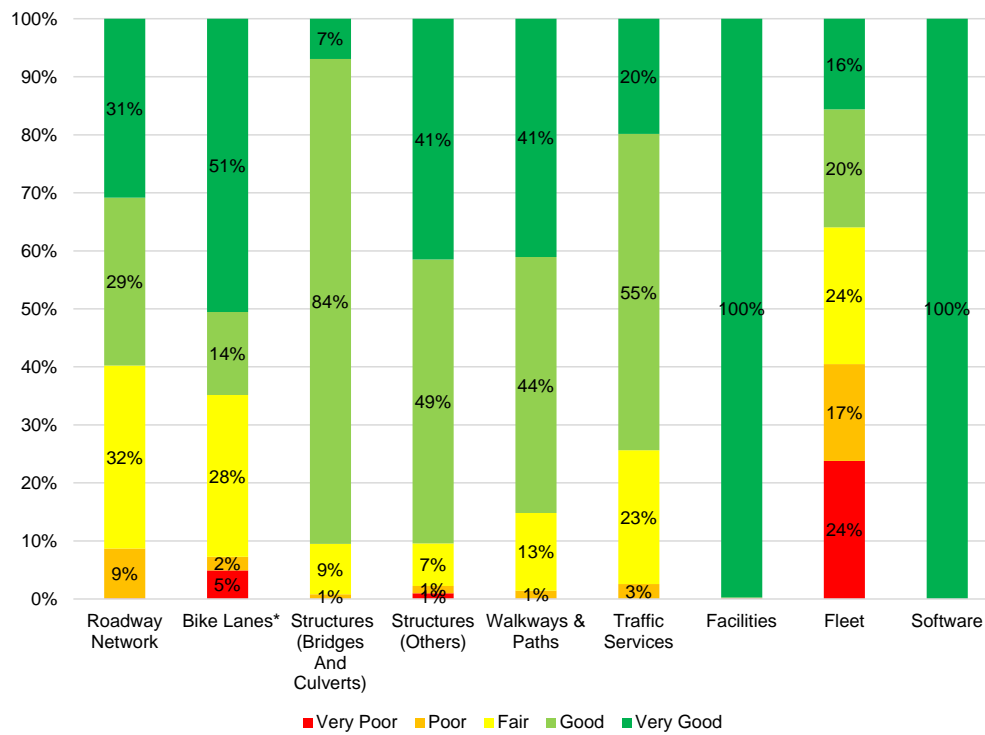
**Age Summary**

The following figure summarizes the average age of the City's Transportation assets compared to the remaining useful life of each asset category. The methodology applied to undertake the average age profile analysis considers the age weighted by replacement value of each asset, which influences average asset age and remaining useful life illustrated.



**Condition Summary**

The figure below illustrates the condition of the seven sub-component assets of Transportation Services. The majority of assets are in Good to Very Good condition, although, a small portion of assets pertaining to the Roadway Network, Bike Lanes, Structures, Walkways & Paths, Traffic Services, Facilities and Fleet are in Poor and Very Poor condition.



\*The bike lanes are a small percentage of the roadway network, and their condition reflects the condition of the roadway network. The bike lanes corresponding to poor condition need collaboration with the region to rehabilitate the roadway network.



**Comparison of 2023 vs. 2022 Inventory and Replacement Value**

The tables below outlines the difference in Transportation Services assets in the 2023 SOLI relative to the 2022 SOLI while considering reporting under the two different views. Please note, the 2022 SOLI is shown as it was reported (i.e. in \$2023). The values for the 2023 SOLI are in \$2024.

Under the responsibility view framework, the value of Transportation Services assets has increased by 14% from approximately \$3.9 billion to \$4.4 billion. This increase is attributed to the growth of asset base and overall cost increases for these assets. Recent cost data has been provided and used to inform this analysis. The 2023 SOLI analysis now includes Vertical Traffic Calming Devices and Bike Lanes into the analysis.

When considering the Transportation Services Facilities, Fleet and Software, the total asset value for Transportation Services has increased proportionately with the inclusion of these assets. Furthermore, the total value of Transportation Services assets represents an increase of 14% (or \$559.6 million) from the value reported in 2022 after inflationary adjustments.

Please note, the Facilities, City Support Fleet and IT report cards will include additional information (including the inflation measure applied) on those assets used by Transportation Services but maintained and managed by a different City department.

Asset	2022 SOLI		2023 SOLI	
Roadway Network (Includes Islands)	3,819	Lane KM	3,520	Lane KM
Roadway Network (Bike Lanes)*	N/A		339	Lane KM
Structures (Bridges & Culverts)	5	KM	5	KM
Structures (Other)**	115	KM	119	KM
Walkways & Paths	1,948	KM	2,145	KM
Traffic Services	97,402	Each	105,006	Each
Operations Facilities	11	Each	11	Each
Fleet	156	Each	166	Each
Software	20	Each	20	Each

Asset	2022 SOLI (\$2023)	2023 SOLI (\$2024)	Difference	
<b>1. Assets Managed by Other Service Areas***</b>				
Operations Facilities	\$ 95,478,671	\$ 96,374,967	\$ 896,296	1%
Fleet	\$ 18,332,582	\$ 18,843,356	\$ 510,774	3%
Software	\$ 8,484,200	\$ 9,224,277	\$ 740,077	9%
<b>Subtotal Assets Managed by Other Service Areas</b>	<b>\$ 122,295,453</b>	<b>\$ 124,442,599</b>	<b>\$ 2,147,146</b>	<b>2%</b>
<b>2. Assets Managed by Transportation Services</b>				
Roadway Network (Includes Islands)	\$ 2,127,196,084	\$ 2,429,758,496	\$ 302,562,412	14%
Roadway Network (Bike Lanes)*	\$ -	\$ 10,615,570	\$ 10,615,570	N/A
Structures (Bridges & Culverts)	\$ 861,326,109	\$ 968,916,688	\$ 107,590,579	12%
Structures (Other)**	\$ 108,834,552	\$ 100,540,638	\$ (8,293,914)	-8%****
Walkways & Paths	\$ 389,422,114	\$ 455,431,979	\$ 66,009,865	17%
Traffic Services	\$ 395,618,749	\$ 474,565,676	\$ 78,946,927	20%
<b>Subtotal Assets Managed by Transportation Services (Responsibility View)</b>	<b>\$ 3,882,397,608</b>	<b>\$ 4,439,829,048</b>	<b>\$ 557,431,440</b>	<b>14%</b>
<b>Total Replacement Value: User View (1+2)</b>	<b>\$ 4,004,693,061</b>	<b>\$ 4,564,271,647</b>	<b>\$ 559,578,586</b>	<b>14%</b>

\* Replacement value of bike lanes is the additional cost of bike lane assets over the base roadway network

\*\* Other structures include: gateway features, noise walls, retaining walls on walkways, fences, guiderails, handrails and steps

\*\*\* Responsibility of managing the assets lies with another service area, but assets are used by Transportation

\*\*\*\*The reduction in the replacement value of Structures (Other) is due to cost data improvement for Gateway features and Noisewalls.



Appendix

# A.2

## Stormwater







<b>Asset Replacement Value:</b>	\$1.8 Billion
<b>Future Condition Trend (Next 10 Years):</b>	Stable - City employs a dedicated Service Fee to fund operational and asset renewal expenditures.
<b>Data Confidence &amp; Reliability:</b>	Age and Condition Based*

\* The City is undertaking a fulsome assessment of all stormwater assets which will be used to update the state of repair, valuations, and lifecycle costs over time

The 2023 SOLI analysis continues to report assets under two different asset representation perspectives: "Responsibility View" and "User View"

**Responsibility View:** Shows the assets under the service area that is responsible for managing them

**User View:** Shows the assets under the service area that is using them

While the User View shows the use of assets, the Responsibility View:

- ✓ provides a direct line of sight to those assets managed by the service area;
- ✓ will help prioritize lifecycle activities managed by the service area;
- ✓ aligns with industry best practices; and
- ✓ provides guidance to future asset management planning practice and departmental initiatives.

The table below illustrates the replacement value (in \$2024) under the two different views.

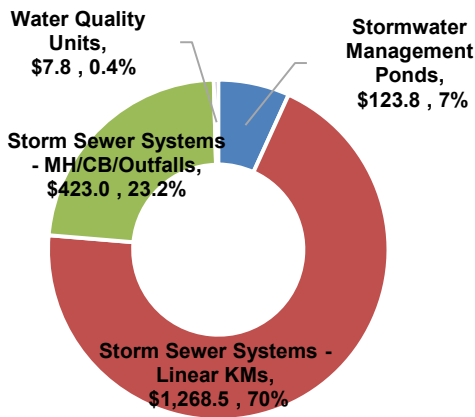
Asset Type	Replacement Value (\$Millions)	Asset Inventory
<b>Assets Managed by Stormwater</b>		
Stormwater Management Ponds	\$123.8	193
Storm Sewer Systems - Linear	\$1,268.5	2,013,934 Metres
Storm Sewer Systems - MH/CB/Outfalls	\$423.0	70,465
Water Quality Units	\$7.8	130
Culverts	-	2,391
Ditches	-	130 KM
LIDS	-	40
<b>Total Replacement Value (Responsibility View)</b>	<b>\$1,823.1</b>	-



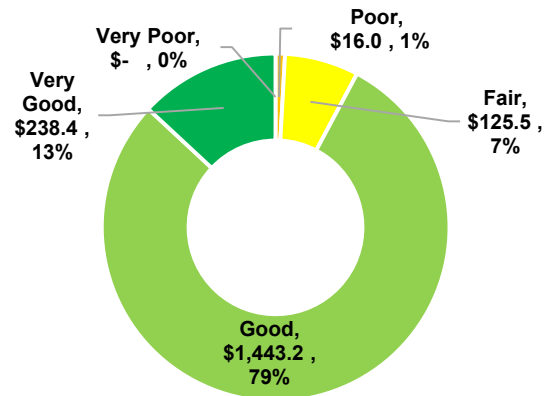
**Major Types of Assets within Stormwater Services - Responsibility View**

The figures below illustrate the replacement value and condition of Stormwater assets under the responsibility view. The total replacement value of assets is \$1.8 billion. About 93% of this total is related to the City's storm sewer system (Linear KMs & MH/CB/Outfalls) with the remaining value largely associated with stormwater management ponds. About 92% of the City's stormwater assets are Good to Very Good condition with the remainder of assets in Fair or Poor condition. The stable future condition trend is attributable to the fact that the majority of Stormwater assets are relatively new and have a long useful life and therefore have a long remaining useful life. In addition to this, the City introduced a dedicated stormwater service fee, which transfers funding from property taxes to a service fee program. Revenues derived from the service fees will be used exclusively towards Stormwater-related costs and investments, which will in turn help relieve some pressure on the capital budget, and allow funds to be re-allocated towards other service areas.

**RESPONSIBILITY VIEW:  
REPLACEMENT VALUE BY ASSET  
CATEGORY (\$M)**



**RESPONSIBILITY VIEW:  
STORMWATER ASSET CONDITION (\$M)\***



\*The City is undertaking a fulsome assessment of all stormwater assets which will be used to update the state of repair, valuations, and lifecycle costs over time

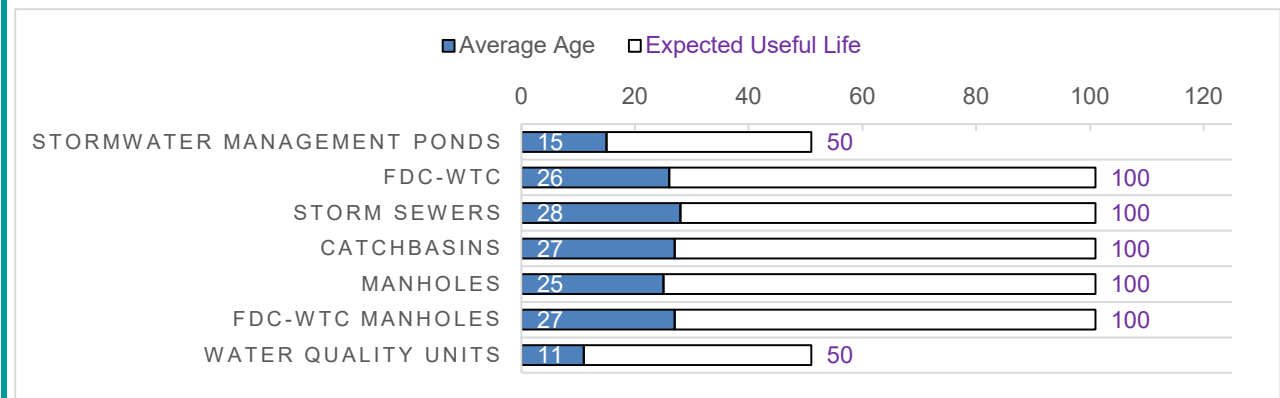
Data Source: GIS database, Departmental Inventory for Water Quality Units (Excel based tracking), Manufacturer pipe price lists and City contracts (cost model)





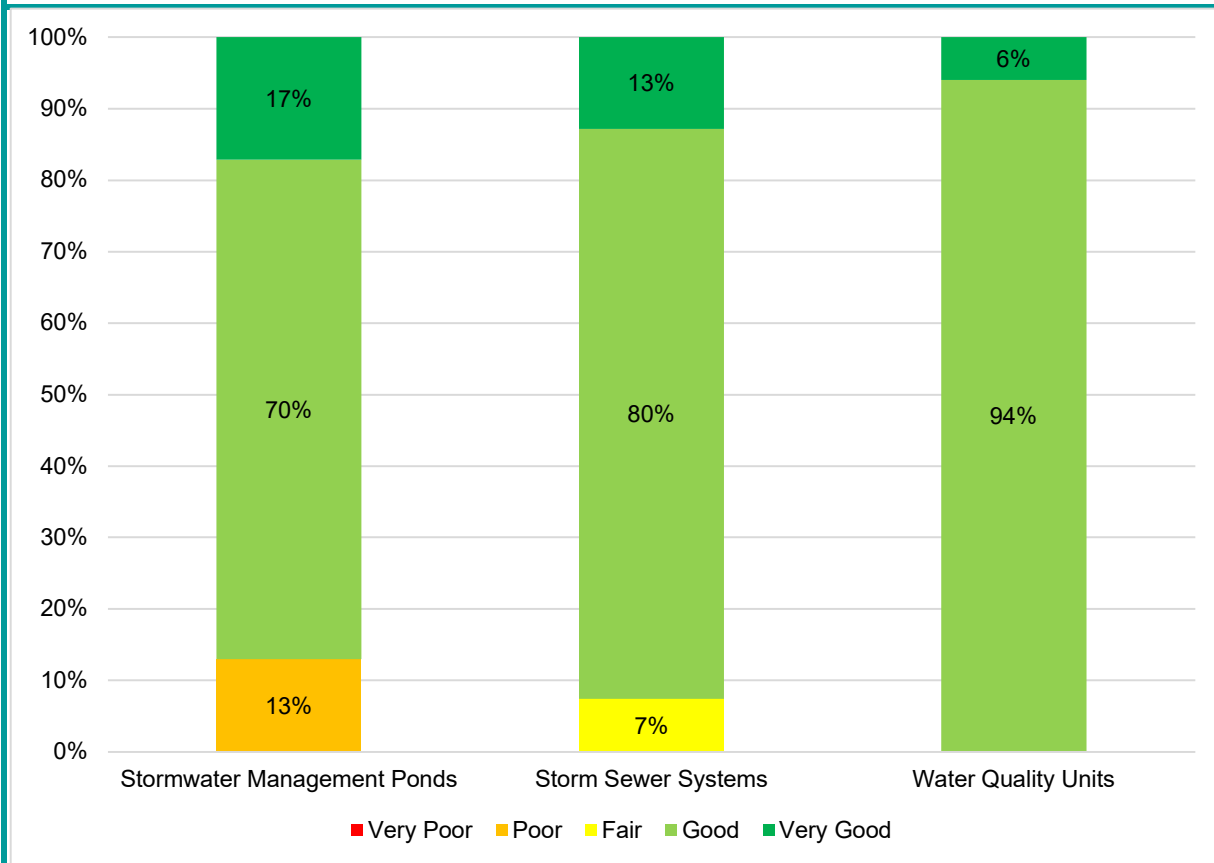
**Age Summary**

The following figure summarizes the average age of the City’s Stormwater Assets compared to the expected useful life of each asset category. The methodology applied to undertake the average age profile analysis considers the age weighted by replacement value of each asset, which influences average asset age and remaining useful life illustrated. It is important to emphasize that the age of an asset relative to its useful life does not always provide a complete picture of its actual condition.



**Condition Summary**

The figure below illustrates the condition of the four sub-component assets of Stormwater services. All sub-components are generally in Good to Very Good Condition, however, about 13% of Stormwater Management Ponds are in Poor condition.



\*The City is undertaking a fulsome assessment of all stormwater assets which will be used to update the state of repair, valuations, and lifecycle costs over time



**Comparison of 2023 vs. 2022 Inventory and Replacement Value**

The tables below outline the difference in Stormwater assets in the 2023 SOLI relative to the 2022 SOLI. Please note, the 2022 SOLI is shown as it was reported (i.e. in \$2023). The values for the 2023 SOLI are in \$2024.

Under the responsibility view framework, the total value of Stormwater assets has increased from \$1.7 billion to \$1.8 billion. The increase in value can largely be attributed to cost increases since the last report. All asset costs were inflated by the Non-Residential Building Construction Price Index (NRCPI) from the values identified in the 2022 SOLI (which were reported in \$2023). Additional information on the indices applied to each asset class can be found in Table 5 of this report. In addition, the increase in overall count and value can be attributed to data improvements as part of the 2023 SOLI that captures assets that were previously not reported under the SOLI and the growth of the stormwater drainage system due to development. Additional assets are captured under the 2023 SOLI that were not previously reported, including Culverts, Ditches and LIDS. Currently only the count of these assets are provided with further replacement value analysis to be completed in future SOLI reports.

Asset	2022 SOLI		2023 SOLI	
Stormwater Management Ponds	186	Each	193	Each
Storm Sewer Systems - Linear	1,902,124	Meters	2,013,934	Meters
Storm Sewer Systems - MH/CB	65,059	Each	70,465	Each
Water Quality Units	128	Each	130	Each
Culverts	N/A	-	2,391	Each
Ditches	N/A	-	130	KM
LIDS	N/A	-	40	Each

Asset	2022 SOLI (\$2023)	2023 SOLI (\$2024)	Difference	
Stormwater Management Ponds	\$ 112,614,175	\$ 123,787,165	\$ 11,172,990	10%
Storm Sewer Systems - Linear & MH/CB	\$ 1,552,466,357	\$ 1,691,512,874	\$ 139,046,517	9%
Water Quality Units	\$ 7,160,318	\$ 7,792,560	\$ 632,242	9%
Culverts	N/A	\$ -	\$ -	N/A
Ditches	N/A	\$ -	\$ -	N/A
LIDS	N/A	\$ -	\$ -	N/A
<b>Total Replacement Value: User View (1+2)</b>	<b>\$ 1,672,240,850</b>	<b>\$ 1,823,092,599</b>	<b>\$ 150,851,749</b>	<b>9%</b>

Appendix

# A.3

## Facilities





<b>Total Asset Replacement Value (All Facilities):</b>	\$1.9 Billion
<b>Total Asset Replacement Value (User View - Software &amp; Fleet):</b>	\$6.4 Million
<b>Future Condition Trend (Next 10 Years):</b>	Stable - Assets are renewed as needed and therefore remain in stable condition
<b>Data Confidence &amp; Reliability:</b>	Condition Based

The 2023 SOLI analysis continues to report assets under two different asset representation perspectives: "Responsibility View" and a "User View"

- Responsibility View:** Shows the assets under the service area that is responsible for managing the capital needs.
- User View:** Shows the assets under the service area that is using them.

While the User View shows the use of assets, the Responsibility View:

- ✓ provides a direct line of sight to those assets managed by the service area;
- ✓ will help prioritize lifecycle activities managed by the service area;
- ✓ aligns with industry best practices; and
- ✓ provides guidance to future asset management planning practice and departmental initiatives.

The table below illustrates the replacement value (in 2024\$) under the two different views.

Asset Type	Replacement Value (\$Millions)	Asset Inventory
<b>1. Assets Used by Other Service Areas and Managed by Facilities</b>		
Corporate Facilities	\$428.2	38
Animal Services Facilities	\$10.8	2
Cultural Services Facilities	\$114.9	1
Recreation Facilities	\$745.2	73
Parks Facilities	\$22.2	19
Transit Facilities	\$217.9	8
Library Facilities*	\$107.0	6
Fire Facilities	\$156.4	17
Work Operations Facilities*	\$96.4	11
<b>Subtotal (Responsibility View)</b>	<b>\$1,898.9</b>	<b>175</b>
<b>2. Assets Used by Facilities and Managed by Other Service Areas</b>		
Software	\$4.2	4
Fleet	\$2.2	69
<b>Subtotal (User View)</b>	<b>\$6.4</b>	<b>-</b>
<b>Total Replacement Value (User + Responsibility View)</b>	<b>\$1,905.2</b>	<b>-</b>

\* Work Operations include facilities associated with Fleet, Stormwater and Transportation

\* Four (4) library facilities are standalone buildings while two (2) of the Library facilities are shared facilities with Recreation

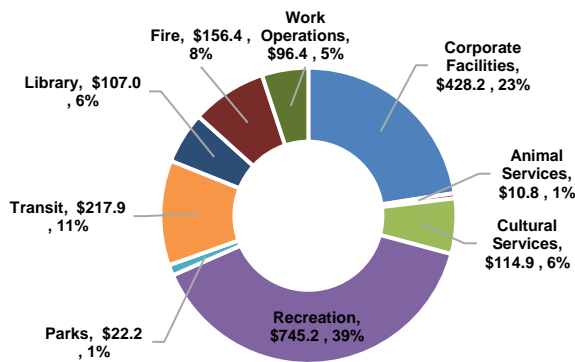




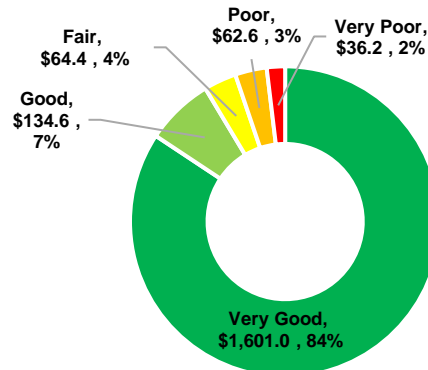
### Major Types of Assets within Facilities - Responsibility View

The figure below illustrates the replacement value and condition of Facilities assets under the responsibility view. Under this view, the total replacement value of assets is \$1.9 billion. This includes all facilities used across various service areas in addition to Corporate Facilities. As depicted in the figure below, Recreation Facilities are the largest portion representing 39% (or \$745.2 million) of the total facilities replacement value. Overall, the facilities are in Very Good condition, with 91% of assets classified to be in Good or Very Good condition. Approximately 5% of assets are in Poor or Very Poor condition. The facilities condition reporting is set on an FCI calculation basis which considers the cost of immediate repair work required at each facility (i.e. deferred maintenance) relative to the replacement value of the facility. Poor and Very Poor condition reporting does not represent a safety issue or preclude service areas from delivering services to meet the needs of residents.

**RESPONSIBILITY VIEW:  
REPLACEMENT VALUE BY SERVICE AREA (\$M)**



**RESPONSIBILITY VIEW:  
FACILITIES ASSET CONDITION (\$M)**

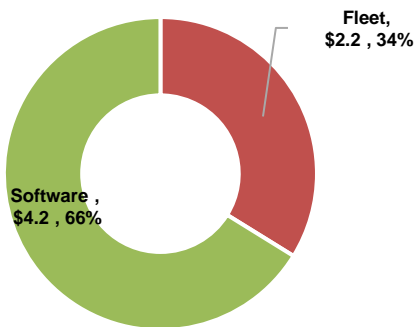


Source: Building Condition Assessments, Suncorp Valuation Report

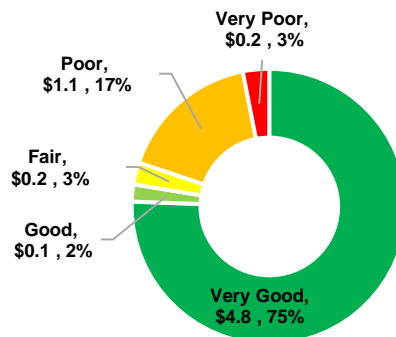
### Major Types of Assets within Facilities - User View

The figures below illustrate the replacement value and condition of assets used by Facilities under the user view. The user view for Facilities captures Software and Fleet, with a total replacement value of \$6.4 million. Approximately 77% of Facilities user view assets are considered to be in Good to Very Good Condition with 20% of assets in Poor or Very Poor condition. Assets classified in Poor or Very Poor condition are not considered to be unsafe; the condition indicates that these assets need immediate repair work to avoid inflated maintenance costs and provide desired levels of service.

**USER VIEW:  
REPLACEMENT VALUE BY SERVICE AREA (\$M)**



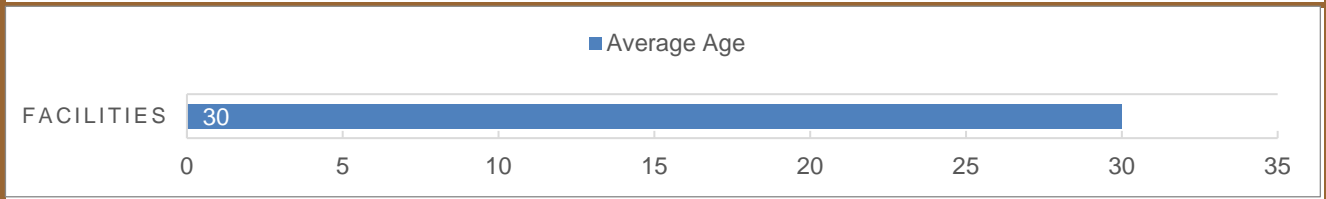
**USER VIEW:  
SOFTWARE & FLEET (\$M)**





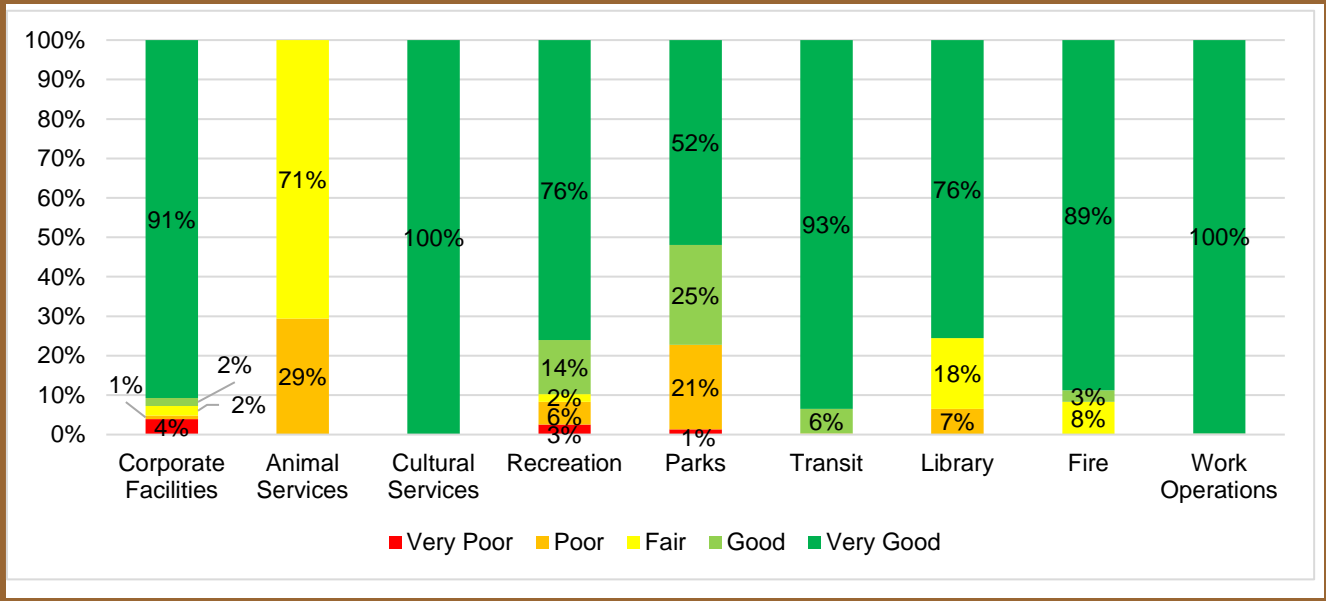
### Age Summary

The following figure summarizes the average age of the City's Facilities assets. The methodology applied to undertake the average age profile analysis considers the age weighted by replacement value of each asset, which influences average asset age illustrated.



### Condition Summary

The figure below illustrates the condition of all facilities assets by service area based on the responsibility view. While the assets are generally in Good to Very Good condition, the overall condition makeup varies by service area. Corporate Facilities, Library, Animal Services, Parks and Recreation all have a small portion of facilities in Poor or Very Poor condition. Again, the condition assessment are determined on an FCI calculation basis which considers the cost of upcoming repair works required at a facility relative to its replacement value. Poor and Very Poor condition reporting does not represent a safety issue or preclude service areas from delivering services to meet the needs of residents.





**Comparison of 2023 vs. 2022 Inventory and Replacement Value**

The tables below outline the difference in Facilities assets in the 2023 SOLI relative to the 2022 SOLI while considering reporting under the two different views. Please note, the 2022 SOLI is shown as it was reported (i.e. in \$2023). The values for the 2023 SOLI are in \$2024.

Under the user view framework, which only considers Software and Fleet, the total value of assets has increased by \$443,200 to \$6.4 million in the 2023 SOLI. The increase can be attributed to cost increases experienced by most asset types.

When considering all Facilities under the responsibility view, the value of all assets increased by 9% (or \$156.9 million) from the value in 2022. The increase can be attributed to the cost changes since the last report. Recent costing data was available and used to value the facilities included in this report. The valuations for facilities which are included in the City's 2024 Development Charges Background Study are based on the 2023 valuation report prepared by Suncorp specifically for the purposes of use in the 2024 DC Study. For other non-DC eligible facilities, the Suncorp report prepared for Insurance purposes was used but adjusted to better align with the cost of constructing a new facility with today's standards (similar to the DC Study approach).

Asset	2022 SOLI		2023 SOLI	
Corporate Facilities	26	Each	38	Each
Animal Services	2	Each	2	Each
Cultural Services	1	Each	1	Each
Recreation	69	Each	73	Each
Parks	18	Each	19	Each
Transit	8	Each	8	Each
Library	6	Each	6	Each
Fire	15	Each	17	Each
Work Operations	11	Each	11	Each
Software	4	Each	4	Each
Fleet	67	Each	69	Each

Asset	2022 SOLI (\$2023)	2023 SOLI (\$2024)	Difference	
<b>1. Assets Used by Facilities and Managed by Other Service Areas*</b>				
Software	\$ 3,973,584	\$ 4,214,461	\$ 240,877	6%
Fleet	\$ 1,950,593	\$ 2,152,958	\$ 202,365	10%
<b>Subtotal Assets Used by Facilities - User View</b>	<b>\$ 5,924,176</b>	<b>\$ 6,367,419</b>	<b>\$ 443,243</b>	<b>7%</b>
<b>2. Assets Used by Other Service Areas and Managed by Facilities</b>				
Corporate Facilities	\$ 355,309,853	\$ 428,156,693	\$ 72,846,840	21%
Animal Services	\$ 9,887,046	\$ 10,765,225	\$ 878,179	9%
Cultural Services	\$ 102,301,865	\$ 114,945,901	\$ 12,644,036	12%
Recreation	\$ 743,492,116	\$ 745,154,337	\$ 1,662,221	0%
Parks	\$ 23,959,029	\$ 22,219,281	\$ (1,739,748)	-7%
Transit	\$ 197,103,902	\$ 217,854,241	\$ 20,750,339	11%
Library	\$ 103,780,112	\$ 107,000,040	\$ 3,219,928	3%
Fire	\$ 110,679,460	\$ 156,405,476	\$ 45,726,016	41%
Work Operations	\$ 95,478,671	\$ 96,374,967	\$ 896,296	1%
<b>Subtotal Assets Managed by Facilities - Responsibility View</b>	<b>\$ 1,741,992,054</b>	<b>\$ 1,898,876,161</b>	<b>\$ 156,884,107</b>	<b>9%</b>
<b>Total Replacement Value (User + Responsibility View)</b>	<b>\$ 1,747,916,230</b>	<b>\$ 1,905,243,580</b>	<b>\$ 157,327,350</b>	<b>9%</b>

Note 1: Valuations for service areas of Animal Services are based on staff discussions which reflect costing from more recent tenders

\*Responsibility of managing the assets lies with another service area, but assets are used by Facilities

Appendix

# A.4

## Transit







## Transit



<b>Asset Replacement Value:</b>	\$671.5 Million
<b>Total Asset Replacement Value Including Facilities and Software:</b>	\$894.7 Million
<b>Future Condition Trend (Next 10 Years):</b>	Stable
<b>Data Confidence &amp; Reliability:</b>	Age and Condition Based

The 2023 SOLI analysis is being reported under two different asset representation perspectives: "**Responsibility View**" and "**User View**" representation

**Responsibility View:** Shows the assets under the service area that is responsible for managing the capital needs

**User View:** Shows the assets under the service area that is using them

While the User View shows the use of assets, the Responsibility View

- ✓ provides a direct line of sight to those assets managed by the service area;
- ✓ will help prioritize lifecycle activities managed by the service area;
- ✓ aligns with industry best practices; and
- ✓ provides guidance to future asset management planning practice and departmental initiatives.

The table below illustrates the replacement value (in \$2024) under the two different views.

Asset Type	Replacement Value (\$Millions)	Asset Inventory
<b>Assets Managed by Transit</b>		
Licensed Vehicle Assets	\$533.2	504
Transit Facilities (On Road)*	\$65.5	3,445
Transit IT Infrastructure**	\$1.4	43
Specialty Equipment***	\$71.4	4,754
<b>Subtotal Assets Managed by Transit (Responsibility View)</b>	<b>\$671.5</b>	<b>-</b>
<b>Assets Managed by Other Service Areas</b>		
Transit Facilities	\$217.9	8
Software Used by Transit	\$5.3	2
<b>Total Replacement Value (User View)</b>	<b>\$894.7</b>	<b>-</b>

\* Transit Facilities (On Road) include Conventional Shelters, Bike Shelters, Zum Shelters, Bus Stops (with Concrete Pads), and Sandalwood Loop

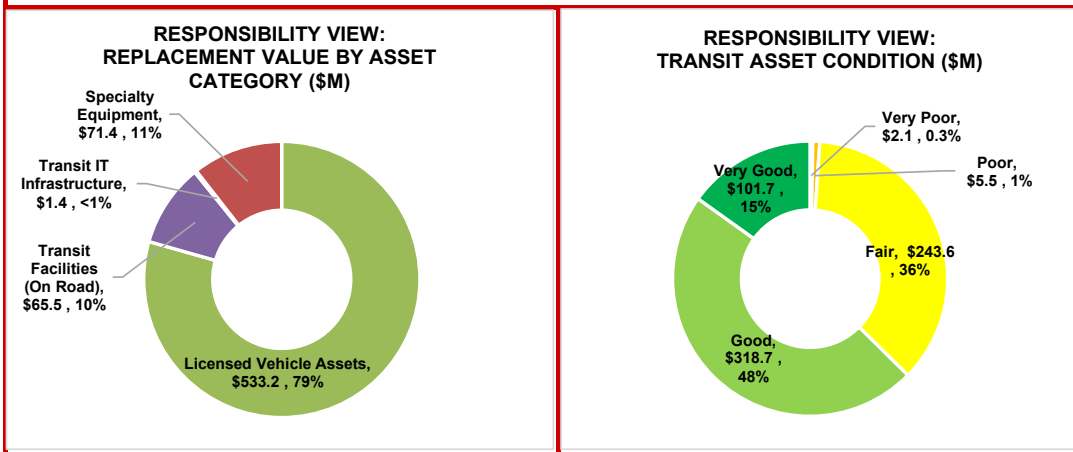
\*\* Transit IT Infrastructure includes Video Wall, CAD/AVL & ID Card Application Hardware

\*\*\* The assets included under specialty equipment are detailed under the "Comparison of 2023 vs. 2022 Inventory and Replacement Value" below



**Major Types of Assets within Transit - Responsibility View**

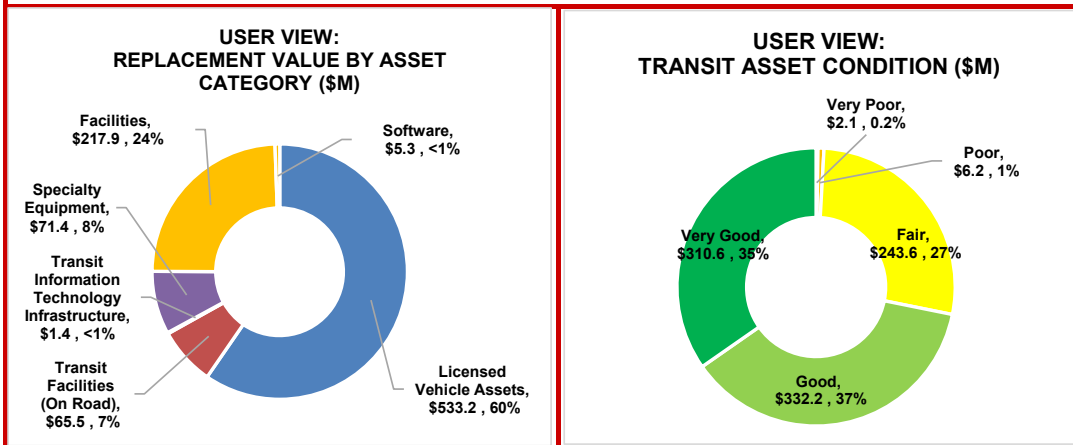
The figures below illustrate the replacement value and condition of Transit assets under the responsibility view. Under this view, the total replacement value of assets is \$671.5 million. Consistent with the 2022 SOLI, Transit licensed vehicle assets, on road transit facilities, Transit IT infrastructure and specialty equipment are considered under the management of this service area. This SOLI analysis is based on like for like replacement and does not reflect potential increased replacement costs in the future. Overall, the Transit assets are in Good condition with only about 1% (\$5.5 million) of the total asset base rated in Poor condition and less than 1% (\$2.1 million) in Very Poor condition. It is important to note that assets classified in "Poor" and "Very Poor" condition are not considered to be unsafe; the condition indicates only that assets are nearing the end of an engineered useful life and may need to be replaced to avoid inflated maintenance costs.



Data Source: Departmental Inventory and Asset Works (M5)

**Major Types of Assets within Transit - User View**

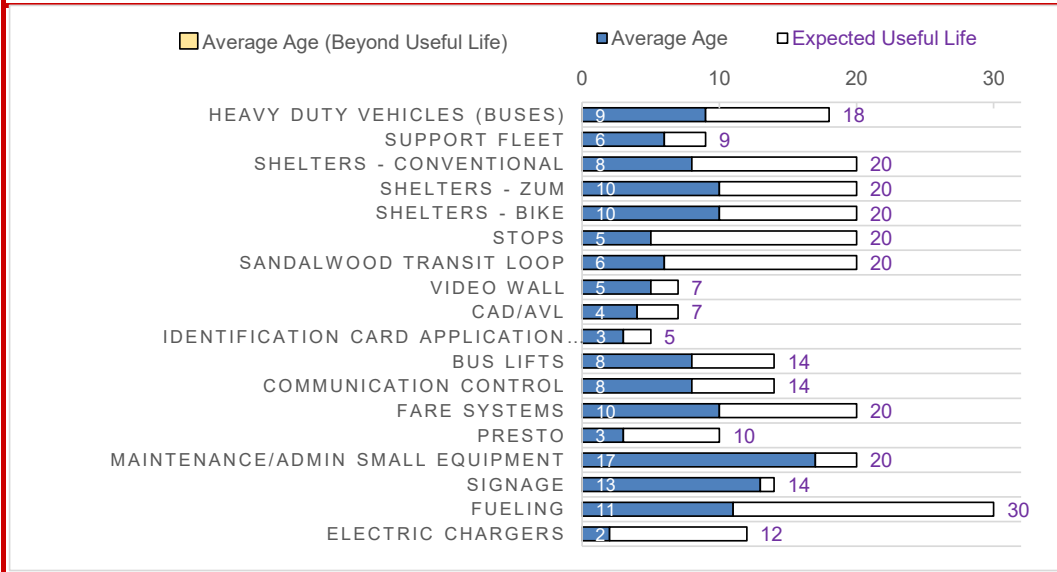
The figures below illustrate the replacement value and condition of Transit assets under the user view. Under the user view illustration, which also captures transit facilities and software, the replacement value is about \$894.7 million. Of this total, licensed vehicles continue to represent the largest share at \$533.2 million. Over 72% of the assets are considered to be in Good to Very Good Condition. Less than 2% of assets are in Poor and Very Poor condition. As above, assets classified in "Poor" and "Very Poor" condition are not considered to be unsafe; the condition indicates only that assets are nearing the end of an engineered useful life and may need to be replaced to avoid inflated maintenance costs.





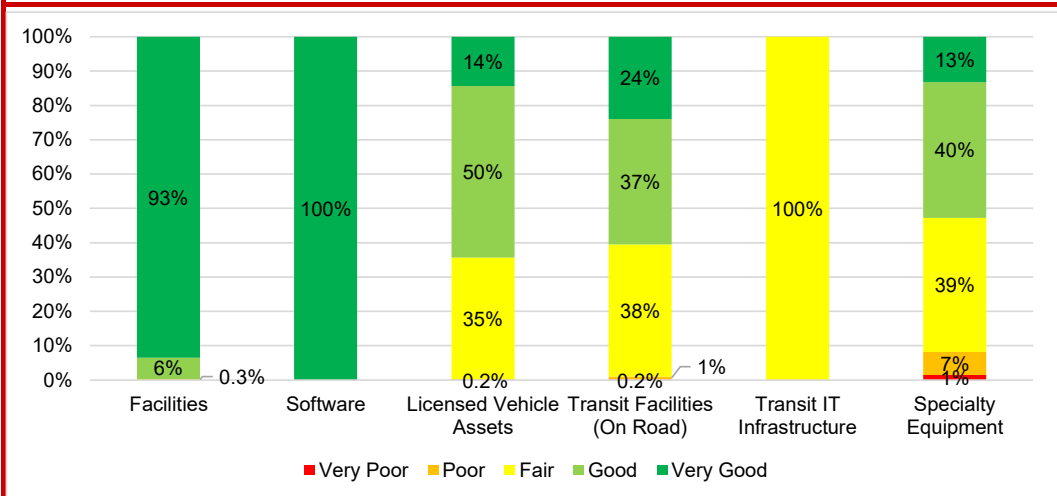
**Age Summary**

The following figure summarizes the average age of the City's Transit Assets compared to the expected useful life of each asset category. The methodology applied to undertake the average age profile analysis considers the age weighted by replacement value of each asset, which influences average asset age and remaining useful life illustrated. It is important to emphasize that the age of an asset relative to its useful life does not always provide a complete picture of its actual condition, and an asset can often perform at an expected level to meet service requirements as is the case with Maintenance/Admin Small Equipment.



**Condition Summary**

The figure below illustrates the condition of the various Transit assets by key sub-component areas based on the user view. While the assets are generally in Good to Very Good condition, specialty equipment has 7% of assets in Poor condition and 1% in Very Poor condition. The Poor assets in this category relate to technology systems and bus hoists reaching the end of their useful life, which are still regularly maintained and safe for use. One Bus Lift is in Very Poor condition and has been taken out of operation. Additionally, there is a small percentage of Transit on-road facilities which are reported in Poor and Very Poor condition. These assets are regularly inspected and continue to be operational and in working order while anticipated to be serviced or replaced over the short-term. The small portion of Very Poor assets under Licensed Vehicle Assets pertain to Support Fleet vehicles. The condition rating for these assets is based on age, and does not necessarily reflective of actual asset condition. These are not public facing assets and are regularly maintained to ensure they are in safe, working order.





**Comparison of 2023 vs. 2022 Inventory and Replacement Value**

The tables below outline the difference in Transit assets in the 2023 SOLI relative to the 2022 SOLI while considering reporting under the two different views. Please note, the 2022 SOLI is shown as it was reported (i.e. in \$2023). The values for the 2023 SOLI are in \$2024.

Under the responsibility view framework, the total replacement value of Transit assets has increased by 9% from approximately \$618.0 million to \$671.5 million. The increase in value can largely be attributed to cost increases since the last report. When looking at individual assets, a large increase is seen in the value of Bus Lifts due to the inclusion of additional civil works costs associated with replacing the lifts. There has been a decrease in the future replacement value of Transit IT Infrastructure due to a shift towards a cloud based CAD/AVL server. Recent costing data was provided and used for Heavy Duty Vehicles, Support Fleet, Conventional Shelters and Signage, while the remaining asset replacement values were inflated by the Machinery & Equipment Price Index (M&E) from the values identified in the 2022 SOLI (which were reported in \$2023). Additional information on the indices applied to each asset class can be found in Table 5 of this report.

When considering the Transit Facilities and Software, the value of Transit assets increased by 9% (or \$74.4 million) from the value reported in 2022 after inflationary adjustments. This increase is also attributable to the use of updated indices to reflect the cost to replace assets in current dollars.

Please note, the Facilities and IT report cards include additional information (including the inflation measure applied) on those assets used by Transit Services but maintained and managed by a different City department.

Asset	2022 SOLI		2023 SOLI	
Licensed Vehicle Assets	505	Each	504	Each
Transit Facilities (On Road)	3,400	Each	3,445	Each
Transit Information Technology Infrastructure	43	Each	43	Each
Specialty Equipment				
Bus Lifts	34	Each	34	Each
Communication Control	4	Each	4	Each
Fare Systems	498	Each	498	Each
Presto	1,082	Each	1,082	Each
Maintenance/Admin Small Equipment	9	Each	9	Each
Signage	3,120	Each	3,117	Each
Fueling	5	Each	5	Each
Electric Chargers	5	Each	5	Each
Facilities	8	Each	8	Each
Software	2	Each	2	Each

Asset	2022 SOLI (\$2023)	2023 SOLI (\$2024)	Difference	
<b>1. Assets Managed by Other Service Areas*</b>				
Facilities	\$ 197,103,902	\$ 217,854,241	\$ 20,750,339	11%
Software	\$ 5,195,531	\$ 5,343,080	\$ 147,549	3%
<b>Subtotal Assets Managed by Other Service Areas</b>	<b>\$ 202,299,433</b>	<b>\$ 223,197,322</b>	<b>\$ 20,897,889</b>	<b>10%</b>
<b>2. Assets Managed by Transit Services</b>				
Licensed Vehicle Assets	\$ 497,071,246	\$ 533,186,187	\$ 36,114,940	7%
Transit Facilities (On Road)	\$ 62,239,746	\$ 65,475,890	\$ 3,236,144	5%
Transit Information Technology Infrastructure	\$ 2,311,800	\$ 1,419,788	\$ (892,012)	-39%
Specialty Equipment				
Bus Lifts	\$ 11,648,997	\$ 25,803,567	\$ 14,154,570	122%
Communication Control	\$ 17,136,000	\$ 17,384,581	\$ 248,581	1%
Fare Systems	\$ 10,126,632	\$ 10,387,966	\$ 261,333	3%
Presto	\$ 5,839,540	\$ 6,005,379	\$ 165,839	3%
Maintenance/Admin Small Equipment	\$ 672,346	\$ 738,228	\$ 65,882	10%
Signage	\$ 2,002,030	\$ 1,892,559	\$ (109,471)	-5%
Fueling	\$ 1,564,342	\$ 1,608,768	\$ 44,426	3%
Electric Chargers	\$ 7,405,200	\$ 7,615,503	\$ 210,303	3%
<b>Subtotal Assets Managed by Transit Services (Responsibility View)</b>	<b>\$ 618,017,880</b>	<b>\$ 671,518,415</b>	<b>\$ 53,500,535</b>	<b>9%</b>
<b>Total Replacement Value: User View (1+2)</b>	<b>\$ 820,317,313</b>	<b>\$ 894,715,736</b>	<b>\$ 74,398,424</b>	<b>9%</b>

\* Responsibility of managing the assets lies with another service area, but assets are used by Transit

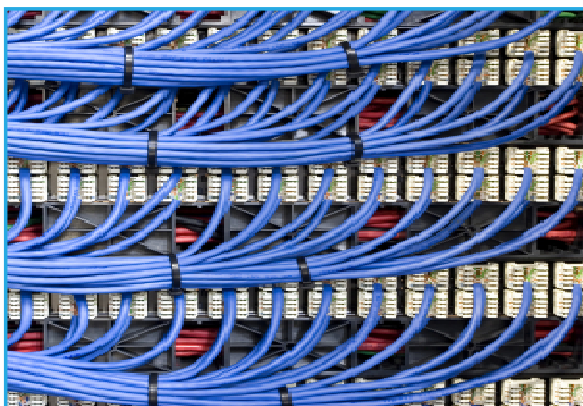


Appendix

# A.5

## Information Technology





<b>Asset Replacement Value:</b>	\$189.6 Million
<b>Future Condition Trend (Next 10 Years):</b>	Stable - Assets are replaced frequently and therefore remain in stable condition
<b>Data Confidence &amp; Reliability:</b>	Medium (Condition Based)

The 2023 SOLI analysis continues to report assets under two different asset representation perspectives: "**Responsibility View**" and a "**User View**"

**Responsibility View:** Shows the assets under the service area that is responsible for managing them  
**User View:** Shows the assets under the service area that is using them

While the User View shows the use of assets, the Responsibility View:

- ✓ provides a direct line of sight to those assets managed by the service area;
- ✓ will help prioritize lifecycle activities managed by the service area;
- ✓ aligns with industry best practices; and
- ✓ provides guidance to future asset management planning practice and departmental initiatives.

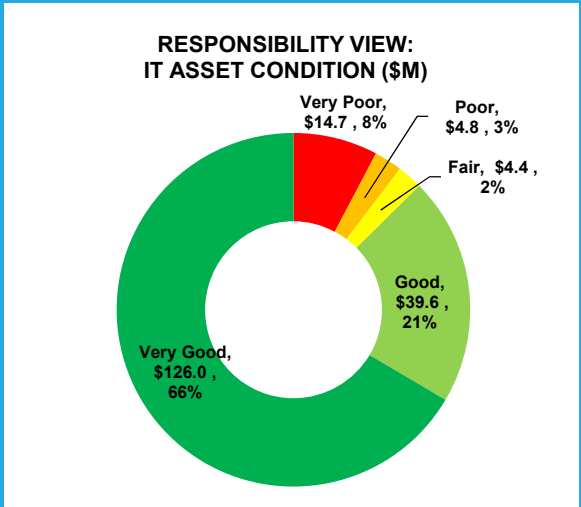
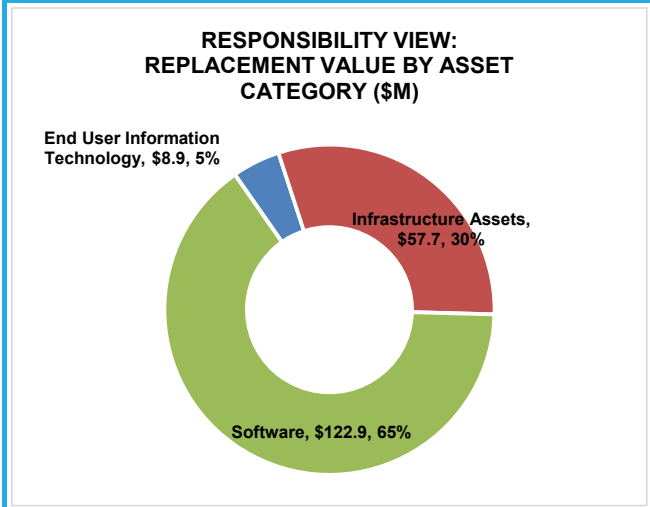
For IT, all assets are captured under the responsibility view as shown below (in \$2024).

Asset Type	Replacement Value (\$Millions)	Asset Inventory
<b>Assets Managed by IT</b>		
End User Information Technology	\$8.9	8,933
Infrastructure Assets	\$57.7	Pooled
Software	\$122.9	110
<b>Total Replacement Value (Responsibility View)</b>	<b>\$189.6</b>	<b>-</b>



**Major Types of Assets within IT - Responsibility View**

The figure below illustrates the replacement value and condition of IT services under the responsibility view. The total replacement value of IT assets is \$189.6 million, of which, about 65% of the total value is related to the City's software assets (both Corporate and those used by other service areas). Nearly 90% of IT assets are in Good or Very Good condition, with only 11% of assets in Poor to Very Poor condition. As IT assets are replaced and serviced frequently, their condition will remain stable. Overall, the Corporate IT assets are in Good condition and are meeting current needs.



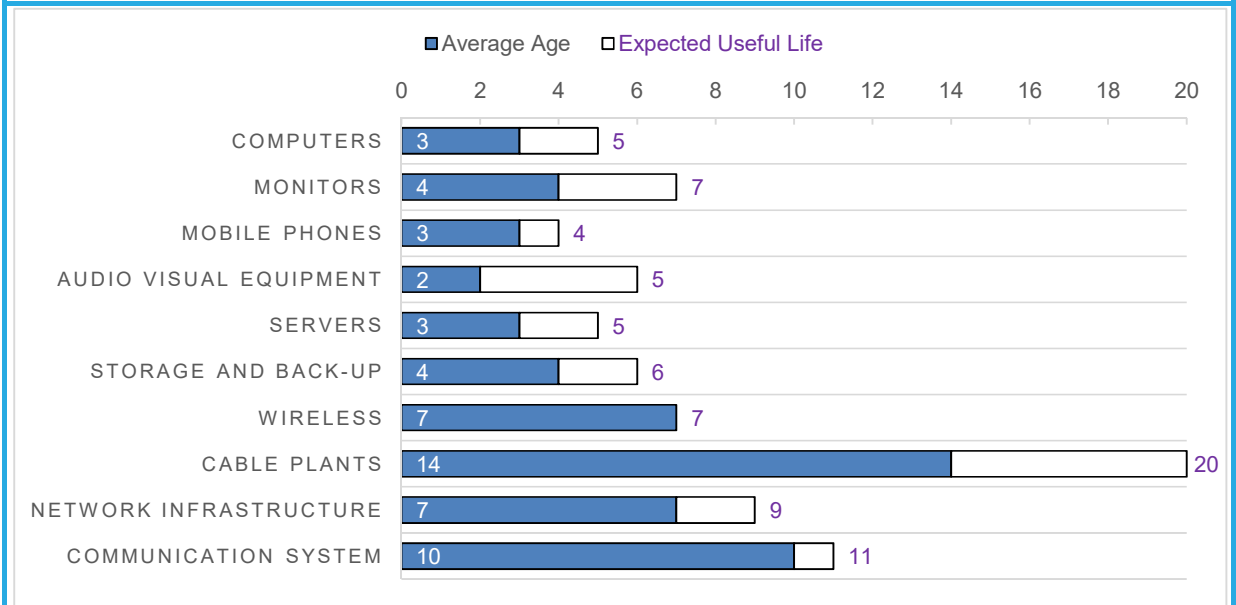
Data Source: Departmental Inventory





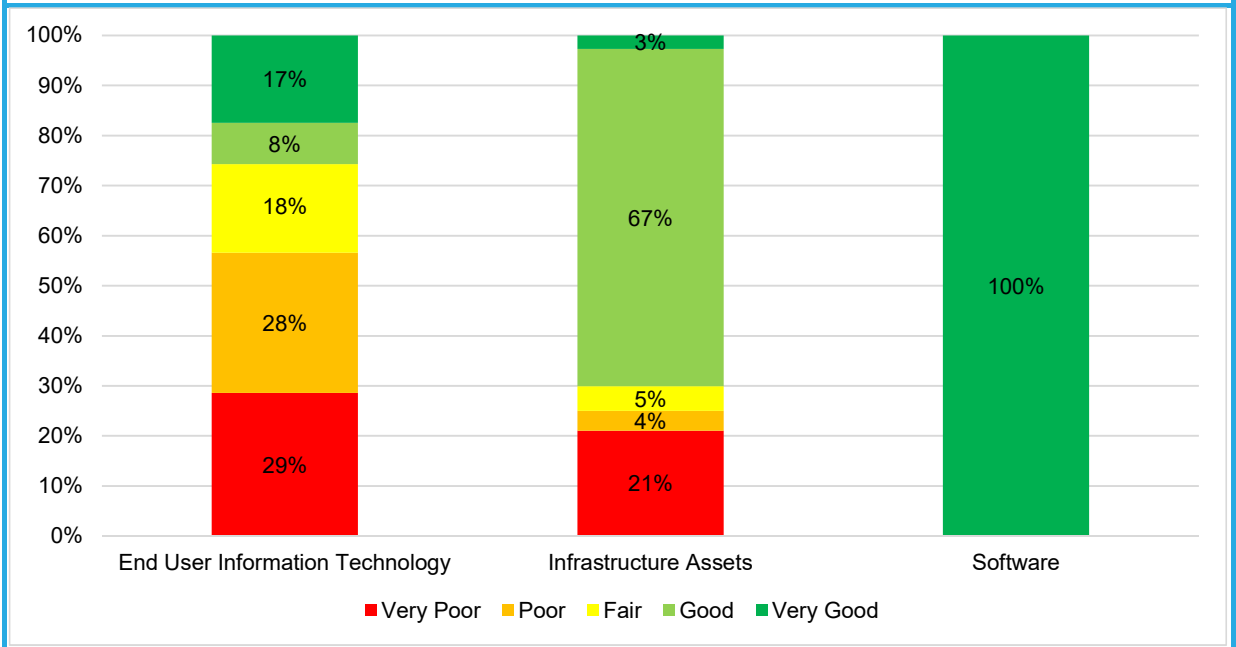
**Age Summary**

The following figure summarizes the average age of the City's IT Assets compared to the estimated useful life of each asset category. The methodology applied to undertake the average age profile analysis considers the age weighted by replacement value of each asset, which influences average asset age and remaining useful life illustrated. It is important to emphasize that the age of an asset relative to its useful life does not always provide a complete picture of its actual condition. Software has been left out of the age analysis below as it is a unique asset type.



**Condition Summary**

The figure below illustrates the condition of the three sub-component assets of Information Technology services under the responsibility view. Software and Infrastructure Assets are mostly in Good to Very Good Condition. With this said about 57% of End User IT assets are in Poor and Very Poor condition. This condition mostly relates to computers, mobile phones, and monitors which is based on age and indicates that these assets are nearing the end of an engineered useful life. In practice, these assets continue to be in good working condition and stay in use until they break or are unable to provide the desired levels of service.







**Comparison of 2023 vs. 2022 Inventory and Replacement Value**

The tables below outline the difference in IT assets in the 2023 SOLI relative to the 2022 SOLI, while considering reporting under the responsibility view. Please note, the 2022 SOLI is shown as it was reported (i.e. in \$2023). The values for the 2023 SOLI are in \$2024.

The total value of IT assets has increased from approximately \$162.4 million to \$189.6 million. The increase in value can largely be attributed to cost increases since the last report. The asset replacement values were inflated by the Machinery & Equipment Price Index (M&E) from the values identified in the 2022 SOLI (which were reported in \$2023). Further information on the indices applied to each asset class can be found in Table 5 of this report. Additionally, the inclusion of a more robust valuation for software (i.e. the workforce software, software for development services) and other software accounts for some of the variance.

Asset	2022 SOLI		2023 SOLI	
<b>End User Information Technology</b>				
Computers	3,547	Each	3,538	Each
Monitors	3,200	Each	3,500	Each
Mobile Phones	1,530	Each	1,658	Each
Audio Visual Equipment	222	Each	237	Each
<b>Infrastructure Assets</b>				
Servers	83	Each	76	Each
Storage And Back-Up	22	Each	27	Each
Wireless	806	Each	806	Each
Cable Plants	284,723	Meters	284,723	Metres
Network Infrastructure	671	Each	671	Each
Communication System	4,127	Each	4,127	Each
<b>Software</b>	109	Each	110	Each

Asset	2022 SOLI (\$2023)	2023 SOLI (\$2024)	Difference	
<b>Assets Managed by IT</b>				
<b>End User Information Technology</b>				
Computers	\$ 6,408,564	\$ 6,768,393	\$ 359,829	6%
Monitors	\$ 891,363	\$ 1,002,615	\$ 111,253	12%
Mobile Phones	\$ 637,291	\$ 706,412	\$ 69,121	11%
Audio Visual Equipment	\$ 364,634	\$ 464,824	\$ 100,190	27%
<b>Infrastructure Assets</b>				
Servers	\$ 2,682,435	\$ 2,720,249	\$ 37,815	1%
Storage And Back-Up	\$ 4,102,673	\$ 6,489,022	\$ 2,386,349	58%
Wireless	\$ 2,160,582	\$ 2,221,941	\$ 61,359	3%
Cable Plants	\$ 33,889,474	\$ 34,851,911	\$ 962,438	3%
Network Infrastructure	\$ 6,809,222	\$ 7,002,600	\$ 193,377	3%
Communication System	\$ 4,306,935	\$ 4,429,249	\$ 122,314	3%
<b>Software</b>	\$ 100,114,855	\$ 122,908,540	\$ 22,793,685	23%
<b>Total Replacement Value - Responsibility View</b>	<b>\$ 162,368,028</b>	<b>\$ 189,565,757</b>	<b>\$ 27,197,729</b>	<b>17%</b>

Appendix

# A.6

## City Support Fleet





## City Support Fleet



<b>Total Asset Replacement Value (excl. Software):</b>	\$60.4 Million
<b>Future Condition Trend (Next 10 Years):</b>	Stable - Assets are replaced frequently and therefore remain in stable condition
<b>Data Confidence &amp; Reliability:</b>	Low-Medium (Age and Condition Based)

The 2023 SOLI analysis continues to report assets under two different asset representation perspectives: "Responsibility View" and "User View"

**Responsibility View:** Shows the asset under the service area that is responsible for managing them  
**User View:** Shows the assets under the service area that is using the capital needs

While the User View shows the use of assets, the Responsibility View:

- ✓ provides a direct line of sight to those assets managed by the service area;
- ✓ will help prioritize lifecycle activities managed by the service area;
- ✓ aligns with industry best practices; and
- ✓ provides guidance to future asset management planning practice and departmental initiatives.

The table below illustrates the replacement value (in \$2024) under the two different views.

Asset Type	Replacement Value (\$Millions)	Asset Inventory
<b>1. Assets Managed by Other Service Areas but used by City Support Fleet</b>		
Software (Moved to IT)	\$3.9	2
<i>Subtotal (User View)</i>	\$3.9	2
<b>2. Assets Managed by Fleet and Used by Other Service Areas</b>		
Licensed Fleet	\$38.5	502
Off-Road Vehicles	\$19.7	299
Fleet Equipment	\$2.2	252
<i>Subtotal (Responsibility View)</i>	\$60.4	1,053
<b>Total Replacement Value (User + Responsibility View)</b>	<b>\$64.2</b>	<b>1,055</b>

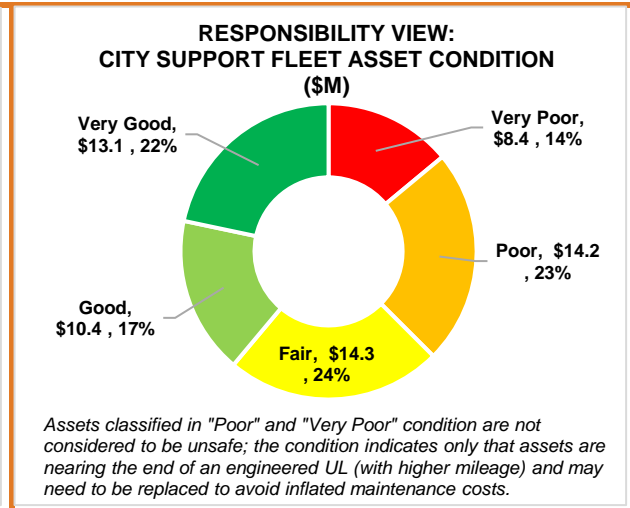
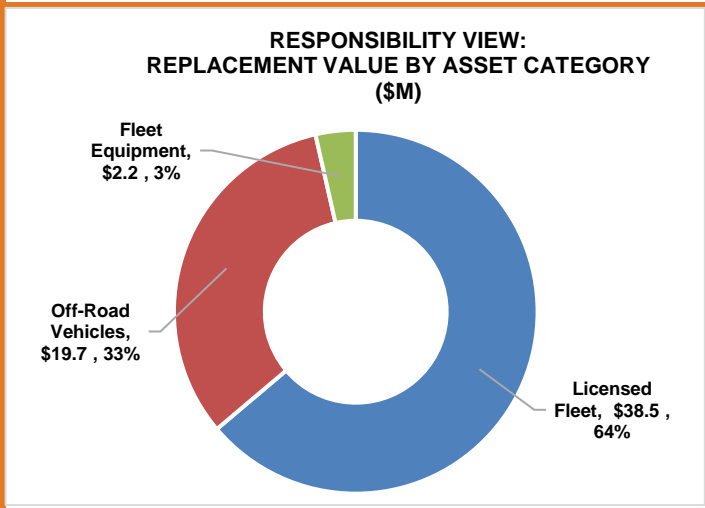
City Support Fleet excludes Transit and Fire Assets and Parks Fleet Equipment which are managed by their respective service areas.





Major Types of Assets within City Support Fleet - Responsibility View

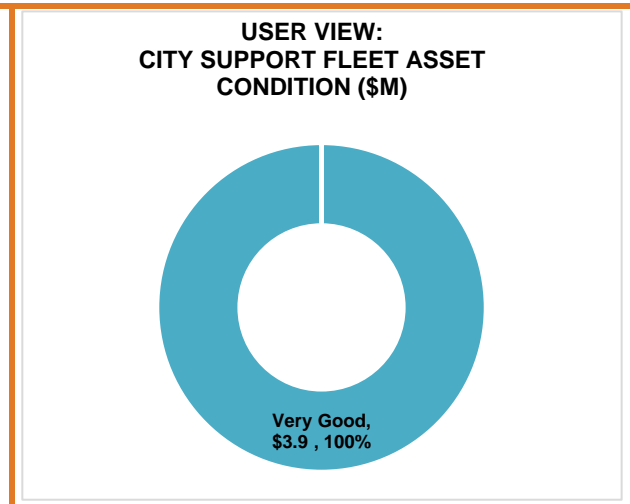
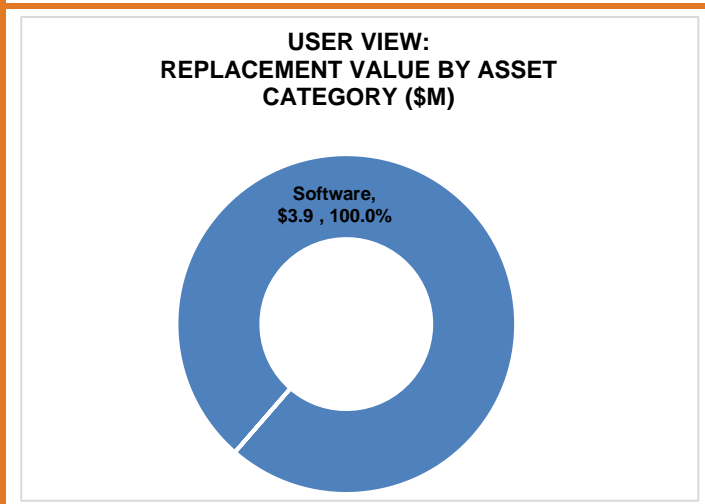
The figure below illustrates the replacement value and condition of City Support Fleet assets under the responsibility view. Under this view, the total replacement value of assets is \$60.4 million. Approximately 64% of the total value is related to the City's licensed fleet. About 40% of assets are considered to be in Good to Very Good condition. However, about 37% remain in Poor to Very Poor condition. The condition of City Support Fleet assets for the most part is based on age and/or vehicle mileage and not necessarily always reflective of the comprehensive asset condition. Assets classified in "Poor" and "Very Poor" condition are not considered to be unsafe; the condition indicates that assets are nearing the end of an engineered UL (with higher mileage) and may need to be replaced to avoid inflated maintenance costs.



Data Source: Assetworks M5-Fleet Management Solution

Major Types of Assets within City Support Fleet - User View

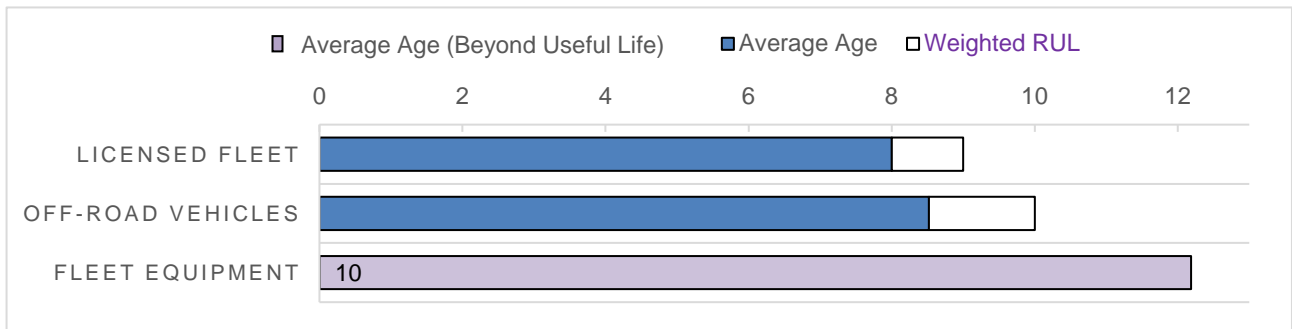
The figures below illustrate the replacement value and condition of City Support Fleet assets under the user view. Under the user view illustration, which captures software, the replacement value is about \$3.9 million. All software assets are considered to be in Very Good condition.





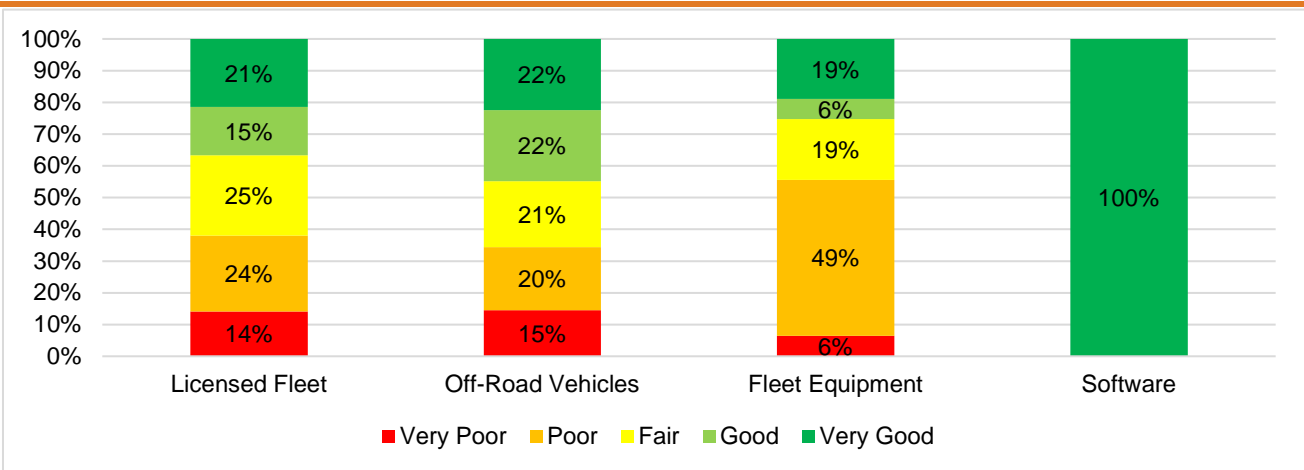
**Age Summary**

The following figure summarizes the average age of the City Support Fleet assets compared to the expected useful life of each asset category. The methodology applied to undertake the average age profile analysis considers the age weighted by replacement value of each asset, which influences average asset age and remaining useful life illustrated.



**Condition Summary**

The figure below illustrates the condition of the various City Support Fleet assets by key sub-component areas based on the user and responsibility views. While a portion of the assets are in Good to Very Good condition, a share of the Licensed Fleet, Off-Road Vehicles and Fleet Equipment are in Poor or Very Poor condition. It is important to note that assets classified in "Poor" and "Very Poor" condition are not considered to be unsafe; the condition indicates only that assets are nearing the end of an engineered UL (with higher mileage) and may need to be replaced to avoid inflated maintenance costs.







**Comparison of 2023 vs. 2022 Inventory and Replacement Value**

The tables below outline the difference in City Support Fleet assets in the 2023 SOLI relative to the 2022 SOLI while considering reporting under the two different views. Please note, the 2022 SOLI is shown as it was reported (i.e. in \$2023). The values for the 2023 SOLI are in \$2024.

Under the responsibility view framework, the total value of City Support Fleet assets has increased by 8% from approximately \$55.9 million to \$60.4 million. The increase in value can largely be attributed to cost increases since the last report. Additional information on the indices applied to each asset class can be found in Table 5 of this report. Conversely, when considering assets only used by City Support Fleet (i.e. Software), the total asset value is equal to \$3.9 million, which does represent a significant increase when compared to 2022. This variance can be attributed to the new inclusion of all Parks Fleet Equipment, which was not included under the Fleet Responsibility or User View in previous iterations of the SOLI Report.

Please note the IT report card will include additional information (including the inflation measure applied) on those assets used by City Support Fleet but maintained and managed by a different City department.

Asset	2022 SOLI		2023 SOLI	
Licensed Fleet	503	Each	502	Each
Off-Road Vehicles	255	Each	299	Each
Fleet Equipment	88	Each	252	Each
Software	2	Each	2	Each

Asset	2022 SOLI (\$2023)	2023 SOLI (\$2024)	Difference	
<b>1. Assets Managed by Other Service Areas and Used by City Support Fleet*</b>				
Software	\$ 3,780,158	\$ 3,887,512	\$ 107,354	3%
<b>Subtotal Replacement Value - User View</b>	<b>\$ 3,780,158</b>	<b>\$ 3,887,512</b>	<b>\$ 107,354</b>	<b>3%</b>
<b>2. Assets Managed by City Support Fleet and Used by Other Service Areas</b>				
Licensed Fleet	\$ 37,333,003	\$ 38,534,391	\$ 1,201,388	3%
Off-Road Vehicles	\$ 18,113,857	\$ 19,676,514	\$ 1,562,656	9%
Fleet Equipment	\$ 438,528	\$ 2,150,042	\$ 1,711,514	390%
<b>Subtotal Replacement Value - Responsibility View</b>	<b>\$ 55,885,388</b>	<b>\$ 60,360,947</b>	<b>\$ 4,475,559</b>	<b>8%</b>
<b>Total Replacement Value (User + Responsibility View)</b>	<b>\$ 59,665,546</b>	<b>\$ 64,248,459</b>	<b>\$ 4,582,913</b>	<b>8%</b>

\*Responsibility of managing the assets lies with another service area, but assets are used by City Support Fleet

Appendix

# A.7

## Fire Services







## Fire Services



<b>Total Asset Replacement Value:</b>	\$99.8 Million
<b>Total Asset Replacement Value Including Facilities:</b>	\$261.0 Million
<b>Future Condition Trend (Next 10 Years):</b>	Declining - As assets age they may require attention in the future
<b>Data Confidence &amp; Reliability:</b>	Age and Condition Based

The 2023 SOLI analysis is being reported under two different asset representation perspectives: "**Responsibility View**" and "**User View**" representation

**Responsibility View:** Shows the assets under the service area that is responsible for managing the capital needs.

**User View:** Shows the assets under the service area that is using them

The responsibility view is also being illustrated in this 2023 SOLI as it is an important viewpoint from an Asset Management Planning perspective. The responsibility view:

- ✓ provides a direct line of sight to those assets managed by the service area;
- ✓ will help prioritize lifecycle activities managed by the service area;
- ✓ aligns with industry best practices; and
- ✓ provides guidance to future asset management planning practice and departmental initiatives.

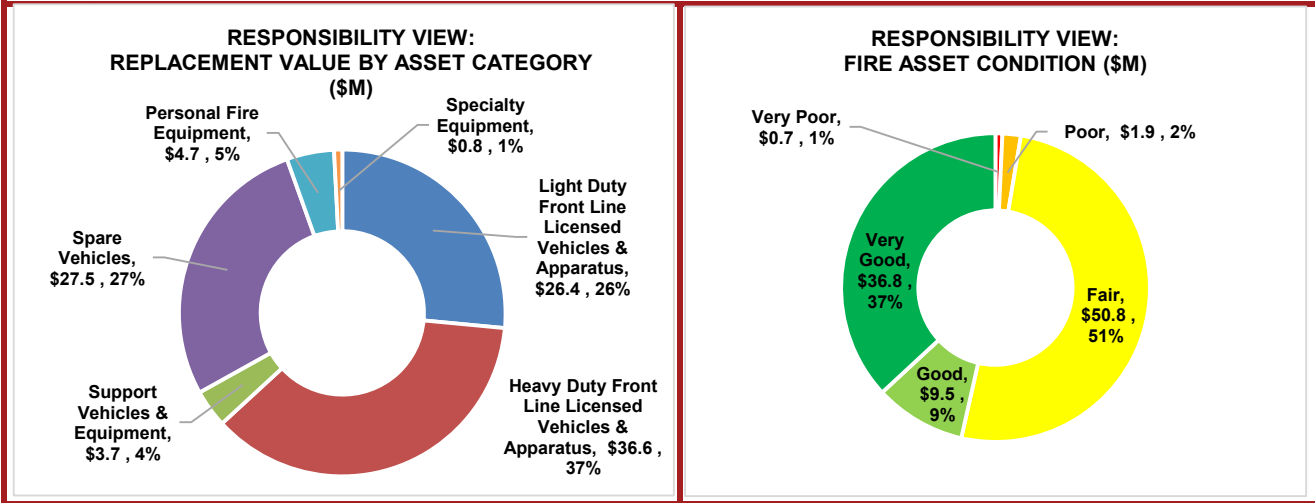
The table below illustrates the replacement value (in \$2024) under the two different views.

Asset Type	Replacement Value (\$Millions)	Asset Inventory
<b>Assets Managed by Fire Services</b>		
Light Duty Front Line Licensed Vehicles & Apparatus	\$26.4	29
Heavy Duty Front Line Licensed Vehicles & Apparatus	\$36.6	17
Support Vehicles & Equipment	\$3.7	44
Spare Vehicles	\$27.5	25
Personal Fire Equipment	\$4.7	1,289
Specialty Equipment	\$0.8	8
<i>Subtotal Assets Managed by Fire Services (Responsibility View)</i>	<i>\$99.8</i>	<i>-</i>
<b>Assets Managed by Other Service Areas</b>		
Fire Services Facilities	\$156.4	17
Fire Services Software	\$4.9	3
<b>Total Replacement Value (User View)</b>	<b>\$261.0</b>	<b>-</b>



**Major Types of Assets within Fire Services - Responsibility View**

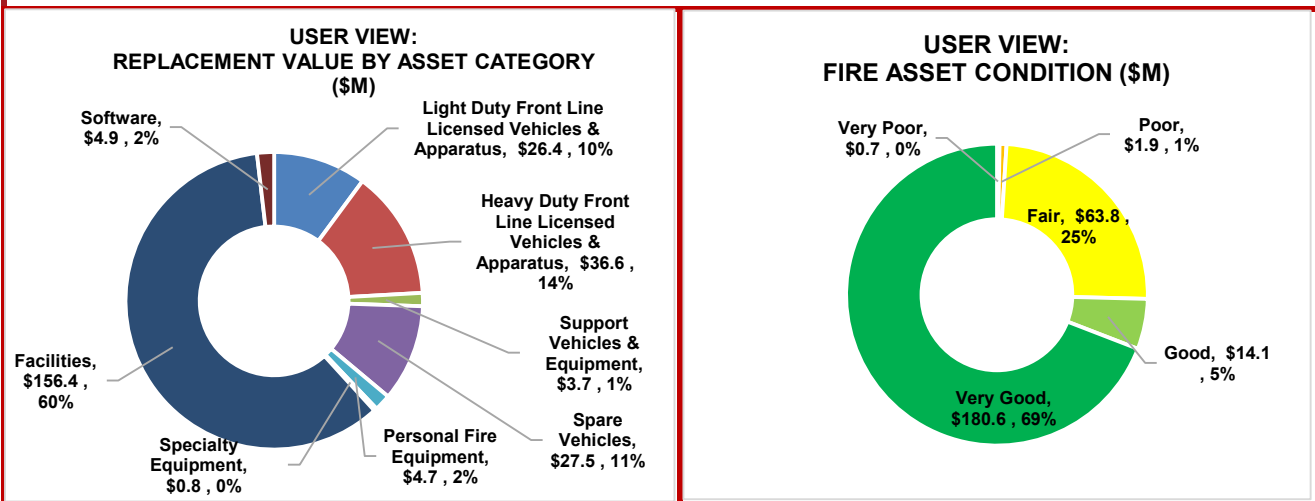
The figure below illustrates the replacement value and condition of Fire Services assets under the responsibility view. Under this view, the total replacement value of assets is \$99.8 million. Of this total, more than 90% is related to the Fire fleet (including front line licensed vehicles & apparatus, support vehicles & equipment and spare vehicles). About 46% of the assets are considered to be in Good to Very Good condition, with the majority of the remaining assets in Fair condition. Approximately 3% of the assets for Fire Services are in Poor or Very Poor condition, represented almost entirely by aging support vehicles reaching the end of their useful lives.



Data Source: M5 and City Databases

**Major Types of Assets within Fire Services - User View**

The figures below illustrate the replacement value and condition of Fire Services assets under the user view. Under the user view illustration which also captures facilities and software, the replacement value is about \$261.0 million. Approximately 74% of the assets are considered to be in Good to Very Good Condition.

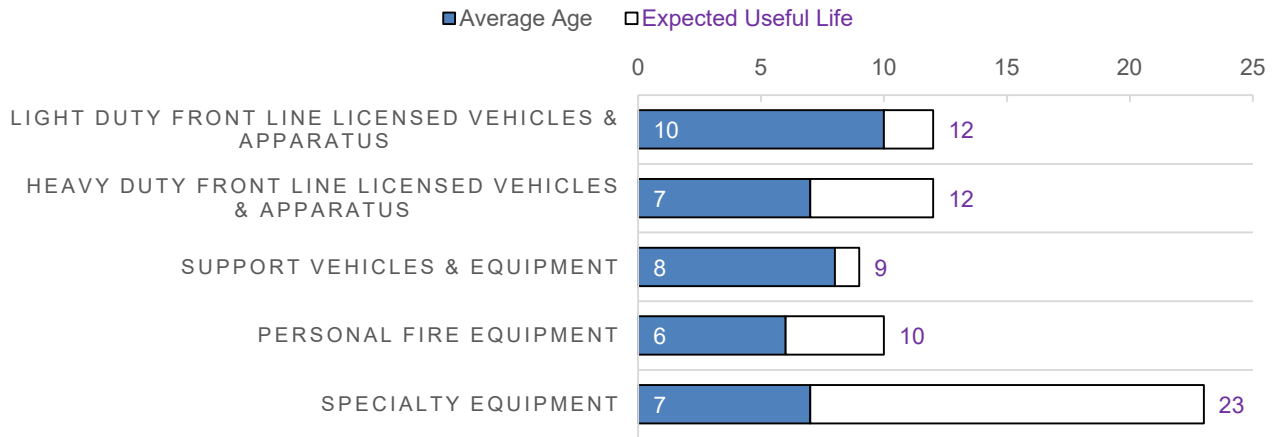


Data Source: M5, City Databases, Suncorp valuations report and recent tenders (for facilities)



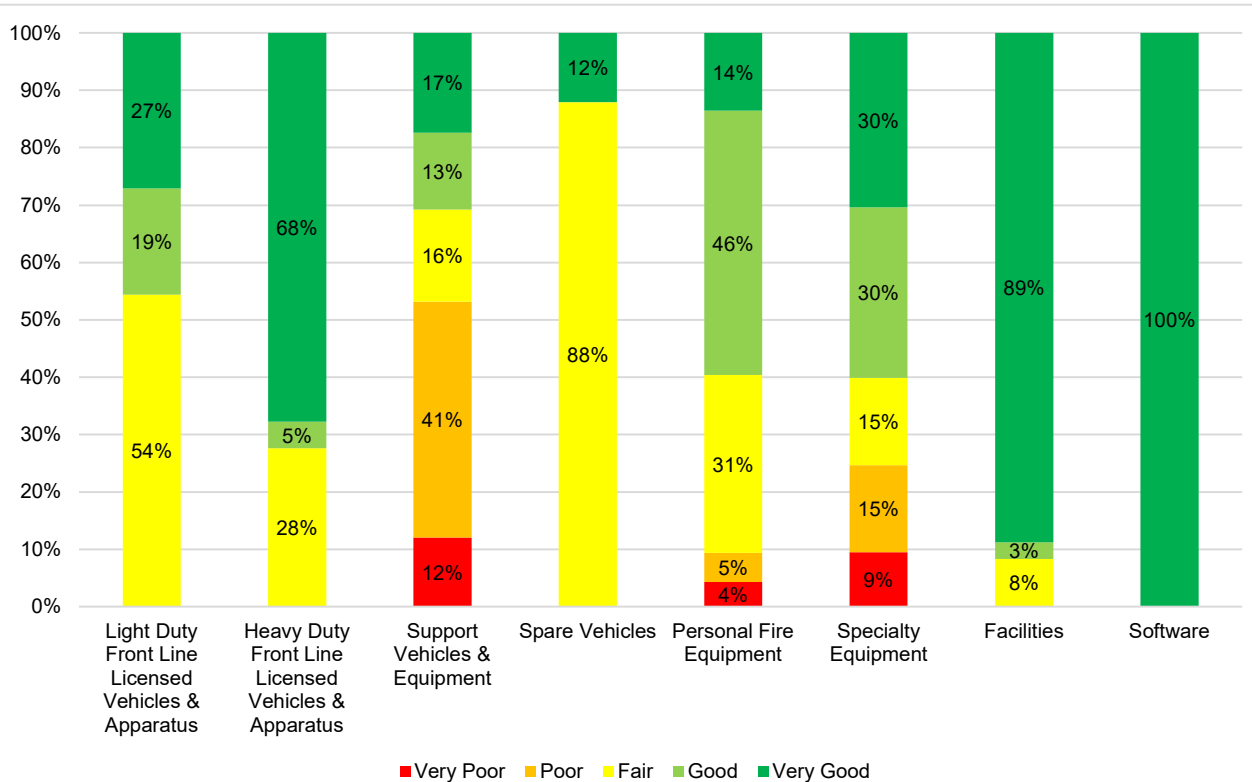
**Age Summary**

The following figure summarizes the average age of the City's Fire Assets compared to the expected useful life of each asset category. The methodology applied to undertake the average age profile analysis considers the age weighted by replacement value of each asset, which influences average asset age and remaining useful life illustrated. It is important to emphasize that the age of an asset relative to its useful life does not always provide a complete picture of its actual condition. Spare vehicles have been left out of the age analysis below.



**Condition Summary**

The figure below illustrates the condition of the eight sub-component assets of Fire Services. Facilities are generally in Good to Very Good condition. Almost all assets in Very Poor condition are attributable to Support Vehicles, specialty equipment and personal fire equipment but do not represent a safety issue or preclude Fire Services from delivering services to meet the needs of residents.







**Comparison of 2023 vs. 2022 Inventory and Replacement Value**

The tables below outlines the difference in Fire Services assets in the 2022 SOLI relative to the 2023 SOLI, while considering reporting under the two different views. Please note, the 2022 SOLI is shown as it was reported (i.e. in \$2023). The values for the 2023 SOLI are in \$2024.

Under the responsibility view framework, the value of Fire Services assets has increased by 59% from approximately \$62.8 million to \$99.8 million. This increase can be attributed to better asset data and updated costing information, taking into account the significant increase in prices observed over the last few years. Additional information on the indices applied to each asset class can be found in Table 5 of this report.

When considering the Fire Services Facilities and Software (user view assets), the asset value have increased from about \$114.1 million to about \$161.3 million (41%). The increase in facilities valuation is related to the addition of 2 additional facilities: the Williams Parkway Fire Campus, and Fire Station 214. Furthermore, the total value of Fire Services assets represents an increase of 47% (or \$84.1 million) from the value reported in 2022 before any inflationary adjustments.

Please note, the Facilities and IT report cards will include additional information (including the inflation measure applied) on those assets used by Fire Services but maintained and managed by a different City department.

Asset	2022 SOLI		2023 SOLI	
Light Duty Front Line Licensed Vehicles & Apparatus	31	Each	29	Each
Heavy Duty Front Line Licensed Vehicles & Apparatus			17	Each
Support Vehicles & Equipment	67	Each	44	Each
Spare Vehicles	31	Each	25	Each
Personal Fire Equipment	1,201	Each	1,289	Each
Specialty Equipment	7	Each	8	Each
Facilities	15	Each	17	Each
Software	5	Each	3	Each

Asset	2022 SOLI (\$2023)	2023 SOLI (\$2024)	Difference	
<b>1. Assets Managed by Other Service Areas*</b>				
Facilities	\$ 110,679,460	\$ 156,405,476	\$ 45,726,016	41%
Software	\$ 3,456,865	\$ 4,867,180	\$ 1,410,315	41%
<b>Subtotal Assets Managed by Other Service Areas</b>	<b>\$ 114,136,325</b>	<b>\$ 161,272,657</b>	<b>\$ 47,136,332</b>	<b>41%</b>
<b>2. Assets Managed by Fire Services</b>				
Light Duty Front Line Licensed Vehicles & Apparatus	\$ 40,099,773	\$ 26,426,000	\$ 22,926,227	57%
Heavy Duty Front Line Licensed Vehicles & Apparatus		\$ 36,600,000		
Support Vehicles & Equipment	\$ 3,581,324	\$ 3,741,200	\$ 159,876	4%
Spare Vehicles	\$ 14,749,259	\$ 27,519,000	\$ 12,769,741	87%
Personal Fire Equipment	\$ 3,849,179	\$ 4,681,280	\$ 832,101	22%
Specialty Equipment	\$ 568,030	\$ 805,800	\$ 237,770	42%
<b>Subtotal Assets Managed by Fire Services (Responsibility View)</b>	<b>\$ 62,847,565</b>	<b>\$ 99,773,280</b>	<b>\$ 36,925,715</b>	<b>59%</b>
<b>Total Replacement Value: User View (1+2)</b>	<b>\$ 176,983,890</b>	<b>\$ 261,045,937</b>	<b>\$ 84,062,046</b>	<b>47%</b>

\*Responsibility of managing the assets lies with another service area, but assets are used by Fire Services

Appendix

# A.8

## Parks







<b>Total Asset Replacement Value:</b>	\$720.5 Million
<b>Total Asset Replacement Value Including Facilities, City Support Fleet and Software</b>	\$769.3 Million
<b>Future Condition Trend (Next 10 Years):</b>	Declining - As assets age they may require attention in the future
<b>Data Confidence &amp; Reliability:</b>	Age & Condition Based

The 2023 SOLI analysis continues to report assets under two different asset representation perspectives: "**Responsibility View**" and a "**User View**" representation

**Responsibility View:** Shows the assets under the service area that is responsible for managing the capital needs

**User View:** Shows the assets under the service area that is using them

- ✓ provides a direct line of sight to those assets managed by the service area;
- ✓ will help prioritize lifecycle activities managed by the service area;
- ✓ aligns with industry best practices; and
- ✓ provides guidance to future asset management planning practice and departmental initiatives.

The table below illustrates the replacement value (in \$2024) under the two different views.

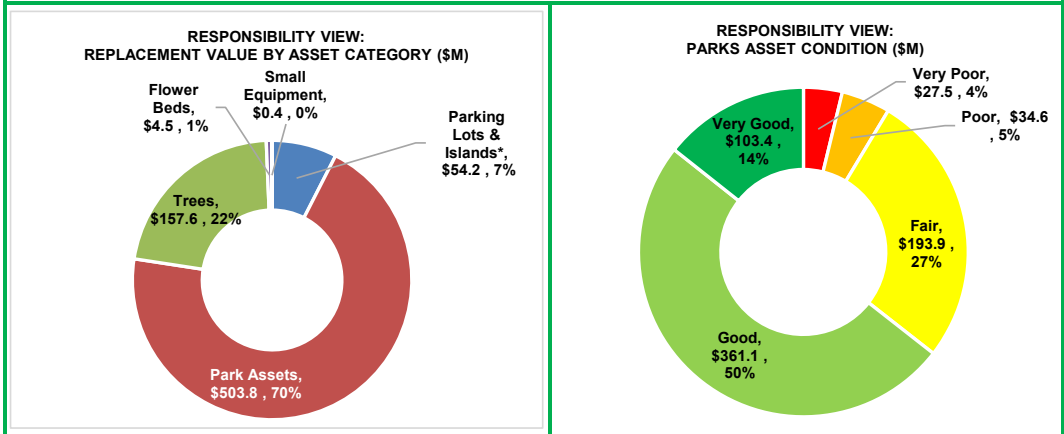
Asset Type	Replacement Value (\$Millions)	Asset Inventory
<b>Assets Managed by Parks Services</b>		
Parking Lots & Islands	\$54.2	678,428 Square Metres
Small Engine Equipment	\$0.4	547 Each
Trees	\$157.6	1,125 Each
Flower Beds	\$4.5	1,593 Each
<b>Park Assets</b>		
Parks	\$105.9	1,125 Hectares
Natural Heritage Lands*	-	1,645 Hectares
Park Furnishing	\$3.9	4,735 Each
Playgrounds	\$112.9	348 Each
Shade Structures	\$42.5	303 Each
Splash Pads & Outdoor Pools	\$5.6	12 Each
Fitness Equipment	\$1.5	43 Each
Skate Parks	\$2.1	4 Each
Sports Facilities	\$153.4	1,110 Each
Pathways	\$76.1	303,795 Metres
<b>Subtotal Assets Managed by Parks (Responsibility View)</b>	<b>\$720.5</b>	<b>-</b>
<b>Assets Managed by Other Service Areas</b>		
Parks Facilities	\$22.2	19 Each
City Support Fleet Used by Parks	\$26.6	524 Each
Software Used by Parks	\$0.0	1 Each
<b>Total Replacement Value (User View)</b>	<b>\$769.3</b>	<b>-</b>

\* City intends to value Natural Heritage Lands in the future SOLI/AMP iterations



### Major Types of Assets within Parks - Responsibility View

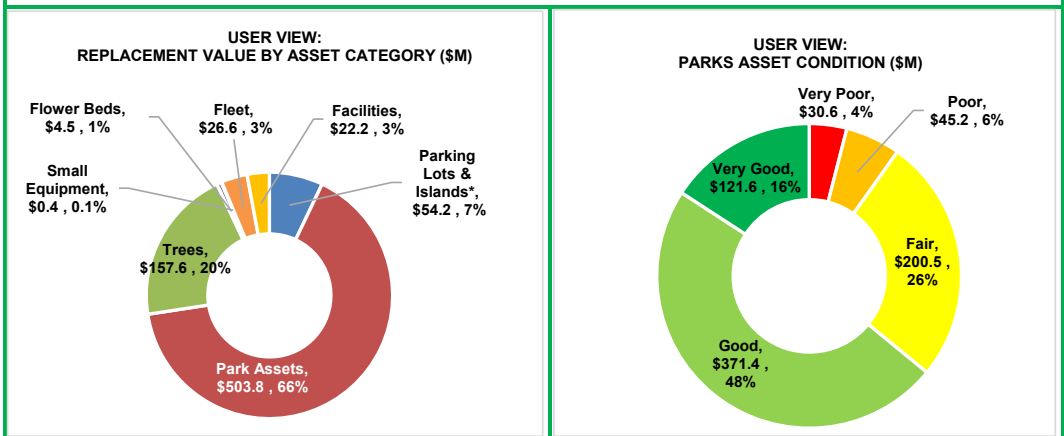
The figure on the below illustrates the replacement value and condition of Parks assets under the responsibility view. Under the responsibility view, the total replacement value of the Parks assets is \$720.5 million. Of the \$720.5 million replacement value, about 70%, or \$503.8 million, is attributed to park assets, which include sports facilities infrastructure, pathways, playgrounds, etc. Furthermore, about 22%, or \$157.6 million is attributed to trees. The remaining assets are valued as detailed below. As the Parks infrastructure is in overall Good condition, the infrastructure is meeting current needs, however, these assets may require attention as they age over time. Only about 9% of assets are considered to be in Poor and Very Poor Condition.



Data Source: Departmental Inventories, GIS database, City of Brampton 2019 DC Background Study

### Major Types of Assets within Parks - User View

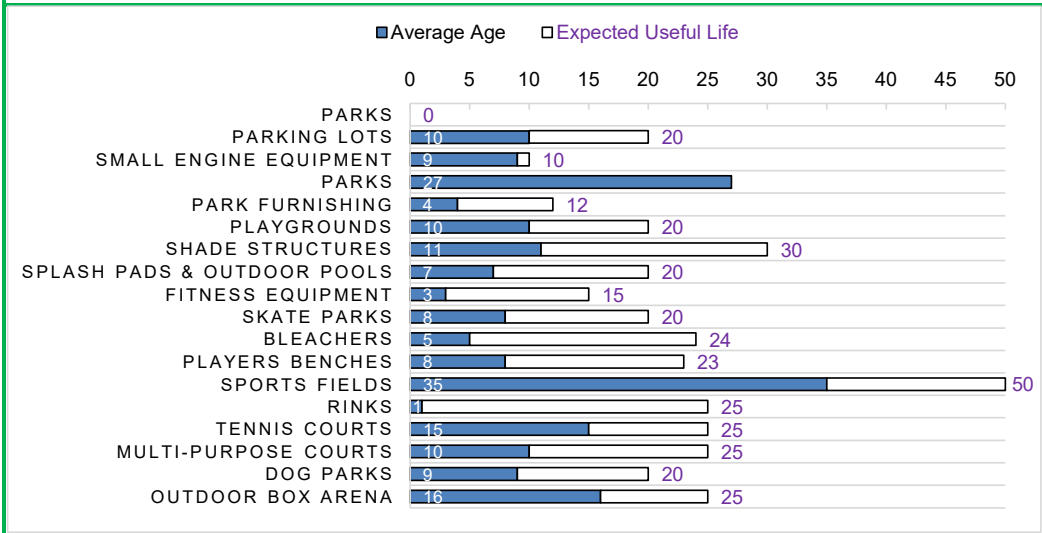
The figures below illustrate the replacement value and condition of Parks assets under the user view. Under the user view illustration which also captures facilities, fleet and software, the replacement value is about \$769.3 million. Of this total, the Park Assets continue to represent the largest share at \$503.8 million of the assets considered. Facilities assets add \$22.2 million to the total replacement value while Fleet adds \$26.6 million. Approximately 64% of the assets used by Parks are considered to be in Good to Very Good Condition. Only 4% of assets are in Very Poor condition - this does not mean the assets are unsafe.





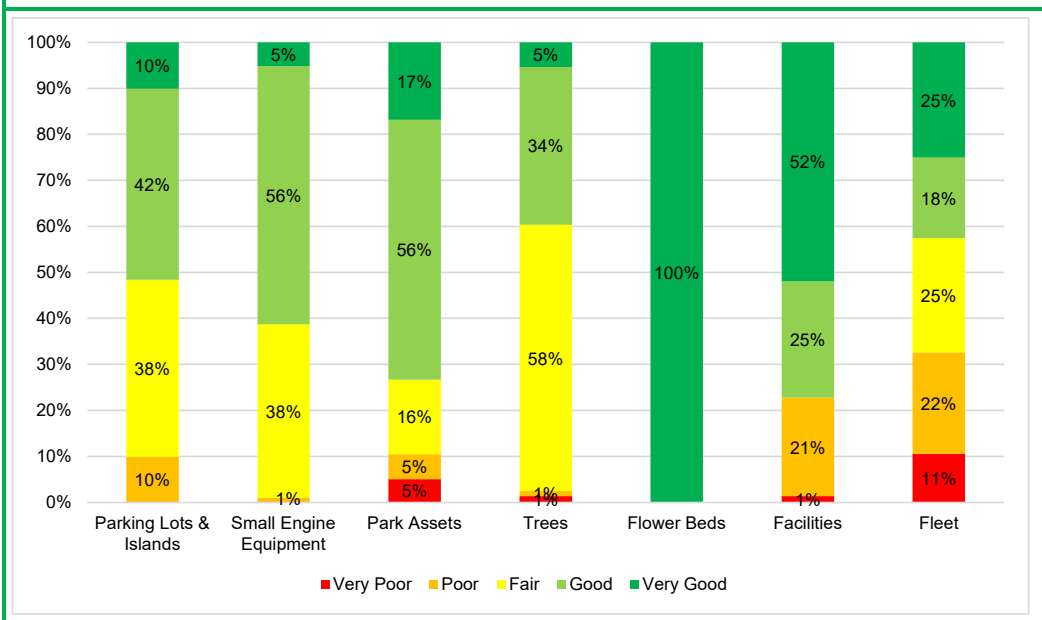
**Age Summary**

The following figure summarizes the average age of the City's Parks Assets compared to the expected useful life of each asset category. The methodology applied to undertake the average age profile analysis considers the age weighted by replacement value of each asset, which influences average asset age and remaining useful life illustrated. It is important to emphasize that the age of an asset relative to its useful life does not always provide a complete picture of its actual condition. The condition of assets is monitored and improved upon due to ongoing maintenance and component replacements.



**Condition Summary**

The figure below illustrates the condition of the various Parks assets by key sub-component areas based on the user view. While the assets are generally in Good to Very Good condition, a small portion of Park Assets, Trees, Facilities and Fleet are in Very Poor condition. These condition assessments do not indicate that the assets are unsafe; generally these assets are nearing the end of their useful life and are due for replacement in the near future. Poor and Very Poor assets do not represent a safety issue or preclude service areas from delivering services to meet the needs of residents and will be addressed through the budget.







**Comparison of 2023 vs. 2022 Inventory and Replacement Value**

The tables below outline the difference in Parks assets in the 2023 SOLI relative to the 2022 SOLI while considering reporting under the two different views. Please note, the 2022 SOLI is shown as it was reported (i.e. in \$2023). The values for the 2023 SOLI are in \$2024.

Under the responsibility view framework, the total value of Parks assets has increased by 4% from approximately \$691.0 million to \$720.5 million. The increase in value can largely be attributed to cost increases since the last report. Where available, recent costing data was used such as for Parking Lots, Playgrounds, Pathways & Trees, while the remaining asset replacement values were inflated by either the Non-Residential Building Construction Price Index (NRCPi) or the Machinery & Equipment Price Index (M&E) from the values identified in the 2022 SOLI (which were reported in \$2022). Additional information on the indices applied to each asset class can be found in Table 5 of this report. Although the overall replacement value has increased, Small Engine Equipment and Parkland have seen decreases in replacement values. The decrease in Small Engine Equipment relates to the reporting of some of these assets under Fleet rather than Parks. For Parkland, the replacement cost no longer accounts for planting costs as these are assumed to be captured under Trees.

When considering the facilities, fleet and IT assets, the total value has increased by \$2.1 million from the value reported in 2022 after inflationary adjustments.

Please note that Facilities, City Support Fleet and IT report cards include additional information (including the inflation measure applied) on those assets used by Parks but maintained and managed by different City departments.

Asset	2022 SOLI		2023 SOLI	
Parking Lots & Islands*	678,428	Square Metres	678,428	Square Metres
Small Equipment	532	Each	547	Each
Trees	249,749	Each	257,462	Each
Flower Beds	1,232	Each	1,593	Each
<b>Park Assets</b>				
Parkland (Excluding Natural Heritage Lands)	1,119	Hectares	1,125	Hectares
Natural Heritage Lands	1,645	Hectares	1,645	Hectares
Park Furnishing	4,728	Each	4,735	Each
Playgrounds	345	Each	348	Each
Shade Structures	292	Each	303	Each
Splash Pads & Outdoor Pools	8	Each	12	Each
Fitness Equipment	28	Each	43	Each
Skate Parks	4	Each	4	Each
Sports Facilities	1,172	Each	1,110	Each
Pathways	296,065	Metres	303,795	Metres
Facilities	18	Each	19	Each
Fleet	339	Each	524	Each
Software	1	Each	1	Each

Asset	2022 SOLI (\$2023)	2023 SOLI (\$2024)	Difference	
<b>1. Assets Managed by Other Service Areas**</b>				
Facilities	\$ 23,959,029	\$ 22,219,281	\$ (1,739,748)	-7%
Fleet	\$ 22,722,433	\$ 26,588,825	\$ 3,866,392	17%
Software	\$ -	\$ -	\$ -	0%
<b>Subtotal Assets Managed by Other Service Areas</b>	<b>\$ 46,681,461</b>	<b>\$ 48,808,105</b>	<b>\$ 2,126,644</b>	<b>5%</b>
<b>2. Assets Managed by Parks Services</b>				
Parking Lots & Islands*	\$ 50,168,380	\$ 54,177,059	\$ 4,008,679	8%
Small Equipment	\$ 702,499	\$ 420,210	\$ (282,289)	-40%
Trees	\$ 145,769,600	\$ 157,566,744	\$ 11,797,144	8%
Flower Beds	\$ 3,607,484	\$ 4,542,047	\$ 934,563	26%
<b>Park Assets</b>				
Parkland (Excluding Natural Heritage Lands)	\$ 127,081,185	\$ 105,877,490	\$ (21,203,696)	-17%
Natural Heritage Lands	\$ -	\$ -	\$ -	0%
Park Furnishing	\$ 3,767,108	\$ 3,882,258	\$ 115,149	3%
Playgrounds	\$ 106,438,750	\$ 112,873,635	\$ 6,434,885	6%
Shade Structures	\$ 37,656,393	\$ 42,469,003	\$ 4,812,611	13%
Splash Pads & Outdoor Pools	\$ 3,634,637	\$ 5,647,825	\$ 2,013,187	55%
Fitness Equipment	\$ 1,007,060	\$ 1,546,372	\$ 539,312	54%
Skate Parks	\$ 1,906,695	\$ 2,052,430	\$ 145,735	8%
Sports Facilities	\$ 137,766,643	\$ 153,360,431	\$ 15,593,787	11%
Pathways	\$ 71,511,673	\$ 76,060,241	\$ 4,548,568	6%
<b>Subtotal Assets Managed by Parks Services (Responsibility View)</b>	<b>\$ 691,018,109</b>	<b>\$ 720,475,743</b>	<b>\$ 29,457,634</b>	<b>4%</b>
<b>Total Replacement Value: User View (1+2)</b>	<b>\$ 737,699,570</b>	<b>\$ 769,283,849</b>	<b>\$ 31,584,278</b>	<b>4%</b>

\*In 2023 SOLI the City progressed to more detailed reporting of the Parking Lots & Islands in Square Metres as opposed to total count reported in the previous years

\*\*Responsibility of managing the assets lies with another service area, but assets are used by Parks

Appendix

# A.9

## Recreation







## Recreation



<b>Total Asset Replacement Value:</b>	\$64.20 Million
<b>Total Asset Replacement Value Including Facilities, City Support Fleet and Software:</b>	\$817.4 Million
<b>Future Condition Trend (Next 10 Years):</b>	Declining - As assets age they may require attention in the future
<b>Data Confidence &amp; Reliability:</b>	Age & Condition Based

The 2023 SOLI analysis continues to report assets under two different asset representation perspectives: "**Responsibility View**" and "**User View**" representation

**Responsibility View:** Shows the assets under the service area that is responsible for managing them  
**User View:** Shows the assets under the service area that is using them

While the User View shows the use of assets, the Responsibility View:

- ✓ provides a direct line of sight to those assets managed by the service area;
- ✓ will help prioritize lifecycle activities managed by the service area;
- ✓ aligns with industry best practices; and
- ✓ provides guidance to future asset management planning practice and departmental initiatives.

The table below illustrates the replacement value (in \$2024) under the two different views.

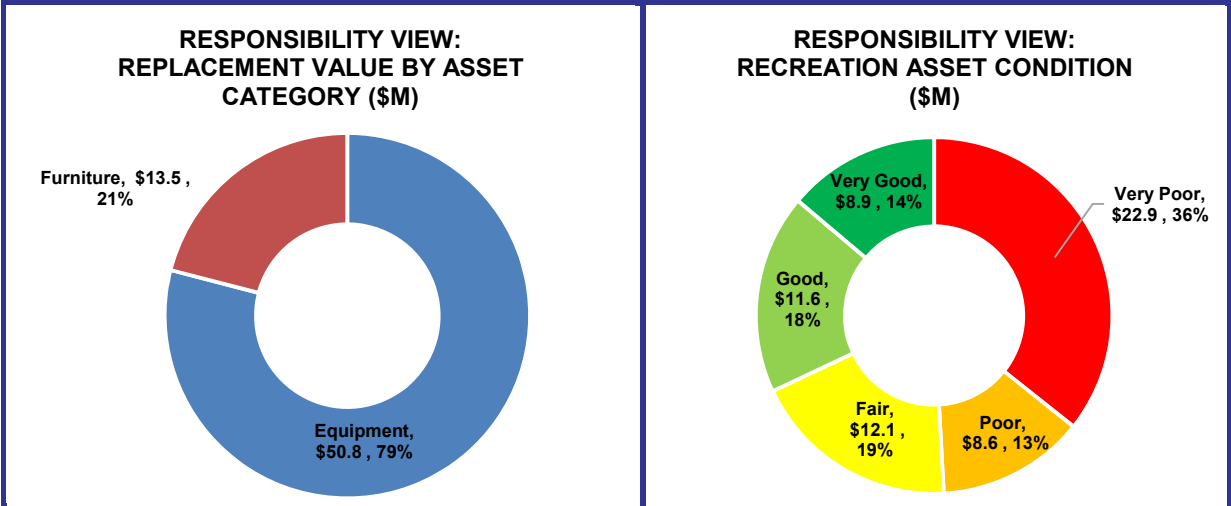
Asset Type	Replacement Value (\$Millions)	Asset Inventory
<b>Assets Managed by Recreation</b>		
Equipment	\$50.8	3,107
Furniture	\$13.5	303
<i>Subtotal Assets Managed by Recreation (Responsibility View)</i>	\$64.2	3,410
<b>Assets Managed by Other Service Areas</b>		
<i>Recreation Facilities</i>	\$745.2	73
<i>City Support Fleet Used by Recreation</i>	\$4.5	130
<i>Software Used by Recreation</i>	\$3.5	3
<b>Total Replacement Value (User View)</b>	<b>\$817.4</b>	-

*Note: The inventory count presented in this asset management plan for Equipment and furniture asset category reflects grouped assets rather than an actual count of individual assets.*



### Major Types of Assets within Recreation - Responsibility View

The figures below illustrate the replacement value and condition of Recreation assets under the responsibility view. Under this view, the total replacement value of assets is \$64.2 million. Consistent with the 2022 SOLI, only equipment and furniture are considered under the management of this service area. Overall, the Recreation assets are in Fair condition, although, about 49% of the total asset base is rated in Poor to Very Poor condition. The determination of condition for recreation assets is mainly "age based" meaning the condition is set relative to the remaining useful life of the asset. It is expected that future iterations of the SOLI will look to further incorporate condition based assessments which may improve the overall confidence and reliability of the identified condition ratings.

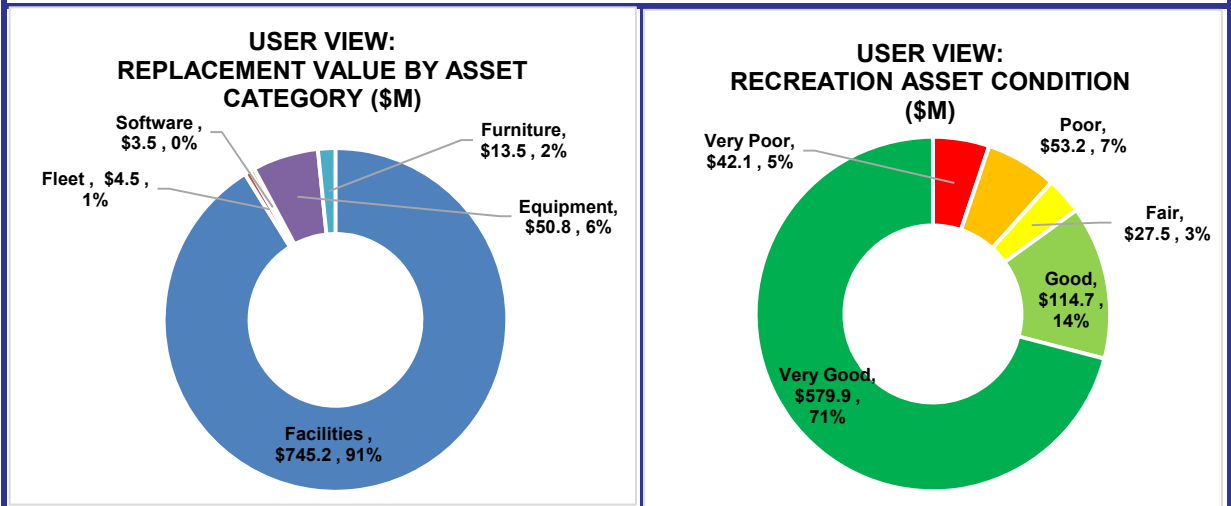


Data Source: PSAB data and historical budgets

### Major Types of Assets within Recreation - User View

The figures below illustrate the replacement value and condition of Recreation assets under the user view. Under the user view illustration, which also captures facilities, fleet and software, the replacement value is about \$817.4 million. Of this total, the Recreation facilities represent the largest share at \$745.2 million. Approximately 85% of the assets are considered to be in Good to Very Good Condition. Only 5% of assets are in Very Poor condition.

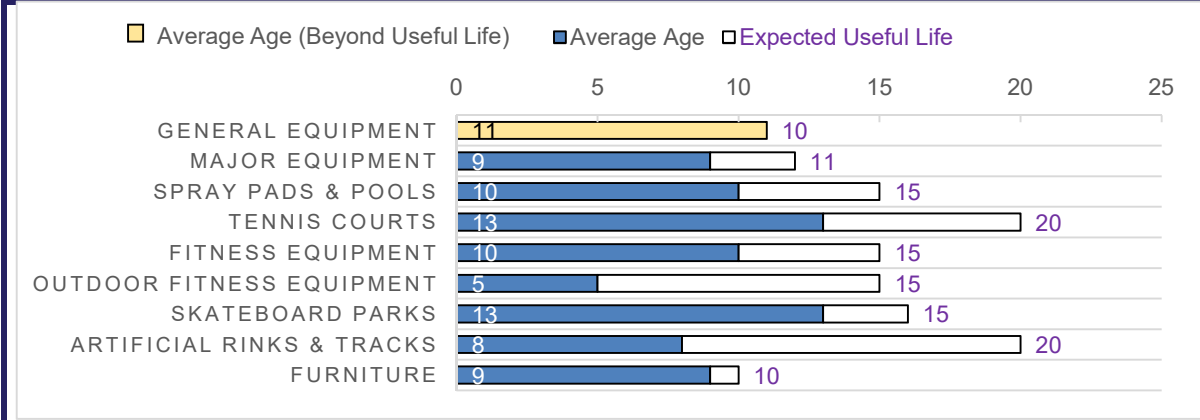
It is important to note, that the proportion of assets considered to be in Poor condition can be attributed to some of the Recreation facilities, although, the facilities continue to be operational and safe for use and these facilities will be addressed through the budget as required.





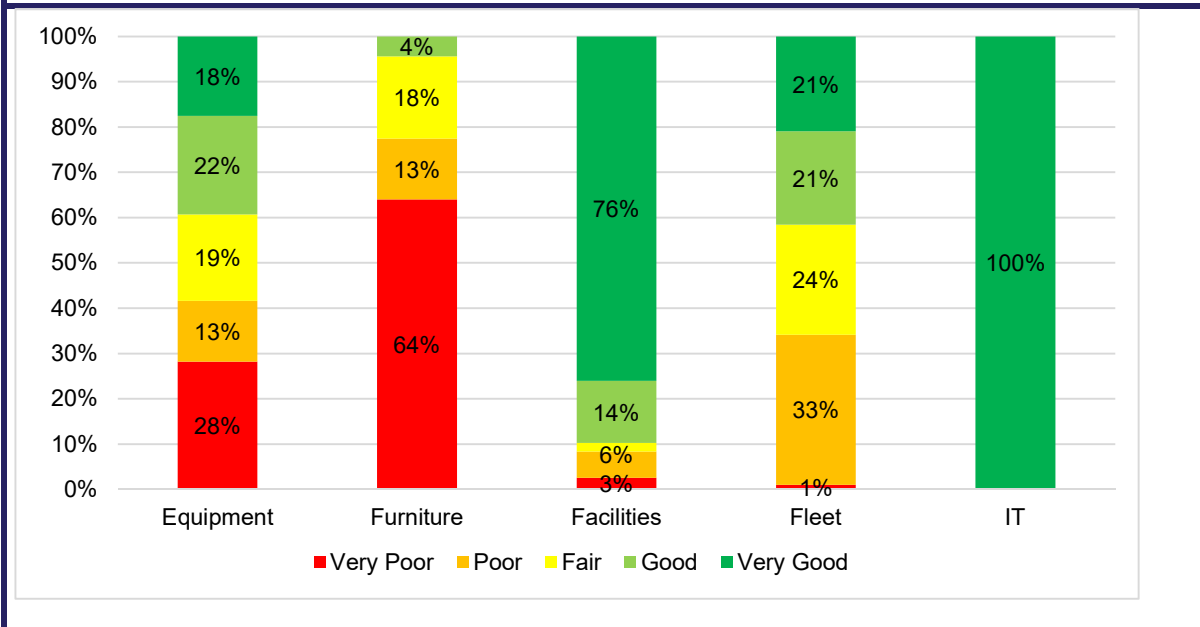
**Age Summary**

The following figure summarizes the average age of the City's Recreation Assets compared to the expected useful life of each asset category. The methodology applied to undertake the average age profile analysis considers the age weighted by replacement value of each asset, which influences average asset age and remaining useful life illustrated. It is important to emphasize that the age of an asset relative to its useful life does not always provide a complete picture of its actual condition.



**Condition Summary**

The figure below illustrates the condition of the various Recreation assets by key sub-component areas based on the user view. While the assets are generally in Good to Very Good condition, Equipment & Furniture have assets in Poor and Very Poor condition based on age. Approximately 34% of Fleet are also in Poor or Very Poor condition. Assets that are reported in Very Poor condition are based on the age of the asset and not necessarily reflect the actual asset condition. The City is implementing Asset Information Management Strategy (AIMS) project which will advance its asset management practices and improve confidence and reliability in data including condition.







**Comparison of 2023 vs. 2022 Inventory and Replacement Value**

The tables below outline the difference in Recreation assets in the 2023 SOLI relative to the 2022 SOLI, while considering reporting under the two different views. Please note, the 2022 SOLI is shown as it was reported (i.e. in \$2023). The values for the 2023 SOLI are in \$2024.

Under the responsibility view framework, the total value of Recreation assets has increased by 8% from approximately \$59.3 million to \$64.2 million. Recent costing data was used where available, with the remaining asset replacement values inflated by either the Machinery & Equipment Price Index (M&E) or the Non-Residential Building Construction Price Index (NRCPI) from the values identified in the 2022 SOLI (which were reported in \$2023). Additional information on the indices applied to each asset class can be found in Table 5 of this report.

When considering the Recreation Facilities, City Support Fleet and IT assets, the total asset value for Recreation has increased proportionately with the inclusion of these assets. In total, the value of Recreation assets increased by 1% (or \$7.0 million) from the value reported in 2022.

Please note, the Facilities, City Support Fleet and IT report cards will include additional information (including the inflation measure applied) on those assets used by Recreation but maintained and managed by these different City departments.

Asset	2022 SOLI		2023 SOLI	
Facilities	69	Each	73	Each
Fleet	123	Each	130	Each
Software	3	Each	3	Each
Equipment	3,087	Each	3,107	Each
Furniture	303	Pooled	303	Pooled

Asset	2022 SOLI (\$2023)	2023 SOLI (\$2024)	Difference	
<b>1. Assets Managed by Other Service Areas*</b>				
Facilities	\$ 743,492,116	\$ 745,154,337	\$ 1,662,221	0%
Fleet	\$ 4,180,260	\$ 4,527,371	\$ 347,112	8%
Software	\$ 3,362,499	\$ 3,457,992	\$ 95,493	3%
<b>Subtotal Assets Managed by Other Service Areas</b>	<b>\$ 751,034,875</b>	<b>\$ 753,139,700</b>	<b>\$ 2,104,825</b>	<b>0%</b>
<b>2. Assets Managed by Recreation</b>				
Equipment	\$ 46,214,452	\$ 50,768,508	\$ 4,554,056	10%
Furniture	\$ 13,102,578	\$ 13,474,682	\$ 372,104	3%
<b>Subtotal Assets Managed by Recreation - Responsibility View</b>	<b>\$ 59,317,029</b>	<b>\$ 64,243,190</b>	<b>\$ 4,926,160</b>	<b>8%</b>
<b>Total Replacement Value - User View (1+2)</b>	<b>\$ 810,351,904</b>	<b>\$ 817,382,890</b>	<b>\$ 7,030,986</b>	<b>1%</b>

\*Responsibility of managing the assets lies with another service area, but assets are used by Recreation

Appendix

# A.10

## Cultural Services





## Cultural Services



<b>Total Asset Replacement Value:</b>	\$17.9 Million
<b>Total Asset Replacement Value Including Facilities, City Support Fleet and Software:</b>	\$133.5 Million
<b>Future Condition Trend (Next 10 Years):</b>	Declining - As assets age they may require attention in the future
<b>Data Confidence &amp; Reliability:</b>	Age and Condition Based

The 2023 SOLI analysis continues to report assets under two different asset representation perspectives: "**Responsibility View**" and a "**User View**".

**Responsibility View:** Shows the assets under the service area that is responsible for managing the capital needs

**User View:** Shows the assets under the service area that is using them

While the User View shows the use of assets, the Responsibility View:

- ✓ provides a direct line of sight to those assets managed by the service area;
- ✓ will help prioritize lifecycle activities managed by the service area;
- ✓ aligns with industry best practices; and
- ✓ provides guidance to future asset management planning practice and departmental initiatives.

The table below illustrates the replacement value (in \$2024) under the two different views.

Asset Type	Replacement Value (\$Millions)	Asset Inventory
<b>Assets Managed by Cultural Services</b>		
Outdoor Equipment & Furniture	\$4.8	Pooled
Specialty Equipment	\$7.6	6,189
Furniture	\$0.1	475
Public Art	\$5.3	29
<i>Subtotal Assets Managed by Cultural Services (Responsibility View)</i>	<i>\$17.9</i>	<i>-</i>
<b>Assets Managed by Other Service Areas</b>		
<i>Cultural Services Facilities*</i>	<i>\$114.9</i>	<i>1</i>
<i>Software Used by Cultural Services</i>	<i>\$0.0</i>	<i>1</i>
<i>City Support Fleet Used by Cultural Services</i>	<i>\$0.6</i>	<i>7</i>
<b>Total Replacement Value (User View)</b>	<b>\$133.5</b>	<b>-</b>

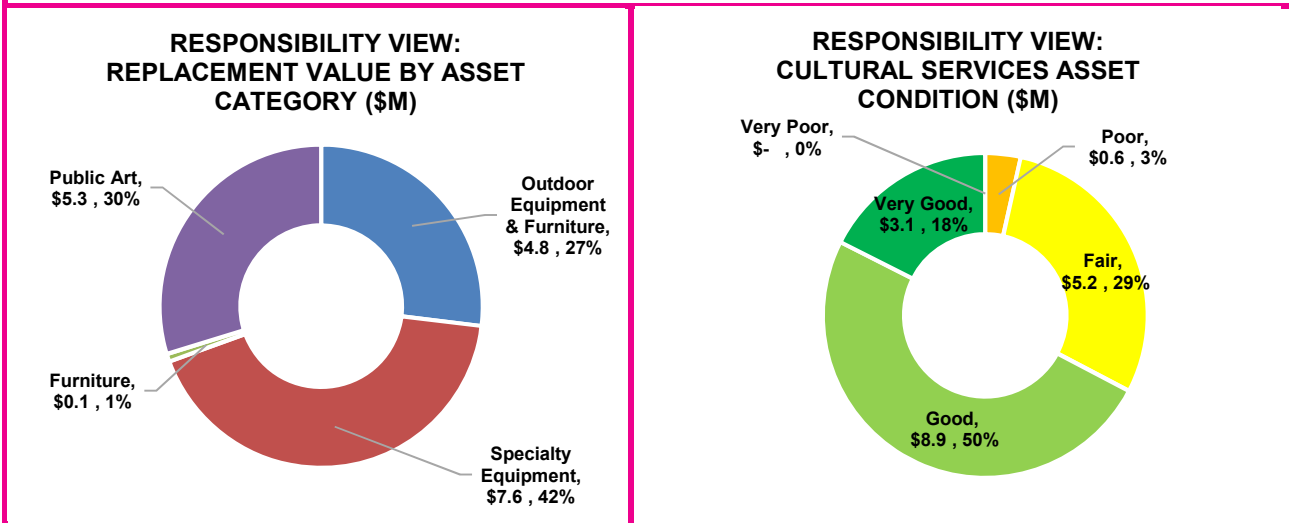
Note\*: Culture manages and maintains the buildings but large scale capital is still undertaken by BDC



## Cultural Services

### Major Types of Assets within Cultural Services - Responsibility View

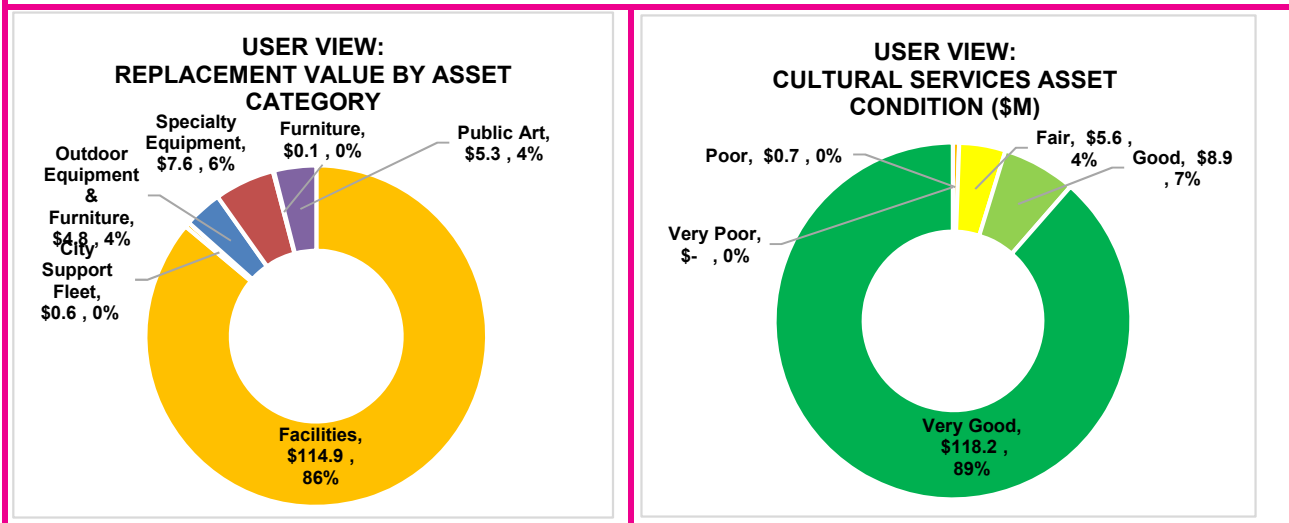
The figure below illustrates the replacement value and condition of Cultural Services assets under the responsibility view. Under this responsibility view, the total replacement value of assets is \$17.9 million. Of this total, approximately 42% is associated with specialty equipment with a further 27% related to outdoor equipment. About 68% of assets are considered to be in Good to Very Good condition, with the remaining assets in Fair or Poor condition. As the City's Cultural Services assets are overall in Good condition, these assets are meeting current needs.



Data Source: Departmental Inventory

### Major Types of Assets within Cultural Services - User View

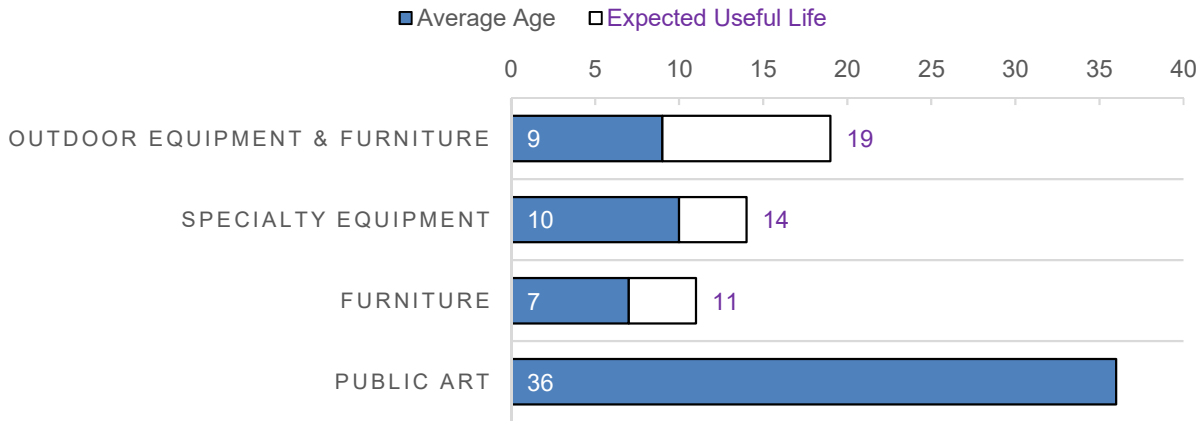
The figures below illustrate the replacement value and condition of Cultural Services assets under the user view. Under the user view illustration, which also captures facilities, City support fleet and software, the replacement value is about \$133.5 million. Of this total, the Cultural Services facilities represent the largest share at \$114.9 million. Approximately 96% of the assets are considered to be in Good to Very Good Condition. No assets are in Very Poor condition.





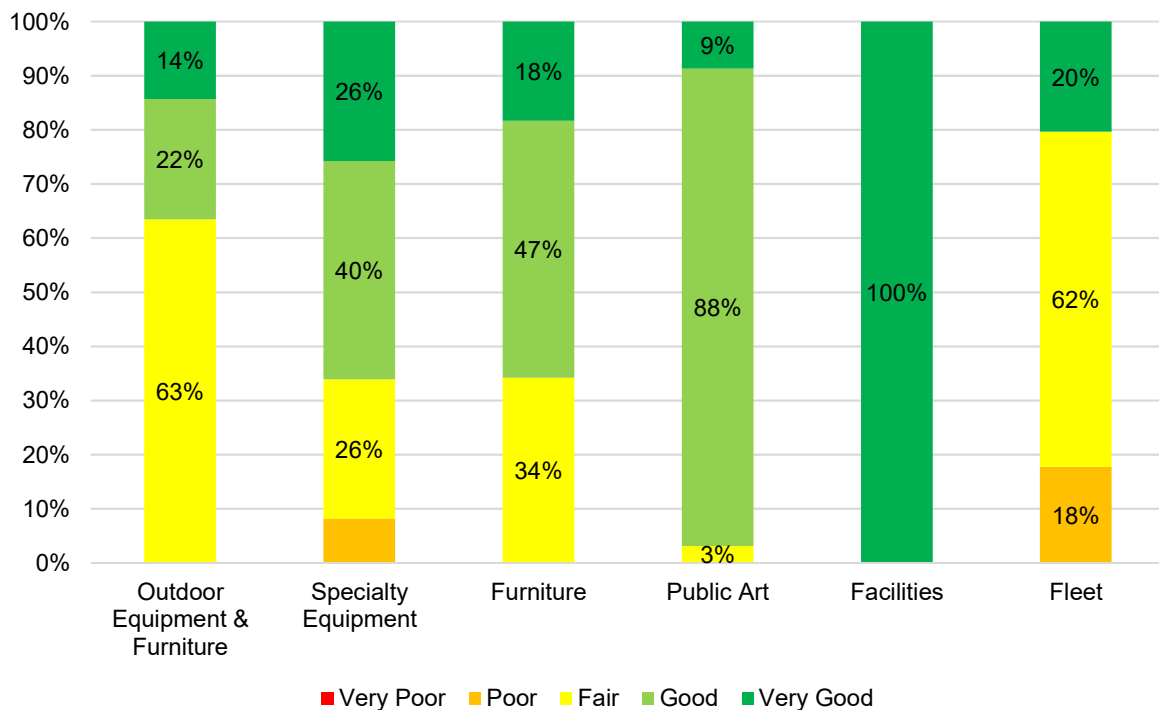
**Age Summary**

The following figure summarizes the average age of the City's Cultural Services assets compared to the expected useful life of each asset category. The methodology applied to undertake the average age profile analysis considers the age weighted by replacement value of each asset, which influences average asset age and remaining useful life illustrated.



**Condition Summary**

The figure below illustrates the condition of the various Cultural Services assets by key sub-component areas based on the user view. Most asset categories are all generally considered to be in Good or Very Good Condition. About 18% of Fleet assets are considered to be in Poor condition as they reach the end of their service life and will be replaced.







**Comparison of 2023 vs. 2022 Inventory and Replacement Value**

The tables below outline the difference in Cultural Services assets in the 2023 SOLI relative to the 2022 SOLI, while considering reporting under the two different views. Please note, the 2022 SOLI is shown as it was reported (i.e. in \$2023). The values for the 2023 SOLI are in \$2024.

Under the responsibility view framework, the total value of Cultural Services assets has increased by 9% from approximately \$16.5 million to \$17.9 million. The increase in value can largely be attributed to cost increases since the last report. As recent costing data was not available, the Cultural Services asset replacement values were inflated by the Machinery & Equipment Price Index (M&E) from the values identified in the 2022 SOLI (which were reported in \$2023). Additional information on the indices applied to each asset class can be found in Table 5 of this report.

When considering the Cultural Services Facilities, City Support Fleet and IT assets, the total asset value for Cultural Services has generally increased proportionately with the inclusion of these assets. The total value of Cultural Services assets increased by about 12% from the value reported in 2022.

Please note, the Facilities, City Support Fleet and IT report cards will include additional information (including the inflation measure applied).

Asset	2022 SOLI		2023 SOLI	
Outdoor Equipment & Furniture	Pooled		Pooled	
Specialty Equipment	5,412	Each	6,189	Each
Furniture	475	Each	475	Each
Public Art	28	Each	29	Each
Facilities	1	Each	1	Each
Fleet	6	Each	7	Each
Software	1	Each	1	Each

Asset	2022 SOLI (\$2023)	2023 SOLI (\$2024)	Difference	
<b>1. Assets Managed by Other Service Areas*</b>				
Facilities	\$ 102,301,865	\$ 114,945,901	12,644,036	12%
City Support Fleet	\$ 603,951	\$ 619,520	15,568	3%
IT	\$ -	\$ -	-	N/A
<b>Subtotal Assets Managed by Other Service Areas</b>	<b>\$ 102,905,816</b>	<b>\$ 115,565,421</b>	<b>12,659,605</b>	<b>12%</b>
<b>2. Assets Managed by Cultural Services</b>				
Outdoor Equipment & Furniture**	\$ 4,780,497	\$ 4,829,326	\$ 48,829	1%
Specialty Equipment	\$ 6,500,525	\$ 7,614,782	\$ 1,114,257	17%
Furniture	\$ 138,483	\$ 137,896	\$ (587)	0%
Public Art	\$ 5,092,558	\$ 5,336,123	\$ 243,565	5%
<b>Subtotal Assets Managed by Cultural Services (Responsibility View)</b>	<b>\$ 16,512,062</b>	<b>\$ 17,918,127</b>	<b>\$ 1,406,065</b>	<b>9%</b>
<b>Total Replacement Value: User View (1+2)</b>	<b>\$ 119,417,879</b>	<b>\$ 133,483,548</b>	<b>\$ 14,065,669</b>	<b>12%</b>

\*Assets related to City Support Fleet and IT, the Responsibility of managing the assets lies with another service area, but assets are used by Cultural Services. As it pertains to facility related assets, Culture manages and maintains the facilities but large scale capital is still undertaken by the City's Building Design and Construction (BDC) group. As a result, these facilities are represented under the "User view" framework

Appendix

# A.11

## Library





<b>Asset Replacement Value:</b>	\$22.6 Million
<b>Total Asset Replacement Value including Facilities and City-Support Fleet:</b>	\$129.8 Million
<b>Future Condition Trend (Next 10 Years):</b>	Declining – As assets age they may require attention in the future
<b>Data Confidence &amp; Reliability:</b>	Age and Condition Based

The 2023 SOLI analysis continues to report assets under two different asset representation perspectives: **"Responsibility View"** and **"User View"**

**Responsibility View:** Shows the assets under the service area that is responsible for managing them

**User View:** Shows the assets under the service area that is using them

While the User View shows the use of assets, the Responsibility View:

- ✓ provides a direct line of sight to those assets managed by the service area;
- ✓ will help prioritize lifecycle activities managed by the service area;
- ✓ aligns with industry best practices; and
- ✓ provides guidance to future asset management planning practice and departmental initiatives.

The table below illustrates the replacement value (in \$2024) under the two different views.

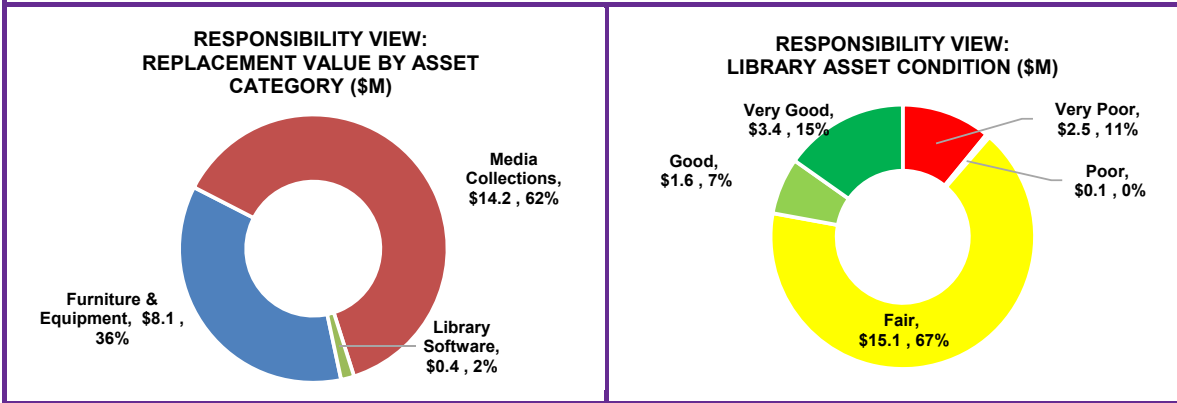
Asset Type	Replacement Value (\$Millions)	Asset Inventory
<b>Assets Managed by Library</b>		
Furniture and Equipment	\$8.1	6,728
Media Collections	\$14.2	Pooled
Library Software	\$0.4	18
<i>Subtotal Assets Managed by Library (Responsibility View)</i>	\$22.6	-
<b>Assets Managed by Other Service Areas</b>		
<i>Library Facilities</i>	\$107.0	6
<i>City Support Fleet Used by Library</i>	\$0.2	4
<b>Total Replacement Value (User View)</b>	<b>\$129.8</b>	-

The Library facility figure reported includes the four (4) standalone library branches as well as two (2) libraries located within Recreation Facilities (Gore Meadows Community Centre and Susan Fennel Sportsplex (formerly South Fletchers Sports Complex)). The library portion of those shared facilities are included in the above facilities total of \$107.0 million.



### Major Types of Assets within Brampton Library - Responsibility View

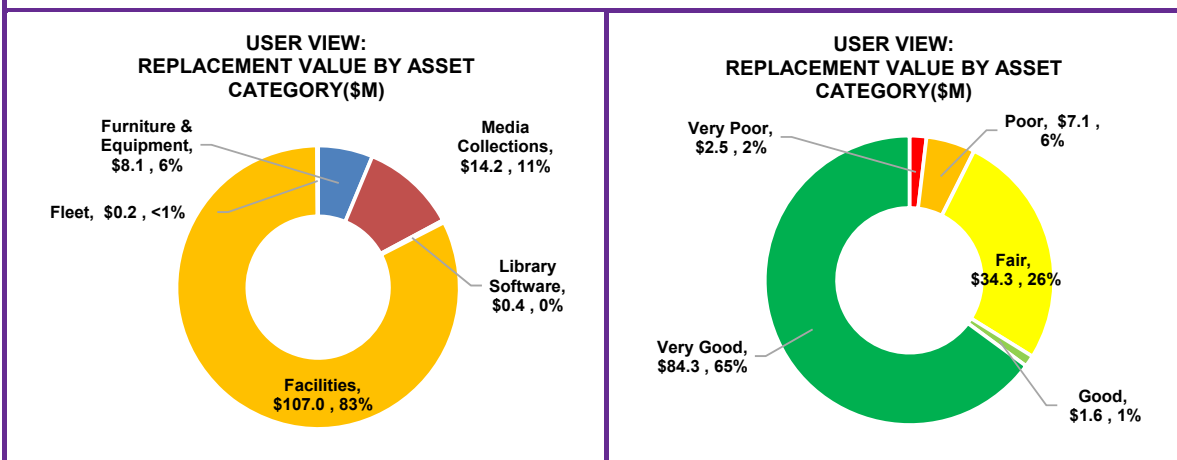
The figure below illustrates the replacement value and condition of Library service assets under the responsibility view. Under the responsibility view, the total replacement value of the Library assets is \$22.6 million. Of the \$22.6 million replacement value, about 62%, or \$14.2 million, is attributed to Media Collections. Furthermore, about 36%, or \$8.1 million is attributed to Furniture and Equipment, while the remaining \$360,000 is related to Library Software. Approximately 11% of total assets managed by Library services are identified in Very Poor or Poor condition. This condition of a small subset of the total Library assets does not represent a safety issue or preclude Brampton Library from delivering services to meet the needs of residents.



Data Source: PSAB data and consultation with Library staff

### Major Types of Assets within Brampton Library - User View

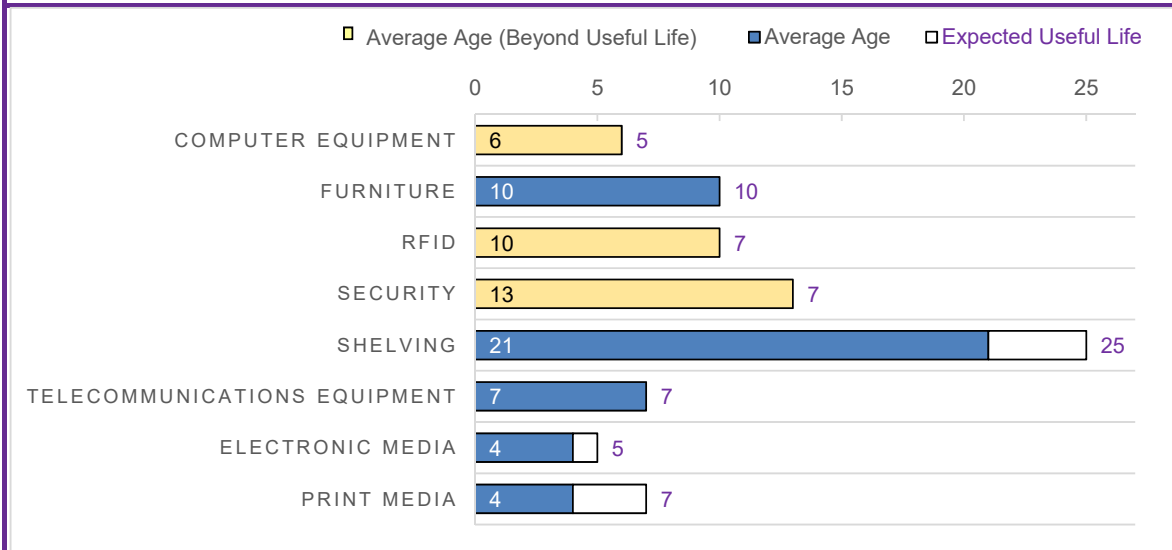
The figures below illustrate the replacement value and condition of Library service assets under the user view. Under the user view, which captures facilities and City support fleet, the replacement value is about \$129.8 million. Of this total \$129.8 million, the Library facilities represent the largest component at \$107.0 million. Approximately 66% of the Library's assets are considered to be in Good to Very Good condition, with the remaining assets close to, or past, the end of their service life.





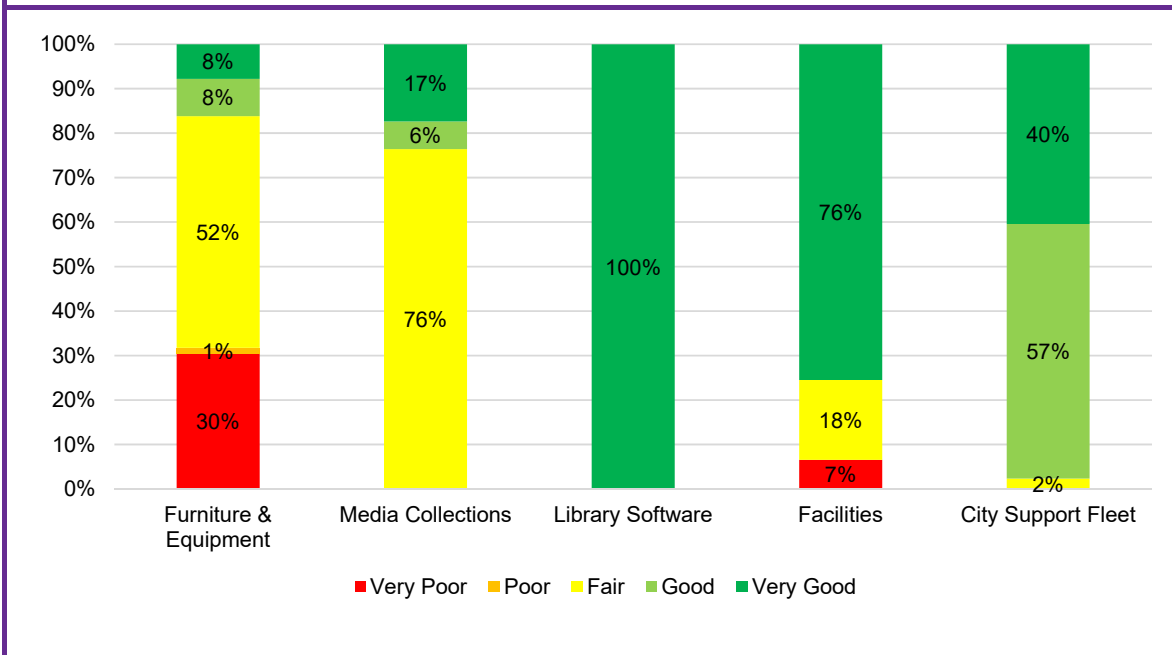
**Age Summary**

The following figure summarizes the average age of the City's Library Assets compared to the expected useful life of each asset category. The methodology applied to undertake the average age profile analysis considers the age weighted by replacement value of each asset, which influences average asset age and remaining useful life illustrated. It is important to emphasize that the age of an asset relative to its useful life does not always provide a complete picture of its actual condition, and an asset can often perform at the expected level to meet service requirements, despite being beyond its useful life, as is the case with Library assets (RFID, Security and Computer Equipment).



**Condition Summary**

The figure below illustrates the condition of the various Library service assets by key sub-component areas. While the assets are cumulatively in Fair or higher condition, Furniture and Equipment have a significant component of assets in Poor or Very Poor condition. Library Software assets and the majority of facilities are in Good or Very Good Condition, except for 7% of facilities, which are in Very Poor condition.







**Comparison of 2023 vs. 2022 Inventory and Replacement Value**

The tables below outline the difference in Library assets in the 2023 SOLI relative to the 2022 SOLI while considering reporting under the two different views. Please note, the 2022 SOLI is shown as it was reported (i.e. in \$2023). The values for the 2023 SOLI are in \$2024.

Looking only at those assets included under the responsibility view framework, the total value of Library Services has decreased by 8% from approximately \$24.7 million to \$22.6 million. The decrease in value is attributed to the decommissioning of some existing assets. The replacement values in this 2023 SOLI were inflated by the Machinery & Equipment Price Index (M&E) from the values identified in the 2022 SOLI (which were reported in \$2023). Additional information on the indices applied to each asset class can be found in Table 5 of this report.

Including the Library Facility and City Support Fleet assets, the total asset value for Library Services has increased proportionately with those assets. In total, the value of library assets has increased by 1% (or \$1.2 million) from 2022. This increase can largely be attributed to the increased valuations of City Library facilities.

Please note, the Facilities and City Support Fleet report cards will include additional information on those assets used by Library but maintained and managed by a different city department.

Asset	2022 SOLI		2023 SOLI	
Furniture & Equipment	7,159	Each	6,728	Each
Media Collections		Pooled		Pooled
Library Software	17	Each	18	Each
Facilities	6	Each	6	Each
Fleet	4	Each	4	Each

Asset	2022 SOLI (\$2023)	2023 SOLI (\$2024)	Difference	
<b>1. Assets Managed by Other Service Areas*</b>				
Facilities	\$ 103,780,112	\$ 107,000,040	\$ 3,219,928	3%
Fleet	\$ 154,271	\$ 157,678	\$ 3,407	2%
<b>Subtotal Assets Managed by Other Service Areas</b>	<b>\$ 103,934,383</b>	<b>\$ 107,157,718</b>	<b>\$ 3,223,335</b>	<b>3%</b>
<b>2. Assets Managed by Library</b>				
Furniture & Equipment	\$ 8,535,526	\$ 8,126,767	\$ (408,759)	-5%
Media Collections	\$ 15,769,724	\$ 14,152,035	\$ (1,617,689)	-10%
Library Software	\$ 387,249	\$ 360,498	\$ (26,752)	-7%
<b>Subtotal Assets Managed by Library (Responsibility View)</b>	<b>\$ 24,692,499</b>	<b>\$ 22,639,300</b>	<b>\$ (2,053,199)</b>	<b>-8%</b>
<b>Total Replacement Value: User View (1+2)</b>	<b>\$ 128,626,882</b>	<b>\$ 129,797,018</b>	<b>\$ 1,170,136</b>	<b>1%</b>

\*Responsibility of managing the assets lies with another service area, but assets are used by Library Services

Appendix

# A.12

## Animal Services





<b>Total Asset Replacement Value:</b>	\$366,800
<b>Total Asset Replacement Value Including Facilities, City Support Fleet and Software</b>	\$12.5 Million
<b>Future Condition Trend (Next 10 Years):</b>	Declining - As assets age they may require attention in the future
<b>Data Confidence &amp; Reliability:</b>	Medium (Condition Based)

The 2023 SOLI analysis continues to report assets under two different asset representation perspectives: "Responsibility View" and a "User View" representation

- Responsibility View:** Shows the assets under the service area that is responsible for managing them
- User View:** Shows the assets under the service area that is using them

While the User View shows the use of assets, the Responsibility View

- ✓ provides a direct line of sight to those assets managed by the service area;
- ✓ will help prioritize lifecycle activities managed by the service area;
- ✓ aligns with industry best practices; and
- ✓ provides guidance to future asset management planning practice and departmental initiatives.

The table below illustrates the replacement value (in \$2024) under the two different views.

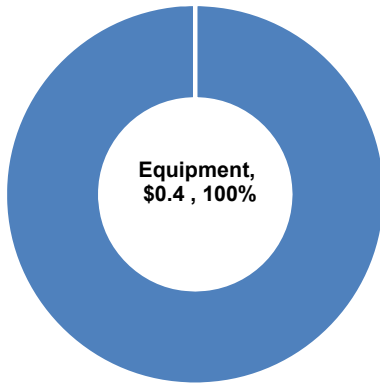
Asset Type	Replacement Value (\$Millions)	Asset Inventory
<b>Assets Managed by Animal Services</b>		
Equipment	\$0.4	176
<i>Subtotal Assets Managed by Animal Services (Responsibility View)</i>	<i>\$0.4</i>	<i>176</i>
<b>Assets Managed by Other Service Areas</b>		
<i>Animal Services Facilities <sup>(1)</sup></i>	<i>\$10.8</i>	<i>2</i>
<i>City Support Fleet Used by Animal Services</i>	<i>\$1.2</i>	<i>11</i>
<i>Software Used by Animal Services</i>	<i>\$0.2</i>	<i>1</i>
<b>Total Replacement Value (User View)</b>	<b>\$12.5</b>	<b>-</b>



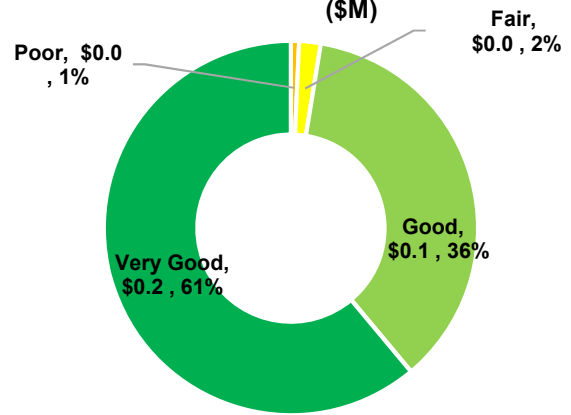
**Major Types of Assets within Animal Services - Responsibility View**

The figure below illustrates the replacement value and condition of Animal Services assets under the responsibility view. Under this view, the total replacement value of assets is about \$366,800. Consistent with the 2022 SOLI, only Animal Services equipment is considered under the management of the service area and therefore makes up the entire replacement value. Overall, the Animal Services assets are in Very Good condition with about 1% of total assets rated in Poor condition.

**RESPONSIBILITY VIEW:  
REPLACEMENT VALUE BY ASSET  
CATEGORY (\$M)**



**RESPONSIBILITY VIEW:  
ANIMAL SERVICES ASSET CONDITION  
(\$M)**

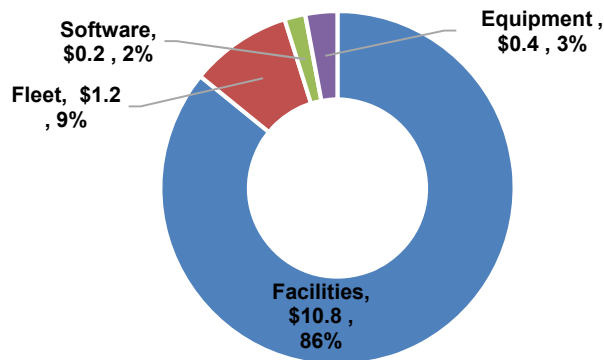


Data Source: Departmental Inventory, PSAB data as of year-end 2023

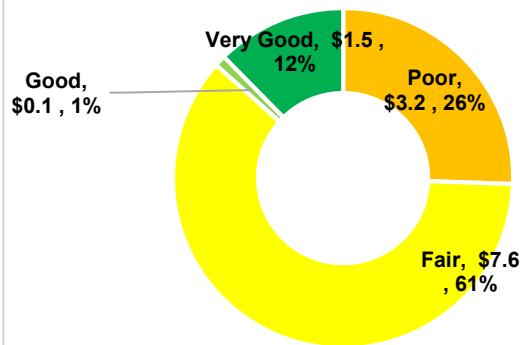
**Major Types of Assets within Animal Services - User View**

The figures below illustrate the replacement value and condition of Animal Services assets under the user view. Under the user view illustration, which also captures facilities, City support fleet and software, the replacement value is about \$12.5 million. Of this total, the Animal Services facilities represent the largest share at \$10.8 million. Facilities assets are currently in Fair and Poor condition which are largely driving the overall condition of user view assets. Poor condition reporting does not represent a safety issue or preclude service areas from delivering services to meet the needs of residents.

**USER VIEW:  
REPLACEMENT VALUE BY ASSET  
CATEGORY (\$M)**



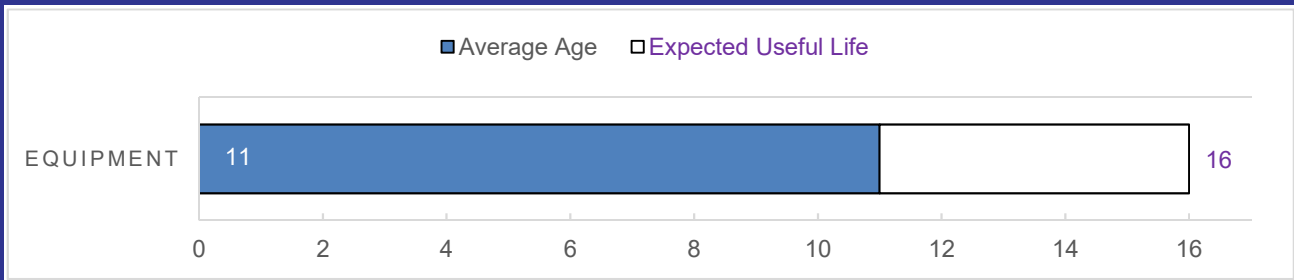
**USER VIEW:  
ANIMAL SERVICES ASSET  
CONDITION (\$M)**





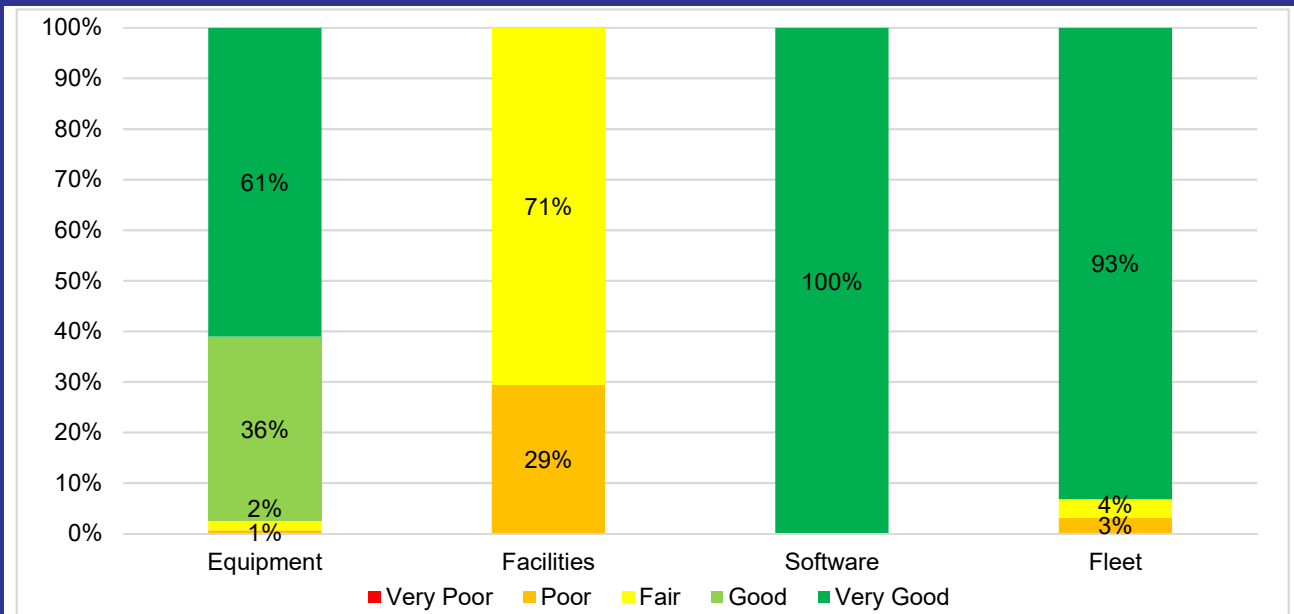
### Age Summary

The following figure summarizes the average age of the City's Animal Services assets compared to the expected useful life of each asset category. The methodology applied to undertake the average age profile analysis considers the age weighted by replacement value of each asset, which influences average asset age and remaining useful life illustrated.



### Condition Summary

The figure below illustrates the condition of the various Animal Services assets by key sub-component areas based on the user view. While the assets are generally in Good to Very Good condition, Facilities are largely in Fair condition and a small portion of Fleet and Equipment assets are in Fair and Poor condition.







**Comparison of 2023 vs. 2022 Inventory and Replacement Value**

The tables below outline the difference in Animal Services assets in the 2022 SOLI relative to the 2023 SOLI, while considering reporting under the two different views. Please note, the 2022 SOLI is shown as it was reported (i.e. in \$2023). The values for the 2023 SOLI are in \$2024.

Under the responsibility view framework, the total value of Animal Services assets has increased from \$345,600 to \$366,800. The increase in value can largely be attributed to cost increases since the last report. As no recent costing data was available, the asset replacement values for Animal Services Equipment were inflated by the Machinery & Equipment Price Index (M&E) from the values identified in the 2022 SOLI (which were reported in \$2023). Additional information on the indices applied to each asset class can be found in Table 5 of this report.

When considering the Animal Services Facilities, City Support Fleet and IT assets, the total asset value for Animal Services increased proportionately with the inclusion of these assets. The overall increases can be attributed to updated costing as part of the 2023 SOLI through the increased inflation factors.

Please note, the Facilities, City Support Fleet and IT report cards include additional information (including the inflation measure applied) on those assets used by Animal Services but maintained and managed by a different City department.

Asset	2022 SOLI		2023 SOLI	
Facilities	2	Each	2	Each
Fleet	12	Each	11	Each
Software	1	Each	1	Each
Equipment	171	Each	176	Each

Asset	2022 SOLI (\$2023)	2023 SOLI (\$2024)	Difference	
<b>1. Assets Managed by Other Service Areas*</b>				
Facilities	\$ 9,887,046	\$ 10,765,225	\$ 878,179	9%
Fleet	\$ 1,134,519	\$ 1,163,022	\$ 28,503	3%
Software	\$ 232,980	\$ 239,596	\$ 6,616	3%
<b>Subtotal Assets Managed by Other Service Areas</b>	<b>\$ 11,254,544</b>	<b>\$ 12,167,843</b>	<b>\$ 913,299</b>	<b>8%</b>
<b>2. Assets Managed by Animal Services</b>				
Equipment	\$ 345,646	\$ 366,822	\$ 21,176	6%
<b>Subtotal Assets Managed by Animal Services (Responsibility View)</b>	<b>\$ 345,646</b>	<b>\$ 366,822</b>	<b>\$ 21,176</b>	<b>6%</b>
<b>Total Replacement Value: User View (1+2)</b>	<b>\$ 11,600,190</b>	<b>\$ 12,534,665</b>	<b>\$ 934,475</b>	<b>8%</b>

\*Responsibility of managing the assets lies with another service area, but assets are used by Animal Services