

2 State of Local Infrastructure (SOLI)

This section of the report seeks to establish an understanding of the current state of Brampton’s estimated \$7.0 billion (\$2021) in infrastructure assets. The valuation is estimated based on an inventory of capital assets as of year-end 2020. 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) is a key building block for Brampton’s future management of its infrastructure assets. This section is intended 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 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 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. Future iterations of this report will continue to include all assets directly and indirectly owned or managed by the City, including those owned or managed by municipal boards and agencies in addition to Brampton Library.

Despite the major service area categories being consistent with the 2019 SOLI Report, the City has made significant improvements to the datasets, key inputs, assumptions, and reporting views. Furthermore, the financing strategy has been updated to be more reflective of a full lifecycle cost of service approach as required by the regulation. Based on a weighted replacement value average of all services and their condition assessments, approximately 76% of assets are assigned a data confidence rating based on condition. This represents an increase of about 7% from the 2019 SOLI Report in which 69% of the asset ratings were based on condition (and 21% from 2018 SOLI Report). Please note that the replacement values will continue to be updated in future years with more recent data which may better reflect the cost pressures that the City is currently experiencing due to COVID-19 if they continue to persist.

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

The assessment of the City’s current state of infrastructure is a key component of the overall Corporate Asset Management Plan (Corporate AMP). Previously, the SOLI was reported under a “User View” representation. In this Corporate Asset Management Plan, the state of the City infrastructure is being 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 them.

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

The responsibility view is also being illustrated in this iteration, 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 most significant adjustment that can be observed under the new responsibility view pertains to Facilities, City Support Fleet and Software. These assets all form a fundamental component to how services are delivered and therefore “used” by each service area, although, the department that manages the infrastructure is different from those who use it.

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 in highlighted in grey). As illustrated in the total replacement value below, both views result in the same valuation of \$7.0 billion:

Table 2-1 – 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	Roads	\$1,421.8	Roads	\$1,421.8
	Islands	\$49.7	Islands	\$49.7
	Structures (Bridges & Culverts)	\$739.8	Structures (Bridges & Culverts)	\$739.8
	Structures (Other)*	\$66.3	Structures (Other)	\$66.3
	Walkways & Paths	\$252.2	Walkways & Paths	\$252.2
	Traffic Services	\$357.9	Traffic Services	\$357.9
			Facilities (Moved to Facilities)	\$81.4
			Fleet (Moved to City Support Fleet)	\$18.0
			Software (Moved to IT)	\$2.3
Total Transportation		\$2,887.8		\$2,989.5
<i>*Note: Structures (Other) includes gateway features, noise walls, retaining walls, fences, guiderails, handrails and steps</i>				
Stormwater	Stormwater Management Ponds	\$94.7	Stormwater Management Ponds	\$94.7
	Storm Sewer Systems	\$1,241.0	Storm Sewer Systems	\$1,241.0
	Oil & Grit Separators	\$7.1	Oil & Grit Separators	\$7.1
Total Stormwater		\$1,342.7		\$1,342.7
Facilities	Corporate Facilities	\$308.9	Corporate Facilities	\$308.9
	Animal Services Facilities	\$9.2	Software (Moved to IT)	\$0.5
	Cultural Services Facilities	\$88.5		
	Recreation Facilities	\$573.4		
	Parks Facilities	\$17.8		
	Transit Facilities	\$165.6		
	Library Facilities	\$81.9		
	Fire Facilities	\$116.0		
Work Operations Facilities	\$81.4			
Total Facilities		\$1,442.6		\$309.3

Service Area	Assets Under Responsibility View		Assets Under User View	
	Asset Type	CRV (\$M)	Asset Type	CRV (\$M)
Transit	Licensed Vehicle Assets	\$429.7	Licensed Vehicle Assets	\$429.7
	Transit Facilities (On Road)	\$53.7	Transit Facilities (On Road)	\$53.7
	Transit IT Infrastructure	\$1.1	Transit IT Infrastructure	\$1.1
	Specialty Equipment	\$43.6	Specialty Equipment	\$43.6
			Facilities (Moved to Facilities)	\$165.6
			Software (Moved to IT)	\$1.1
Total Transit		\$528.0		\$694.7
Information Technology (IT)	End User IT	\$5.9	End User IT	\$5.9
	Infrastructure Assets	\$55.6	Infrastructure Assets	\$55.6
	Software (Shared Corporate Software)	\$27.2	Software (Shared Corporate Software)	\$27.2
	Software (Used by Other Service Areas)	\$8.3		
Total IT		\$97.1		\$88.8
City Support Fleet	Licensed Fleet (Corporate Services Fleet)	\$5.1	Licensed Fleet (Corporate Services Fleet)	\$5.1
	Off-Road Vehicles (Corporate Services Fleet)	\$1.4	Off-Road Vehicles (Corporate Services Fleet)	\$1.4
	Fleet Equipment (Corporate Services Fleet)	\$0.04	Fleet Equipment (Corporate Services Fleet)	\$0.04
	Licensed Fleet (Used by Other Service Areas)	\$27.1	Software (Moved to IT)	\$0.8
	Off-Road Vehicles (Used by Other Service Areas)	\$14.1		
	Fleet Equipment (Used by Other Service Areas)	\$0.3		
Total City Support Fleet		\$48.1		\$7.3
Fire	Front Line Licensed Vehicles & Apparatus	\$19.3	Front Line Licensed Vehicles & Apparatus	\$19.3
	Support Vehicles & Equipment	\$6.4	Support Vehicles & Equipment	\$6.4
	Spare Vehicles	\$6.9	Spare Vehicles	\$6.9
	Personal Fire Equipment	\$3.0	Personal Fire Equipment	\$3.0
			Facilities (Moved to Facilities)	\$116.0
			Software (Moved to IT)	\$3.1
Total Fire		\$35.6		\$154.7
Parks	Parking Lots	\$15.0	Parking Lots	\$15.0
	Small Engine Equipment	\$2.3	Small Engine Equipment	\$2.3
	Park Parkland	\$68.4	Park Parkland	\$68.4
	Natural Heritage Lands	\$0.0	Natural Heritage Lands	\$0.0
	Park Furnishing	\$3.0	Park Furnishing	\$3.0
	Playgrounds	\$85.8	Playgrounds	\$85.8
	Shade Structures	\$36.3	Shade Structures	\$36.3
	Splash Pads & Outdoor Pools	\$3.2	Splash Pads & Outdoor Pools	\$3.2
Fitness Equipment	\$0.7	Fitness Equipment	\$0.7	

Service Area	Assets Under Responsibility View		Assets Under User View	
	Asset Type	CRV (\$M)	Asset Type	CRV (\$M)
	Skate Parks	\$1.7	Skate Parks	\$1.7
	Sports Facilities	\$120.1	Sports Facilities	\$120.1
	Pathways	\$47.3	Pathways	\$47.3
	Trees	\$129.9	Trees	\$129.9
	Flower Beds	\$3.8	Flower Beds	\$3.8
	Cemetery Equipment	\$0.1	Cemetery Equipment	\$0.1
			Facilities (Moved to Facilities)	\$17.8
			Fleet (Moved to City Support Fleet)	\$17.3
			Software (Moved to IT)	\$0.0
Total Parks		\$517.6		\$552.7
Recreation	Equipment	\$31.7	Equipment	\$31.7
	Furniture	\$11.5	Furniture	\$11.5
			Facilities (Moved to Facilities)	\$573.4
			Fleet (Moved to City Support Fleet)	\$4.2
			Software (Moved to IT)	\$0.3
Total Recreation		\$43.2		\$621.1
Cultural Services	Outdoor Equipment	\$1.7	Outdoor Equipment	\$1.7
	Specialty Equipment	\$10.3	Specialty Equipment	\$10.3
	Furniture	\$0.2	Furniture	\$0.2
	Public Art	\$0.8	Public Art	\$0.8
			Facilities (Moved to Facilities)	\$88.5
			Fleet (Moved to City Support Fleet)	\$0.7
			Software (Moved to IT)	\$0.0
Total Cultural Services		\$13.1		\$102.3
Library	Furniture and Equipment	\$8.0	Furniture and Equipment	\$8.0
	Media Collections	\$10.7	Media Collections	\$10.7
	Library Software	\$0.3	Library Software	\$0.3
			Facilities (Moved to Facilities)	\$81.9
			Fleet (Moved to City Support Fleet)	\$0.2
Total Library		\$19.0		\$101.1
Animal Services	Equipment	\$0.3	Equipment	\$0.3
			Facilities (Moved to Facilities)	\$9.2
			Fleet (Moved to City Support Fleet)	\$1.1
			Software (Moved to IT)	\$0.2
Total Animal Services		\$0.3		\$10.8
Total CRV (\$M)		\$6,975.1		\$6,975.1

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

2.2 Asset Inventory and Valuation

As specified in the Ministry Guide, the value of the City's assets is presented 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. It is noted that 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 on Table 2-2 below, the City's 2019 Consolidated Financial Statement reported the Net Book Value of the City's Tangible Capital Assets as of December 31, 2020 at \$3.8 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 2-2 – City of Brampton Net Book Value (\$000)

FIR Functional Classification	Net Book Value Jan 1, 2020	Net Additions/ Disposals	Net Amortization Expense	Net Book Value Dec 31, 2020
General Government	\$355,609	\$16,106	\$12,529	\$359,187
Protection	\$66,275	\$5,310	\$5,556	\$66,030
Transportation	\$1,894,898	\$115,335	\$78,054	\$1,932,179
Environmental	\$528,994	\$34,890	\$16,978	\$546,906
Health	\$765	\$82	\$96	\$751
Social and Family	\$4,045	\$52	\$338	\$3,760
Recreation and Cultural Services	\$845,593	\$80,799	\$27,014	\$899,377
Planning and Development	\$8,333	\$740	\$1,436	\$7,637
TOTAL	\$3,704,513	\$253,314	\$142,001	\$3,815,826

Note: Categories/information derived from the 2020 Financial Information Return. The net amortization figure tends to vary from year-to-year pending 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 \$7.0 billion.

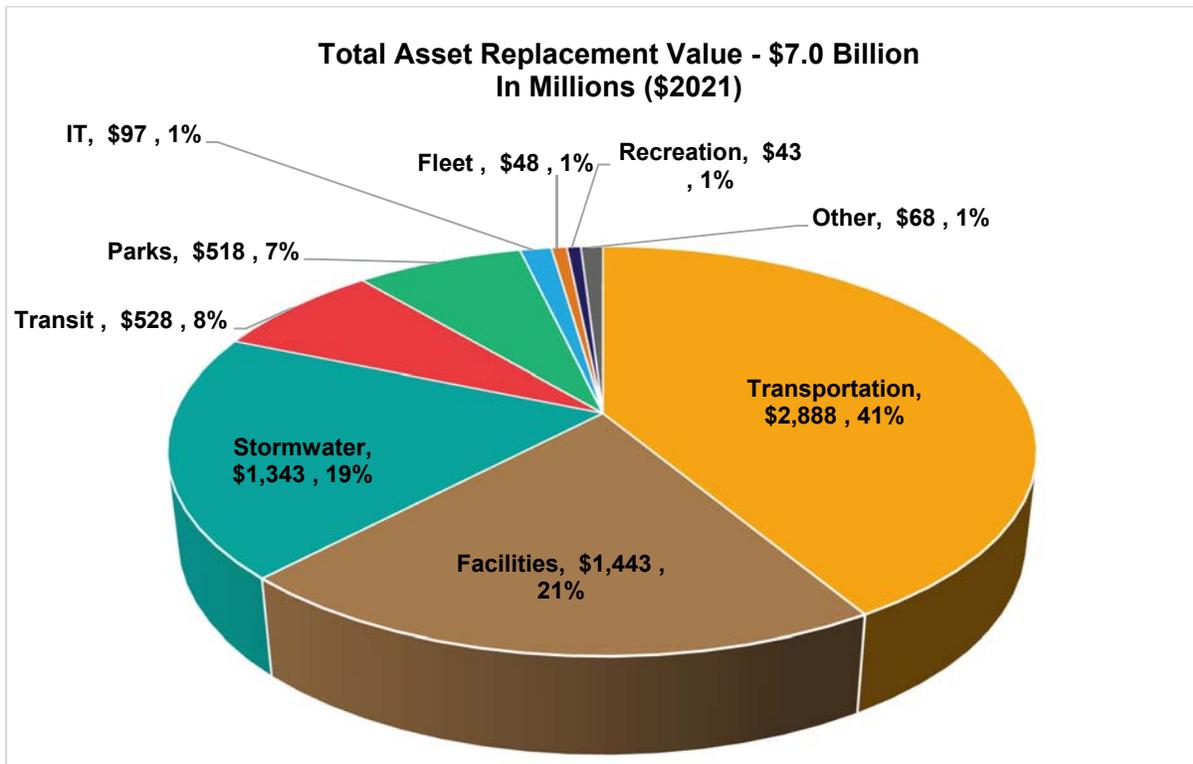
2.3 Replacement Cost Valuation

The City uses three basic methods to estimate replacement costs needed for infrastructure renewal planning:

1. **Local price indices:** This is the most accurate method. The City has collected recent acquisition data demonstrating similar replacement activities.
2. **Published price indices:** Where local indices are not available, the City uses published indices which, although appropriate and standardized, may not be as relevant to City assets as local indices.
3. **Purchasing estimates:** When assets cannot be estimated against either index, the City uses historic cost, asset age and inflationary effects to determine the current replacement value.

The total replacement value of all assets covered under this report is illustrated by service in Figure 2-1 below. Transportation services represents the largest share at 41%, or \$2.89 billion, of the total \$7.0 billion replacement value. The replacement value reported in the below figure is represented under the “Responsibility view” framework.

Figure 2-1 – Total Replacement Value of City Infrastructure = \$7.0 Billion



Note: Other category includes Fire, Library, Culture and Animal Services

Although Figure 2-1 provides a general overview of the replacement value by service area, Table 2-3 to Table 2-14 below provide a more detailed overview of the service area valuations at the sub-asset level and the inventories of assets (as of year-end 2020) that attribute to the total valuation identified. The tables have been adjusted to represent the valuation under both the user view and responsibility view framework. The detailed SOLI Report Cards, by service area, are provided in Appendix B of this

Corporate AMP. All costs are represented in constant \$2021 and for the purposes of this analysis, an inflation factor of 2% was used to adjust the replacement values of assets which were not provided in current dollars.

Table 2-3 – Detailed Asset Inventory Replacement Value – Transportation Services

Service	Asset		Inventory	Unit	Replacement Value (\$000)
	1. Assets Managed by Transportation				
	Roadway Network	Roads	3,650	Lane KM	\$1,421,848
		Islands	566,085	Sq. M.	\$49,728
	Structures	Bridges	3,833	Metres	\$348,742
		Culverts	6,065	Metres	\$391,020
		Gateway Features	2,770	Metres	\$12,323
		Noise Walls	12,398	Metres	\$25,291
		Retaining Walls	8,208	Metres	\$18,335
		Fences	34,760	Metres	\$3,891
		Guiderails	31,634	Metres	\$4,903
		Handrails	3,277	Metres	\$526
		Steps	80	Metres	\$1,016
	Walkways & Path	Sidewalks	1,870	KM	\$236,522
		Walkways	14	KM	\$3,986
		Multi-Use Paths	120	KM	\$11,676
	Traffic Services	Street Lighting	43,380	Each	\$265,703
		Traffic Signals	777	Each	\$91,102
		Traffic Signs	46,408	Each	\$1,141
	Subtotal Assets Managed by Transportation - Responsibility View				\$2,887,756
	2. Assets Managed by Other Service Areas				
	Operations Facilities		13	Each	\$81,377
Fleet	Licensed Fleet	112	Each	\$12,235	
	Off-Road Equipment	94	Each	\$5,740	
	Fleet Equipment	17	Each	\$24	
Software		22	Each	\$2,334	
Subtotal Assets Managed by Other Service Areas				\$101,710	
TOTAL - USER VIEW (1+2)				\$2,989,467	

Note: There are 70 roadway bridges, 114 pedestrian bridges.
 There are 156 culverts.
 There are 290 gateway features.
 There are 44 noise walls and 193 retaining walls.
 There are 568 guiderails and 92 handrails.

Table 2-4 – Detailed Replacement Values – Stormwater Services

Service	Asset		Inventory	Unit	Replacement Value (\$000)
	Stormwater Management Ponds		184	Each	\$94,676
	Storm Sewer System	FDC-WTC	252,278	Metres	\$70,603
		Storm Sewers	1,594,134	Metres	\$871,548
		Catchbasins	37,398	Each	\$120,641
		Manholes	21,644	Each	\$156,542
		FDC-WTC Manholes	4,003	Each	\$21,625
	Oil & Grit Separators		92	Units	\$7,086
TOTAL - USER & RESPONSIBILITY VIEW					\$1,342,722

Table 2-5 – Detailed Replacement Values – Facilities

Service	Asset		Inventory	Unit	Replacement Value (\$000)
	1. Assets Used by the Corporation and Managed by Facilities				
	Corporate Facilities		29	Each	\$308,860
	Subtotal Assets Used by the Corporation and Managed by Facilities				\$308,860
	2. Assets Used by Facilities and Managed by Other Service Areas				
	Software		4	Each	\$489
	Subtotal Assets Used by Facilities and Managed by Other Service Areas				\$489
	Subtotal – User View (1+2)				\$309,348
	3. Assets Managed by Facilities and Used by Other Service Areas				
	Animal Services		2	Each	\$9,244
	Cultural Services		1	Each	\$88,504
	Recreation		73	Each	\$573,408
	Parks		16	Each	\$17,753
	Transit		8	Each	\$165,605
	Library		6	Each	\$81,891
	Fire		19	Each	\$115,979
Work Operations		13	Each	\$81,378	
Subtotal Assets Managed by Facilities and Used by Other Service Areas				\$1,133,762	
TOTAL - RESPONSIBILITY VIEW¹ (1+3)					\$1,442,622

Note 1: Does not include software

Table 2-6 – Detailed Replacement Values – Transit Services

Service	Asset	Inventory	Unit	Replacement Value (\$000)	
Transit 	1. Assets Managed by Transit				
	Licensed Vehicle Assets	Heavy Duty Vehicles Light Duty Vehicles	470 28	Each Each	\$428,371 \$1,289
	Transit Facilities (On Road)	Shelters – Conventional	846	Each	\$7,000
		Shelters – Züm	131	Each	\$29,988
		Shelters – Bike	23	Each	\$246
		Stops	2,293	Each	\$15,379
		Sandalwood Transit Loop	1	Each	\$1,040
	Transit IT Infrastructure	Video Walls	1	Each	\$65
		Smart Bus Systems	1	Each	\$977
		True Credential ID Card	3	Each	\$16
		Application Hardware			
	Specialty Equipment	Conveyance Systems	34	Each	\$6,502
		Comm. Control	4	Each	\$14,723
		Fare Systems	470	Each	\$8,670
		PRESTO	1,459	Each	\$6,451
		Maintenance/Admin Small Equipment	7	Each	\$469
		Signage	3,093	Each	\$3,041
		Fueling	5	Each	\$1,207
		Stock Room	2	Each	\$2,543
	Subtotal Assets Managed by Transit - Responsibility View				\$527,979
	2. Assets Managed by Other Service Areas				
	Facilities	All Transit Facilities	8	Each	\$165,605
	Transit IT Infrastructure	Software	1	Each	\$1,147
Subtotal Assets Managed by Other Service Areas				\$166,752	
TOTAL - USER VIEW (1+2)				\$694,732	

Table 2-7 – Detailed Replacement Values – IT Services

Service	Asset		Inventory	Unit	Replacement Value (\$000)
Information Technology 	1. Assets Used by Information Technology (IT)				
	End User IT	Computers	2,915	Each	\$4,619
		Monitors	2,843	Each	\$711
		Mobile Phones	1,141	Each	\$406
		Audio Visual Equipment	115	Each	\$188
	Infrastructure Assets	Servers	84	Each	\$2,385
		Storage and Back-Up	29	Each	\$4,212
		Wireless	806	Each	\$1,901
		Cable Plants	286,977	Metres	\$37,103
		Network Infrastructure	671	Each	\$5,991
		Communication System	4,141	Each	\$4,038
	Software		64	Each	\$27,242
	Subtotal Assets Used by IT - User View				\$88,795
	2. Assets Used by Other Service Areas and Managed by IT				
Software		45	Each	\$8,305	
Subtotal Assets Used by Other Service Areas				\$8,305	
TOTAL - RESPONSIBILITY VIEW (1+2)				\$97,100	

Table 2-8 – Detailed Replacement Values – City Support Fleet

Service	Asset		Inventory	Unit	Replacement Value (\$000)
City Support Fleet 	1. Assets Managed by Other Service Areas and Used by City Support Fleet				
	Software		2	Each	\$775
	Subtotal Assets Managed by Other Service Areas and Used by City Support Fleet				\$775
	2. Assets Managed and Used by City Support Fleet				
	Licensed Vehicles		158	Each	\$5,092
	Off-Road Equipment		28	Each	\$1,369
	Fleet Equipment		22	Each	\$42
	Subtotal Assets Managed and Used by the Corporation				\$6,503
	Subtotal Replacement Value - User View (1+2)				\$7,278
	3. Assets Managed by Fleet and Used by Other Service Areas				
	Licensed Vehicles		359	Each	\$27,113
	Off-Road Equipment		256	Each	\$14,121
	Fleet Equipment		101	Each	\$339
	Subtotal Assets Managed by Fleet and Used by Other Service Areas				\$41,573
TOTAL - RESPONSIBILITY VIEW¹ (2+3)				\$48,076	

Note 1: Does not include software

Table 2-9 – Detailed Replacement Values – Fire Services

Service	Asset	Inventory	Unit	Replacement Value (\$000)	
Fire Services 	1. Assets Managed by Fire Services				
	Front Line Licensed Vehicles & Apparatus	21	Each	\$19,263	
	Support Vehicles & Equipment	63	Each	\$6,445	
	Spare Vehicles	31	Each	\$6,918	
	Personal Fire Equipment	1,026	Each	\$3,002	
	Subtotal Assets Managed by Fire Services - Responsibility View				\$35,628
	2. Assets Managed by Other Service Areas				
	Facilities (Moved to Facilities)	19	Each	\$115,979	
	Software (Moved to IT)	5	Each	\$3,103	
	Subtotal Assets Managed by Other Service Areas				\$119,082
TOTAL - USER VIEW (1+2)				\$154,710	

Table 2-10 – Detailed Replacement Values – Parks Services

Service	Asset		Inventory	Unit	Replacement Value (\$000)
Parks 	1. Assets Managed by Parks Services				
	Park Assets	Parks Parkland*	676	Ha.	\$68,391
		Natural Heritage Lands	1,653	Ha.	\$0
		Park Furnishing	4,405	Each	\$3,031
		Playgrounds	332	Each	\$85,781
		Shade Structures	310	Each	\$36,340
		Splash Pads/Pools	8	Each	\$3,173
		Fitness Equipment	18	Each	\$678
		Skate Parks	4	Each	\$1,665
		Sports Facilities	1,180	Each	\$120,122
		Pathways	278,379	Metres	\$47,264
		Other Assets	Parking Lots	333	Each
	Trees	249,749	Each	\$129,919	
	Cemetery Equipment	76	Each	\$75	
	Flower Beds	1,200	Each	\$3,794	
	Small Equipment	716		\$2,309	
Subtotal Assets Managed by Park Services - Responsibility View				\$517,574	
2. Assets Managed by Other Service Areas					
Facilities (Moved to Facilities)		16	Each	\$17,753	
Fleet (Moved to City Support Fleet)		319	Each	\$17,342	
Software (Moved to IT)		1	Each	\$0	
Subtotal Assets Managed by Other Service Areas				\$35,096	
TOTAL - USER VIEW (1+2)				\$552,669	

*Note: Parks Parkland sub-asset category excludes pathways, sports fields, playgrounds and other sub-asset classes as stated in the table

Table 2-11 – Detailed Replacement Values – Recreation Services

Service	Asset		Inventory	Unit	Replacement Value (\$000)
Recreation 	2. Assets Managed by Recreation Services				
	Recreation Equipment	General Equipment	2,198	Each	\$12,745
		Major Equipment	193	Each	\$4,780
		Splash Pads & Pools	8	Each	\$4,692
		Tennis Courts	6	Each	\$612
		Fitness Equipment	572	Each	\$3,245
		Outdoor Fitness Equipment	10	Each	\$153
		Artificial Rinks & Tracks	8	Each	\$1,243
		Skateboard Parks	7	Each	\$4,188
		Furniture	303	Each	\$11,529
	Subtotal Assets Managed by Recreation Services - Responsibility View				\$43,188
	2. Assets Managed by Other Service Areas				
	Facilities (Moved to Facilities)		74	Each	\$573,408
	Fleet (Moved to City Support Fleet)		135	Each	\$4,231
	Software (Moved to IT)		2	Each	\$303
Subtotal Assets Managed by Other Service Areas				\$577,942	
TOTAL - USER VIEW (1+2)				\$621,131	

Table 2-12 – Detailed Replacement Values – Cultural Services

Service	Asset		Inventory	Unit	Replacement Value (\$000)
Cultural Services 	1. Assets Managed and Used by Cultural Services				
	Outdoor Equipment		Pooled	N/A	\$1,745
	Specialty Equipment		2,699	Each	\$10,321
	Furniture		424	Each	\$207
	Public Art		25	Each	\$845
	Subtotal Assets Managed by Cultural Services - Responsibility View				\$13,119
	2. Assets Managed by Other Service Areas				
	Facilities (Moved to Facilities)		1	Each	\$88,504
	Fleet (Moved to City Support Fleet)		9	Each	\$655
	Software (Moved to IT)		1	Each	\$0
	Subtotal Assets Managed by Other Service Areas				\$89,159
TOTAL - USER VIEW (1+2)				\$102,279	

Table 2-13 – Detailed Replacement Values – Library Services

Service	Asset		Inventory	Unit	Replacement Value (\$000)
Library 	1. Assets Managed by Library Services				
	Furniture and Equipment	Computer Equipment	1,651	Each	\$2,324
		Furniture	3,933	Each	\$3,198
		RFID	98	Each	\$1,469
		Shelving	1,196	Each	\$882
		Telecommunications Equipment	4	Each	\$133
	Media Collections	Electronic Media	Pooled	N/A	\$2,439
		Print Media	Pooled	N/A	\$8,227
	Library Software		19	Each	\$346
	Subtotal Assets Managed by Library Services - Responsibility View				\$19,017
	2. Assets Managed by Other Service Areas				
	Facilities (Moved to Facilities)		6	Each	\$81,891
Fleet (Moved to City Support Fleet)		5	Each	\$171	
Subtotal Assets Managed by Other Service Areas				\$82,062	
TOTAL - USER VIEW (1+2)				\$101,079	

Table 2-14 – Detailed Replacement Values – Animal Services

Service	Asset		Inventory	Unit	Replacement Value (\$000)
Animal Services 	1. Assets Managed by Animal Services				
	Equipment		124	Each	\$275
	Subtotal Assets Managed and Used by Animal Services - Responsibility View				\$275
	2. Assets Managed by Other Service Areas				
	Facilities (Moved to Facilities)		2	Each	\$9,244
	Fleet (Moved to City Support Fleet)		14	Each	\$1,131
	Software (Moved to IT)		1	Each	\$156
Subtotal Managed by Other Service Areas				\$10,531	
TOTAL - USER VIEW (1+2)				\$10,806	

2.4 Asset Condition

The City has adopted an asset condition rating scale that is consistent with the Canadian National Infrastructure Report Card as well as other major organizations and institutions reporting formats. The five-point rating scale, as shown in Table 2-15, 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 2-15 – 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:

- Existing Rating System: Facility Condition Index (FCI) - The FCI is a standard facility management benchmark that is used to objectively assess the current condition of a building asset. This 2021 Corporate AMP used 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 was analyzed to determine the overall condition of facility assets. Table 2-16 below indicates the Facilities Condition Grading System used in this CAMP.

Table 2-16 – Facilities General Condition Grading System

Grade	Description	Condition (Criteria)
VG	Very Good	Only normal maintenance required (0-2%)
G	Good	Minor Defects only - Minor maintenance required (2%-5%)
F	Fair	Maintenance required to return to accepted Level of Service - Significant maintenance required (5% - 10%)
P	Poor	Requires Renewal - Significant renewal/upgrade required (10-30%)
VP	Very Poor	Over 30% of asset requires replacement

- Existing Rating System: 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.

- *Existing Rating System: 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 side walls, railings, etc. Each element of the bridge is rated from 1 (the element is on the verge of failure) to 10 (new condition). An overall measure for the bridge is then calculated 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.
- *Estimated Rating: Age and 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 2-17 has been applied to derive the condition from the remaining assets useful life and vice versa. However, for some other assets types, such as storm sewers and fleet, a more refined deterioration curve was applied which better represented the lifecycle needs of those assets. 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 2-17 – Overall City’s Condition Grading Standard Framework

Grade	Condition	% of RUL
Grade 1	Very Good	80-100
Grade 2	Good	60-80
Grade 3	Fair	40-60
Grade 4	Poor	20-40
Grade 5	Very Poor	0-20

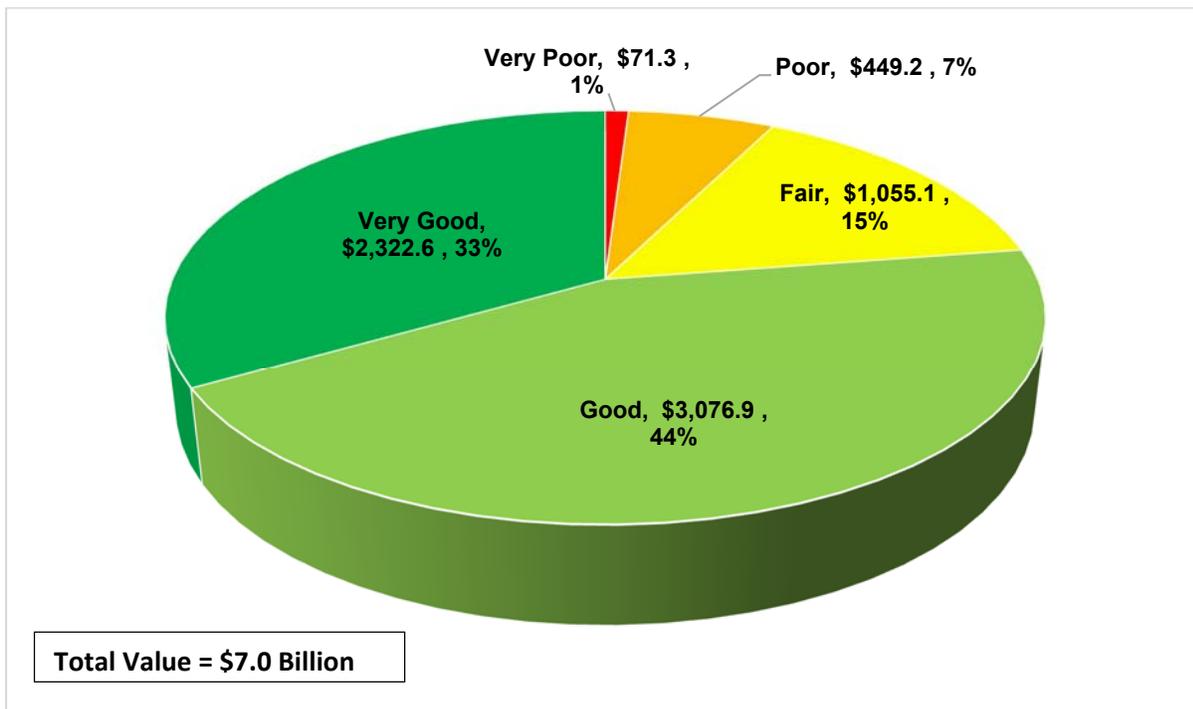
- *Projected Rating: Expert Opinion* – Where formal condition assessment, reliable age data, or the results of the Age & EUL analysis failed to represent actual condition observed by Staff, expert opinion of the City of Brampton service area experts were used to estimate asset condition. For example, all software incorporated into this report is considered to be in very good condition despite the age of the asset. The data would say some software is in poor or very poor condition, relative to the year it may have been acquired, while the expert knows the asset is overall in good condition. The opinion of the expert would override age and useful life in this circumstance. The expert opinion condition was evaluated by comparing Staff experience to the definition as noted above.

Based on the inputs described above, Figure 2-2 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 less than 10% of the asset base measuring “Very Poor” to “Poor” indicating some assets in these categories may require more immediate renewal/replacement considerations. One of the attributing factors to the overall “Good” condition rating can largely be

associated to the City’s infrastructure being relatively new in age. Using the service area asset management models developed for this purposes of this CAMP, the data indicates that over 50% of the City’s infrastructure has been emplaced over the last three decades. Transportation, Stormwater, Facilities and Transit constitute the majority of the City’s asset portfolio and most of their assets have over 50% of the asset design life remaining.

The conditions illustrated in the figure below represent the cumulative value of assets categorized in the five condition areas. As Transportation and Stormwater Infrastructure represent about 60% of the City’s total replacement value, the condition of these specific assets provide a greater influence to the overall condition rating identified. Another point to note is the quantum of assets in very poor condition, which represents only about 1% of the total replacement value.

Figure 2-2 – Summary of Brampton’s Asset by Condition (\$ Millions)



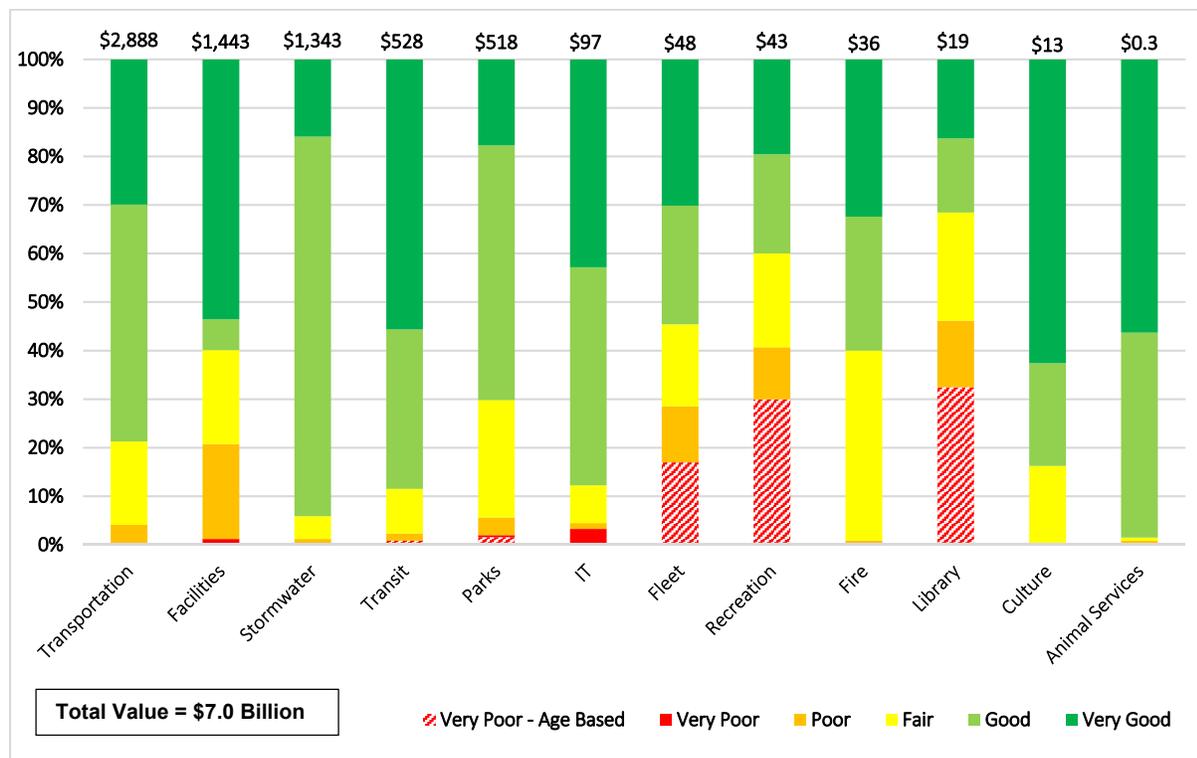
As indicated earlier, the available replacement value and condition assessment information specific to the service areas considered are presented in individual report cards. Each report card presents a comparison of the capital asset inventory and replacement values from the 2019 SOLI Report with the data utilized to formulate this Report card. All costs incorporated within the report cards are represented in constant \$2021. Figure 2-3 below provides a more detailed review of the condition assessment by service area. A few notes for consideration:

- The service areas identified below are under the responsibility view framework which means that all assets related to Facilities, City Support Fleet and IT reside under the respective service area below (i.e. Recreation Service below would not include the recreation centre themselves – the centers would be reported under Facilities).
- Service areas that appear to have a greater proportion of their assets in very poor condition is mostly attributed to assets that the conditions were evaluated based on the “age” of the asset

relative to the useful life. The assets themselves continue to remain in service and functional. In addition, those service areas represent a small share of the City’s overall asset valuation.

- Specifically, for fleet, the evaluation of condition is considered to be “age based”; however, the service area experts do perform some condition-based protocols to evaluate the asset replacement needs. The fleet vehicles and equipment in very poor condition are safe, operational and intended to be addressed in the near future.
- Other service areas where there are assets in very poor condition based on actual condition assessments are being reviewed and addressed through the City’s regular capital budget process.
- Please note, the service area report cards in Appendix B only illustrate the overall asset conditions and does not differentiate very poor assets between age and condition.

Figure 2-3 – Summary of Asset Condition by Service Area (\$ Millions)



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 and does not truly reflect the condition of the asset – as the City matures its practices, progress is expected in better reporting of these assets.

Table 2-18 below provides qualifications, by service area, of the assets within each that are in Poor or Very Poor Condition.

Table 2-18 – Qualification of Very Poor Assets

Service Area	Description
Library & Recreation (\$19M)	<ul style="list-style-type: none"> Majority related to furniture/equipment and media collections (for Library) Age based condition assessments and categorized in Very Poor by virtue of design life
Facilities (\$17M)	<ul style="list-style-type: none"> 12 Recreation facilities and 3 Park facilities in Very Poor condition Conditions developed using an FCI based calculation BDC identified facilities to be addressed in upcoming budgets
Parks (\$10M)	<ul style="list-style-type: none"> Largely parkland related assets (i.e. walls, curbs and fences) with some trees and cemetery equipment making up a smaller portion Mostly age based assessments with limited data on actual asset upgrades
Transportation (\$8M)	<ul style="list-style-type: none"> Only 9 lane KM of roadway, some fences, walkways and traffic services Mostly condition based assessments Very Poor assets represent a small portion of the total base
Fleet (\$8M)	<ul style="list-style-type: none"> Based on vehicle useful life, high mileage and engine hours Maintained in good and safe working order with increased maintenance costs
Transit (\$4M)	<ul style="list-style-type: none"> Largely related to fleet support vehicles, communication control equipment where conditions are based on age Most Very Poor assets are addressed through the budget
IT (\$3M)	<ul style="list-style-type: none"> Related to end-user information technology and infrastructure assets Condition based Frequent replacements due to short asset UL and to keep pace with emerging technology
Stormwater (\$1M)	<ul style="list-style-type: none"> Related to storm sewer network and represents only a very small share of total stormwater assets Age based assessment

Note: Numbers may not add exactly to the very poor total due to rounding

2.5 Data Confidence

To aid interpretation of the information presented, a data confidence rating is assigned to the service area condition summarized in the State of the Local Infrastructure Report Cards of this Corporate AMP (Appendix B). The data confidence rating scales outlined in Table 2-15 define the various measures used to qualify the accuracy and reliability of the information used to develop this report, specifically as it relates to condition charts which then relates to the projection of investment needs for asset repair and replacement. It is an overall goal to improve the reliability and accuracy of all information through future reporting. While the City should move to a risk-based approach over time, age-based assessments may still be appropriate for some assets. The current City-wide Data Confidence is assessed as Low-Medium (Age and Condition Based).

For this SOLI report, the following condition assessments methodologies were implemented:

- **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

Based on a weighted replacement value average of all services and their condition assessments, about 76% of assets are assigned a data confidence rating based on condition. This represents an increase of 7% from the 2019 SOLI Report in which 69% of the assets ratings were based on condition. The scale below provides a visual representation of the City’s reliability and accuracy for condition data based on the criteria listed in Table 2-17. As the City further moves towards a condition and risk based approach the reliability and accuracy of data will continue to increase. Table 2-19 below provides a detailed outline of how each service category’s assets were assessed. Please note the assets classified to be based on condition are in many instances subject to the input received from individual service area experts.



Table 2-19 – Condition Assessment Approach

Service Area ⁽¹⁾	% of Asset Portfolio ⁽²⁾	Age	Condition	Risk
Transportation	41.40%	✓	✓	
Roads	20.38%		✓	
Islands (Part Of Roadway Network)	0.71%	✓		
Roadway Bridges & Pedestrian Bridges	5.00%		✓	
Roadway Culverts	5.60%		✓	
Gateway Features	0.18%		✓	
Noise Walls	0.36%		✓	
Retaining Walls on Walkways	0.26%		✓	
Fences	0.06%		✓	
Guiderails	0.07%		✓	
Handrails	0.01%		✓	
Steps	0.01%		✓	
Sidewalks	3.39%		✓	
Walkways	0.06%		✓	
Multi-Use Paths	0.17%		✓	
Street Lighting	3.81%	✓	✓	
Traffic Signals	1.31%	✓		
Traffic Signs	0.02%		✓	
Stormwater	19.25%	✓	✓	
Stormwater Management Ponds	1.36%		✓	
FDC-WTC	1.01%	✓		
Storm Sewers	12.49%	✓		
Catchbasins	1.73%	✓		
Manholes	2.24%	✓		
FDC-WTC Manholes	0.31%	✓		
Oil & Grit Separators	0.10%	✓		
Facilities	20.68%		✓	
Facilities	20.68%		✓	

Service Area ⁽¹⁾	% of Asset Portfolio ⁽²⁾	Age	Condition	Risk
Transit	7.57%	✓	✓	
Heavy Duty Vehicles (Buses)	6.14%		✓	
Fleet Support	0.02%	✓		
Shelters – Conventional	0.10%		✓	
Shelters – Zum	0.43%		✓	
Shelters – Bike	0.004%		✓	
Stops	0.22%	✓		
Sandalwood Transit Loop	0.01%	✓		
Video Walls	0.001%	✓		
Smart Bus Systems	0.01%	✓		
True Credential Identification Card Application Hardware	0.0002%	✓		
Conveyance Systems	0.09%	✓		
Communication Control	0.21%	✓		
Fare Systems	0.12%	✓		
Presto	0.09%	✓		
Maintenance/Admin Small Equipment	0.01%		✓	
Signage	0.04%	✓		
Fueling	0.02%		✓	
Stock Room	0.04%	✓		
Information Technology	1.39%		✓	
Computers	0.07%		✓	
Monitors	0.01%		✓	
Mobile Phones	0.01%		✓	
Audio Visual Equipment	0.003%		✓	
Servers	0.03%		✓	
Storage And Back-Up	0.06%		✓	
Wireless	0.03%		✓	
Cable Plants	0.53%		✓	
Network Infrastructure	0.09%		✓	
Communication System	0.06%		✓	
Software	0.51%		✓	
City Support Fleet	0.69%	✓		
Licensed Fleet	0.46%	✓		
Off-Road Vehicles	0.22%	✓		
Fleet Equipment	0.01%	✓		
Fire	0.51%	✓	✓	
Front Line Licensed Vehicles & Apparatus	0.28%		✓	
Support Vehicles & Equipment	0.09%		✓	
Spare Vehicles	0.10%		✓	
SCBA	0.02%		✓	
Bunker Gear	0.02%	✓		
Parks	7.42%	✓	✓	
Parking Lots	0.22%		✓	

Service Area ⁽¹⁾	% of Asset Portfolio ⁽²⁾	Age	Condition	Risk
<i>Small Engine Equipment</i>	0.03%	✓		
<i>Parks</i>	0.98%	✓		
<i>Natural Heritage Lands</i>	0.00%	✓		
<i>Park Furnishing</i>	0.04%		✓	
<i>Playgrounds</i>	1.23%		✓	
<i>Shade Structures</i>	0.52%		✓	
<i>Splash Pads & Outdoor Pools</i>	0.05%		✓	
<i>Fitness Equipment</i>	0.01%		✓	
<i>Skate Parks</i>	0.02%		✓	
<i>Sports Facilities</i>	1.72%	✓	✓	
<i>Pathways</i>	0.68%	✓		
<i>Trees</i>	1.86%		✓	
<i>Flower Beds</i>	0.05%	✓		
<i>Cemetery Equipment</i>	0.001%		✓	
Recreation	0.62%	✓	✓	
<i>General Equipment</i>	0.18%	✓		
<i>Major Equipment</i>	0.07%	✓		
<i>Splash Pads & Pools</i>	0.07%		✓	
<i>Tennis Courts</i>	0.01%	✓		
<i>Fitness Equipment</i>	0.05%		✓	
<i>Outdoor Fitness Equipment</i>	0.002%		✓	
<i>Skateboard Parks</i>	0.06%		✓	
<i>Artificial Rinks & Tracks</i>	0.02%		✓	
<i>Furniture</i>	0.17%	✓		
Cultural Services	0.19%	✓	✓	
<i>Outdoor Equipment</i>	0.03%	✓		
<i>Specialty Equipment</i>	0.15%		✓	
<i>Furniture</i>	0.003%		✓	
<i>Public Art</i>	0.01%		✓	
Library	0.27%	✓	✓	
<i>Computer Equipment</i>	0.03%	✓		
<i>Furniture</i>	0.05%	✓		
<i>RFID</i>	0.02%	✓		
<i>Shelving</i>	0.01%	✓		
<i>Telecommunications Equipment</i>	0.002%	✓		
<i>Electronic Media</i>	0.03%	✓		
<i>Print Media</i>	0.12%	✓		
<i>Library Software</i>	0.005%		✓	
Animal Services	0.004%		✓	
<i>Equipment</i>	0.004%		✓	

Note 1: Services are structured under the responsibility view (see section 2.2 for more details)

Note 2: Numbers may not add precisely due to rounding

APPENDIX B
SOLI REPORT CARDS

APPENDIX B



Transportation



Total Asset Replacement Value:	\$2.9 Billion
Total Asset Replacement Value Including Facilities, Fleet and Software:	\$3.0 Billion
Future Condition Trend (Next 10 Years):	Declining - As assets age they may require attention in the future
Data Confidence & Reliability:	Age and Condition Based

The 2020 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 them

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

The responsibility view is also being illustrated in this 2020 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 2021\$) under the two different views.

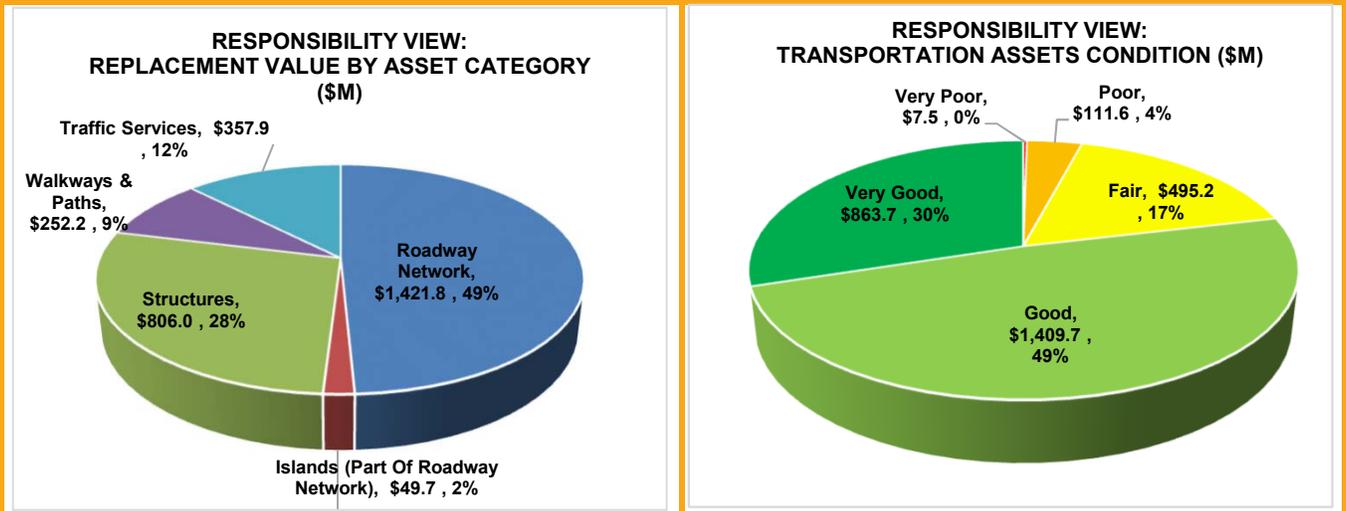
Asset Type	Replacement Value (\$Millions)	Asset Inventory
Assets Managed by Transportation Services		
Roads	\$1,421.8	3,650 Lane KM
Islands	\$49.7	566,085 Square Metres
Structures (Bridges & Culverts)	\$739.8	10 KM
Structures (Other)	\$66.3	93 KM
Walkways & Paths	\$252.2	2 KM
Traffic Services	\$357.9	90,565 Each
<i>Subtotal Assets Managed by Transportation Services (Responsibility View)</i>	<i>\$2,887.8</i>	<i>-</i>
Assets Managed by Other Service Areas		
Operations Facilities (Moved to Facilities)	\$81.4	13
Fleet (Moved to City Support Fleet)	\$18.0	223
Software (Moved to IT)	\$2.3	22
Total Replacement Value (User View)	\$2,989.5	-

**Other structures include: Gateway Features, Noise walls, Retaining walls on Walkways, Fences, Guiderrails, Handrails and steps*



Major Types of Assets within Transportation Services - Responsibility View

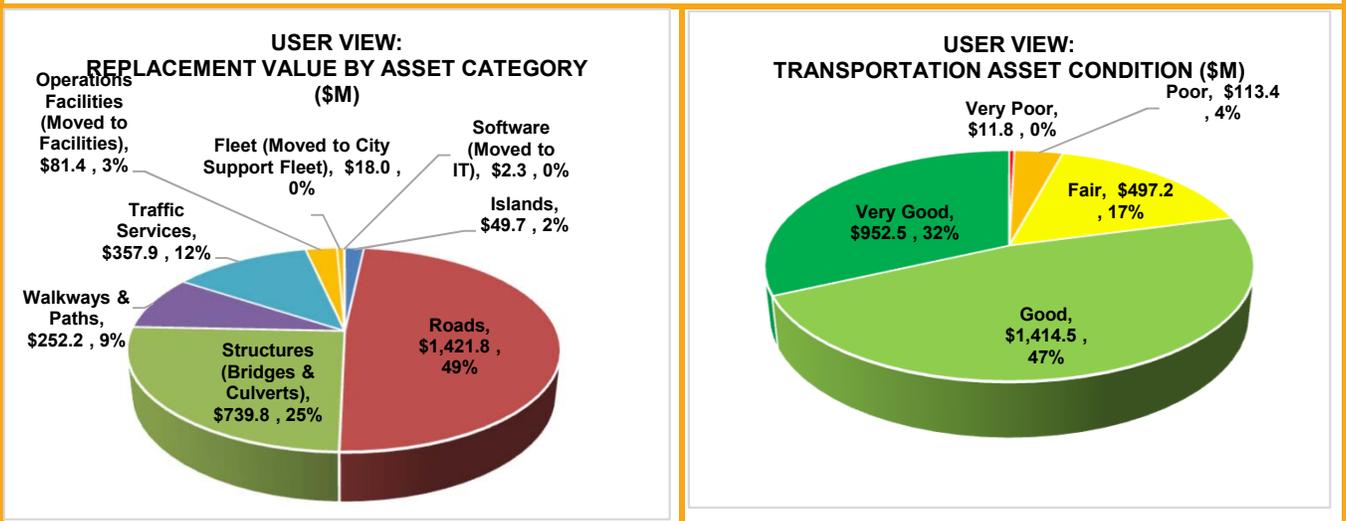
The figure below illustrates the replacement value and condition of Transportation Services assets under the responsibility view. Under this view, the total replacement value of assets is \$2.9 billion. Of this total, roughly 51% is related to the roadway network (including islands). About 79% of the assets are considered to be in Good to Very Good condition, with the majority of the remaining assets in fair condition. Approximately 4% of assets are in Poor and Very Poor condition - of which a portion of the assets belongs to traffic services which the condition is assessed relative to the age and design life of the asset.



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

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, city support fleet and software, the replacement value is about \$3.0 billion. Approximately 79% of the assets are considered to be in Good to Very Good Condition.

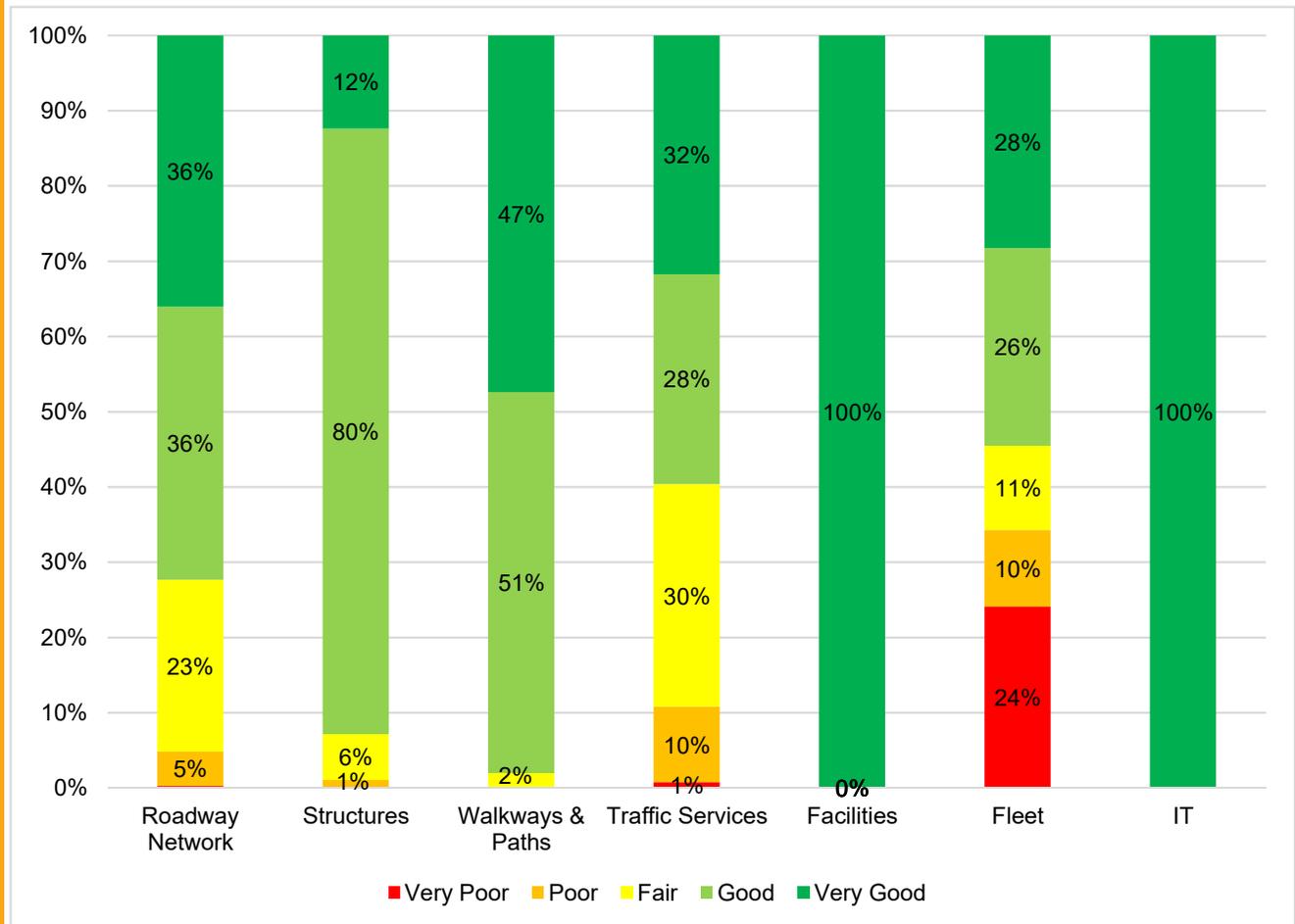


APPENDIX B



Transportation

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, Structures, Traffic Services and Fleet are in Poor and Very Poor condition.



APPENDIX B



Transportation

Comparison of 2019 vs. 2020 Inventory and Replacement Value (2021\$)

The tables below outlines the difference in Transportation Services assets in the 2019 SOLI relative to the 2020 SOLI while considering reporting under the two different views. All values are expressed in 2021 dollars.

Under the responsibility view framework, the value of Transportation Services assets has increased by 18% from approximately \$2.5 billion to \$2.9 billion. This increase can be attributed to better asset data, costing information and the inclusion of additional traffic services assets.

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 16% (or \$422.2 million) from the value reported in 2019 after inflationary adjustments.

Please note, the Facilities, City Support Fleet and IT report cards will include additional information on those assets used by Transportation Services but maintained and managed by a different City department. For fair comparison, 2019 asset inventory has been adjusted to align with 2020 responsibility view.

Asset	2019 SOLI		2020 SOLI	
Roads	3,287	Lane KM	3,650	Lane KM
Islands	565,064	Square Metres	566,085	Square Metres
Structures (Bridges & Culverts)	10	KM	10	KM
Structures (Other)	86	KM	93	KM
Walkways & Paths	1,949	KM	2,004	KM
Traffic Services	87,817	Each	90,565	Each
Operations Facilities (Moved to Facilities)	12	Each	13	Each
Fleet (Moved to City Support Fleet)	166	Each	223	Each
Software (Moved to IT)	23	Each	22	Each

Asset	2019 SOLI (\$2021)	2020 SOLI (\$2021)	Difference	
1. Assets Managed by Other Service Areas				
Operations Facilities (Moved to Facilities)	\$ 97,731,610	\$ 81,377,531	\$ (16,354,079)	-17%
Fleet (Moved to City Support Fleet)	\$ 16,793,431	\$ 17,999,354	\$ 1,205,922	7%
Software (Moved to IT)	\$ 1,826,604	\$ 2,334,420	\$ 507,816	28%
Subtotal Assets Managed by Other Service Areas	\$ 116,351,645	\$ 101,711,305	\$ (14,640,340)	-13%
2. Assets Managed by Transportation Services				
Roads	\$ 1,122,065,117	\$ 1,421,848,118	\$ 299,783,001	27%
Islands	\$ 48,129,441	\$ 49,728,441	\$ 1,599,000	3%
Structures (Bridges & Culverts)	\$ 709,654,759	\$ 739,762,548	\$ 30,107,789	4%
Structures (Other)	\$ 40,315,238.86	\$ 66,284,527	\$ 25,969,288	64%
Walkways & Paths	\$ 239,705,928	\$ 252,184,720	\$ 12,478,791	5%
Traffic Services	\$ 290,981,122	\$ 357,947,250	\$ 66,966,129	23%
Subtotal Assets Managed by Transportation Services (Responsibility View)	\$ 2,450,851,606	\$ 2,887,755,604	\$ 436,903,998	18%
Total Replacement Value: User View (1+2)	\$ 2,567,203,251	\$ 2,989,466,908	\$ 422,263,657	16%

**Other structures include: Gateway Features, Noise walls, Retaining walls on Walkways, Fences, Guiderails, Handrails and steps*



Stormwater



Asset Replacement Value:	\$1.3 Billion
Future Condition Trend (Next 10 Years):	Increasing - Introduced a dedicated User Fee to fund operational and asset renewal expenditures.
Data Confidence & Reliability:	Age and Condition Based

The 2020 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 them.
- User View:** Shows the assets under the service area that is using them.

The responsibility view is also being illustrated in this 2020 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.

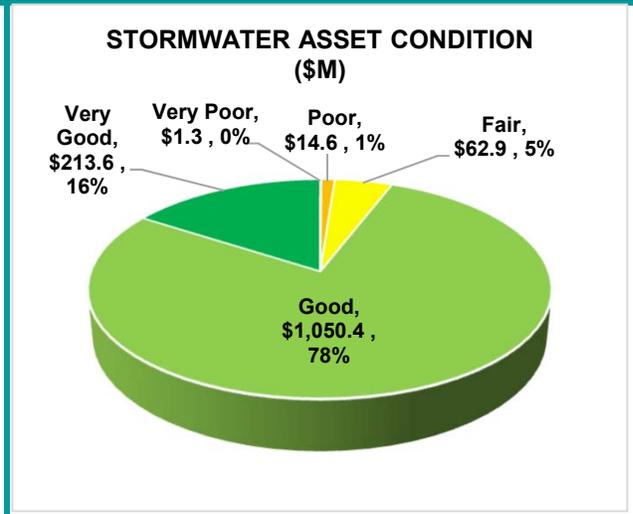
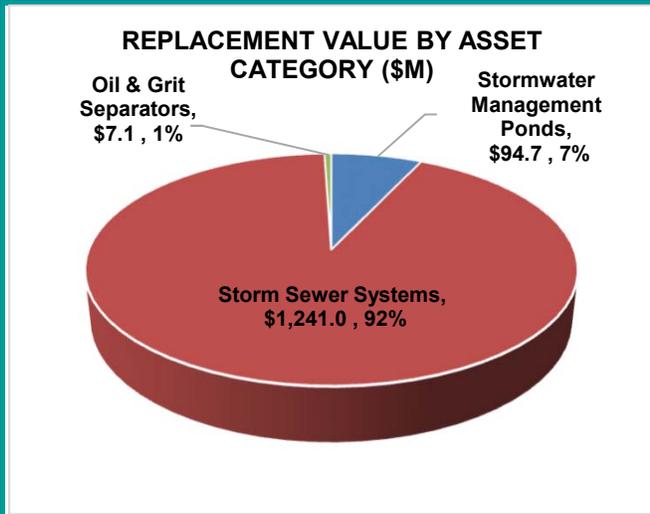
The shift in asset representation has no effect on the overall asset portfolio for Stormwater Services. The table below outlines the assets under both the User and Responsibility View:

Asset Type	Replacement Value (\$Millions)	Asset Inventory
Assets Managed by Stormwater		
Stormwater Management Ponds	\$94.7	184
Storm Sewer Systems	\$1,241.0	Pooled
Oil & Grit Separators	\$7.1	92
Total Replacement Value (User or Responsibility View)	\$1,342.7	-



Major Types of Assets within Stormwater Services - User & Responsibility View

The figures below illustrate the replacement value and condition of Stormwater Service assets under the user and responsibility view. Under these views, the total replacement value of assets is \$1.3 billion. About 92% of this total is related to the City's storm sewer system with the remaining value largely associated with stormwater management ponds. Nearly 95% of the City's stormwater assets are Good to Very Good condition with the remaining assets in Fair or Poor condition. The increased future condition trend is attributable to the recently introduced dedicated stormwater user fee which transfers funding from property taxes to a user-fee program. Revenues derived from the user 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.



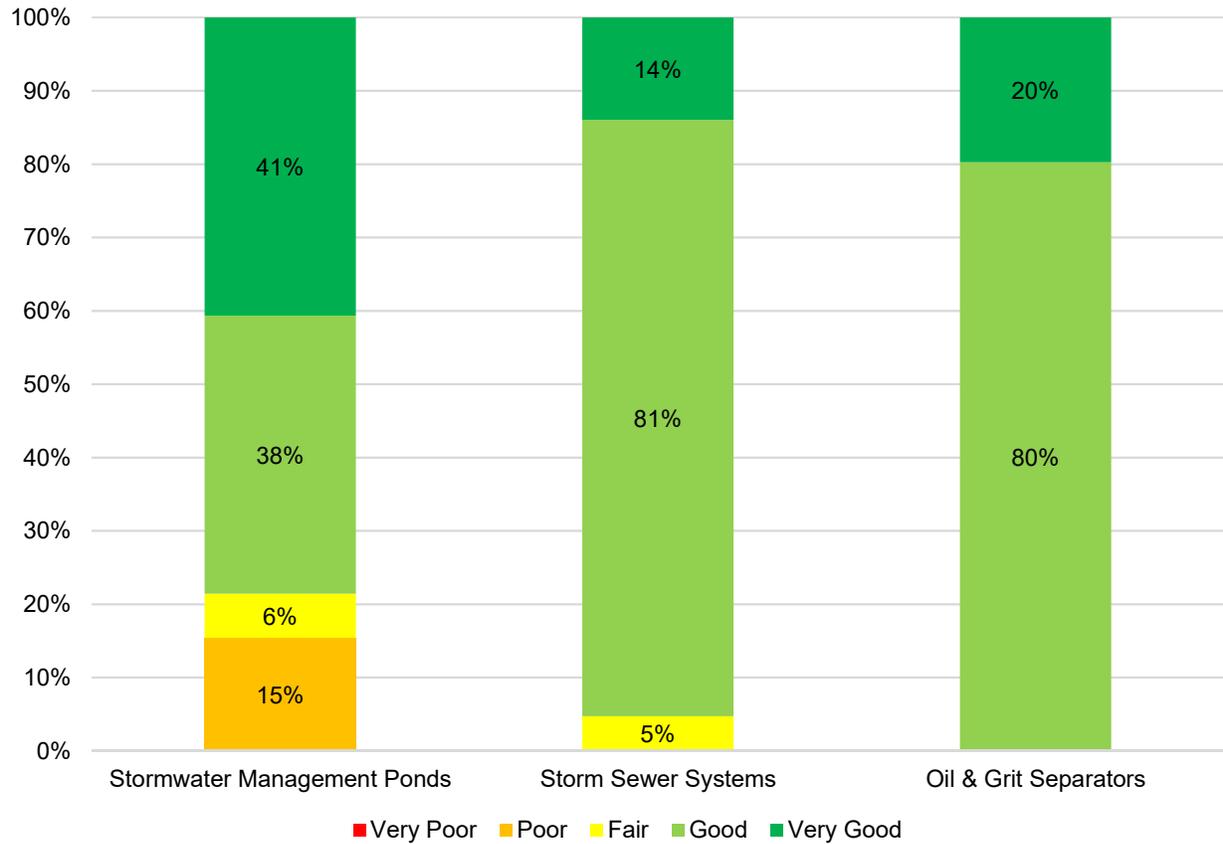
Data Source: GIS database, Departmental Inventory for O&GS (Excel based tracking), Manufacturer pipe price lists and City contracts (cost model)

APPENDIX B



Stormwater

The figure below illustrates the condition of the three sub-component assets of Stormwater services. All sub-components are generally in Good to Very Good Condition, however, about 15% of Stormwater Management Ponds are in Poor condition.



APPENDIX B



Stormwater

Comparison of 2019 vs. 2020 Inventory and Replacement Value (2021\$)

The tables below outline the difference in Stormwater assets in the 2019 SOLI relative to the 2020 SOLI. Please note, all values are expressed in 2021 dollars.

Under the user and responsibility view framework, the total value of Stormwater assets has decreased by 5% from approximately \$1.4 billion to \$1.3 billion. This decrease can generally be attributed to updated costing related to stormwater management ponds as part of the 2020 SOLI.

Asset	2019 SOLI		2020 SOLI	
Stormwater Management Ponds	182	Each	184	Each
Storm Sewer Systems - Linear	1,821,549	Meters	1,846,411	Meters
Storm Sewer Systems - MH/CB	61,898	Each	63,045	Each
Oil & Grit Separators	92	Each	92	Each

Asset	2019 SOLI (\$2021)	2020 SOLI (\$2021)	Difference	
Stormwater Management Ponds	\$ 189,352,800	\$ 94,676,400	\$ (94,676,400)	-50%
Storm Sewer Systems - Linear & MH/CB	\$ 1,213,245,325	\$ 1,240,959,760	\$ 27,714,434	2%
Oil & Grit Separators	\$ 7,086,041	\$ 7,086,041	\$ -	0%
Subtotal Assets Considered in 2020 SOLI	\$ 1,409,684,166	\$ 1,342,722,200	\$ (66,961,966)	-5%

APPENDIX B



Facilities



Total Asset Replacement Value (Corporate Facilities): \$309.3 Million

Total Asset Replacement Value (All Facilities, Including Software): \$1.4 Billion

Future Condition Trend (Next 10 Years): Stable - Assets are renewed as needed and therefore remain in stable condition

Data Confidence & Reliability: Condition Based

The 2020 SOLI analysis is being reported 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

The responsibility view is an addition in this 2020 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 2021\$) under the two different views.

Asset Type	Replacement Value (\$Millions)	Asset Inventory
1. Assets Used by the Corporation and Managed by Facilities		
Corporate Facilities	\$308.9	29
<i>Subtotal Assets Used by the Corporation and Managed by Facilities</i>	<i>\$308.9</i>	<i>29</i>
2. Assets Used by Facilities and Managed by Other Service Areas		
Software (Moved to IT)	\$0.5	4
<i>Subtotal Assets Used by the Corporation and Managed by Facilities (User View = 1+2)</i>	<i>\$309.3</i>	<i>-</i>
3. Assets Managed by Facilities and Used by Other Service Areas		
Animal Services Facilities	\$9.2	2
Cultural Services Facilities	\$88.5	1
Recreation Facilities	\$573.4	73
Parks Facilities	\$17.8	16
Transit Facilities	\$165.6	8
Library Facilities*	\$81.9	6
Fire Facilities	\$116.0	19
Work Operations Facilities*	\$81.4	13
<i>Subtotal Assets Managed by Facilities and Used by Other Service Areas</i>	<i>\$1,133.8</i>	<i>138</i>
Total Replacement Value (Responsibility View = 1+ 3)	\$1,442.6	167

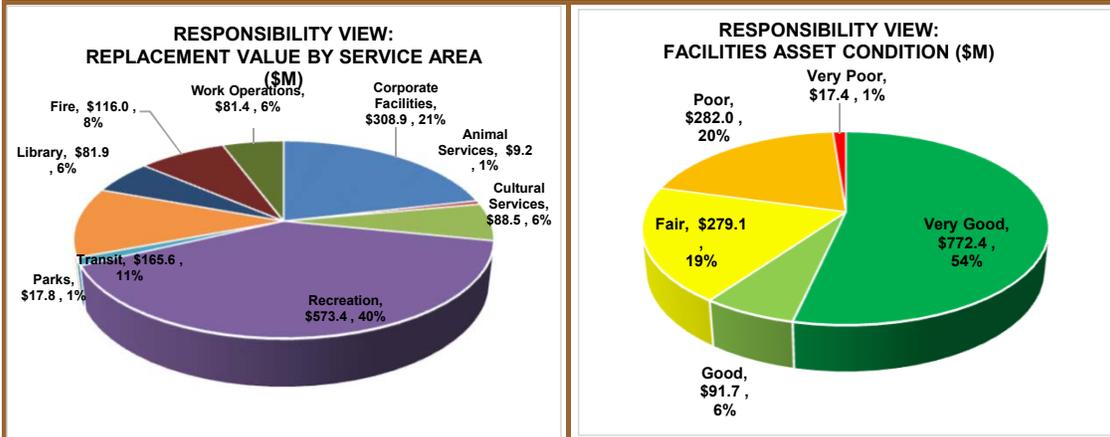
* Work Operations include facilities associated with Fleet, Stormwater and Transportation

* 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

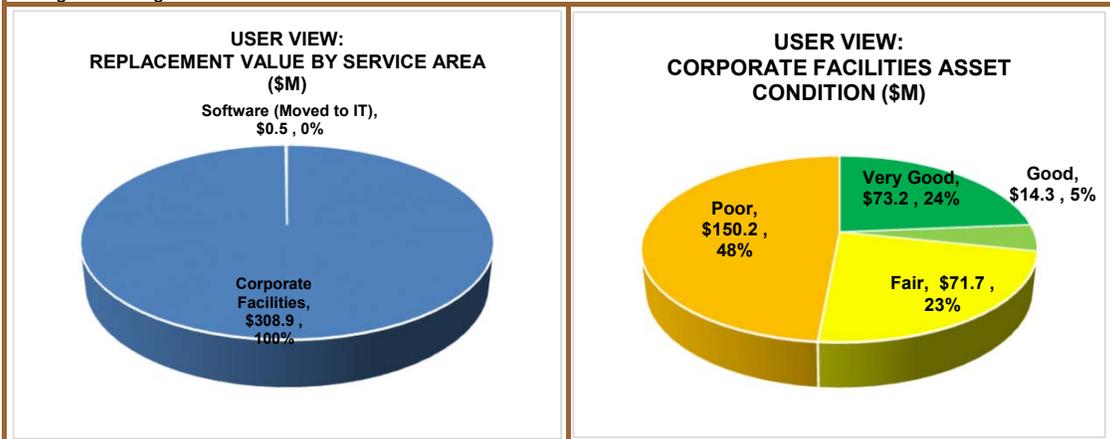
The figure below illustrates the replacement value and condition of Facilities assets under the responsibility view. Under this view, the total replacement value of assets is \$1.4 billion. This includes all facilities used across various service areas in addition to Corporate Facilities. As depicted in the figure below, Recreation Facilities are the largest portion representing 40% (or \$573.4 million) of the total facilities replacement value. Overall, the facilities are in Good condition, with 60% of assets classified to be in Good or Very Good condition. Approximately 21% of assets are in Poor or Very Poor condition, with only 1% of that representing Very Poor assets. The facilities condition reporting is set on an FCI calculation basis which considers the cost of immediate repair work required at each facility 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.



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 Facilities assets under the user view. The user view for Facilities captures Corporate Facilities and Software, with a total replacement value of \$309.3 million. Approximately 28% of Corporate Facilities assets are considered to be in Good to Very Good Condition and no assets are in Very Poor condition, although, about 49% of assets are in Poor condition. The poor condition assets mainly related to the Civic Centre and City Hall as significant renewal costs are identified in the short-term. As mentioned in the section above, these facilities do not represent a safety issue or preclude the delivery of services to meet resident needs and will be addressed through the budget.

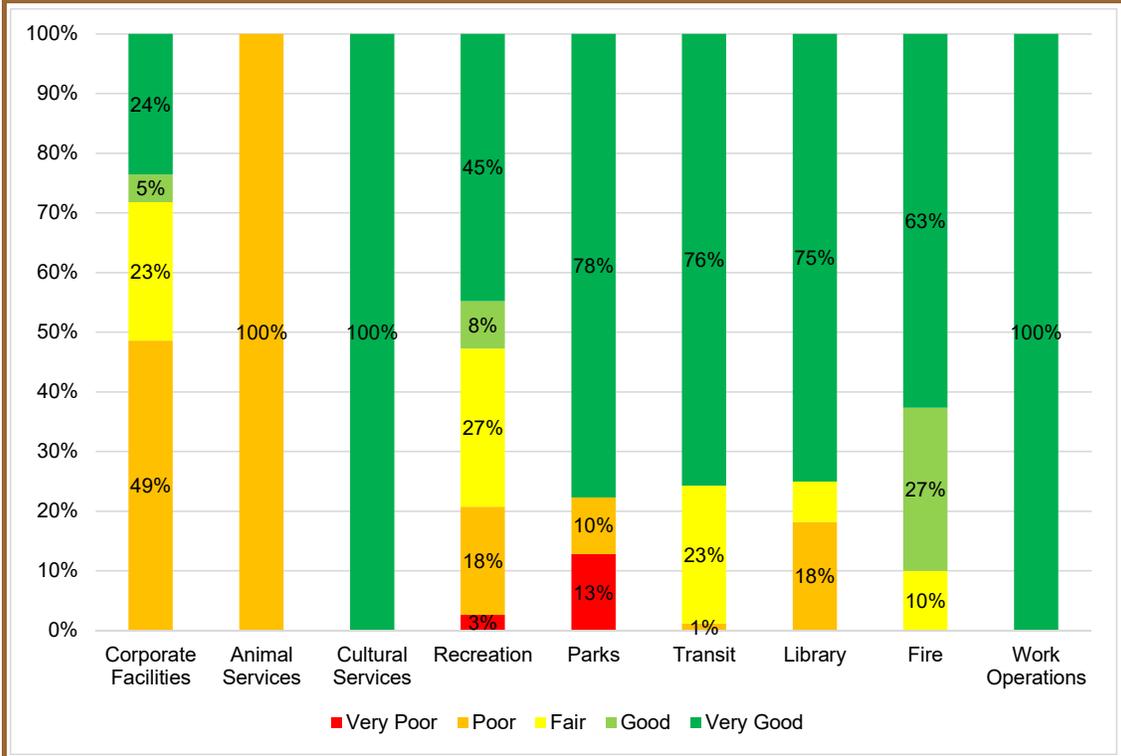


APPENDIX B



Facilities

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, Animal Services, Recreation, Parks, Transit, Library and Fire all have a 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 immediate repair works required at a facility 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. These facilities are being addressed through the budget as required.



APPENDIX B



Facilities

Comparison of 2019 vs. 2020 Inventory and Replacement Value (2021\$)

The tables below outline the difference in Facilities assets in the 2019 SOLI relative to the 2020 SOLI while considering reporting under the two different views. Additionally in 2020, some noteworthy changes appeared due to the recategorization of a few facilities from Parks to Recreation. Please note, all values are expressed in 2021 dollars.

Under the user view framework, which only considers Corporate Facilities and Software, the total value of assets has increased by 10% from approximately \$281.1 million to \$309.3 million. This increase can generally be attributed to additional facilities and software included as part of the 2020 SOLI.

When considering all Facilities under the responsibility view, the total asset value for Facilities has increased proportionately with the inclusion of these assets. In total, the value of Facilities assets increased by 10% (or \$132.5 million) from the value in 2019 after inflationary adjustments. This is due to better information surrounding the City's facilities. The valuations are largely based on the valuation prepared by Suncorp and it is expected that a new study will be initiated in the near term to update the facility values used for this report.

Asset	2019 SOLI		2020 SOLI	
Corporate Facilities	23	Each	29	Each
Animal Services	1	Each	2	Each
Cultural Services	1	Each	1	Each
Recreation	61	Each	73	Each
Parks	29	Each	16	Each
Transit	8	Each	8	Each
Library	4	Each	6	Each
Fire	19	Each	19	Each
Work Operations	12	Each	13	Each
Software (Moved to IT)	0	Each	4	Each
Total	158	Each	167	Each

Asset	2019 SOLI (\$2021)	2020 SOLI (\$2021)	Difference	
1. Assets Used by Facilities and Managed by Other Service Areas				
Software (Moved to IT)	\$ -	\$ 488,578	\$ 488,578	N/A
Subtotal Assets Used by Facilities and Managed by Other Service Areas	\$ -	\$ 488,578	\$ 488,578	N/A
2. Assets Used by the Corporation and Managed by Facilities				
Corporate Facilities	\$ 281,073,823	\$ 308,859,632	\$ 27,785,809	10%
Subtotal Assets Used by the Corporation and Managed by Facilities	\$ 281,073,823	\$ 308,859,632	\$ 27,785,809	10%
Subtotal Assets Used by Facilities - User View (1+2)	\$ 281,073,823	\$ 309,348,210	\$ 28,274,387	10%
3. Assets Managed by Facilities and Used by Other Service Areas				
Animal Services	\$ 6,482,628	\$ 9,243,785	\$ 2,761,157	43%
Cultural Services	\$ 87,547,306	\$ 88,504,196	\$ 956,890	1%
Recreation	\$ 539,434,464	\$ 573,407,833	\$ 33,973,369	6%
Parks	\$ 20,804,879	\$ 17,753,484	\$ (3,051,395)	-15%
Transit	\$ 148,589,003	\$ 165,605,215	\$ 17,016,212	11%
Library	\$ 59,651,334	\$ 81,891,070	\$ 22,239,736	37%
Fire	\$ 83,530,595	\$ 115,979,197	\$ 32,448,602	39%
Work Operations	\$ 84,189,957	\$ 81,377,531	\$ (2,812,425)	-3%
Subtotal Assets Managed by Facilities and Used by Other Service Areas	\$ 1,030,230,166	\$ 1,133,762,311	\$ 103,532,145	10%
Total Replacement Value of Facilities - Responsibility View (1+3)	\$ 1,311,303,988	\$ 1,442,621,943	\$ 131,317,954	10%

APPENDIX B



Transit



Asset Replacement Value:	\$528.0 Million
Total Asset Replacement Value Including Facilities and Software:	\$694.7 Million
Future Condition Trend (Next 10 Years):	Stable
Data Confidence & Reliability:	Age and Condition Based

The 2020 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 them.

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

The responsibility view is also being illustrated in this 2020 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 2021\$) under the two different views.

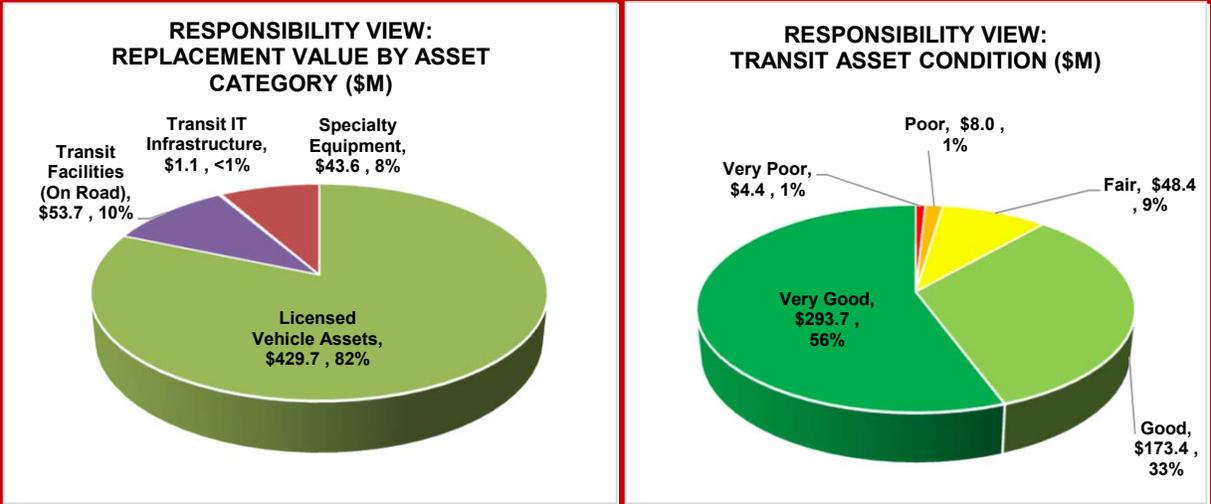
Asset Type	Replacement Value (\$Millions)	Asset Inventory
Assets Managed by Transit Services		
Licensed Vehicle Assets	\$429.7	498
Transit Facilities (On Road)*	\$53.7	3,294
Transit IT Infrastructure	\$1.1	5
Specialty Equipment	\$43.6	5,074
<i>Subtotal Assets Managed by Transit (Responsibility View)</i>	<i>\$528.0</i>	<i>-</i>
Assets Managed by Other Service Areas		
<i>Transit Facilities</i>	<i>\$165.6</i>	<i>8</i>
<i>Software Used by Transit</i>	<i>\$1.1</i>	<i>1</i>
Total Replacement Value (User View)	\$694.7	-

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



Major Types of Assets within Transit Services - Responsibility View

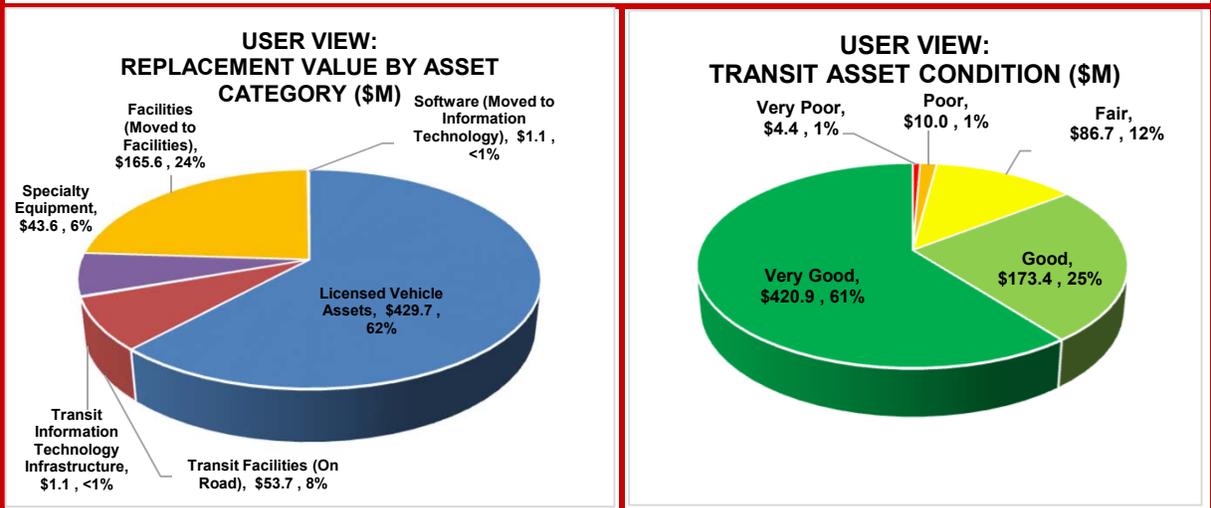
The figures below illustrate the replacement value and condition of Transit Service assets under the responsibility view. Under this view, the total replacement value of assets is \$528.0 million. As part of the 2020 SOLI, only Transit licensed vehicle assets, on road transit facilities, Transit IT infrastructure and specialty equipment are considered under the management of this service area. Overall, the Transit assets are in Good condition with only about 1% (\$8.0 million) of the total asset base rated in Poor condition and a further 1% (\$4.4 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 UL and may need to be replaced to avoid inflated maintenance costs.



Data Source: Departmental Inventory, PSAB data as of year-end 2020

Major Types of Assets within Transit Services - 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 \$694.7 million. Of this total, licensed vehicles continue to represent the largest share at \$429.7 million. Approximately 86% of the assets are considered to be in Good to Very Good Condition. Only 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 UL and may need to be replaced to avoid inflated maintenance costs.

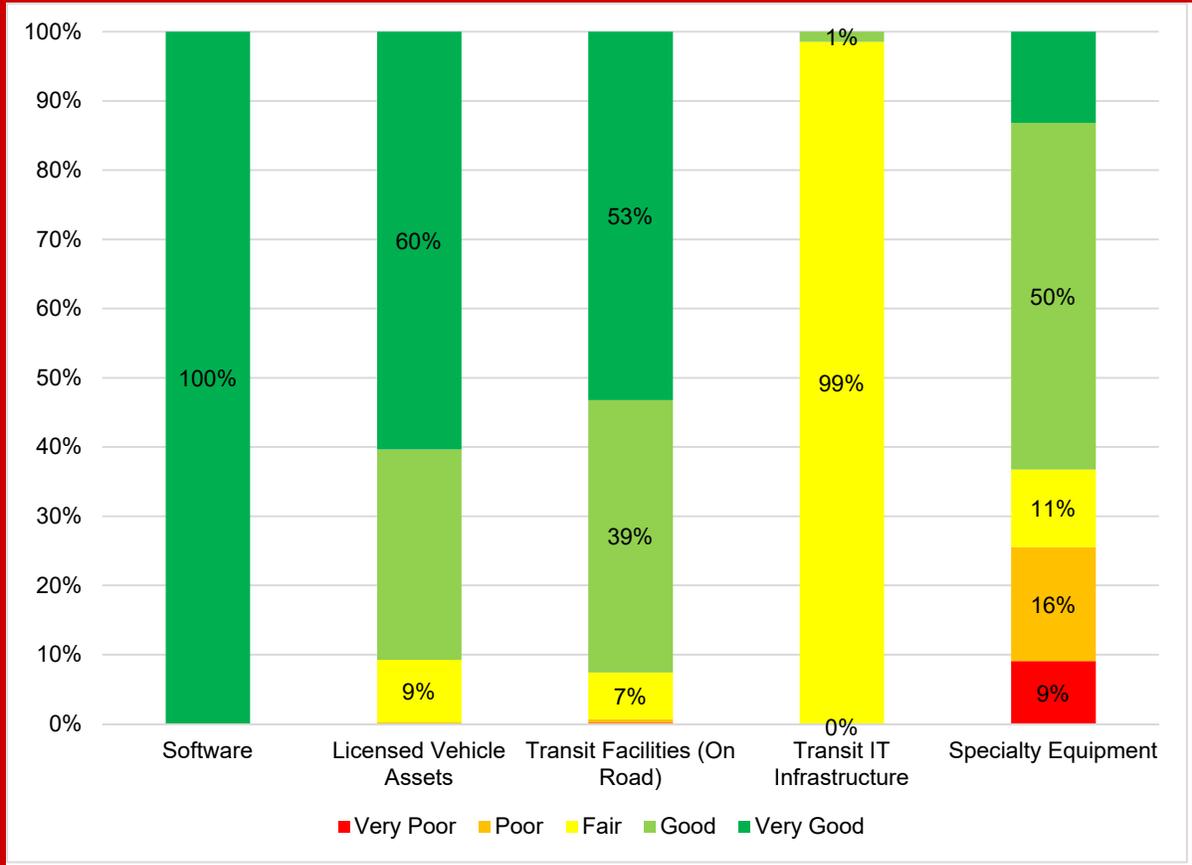


APPENDIX B



Transit

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 about 9% of assets in Very Poor condition and a further 16% in poor condition. Much of these assets relate to Smart bus on-board equipment, and although these assets continue to be operational and in working order, they are anticipated to be serviced over the short-term which will improve the condition of the assets.



APPENDIX B



Transit

Comparison of 2019 vs. 2020 Inventory and Replacement Value (2021\$)

The tables below outline the difference in Transit assets in the 2019 SOLI relative to the 2020 SOLI while considering reporting under the two different views. Please note, all values are expressed in 2021 dollars.

Under the responsibility view framework, the total value of Transit assets has increased by 9% from approximately \$484.7 million to \$528.0 million. This increase can generally be attributed to updated costing information as part of the 2020 SOLI, updated inventory information and recent acquisitions.

When considering the Transit Facilities and software, the total asset value for Transit increases proportionately with the inclusion of these assets. In total, the value of Transit assets increased by 9% (or \$59.9 million) from the value reported in 2019 after inflationary adjustments. This increase is due to better information surrounding the City's facilities related to transit services.

Please note, the Facilities and IT report cards include additional information on those assets used by Transit Services but maintained and managed by a different City department. For fair comparison, 2019 asset inventory has been adjusted to align with 2020 responsibility view. Also note, future transit SOLI reports will continue to transform as the city transitions to a more green based fleet which will impact the total value of infrastructure and number of assets required to deliver services.

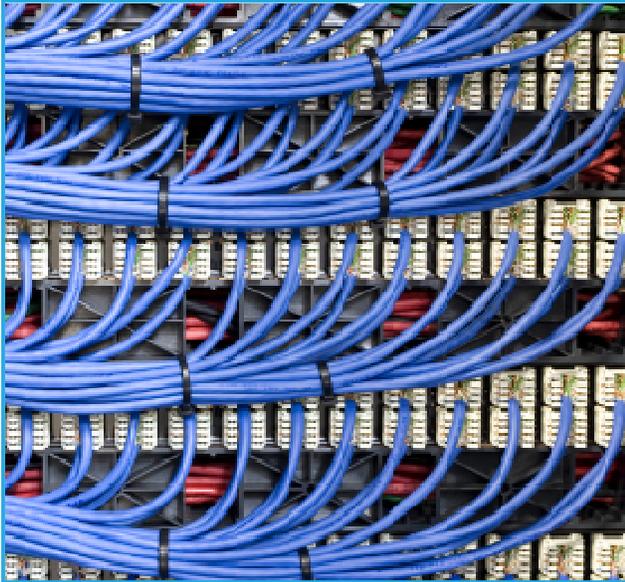
Asset	2019 SOLI		2020 SOLI	
Facilities (Moved to Facilities)	8	Each	8	Each
Software (Moved to IT)	1	Each	1	Each
Licensed Vehicle Assets	481	Each	498	Each
Transit Facilities (On Road)	2,366	Each	3,294	Each
Transit Information Technology Infrastructure	10	Each	5	Each
Specialty Equipment				
Conveyance Systems	34	Each	34	Each
Communication Control		Pooled	4	Each
Fare Systems*	2,950	Each	470	Each
Presto	1,395	Each	1,459	Each
Maintenance/Admin Small Equipment		Pooled	7	Each
Signage	2,577	Each	3,093	Each
Fueling	5	Each	5	Each
Stock Room		N/A		N/A

*The Drop in Fare Systems is due to a change in the valuing of equipment, which now values all equipment on each bus as a whole rather than by sub-component.

Asset	2019 SOLI (\$2021)	2020 SOLI (\$2021)	Difference	
1. Assets Managed by Other Service Areas				
Facilities (Moved to Facilities)	\$ 148,589,003	\$ 165,605,215	\$ 17,016,212	11%
Software (Moved to Information Technology)	\$ 1,544,994	\$ 1,147,500	\$ (397,494)	-26%
Subtotal Assets Managed by Other Service Areas	\$ 150,133,997	\$ 166,752,715	\$ 16,618,718	11%
2. Assets Managed by Transit Services				
Licensed Vehicle Assets	\$ 389,592,866	\$ 429,660,720	\$ 40,067,854	10%
Transit Facilities (On Road)	\$ 52,634,388	\$ 53,653,576	\$ 1,019,187	2%
Transit Information Technology Infrastructure	\$ 1,057,049	\$ 1,057,720	\$ 671	0%
Specialty Equipment				
Conveyance Systems	\$ 6,502,500	\$ 6,502,500	\$ -	0%
Communication Control	\$ 14,722,244	\$ 14,723,000	\$ 756	0%
Fare Systems*	\$ 9,396,239	\$ 8,670,000	\$ (726,239)	-8%
Presto	\$ 6,169,000	\$ 6,451,000	\$ 282,000	5%
Maintenance/Admin Small Equipment	\$ 395,352	\$ 469,200	\$ 73,848	19%
Signage	\$ 516,944	\$ 3,041,640	\$ 2,524,696	488%
Fueling	\$ 1,206,864	\$ 1,207,000	\$ 136	0%
Stock Room	\$ 2,543,090	\$ 2,543,000	\$ (90)	0%
Subtotal Assets Managed by Transit Services (Responsibility View)	\$ 484,736,536	\$ 527,979,356	\$ 43,242,820	9%
Total Replacement Value: User View (1+2)	\$ 634,870,533	\$ 694,732,070	\$ 59,861,538	9%



Information Technology



Asset Replacement Value:	\$88.8 Million
Asset Replacement Value including software from other service areas	\$97.1 Million
Future Condition Trend (Next 10 Years):	Stable - Assets are replaced frequently and therefore remain in stable condition
Data Confidence & Reliability:	Medium (Condition Based)

The 2020 SOLI analysis is being reported 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

The responsibility view in this 2020 SOLI 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.

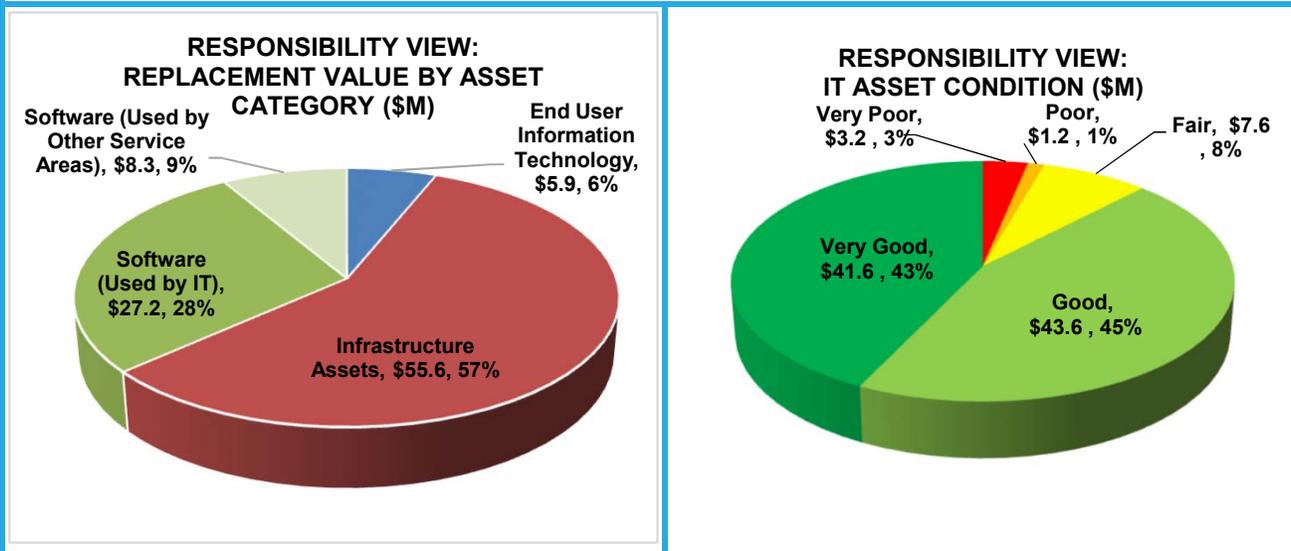
The table below illustrates the replacement value (in 2021\$).

Asset Type	Replacement Value (\$Millions)	Asset Inventory
Assets Used by IT		
End User Information Technology	\$5.9	7,014
Infrastructure Assets	\$55.6	Pooled
Software (Shared Corporate Software)	\$27.2	64
<i>Subtotal Assets Used by IT (User View)</i>	<i>\$88.8</i>	<i>-</i>
IT Assets Used by Other Service Areas		
Software	\$8.3	45
Total Replacement Value (Responsibility View)	\$97.1	-



Major Types of Assets within IT - Responsibility View

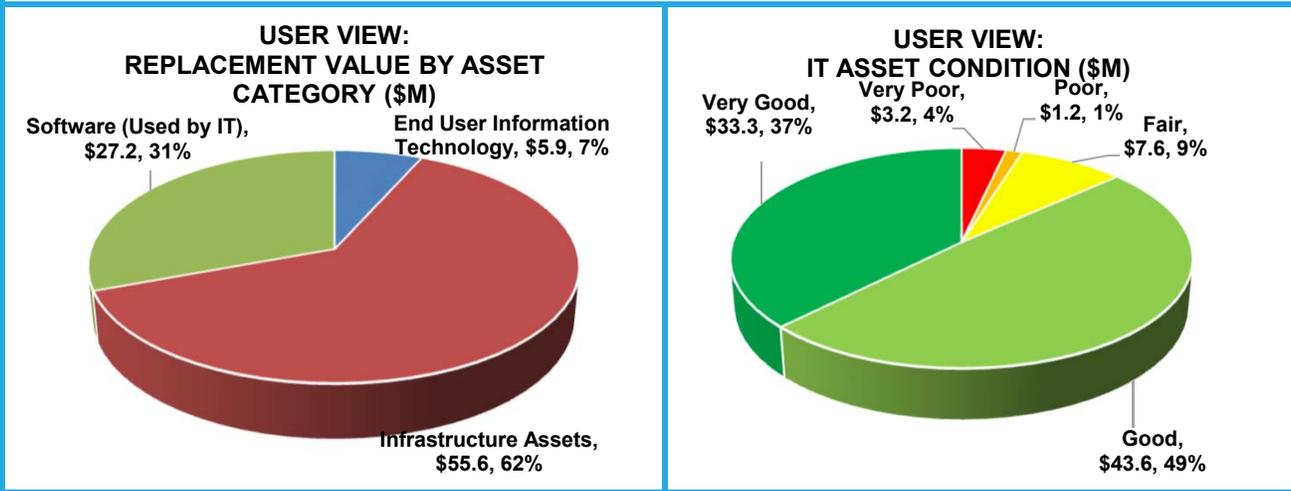
The figure below illustrates the replacement value and condition of IT services under the responsibility view. Under this view, the total replacement value of IT assets is \$97.1 million, of which, over 50% of the total value is related to the City's IT infrastructure assets. Approximately 88% of IT assets are in Good or Very Good condition, with only 4% 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

Major Types of Assets within IT - User View

The figures below illustrate the replacement value and condition of IT assets under the user view. IT is an internal service provider that manages assets on behalf of many other service areas. However, under the user view, IT accounts for Software assets used exclusively by IT services. With that under consideration, the replacement value under the user view amounts to about \$88.8 million. The difference between the user view and responsibility view is entirely attributed to software assets used by various service areas. The overall condition assessment of IT assets generally does not change under the user view as all software assets are considered to be in "Very Good" condition.

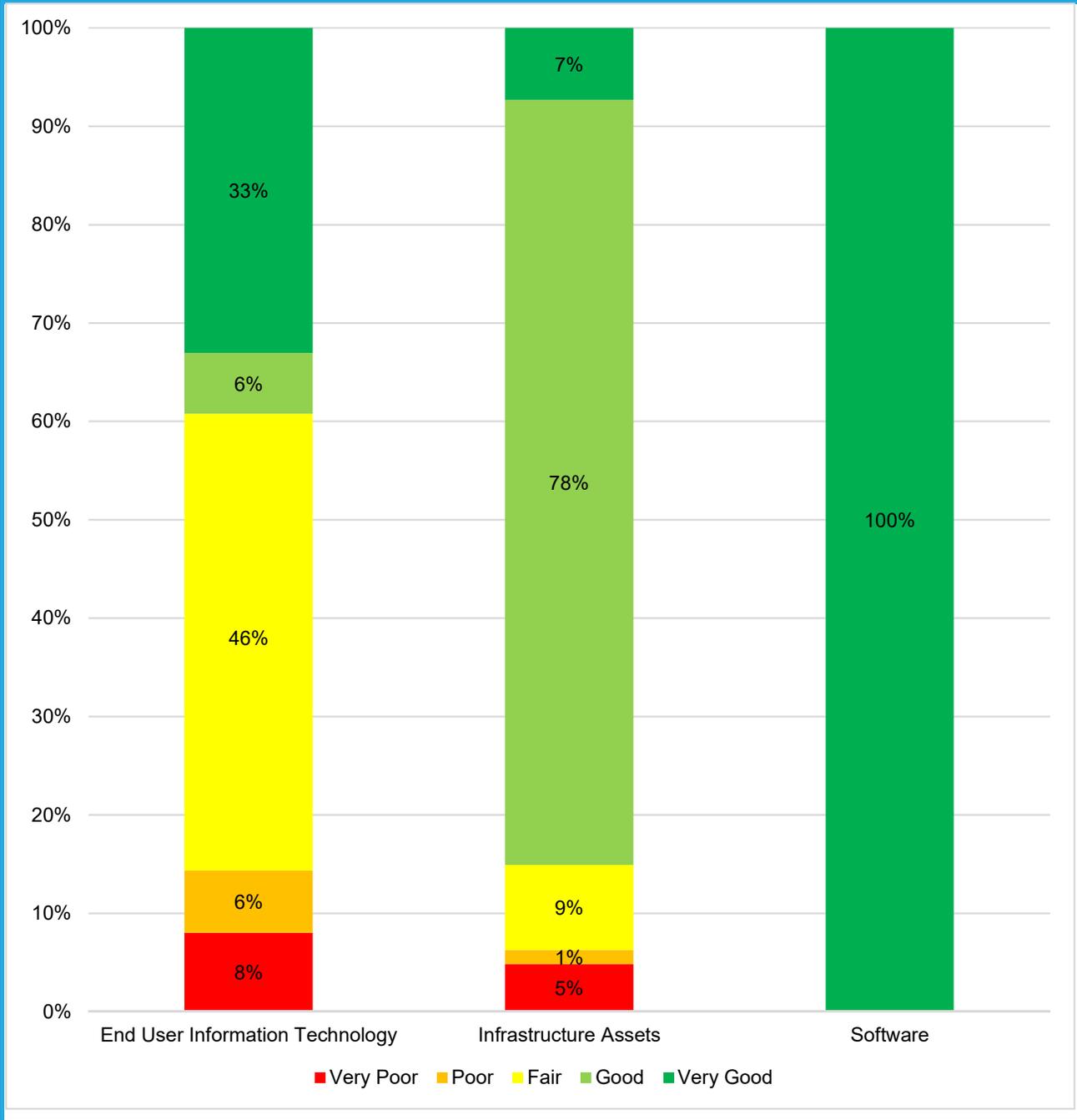


APPENDIX B



Information Technology

The figure below illustrates the condition of the three sub-component assets of Information Technology services under the responsibility view. All sub-component asset categories are mostly in Good to Very Good Condition. With this said about 46% of End User IT assets are in Fair condition. This amount mostly relates to computers, monitors and mobile phones which have been considered in Fair condition, however assets continually receive regular maintenance and continue to be in good working condition.



APPENDIX B



Information Technology

Comparison of 2019 vs. 2020 Inventory and Replacement Value (2021\$)

The tables below outline the difference in IT assets in the 2019 SOLI relative to the 2020 SOLI while considering reporting under the two different views. All values are expressed in 2021 dollars.

For IT, the only notable change in switching to the responsibility view is the addition of all City software assets (except Library). Previously all Software was distributed to their respective user service areas where the particular asset was being utilized.

The tables below outline the difference in IT assets in the 2019 SOLI relative to the 2020 SOLI while considering the change in reporting to the new responsibility view. Looking only at those assets included under the responsibility view framework, the total value of IT has nominally decreased from approximately \$100.1 million to \$97.1 million largely attributed to better costing information in the 2020 SOLI.

Asset	2019 SOLI		2020 SOLI	
End User Information Technology				
Computers	3,039	Each	2,915	Each
Monitors	2,846	Each	2,843	Each
Mobile Phones	1,059	Each	1,141	Each
Audio Visual Equipment			115	Each
Infrastructure Assets				
Servers	64	Each	84	Each
Storage And Back-Up	13	Each	29	Each
Wireless	1,013	Each	806	Each
Cable Plants	285,544	Metres	286,977	Meters
Network Infrastructure	581	Each	671	Each
Communication System	3,809	Each	4,141	Each
Software	50	Each	109	Each

Asset	2019 SOLI (2021\$)	2020 SOLI (2021\$)	Difference	
Assets Used and Managed by IT				
End User Information Technology				
Computers	\$ 4,722,696	\$ 4,619,300	\$ (103,396)	-2%
Monitors	\$ 755,049	\$ 710,750	\$ (44,299)	-6%
Mobile Phones	\$ 407,881	\$ 405,907	\$ (1,974)	0%
Audio Visual Equipment	\$ -	\$ 187,500	\$ 187,500	N/A
Infrastructure Assets				
Servers	\$ 1,834,694	\$ 2,385,141	\$ 550,447	30%
Storage And Back-Up	\$ 3,376,976	\$ 4,211,570	\$ 834,593	25%
Wireless	\$ 2,818,402	\$ 1,901,105	\$ (917,297)	-33%
Cable Plants	\$ 38,380,031	\$ 37,102,756	\$ (1,277,275)	-3%
Network Infrastructure	\$ 5,965,159	\$ 5,991,462	\$ 26,303	0%
Communication System	\$ 3,527,318	\$ 4,037,890	\$ 510,572	14%
Software (Shared Corporate Software)	\$ 33,863,940	\$ 27,242,195	\$ (6,621,745)	-20%
Subtotal Assets Used by IT (User View)	\$ 95,652,148	\$ 88,795,576	\$ (6,856,572)	-7%
Assets Used By Other Service Areas but Managed by IT				
Software (Moved to IT)	\$ 4,469,861	\$ 8,304,692	\$ 3,834,830	86%
Total Replacement Value - Responsibility View	\$ 100,122,009	\$ 97,100,268	\$ (3,021,741)	-3%

APPENDIX B



City Support Fleet



Total Asset Replacement Value (excl. Software):	\$48.1 Million
Future Condition Trend (Next 10 Years):	Stable - Assets are replaced frequently and therefore remain in stable condition
Data Confidence & Reliability:	Low-Medium (Age and Condition Based)

The 2020 SOLI analysis is being reported under two different asset representation perspectives: "**Responsibility View**" and "**User View**" representation

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 them

The responsibility view is an addition in this 2020 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 2021\$) under the two different views.

Asset Type	Replacement Value (\$Millions)	Asset Inventory
1. Assets Managed by Other Service Areas but used by City Support Fleet		
Software (Moved to IT)	\$0.8	2
<i>Subtotal Assets Managed by Other Service Areas and Used by City Support Fleet</i>	\$0.8	-
2. Assets Managed and Used by City Support Fleet		
Licensed Fleet	\$5.1	158
Off-Road Vehicles	\$1.4	28
Fleet Equipment	\$0.0	22
<i>Subtotal Assets Managed and Used by City Support Fleet</i>	\$6.5	208
Total Replacement Value - User View (1+2)	\$7.3	-
3. Assets Managed by Fleet and Used by Other Service Areas		
Licensed Fleet	\$27.1	359
Off-Road Vehicles	\$14.1	256
Fleet Equipment	\$0.3	101
<i>Subtotal Assets Managed by Fleet and Used by Other Service Areas</i>	\$41.6	716
Total Replacement Value - Responsibility View (2+3)	\$48.1	924

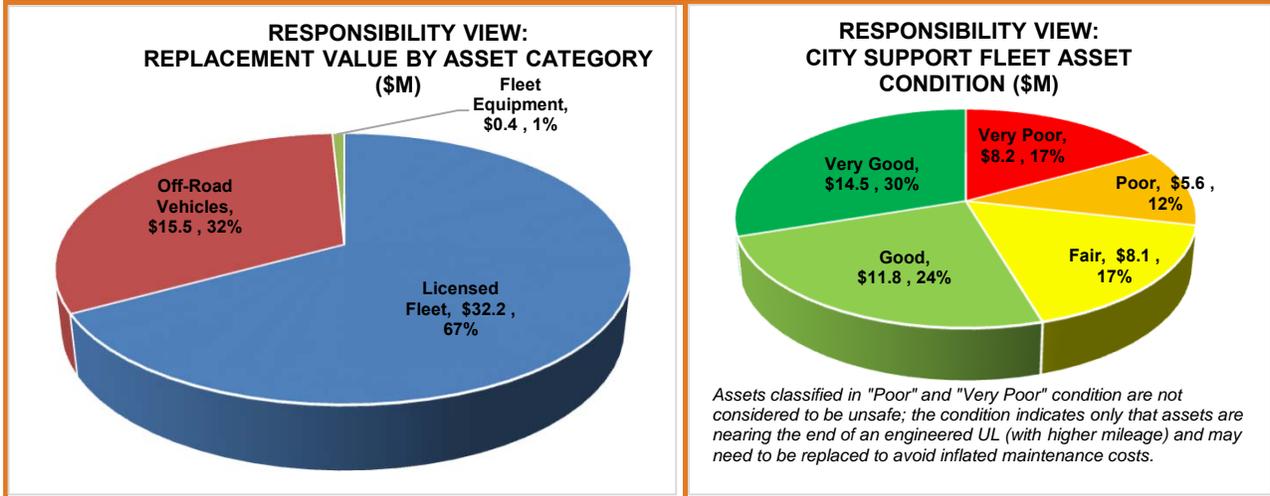
City Support Fleet excludes Transit and Fire Assets and Parks Fleet Equipment which are managed by respective service areas.



City Support Fleet

Major Types of Assets within City Support Fleet - Responsibility View

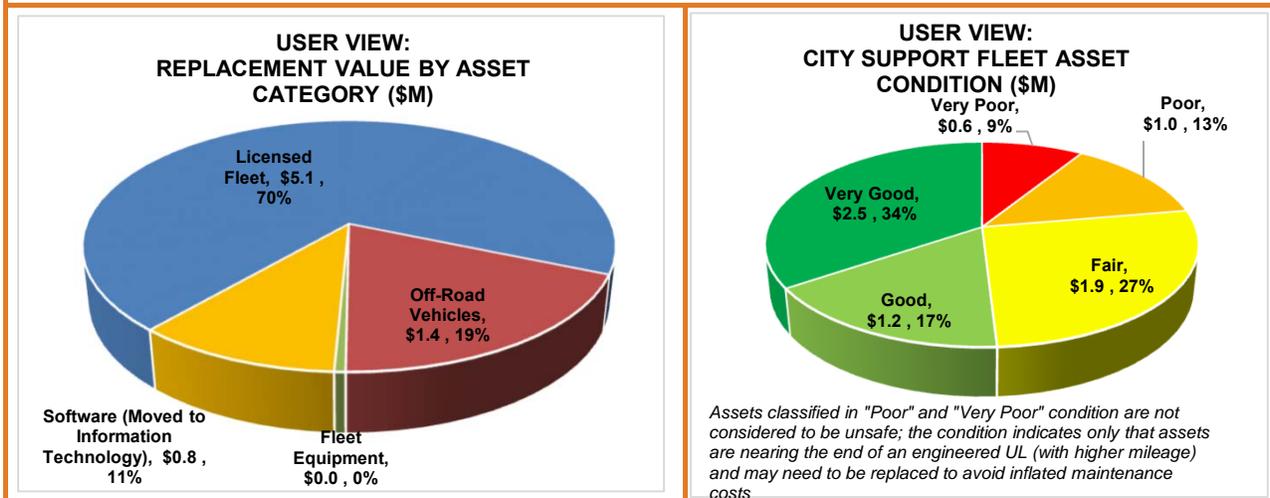
The figure below illustrates the replacement value and condition of City Support Fleet assets under the responsibility view. Under this view, the total replacement value of assets is \$48.1 million. Approximately 67% of the total value is related to the City's licensed fleet. About 55% of assets are considered to be in Good to Very Good condition. However, about 29% 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 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.



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 also captures software, the replacement value is about \$7.3 million. This view only includes City Support Fleet assets, as those assets used by other service areas under the user view are reported under each area respectively.

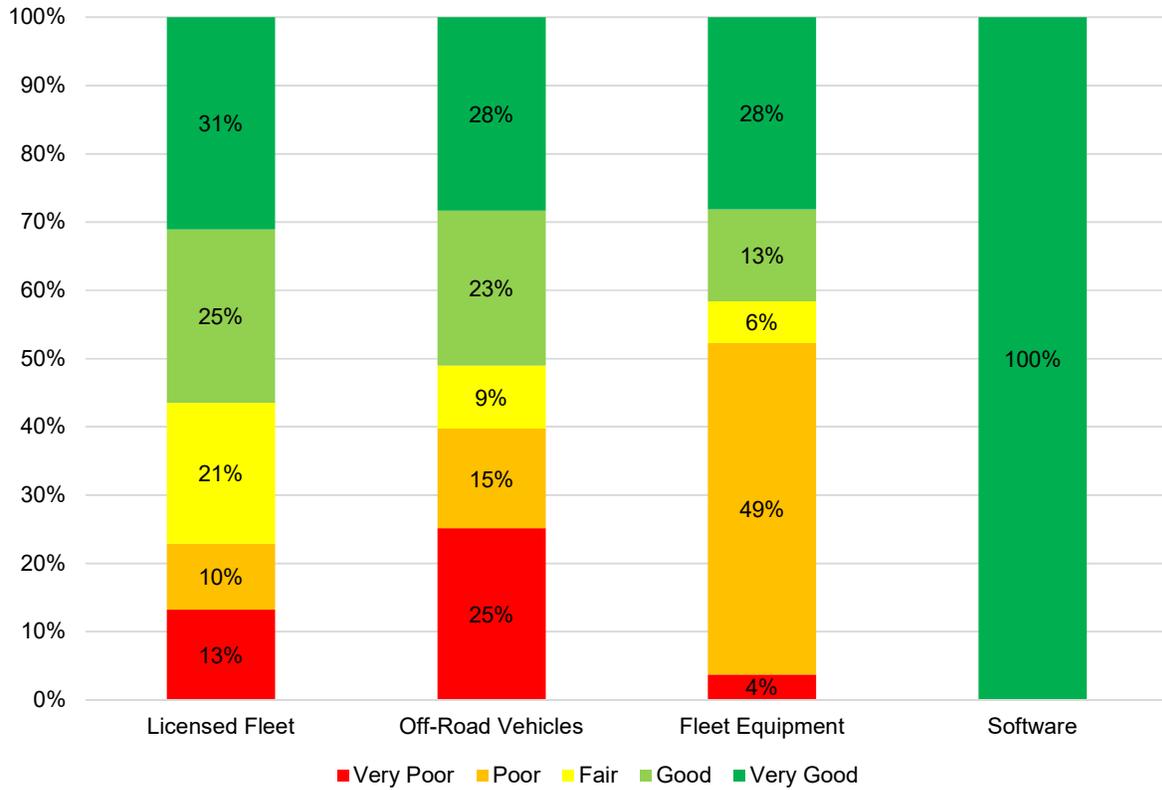


APPENDIX B



City Support Fleet

The figure below illustrates the condition of the various City Support Fleet assets by key sub-component areas based on the user view. 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.



APPENDIX B



City Support Fleet

Comparison of 2019 vs. 2020 Inventory and Replacement Value (2021\$)

The tables below outline the difference in City Support Fleet assets in the 2019 SOLI relative to the 2020 SOLI while considering reporting under the two different views. Please note, all values are expressed in 2021 dollars.

Under the responsibility view framework, the total value of City Support Fleet assets has increased by 5% from approximately \$45.7 million to \$48.1 million. This increase can generally be attributed to updated costing information and asset inventories as part of the 2020 SOLI. When considering assets only used by City Support Fleet, inclusive of software, the total asset value is only \$7.3 million which does represent an increase of 19% when compared to the similar assets in 2019.

Please note the IT report card will include additional information on those assets used by City Support Fleet but maintained and managed by a different City department. For fair comparison, 2019 asset inventory has been adjusted to align with 2020 responsibility view.

Asset	2019 SOLI		2020 SOLI	
Licensed Fleet	469	Each	517	Each
Off-Road Vehicles	156	Each	284	Each
Fleet Equipment*	444	Each	123	Each
Software (Moved to Information Technology)	2	Each	2	Each

*In 2020 Parks Fleet Equipment was moved to Parks service area.

Asset	2019 SOLI (\$2021)	2020 SOLI (\$2021)	Difference	
1. Assets Managed by Other Service Areas and Used by City Support Fleet				
Software (Moved to Information Technology)	\$ 806,518	\$ 775,200	\$ (31,318)	-4%
Subtotal Assets Managed by Other Service Areas and Used by City Support Fleet				
	\$ 806,518	\$ 775,200	\$ (31,318)	-4%
2. Assets Used and Managed by City Support Fleet				
Licensed Fleet	\$ 4,225,909	\$ 5,092,168	\$ 866,259	20%
Off-Road Vehicles	\$ 811,900	\$ 1,368,772	\$ 556,872	69%
Fleet Equipment*	\$ 280,570	\$ 42,112	\$ (238,458)	-85%
Subtotal Assets Used and Managed by City Support Fleet				
	\$ 5,318,379	\$ 6,503,052	\$ 1,184,673	22%
Subtotal Replacement Value - User View (1+2)				
	\$ 6,124,897	\$ 7,278,252	\$ 1,153,355	19%
3. Assets Managed by City Support Fleet and Used by Other Service Areas				
Licensed Fleet	\$ 26,033,977	\$ 27,112,918	\$ 1,078,941	4%
Off-Road Vehicles	\$ 11,158,023	\$ 14,120,935	\$ 2,962,912	27%
Fleet Equipment*	\$ 3,197,837	\$ 338,715	\$ (2,859,122)	-89%
Subtotal Assets Managed by City Support Fleet and Used by Other Service Areas				
	\$ 40,389,838	\$ 41,572,569	\$ 1,182,731	3%
Subtotal Replacement Value - Responsibility View (2+3)				
	\$ 45,708,217	\$ 48,075,621	\$ 2,367,404	5%

*In 2020 Parks Fleet Equipment was moved to Parks service area.

Note: The 2019 SOLI included corporate fleet only, however, all fleet are illustrated here for comparison purposes under the responsibility view

APPENDIX B



Fire Services



Total Asset Replacement Value:	\$35.6 Million
Total Asset Replacement Value Including Facilities:	\$154.7 Million
Future Condition Trend (Next 10 Years):	Declining - As assets age they may require attention in the future
Data Confidence & Reliability:	Age and Condition Based

The 2020 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 them
User View: Shows the assets under the service area that is using them

The responsibility view is also being illustrated in this 2020 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.

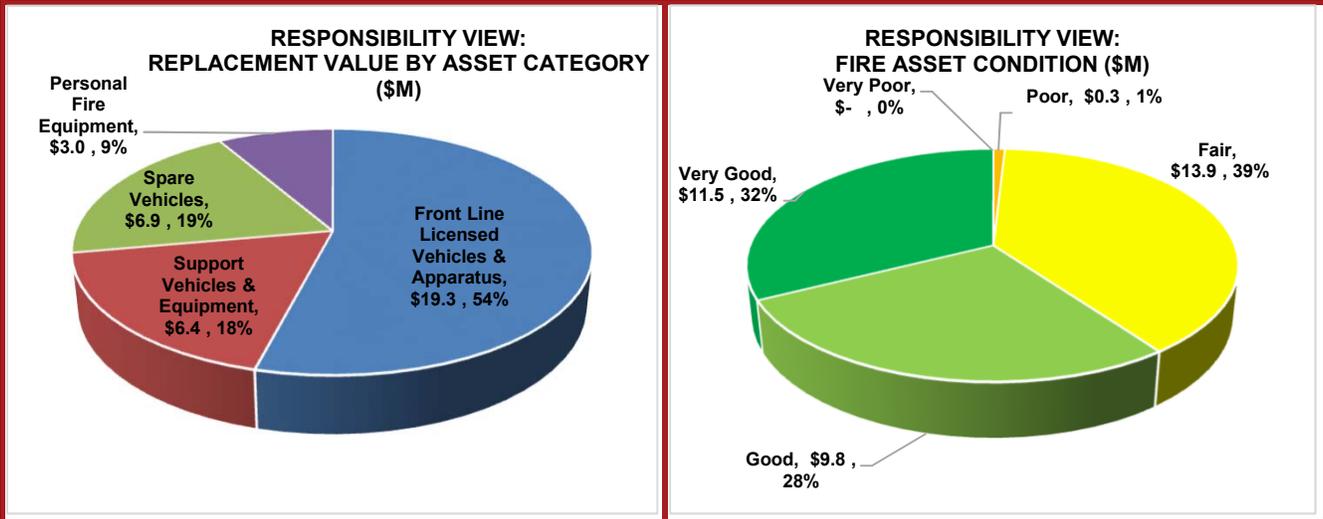
The table below illustrates the replacement value (in 2021\$) under the two different views.

Asset Type	Replacement Value (\$Millions)	Asset Inventory
Assets Managed by Fire Services		
Front Line Licensed Vehicles & Apparatus	\$19.3	21
Support Vehicles & Equipment	\$6.4	63
Spare Vehicles	\$6.9	31
Personal Fire Equipment	\$3.0	1,026
<i>Subtotal Assets Managed by Fire Services (Responsibility View)</i>	\$35.6	-
Assets Managed by Other Service Areas		
<i>Fire Services Facilities (Moved to Facilities)</i>	\$116.0	19
<i>Fire Services Software (Moved to IT)</i>	\$3.1	5
Total Replacement Value (User View)	\$154.7	-



Major Types of Assets within Fire Services - Responsibility View

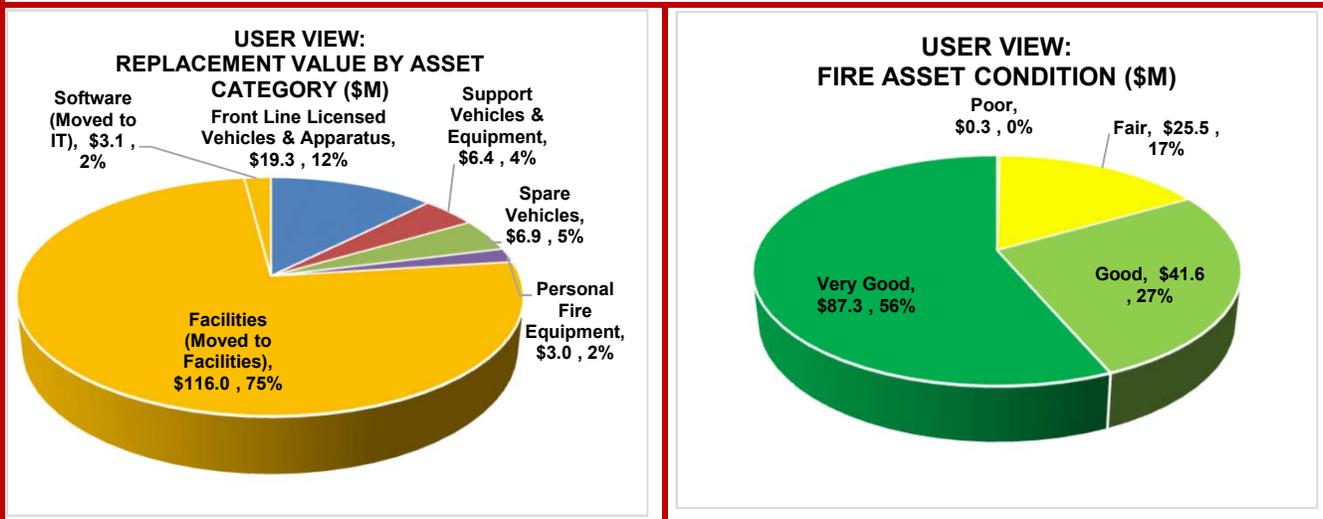
The figure below illustrates the replacement value and condition of Fire Services assets under the responsibility view. Under this view, the total replacement value of assets is \$35.6 million. Of this total, roughly 91% is related to the Fire fleet (including front line licensed vehicles & apparatus, support vehicles & equipment and spare vehicles. About 60% of the assets are considered to be in Good to Very Good condition, with the majority of the remaining assets in fair condition. No assets for Fire Services are in Very Poor condition.



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, the replacement value is about \$154.7 million. Approximately 71% of the assets are considered to be in Good to Very Good Condition. No assets for Fire Services are in Very Poor condition.



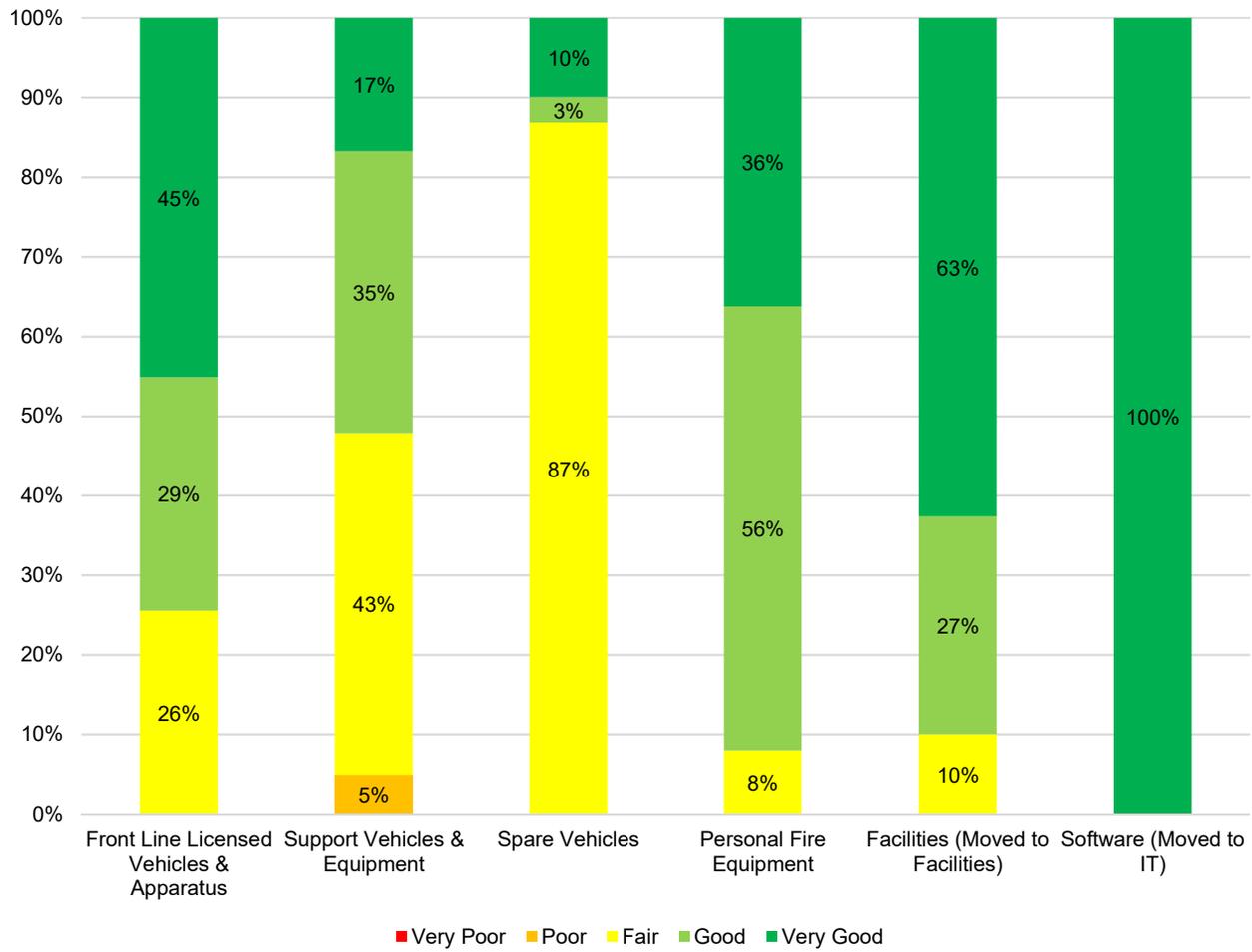
Data Source: M5, City Databases, Suncorp valuations report and recent tenders (for facility)

APPENDIX B



Fire Services

The figure below illustrates the condition of the five sub-component assets of Fire Services. Facilities are generally in Good to Very Good condition. There are no assets in any sub-area that are in Very Poor condition. Assets in Poor condition are generally associated with a limited number of support vehicles and does not represent a safety issue or preclude fire from delivering services to meet the needs of residents.



APPENDIX B



Fire Services

Comparison of 2019 vs. 2020 Inventory and Replacement Value (2021\$)

The tables below outlines the difference in Fire Services assets in the 2019 SOLI relative to the 2020 SOLI while considering reporting under the two different views. All values are expressed in 2021 dollars.

Under the responsibility view framework, the value of Fire Services assets has decreased slightly by 5% from approximately \$37.5 million to \$35.6 million. This decrease can be attributed to better asset data, costing information and increased confidence in the City's spare vehicle inventory.

When considering the Fire Services Facilities and Software, the total asset value for Fire Services increases proportionately with the inclusion of these assets. Furthermore, the total value of Fire Services assets represents an increase of 28% (or \$33.5 million) from the value reported in 2019 after inflationary adjustments.

Please note, the Facilities and IT report cards will include additional information on those assets used by Fire Services but maintained and managed by a different City department. For fair comparison, 2019 asset inventory has been adjusted to align with 2020 responsibility view.

Asset	2019 SOLI		2020 SOLI	
Front Line Licensed Vehicles & Apparatus			21	Each
Support Vehicles & Equipment	101	Each	63	Each
Spare Vehicles			31	Each
Personal Fire Equipment	1,048	Each	1,026	Each
Facilities (Moved to Facilities)	19	Each	19	Each
Software (Moved to IT)	5	Each	5	Each

Note: In 2019 SOLI, Spare Vehicles and Support Vehicles & Equipment were not listed as separate categories.

Asset	2019 SOLI (\$2021)	2020 SOLI (\$2021)	Difference	
1. Assets Managed by Other Service Areas				
Facilities (Moved to Facilities)	\$ 83,530,595	\$ 115,979,197	\$ 32,448,602	39%
Software (Moved to IT)	\$ 164,487	\$ 3,102,544	\$ 2,938,057	1786%
Subtotal Assets Managed by Other Service Areas	\$ 83,695,082	\$ 119,081,741	\$ 35,386,659	42%
2. Assets Managed by Fire Services				
Front Line Licensed Vehicles & Apparatus		\$ 19,263,414		
Support Vehicles & Equipment	\$ 34,942,849	\$ 6,444,539	\$ (2,317,154)	-7%
Spare Vehicles		\$ 6,917,742		
Personal Fire Equipment	\$ 2,600,636	\$ 3,002,108	\$ 401,472	15%
Subtotal Assets Managed by Fire Services (Responsibility View)	\$ 37,543,485	\$ 35,627,803	\$ (1,915,682)	-5%
Total Replacement Value: User View (1+2)	\$ 121,238,567	\$ 154,709,544	\$ 33,470,977	28%

APPENDIX B



Parks



Total Asset Replacement Value:	\$517.6 Million
Total Asset Replacement Value Including Facilities, City Support Fleet and Software	\$552.7 Million
Future Condition Trend (Next 10 Years):	Declining - As assets age they may require attention in the future
Data Confidence & Reliability:	Age & Condition Based

The 2020 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 them*
- User View:** Shows the assets under the service area that is using them*

The responsibility view is also being illustrated in this 2020 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 2021\$) under the two different views.

Asset Type	Replacement Value (\$Millions)	Asset Inventory
Assets Managed by Parks Services		
Parking Lots	\$15.0	333
Small Engine Equipment	\$2.3	716
Trees	\$129.9	249,749
Flower Beds	\$3.8	1,200
Cemetery Equipment	\$0.1	76
Park Assets		
Parks	\$68.4	676 Hectares
Natural Heritage Lands	\$0.0	1,653 Hectares
Park Furnishing	\$3.0	4,405
Playgrounds	\$85.8	332
Shade Structures	\$36.3	310
Splash Pads & Outdoor Pools	\$3.2	8
Fitness Equipment	\$0.7	18
Skate Parks	\$1.7	4
Sports Facilities	\$120.1	1,180
Pathways	\$47.3	278,379 Metres
Subtotal Assets Managed by Parks (Responsibility View)	\$517.6	-
Assets Managed by Other Service Areas		
Parks Facilities	\$17.8	16
City Support Fleet Used by Parks	\$17.3	319
Software Used by Parks	\$0.0	1
Total Replacement Value (User View)	\$552.7	-

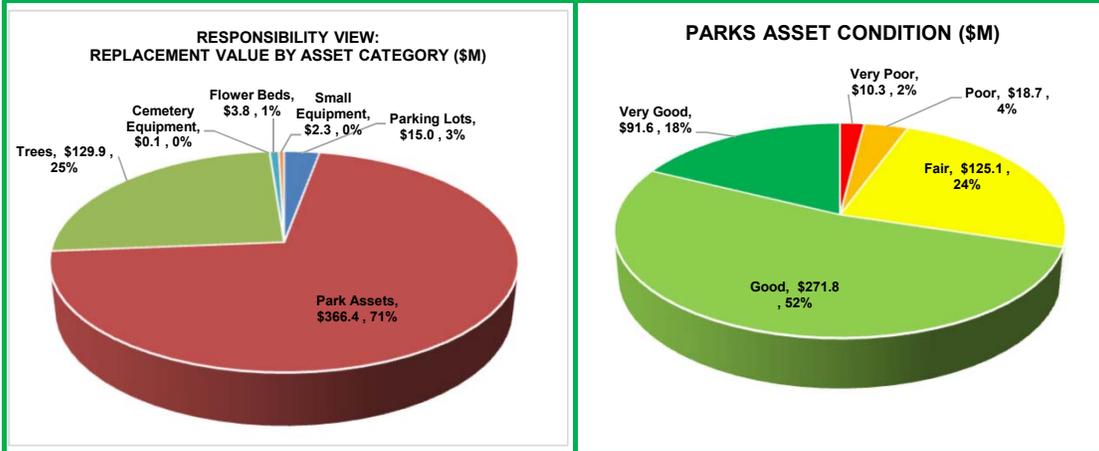
APPENDIX B



Parks

Major Types of Assets within Parks - Responsibility View

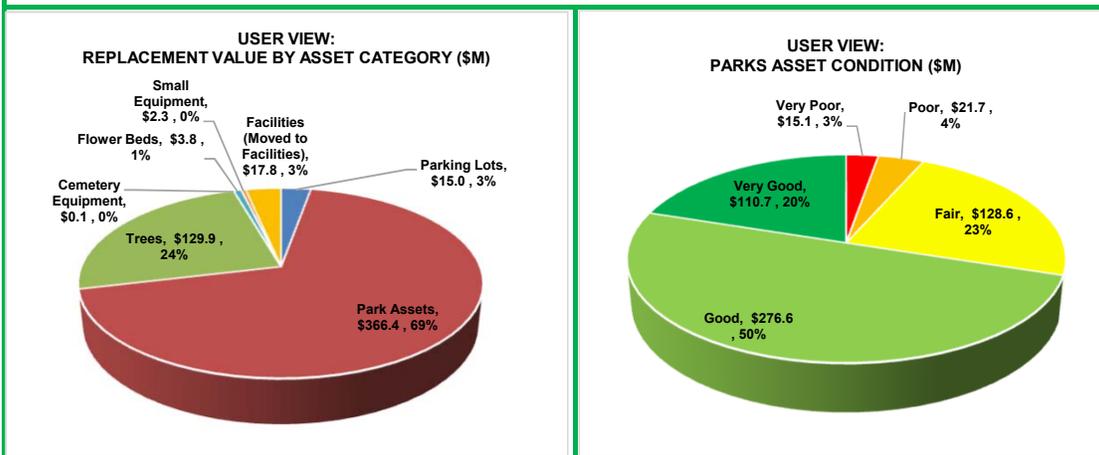
The figure on the below illustrates the replacement value and condition of Parks assets under the responsibility view. Under the responsibility view, the total replacement value of the Parks assets is \$517.6 million. Of the \$517.6 million replacement value, about 71%, or \$366.4 million, is attributed to park assets, which include the Sports Facilities infrastructure, parkland, playgrounds, etc. Furthermore, about 25%, or \$129.9 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 6% of assets are considered to be in Poor and Very Poor Condition.



Data Source: Departmental Inventories, GIS database, City of Brampton 2019 Development Charges 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, City-support fleet and software, the replacement value is about \$552.7 million. Of this total, the Park Assets continues to represent the largest share at \$366.4 million of the assets considered. Facilities assets add \$17.8 million to the total replacement value while Fleet adds \$17.3 million. Approximately 70% of the City's assets are considered to be in Good to Very Good Condition. Only 3% of assets are in Very Poor condition, largely related to Parks Trees, Facilities and Fleet. This condition assessment does not mean the assets are unsafe.

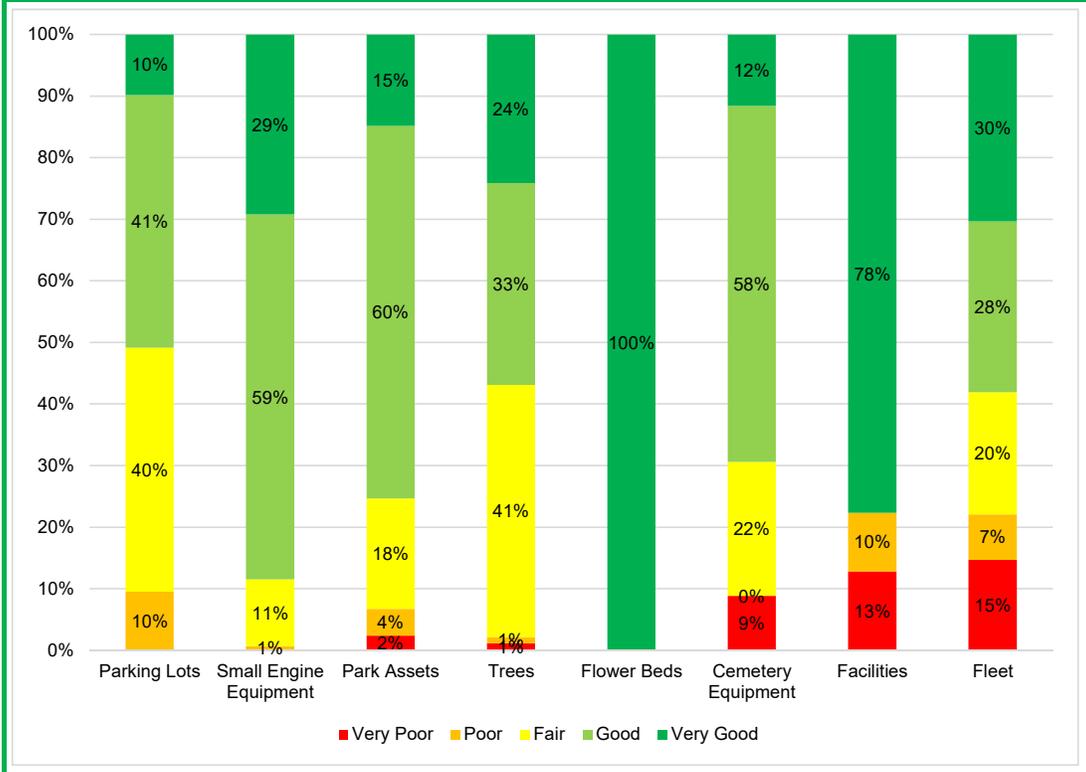


APPENDIX B



Parks

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, Cemetery Equipment, 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 as part of this analysis. Specifically for facilities, the condition assessment are determined on a Facilities Condition Index (FCI) calculation basis which considers the cost of immediate repair works required at a facility relative to the replacement value of the facility. Poor and Very Poor condition assessments 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.



APPENDIX B



Parks

Comparison of 2019 vs. 2020 Inventory and Replacement Value (2021\$)

The tables below outline the difference in Parks assets in the 2019 SOLI relative to the 2020 SOLI while considering reporting under the two different views. Please note, all values are expressed in 2021 dollars.

Under the responsibility view framework, the total value of Parks assets has decreased by 18% from approximately \$673.3 million to \$552.7 million. This decrease can generally be attributed to better costing information as part of the 2020 SOLI. Additionally, some Park assets that were previously included under parks have been moved to Recreation as the assets are managed by Recreation Services.

When considering the Parks Facilities, City Support Fleet and IT assets, the total value for Parks has increased proportionately with the inclusion of these assets. However, the total value of Parks assets has decreased by \$120.6 million from the value reported in 2019 after inflationary adjustments. This again is attributed to better asset information as well as the recategorization of some Parks assets to Recreation.

Please note that Facilities, City Support Fleet and IT report cards include additional information on those assets used by Parks but maintained and managed by different City departments. For fair comparison, the 2019 asset inventory has been adjusted to align with the 2020 responsibility view.

Asset	2019 SOLI		2020 SOLI	
Parking Lots	299	Each	333	Pooled
Small Equipment	292	Each	716	Each
Trees	215,118	Each	249,749	Each
Flower Beds	Not Included	Not Included	1,200	Each
Cemetery Equipment	76	Each	76	Each
Park Assets				
Parkland (Excluding Natural Heritage Lands)	1,075	Hectares	676	Hectares
Natural Heritage Lands	1,255	Hectares	1,653	Hectares
Park Furnishing	Not Identified	Not Identified	4,405	Each
Playgrounds	326	Each	332	Each
Shade Structures	246	Each	310	Each
Splash Pads & Outdoor Pools	14	Each	8	Each
Fitness Equipment	33	Each	18	Each
Skate Parks	10	Each	4	Each
Sports Facilities	226	Each	1,180	Each
Pathways	279,239	Metres	278,379	Metres
Facilities (Moved to Facilities)	29	Each	16	Each
Fleet (Moved to City Support Fleet)	597	Each	319	Each
Software (Moved to IT)	2	Each	1	Each

Asset	2019 SOLI (\$2021)	2020 SOLI (\$2021)	Difference	
1. Assets Managed by Other Service Areas				
Facilities (Moved to Facilities)	\$ 19,997,000	\$ 17,753,484	\$ (2,243,516)	-11%
Fleet (Moved to City Support Fleet)	\$ 20,176,199	\$ 17,342,219	\$ (2,833,980)	-14%
Software (Moved to IT)	\$ -	\$ -	\$ -	0%
Subtotal Assets Managed by Other Service Areas	\$ 40,173,199	\$ 35,095,703	\$ (5,077,496)	-13%
2. Assets Managed by Parks Services				
Parking Lots	\$ 17,499,526	\$ 15,031,163	\$ (2,468,363)	-14%
Small Equipment	\$ 2,308,626	\$ 2,308,626	\$ -	0%
Trees	\$ 111,904,384	\$ 129,919,430	\$ 18,015,046	16%
Flower Beds	\$ -	\$ 3,794,400	\$ 3,794,400	N/A
Cemetery Equipment	\$ 74,967	\$ 74,967	\$ -	0%
Park Assets				
Parkland (Excluding Natural Heritage Lands)	\$ 219,329,554	\$ 68,390,728	\$ (150,938,826)	-69%
Natural Heritage Lands	\$ -	\$ -	\$ -	0%
Park Furnishing	\$ -	\$ 3,030,522	\$ 3,030,522	0%
Playgrounds	\$ 83,179,980	\$ 85,780,980	\$ 2,601,000	3%
Shade Structures	\$ 28,678,626	\$ 36,340,444	\$ 7,661,818	27%
Splash Pads & Outdoor Pools	\$ 6,866,640	\$ 3,173,220	\$ (3,693,420)	-54%
Fitness Equipment	\$ 936,360	\$ 678,036	\$ (258,324)	-28%
Skate Parks	\$ 4,473,720	\$ 1,664,640	\$ (2,809,080)	-63%
Sports Facilities	\$ 112,404,816	\$ 120,122,085	\$ 7,717,269	7%
Pathways	\$ 45,591,142	\$ 47,264,430	\$ 1,673,288	4%
Subtotal Assets Managed by Parks Services (Responsibility View)	\$ 633,248,341	\$ 517,573,671	\$ (115,674,669)	-18%

APPENDIX B



Recreation



Total Asset Replacement Value:	\$43.2 Million
Total Asset Replacement Value Including Facilities, City Support Fleet and Software:	\$621.1 Million
Future Condition Trend (Next 10 Years):	Declining - As assets age they may require attention in the future
Data Confidence & Reliability:	Age & Condition Based

The 2020 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 them*
- User View:** Shows the assets under the service area that is using them*

The responsibility view is also being illustrated in this 2020 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 2021\$) under the two different views.

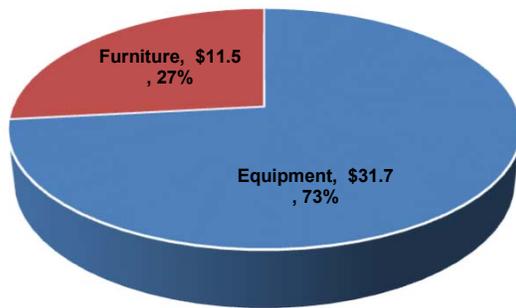
Asset Type	Replacement Value (\$Millions)	Asset Inventory
Assets Managed by Recreation		
Equipment	\$31.7	3,002
Furniture	\$11.5	303
<i>Subtotal Assets Managed by Recreation (Responsibility View)</i>	<i>\$43.2</i>	<i>3,305</i>
Assets Managed by Other Service Areas		
<i>Recreation Facilities</i>	<i>\$573.4</i>	<i>73</i>
<i>City Support Fleet Used by Recreation</i>	<i>\$4.2</i>	<i>135</i>
<i>Software Used by Recreation</i>	<i>\$0.3</i>	<i>2</i>
Total Replacement Value (User View)	\$621.1	-



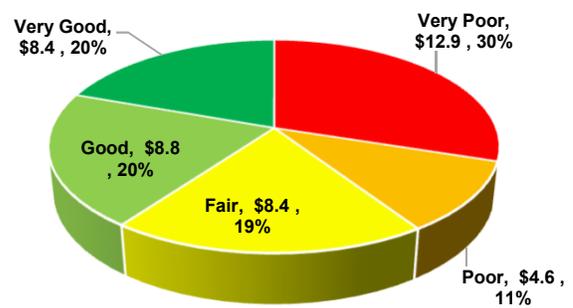
Major Types of Assets within Recreation - Responsibility View

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 \$43.2 million. As part of the 2020 SOLI, only Recreation Equipment and Furniture are considered under the management of this service area. Overall, the Recreation assets are in Fair condition, although, about 41% 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.

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



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



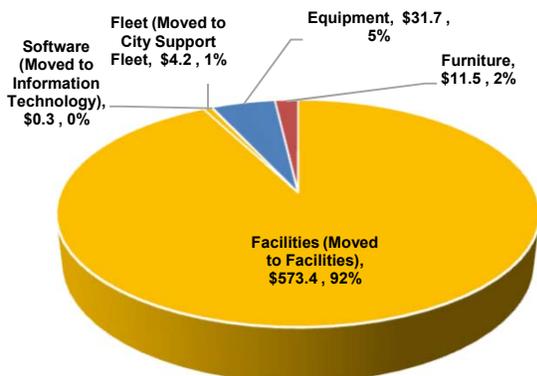
Data Source: Departmental Inventory, PSAB data as of year-end 2020

Major Types of Assets within Recreation - User View

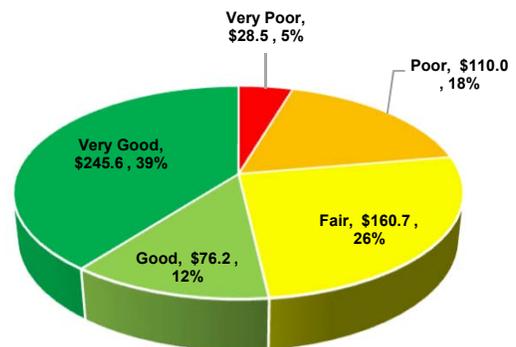
The figures below illustrate the replacement value and condition of Recreation assets under the user view. Under the user view illustration which also captures facilities, City support fleet and software, the replacement value is about \$621.1 million. Of this total, the Recreation facilities represent the largest share at \$573.4 million. Approximately 51% 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. It is expected that detailed condition assessments will be developed in the next iteration of the City's facilities asset management plan.

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



**USER VIEW:
RECREATION ASSET CONDITION (\$M)**

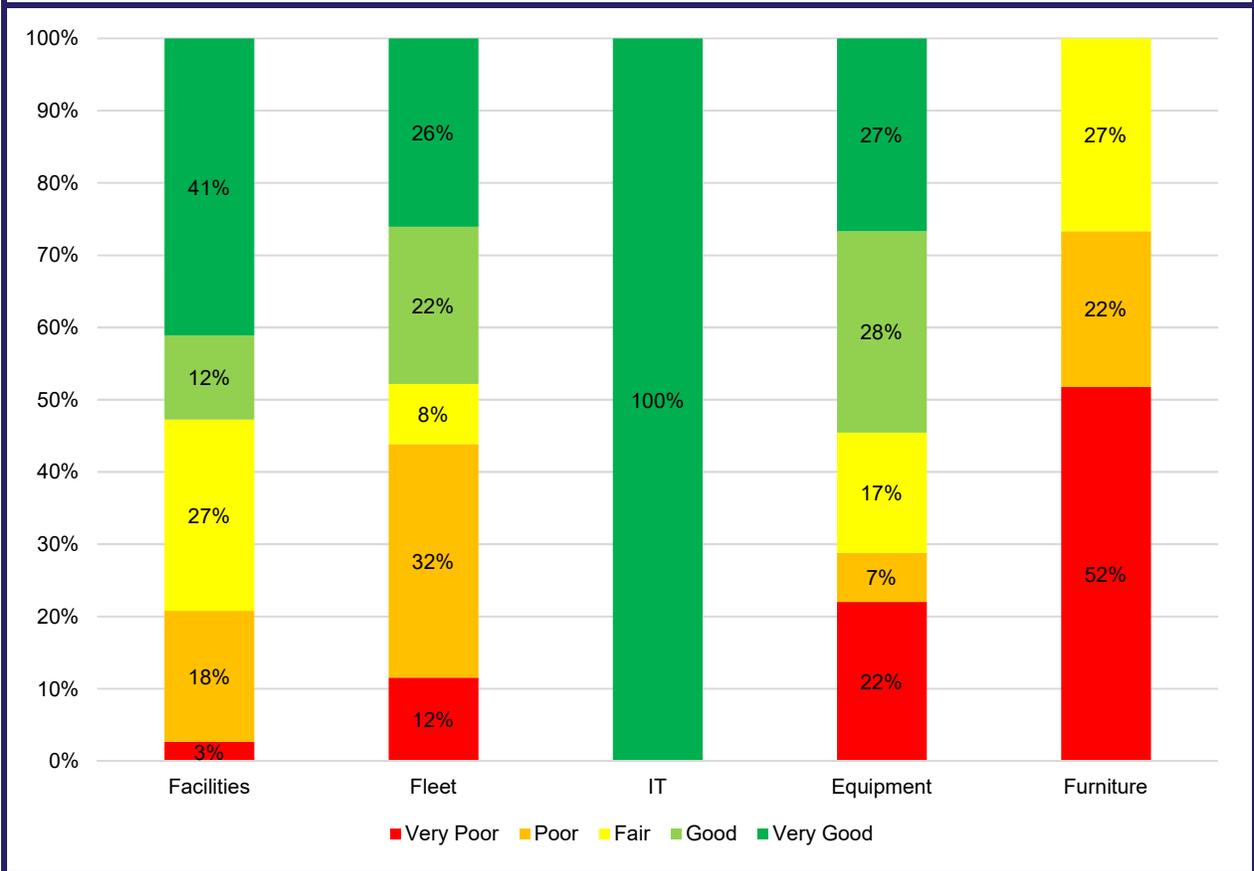


APPENDIX B



Recreation

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, Furniture is in generally Very Poor condition based on age but are all in working order. Approximately 12% of Fleet and 29% of Equipment are also in Poor or Very Poor condition. Assets that are in Very Poor condition are based on the age of the asset and will be replaced as they reach the end of their useful life. 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.



APPENDIX B



Recreation

Comparison of 2019 vs. 2020 Inventory and Replacement Value (2021\$)

The tables below outline the difference in Recreation assets in the 2019 SOLI relative to the 2020 SOLI, while considering reporting under the two different views. Please note, all values are expressed in 2021 dollars.

Under the responsibility view framework, the total value of Recreation assets has increased by 68% from approximately \$25.7 million to \$43.2 million. This increase can generally be attributed to updated costing information as part of the 2020 SOLI, as well as the inclusion of some assets previously classified under Parks (including Recreation managed multi-purpose courts, tracks, splash pads, etc.)

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. However, in total, the value of Recreation managed assets increased by 9% (or \$52.6 million) from the value reported in 2019 after inflationary adjustments. This is due to better information surrounding the City's facilities, fleet and equipment related to Recreation.

Please note, the Facilities, City Support Fleet and IT report cards will include additional information on those assets used by Recreation but maintained and managed by these different City departments. For fair comparison, the 2019 asset inventory has been adjusted to align with the 2020 responsibility view.

Asset	2019 SOLI		2020 SOLI	
Facilities (Moved to Facilities)	61	Each	74	Each
Fleet (Moved to City Support Fleet)	120	Each	135	Each
Software (Moved to Information Technology)	2	Each	2	Each
Equipment	2,693	Each	3,002	Each
Furniture	Included in Equipment		303	Each

Asset	2019 SOLI (\$2021)	2020 SOLI (\$2021)	Difference	
1. Assets Managed by Other Service Areas				
Facilities (Moved to Facilities)	\$ 539,434,464	\$ 574,637,586	\$ 35,203,123	7%
Fleet (Moved to City Support Fleet)	\$ 3,703,755	\$ 4,231,230	\$ 527,475	14%
Software (Moved to Information Technology)	\$ 896,721	\$ 303,450	\$ (593,271)	-66%
Subtotal Assets Managed by Other Service Areas	\$ 544,034,940	\$ 579,172,266	\$ 35,137,326	6%
2. Assets Managed by Recreation				
Equipment	\$ 25,682,485	\$ 31,659,369	\$ 5,976,884	23%
Furniture	\$ 25,682,485	\$ 11,529,011	\$ 11,529,011	N/A
Subtotal Assets Managed by Recreation - Responsibility View	\$ 25,682,485	\$ 43,188,380	\$ 17,505,895	68%
Total Replacement Value - User View (1+2)	\$ 569,717,425	\$ 622,360,646	\$ 52,643,221	9%

APPENDIX B



Cultural Services



Total Asset Replacement Value:	\$13.1 Million
Total Asset Replacement Value Including Facilities, City Support Fleet and Software:	\$102.3 Million
Future Condition Trend (Next 10 Years):	Declining - As assets age they may require attention in the future
Data Confidence & Reliability:	Age and Condition Based

The 2020 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 them

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

The responsibility view is also being illustrated in this 2020 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 2021\$) under the two different views.

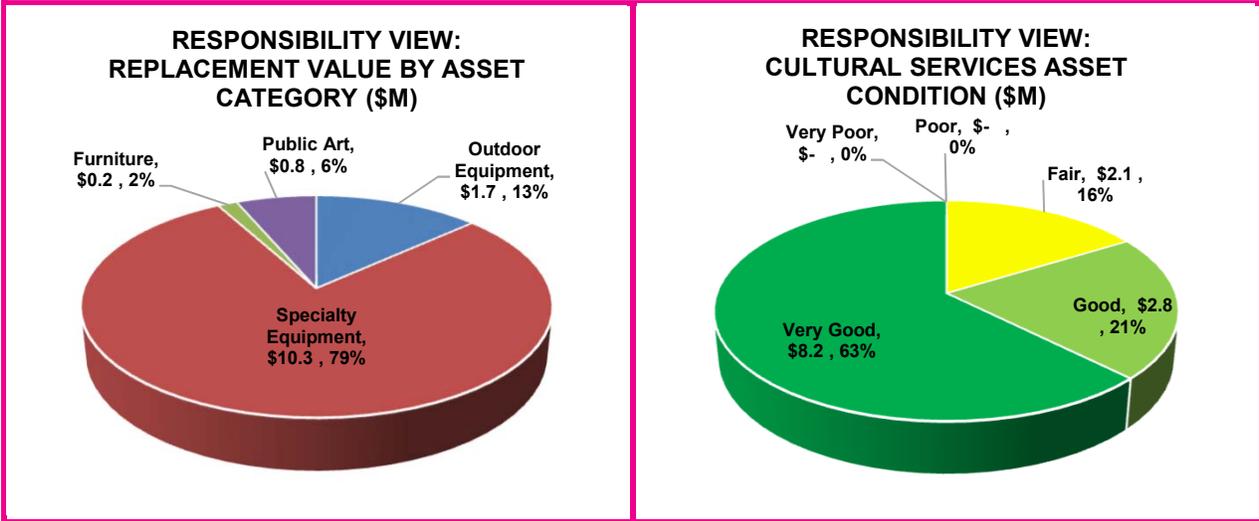
Asset Type	Replacement Value (\$Millions)	Asset Inventory
Assets Managed by Cultural Services		
Outdoor Equipment	\$1.7	Pooled
Specialty Equipment	\$10.3	2,699
Furniture	\$0.2	424
Public Art	\$0.8	25
<i>Subtotal Assets Managed by Cultural Services (Responsibility View)</i>	<i>\$13.1</i>	<i>-</i>
Assets Managed by Other Service Areas		
<i>Cultural Services Facilities</i>	<i>\$88.5</i>	<i>2</i>
<i>City Support Fleet Used by Cultural Services</i>	<i>\$0.7</i>	<i>14</i>
<i>Software Used by Cultural Services</i>	<i>\$0.0</i>	<i>-</i>
Total Replacement Value (User View)	\$102.3	-



Cultural Services

Major Types of Assets within Cultural Services - Responsibility View

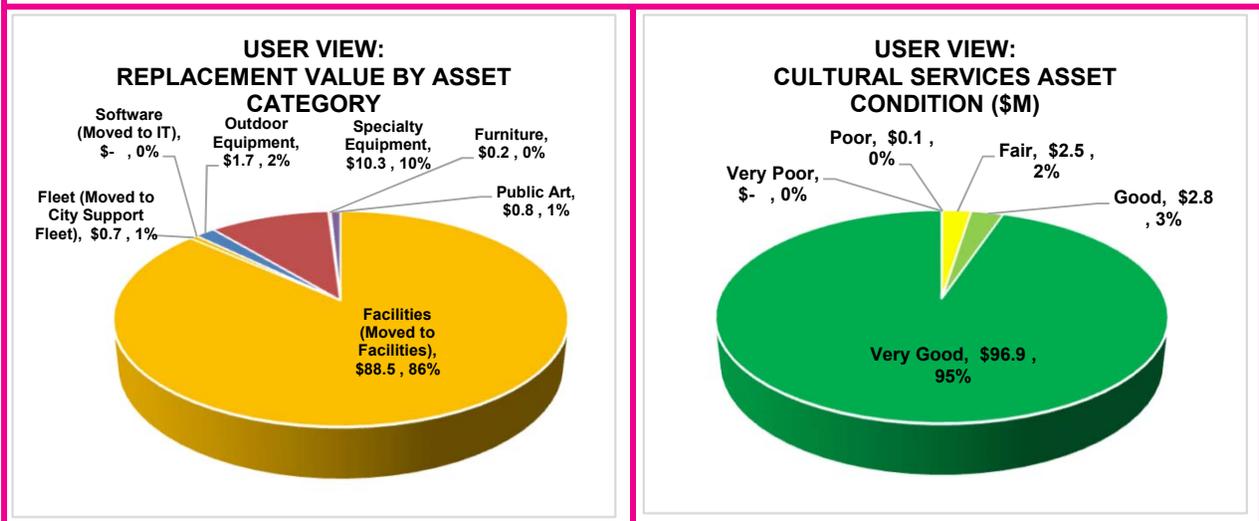
The figure below illustrates the replacement value and condition of Cultural Services assets under the responsibility view. Under this responsibility view, the total replacement value of assets is \$13.1 million. Of this total, roughly 79% is related to the speciality equipment. About 84% of assets are considered to be in Good to Very Good condition, with the remaining assets in Fair condition. As the City's Cultural Services assets are overall in Good condition, these assets are meeting current needs.



Data Source: Departmental Inventory, PSAB data as of year-end 2020

Major Types of Assets within Cultural Services - User View

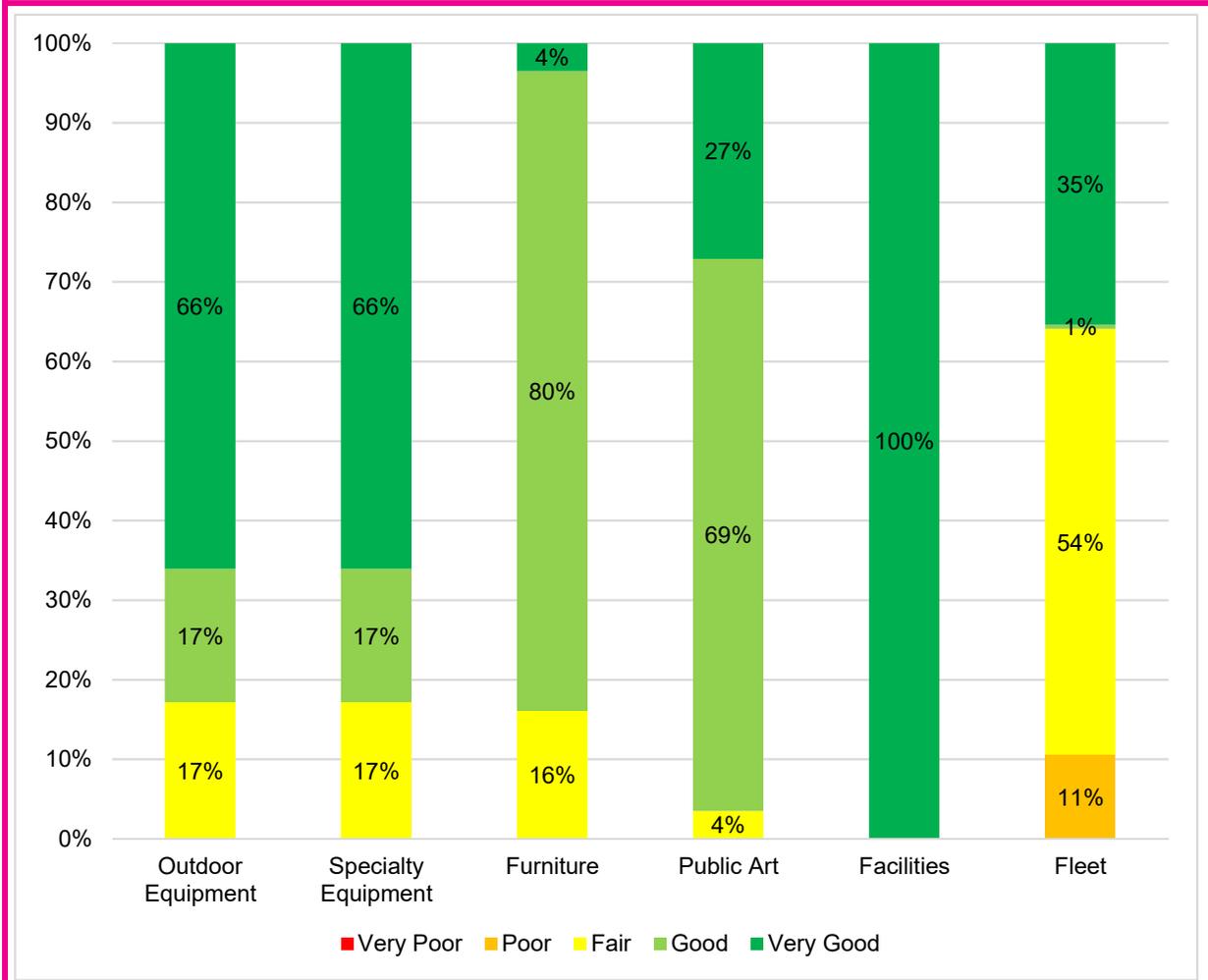
The figures below illustrate the replacement value and condition of Cultural Services assets under the user view. Under the user view illustration which also captures facilities, City support fleet and software, the replacement value is about \$102.3 million. Of this total, the Cultural Services facilities represent the largest share at \$88.5 million. Approximately 98% of the assets are considered to be in Good to Very Good Condition. No assets are Very Poor condition.





Cultural Services

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. Only 11% of Fleet assets are considered to be in Poor condition as they reach the end of their service life and will be replaced.



APPENDIX B



Cultural Services

Comparison of 2019 vs. 2020 Inventory Replacement Value (2021\$)

The tables below outline the difference in Cultural Services assets in the 2019 SOLI relative to the 2020 SOLI while considering reporting under the two different views. Please note, all values are expressed in 2021 dollars.

Under the responsibility view framework, the total value of Cultural Services assets has increased by 41% from approximately \$9.3 million to \$13.1 million. This increase can be attributed to better asset data as well as the inclusion of Public Art and Furniture in this analysis.

When considering the Cultural Services Facilities, City Support Fleet and IT assets, the total asset value for Cultural Services has increased proportionately with the inclusion of these assets. Furthermore, the total value of Cultural Services assets increased by 5% (or \$4.9 million) from the value reported in 2019 after inflationary adjustments. This is due to better information surrounding the City's facilities and fleet related to Cultural Services.

Please note, the Facilities, City Support Fleet and IT report cards will include additional information on those assets used by Cultural Services but maintained and managed by a different City department. For fair comparison, the 2019 asset inventory has been adjusted to align with the 2020 responsibility view.

Asset	2019 SOLI		2020 SOLI	
Outdoor Equipment	Pooled		Pooled	
Specialty Equipment	Pooled		2,699	Each
Furniture	Included with Outdoor/Specialty Equipment		424	Each
Public Art	Not Included		25	Each
Facilities (Moved to Facilities)	1	Each	1	Each
Fleet (Moved to City Support Fleet)	8	Each	9	Each
Software (Moved to IT)	1	Each	1	Each

Asset	2019 SOLI (\$2021)	2020 SOLI (\$2021)	Difference	
1. Assets Managed by Other Service Areas				
Facilities (Moved to Facilities)	\$ 87,547,306	\$ 88,504,196	956,890	1%
Fleet (Moved to City Support Fleet)	\$ 532,871	\$ 655,342	122,471	23%
Software (Moved to IT)	\$ -	\$ -	-	N/A
Subtotal Assets Managed by Other Service Areas	\$ 88,080,177	\$ 89,159,538	1,079,361	1%
2. Assets Managed by Cultural Services				
Outdoor Equipment	\$ 1,883,644	\$ 1,745,687	\$ (137,957)	-7%
Specialty Equipment	\$ 7,438,539	\$ 10,321,264	\$ 2,882,725	39%
Furniture	\$ -	\$ 206,962	\$ 206,962	N/A
Public Art	\$ -	\$ 845,298	\$ 845,298	N/A
Subtotal Assets Managed by Cultural Services (Responsibility View)	\$ 9,322,183	\$ 13,119,211	\$ 3,797,028	41%
Total Replacement Value: User View (1+2)	\$ 97,402,360	\$ 102,278,749	\$ 4,876,389	5%

APPENDIX B



Library



Asset Replacement Value:	\$19.0 Million
Total Asset Replacement Value including Facilities and City-Support Fleet:	\$101.1 Million
Future Condition Trend (Next 10 Years):	Declining – As assets age they may require attention in the future
Data Confidence & Reliability:	Age and Condition Based

The 2020 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 them

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

The responsibility view is an addition in this 2020 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 millions) under the two different views.

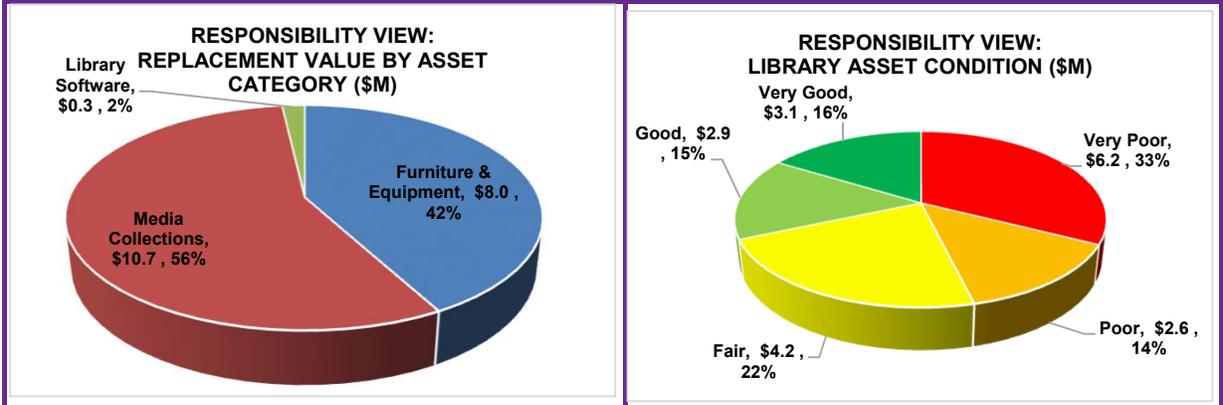
Asset Type	Replacement Value (\$Millions)	Asset Inventory
Assets Managed by Library		
Furniture and Equipment	\$8.0	6,882
Media Collections	\$10.7	Pooled
Library Software	\$0.3	19
<i>Subtotal Assets Managed by Library (Responsibility View)</i>	<i>\$19.0</i>	<i>-</i>
Assets Managed by Other Service Areas		
<i>Library Facilities</i>	<i>\$81.9</i>	<i>6</i>
<i>City Support Fleet Used by Library</i>	<i>\$0.2</i>	<i>5</i>
Total Replacement Value (User View)	\$101.1	-

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 South Fletchers Sports Complex). The library portion of those shared facilities are included in the above facilities total of \$81.9 million. The inclusion of the two (2) shared facilities in this report is a data improvement from the 2019 SOLI Report.



Major Types of Assets within Brampton Library - Responsibility View

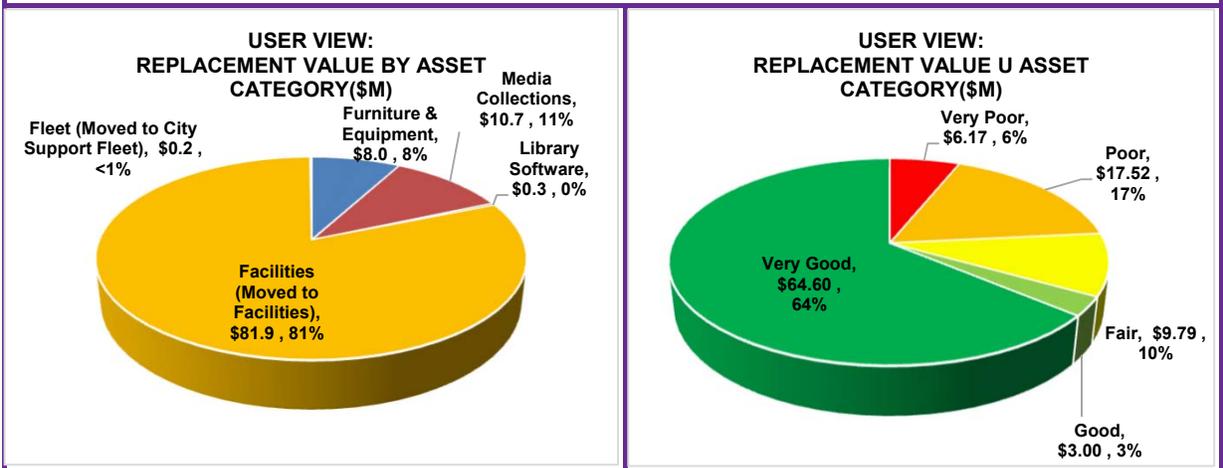
The figure on the following page illustrates the replacement value and condition of Library service assets under the responsibility view. Under the responsibility view, the total replacement value of the Library assets is \$19.0 million. Of the \$19.0 million replacement value, about 56%, or \$10.7 million, is attributed to Media Collections. Furthermore, about 42%, or \$8.0 million is attributed to Furniture and Equipment while the remaining \$346,000 is related to Library Software. As most of the furniture and equipment and media collection condition are age based, a portion of these assets are considered to be in Poor and Very Poor condition.



Data Source: PSAB data and consultation with Library staff

Major Types of Assets within Brampton Library - User View

The figures below illustrates the replacement value and condition of Library service assets under the user view. Under the user view illustration which captures facilities and city support fleet, the replacement value increases to \$101.1 million from \$19.0 million reported under the responsibility view framework. Of this total \$101.1 million, the Library facilities represent the largest component at \$81.9 million. Approximately two-thirds 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.

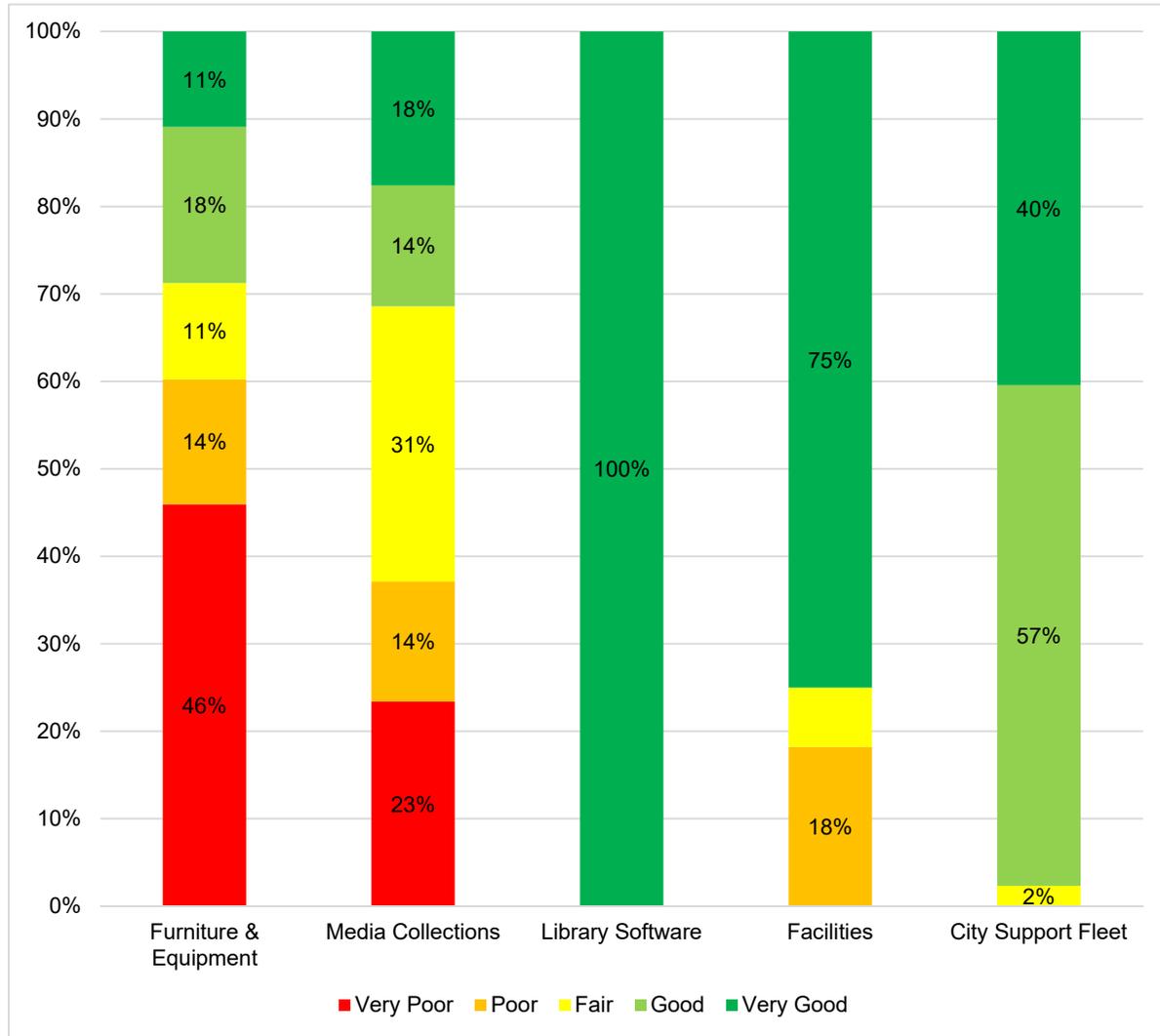


APPENDIX B



Library

The figure below illustrates the condition of the various Library service assets by key sub-component areas. While the assets are cumulatively in Good condition, Furniture and Equipment as well as Media Collections have a significant component of assets in Poor or Very Poor condition. Lastly, all Library Software assets and most facilities are in Very Good Condition. The assets in Poor Condition are evaluated based on the asset age.



APPENDIX B



Library

Comparison of 2019 vs. 2020 Inventory and Replacement Value (All Costs in \$2021)

The tables below outline the difference in Library assets in the 2019 SOLI relative to the 2020 SOLI while considering reporting under the two different views. Please note, all values are expressed in 2021 dollars.

Looking only at those assets included under the responsibility view framework, the total value of Library Services has decreased by 17% from approximately \$22.8 million to \$19.0 million. This decrease can generally be attributed to media collection as the Library decreased purchases due to COVID-19 restrictions imposed on Library facilities which resulted in an increase in usage of the online database (eResources).

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 22% (or \$18.5 million) from 2019. This can largely be attributed to the inclusion of the 2 shared library facilities in Recreation centres which were not captured in the 2019 SOLI Report.

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. For fair comparison, 2019 asset inventory has been adjusted to align with 2020 responsibility view.

Asset	2019 SOLI		2020 SOLI	
Furniture & Equipment	6,703	Each	6,882	Each
Media Collections	Pooled		Pooled	
Library Software		Not Included	19	Each
Facilities	4	Each	6	Each
Fleet	4	Each	5	Each

Asset	2019 SOLI (\$2021)	2020 SOLI (\$2021)	Difference	
1. Assets Managed by Other Service Areas				
Facilities (Moved to Facilities)	\$ 59,651,334	\$ 81,891,070	\$ 22,239,736	37%
Fleet (Moved to City Support Fleet)	\$ 135,744	\$ 171,027	\$ 35,284	26%
Subtotal Assets Managed by Other Service Areas	\$ 59,787,078	\$ 82,062,097	\$ 22,275,020	37%
2. Assets Managed by Library				
Furniture & Equipment	\$ 7,731,427	\$ 8,005,728	\$ 274,301	4%
Media Collections	\$ 15,049,732	\$ 10,665,636	\$ (4,384,095)	-29%
Library Software	\$ -	\$ 345,703	\$ 345,703	N/A
Subtotal Assets Managed by Library (Responsibility View)	\$ 22,781,159	\$ 19,017,068	\$ (3,764,092)	-17%
Total Replacement Value: User View (1+2)	\$ 82,568,237	\$ 101,079,165	\$ 18,510,928	22%



Animal Services



Total Asset Replacement Value:	\$274,900
Total Asset Replacement Value Including Facilities, City Support Fleet and Software	\$10.8 Million
Future Condition Trend (Next 10 Years):	Declining - As assets age they may require attention in the future
Data Confidence & Reliability:	Medium (Condition Based)

The 2020 SOLI analysis is being reported 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

The responsibility view is an addition in this 2020 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 2021\$) under the two different views.

Asset Type	Replacement Value (\$Millions)	Asset Inventory
Assets Managed by Animal Services		
Equipment	\$0.3	124
<i>Subtotal Assets Managed by Animal Services (Responsibility View)</i>	\$0.3	124
Assets Managed by Other Service Areas		
<i>Animal Services Facilities ⁽¹⁾</i>	\$9.2	2
<i>City Support Fleet Used by Animal Services</i>	\$1.1	14
<i>Software Used by Animal Services</i>	\$0.2	1
Total Replacement Value (User View)	\$10.8	-

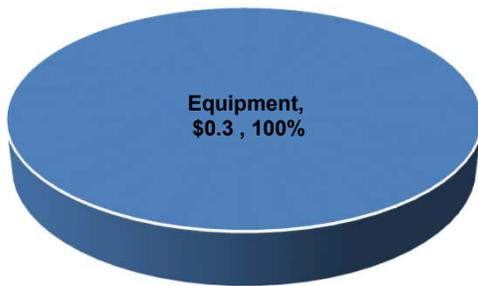
(1) By-law facility with a replacement value of approximately \$ 2.8 million is now included Animal Shelter under user view



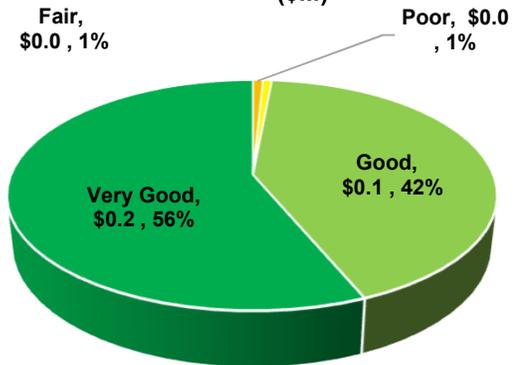
Major Types of Assets within Animal Services - Responsibility View

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 \$274,900. As part of the 2020 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 the total asset rated in Poor condition.

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



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



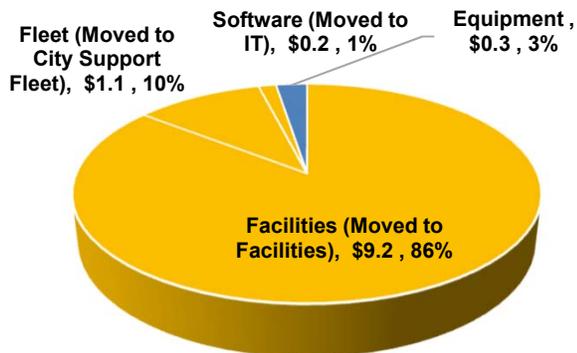
Data Source: Departmental Inventory, PSAB data as of year-end 2020

Major Types of Assets within Animal Services - User View

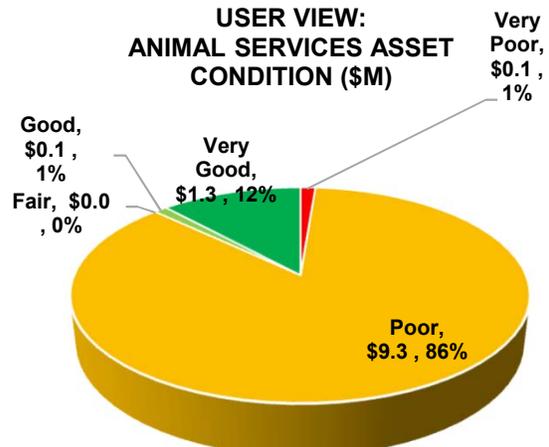
The figures below illustrate the replacement value and condition of Animal Services assets under the user view. Under the user view illustration which also captures facilities, City support fleet and software, the replacement value is about \$10.8 million. Of this total, \$10.8 million, the Animal Services facilities represent the largest share at \$9.2 million. Approximately 13% of the City's assets are considered to be in Good to Very Good Condition and only 3% of assets are in Very Poor condition.

It is important to note, that although the animal facilities are considered to be in Poor condition based on the City's condition threshold methodology, the facility continues to be in good working order. It is expected that detailed condition assessments of the animal facilities will be developed in the next iteration of the City's facilities asset management plan.

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



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

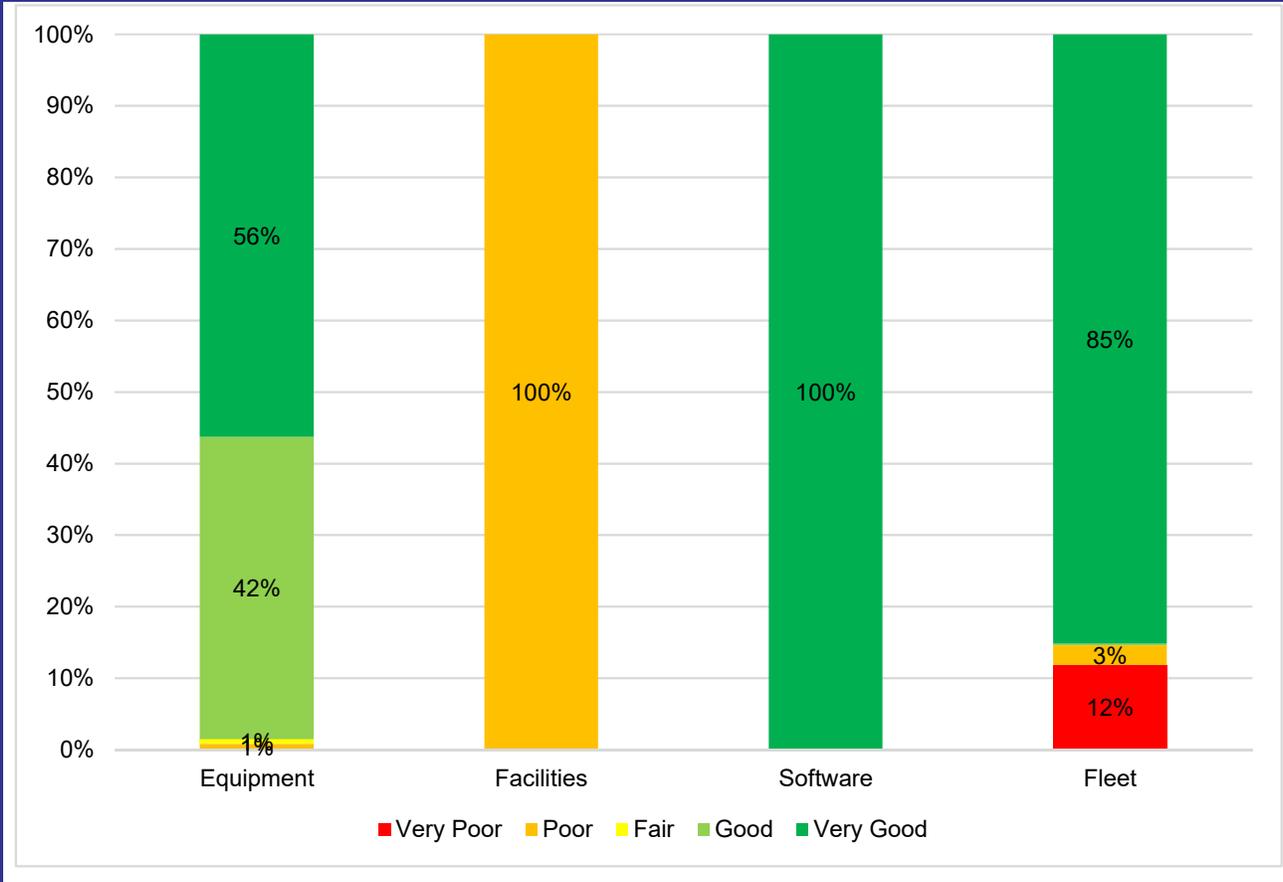


APPENDIX B



Animal Services

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 in generally Poor condition as well as approximately 15% of Fleet in Poor or Very Poor condition.



APPENDIX B



Animal Services

Comparison of 2019 vs. 2020 Inventory and Replacement Value (2021\$)

The tables below outline the difference in Animal Services assets in the 2019 SOLI relative to the 2020 SOLI while considering reporting under the two different views. Please note, all values are expressed in 2021 dollars.

Under the responsibility view framework, the total value of Animal Services assets has decreased by 8% from approximately \$300,300 to \$274,900. This decrease can generally be attributed to updated costing information as part of the 2020 SOLI.

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. However, in total, the value of Animal Services assets increased by 45% (or \$3.4 million) from the value reported in 2019 after inflationary adjustments. This is due to better information surrounding the City's facilities and fleet related to Animal Services.

Please note, the Facilities, City Support Fleet and IT report cards include additional information on those assets used by Animal Services but maintained and managed by a different City department. For fair comparison, 2019 asset inventory has been adjusted to align with 2020 responsibility view.

Asset	2019 SOLI		2020 SOLI	
Facilities (Moved to Facilities)	1	Each	2	Each
Fleet (Moved to City Support Fleet)	11	Each	14	Each
Software (Moved to IT)	1	Each	1	Each
Equipment	153	Each	124	Each

Asset	2019 SOLI (\$2021)	2020 SOLI (\$2021)	Difference	
1. Assets Managed by Other Service Areas				
Facilities (Moved to Facilities)	\$ 6,482,628	\$ 9,243,785	\$ 2,761,157	43%
Fleet (Moved to City Support Fleet)	\$ 541,345	\$ 1,131,287	\$ 589,942	109%
Software (Moved to IT)	\$ 106,970	\$ 156,060	\$ 49,090	46%
Subtotal Assets Managed by Other Service Areas	\$ 7,130,943	\$ 10,531,132	\$ 3,400,189	48%
2. Assets Managed by Animal Services				
Equipment	\$ 300,284	\$ 274,944	\$ (25,340)	-8%
Subtotal Assets Managed by Animal Services (Responsibility View)	\$ 300,284	\$ 274,944	\$ (25,340)	-8%
Total Replacement Value: User View (1+2)	\$ 7,431,227	\$ 10,806,076	\$ 3,374,849	45%