

Council Information Session:

Appendix B

Development of a Corporate Asset Management Plan



CITY OF BRAMPTON

November 29, 2021

HEMSON

Today's Agenda and Purpose of Meeting

1. Summary of Brampton Assets

- Maturity Assessment
- Value and Condition

2. Full Life-cycle Costs

- Lifecycle activities considered
- Total cumulative 10-year lifecycle costs

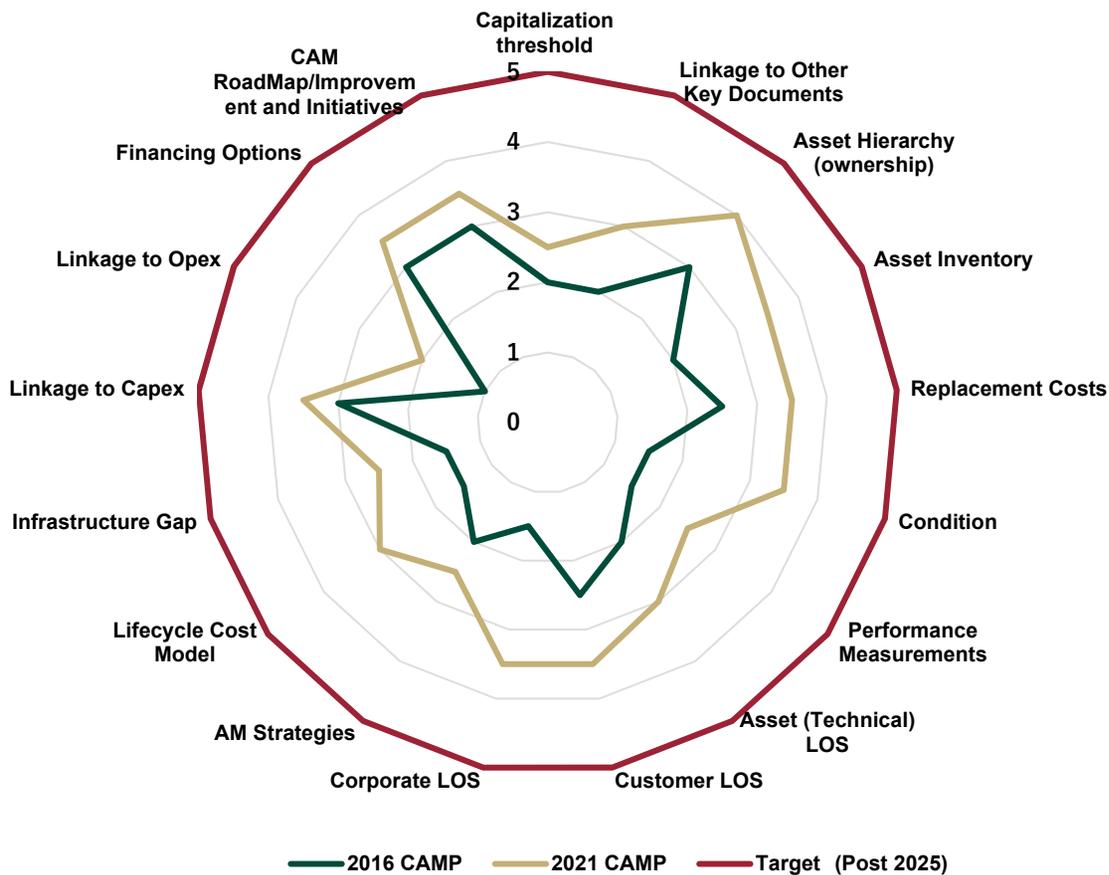
3. Infrastructure Gap

- Summary of Cost and Revenue Analysis
- 10-year infrastructure Gap

Summary of Key Messages

1. The City has made good progress to mature its asset management practices over the last number of years
 - Multi-year process and further development required to fully mature all facets of Asset Management
2. Replacement value of City Infrastructure is estimated at \$7.0 Billion (excluding Land)
3. Overall, City assets are in “Good” Condition with a limited number of assets in “Very Poor” Condition
4. City has been proactive in addressing infrastructure needs
5. Continue along current Asset Management roadmap to meet the regulatory requirements and address needs of existing assets while balancing the lifecycle needs of new infrastructure emplaced

Maturity Assessment: Asset Management is a Multi-Year Process



- Corporate Asset Management Planning is a comprehensive and multi-year process
- Significant progress has been made since 2016
- Continue to build off the foundation developed to improve confidence
- **Goal:** high data confidence which can translate into informed recommendations that are evidence-based and comply with provincial legislation (post 2025).

**Rating scale relates to data confidence and effectiveness scale outlined in 2016 CAMP
0 = Innocence/Basic and 5 = Very Mature (excellent performance)



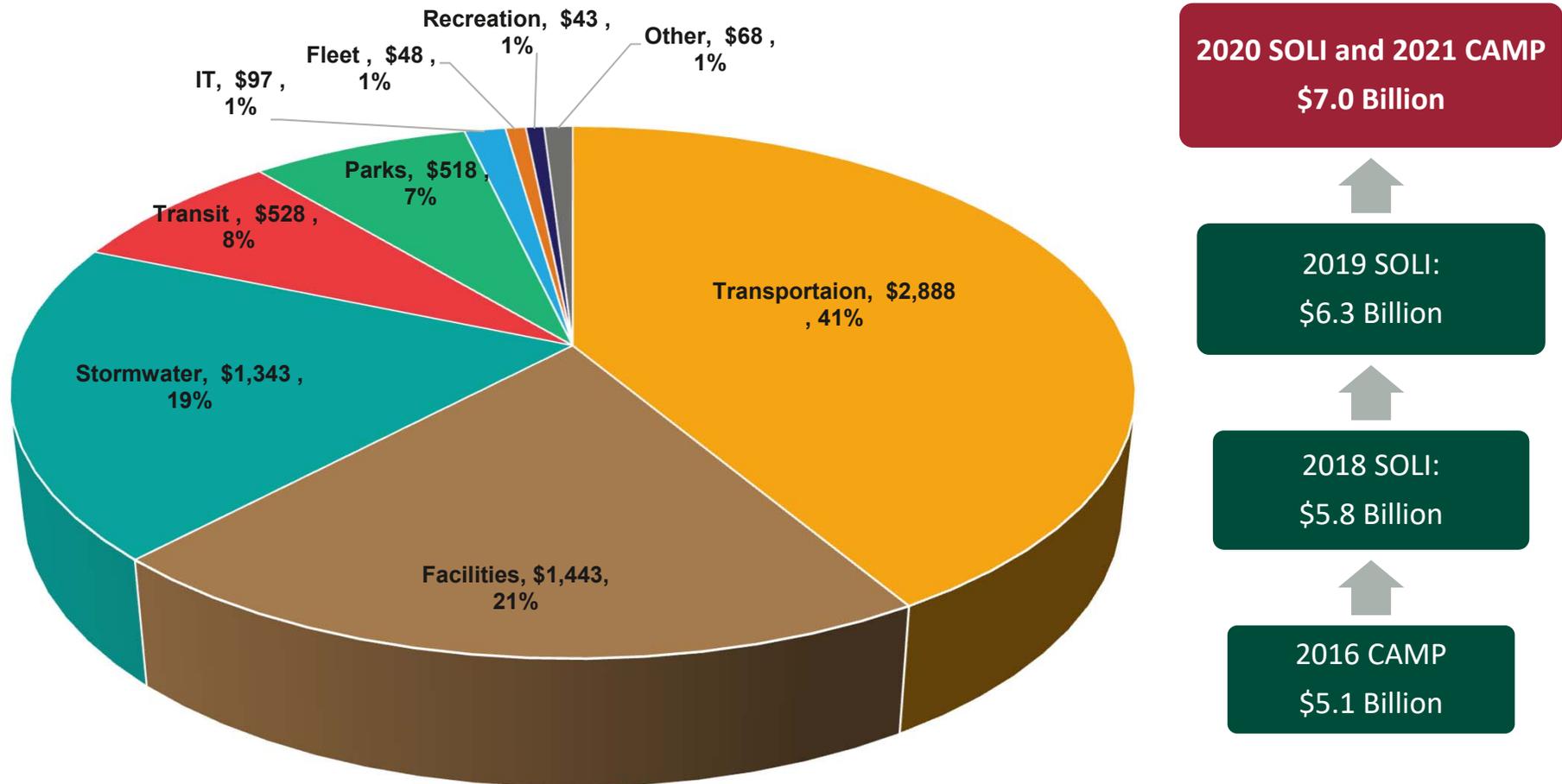
Reporting Structure: Responsibility View vs. User View

Report Cards prepared under two views:

- **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

Asset Types	Replacement Value (\$Millions)
1. Assets Managed by Cultural Services	
<i>Outdoor Equipment</i>	\$1.7
<i>Specialty Equipment</i>	\$10.3
<i>Furniture</i>	\$0.2
<i>Public Art</i>	\$0.8
Subtotal Assets Managed by Cultural Services (Responsibility View)	\$13.1
2. Assets Managed by Other Service Areas	
<i>Cultural Services Facilities</i>	\$88.5
<i>City Support Fleet Used by Cultural Services</i>	\$0.7
<i>Software Used by Cultural Services</i>	\$0.0
Total Replacement Value (User View)	\$102.3

City of Brampton Assets Valued at \$7.0 Billion (Responsibility View)



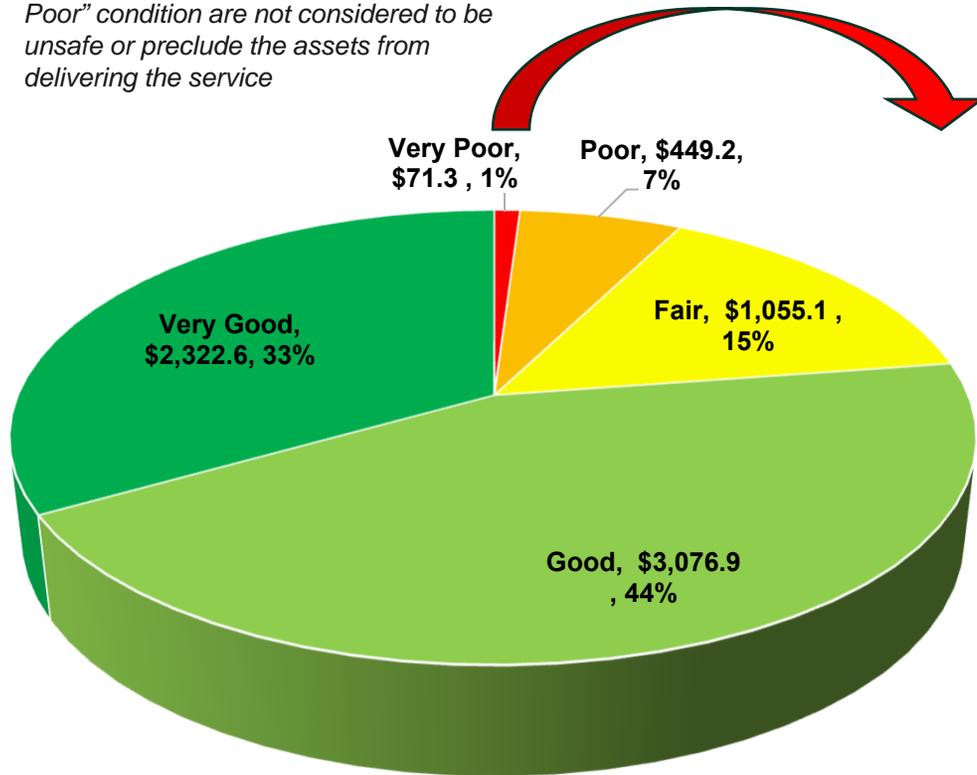
*Other: represents: Fire (\$36 million), Library (\$19 million), Culture (\$13 million) and Animal services (\$0.3 Million,)

- 5 Note 1: Graph in (\$millions) and in \$2021
 Note 2: Asset Valuation from previous years have not been adjusted for inflation



Overall City Assets are in “Good” Condition (\$M)

Note: Assets classified in “Poor” and Very Poor” condition are not considered to be unsafe or preclude the assets from delivering the service



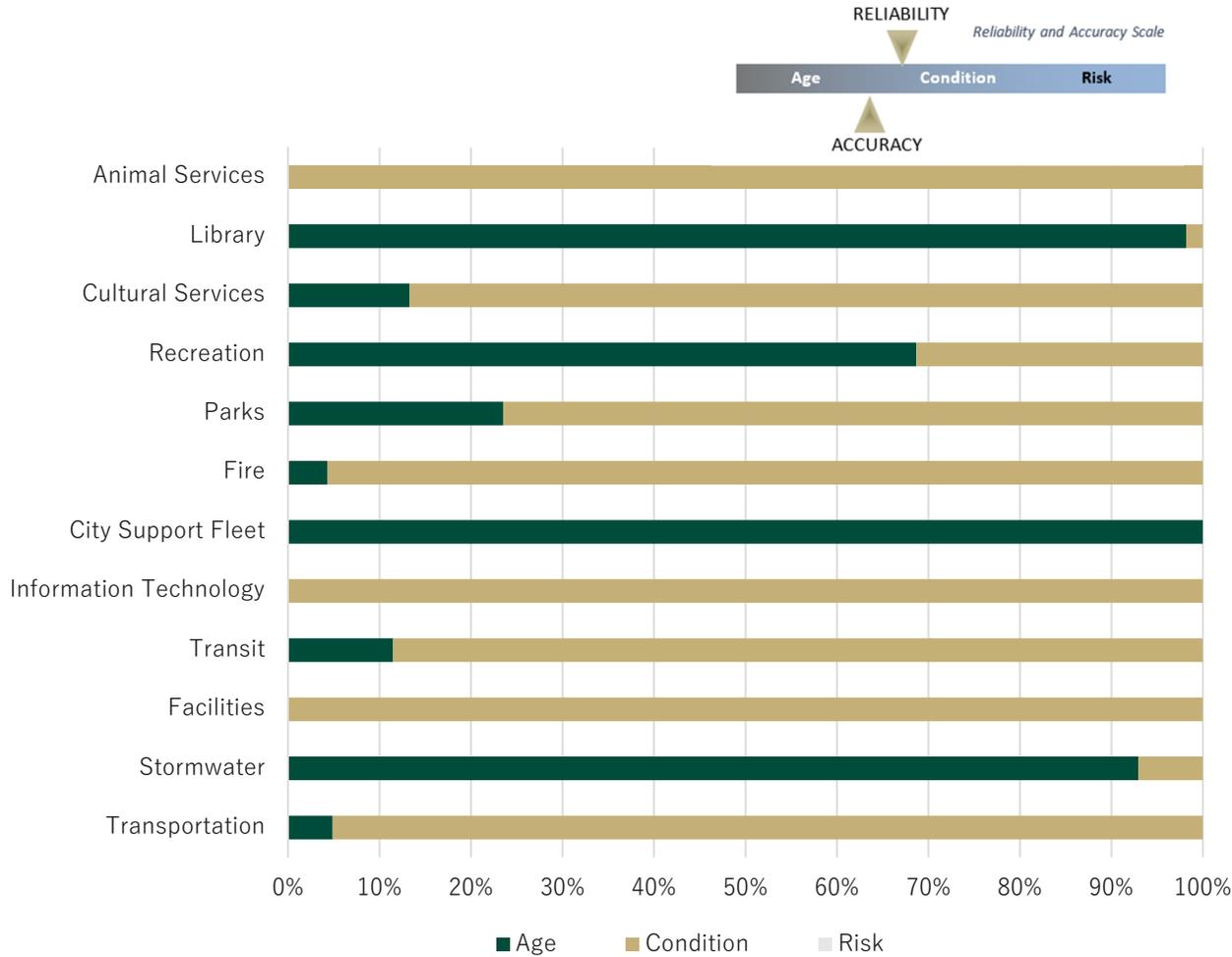
Note 1: Figures in the table represent share of assets categorized in very poor condition under the responsibility view (in \$Millions).

Very Poor Assets ⁽¹⁾	Comments
Library & Recreation (\$19M)	<ul style="list-style-type: none"> Majority related to furniture/equipment and media Collections (for library) Aged based condition assessments and categorized in very poor by virtue of design life (relatively short useful lives)
Facilities (\$17M)	<ul style="list-style-type: none"> 12 Recreation facilities and 3 park facilities 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 small portion of total base and addressed through the budget
Fleet (\$8M)	<ul style="list-style-type: none"> Related to vehicles past their useful life and high mileage Category will tend to always have “very poor” assets
Transit (\$4M)	<ul style="list-style-type: none"> Largely related to fleet support vehicles, communication control equipment where conditions are based on age Most VP assets addressed through 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

In addition, a small share of VP Assets is also attributed to SW infrastructure (age based)



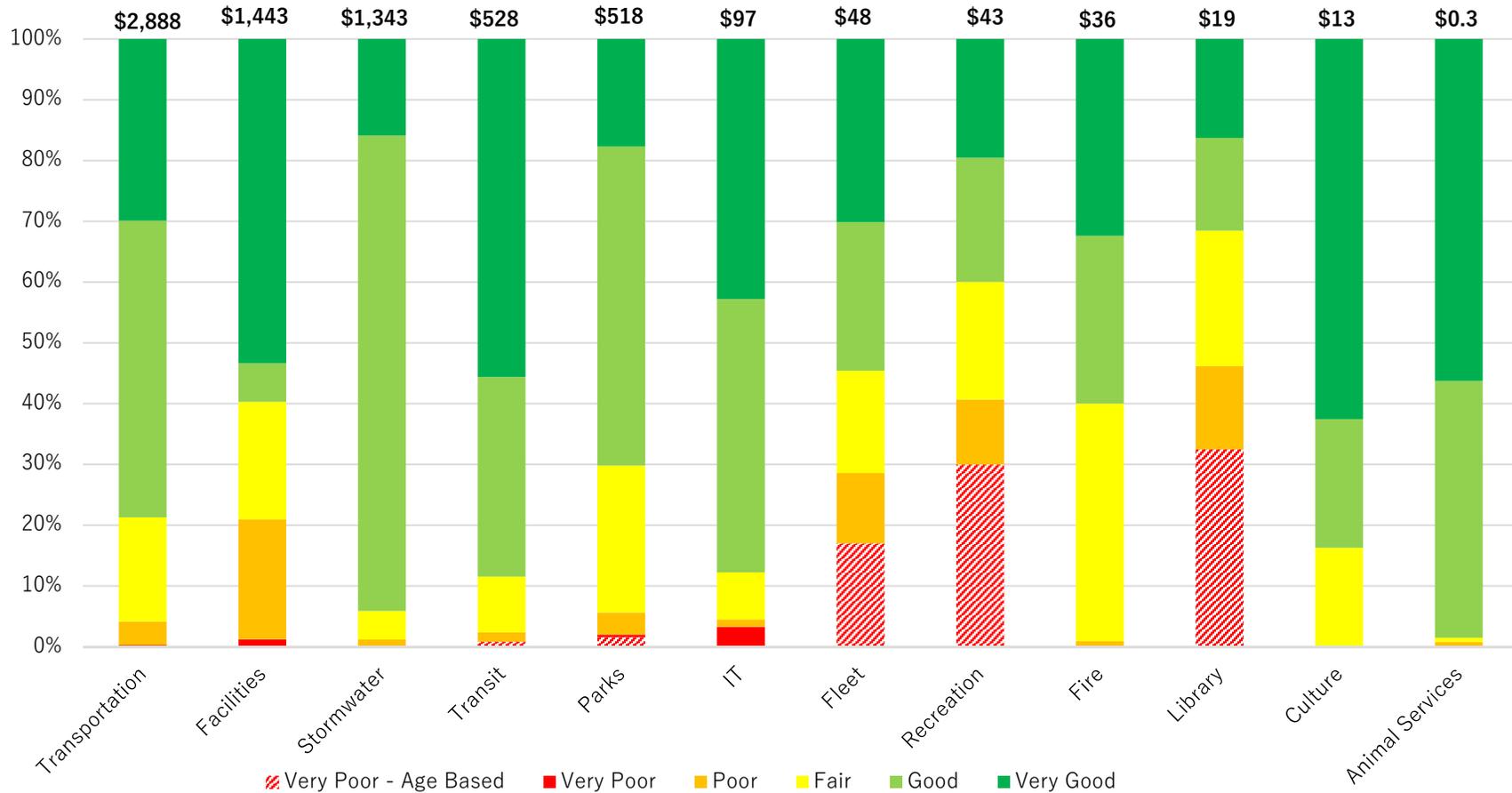
State of the Local Infrastructure (SOLI): Data Maturity - Responsibility View



- Confidence rating for most assets are condition based (**over three-quarter of replacement value**)
- Confidence rating driven by larger asset categories of Transportation, Facilities, Transit and Fire being more mature from a data perspective
- Goal:** to move toward condition and risk based assessments where reasonable

7 Note: Order of service areas based on asset replacement value: lowest to highest

Responsibility View: Asset Condition by Service Area (\$M)



Note 1: Values identified at the top of each bar represents the replacement value of infrastructure under the "Responsibility View" for each service area (in \$Millions)

Note 2: Very poor assets in solid red represent the share of assets that are assessed a very poor condition based on condition assessment

Note 3: fleet is identified as age based but does have some condition based protocols included in their assessment.



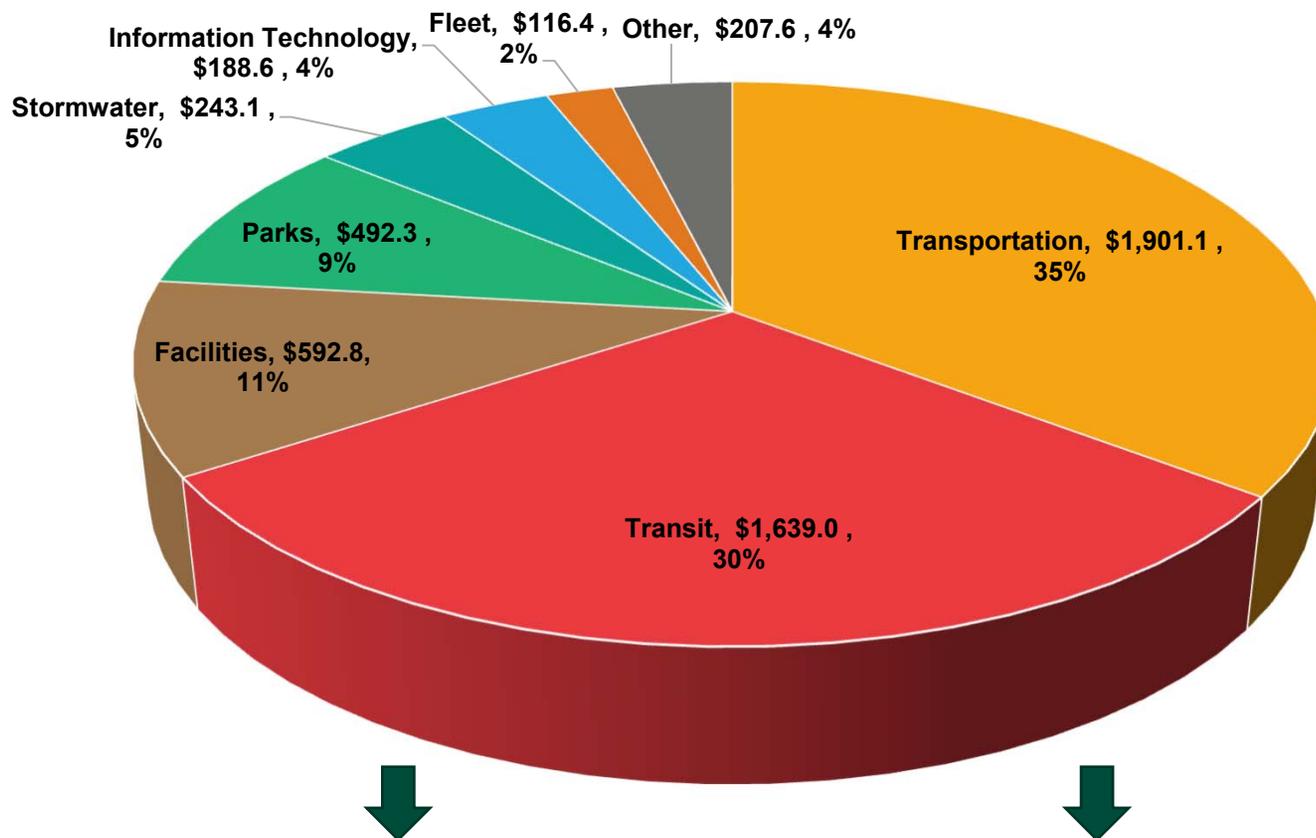
Summary of Full Lifecycle Activities Considered:

- There are six lifecycle activities that are to be addressed through the CAMP
 1. Non-Infrastructure Solutions
 2. Operations and Maintenance⁽¹⁾
 3. Renewal and Rehabilitation
 4. Replacement Activities
 5. Disposal Activities
 6. Expansion Activities

- In general, Brampton undertakes all the lifecycle activities listed.
 - Important to illustrate and document through the AMP

Note 1: costs associated with maintaining capital assets

Summary of Total 10-Year Lifecycle Cost = \$ 5.38 Billion



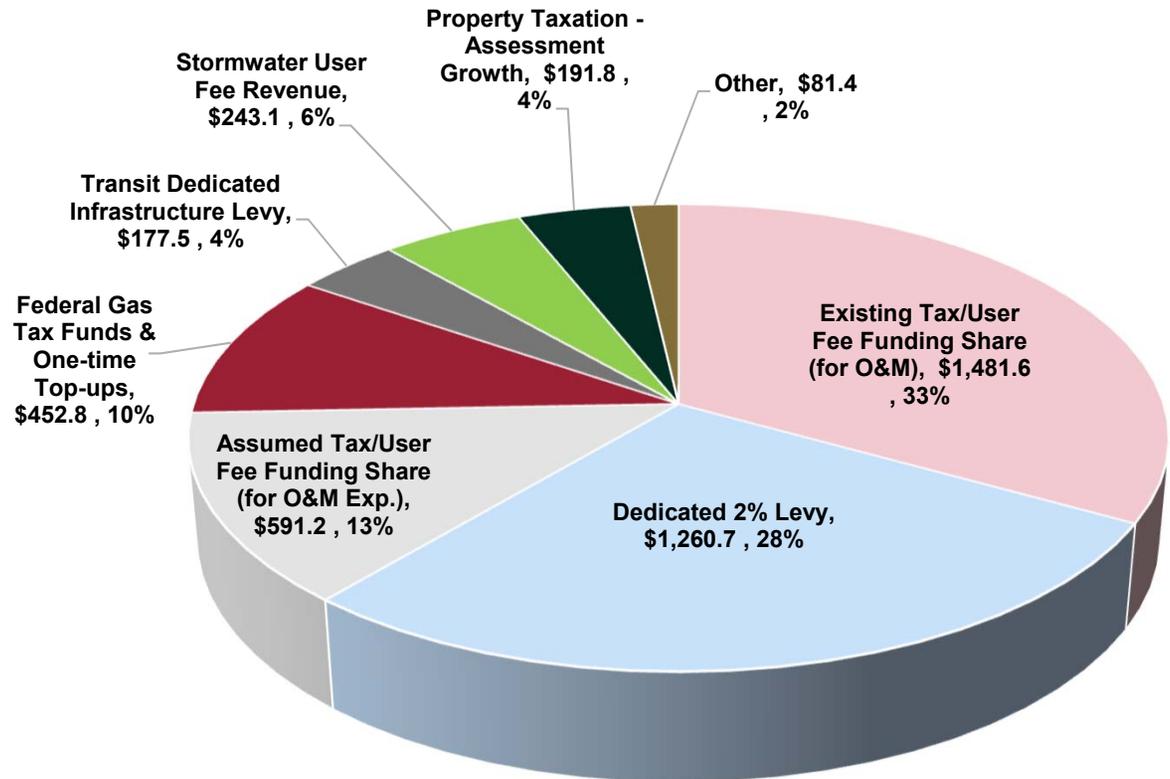
Service Category	Operations and Maintenance - Existing Assets	Replacement/Renwal/Non-Inf. - Existing Assets	Subtotal Existing Assets	Operations and Maintenance - Expansion Related	Replacement & Renewal - Expansion Related	Subtotal Expansion Activities	Total Lifecycle Costs
TOTAL INVESTMENT	\$ 1,532.2	\$ 2,663.8	\$ 4,196.06	\$ 591.2	\$ 593.7	\$ 1,184.84	\$ 5,380.90

10 *Other: represents: Fire (\$78 million), Library (\$58 million), Recreation (\$57 million), Culture (\$14 million) and Animal services (\$0.3 Million,)



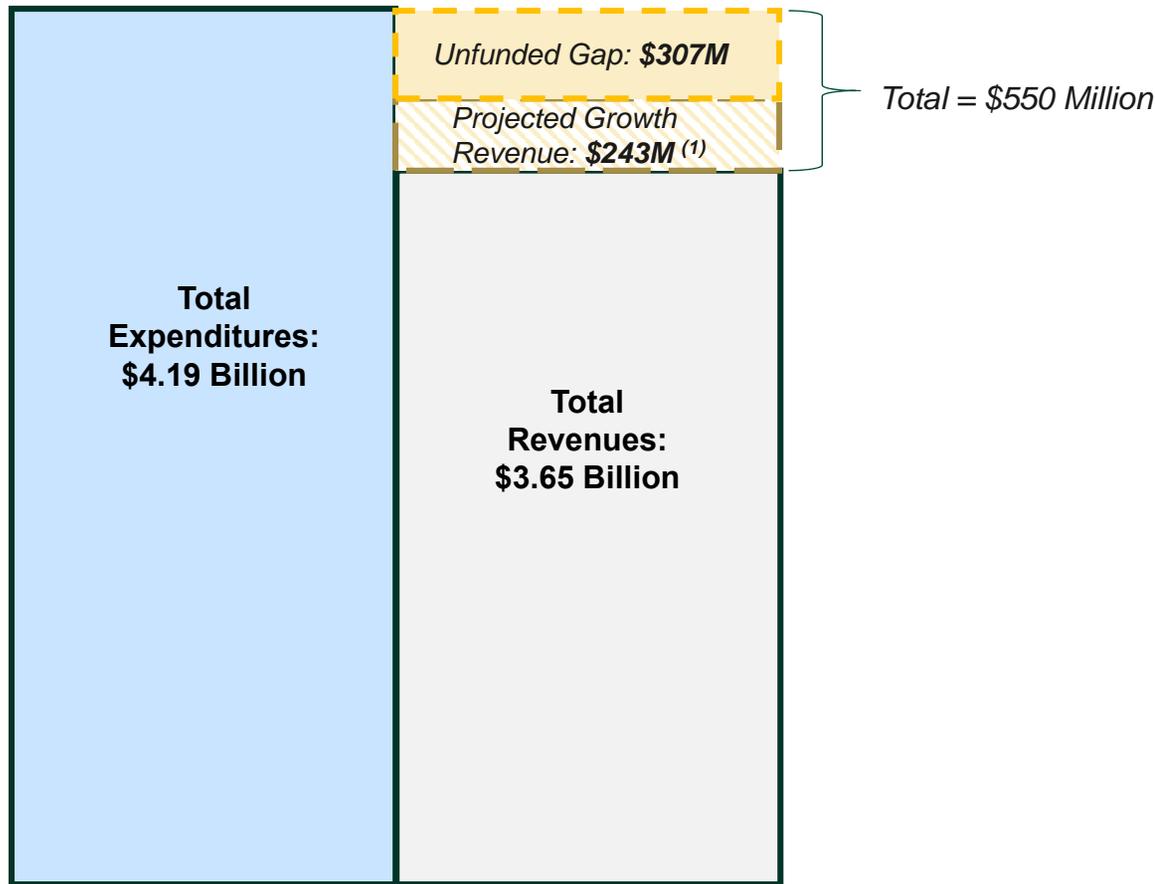
Summary of Projected Spending over the Next 10-Years

- City uses a range of funding and financing tools to address capital requirements
- City has been proactive by increasing annual tax supported contributions (2% and 1% levy) and introducing a dedicated stormwater user fee
- Forecast spending up to about **\$3.89 billion** to address the full life cycle needs of its existing assets
 - Totals **\$4.48 Billion** with consideration for the estimated O&M needs of new assets the City will acquire over the same period.



Note 1: "Other" represents available reserves and estimated share of transit funding stream for replacement projects
 Note 2: Chart represented in \$millions
 Note 3: Revenues do not assume inflation

Calculated 10-Year Infrastructure Deficit: Existing Assets



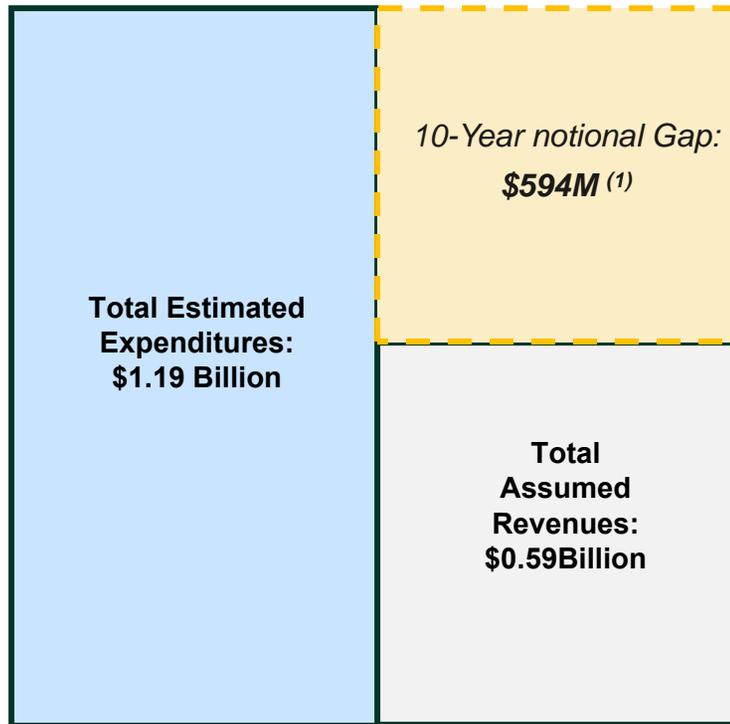
- ✓ City continues to manage existing assets in a fiscally sustainable manner
- ✓ Funding from upper-level of government needed
- ✓ City's affordability can be better balanced with improved data (i.e. LOS, risk, useful life information, conditions)

Note 1: Additional revenue from assessment growth, Federal Gas Tax Allocation, increase in special purpose levies and a portion of stormwater fees could be used towards existing and/or expansion assets.

¹² *Note 2: Graph not to scale*



Calculated 10-Year Infrastructure Deficit: Expansion Activities



- ✓ Expansion activities included to comply with regulation
- ✓ Gap attributed to saving for asset R&R activities which are likely to occur outside the planning period
- ✓ City has time to plan for expenses and growth revenues require time to materialize
- ✓ Support from upper-level of government needed

Note 1: The analysis generally assumes all projected growth revenues would be directed to existing assets. The specific allocation will be determined through regular capital budget reviews

13 *Note 2: Graph not to scale*

Infrastructure Gap Improvements

Cost analysis improvements:

1. More fulsome evaluation of full life-cycle costs (including asset management requirements associated with expansion activities)
2. Average annual expenditures adjusted to be smoothed over a longer-term and more inline with asset useful life

Revenue Model improvements:

1. Financial model includes projected revenues from growth
2. Refined forecasts for infrastructure levies
3. Updated information on other funding sources

Approaches to Close the Gap: Asset Management Maturity

Strategy	Approach
Improved Data Quality	<p>As the City matures its asset management practices, better data by service will help to achieve a proper assessment of the condition of assets.</p> <p>Further, some assets are currently assessed on an age-based approach which does not necessarily reflect the actual condition of the asset.</p>
Levels of Service Measures	<p>As part of the CAMP, levels of services measures by service area have been established. These assessments will assist in tracking asset performance, condition ratings and may identify areas where these funding needs could be recalibrated based on performance. This could result in reductions in current funding needs for the short term.</p>
Implement a Standardized Risk Framework	<p>A standardized risk framework for asset classes would help to establish the tolerance level of individual asset classes in order to help prioritize investment needs and levels of service, with the potential for reduced funding needs.</p>
Continued Project Co-ordination with Region of Peel and Utility Companies	<p>In exploring opportunities with the Region and Utility service providers, overall cost efficiencies may be achieved during linear asset rehabilitation and replacement (e.g. storm sewers, roads, bridges, culverts) by better aligning capital ventures.</p>

Approaches to Close the Gap: Funding Strategies

Strategy	Approach
Maintain Existing Funding Sources (2% Infrastructure Levy and 1% Transit Levy)	<p>To continue bridging the funding gap and improve financial sustainability, the City should maintain their existing infrastructure levy dedicated towards asset management and monitor the revenues derived.</p> <p>The City of Brampton has placed great importance on creating a reliable and well-operated transit system, as it is vital to a thriving City. Having a strong transit infrastructure is important to reducing road congestion, attracting businesses and investments and helping to connect people and job. The City should continue to implement this levy, which will help strengthen new services, but it will also ensure existing transit assets are well maintained.</p>
Develop Annual Capital Reinvestment Targets	<p>Targets should be set for various assets to determine if the current reinvestment rates are reasonable or allow new targets to be developed in order to meet current or planned levels of service.</p>
Seek Funding Support from Other Levels of Government	<p>The City of Brampton has continued to demonstrate a significant commitment to asset management and developing a set of renewal practices to ensure that services are delivered in the most cost efficient manner.</p> <p>Despite the efforts, upper level of government support is required to supplement the city's practices to balance affordability.</p>

Next Steps

Phases	Deliverables	Timeline
Phase I	Asset Management Maturity State of the Local Infrastructure Lifecycle Strategy Financing Strategy	Budget Week (Nov. 29th - Dec. 3rd)
Phase II	Level of Service AM Strategy Asset Governance AIMS Asset Interdependence Risk Management Framework Demand Strategy Climate Change Integration Communication Strategy Plan Improvement and Monitoring	Q1 2022
Presentation to Council		Q1 2022