

Communication : C 1 Committee of the Whole (Working Session) December 7, 2022 Agenda Item # 1

# Non-Core Asset Management Plans

### City of Vaughan

VANCEDAN CITY DAD

December 7<sup>th</sup>, 2022

Christiaan Lombard, MBA P. Eng IAM Cert.: Asset Management Leader, Americas Water Donghui Lu, Ph. D, IAM Cert.: Asset Management Consultant

### Agenda

- 1. Ontario Regulation 588 / 17
- 2. What is Asset Management + Project Methodology?
- 3. The City's Non-Core Asset Portfolio
- 4. Asset Management Plan Components
  - What is the state of infrastructure?
  - ii. What are the Levels of Service (LoS)?
  - iii. What are the asset lifecycle strategies?
  - iv. What are the funding needs?
  - v. How can AM planning be improved?
- 5. Q&A

## **Ontario Regulation 588 / 17**

Ontario Regulation 588 / 17 Regulatory Requirements & Dates	
All Municipalities are required to prepare their first Strategic Asset Management Policy	
All municipalities are required to have an <b>Asset Management Plan</b> for its <b>entire core municipal infrastructure</b> <b>Note:</b> Core Asset Management Plans were endorsed by Council last year and are currently publicly accessible on the City website (as per regulation)	
All municipalities are required to have an asset management plan for infrastructure assets not included under their core assets	
All Asset Management Plans must include information about the <b>levels of service</b> that the municipality proposes to provide, the <b>activities required</b> to meet those levels of service, and <b>a strategy to fund activities</b>	



### What is Asset Management?

Asset Management is an integrated process that combines the skills, expertise, and activities of people with information about a community's physical assets and finances so that informed decisions are made to support sustainable service delivery



Source: Adapted from Asset Management for Sustainable Service Delivery: A BC Framework



#### **Asset Management Methodology** What is the What is the state of пПІ Level infrastructure? of Service (LoS)? 1.2 1.3 2.1 1.1 Determine Inventory Assess **Determine LoS** Condition **Residual Life** Assets 5.1 3.1 3.2 3.3 3.4 4.1 Asset **Operations and Renewal and** Disposal 20-60 Year Acquisition Maintenance Replacement **Strategies Funding Needs Strategies** Strategies Strategies



5

### The City's Non-Core Asset Portfolio

- Facilities
- Parks
- Forestry
- Active Transportation
- Traffic Control & Streetlights
- Fleet
- Fire & Rescue



Photo: Tree Planting





Photo: LED Streetlight Retrofit

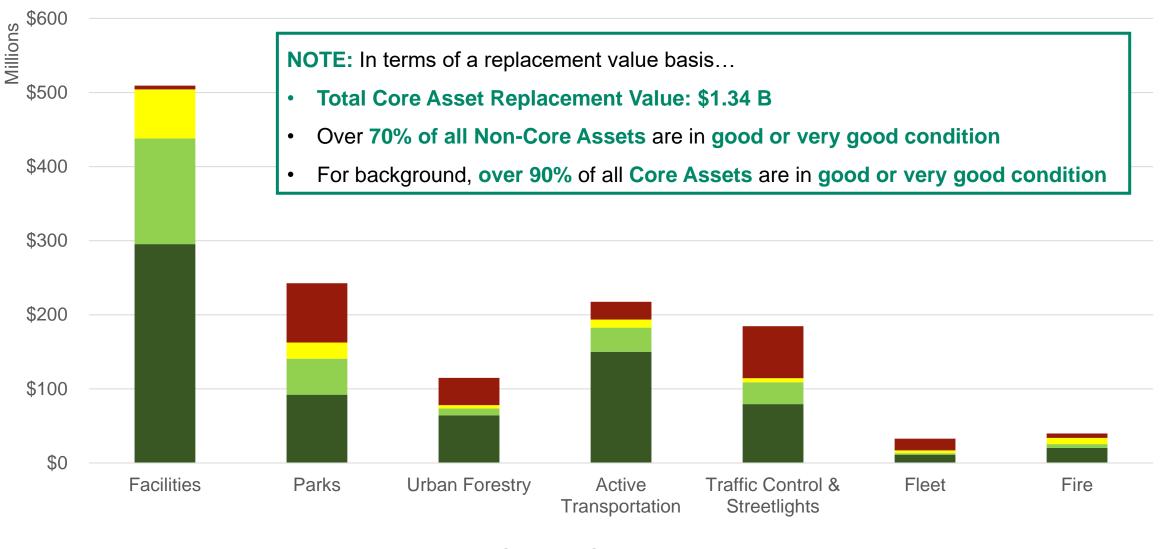


Photo: North Maple Regional Park (NMRP) Pavilion and Soccer Fields



### 1. What is the State of Infrastructure?





■ Very Good ■ Good ■ Fair ■ Poor



## 2. What is Level of Service (LoS)?

#### **Example LoS Measures**



Asset Class	Community Measures	Technical Measures
Facilities	Property proximities to public Libraries (map)	Percent of Facilities above target FCI
Parks	Property proximities to public Parks (map)	Hectares of maintained Parkland per 1,000 population
Active Transportation	Cycling and Trail Network (map)	Percent of priority Cycling, and Trail Network completed
Traffic Control & Streetlights	Streetlight Network (map)	Percent complete of LED Conversion Program
Fleet	Implementation of "Greening" the Fleet Strategy (including number of Electric and Hybrid vehicles in service)	Gas mileage of vehicles by class (light, medium, heavy)
Fire	Response area of fire halls (map)	Percent satisfaction based on results from biennial Citizen Satisfaction Survey

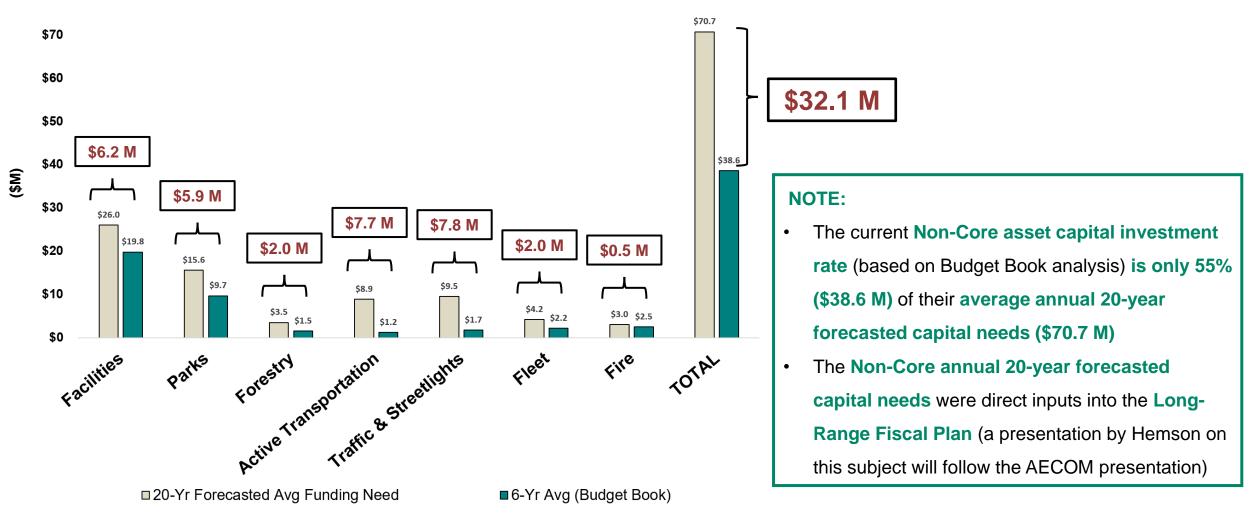
NOTE: The City has compiled data for all LoS measures, but the AM Plans favored an initial streamlined approach and do not yet have all the measures included



#### 3. What are the Asset **Lifecycle Strategies?** Lifecycle Delivery Costs 0 Cumulative Capital and O&M Costs **Disposal & Disposal and** Replacement Replacement Renewal Capital Refurbish **Operation &** Acquisition **Maintenance Operation & Maintenance** Operate and Mainta 100% 0 % Effective Life aecom.com

### 4. What are the Funding Needs? (1 of 2)

### **Non-Core Assets: Capital Asset Funding Needs**

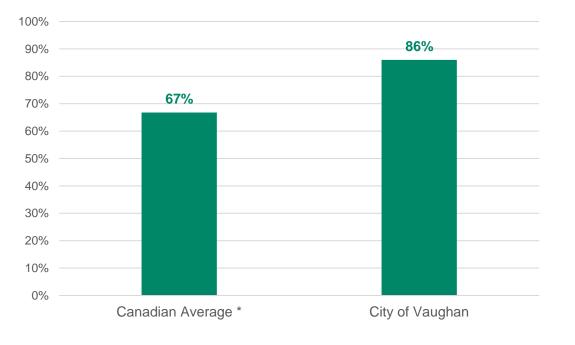




### 4. What are the Funding Needs? (2 of 2)



#### Percentage of Facility Assets in Good to Very Good Condition





\* Source: 2019 Canadian Infrastructure Report Card, Culture and Recreation Facilities including Arenas and Pools, Arts and Culture and Other facilities. Excludes "Unknown"

#### NOTE:

- Indications are that the City of Vaughan's Non-Core assets are in a better condition than its municipal peers, considering the example of facility assets shown at left.
- However, these asset are continuously ageing and increased capital funding for Non-Core assets is required to:
  - Sustain the **high quality of service** that the City's customers are accustomed to.
  - Manage risk and avoid unexpected asset failures.
  - Ensure the long-term sustainability of the City's
    \$1.34 B investment in Non-Core assets.



### 5. How Can AM Planning Be Improved?

- 1. Continue to refine asset inventories and close current data gaps
- 2. Continue updating asset condition data to improve understanding of asset condition
- Refine the LoS framework with the objective of meeting the O. Reg. 588 / 17 deadline of mid-2025:
  - Measure and report on asset performance
  - Link LoS with sustainable funding levels
- 4. Incorporate asset risk assessment identify high-risk assets
- 5. Establish a sustainable funding model for non-core assets
- 6. Continue improving the City's Non-Core AM program

**AECOM** Delivering a better world