# VAUGHAN

## COMMITTEE OF THE WHOLE (WORKING SESSION) – DECEMBER 7, 2022

## COMMUNICATIONS

**Distributed December 2, 2022**

**Item**

C1.    Presentation Material                                          1

**Distributed December 5, 2022**

C2.    Presentation Material                                          2

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**Please note there may be further Communications.**

Photo: City Hall, City of Vaughan

# 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
   i.   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

Photo: Maple Community Centre Pool

# Ontario Regulation 588 / 17

| Deadline Date | Ontario Regulation 588 / 17 Regulatory Requirements & Dates |
|---|---|
| July 1st 2019 | All Municipalities are required to prepare their first **Strategic Asset Management Policy** |
| July 1st 2022 | All municipalities are required to have an **Asset Management Plan** for its **entire core municipal infrastructure**<br>**Note:** Core Asset Management Plans were endorsed by Council last year and are currently publicly accessible on the City website (as per regulation) |
| July 1st 2024 | All municipalities are required to have an **asset management plan** for infrastructure **assets not included under their core assets** |
| July 1st 2025 | All Asset Management Plans must include information about the **levels of service** that the municipality proposes to provide, the **activities required** to meet those levels of service, and **a strategy to fund activities** |

Photo: Thornhill Green Park Waterplay
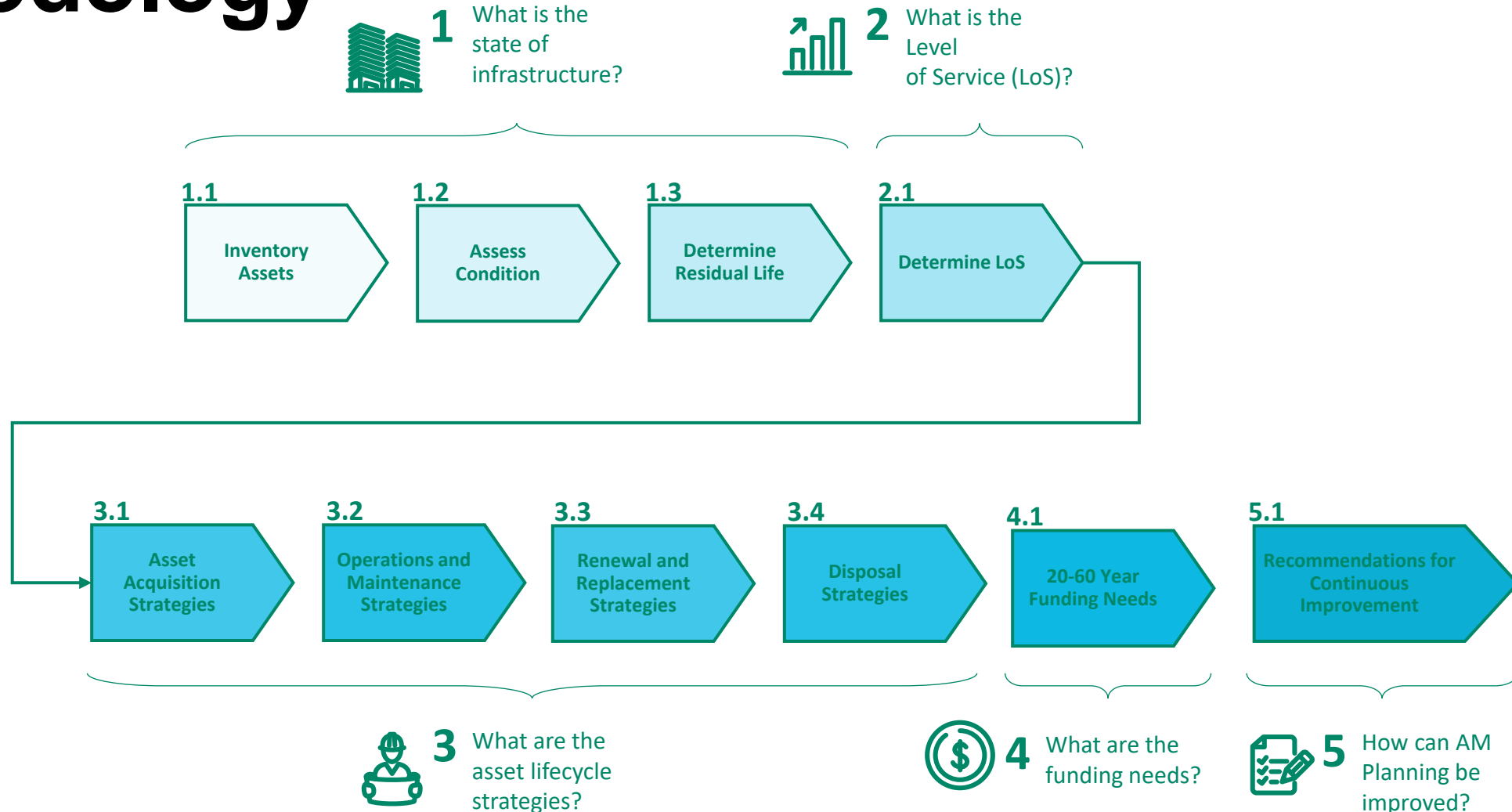
# What is Asset Management?

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**



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

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# Asset Management Methodology

**1** What is the state of infrastructure?

**2** What is the Level of Service (LoS)?

**1.1** Inventory Assets

**1.2** Assess Condition

**1.3** Determine Residual Life

**2.1** Determine LoS

**3.1** Asset Acquisition Strategies

**3.2** Operations and Maintenance Strategies

**3.3** Renewal and Replacement Strategies

**3.4** Disposal Strategies

**4.1** 20-60 Year Funding Needs

**5.1** Recommendations for Continuous Improvement

**3** What are the asset lifecycle strategies?

**4** What are the funding needs?

**5** How can AM Planning be improved?

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# The City's Non-Core Asset Portfolio

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



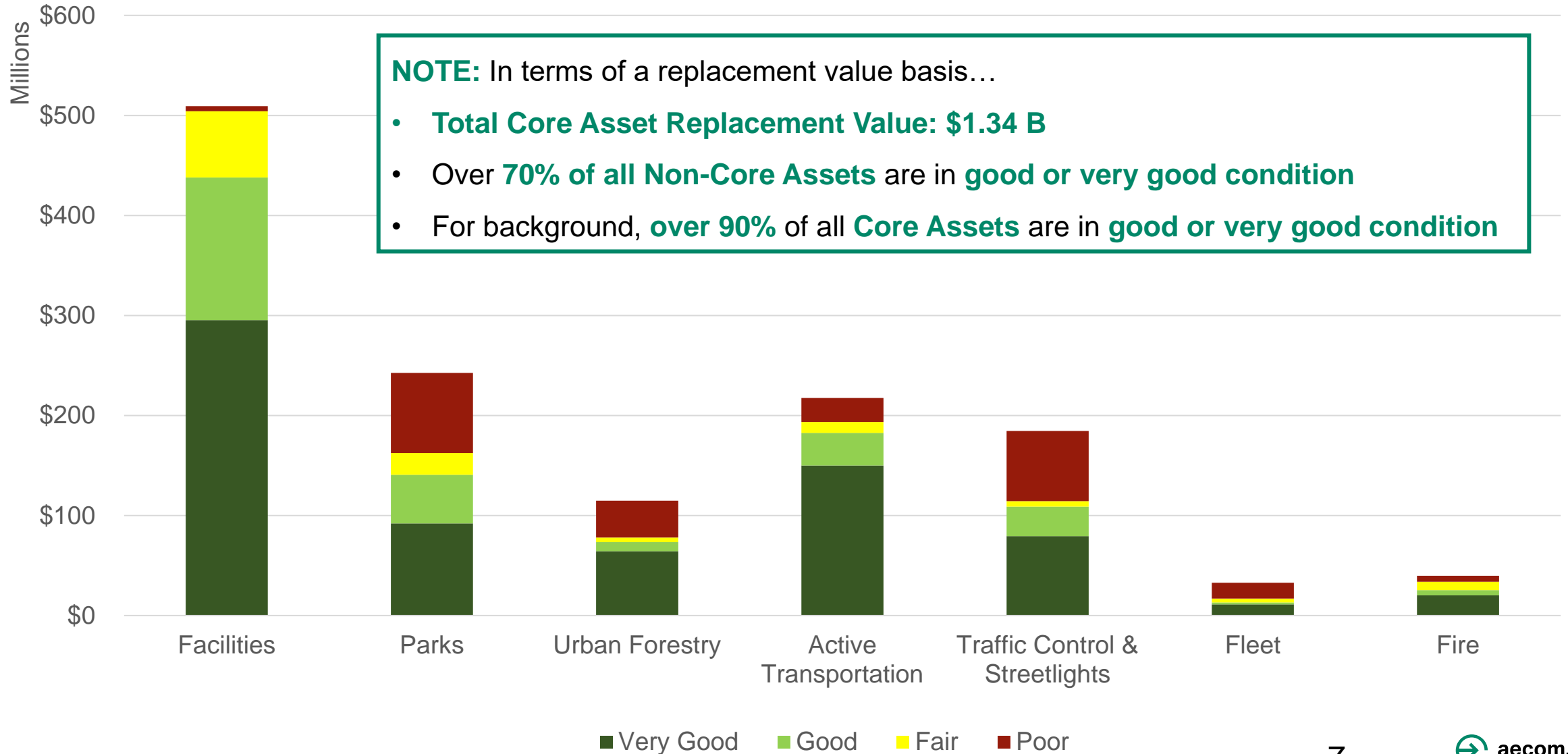Photo: LED Streetlight Retrofit



Photo: Tree Planting



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



Photo: Fire Hall 7-9 & Fire Trucks

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# 1. What is the State of Infrastructure?



NOTE: In terms of a replacement value basis…

- **Total Core Asset Replacement Value: $1.34 B**
- Over **70% of all Non-Core Assets** are in **good or very good condition**
- For background, **over 90%** of all **Core Assets** are in **good or very good condition**

Legend: Very Good | Good | Fair | Poor

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# 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
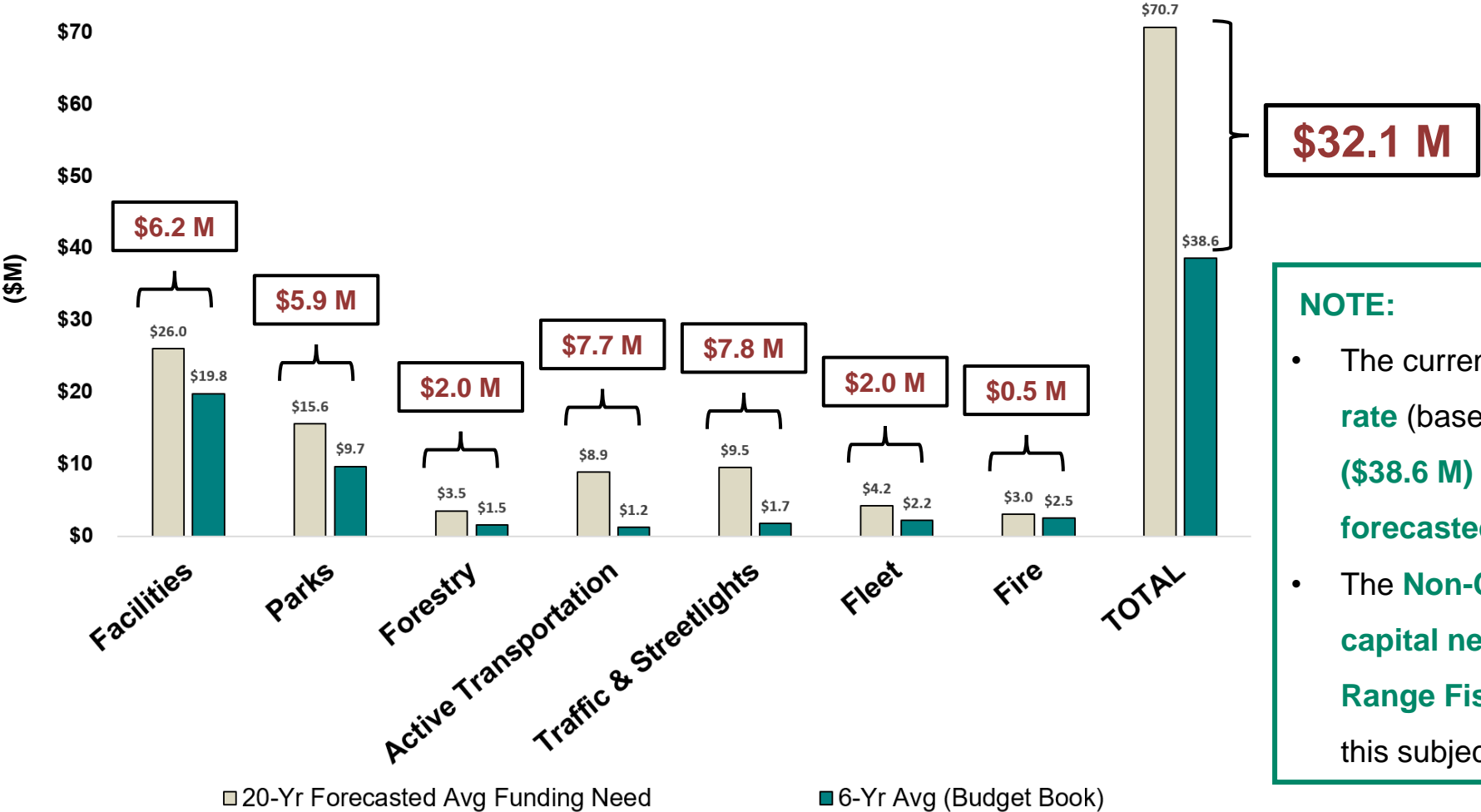
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# 3. What are the Asset Lifecycle Strategies?



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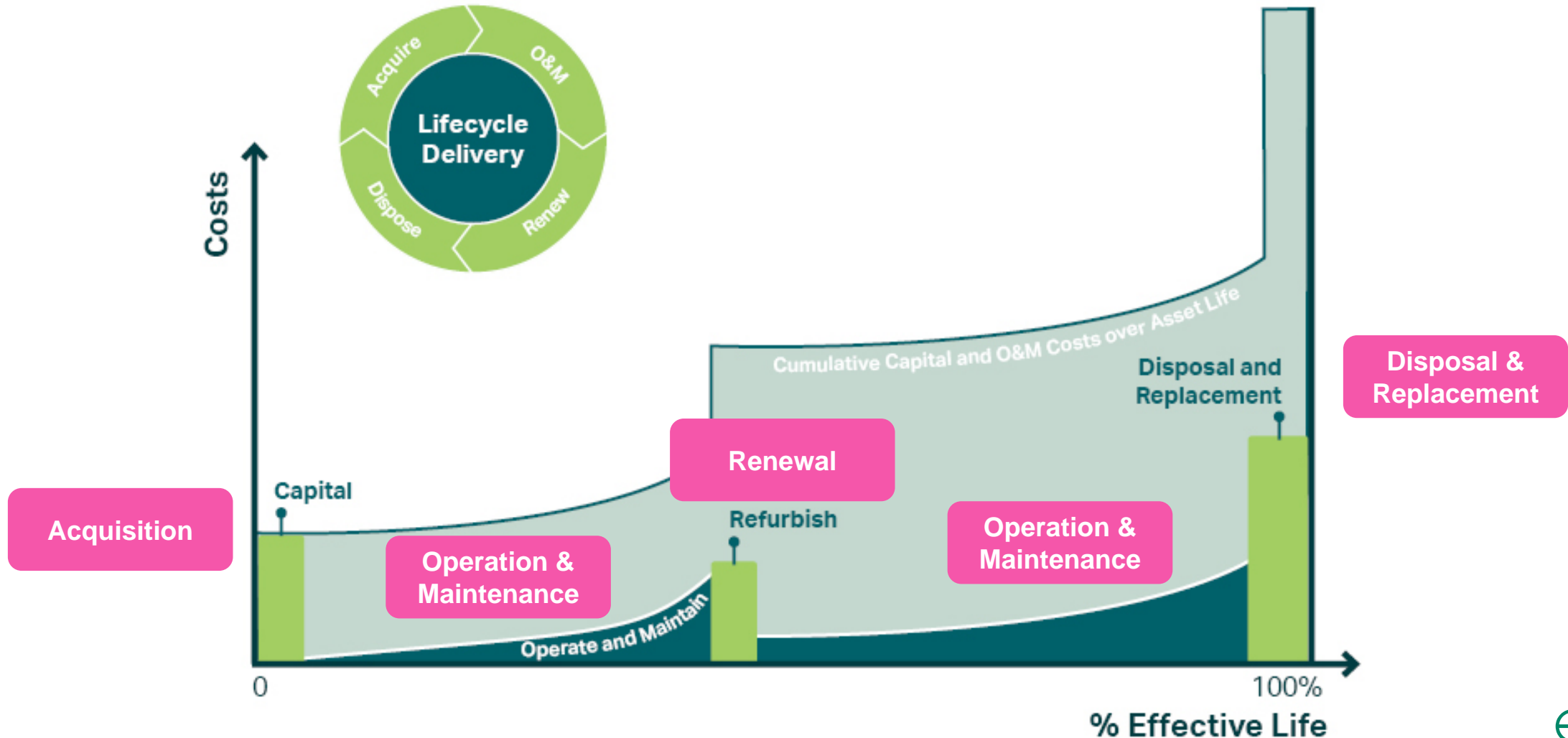
**Non-Core Assets: Capital Asset Funding Needs**
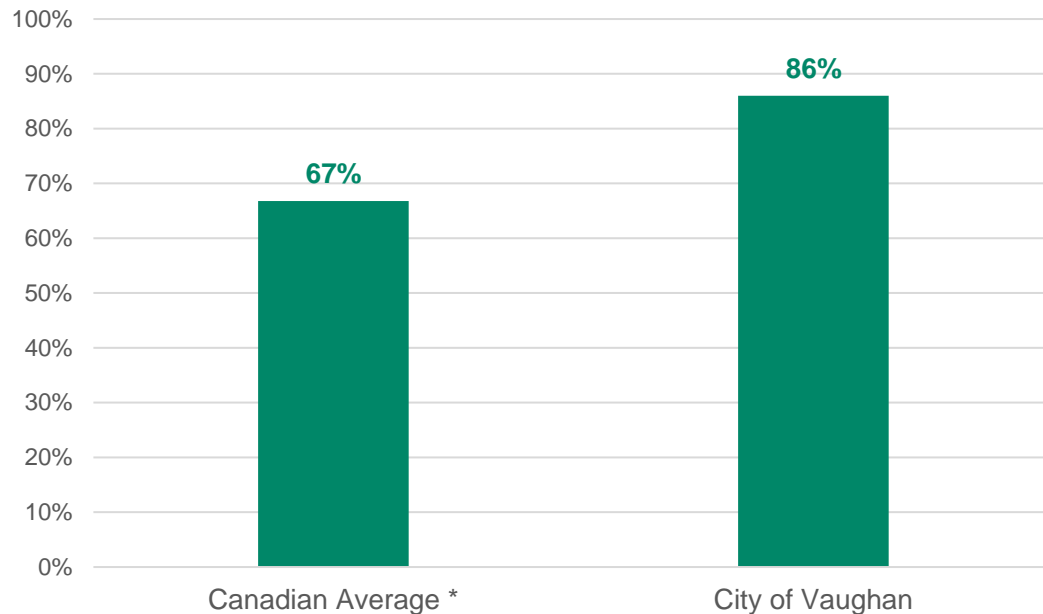


NOTE:

- The current **Non-Core asset capital investment rate** (based on Budget Book analysis) **is only 55% ($38.6 M)** of their **average annual 20-year forecasted capital needs ($70.7 M)**

- The **Non-Core annual 20-year forecasted capital needs** were direct inputs into the **Long-Range Fiscal Plan** (a presentation by Hemson on this subject will follow the AECOM presentation)

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

Canadian Average *: 67%
City of Vaughan: 86%

**CANADIAN INFRASTRUCTURE REPORT CARD 2019**

* 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.

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# 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

3. 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

Photo: Civic-Centre-Resource-Library

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# Council Working Session

# Long Range Fiscal Plan and Forecast

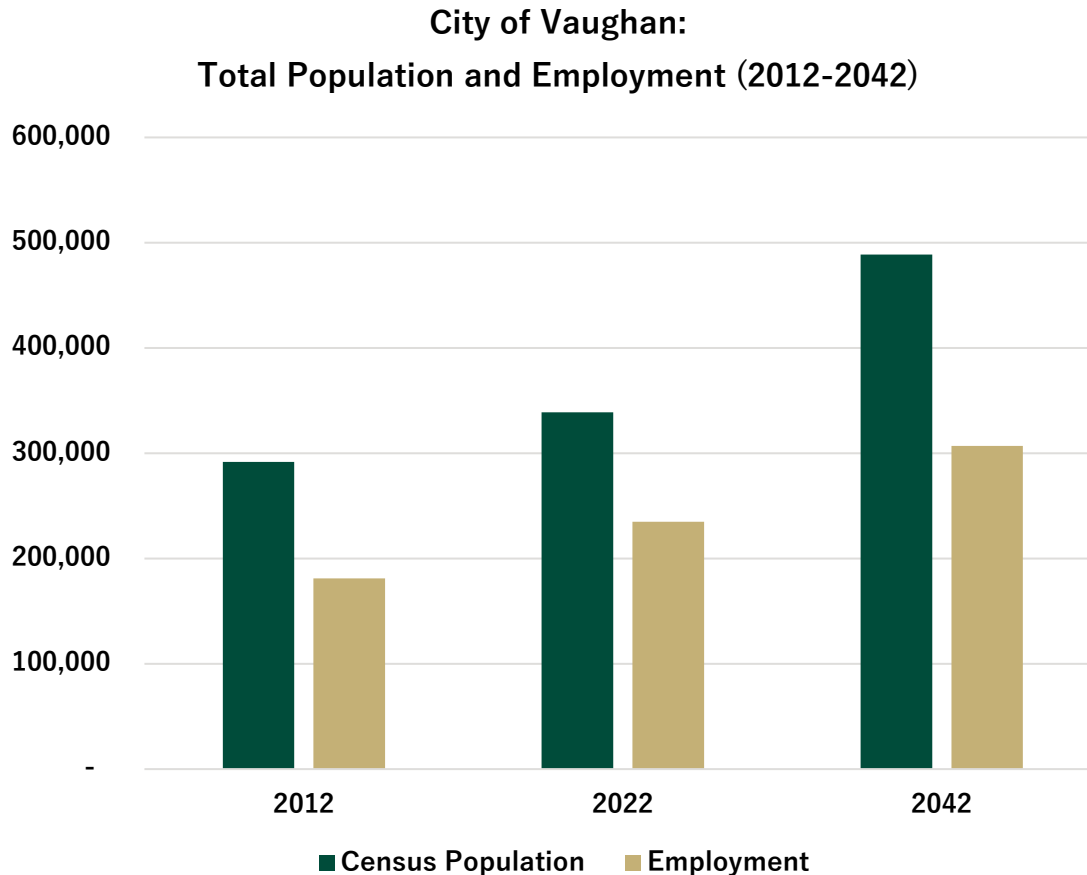**HEMSON**

# Topics for Discussion

- Growth in the City of Vaughan

- Purpose, Deliverables and Key Outputs of the LRFP

- Key Findings of the LRFP

- Recommendations

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# The City Continues to Grow

**City of Vaughan:**

**Total Population and Employment (2012-2042)**



Source: 2022 DC Study.

- Strong population growth and development across the City

  - Census population growth of 16% since 2012

- Employment growth of 30% has occurred since 2012

- By 2042 population expected to grow to 489,000 persons and 307,000 employees

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# Why is the City Developing a Long Range Fiscal Plan (LRFP)?

- City's budget process continues to be robust and always evolving

- LRFP to complement the budget process by providing a long-term outlook

- As City grows, a long-term cost outlook helps identify fiscal pressures before they occur

  - Develop fiscal strategies in advance of cost pressures

- Evaluate fiscal effects of changes in City's financial policies

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# The LRFP is Made Up of Two Key Deliverables

| Fiscal Impact Model | LRFP Report |
|---|---|
| • Forecast the future financial position of the City over the next 20 years (to 2042) | • Overview of 20-year forecast (to 2042) |
| • Identify overall capital and operating needs | • Focus on financial viability, management, flexibility and sustainability |
| • Undertake sensitivity testing on key fiscal measures such as: reserve balances, debt levels, tax levy increases, etc. | • Identification of risks, challenges and opportunities |
| • Centralized Excel based model that contains key financial data to develop long-term outlook | • Key directions and policy recommendations to be presented to Council |
| | • Report expected in Early 2023 |

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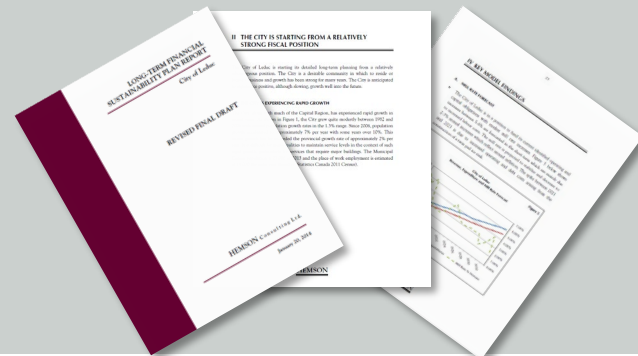
# Fiscal Model Structure
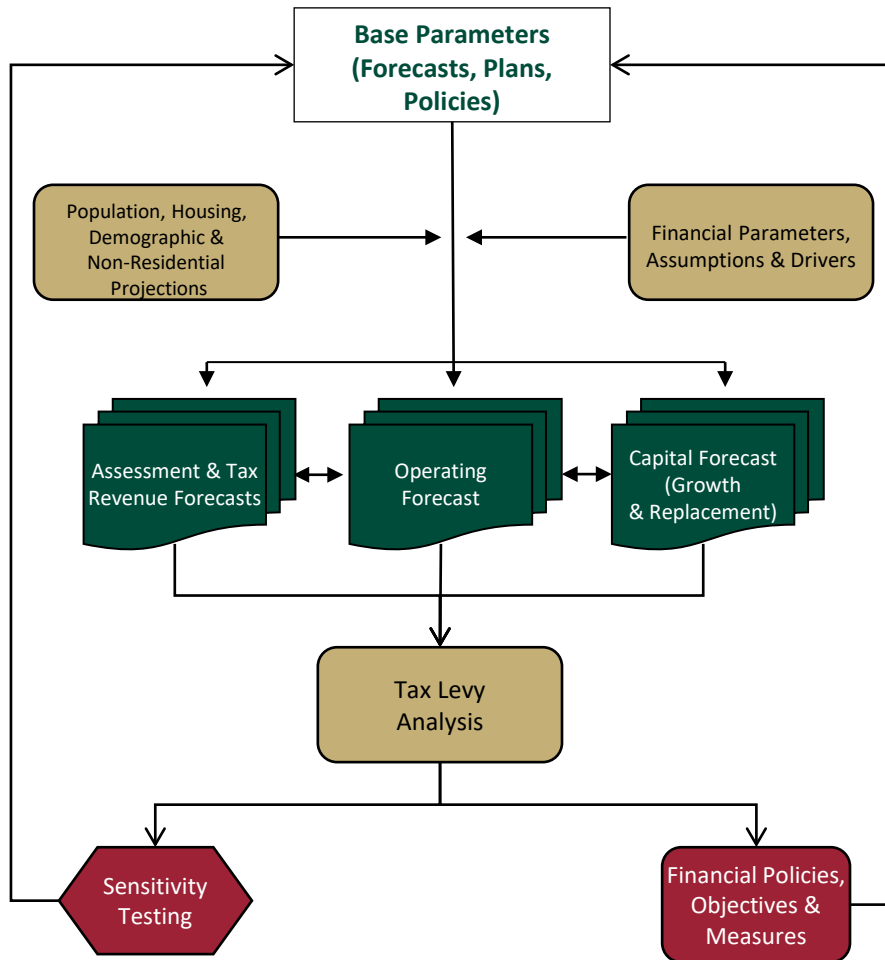


- Forecast extends 20-years to 2042 and deals with all tax funded services

- Capital forecast developed from various City sources
  - 2022 capital budget, 2022 DC Study, current core and non-core AMPs

- City's 2022 budget used as basis for operating forecast
  - Subsequent years based on series of volume and capital induced drivers
  - Can be adjusted to reflect changes in development forecast, capital, reserves, etc.

- All values expressed in constant 2022 dollars

*Note: Water/wastewater/stormwater services to be addressed in future phase of the LRFP.*

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# The LRFP is a Living Document

- Earlier in 2022 the City completed a series of study updates - DC Study, Parkland Acquisition/CIL analysis, and CBC Strategy

  - *Recent Provincial legislative changes, Bill 23, have significant impact on these studies which are not reflected in the current LRFP model*

- Core-AMPs approved by Council in 2021

  - City has met the requirements of O.Reg. 588/17

- Ongoing updates will be necessary

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# Key Outputs the City will Consider through LRFP

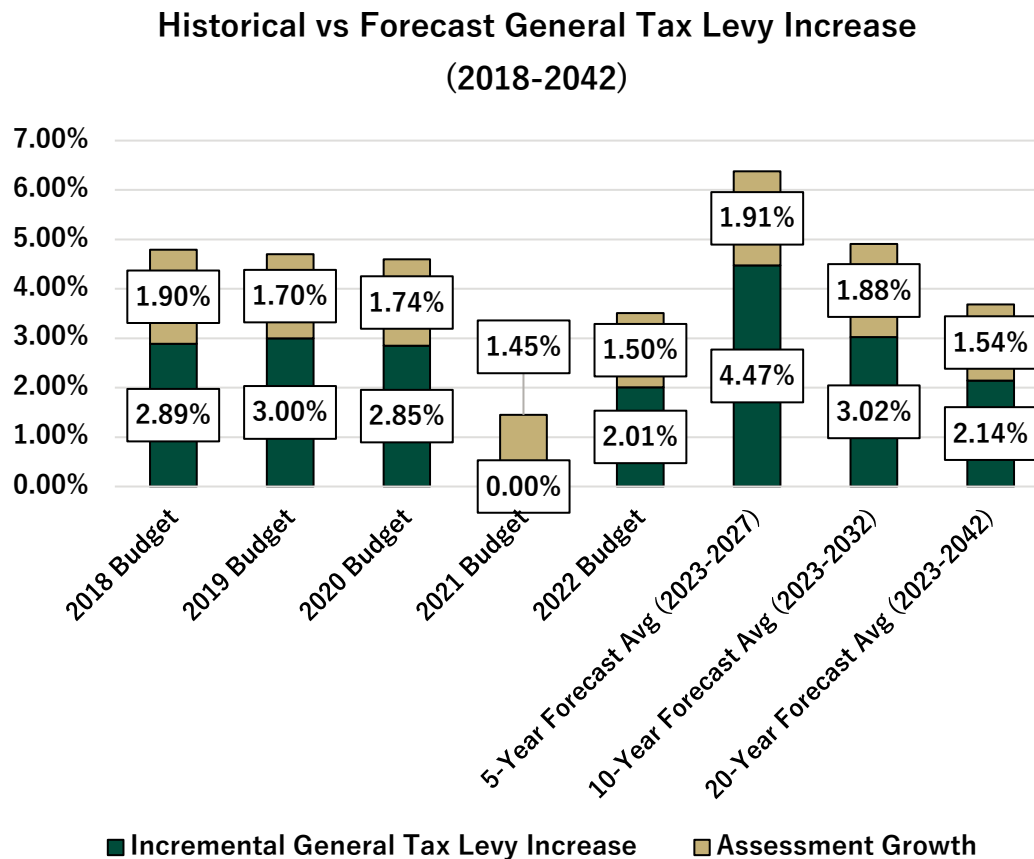| Output Name | Description |
|---|---|
| Operating | • Operating cost fiscal impacts associated to maintaining levels of service<br>• As the City grows, how much do our expenditures increase by over a longer time period? |
| Capital Contributions | • LRFP to develop scenarios of capital contribution levels based on findings of core and non-core asset management plans |
| Infrastructure Reserves | • Reserve levels can be forecasted given capital commitments<br>• Are reserve levels adequate today and in the future to undertake City capital obligations? |
| Debt Levels | • Model has been developed to track City debt levels over a 20-year period<br>• Tracks debt levels relative to City 10% limit of own source revenues |
| Tax Levy | • Tax levy increases that may be needed to undertake both operating and capital obligations |

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# What the LRFP is not:

- Land-use plan

- Master servicing plan (requires engineering data)

- Replacement of corporate budget software

- Analysis of staffing requirements

- Model for public use

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**Key Finding #1:**

**The City will need to plan for tax levy pressures over the short-term while balancing capital commitments over the long-term**

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# Historical vs Forecasted Tax Levy Increase

**Historical vs Forecast General Tax Levy Increase**

**(2018-2042)**



■ Incremental General Tax Levy Increase   ■ Assessment Growth

*Note: Forecast is in constant 2022 dollars.*

- Front-ended forecast pressure associated to operating impact from new infrastructure

- Largely associated to new road construction and new facilities

- Long-term pressure associated to contributions to reserves for future repair/replacement of assets

- Important to recognize outputs reflect best available information

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# Capital Expenditure Forecast Totals $6.3 Billion (2022-2042)



Capital Expenditures (Excluding Rate Supported Capital) by Funding Source (2022-2042)

North Maple Regional Park Development (2022-2026)
Black Creek Channel Renewal (2022-2025)
Fire Station 7-12 (2023-2027)
Fire Station 7-11 (2025-2027)
Block 41 CC (2025-2029)

20-Year growth-related roads program = $2.5 Billion

Legend: DC Funded | Debt Financed from DC | Reserve Funded | Debt Financed from Tax

*Note: In constant 2022 dollars. Excludes CBC funded capital.*

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**Key Finding #2:**

**Property taxes will continue to be the City's main source of revenue, however fiscal pressures can occur if status quo tax rate increases are maintained**

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# Forecasted Levy vs. Status Quo Tax Rate Increases
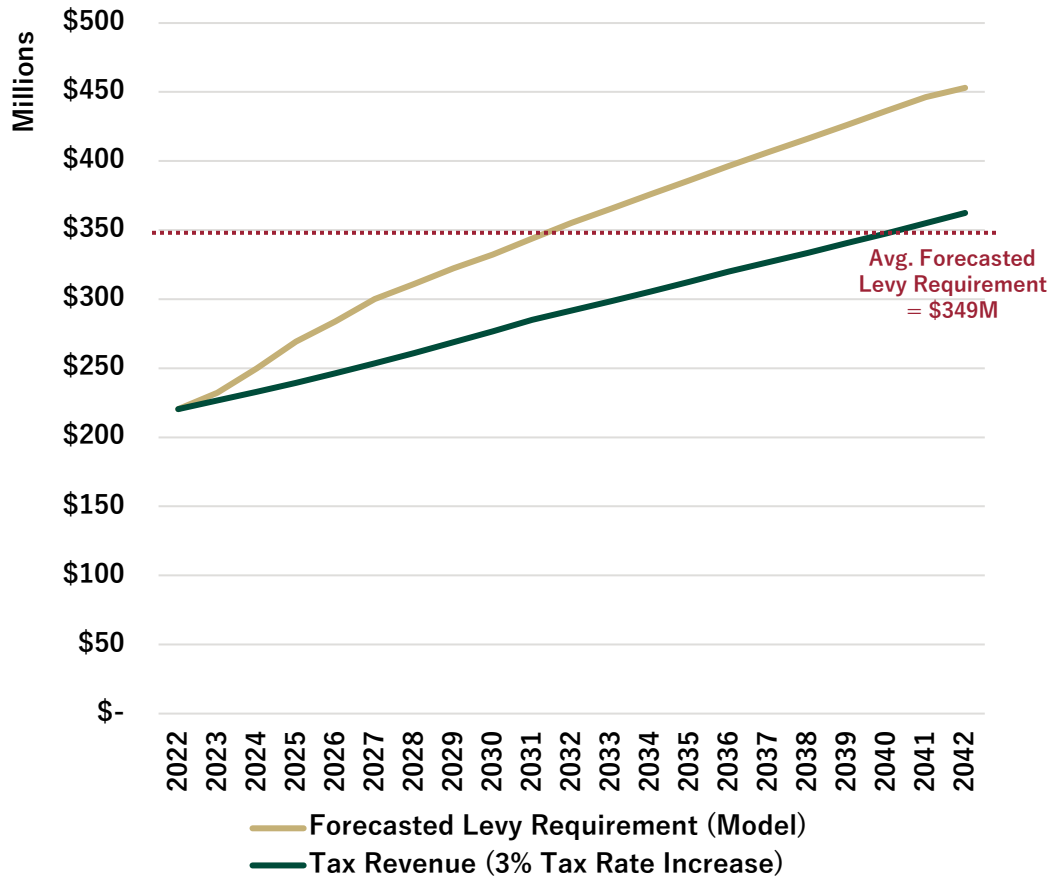


Note: Forecast is in constant 2022 dollars.

- ■ Current tax rates would not be sufficient to fund long-term obligations

- ■ Over the long-term can result in:
  - ■ Deferral of capital
  - ■ Impacts to levels of service

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# Key Finding #3:

# Infrastructure reserves and debt financing are important fiscal tools that will help the City moving forward

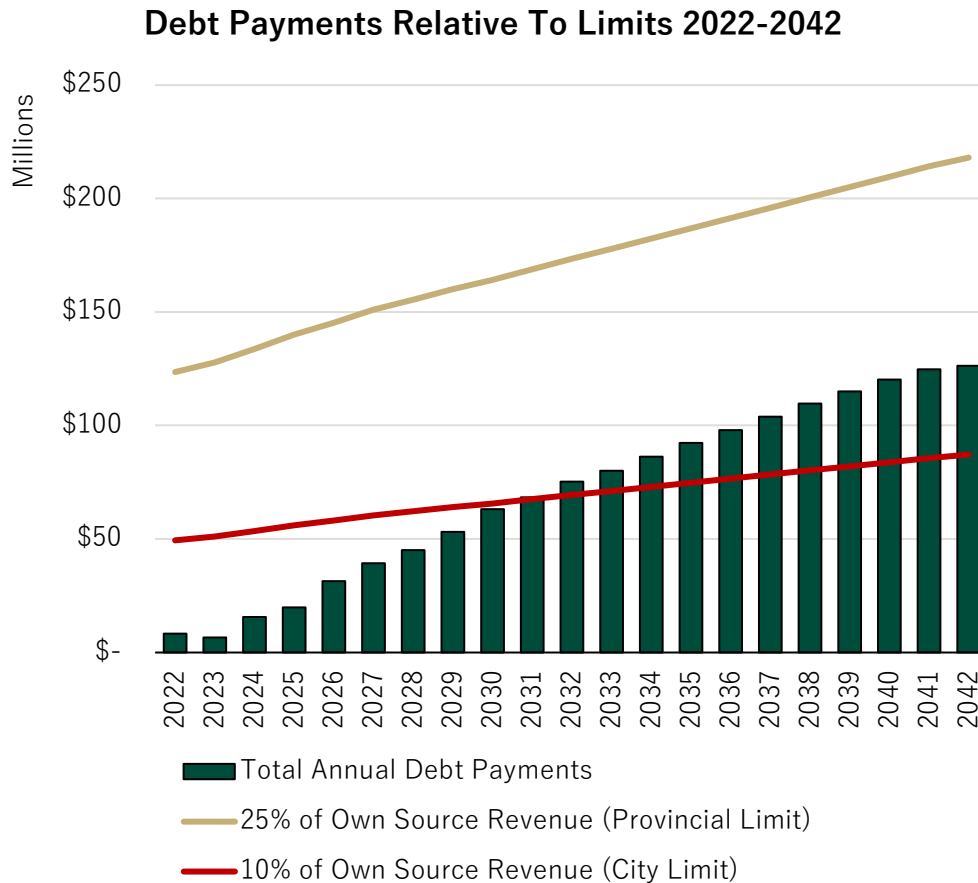**HEMSON**

# Cumulative Infrastructure Gap

## 20-Year AMP Need vs Funding Scenarios

*Total 20-year need = $2.7 Billion*
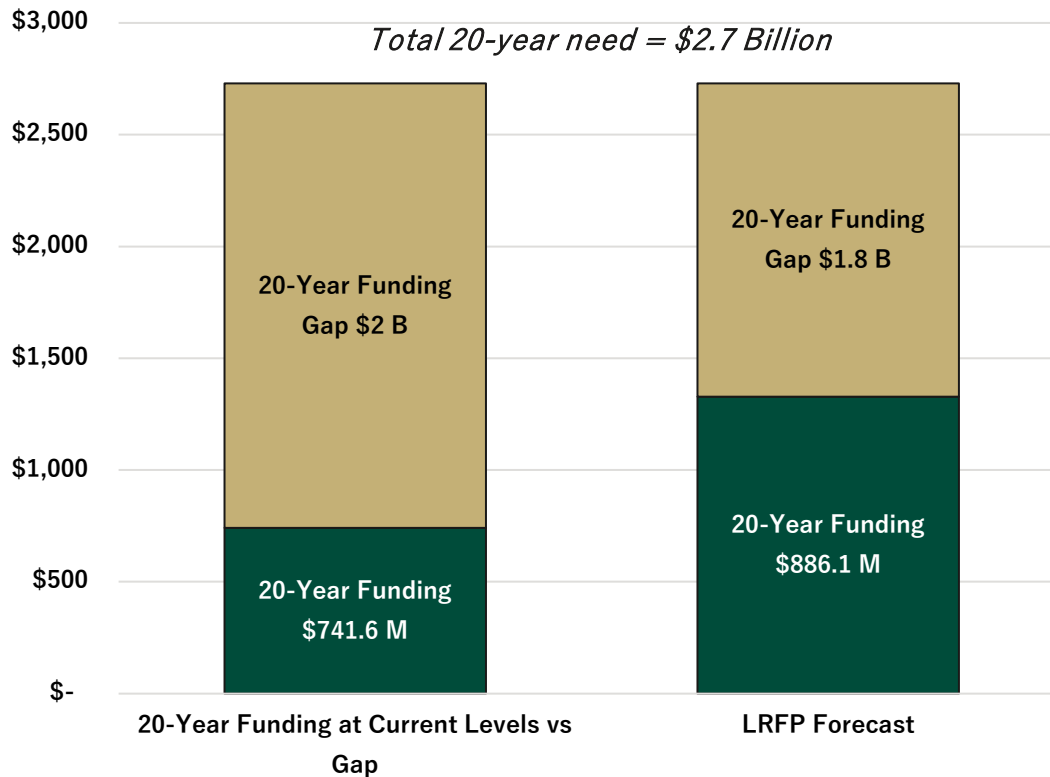


- Total need based on:
  - AMP average needs over 20-year period
  - Future replacement of growth-related infrastructure
  - Future replacement of assumed infrastructure
- Current funding levels assumed to include:
  - Base contribution to capital reserves of $23.9 million held constant over 20-year period
  - LRFP forecast assumes an annual increase of about 5.7% to base contribution
  - CCBF annual funding (i.e. former Gas Tax funding)

*Note: Cumulative gap expressed in constant 2022 dollars.*

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# Debt Policy Limits 2022-2042

**Debt Payments Relative To Limits 2022-2042**



Millions

$250
$200
$150
$100
$50
$-

2022 2023 2024 2025 2026 2027 2028 2029 2030 2031 2032 2033 2034 2035 2036 2037 2038 2039 2040 2041 2042

■ Total Annual Debt Payments

— 25% of Own Source Revenue (Provincial Limit)

— 10% of Own Source Revenue (City Limit)

- City expected to experience significant debt pressures due to magnitude and timing of capital program

- About $1.5 billion in total debt funding (about 29% of total 20-year capital program)

- Additional pressures can occur due to rising interest rates over the short-term

*Note: Includes water/wastewater debt assumed in City's water financial plan. Own source revenue includes tax and water/wastewater/storm rate revenue assumed to increase at 2% annually.*

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# Key Recommendations to Improve LRFP

- City has begun developing a long-term capital plan (minimum of 10-years)

  - Capital plan should consider both growth and non-growth related infrastructure

- City may review key infrastructure reserve policies

  - Are reserve levels adequate?

- Explore tools available to help address infrastructure gap, such as debt, service levels, timing, or dedicated infrastructure reserve funding (i.e. infrastructure levy)

- City to continue to track debt levels in line with policy and consistent with budget and re-examine when necessary

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# Next Steps

- LRFP Report – Will be available early 2023

- The City is encouraged to continue updating the Fiscal Impact Model to reflect current annual budgets and legislative changes

- Monitor policies alongside updates to the Fiscal Impact Model and use sensitivity testing to gauge impacts on long-term results

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