

CORPORATE ASSET MANAGEMENT

General Issues Committee April 3, 2024

Agenda

- Ontario Regulation 588/17
- Non-Core AM Plans Findings
- Lifecycle Management



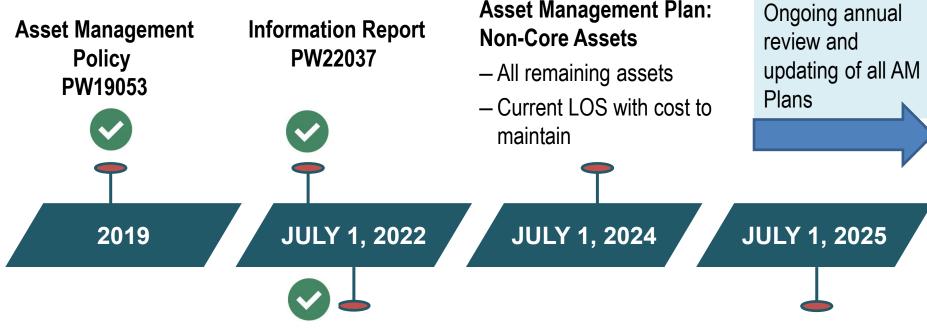
O. Reg. 588/17:
Asset Management
Planning for
Municipal Infrastructure

Recommendation

 To approve the Asset Management Plans as attached to Recommendation Report PW23073(a) (Appendices "A", "B", "C", "D", "E")



Ontario Regulation 588/17 Mandates



Asset Management Plan: Core Assets PW22048

- Transportation
 - (Roads, Engineered Structures),
- Water Works
 - (Water, Wastewater, Stormwater),
- Current LOS with cost to maintain.

Proposed LOS and Financial Strategy Completed

LOS – Levels of Service



Update: AM Plans

Plans due by July 1, 2024:

- Information Technology
- City Housing
- Parks and Cemeteries
- Recreation and Golf Courses
- Natural Assets
- Corporate Facilities/Tim Hortons Field
- Central Fleet
- Tourism & Culture
- Bylaw and Animal Services
- Forestry and Horticulture
- Public Health
- Children's & Community Services
- Long Term Care

Plans completed in Q1 2024:

- Fire
- Paramedics
- Transit
- Corporate Real Estate Office
- Libraries

Plans completed in 2023:

- Police
- Waste Management
- Parking

Plans completed in 2022:

- Water
- Waste Water
- Storm Water
- Road
- Engineered Structures



GIC – Apr 3, 2024

Summary of Findings

ASSET CATEGORY	REPLACEMENT VALUE (M)	AVERAGE AGE (YEARS)	AVERAGE CONDITION	RENEWAL FUNDING RATIO	10 YEAR O&M & RENEWAL FUNDING RATIO	FUNDING GAP PER YEAR (M)	FUNDING GAP OVER 10 YEARS (M)
Hamilton Street Railway (HSR)	\$524.8	14	Fair	81%	93%	\$16.3	\$163
Data Confidence	Medium	Medium	Low	Medium	Medium	Medium	Medium
Hamilton Fire Department	\$252	26	Good	98%	98%	\$3.7	\$37
Data Confidence	Medium	High	Medium	Medium	Medium	Medium	Medium
Hamilton Paramedic Service	\$62.7	27	Fair	65%	88%	\$11.8	\$118
Data Confidence	Medium	High	High	Medium	Medium	Medium	Medium
Corporate Real Estate Office *excludes land assets	*\$0.06	1	Good	98%	100%	\$0	\$0
Data Confidence	Medium	Medium	Medium	Medium	Medium	Medium	Medium
Hamilton Public Library	\$424.9	29	Good	73.5%	80%	\$10	\$100
Data Confidence	Medium	High	Medium	Low-Medium	Low-Mediun	Low-Medium	Low-Medium
TOTAL	\$1,265	l I	ınding Gap lata confide	-	\$41.8	\$418	



Introduction to Lifecycle Cost Analysis

Lifecycle Cost Analysis is a way for the City to improve decision-making and demonstrate cost-effectiveness by:

- Determining the true cost of asset ownership before acquiring an asset and not solely considering the construction or purchase price of an asset; and,
- Ensuring decision makers have the information to compare asset options and outcomes.





Asset Lifecycle

The Asset Lifecycle refers to the stages involved in the management of an asset

Acquisition: When we buy, build or inherit something new that the City didn't own before including an expansion.

Renewal: When an asset is at the end of life, and we will either buy or build a new similar asset to replace it with like for like



Operations: Everyday activities or resources required to keep the assets/services working (e.g., staff salaries, cleaning, painting, studies, energy costs, internet etc.).

Maintenance: Planned or reactive activities that restore/fix an asset, so it reaches its expected life.

Disposal: When the asset is at the end of life or service is being discontinued and we're not replacing it with another similar asset.



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Whole Life Costs

Whole Life Costs

10-20% of costs 80% of decisions made

70-80% of costs 20% of decisions made

Renewal

Design

Asset

Purchases

Training

Consulting

Construction

Acquisition

- Energy
- Water
- Raw Materials
- Consumables
- Overhead
- **Benefit Costs**

Operations

- Staff/Labour

Maintenance

- Labour
- **Materials**
- **Spares**
- Contractors
- Overhead

Disposal

- Cost of Disposal
- Residual Value
- Inability to dispose of

AM Analysis

Pre-Inspections

Documentation

The **Whole Life Cost** is the total cost of asset ownership.

To compare asset options and outcomes we can calculate the **Average** Annual Cost (Whole Life Cost / Estimated Service Life).



Lifecycle Cost Analysis and Levels of Service

Recap: Levels of service are best described as the link between the outcomes the community desires and the way that the City technically provides those services.

How does Lifecycle Cost Analysis connect to Levels of Service?

- Many lifecycle activities are technical levels of service we are providing to the public;
- The City needs to understand how certain decisions affect the cost of asset ownership; and,
- The choices we make today may affect future generations' levels of service.

If we don't understand the Whole Life Cost of assets when we acquire them, how can we budget to maintain levels of service?



Lifecycle Cost Analysis Helps Us Understand and Present Options

C)ptioi	n A –	Affor	dabl	e L.	O.S.

Option B – Current L.O.S.

Option C – Desired L.O.S.

Levels of Service that can be provided with current financial resources. Levels of Service we are currently providing and what customers may expect.

Levels of Service that some may want which may include new services and upgrades to existing services.

Park Example







Undetermined Grass
Coverage, Mowed Monthly,
Limited Public Facilities

Even Grass Coverage, Mowed Bi-Weekly Some Public Facilities/Sporting Fields \$\$ Irrigated Grass Cover,
Mowed Weekly
Formal Gardens
Premium Public Facilities
\$\$\$\$



Many Thanks to the Team

Corporate Services Financial Planning and Policy Division

Public Works

Transit Asset Owner (Maureen Cosyn Heath)

Emergency Services

- Hamilton Fire Department Asset Owner (Chief Dave Cunliffe)
- Hamilton Paramedic Service Asset Owner (Chief Michael Sanderson)

Planning and Economic Development

Corporate Real Estate Office Asset Owner (Ray Kessler)

Hamilton Public Library

Hamilton Public Library Asset Owner (Paul Takala)

Corporate Asset Management Office

 Amber Dewar, Dan Leake, Muhammad Obaidullah, Subul Khalid, Jasmine MacDonald and Alix Luciani

