



ASSET MANAGEMENT PLAN FOR CORE ASSETS

General Issues Committee
June 15, 2022

Recommendation

To approve the Asset Management Overview and Plans for Core Assets per O. Reg 588/17.

No financial commitments at this time.
Findings will be used to inform the 2023 tax and rate supported budget process.

Asset Management Goal

- To meet a required level of service (LOS), in the most cost-effective manner, through the management of assets for present and future customers.

Benefits

- Governance and accountability,
- Effective and sustainable decisions,
- Enhanced customer service,
- Effective risk management,
- Improved financial efficiency.

Ontario 

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

Ontario Regulation 588/17 Mandates

Asset Management

Policy

PW19053



2019

Information Report

PW22037



JULY 1, 2022

Asset Management Plan: Non-Core Assets

- All remaining assets
- Current LOS with cost to maintain

JULY 1, 2024

JULY 1, 2025

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 3

Asset Management Approach

Principles

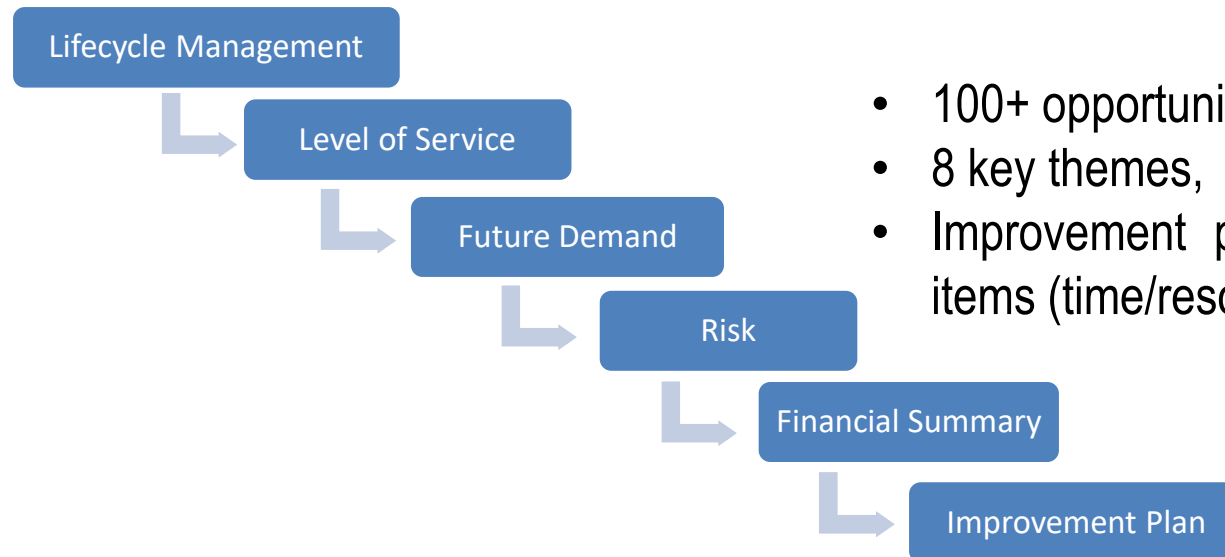
- Adopt a lifecycle approach,
- Endorse evidence based decision making,
- Embrace continuous improvement,
- Provide optimal value,
- Develop service knowledge.



Lifecycle Management



Plan Components



- 100+ opportunities for improvement,
- 8 key themes,
- Improvement plan identified on all items (time/resources).



Asset Information (Data)

- AM Planning starts with data (registry – age, location, condition, quantity etc.),
- Data confidence scale developed in order to quantify concerns,

Data Confidence Grading Scale		
Confidence Grade	Reliability	Accuracy
A - Very High	Data based on sound records, procedures, investigations and analysis, documented properly and agreed as the best method of assessment.	Dataset is complete and Estimated to be accurate +/- 2%
B - High	As above with minor shortcomings e.g. some data old, or missing.	Dataset is complete Estimated to be accurate +/- 10%
C - Medium	Data based on sound records, procedures, investigations and analysis which is incomplete or unsupported, or extrapolated from a limited sample	Dataset is substantially complete but up to 50% extrapolated data and accuracy estimate +/- 25%
D - Low	Data is based on unconfirmed verbal reports and/or cursory inspections and analysis.	Most data is estimated or extrapolated. Accuracy +/- 40%
E - Very Low	None or very little data held.	Dataset does not exist or very little accuracy.

- Data found to be missing, old, incomplete, duplicated and not aligned to AM processes that are still being developed.

Asset Condition



- No condition process for many assets,
- Lack of condition assessments (CA's),
- Use of Estimated Service Life (ESL) and age to approximate condition.



Lifecycle Management



- Not all assets are properly programmed,
- Impact of acquired assets on O&M activities,
- Timing of renewals requires more analysis.



Levels of Service



- LOS is critical for asset owners to understand,
- Owners are learning about and starting to embrace LOS,
- Standardized procedure being finalized,
- Community engagement is paramount and will be ongoing.

Replacement Cost



- Variations exist in current data,
- Need to apply a robust process across all asset classes.

Demand & Risk Management Improvements



- Not yet extensive requirements in O. Reg 588/17,
- Required by 2025; currently in development.

Financial Management Improvements



- Planning horizon expanded from 10 to 30 years,
- Infrastructure gap at low-med confidence,
- Future Long-Term Financial Plan will connect the budget to AM Plans.

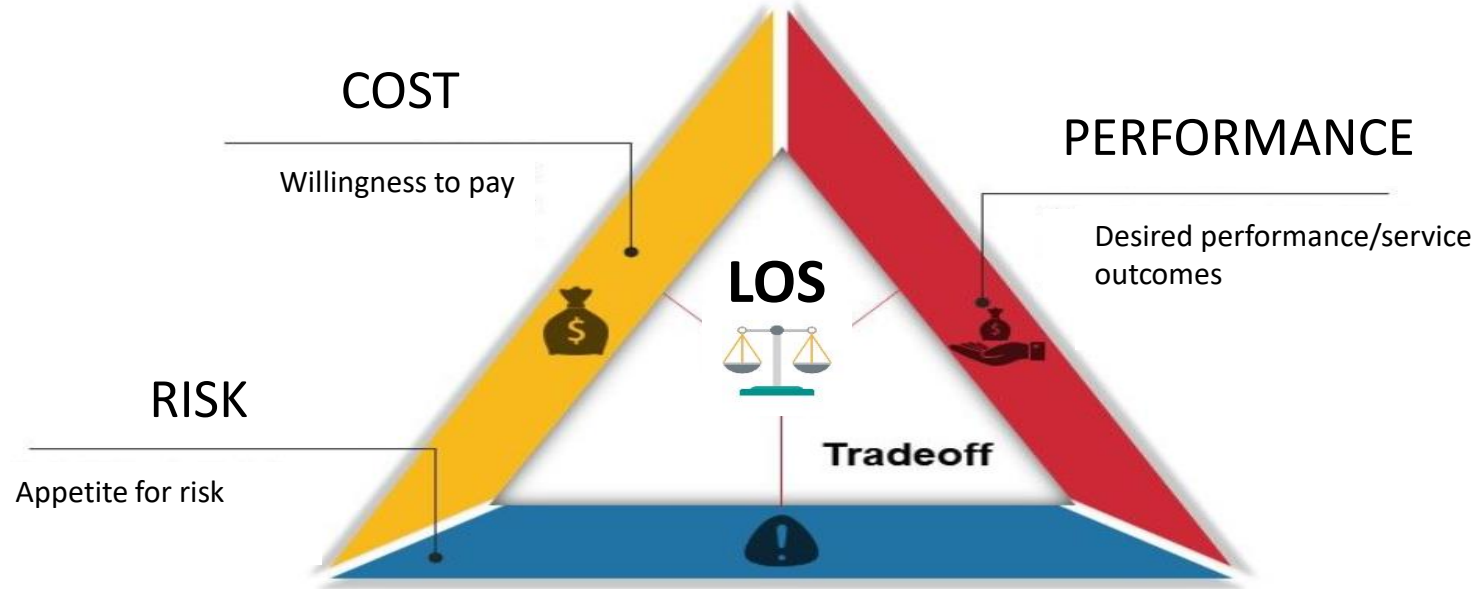
Governance



- Need for standard processes evident; currently in development,
- Clearly defined asset ownership apparent yet still some gray areas.

AM Plans - Findings

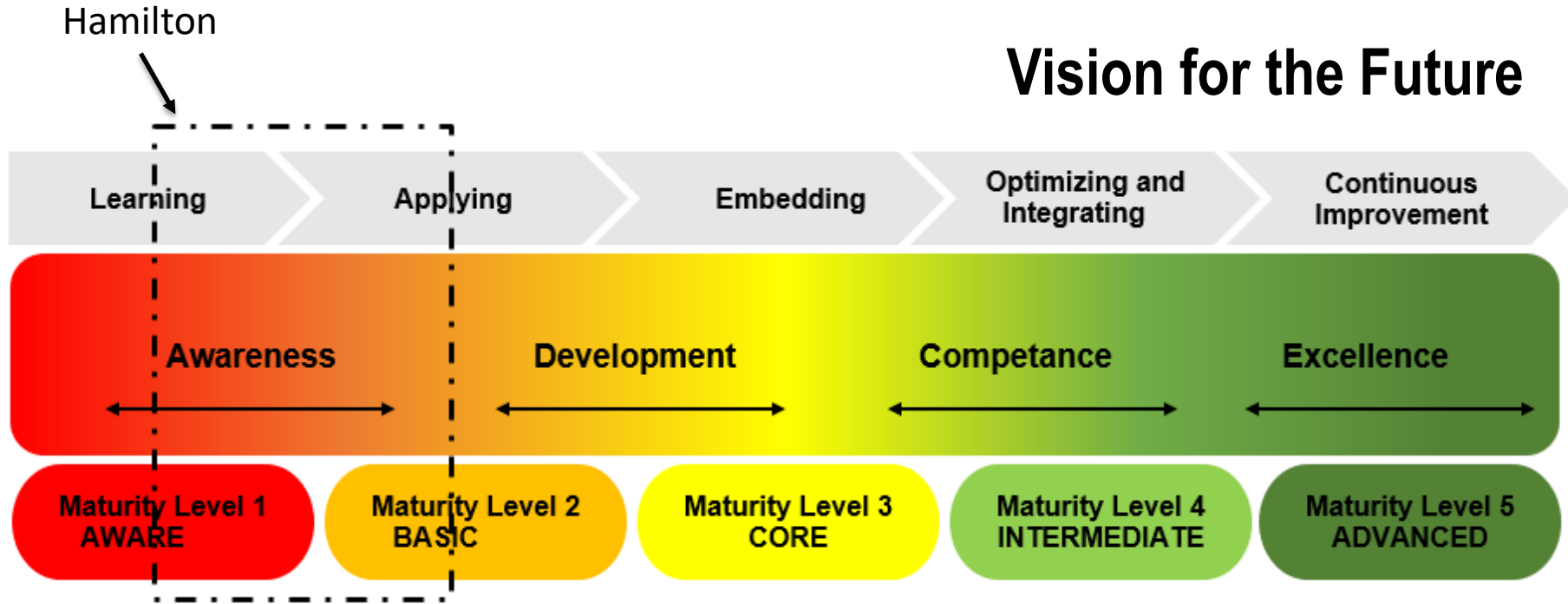
Asset Category	Replacement Value (B)	Average Age (Years)	Average Condition	Renewal Funding Ratio	10 Year O&M & Renewal Funding Ratio	Funding Gap per year (M)	Funding Gap over 10 years (M)
Water	\$4.3	34	Fair	75%	85%	\$20	\$202
Data Confidence	Low	Medium	Low	Low-Med	Low-Med	Low-Med	Low-Med
Wastewater	\$7.3	30	Fair	46%	70%	\$49.8	\$498
Data Confidence	Low	Medium	Medium	Low-Med	Low-Med	Low-Med	Low-Med
Storm Water	\$3.1	22	Good	9.5%	42%	\$31	\$312
Data Confidence	Medium	Medium	Low	Low-Med	Low-Med	Low-Med	Low-Med
Road Network	\$5.1	16	Fair	14%	66%	\$87	\$866
Data Confidence	Low	Low	Medium	Low-Med	Low-Med	Low-Med	Low-Med
Engineered Structures	\$1.5	33	Good	33%	67%	\$8.1	\$81
Data Confidence	Medium	Medium	Medium	Low-Med	Low-Med	Low-Med	Low-Med
TOTAL	\$21.3	Funding Gap \$195.9 M annually (data confidence low-med)				\$195.9	\$1,959



- Proposed levels of service will be achieved through the balance of cost, risk and service/asset performance.
- Prioritization of operating and capital funds becomes critical in order to ensure the best balance is achieved.
- Must find the balance that delivers the greatest value to the City.

Asset Management Journey

Vision for the Future



- Reset the conversation: Managing assets vs asset management,
- Definition of Asset Owner: Service provider “owns” the assets,
- CAM Office collaboration/engagement with asset owners and stakeholders,
- Corporate Asset Management Program development.

CAM Office

- Amber Dewar, Sean Hilderley, Jasmine MacDonald and Alix Luciani

Corporate Services Financial Planning and Policy Division

Public Works

- Transportation Asset Owner (Chief Road Official Edward Soldo),
- Water Works Asset Owner (Acting Director Hamilton Water Nick Winters),
- Engineering Services,
- Hamilton Water,
- Transportation, Operations & Maintenance.

Planning and Economic Development

- Transportation Planning,
- City Planning and Strategic Growth.