

nclusive

ASSET MANAGEMENT WORKSHOP

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WHAT IS ASSET MANAGEMENT?



- About making sustainable decisions to optimize costs and performance
- Prescribing economical solutions for lasting success
- > A culture of continuous improvement
- Managing risks
- ➤ ISO 55000 is the global governance of AM

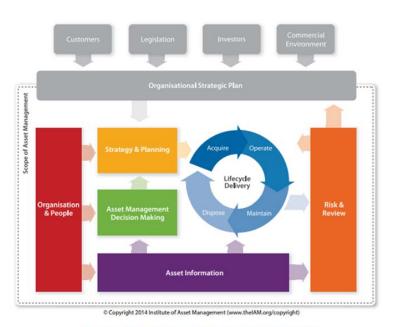


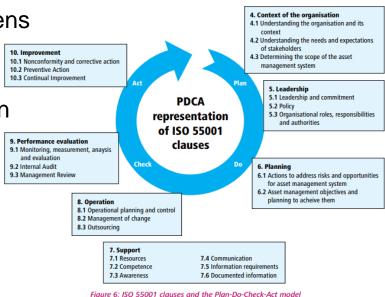
Figure 3: The IAM's Conceptual Asset Management model

WHY ARE WE DOING AM?



Benefits:

- ✓ Improved financial performance
- ✓ Informed asset investment decisions
- Drives long-term thinking and planning
- ✓ Managed Risk
- Protect & Enhance quality of life for citizens
- ✓ Demonstrated social responsibility
- ✓ Demonstrated compliance with legislation
- ✓ Improves organizational sustainability
- ✓ Provide structure to AM operations
- ✓ Facilities standardization of efforts
- ✓ Enhance reputation



WHAT IS AN AM SYSTEM?



- ✓ Is the system or collection of things that work together to help the Town accomplish our objectives ~ Focused on practices and fundamentals
- ✓ Provides a documented foundation for the AM operation
- ✓ Ensures that everyone know who does what, how things are done, so that tasks are

 performed the same way.

performed the same way across the organization

- ✓ Uses policies, roles and responsibilities to standardize and coordinate activities
- ✓ Provides disciplined practices that are needed to manage physical assets effectively and efficiently

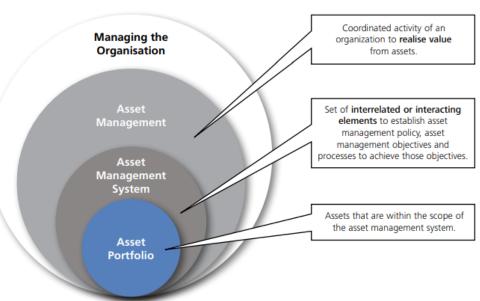


Figure 7: Relationship between asset management and the Asset Management System

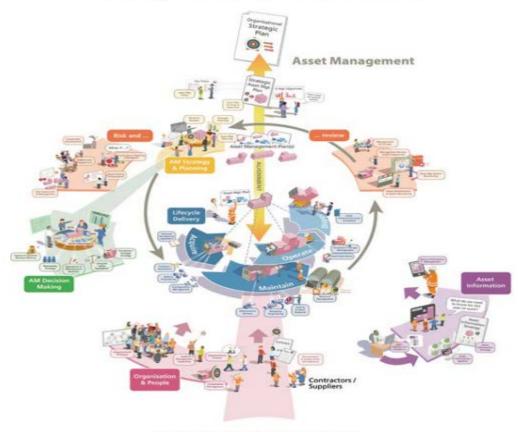
WHAT DOES AM LOOK LIKE?



People do asset management

Knowledge, competence, motivation and teamwork have a huge influence on asset management outcomes

What does the Asset Management Culture look like?



Extract from the IAM's 'Big Picture'.

For more information about the IAM's 'Big Picture', go to www.theIAM.org/BigPicture

OUR AM SYSTEM



Framework Systems

- ✓ AM Policy adopted in 2016 sets out the guiding principles and objectives
- ✓ AM Strategy developed in 2017 sets out how staff will accomplish these objectives
- ✓ Governance Structure

Tactical Management System

- ✓ AM Plans originally completed 2014
- ✓ Roles & Responsibilities
- ✓ Practices, Processes and Procedures
- ✓ Informational Elements (data)
- ✓ Performance Improvement Elements (KPI)

AM GOVERNANCE



Council

- Approve the strategies and plans as proposed by the City;
- Serve a representatives of stakeholder and community needs; and
- Approve funding for both capital and operating budgets associated with Asset Management through the annual budget

Senior Leadership Team (SLT)*

Communicate the vision of asset management at a corporate level, encourage engagement with the processes

Asset Management Steering Committee*

Coordinate financial, strategic planning, information technology and asset management activities

Corporate Asset Management Office*

Asset System Working Groups and Service Providers*

Residents, Stakeholders and Customers*

*Please refer to the AM Policy Procedures for full list of responsibilities

AM STRATEGY & OUTCOMES



Vision

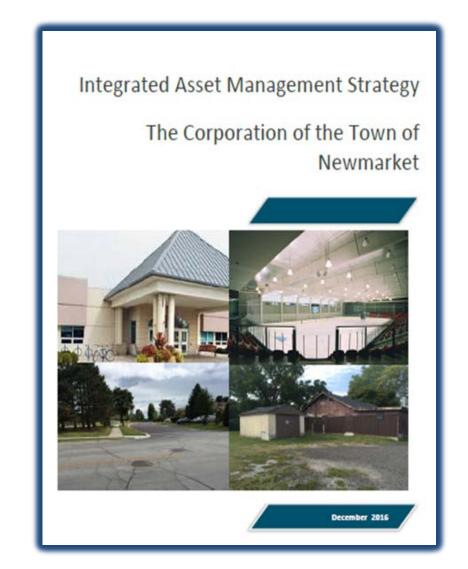
Business Drivers

Review of Current State

Needs Assessment & Gap Analysis

Implementation Plan

Consultant's Recommendations



OUR VISION



Managing service delivery through asset management

Our vision for asset management is to be innovative and fiscally responsible stewards of our infrastructure assets for the benefit of the community we serve and the people we employ, now and in the future. We will develop and continuously improve how we manage our infrastructure assets throughout their lifecycle to ensure they support our goal of a healthy, happy, thriving, dynamic and extraordinary community in which to live, work and play.

We seek to:

- Reach out and build understanding among residents, business, staff and elected officials about the role infrastructure plays in providing services that make our quality of life even better.
- Recognize and respond to current and emerging trends in regulations, society and environment.
- Maintain a balance between an acceptable level of service and a cost that is sustainable
 for residents and businesses now and into the future.
- Ensure that **funding levels and revenue sources are sufficient** to meet current and future infrastructure demands.

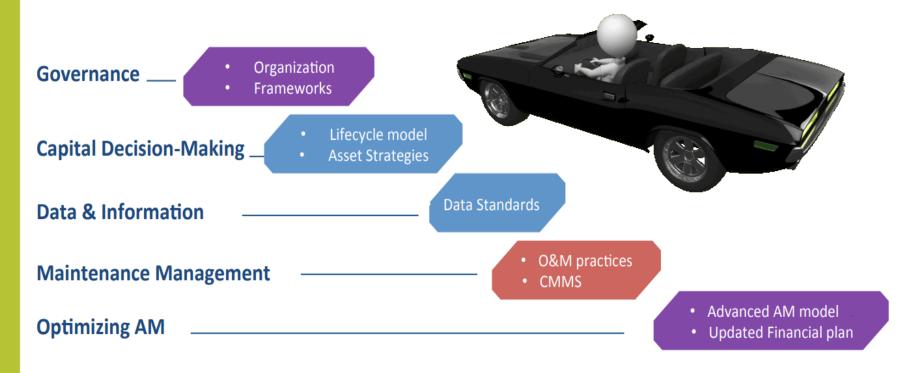
We will put **best practices** in asset management into effect, including an asset management strategy that **links disciplines and departments**, integrates data and software resources and **coordinates decision-making** so that we will be able to invest capital resources wisely and make informed choices about how we maintain our assets and deliver our services.

AM BUSINESS DRIVERS



Identifying the business drivers helps to identify priorities in improvement plans.

To identify prominent asset management drivers for the Town, a survey was conducted of Town staff. (See page 20-21 of the AM Strategy for complete list)



AM NEEDS



- 140-2 Develop AMP for missing asset classes
- 420-1 Document current **O&M practices**, coordinate with asset strategy, and evaluate and document **O&M** costs
- 510-1 Develop asset hierarchy from FIR reporting to the maintenance managed item level
- 520-1 Evaluate data collected after identifying required and critical data and identify gaps
- 540-1 Evaluate needs, develop user requirements for software and develop Terms of Reference (TOR) for procurement
- 540-2 Procure asset management software, and configure, and implement, and identify key integration points with JDE
- 620-1 Establish standard condition grading framework and align to asset class condition scales
- 710-1 Develop Risk Management Framework
- 720-1 Conduct a risk assessment and identify high consequence assets and critical assets
- 810-1 Evaluate, select and incorporate ODM techniques into O&M and capital plan process
- 910-1 Update Capital Financing Sustainability Plan
- 1010-1 **Develop data standards** aligned with asset hierarchy
- 1020-1 Establish data roles owners, users, collector

IMPLEMENTATION PLAN



WBS	Task Name		Duration	Start	Finish 6		018 2019 H1 H2 H1 H2	2020 2021	Newmarket
0	Newmarket Implementation Plan		60 mons	Mon 17-01-09	Tue 21-12-21	HI HZ I	11 H2 H1 H2	N1 N2 N1 N2	.
1	Governance		12 mons	Mon 17-01-09	Tue 17-12-26				
1.1	120-1 Adopt Newmarket Asset Management Strategy (this project)		0 mons	Mon 17-01-09	Mon 17-01-09	01-09			
1.2	310-2 Create or designate Asset Manager posi- to provide guidance and oversee implementati of AM within the Town		3 mons	Mon 17-01-09	Wed 17-04-05				
1.3	140-1 Define and assign responsibility for — stormwater assets	WBS	Task Name			Duration	Start	Finish 6 2017 2018 2019 2020 2021 2022	
1.4	140-2 Develop AMP for missing asset classes								H2 H1 H2 H1 H2 H1 H2 H1 H2 H1 H2 H1 H2
1.5	510-1 Develop asset hierarchy from FIR repo to the maintenance managed item level	3.3	520-1 Evaluate data collected after identifying required and critical data and identify gaps			1 mon	Mon 18-10-29	Mon 18-11-26	
1.6		3.4	1030-1 Establish QA/QC procedures and evaluate quality of critical asset data			2 mons	Tue 18-11-27	Fri 19-02-01	
1.7	1020-1 Establish data roles - owners, users,	4	Maintenance			13 mons	Mon 18-10-29	Fri 19-11-22	
	collector	4.1	420-1 Document current O&M practices,		3 mons Mon	Mon 18-10-29	Fri 19-02-01		
1.8	210-1 LOS Model: define LOS and KPIs, and n associated activities and costs associated wit		coordinate with asset strategy, and evaluate and document O&M costs						
1.9	320-1 Identify required AM specific training a develop learning plan for the organization	4.2	540-2 Procure asset management software, and configure and implement, and identify key			8 mons	Wed 19-04-03	Fri 19-11-22	
2	Capital Program Decision Making		integration points with JDE						
2.1	820-1 Optimize the capital plan with updated	5	Optimizi	ing AM Program		25 mons Mon 19-11-25	Tue 21-12-21	\ \ \ \ \ \ \ \ \ \ \ \ \ \	
2.2	information 620-1 Establish standard condition grading framework and align to asset class condition—	5.1	610-1 Develop asset performance assessmen framework and system			t 2 mons	Mon 19-11-25	Thu 20-01-30	
2.3		5.2	620-2	620-2 Evaluate and establish condition			Fri 20-01-31	Mon 20-03-30	
2.4	430-1 Develop asset performance lifecycle		assessment framework (e.g. frequency)						
	(deterioration) model	5.3	210-2	210-2 LOS: Collect data and validate model;			Tue 20-03-31	Wed 20-05-27	
2.5	710-1 Develop Risk Management Framework		enga	engage customers in setting LOS (future)					
2.6	720-1 Conduct a risk assessment and identify consequence assets and critical assets	5.4		810-1 Evaluate, select and incorporate ODM techniques into O&M and capital plan process			Thu 20-05-28	Fri 20-07-24	
3	Data and Information	5.5			s continuity and asset		Mon 20-07-27	Thu 20-11-19	
3.1	1010-1 Develop data standards aligned with hierarchy		conti	ngency plans for o	critical assets				
3.2	540-3 Develop information system requirem for asset management and a plan to intergat	5.6		3 Update AMP and and Asset strategy	d improve link betweer (future)	6 mons	Wed 20-09-23	Wed 21-03-31	
	systems, e.g. GIS and CMMS	5.7	910-1 Update capital financing sustainability plan			8 mons	Thu 21-04-01	nu 21-04-01 Mon 21-11-22	_
	5.8		920-1 Update reserve fund policy			1 mon	Tue 21-11-23	Tue 21-12-21	│
36 Action Items		5.9				0 mons	Fri 20-12-25	Fri 20-12-25	♦ 12-25
	1101110			evaluate future de	neasure asset demand emand against current	0 mons	Fri 21-07-30	Fri 21-07-30	♦ 07-30

1ST PROJECT





LEVEL OF SERVICE – ACTION ITEMS

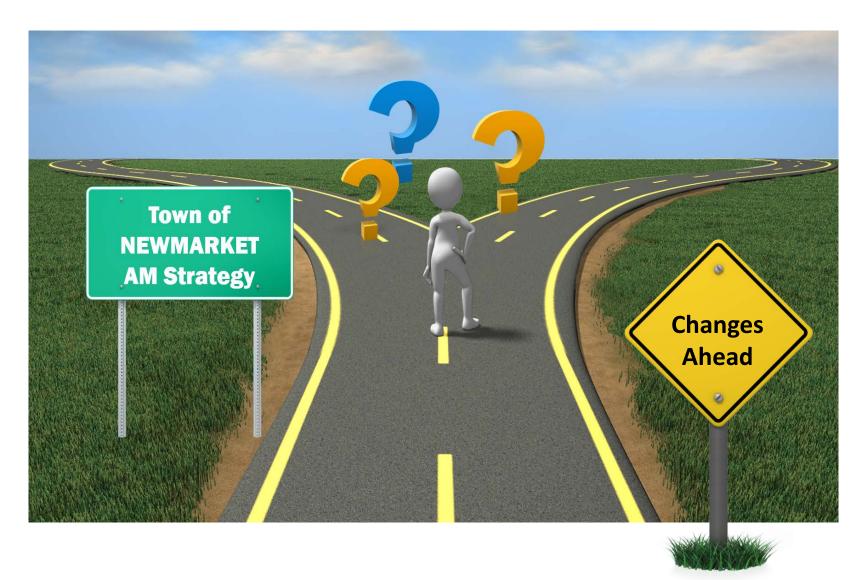


The results from the project align with findings from the strategy:

- Moving forward, the **strategy** should be **updated** to reflect the findings from the LOS model project
- 2. Better **develop data and underlying practices** that support measurement of condition and asset sustainability are the focus for improvement going forward
- 3. Finalize the **service hierarchy** and integrate with financial system reporting
- **4. Improve inventory data** focusing on physical data (length, material etc.) and methods to estimate replacement cost
- 5. Set targets and develop the financial analysis linked to service levels

WHERE TO NEXT





CHANGE MANAGEMENT











The municipality's commitment to consider, as part of its asset management planning:

i. the actions that may be required to address the vulnerabilities that may be caused by **climate change** to the municipality's infrastructure assets, in respect of such matters as,

- A. operations, such as increased maintenance schedules,
- B. levels of service, and
- C. lifecycle management,

ii. the **anticipated costs** that could arise from the vulnerabilities described above,

iii. **adaptation** opportunities that may be undertaken to manage the vulnerabilities described above,

iv. **mitigation approaches** to climate change, such as greenhouse gas emission reduction goals and targets, and

v. disaster planning and contingency funding.





A **process** to ensure that the municipality's asset management planning is aligned with Ontario's land-use planning framework, including any relevant policy statements issued under subsection 3 (1) of the Planning Act, any provincial plans as defined in the Planning Act and the municipality's official plan.

An explanation of the capitalization thresholds used to determine which assets are to be included in the municipality's asset management plan and how the thresholds compare to those in the municipality's tangible capital asset policy, if it has one

The **persons responsible** for the municipality's asset management planning, including the executive lead.

An explanation of the municipal **council's involvement** in the municipality's asset management planning.

The municipality's commitment to provide **opportunities for municipal residents** and other interested parties to provide **input** into the municipality's asset management planning.

Every municipality shall prepare its first strategic asset management policy by July 1, 2019 and shall review and, if necessary, update it at least every five years.





Community Connections

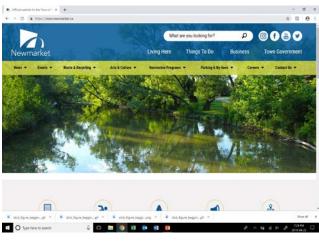
Web Presence

Dashboard

Regular updates to Council (Presentations, Information Reports, Work Shops, Annual updates)

Annual updates included in Community Report









Intranet Presence

Quarterly Communications to staff

2-way communication with staff





From the Office of CAO **CAO Update**



















Data Management Strategy

Data inventory review incl. asset hierarchy, asset identification and asset attributes

Performance assessment framework (LOS & KPI)

Models to link Operations & Maintenance activities

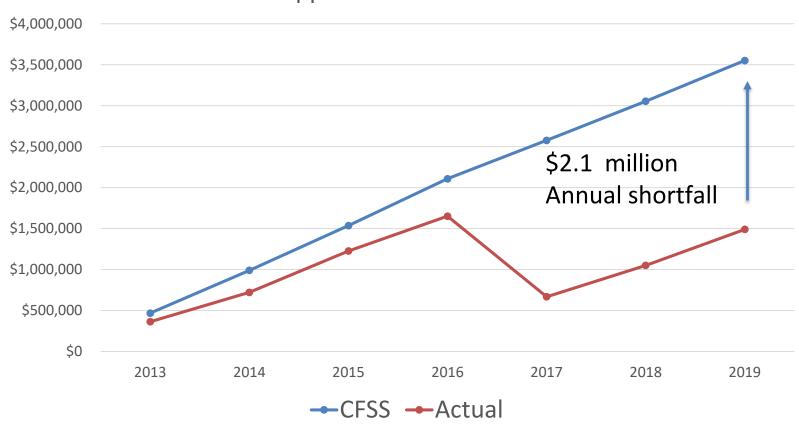
FISCAL BALANCE





Tracking the Capital Financing Sustainability Strategy Newmarket Strategy

Tax-supported ARF contributions





Projected Funding Gap

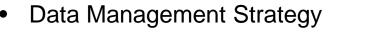




STRATEGY NEEDS



- Financial Sustainability Strategy
- Risk Strategy (Corporate & Operational)





NEXT STEPS



Policy Approval – June 24, 2019

Asset Management Plans for Missing Assets

- Storm Water
- Facilities
- Parks
- Fleet
- Natural Assets







