

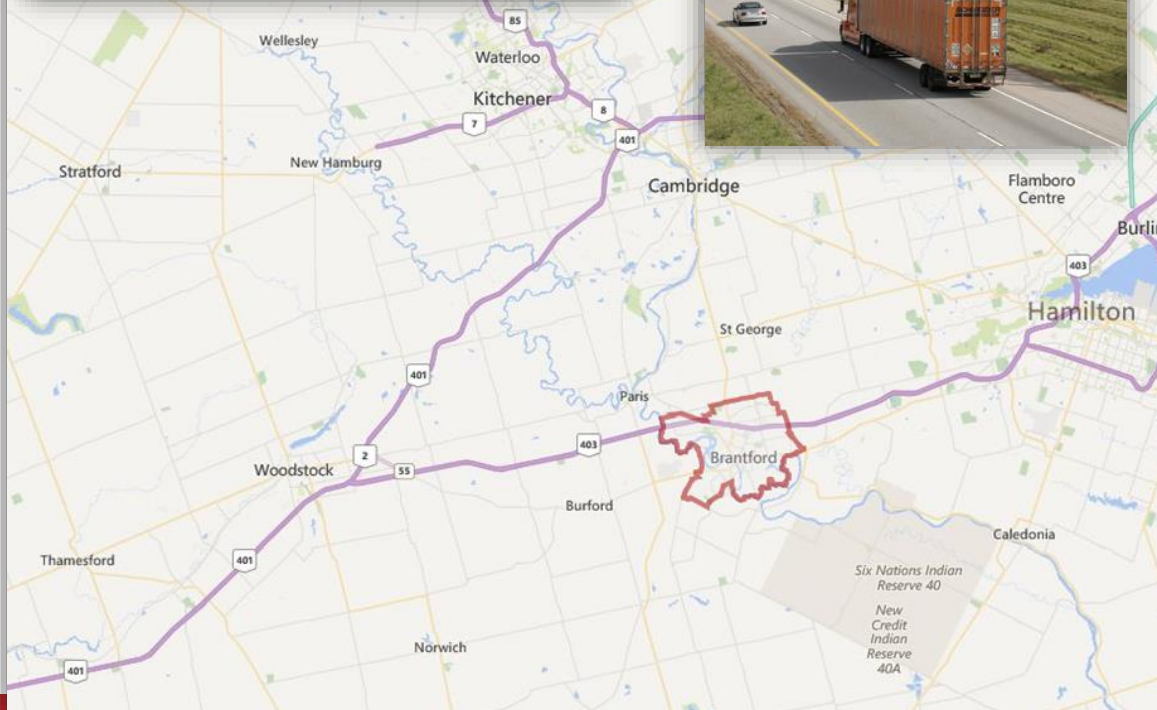
# Integrating Asset Management, Growth Planning and Lifecycle Costing

AMONTario - November 20, 2019



# The City of Brantford

- Established in 1877
- 73 square kilometers situated on the Grand River
- Located on Hwy 403 corridor between Hamilton & London
- Surrounded by Brant County
- 100,000 people
- Single-Tier Government responsible for all aspects of municipal services & management
- Extensive infrastructure base - \$3+ billion replacement



# What is Asset Management (AM)?

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## Asset

item which has value, or potential value to the City

**Tangible** (bridge) or **Intangible** (software)



Make the Best  
Possible Decisions



Manage Risk



Work Towards  
Long Term Strategic  
Objectives



Optimize Lifecycle  
Costs



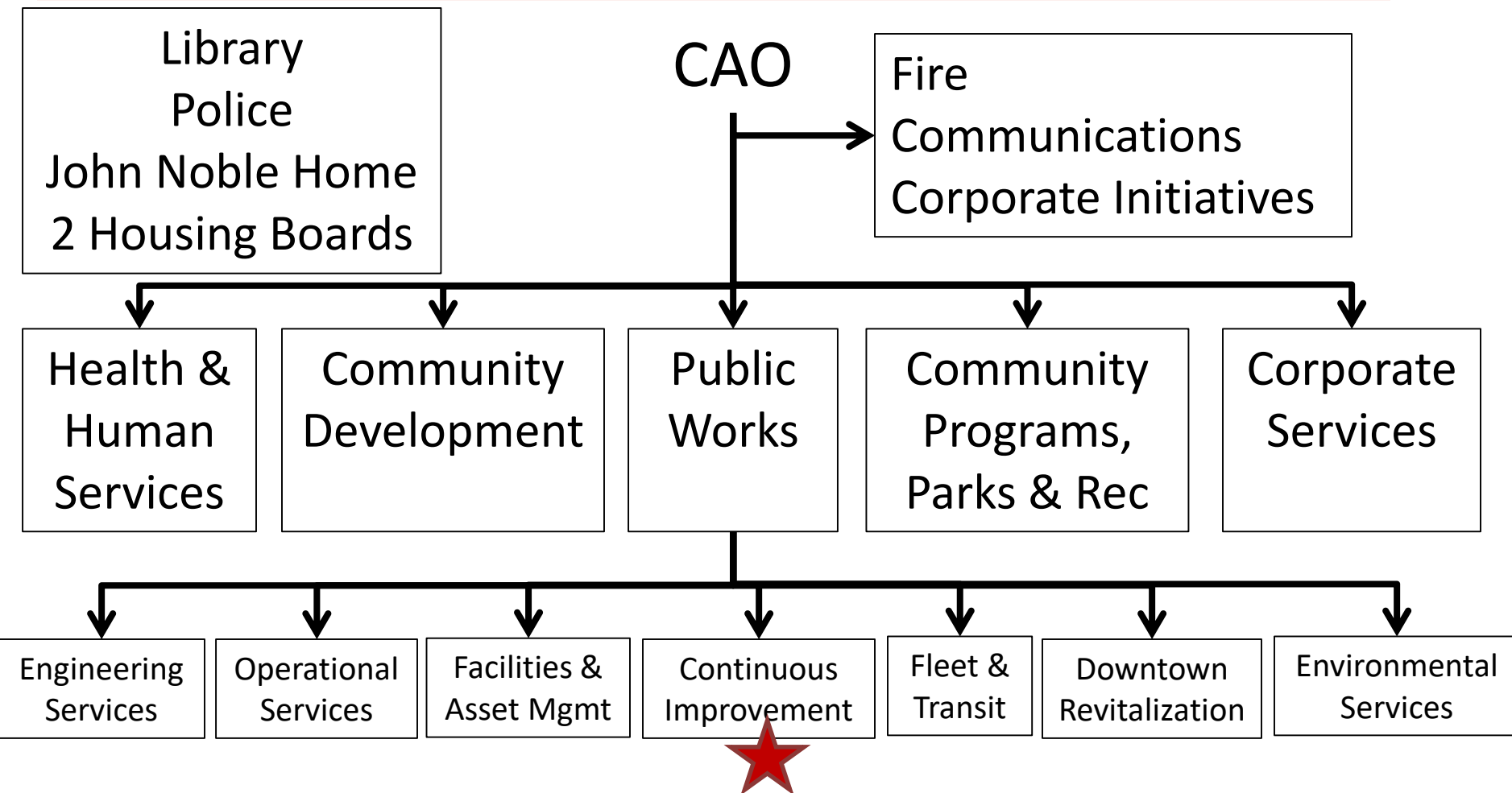
Provide  
Satisfactory  
Levels of Service

# Asset Management Seeks to Answer

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1. What do we own?
2. Where is it?
3. How much longer will it last?
4. What condition is it in?
5. What condition should it be in?
6. How is it performing?
7. How should it be performing?
8. What is the gap?
9. How much to replace it?
10. What action (maintain/repair/replace/expand) should we take?
11. When should we take that action?
12. How resilient is our infrastructure to climate change?

# Brantford Organization Structure

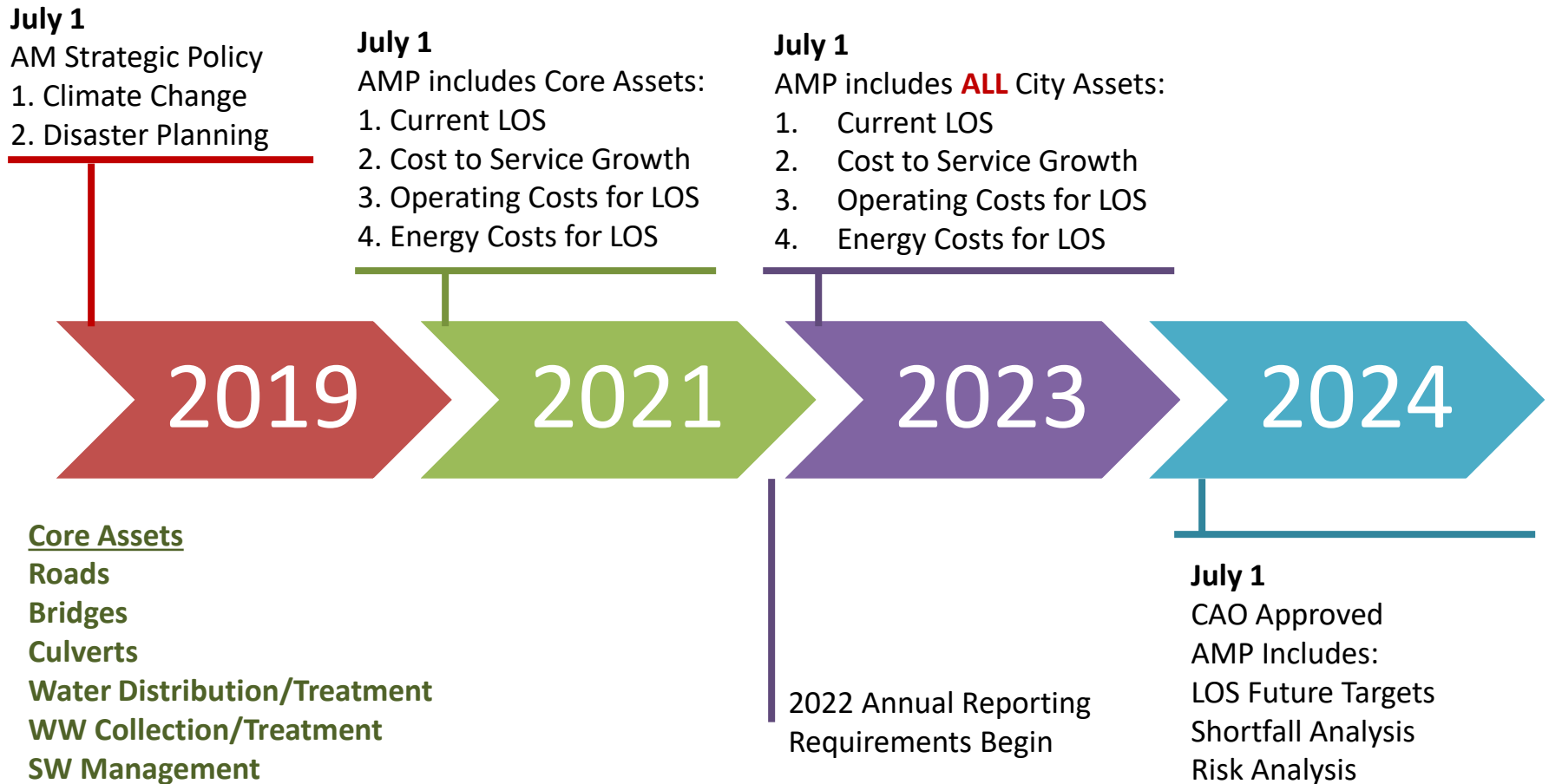


# Chronology of Asset Management

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# O.Regulation 588-17 Time Frame



# O.Reg 588/17 – Readiness Assessment

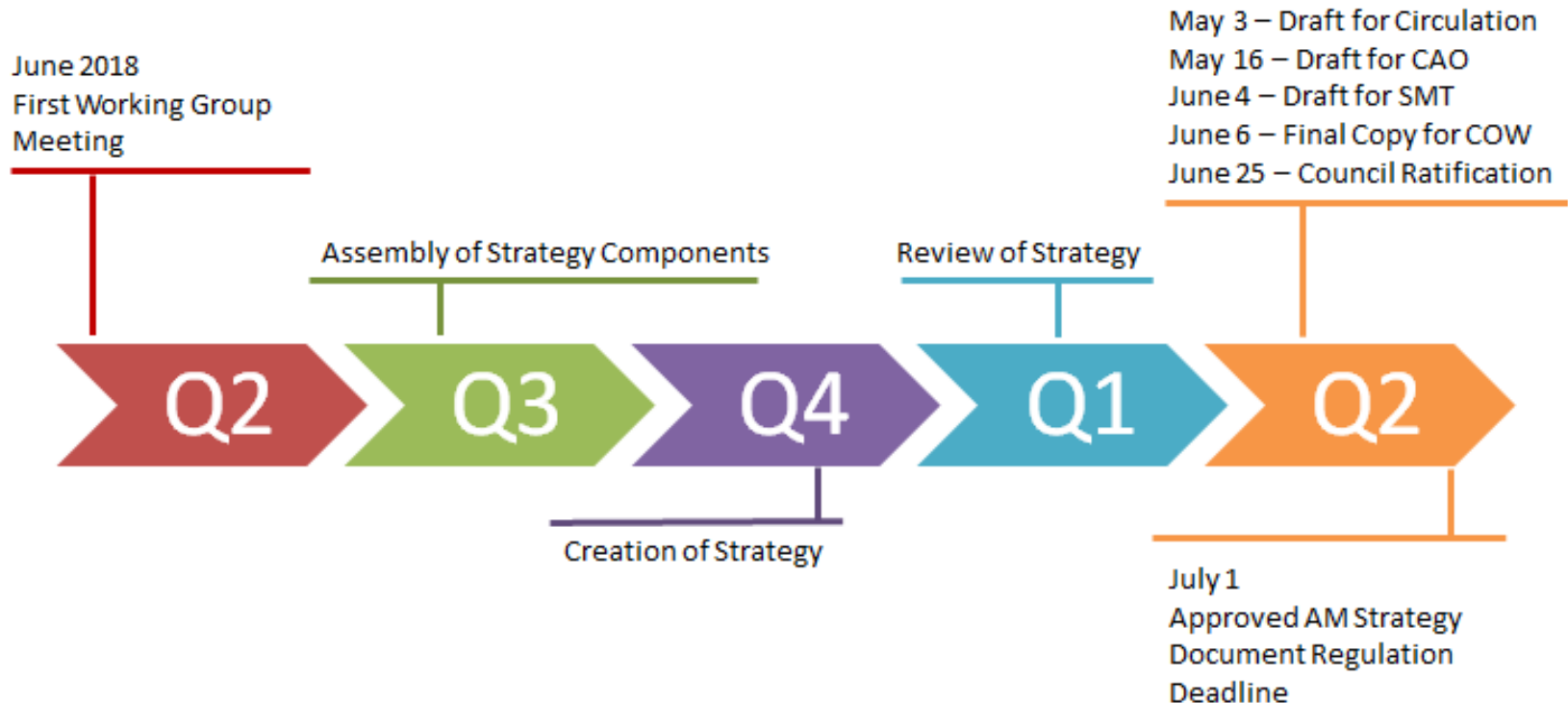
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Required Data / Reporting Requirements	Status
Asset Management Strategic Policy	X
Inventory & Condition	✓
Levels of Service (Current & Proposed)	X
Costs to Service Growth	X
Energy Costs for 10 years for LOS	X
Capital Funding Source Projections	✓
Operating & Maintenance Costs	X
Shortfall and Risk Analysis	X

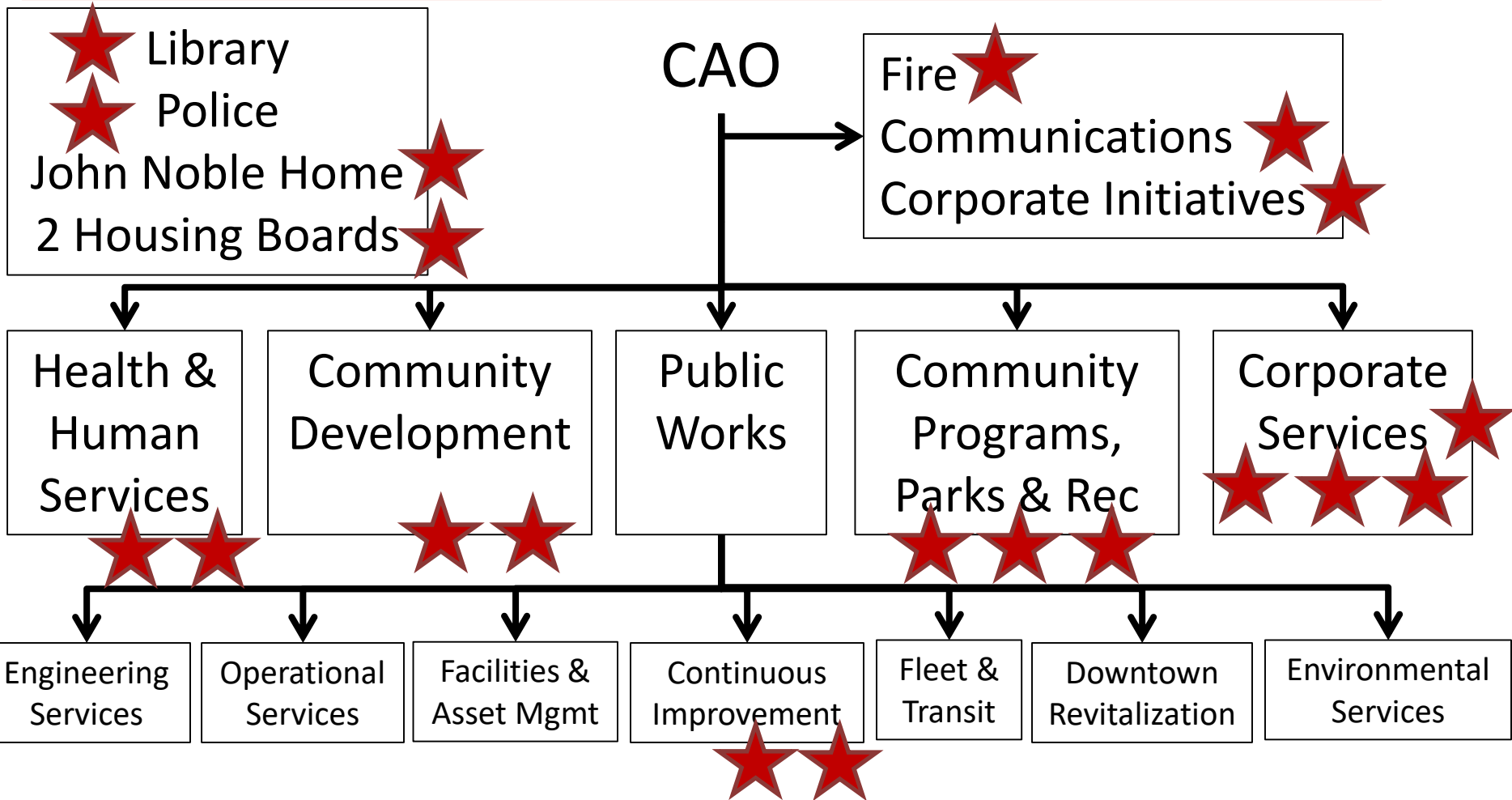
# FILLING THE GAPS

## Strategic Asset Management Policy

- Public Works – request for support from CAO’s office
- Mandate supported by CAO’s office
- Developed a Corporate Team (including Local Board Representatives)



# Brantford Working Group Members



# Strategic Asset Management Policy

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- Council Adoption– May 2019
- Key Components



Strategic Alignment



Guiding Principles



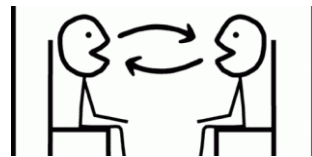
Capitalization Thresholds



How AMP Supports the Budget



Alignment with Ontario's Land-use Planning Framework



Stakeholder Engagement



Commitment to Address Climate Change



Governance and Continuous Improvement

# Growth Planning Questions

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1. How many new assets do we need?
2. Where do we need them?
3. What will the capital costs be?
4. What will the O&M costs be?
5. How do we help Council make informed decisions about developments?
6. How can Asset Management help support Ontario's land use planning framework?

# Lifecycle Questions

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1. What are the capital costs of our assets?
2. How long will this asset last?
3. What is an acceptable condition for this asset?
4. What are the O&M costs over the assets' life?
5. What are the energy costs over the assets' life?
6. What Level of Service do we currently provide?
7. What Level of Service does our community expect?
8. What Level of Service is our community willing to pay for?

# Council Report Appendix B – 20 Action Items

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- Timelines Q4 2019 – Q4 2024
- Three main groups:
  - Plan Development (9/20 Action Items)
  - Plan Support (2/20 Action Items)
  - Plan Implementation (9/20 Action Items)

# Plan Implementation Q2 2020 – Q4 2023

## Cost to Service Growth / Alignment with Ontario's Land-Use Planning Framework

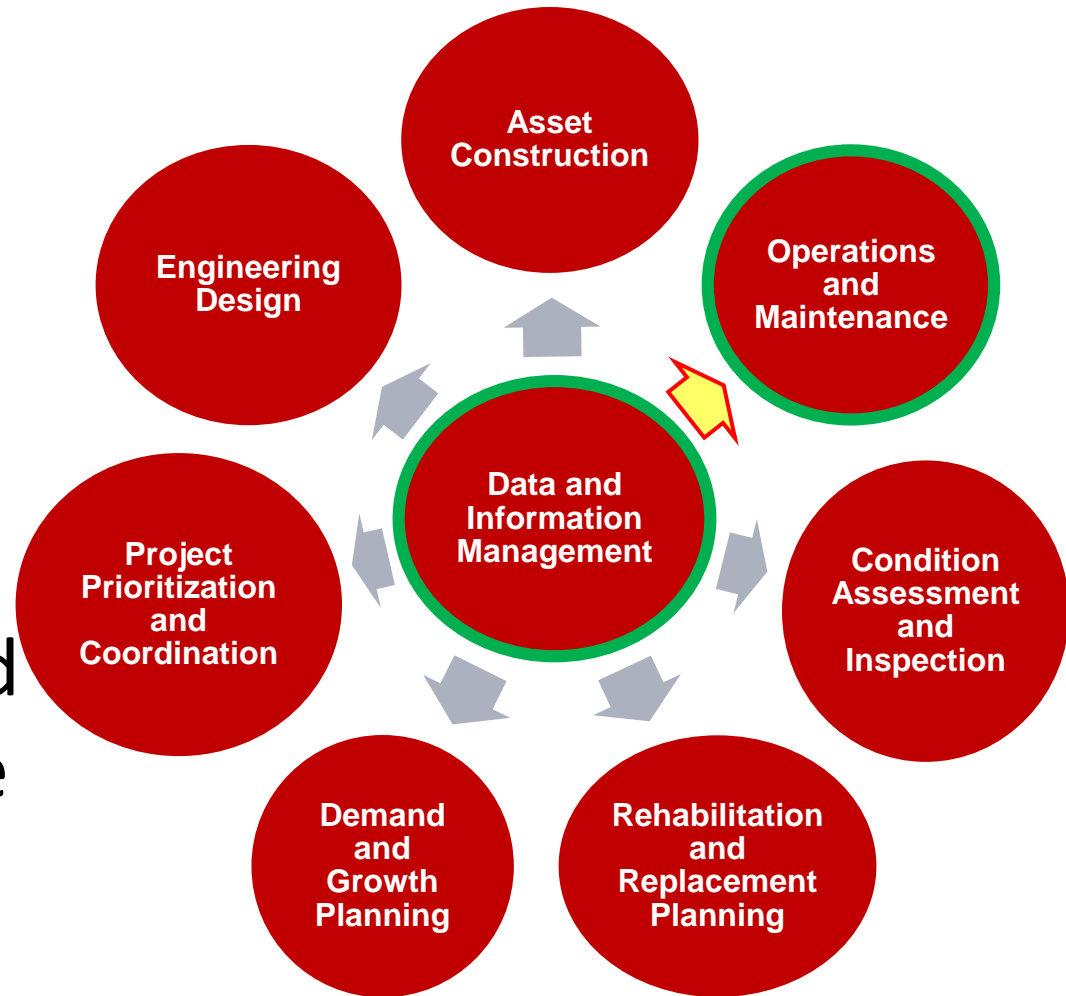
Existing Practices	Future Practices
Master Servicing Plans, Transportation Master Plans – capital construction \$\$	Master Servicing Plans, Transportation Master Plans - <b>Lifecycle</b> \$\$
Corridor Planning (Growth / SOGR alignment)	Introduction of Financial Impact Study (requirements template, terms of reference changes)
DC Background & By-law	Council Report Modification to include Financial Impact Study results

# Plan Support – O&M Cost Tracking

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## Activity Tracking / Maintenance Management

- Last piece of the puzzle
- Data-driven decisions
- Activity/Asset Lifecycle Costing
- Knowledge enabled – mobile workforce

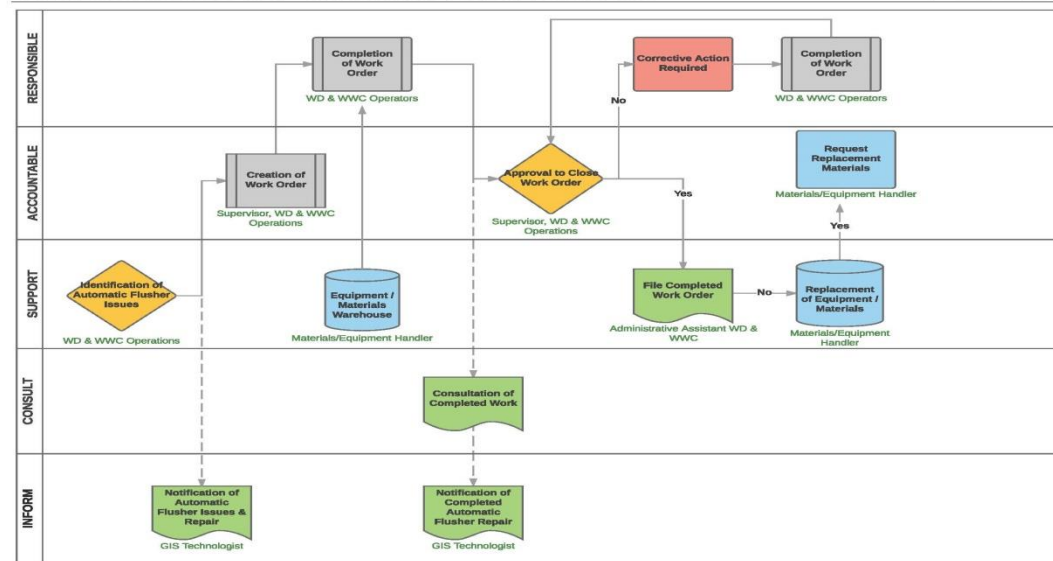


## Phase I – User Needs Assessment

- 18 month process
- 10+ departments involved
- 30+ workshops
- 500+ business processes mapped
- Cross Section of Stakeholders
  - Front Line
  - Senior Management
  - Managers & Supervisors
- Collaborative Environment
  - Open communication
  - Building relationships

BUSINESS PROCESS MAP - AUTOMATIC FLUSHERS REPAIR

February 17, 2017



## Outputs

- 70+ Asset Categories identified/ confirmed (GIS-based)
- Consolidated Activity Summary by Operational Group & Asset Class
- Comprehensive set of technical functional requirements

Operational Area	Asset Types	O&M Activity Count
<b>Solid Waste Operations</b>	Landfills, transfer stations, buildings, pumping stations, gas reclamation facility	58
<b>Corporate Facilities</b>	Corporate administrative facilities, airport, vacant lots	47
<b>Transportation &amp; Parking</b>	Streetlight network, municipal surface parking lots, elevated parking garage, parking pay machines	62
<b>Transit</b>	Transit stopes & related infrastructure	28
<b>ROW Operations</b>	Traffic signs, roadside ditches & natural watercourses, roads, sidewalks, bridges, retaining walls, guard rails, sound walls, fences, stairways, garbage receptacles, signalized intersections, sign supports	162
<b>Environmental Services</b>	Watermains, sanitary, & storm mains, SWM facilities	178
Total		535

## Phase II – Software Procurement & Implementation

- Further maintenance optimization (Reactive -> Pro-Active/ Preventative)
- Confirmation of integration needs
- Competitive Procurement (including front-line staff)
- Implementation (Configuration, Testing, Training)
- Mobile Technology Investment

### SHOPPING LIST

- ✓ GIS Centric
- ✓ Easy to Use
- ✓ Mobile Friendly



## Software Procurement

- Competitive 3-Stage Process
  1. Full RFP – Vendor shortlist (scored)
  2. Software Demonstrations (scored)
  3. In-Field Resource Confirmation
- September – Shortlisted 3 Firms
- October / November – Vendor Demonstrations
- Anticipated award - December (18-24 month implementation)

# Asset Management Journey – Next Steps

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THANK-  
YOU

