Demographic Polling: Understanding Your Municipality

What is the size of your municipality?

A. Less than 10,000
B. 10,000-25,000
C. 25,000-50,000
D. 50,000-100,000
E. Greater than 100,000
Would you describe your municipality as (select all that applies)

A. County
B. Northern
C. Regional and Single Tier
D. Rural
E. Small Urban
F. Large Urban
Would you describe your municipality as (select all that applies)

A. County
B. Northern
C. Regional and Single Tier
D. Rural
E. Small Urban
F. Large Urban
Where are you in the asset management planning process?

A. Haven’t started yet
B. Currently working on the first draft
C. Completed the first plan, currently refining/improving/expanding
D. Complete

25% 25% 25% 25%
What is the greatest challenge you’re facing with the AMP?

A. Improving information/communication between departments
B. Lack of time/capacity
C. Knowing where to source resources / lack of resources
D. Getting Council buy-in
Agenda

• What are we trying to do?
• Why are we trying to do it?
• Where are we?
• Where do I start?
WHAT ARE WE TRYING TO DO?
Our Goal

• Provide Council with accurate and timely information to support decision-making on the full range of business and activities of the municipality

• Session NOT about the analytics or the methods

• It is about creating a culture where the all in costs of actions are known and informed decisions and trade-offs can be made

• The phrase today: “Evidence based policy making”
Comprehensive

LTFP

- Strategic Plans
- AMP
- Capital (new)
- Capital (existing)
- Official Plan
- Master Servicing Agreements
- Operations
- Service Levels

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Comprehensive (con’t)

• You might not have all of those plans/docs
• But you probably have the activities
• Do you know the all in cost implications of all that you do?
  – Full cost recovery for water?
  – Long-term costs of maintaining council’s service standards for:
    • Roads, bridges, buildings?
• Do you have the financial information you need for all of the businesses you are in?
Not Just a Finance Job

Finance  Works  Planning  Council
Helping Council understand – Why AMP?

• We own lots of assets
• We deliver valued services with these assets
• Costly to buy, maintain and operate
• Own assets in variety of unrelated businesses
• We need to understand the costs of our services and assets to ensure we can afford to continue to provide them
• Ignoring these costs is really not good management or oversight
Helping Council understand

• No infrastructure funding from Province without an asset management plan
  – Likely that the plans will be more specific as time goes on

• Gas tax will be linked to evidence of progress on AMP

• However, even if there was NO funding, AMP is the right thing to do. Period.
6 Reasons Why AM is Important

• Local government owns most of the assets
• Many of the assets are old
• We have been under investing in our assets (infrastructure deficit)
• TCA accounting will shine a light on assets and asset consumption
• Funders care
• Assets being consumed faster than being rehabilitated
Which activities are you responsible for in your municipality? (multiple answers allowed)

A. TCA Accounting
B. AMP Development
C. Budget
D. Asset maintenance, renewal, replacement
E. Allocating resources
Do we need better information to inform the public/Council?

A. Yes
B. No
Do you have a strategy for AMP?

A. Yes
B. No
Do you have an AMP for all assets?

A. Yes
B. No, have it for some
C. None at all

33% 33% 33%
WHERE ARE WE?
MFOA’s Review

• MFOA reviewed over 50 AMP’s to help us determine next steps, tools, training, etc.
• Submitted AMPs were huge leap forward
• Different places and different stages
• However, AMP funding and timing generally required the use of existing information
• 2014 and beyond will involve refining AMPs
• Some areas of work:
  – Service level analysis
  – Cost refinement
  – Condition ratings/risk analysis
  – Life expectancies
  – Project prioritization
Working with Council and the Public

• Soft side of AM
  – Governance
  – AMP maintenance
  – Communications
  – Integration with other processes
    • Budgets
    • Master servicing plans
    • Development charges studies
MFOA’S AM TOOLS
AMP tools

- With support from MMAH, MFOA built a number of AM tools
- Tools and recorded webinars available on our website
- Tools were informed by what we saw as some gaps in the plans we reviewed
- Target audience was small and medium sized municipalities
The tools

• Templates
  – Forecasting costs and revenues
• Honour Roll
  – Good AM practices
• AMP checklist
• Tip sheets
• AM report card
MACRP Model

• The Municipal Asset Cost and Revenue Projection (MACRP) model is intended to provide assistance to municipalities in their efforts to develop or revise asset management plans

• The MACRP model is designed to project asset replacement costs over a fifty year time horizon

• Was built in consultation with several small to medium sized municipalities
Model (con’t)

• Runs off of asset inventory
• Uses construction index to estimate replacement costs where they are not known
• Has a 50 year time horizon
• Can be customized to add data related to condition, risk, etc.
• Produces long-term cost stream associated with maintaining existing asset base by asset class and year
Model (con’t)

• Produces aging profiles by asset class
• Allows user to estimate future revenues and measures funding shortfalls
• Model is not a full fiscal impact model
  – Does not include operations
  – Does not include and is not driven by a growth forecast (population, employment, housing, infrastructure)
Purpose

“Rather than trying to re-invent the wheel, by teasing out strengths of small and medium-sized municipalities’ plans, we hope to expedite staff research, fast-track the plan revision cycle and encourage Ontario municipalities to learn from some of the good ideas and best practices championed by other local governments when updating their own plans.”
AM Checklist

• AM is multi-year plan covering thousands of assets that is integrated with engineering studies, master servicing agreements, strategic plans, budgets and LTFFPs

• It is a very large undertaking involving all departments

• Without a “to do list” things can go off the rails
Our Checklist

• It builds on the “self assessment checklist” provided by the Ministry of Economic Development, Employment and Infrastructure

• It is a checklist for filling in gaps and refining your AMP

• It is meant to include the elements of AMP contained in the AM Guide

• Goes beyond the “number crunching” part of AM
What It Covers

• AMP integration
• Internal AMP governance
• Council support
• Asset inventory
• Asset age and consumption rates
• Condition
• Levels of Service
What it Covers (con’t)

• Budgeting
• Finance policies
• Other future actions
  – Procurement strategies
  – Use of technology
  – ASD
  – Cost reduction strategies
What the Checklist Does

• Provides a good **multi-year** “to do” list for AMPs
• It can set out all of steps to be done
• However ......
What the Checklist Does Not Do

• Thinking still required about who? What? How? When?
• Not a project process map or gantt chart
• Lots of thinking/planning still required
A. Yes, and it works well
B. Yes, but not sure it’s effective
C. No
Has your municipality set service levels?

A. Yes
B. No
Does your municipality have? (select all that applies)

A. A tangible capital assets system  
B. A work management system  
C. A decision support system  

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Asset Management Tip Sheets

1. Reporting to Council on Asset Management Plans
2. Meeting Requirements of O.Reg. 284/09
3. Integrated Asset Management Planning
4. Budgeting for Long-Term Asset Management
6. Asset Management Planning & Implementation Q&A
Tip Sheet #1
Reporting to Council

- Tasked with keeping Council & the Public informed
- Getting Council “buy in” to fund capital infrastructural renewal is a challenge
- A key to success:
  - Providing Council with the right information to make informed decisions
Tip Sheet #1
Key Information to Provide

1. Condition of assets and asset categories
2. Remaining Useful life of assets
3. Total replacement value of assets?
4. Consequence of asset failure
5. Recommendation of building reserves
Tip Sheet #1
Sample of Information Presentation

- Important for to illustrate the remaining useful life of assets in conjunction with the condition assessment analysis

- Old infrastructure does not necessarily mean the assets are in “poor” condition
- How much infrastructure is overdue?
- Is the deficit improving or worsening?

**Infrastructure Deficit "Overdue" Assets Required Immediately**

<table>
<thead>
<tr>
<th>Year</th>
<th>Buildings</th>
<th>Sidewalks</th>
<th>Fleet</th>
<th>Bridges</th>
<th>Roads</th>
<th>Wastewater</th>
<th>Water</th>
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<td>$0</td>
<td>$5,000,000</td>
<td>$10,000,000</td>
<td>$15,000,000</td>
<td>$20,000,000</td>
<td>$25,000,000</td>
</tr>
<tr>
<td>2014</td>
<td>$0</td>
<td>$0</td>
<td>$10,000,000</td>
<td>$15,000,000</td>
<td>$20,000,000</td>
<td>$25,000,000</td>
<td>$30,000,000</td>
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<td>$15,000,000</td>
<td>$20,000,000</td>
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<td>$30,000,000</td>
<td>$35,000,000</td>
</tr>
<tr>
<td>2016</td>
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<td>$0</td>
<td>$20,000,000</td>
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<td>$30,000,000</td>
<td>$35,000,000</td>
<td>$40,000,000</td>
</tr>
<tr>
<td>2017</td>
<td>$0</td>
<td>$0</td>
<td>$25,000,000</td>
<td>$30,000,000</td>
<td>$35,000,000</td>
<td>$40,000,000</td>
<td>$45,000,000</td>
</tr>
</tbody>
</table>

**Infrastructure Deficit will Continue to Increase Under Existing Conditions**

**In-Year Capital Contributions**

**In-Year Capital Requirements**

**HEMSON**
Tip Sheet #1
Annual Provisions

- How much should we be contributing annually?
- What are we doing currently?
Tip Sheet #1
Effective Communication of Results

- Easy to interpret charts will help Council and Public understand the state of municipal infrastructure and how it is changing.

- Illustrating year-over-year changes in reserves can help Council understand significant contributions or withdrawals (related to capital investment).
Tip Sheet #3
Asset Management & Strategic Planning

DEVELOPMENT CHARGES
STUDY

WATER & SEWER FULL
COST RECOVERY STUDIES

ROADS MANAGEMENT
STUDY/SOFTWARE

FLEET MANAGEMENT
PROGRAM/SOFTWARE

INSURANCE SCHEDULES

OTHER

ASSET
MANAGEMENT
STUDY

LONG-RANGE
FINANCIAL PLAN

GROWTH MANAGEMENT
STUDY

PERFORMANCE
MEASUREMENT

SERVICE LEVEL
TRACKING & ANALYSIS

FINANCIAL DOCUMENTS

OTHER
(Grant Applications)
Tip Sheet #3
Long-Range Financial Planning Context

- Base Parameters (Forecasts, Plans, Policies)
  - Population, Housing, Demographic & Non-Residential Projections
  - Financial Parameters, Assumptions & Drivers
  - Assessment, Tax & Rate Revenue Forecasts
  - Operating & Capital Forecast
  - Infrastructure Repair & Replacement
  - Tax and Rate Impact Analysis
  - Sensitivity Testing
  - Financial Policies, Objectives & Measures
Tip Sheet #3
Capital Budgeting 101

- Establish short, medium and long-term goals

- Essential that municipalities are prepared:
  - Regularly update their asset registry
  - Improve information for full range of capital assets – in addition to engineering related infrastructure
  - Improve and update condition assessments and replacement costs
Tip Sheet #3
Developing a Capital Prioritization Model

- Develop a Capital Prioritization Model to evaluate the validity of each project
- Weigh the importance of each project based on general guidelines:
  - Health and Safety
  - Service Levels
  - Strategic directions and community priorities
  - Mandates
  - Operating budget implications
  - Economic Development
Tip Sheet #3
Important Considerations

- Assets that have environmental or health risks should be considered the highest priority

- Desired service levels
  - e.g. allow more cracks on a road before replacement
  - e.g. change standards for contributed capital to better acknowledge municipality's requirement to replace it

- Council goals and objectives

- Factor in operating budget implications
Tip Sheet #3
Funding of Prioritized Projects

- Key funding questions that should be answered after projects have been identified

1. Can the projects be funded under existing conditions?

2. Would there be significant increase to user rates or property taxes?
   - Identify level of increase required
   - Can alternative revenue tools be used

3. Can debt financing be used?
Most municipalities are faced with numerous fiscal challenges – Asset Management is another pressure.

A key to success is providing Council, and the public, with solid data and information to allow evidence based decision making.

Best to take a long-term perspective.
Tip Sheet #5
Should contributions be at 100%?

- Need to be contributing to asset management needs and reserves:
  - But should it be at 100% of fully-calculated needs?
- Needs often calculated on engineered “designed life”:
  - Assets often last longer
  - Repair & rehabilitation approaches
  - Dynamic asset management
Tip Sheet #5
Value of Reserve Fund Policies

- Maintaining adequate level in asset reserve funds is essential
- Reserve fund balance critical to long-term fiscal sustainability
- Formal reserve fund policies improve chance of success:
  - Intended use/utilization of reserves
  - Minimum, maximum and target reserve balances
  - Identified funding sources
Tip Sheet #5
Expenditures & Reserves

Mitigating Expenditures through Reserves

- Targets can be set as a ratio of $ in reserves to asset replacement value
- For example, York Region aims to have 20% of asset replacement value in reserves
- Minimum balance should be established to absorb costs associated with unplanned work
Does your municipality have a capital plan?

A. Yes, 10 year plan
B. Yes, 5 year plan
C. Yes, one year plan
D. No
Does your municipality have Master Servicing Plans?

A. Yes
B. No
Are the master service plans integrated with long-term financial forecasts?

A. Yes
B. No
C. What are long-term financial forecasts?

33% 33% 33%
Does your municipality have Financing Plans?

A. Yes
B. No
C. What are financing plans?

33%  33%  33%

Yes   No   What are financing plans?
Report Cards

- Commonly understood
- They aggregate large amounts of information
- They convey important analytical information such as condition risks and costs
- The data that supports the report card helps to establish priorities for setting budgets
Types of Report Cards

• Basic condition rating report card
  – This might be all that smaller places need

• Multi-variable report card
  – Larger jurisdictions might need to know more than just the condition of the asset

• Funding report card
  – Some report cards add a measure for the extent to which asset management is fully funded
<table>
<thead>
<tr>
<th>Numeric Grade</th>
<th>Alpha Grade</th>
<th>Description</th>
<th>Condition Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>A</td>
<td>Excellent</td>
<td>The asset and its components are functioning as intended; limited (if any) deterioration observed on major systems</td>
</tr>
<tr>
<td>2</td>
<td>B</td>
<td>Good</td>
<td>The asset and its components are functioning as intended; no maintenance is anticipated within the next 5 years</td>
</tr>
<tr>
<td>3</td>
<td>C</td>
<td>Fair</td>
<td>The asset and its components are functioning as intended; normal deterioration and minor distress observed; maintenance will be required within the next 5 years to maintain functionality</td>
</tr>
<tr>
<td>4</td>
<td>D</td>
<td>Poor</td>
<td>The asset and its components are not functioning as intended; significant deterioration and distress observed; maintenance and some repair required within the next year to restore functionality</td>
</tr>
<tr>
<td>5</td>
<td>F</td>
<td>Very poor</td>
<td>The asset and its components are not functioning as intended; significant deterioration and major distress observed, possible damage to support structure, may present a risk to people; requires immediate attention</td>
</tr>
</tbody>
</table>
The Final Product

<table>
<thead>
<tr>
<th>ASSET GROUP</th>
<th>2009 RATING¹ and TREND²</th>
<th>COMMENTS (major factors impacting scores)</th>
<th>COMPARATIVE RATING &amp; TREND from 2005 / 2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>B+</td>
<td>Status quo can be maintained with effective renewal investment decisions with advanced AM practices.</td>
<td>B</td>
</tr>
<tr>
<td>Wastewater</td>
<td>B-</td>
<td>Key AM plan improvements for facilities balanced by funding issues - higher energy costs at WWTP, costs</td>
<td>B</td>
</tr>
<tr>
<td></td>
<td></td>
<td>for regulatory / environmental compliance and wet weather flow management and allocations needed for</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>laterals.</td>
<td></td>
</tr>
<tr>
<td>Storm Water</td>
<td>C-</td>
<td>Condition OK but major concerns over lack of dedicated funding for O&amp;M and capacity impacts of climate</td>
<td>C</td>
</tr>
<tr>
<td></td>
<td></td>
<td>change / flooding.</td>
<td></td>
</tr>
</tbody>
</table>

- By class, with grades, trends, comments and comparison since last report
Adding Risk Analysis

Risk Profile

- Housing
  - Low: $6.7M
  - Medium: $15.6M
  - High: $58.2M

- Water
  - Low: $15.6M
  - Medium: $58.2M
  - High: $147.8M

- Wastewater
  - Low: $58.2M
  - Medium: $147.8M

- Roads
  - Low: $147.8M
  - Medium: $147.8M

Legend:
- Inherent Risk
- Target Risk
- Current Risk
- Risk per 10-Yr Capital Recommendation
- Projected 10-Yr Risk (No Funding)
## Adding Funding

<table>
<thead>
<tr>
<th>Grade</th>
<th>Range (average annual spending as % of investment requirement)</th>
<th>Performance Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>87.5%-100%</td>
<td>Excellent</td>
</tr>
<tr>
<td>B</td>
<td>75%-87.5%</td>
<td>Good</td>
</tr>
<tr>
<td>C</td>
<td>62.5%-75%</td>
<td>Fair</td>
</tr>
<tr>
<td>D</td>
<td>50%-62.5%</td>
<td>Poor</td>
</tr>
<tr>
<td>F</td>
<td>&lt; 50%</td>
<td>Fail</td>
</tr>
</tbody>
</table>
Conclusion

• A wide variety of report cards are in use
• It is a great tool to make sense of lots of data and complexity
• Choose the report card that best suits your needs, but do use some type of report card to help council and the public understand the state of their infrastructure
WHERE NEXT?
Where are we going next?

• Refining AMPs
• Developing metrics
• Developing funding strategies
• Reporting to Council and the public on options to have informed decision making
Funding Strategies

• Role of debt and reserves
• Intergenerational equity
• Investment income as a source of capital financing
• Different strategies for different places
CHALLENGES

WARNING

CHALLENGES AHEAD
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