ASSOCIATION OF MANITOBA MUNICIPALITIES

INTRODUCTION TO ASSET MANAGEMENT

WORKSHOP

WITH YOU TODAY

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INTRODUCTIONS

If you would, please tell the group:

- Your name and where you're from
- Your level of exposure to asset management and goals for today
- Also, if you were given the choice, would you choose:
  a) to attend a Jets playoff game
  b) to be somewhere hot
  c) to be in a duck blind/fishing
  d) somewhere else…

GOALS

The Introduction to Asset Management Workshop is intended to:

1. Provide leaders with fundamental information about asset management and how it can be used to help support municipal operations.
2. Build a strong foundation of knowledge so you can better understand and promote asset management in your municipality.

AGENDA

1	10:00am – 10:30am	Introduction	Introduction to participants and facilitator
2	10:30am – 12:00pm	Getting Familiar	A high-level introduction to asset management.
	12:00pm – 12:30pm	Lunch	
3	12:30pm – 1:45pm	Getting Started	A more detailed look at how asset management principles are applied to municipal operations.
	1:45pm – 2:00pm	Break	
4	2:00pm – 3:00pm	Next Steps	Practical tips about how to get started and leverage asset management in your community.

GETTING FAMILIAR

FCM: WHY INVEST IN ASSET MANAGEMENT?

Link to: Why invest in Asset Management?

APPLYING ASSET MANAGEMENT TO YOUR CONTEXT

- Do these resonate with your community?
- Ad hoc planning
- Reactionary decision-making
- Pressing infrastructure issues and increasing requests for services
- Aging infrastructure
- Population growth or decline

Source: Federation of Canadian Municipalities. www.fcm.ca

INCREASING DEMAND FOR SERVICES

Questions:

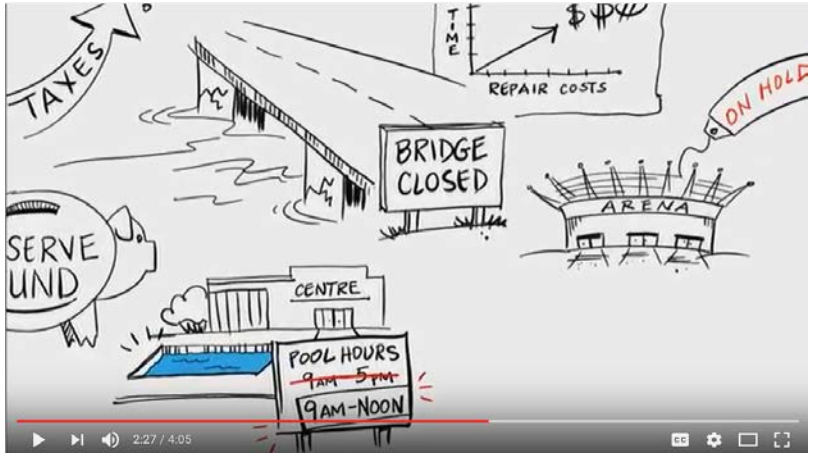
- What near-term concerns does your Council have with respect to Levels of Service (LOS) and infrastructure?
- What long-term (i.e. 5-10+ years) issues concern your leadership and citizens?
  - New water treatment plant
  - Developer cost charges
  - Bridge replacements
  - Economic revitalization
  - Riverbank management
  - Recreation Centres
  - Walking and cycle paths

Source: Federation of Canadian Municipalities. www.fcm.ca

TOUGH DECISIONS

Do these resonate with your community?

- What is your community's existing strategy to meet its infrastructure requirements?
- How will it go about determining the timing of infrastructure renewal and development?
- How does it determine appropriate Levels of Service (LOS)?
- How will it minimize risk to citizens and the municipality while optimizing asset lifespans?

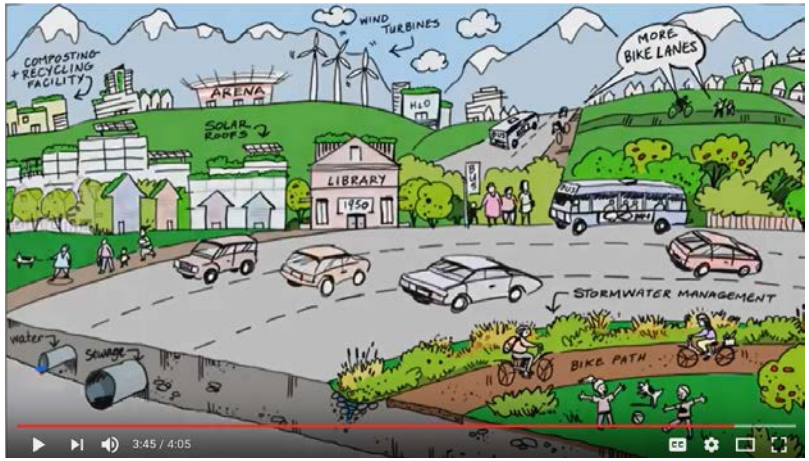


Source: Federation of Canadian Municipalities. www.fcm.ca

"SO, WHAT ARE WE DOING?"

An integrated asset management program will help us to:

- Understand the relationship between infrastructure and service delivery
- Align investment with the City's strategic vision and priorities
- Objectively evaluate and address long-term needs and opportunities
- Track and manage risks to the public and the City
- Take an evidence-based approach in making informed and defensible plans and decisions



Source: Federation of Canadian Municipalities. www.fcm.ca

THE NEED FOR ASSET MANAGEMENT

Manitoba municipalities know their assets and are well-aware of the financial pressures they are facing. What are the drivers affecting your community?

- Assets in poor condition
- New regulations and costs related to safety and the environment
- Keeping taxes low, but not enough funding
- Growth increasing demands on city services
- Demand for new services
- Desire for "exceptional" services
- Investments in capital projects were not accompanied by increases to operating budgets
- Decisions:
  - Defer investment?
  - Draw on reserves?
  - Decrease Levels of Service?

WHAT IS ASSET MANAGEMENT?

Asset management (or infrastructure asset management) is the way we manage the infrastructure we own.

We practice asset management by:

- Fixing a leak in the roof of a house to prevent more costly damage.
- Doing regular maintenance on our vehicles.
- Planning for major household expenses.

We do these things to ensure that we maintain what we own in the most cost-effective way to a standard that we feel is acceptable.

Asset management is a municipality's plan for how to manage municipal infrastructure in order to provide services to residents and other users in a way that meets their expectations, and is financially sustainable into the future.

WHAT ARE INFRASTRUCTURE ASSETS?

Municipal infrastructure exists to provide services to maintaining our standard of living, safety, well-being and economic prosperity.

Infrastructure assets can include:

- roads and bridges
- water distribution networks
- wastewater systems
- water treatment plants
- landfills
- culverts
- sidewalks
- buildings
- equipment

Municipal infrastructure is important because it provides services residents rely on.

WHAT ARE INFRASTRUCTURE ASSETS?

The International Infrastructure Management Manual outlines seven key principles to apply in your municipality.

WHY IS ASSET MANAGEMENT IMPORTANT?

Asset management helps municipalities maintain and operate infrastructure in the **most effective way** so critical services can be provided to the community.

The outputs of asset management planning help municipal leaders to make decisions about maintaining infrastructure and providing municipal services. Municipal leaders cannot make fully informed decisions without knowing information such as:

- full life cycle costs of owning and operating existing or proposed infrastructure;
- levels of service: current, expected future and desired;
- risks and how they are managed; and
- implications of future demands.

Practicing asset management helps provide municipal leaders with this information.

HOW DOES ASSET MANAGEMENT TIE INTO EXISTING PRACTICES?

Strategic Planning

A strong strategic plan includes:

- asset management
- financial reporting
- an official community plan
- a long-term financial plan.

Asset management ties in with these practices and can help strengthen the development and operation of municipal infrastructure and the services they provide to the community. All of these tools help a municipality produce a strong operating plan or business plan.

It is important that municipalities have these operational plans in place. Ensuring you have strong plans for governance and administration practices, or service delivery and public safety plans, will ensure the long-term sustainability of your community. **Asset management is critical to providing the data to help establish effective planning.**

WHAT IS MY ROLE AS A MUNICIPAL LEADER?

It is critical that both council and staff are engaged in the process, understand the benefits of asset management and buy into the need to practice asset management.

Municipal Administrators and Staff can use asset management to run the municipality more effectively through:

- managing service fees
- developing service plans
- compiling the municipal budget

Elected Officials can use asset management outputs to better prioritize decisions considering the community's best long-term interest. This information is especially helpful when communicating with stakeholders to help them understand what decisions are being made and why.

GETTING STARTED

ASSET MANAGEMENT PLANNING

This section helps explain some of the principles and practices you will need to implement asset management in your community.

Specifically, this section looks at:

- what makes up an asset management plan and how to develop an asset register
- how to apply life cycle costs
- how to examine levels of service and use this information for community consultation
- cost-effective management strategies and long-term financial planning.

HOW DO I GET STARTED?

Asset Register

Before you can begin to practice asset management, it is imperative that you know what you are trying to manage.

Asset registers outline the infrastructure owned by a municipality, describe individual segments of infrastructure, and document key attributes of each segment such as the location, age and current replacement cost.

HOW DO I GET STARTED?

Accrual Accounting

In Manitoba, most municipalities have completed an up-to-date asset register due to PSAB 3150 reporting of tangible capital assets.

Question: What could Asset Management add to PSAB 3150 tangible capital assets (TCA) requirements?

Answer: Existing asset registers tend to track historical or original capital costs, whereas Asset Management adds the current replacement cost and the expected remaining life of the asset segments.

HOW DO I GET STARTED?

What are asset segments?

The quality of an asset management plan is often directly related to the quality of the asset register. It is important that asset registers are properly broken into asset segments and components.

How is a "good" asset segment defined?

The asset segments should reflect a portion of the asset that is a reasonable size and that would be replaced at the same time for a similar cost. This means that each segment should have a common:

- year of construction
- type of construction
- type of materials
- expected useful life

Question: Can you think of an example of this?

EXAMPLE: ROADS

A municipal road might be broken into a segment that is one block in length as it was constructed at the same time and to the same standard. Within this one block of municipal road the segment would also have a number of components including road surface, road structure, curb and gutter, and sidewalks. This ensures that any single asset has a common useful life; since a road structure and a sidewalk are expected to have different useful lives they need to be considered as separate assets.

LIFE CYCLE COSTS

What are life cycle costs?

Municipal infrastructure life cycle costs include all of the costs that you would anticipate to occur during the ownership of an asset.

Consider purchasing a new vehicle, expenses include:

- Operating costs: e.g., registration, insurance and fuel.
- Routine or preventative maintenance: e.g., oil changes, new tires.
- Major repairs: e.g., replacing engine or suspension.

Some people mistakenly plan for only the initial purchase cost and still have to cover the full life cycle costs. Municipalities can fall into this same trap when acquiring infrastructure assets without realizing their commitment to future costs.

When looking at infrastructure assets the capital costs can be as little as 20% of the full life cycle cost.

LIFE CYCLE COSTS

According to the International Infrastructure Management Manual, full life cycle costs typically include:

- planning and design costs
- capital costs
- operating and maintenance costs
- rehabilitation and renewal costs
- disposal costs.

Life cycle costs can also include:

- financial management costs
- condition assessment costs
- audit costs
- review costs

LIFE CYCLE COSTS

Continuing the car example:

Questions: What could happen if we chose not to:

- change the oil
- replace balding tires, or
- fix a cracked windshield?

What risks might we introduce?

How may we have traded cost savings for accepting new risks?

Would we accept different risks for ourselves than for our children?

LEVELS OF SERVICE

What are levels of service?

As consumers we make choices about levels of service all the time. When we book a hotel room, we make a decision based on the hotel's rating and the associated cost.

We expect a higher level of service from a five-star hotel than a one-star hotel, but understand that a higher quality hotel room will likely come at an increased cost. Based on our priorities as consumers, we balance between an acceptable level of service and a cost that is affordable to us.

EXAMPLE: ROADS

Let's go back to our roads example and consider levels of service.

- Rural gravel road
- Traffic volumes of 100 vehicles per day
- Currently graded once every two weeks.
- Could either increase or decrease the level of service

Graded	Level of Service	Cost	Impact on Risk?
Once a week	Increased	Increased	**Decreased? How?**
Every two weeks	Current level	Current level	**No change?**
Every three weeks	Decreased	Decreased	**Increased? How?**

LEVELS OF SERVICE

Asset management is about balancing between the full life cycle costs of various services and the levels of service being provided. It is about knowing what levels of service customers expect and what they are willing to pay.

As a municipality do you know:

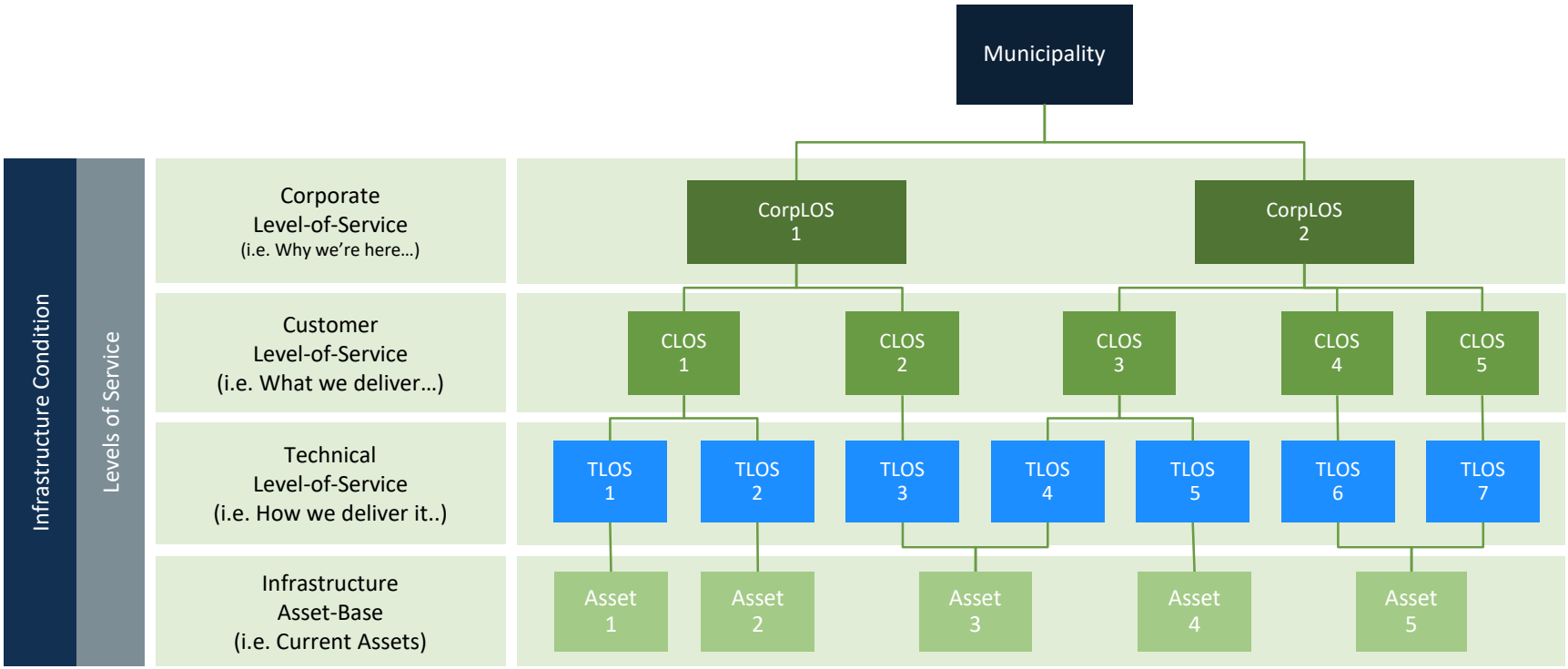
- the level of service you are currently providing to users?
- the annual cost to continue to provide the current level of service?
- how the level of service is expected to change in the future?
- if you are meeting the level of service expectations of your users?

If you can answer these questions then you are probably in a good position to plan for future expenditures within your municipality.

LEVELS OF SERVICE

Goals and Service Delivery

Municipal leaders benefit from a qualitative understanding how high-level service goals are connected to how customers/users perceive those services. Operations staff benefit from having performance metrics to achieve.



LEVELS OF SERVICE

How can levels of service affect risk planning?

Being able to clearly document the risks associated with the services municipalities provide supports good management. Risk management ensures council and staff are aware of the risks that exist, as well as the current activities that are used to reduce or manage these risks. Both current and proposed risk management activities should be incorporated into asset management and long-term financial plans.

Question: What are some risks associated with municipal services?

Or, how would we describe the change in risks with better or worse performance?

LEVELS OF SERVICE

How is community consultation used in asset management?

At some point in asset management planning it is necessary to ensure that the services you plan to provide to the municipality are those in which stakeholders place the most value.

It may also be important to determine if the services provided are at a level that the community finds acceptable or if those service levels should be decreased or increased.

LEVELS OF SERVICE

How is community consultation used in asset management?

To ensure that community consultation provides value for money, as a municipality you need to be both clear on what you are trying to achieve and be prepared with background information.

During consultation, stay aware of:

- life cycle cost implications
- associated risks

COST-EFFECTIVE MANAGEMENT STRATEGIES

What is cost-effective management?

Having cost-effective management strategies is about doing the right thing at the right time. This is often more difficult than it seems.

How do municipalities know what the right thing is (maintenance, replacement, etc.) and when the right time is?

Not only do municipalities need to know the optimal timing of the work they do, they also need to have the financial resources to do those right treatments at the right time.

COST-EFFECTIVE MANAGEMENT STRATEGIES

Often public works and engineering staff have a good idea of both the type and timing of treatments that lead to optimal infrastructure management.

Asset management planning can help determine what strategies are cost-effective. It is important that this information is communicated to decision makers to ensure that the funds are available in a timely way.

Question: What is an example of cost-effective infrastructure management for, say:

- roads
- community centres
- buried pipe?

COST-EFFECTIVE MANAGEMENT STRATEGIES

How does asset management link to long-term financial planning?

Financial planning ensures that communities operate in a way that is sustainable. Long-term financial planning is about understanding future municipal expenditures and how they will be funded. Asset management is an important part of financial planning because it predicts both the cost and timing of future infrastructure expenditures.

Long-term planning allows municipalities to better plan for and predict infrastructure expenses.

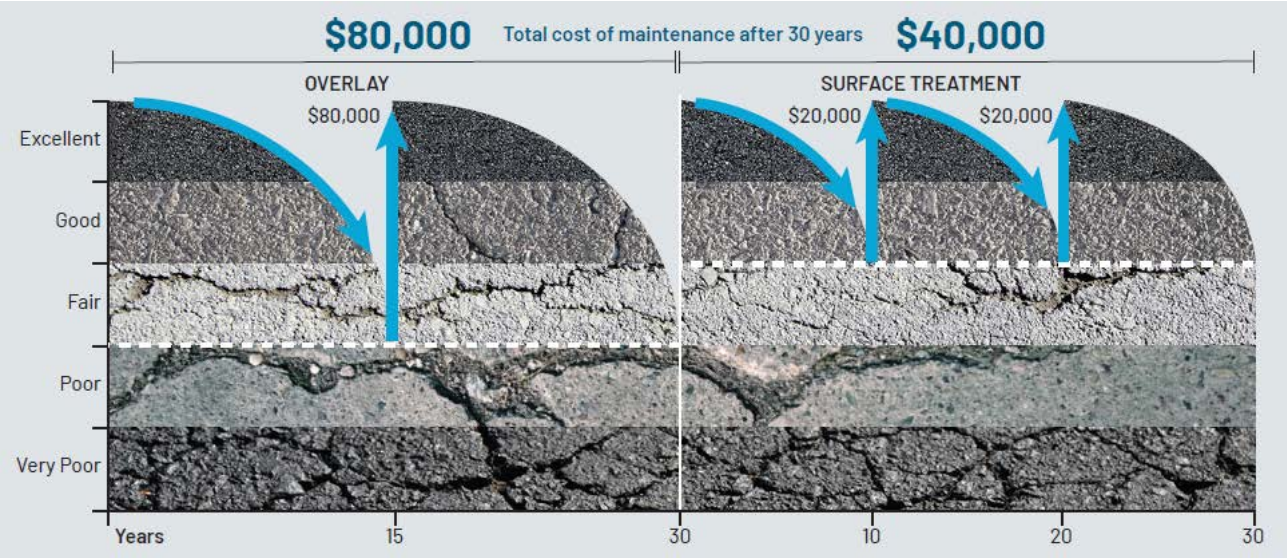
Question: What assets have you planned more than a year in advance and managed your financial plan to accommodate?

EXAMPLE: ROADS

Again, let's go back to our roads example to consider cost-effective management strategies.

Two approaches:

1. Reactive Approach – the municipality waits until the road segment fails and requires a major renewal (perhaps an overlay).
2. Proactive Approach – Instead of waiting for the pavement to reach poor condition, smaller treatments will be applied at the right time.



EXAMPLE: ROADS

Question: What are the results of this shift of management strategies?

Answers:

- Improved overall condition over the long-term
- Significant cost savings

Question: What might prevent us from pursuing this shift in thinking/planning?

NEXT STEPS

RECOMMENDED ACTIONS

What should I do to get started?

To ensure that asset management is successful, council and staff need to understand:

- how they will use this additional planning information
- how it will support municipal management.

Practical step: Identify a champion

Having an internal champion for asset management will increase the chances of successful progress and to get buy-in at both the staff and elected levels. Like any new project, asset management needs to be adequately supported and resourced to enable successful execution.

RECOMMENDED ACTIONS

What kind of support is out there?

You may want to consider:

- training opportunities for municipal staff and elected officials.
- engaging support from professional consultants to coach you through the development of an asset management plan.
- reaching out to fellow municipalities already practicing asset management.
- approach your municipal associations for support and advice.
  - Association of Manitoba Municipalities
  - Manitoba Municipal Administrators Association
  - Federation of Canadian Municipalities
- having your asset management champion join the Canadian Network of Asset Managers.

LEVERAGE YOUR ASSET MANAGEMENT INFO

How can I leverage asset management to support municipal planning?

Remember that all planning tools work together.

- utilize strong financial reporting and asset information
- develop an official community plan
- create a long-term financial plan

All these pieces together contribute to strong municipal operations.

LEVERAGE YOUR ASSET MANAGEMENT INFO

How can I leverage my asset management planning to support municipal operations?

Here are some ways you can leverage asset management to make informed decisions and improve municipal operations:

1. Writing grant and funding applications

Asset management planning will provide a municipality with a better idea of what type of support is needed and allow you to provide a more detailed account of how any funding will be put to use. This additional information will help improve the quality of your funding application.

Question: What funding applications can you see that will benefit from asset management information?

LEVERAGE YOUR ASSET MANAGEMENT INFO

2. Setting user and services fees

Clearly identifying levels of service will be helpful to the storytelling and understanding of the quality of services provided and associated costs. This helps users better understand how and why rates are set. As well, this gives council the ability to set rates that will improve the long-term sustainability of the asset.

Question: How has a lack of proper background information hampered communication to your municipality?

LEVERAGE YOUR ASSET MANAGEMENT INFO

3. Setting tax rates

Having a clearer picture of what your infrastructure costs to operate and sustain into the future is critical information when a municipality is budgeting and setting associated tax rates for the community.

4. Leveraging service agreements and partnerships

Being able to clearly identify your infrastructure resources inform service agreements and partnerships with other municipalities through:

- pooling equipment
- sharing services
- purchasing in bulk
- having the same asset management language.

APPENDIX

QUESTIONS FOR COUNCIL

The following is a list of questions that can be used to engage council and determine how familiar they are with the state of the infrastructure in their community.

Do you know what infrastructure assets you own, including:

- quantity of infrastructure assets?
- year of construction of infrastructure assets?
- remaining life of infrastructure assets?

Do you know the financial state of your municipality, including:

- total value of infrastructure (current replacement cost)?
- current operating and maintenance costs for various asset classes?
- cost and timing of upcoming infrastructure work (next 10 years)?
- full costs of providing current services?

QUESTIONS FOR COUNCIL

Do you know the level of service that you are currently providing, including:

- if the current level of service is acceptable to stakeholders?
- if the current level of service can be maintained with current funding levels?
- associated costs of increasing levels of service?

Do you know the risks associated with infrastructure assets, including:

- types of risks?
- current activities to mitigate risks?
- risks that are not acceptable and need to be reduced?

QUESTIONS FOR COUNCIL

When you commit to new infrastructure do you know the full life cycle costs that you are committing to, including:

- capital costs?
- operating costs?
- maintenance costs?
- disposal costs?

COMMON ASSET MANAGEMENT TERMS

Accrual Accounting

Recognition of assets, liabilities, equity, income and expenses as they are incurred (and once they satisfy the definitions and recognition criteria for inclusion on financial statements). (IIMM)

Asset Management (AM)

The systematic and coordinated activities and practices of an organization to optimally and sustainably deliver on its objectives through the cost-effective life cycle management of assets. (IIMM)

Asset Management Plan (AMP)

Long-term plans (usually 10 to 20 years or more for infrastructure assets) that outline the asset activities and programs for each service area and resources applied to provide a defined level of service in the most cost-effective way. (IIMM)

COMMON ASSET MANAGEMENT TERMS

Asset Management Policy

A document that broadly outlines the principles and mandated requirements for undertaking AM across the organization in a systematic and coordinated way, consistent with the organization's strategic plan. It provides the framework for the AM strategy and AM Plan. (IIMM)

Asset Register

A record of the asset information, typically held in a spreadsheet, database or software system, including asset attribute data such as quantity, type and construction cost.

Condition Assessment

The inspection, assessment, measurement and interpretation of the resultant data, to indicate the condition of a specific component so as to determine the need for some preventive or remedial action. (IIMM)

COMMON ASSET MANAGEMENT TERMS

Core Asset Management (or 'Basic AM')

Asset management which relies primarily on the use of an asset register, maintenance management systems, top-down condition assessment, simple risk assessment and defined levels of service, in order to establish a long-term cash flow projection. (IIMM)

Cost-Effective Management

The proactive, as opposed to reactive, management of the maintenance, repair and rehabilitation activities required to deliver the desired/required level of service while minimizing the life cycle costs of providing the infrastructure.

COMMON ASSET MANAGEMENT TERMS

Current Replacement Cost

The cost the entity would incur to acquire the asset on the reporting date. The cost is measured by reference to the lowest cost at which the gross future economic benefits could be obtained in the normal course of business or the minimum it would cost, to replace the existing asset with a new modern equivalent asset (not a secondhand one)

with the same economic benefits (gross service potential) allowing for any differences in the quantity and quality of output and in operating costs. (IIMM)

COMMON ASSET MANAGEMENT TERMS

Demand Management

Actions taken to influence demand for service and assets, often undertaken as part of sustainability initiatives and/ or to avoid or defer required asset investment.

Demand management may be ‘SUPPLY- SIDE’ demand Management (for example: minimizing wastage through pipe leak detection) or customer DEMAND-SIDE management to reduce demand for over- utilized assets or vice versa (for example: through pricing, regulation, education and incentives). (IIMM)

COMMON ASSET MANAGEMENT TERMS

Levels of Service

Levels of service statements describe the outputs or objectives an organization or activity intends to deliver to customers. (IIMM)

Life Cycle Costs (LCC)

The total cost of an asset throughout its life including planning, design, construction, acquisition, operation, maintenance, rehabilitation and disposal costs. (IIMM)

Long-Term Financial Plan (LTFP)

A long-term financial plan is a plan for generating, spending and saving future income and raising and repaying borrowings as appropriate. It will cover a period of at least three years but preferably longer, and will highlight the financial implications of an entity's proposed activities and anticipated events. (AIFMG)

COMMON ASSET MANAGEMENT TERMS

Renewal

Work to replace existing assets or facilities with assets or facilities of equivalent capacity or performance capability. (IIMM)

Risk Management

Coordinated activities to direct and control an organization with regard to risk. (IIMM)

Strategic Plan

A plan containing the long-term goals and strategies of an organization. Strategic plans have a strong external focus, cover major portions of the organization and identify major targets, actions and resource

allocations relating to the long-term survival, value and growth of the organization.

COMMON ASSET MANAGEMENT TERMS

Definitions References

NGENIUM and IPWEA (2011) International Infrastructure Management Manual (IIMM), Association of Local Government Engineering New Zealand Inc. and National Asset management Steering Group, Thames, New Zealand.

IPWEA (2010) Australian Infrastructure Financial Management Guidelines (AIFGG), Institute of Public Works Engineering Australia, Sydney, Australia

LINKS TO EXTERNAL RESOURCES

AMM's Asset Management

www.amm.mb.ca/issues/

Alberta Municipal Affairs – Asset Management

www.municipalaffairs.alberta.ca/asset-management

FCM Asset Management & Sustainability

www.fcm.ca/home/programs/municipal-asset-management-program/municipal- asset-management-program.htm

Asset Management BC

www.assetmanagementbc.ca

Canadian Network of Asset Managers

www.cnam.ca

THANK YOU.