Asset Management Capacity-Building Cohort Level 2.0 - Defining Levels of Service

Participant Workbook

This initiative is offered through the Municipal Asset Management Program, which is delivered by the Federation of Canadian Municipalities and funded by the Government of Canada.

fcm.ca/assetmanagementprogram

Canada FCM FEDERATION OF CANADIAN MUNICIPALITIES FÉDÉRATION CANADIENNE DES MUNICIPALITÉS

About FCM

The Federation of Canadian Municipalities (FCM) is the national voice of municipal government. In leading the municipal movement, FCM works to align federal and local priorities, recognizing that strong hometowns make for a strong Canada.

Alberta Municipalities Strength In Members

About Alberta Municipalities

Founded in 1905, Alberta Municipalities represents cities, towns, villages, summer villages, and specialized municipalities. AUMA works with federal and provincial governments and business and community stakeholders on a broad range of issues to strengthen the economic, social, cultural, and environmental vitality of its member municipalities.

RMA RURAL MUNICIPALITIES of ALBERTA

About RMA

The Rural Municipalities of Alberta (RMA) is an independent association representing Alberta's 63 counties and municipal districts, five specialized municipalities, and the Special Areas Board. Since 1909, the RMA has helped rural municipalities achieve strong, effective local government.

IAMA INFRASTRUCTURE ASSET MANAGEMENT ALBERTA

About IAMA

Infrastructure Asset Management Alberta (IAMA) represents the greater community of any person, organization or agency engaged in or has an interest in infrastructure asset management.

The 'community' is supported by the IAMA Working Group which is a voluntary group of representatives from associations, local governments, agencies, private industry and/or first nations brought together to recognize and integrate the administrative, technical, operational, financial, and planning aspects of asset management.

Using the Workbook

The following icons will help you to navigate the workbook and presentation and workbook.

Learning Goal

Specific learning outcome to be achieved.

Try it out

Actions, questions, or perspectives to put into practice back at work.

Activity

Individual or group exercises designed to put learning into practice.

Resources

Additional reference materials and tools related to the topic. Web addresses for the resources can be found at the back of the workbook.

Glossary

Definitions of words and phrases used in the course material.

Reflection

A place to write your own reflections and insights on how you might apply a concept or idea to your own municipal circumstances.

Did You Know?

Interesting facts and insights on asset management.

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Workshop 1
Asset Management and Level of Service Refresher

Participant Workbook

Welcome

Welcome to Asset Management Level 2.0 - Defining Levels of Service Delivery. This course is designed to help you, as municipal staff, continue your asset management journey that you began when you established your asset management policy, team, and capacity in the previous workshop. It is designed in a similar format as the original, with a series of three workshops (two one-day workshops, with a two-day workshop in between) and continued guided support between each workshop.

This course is intended to build on your understanding of asset management and to help your municipality advance the effective use of asset management principles within the organization, through a more thorough understanding of levels of service. As you progress through the course, you will see the Federation of Canadian Municipalities (FCM) Municipal Asset Management Program (MAMP) Asset Management Readiness Scale (hereafter referred to as the AMRS) is a great resource to support municipalities in improving their asset management practice. Not all municipalities are at the same level on the AMRS, nor will they be at the same level at the end of this course. However, all participants should take away new skills and knowledge required to continue to make progress on the scale.

Some participants may already be very familiar with incorporating levels of service in their asset management planning, while this subject may be newer to others. This course will allow all participants to build their knowledge and skills and share their experiences with other course participants. The course includes opportunities for group discussions and exercises, as well as assignments that will be completed after the course to continue building your municipality's asset management capacity.

Your participation in this course can provide great value to you, your colleagues, and your organization. Over the coming months, you will have the opportunity to share your thoughts, insights, and experiences. We will also be asking for your feedback through evaluations at each workshop. Your responses will help us continually improve this material for future deliveries.

By the end of this course, you will have completed the steps for defining levels of service, as described in Building Community Resilience through Asset Management: a Handbook & Toolkit for Alberta Municipalities:

Step 1: Define service categories and assets

Step 2: Define primary customer groups

Step 3: Develop Indicators of the community/customer experience

Step 4: Determine the current level of service

Step 5: Identify target level of service

Step 6: Identify capital, operational, and maintenance activities required to meet the target level of service

Step 7: Determine the costs of meeting the targets and affordability

Step 8: Adjust your target level of service until it is affordable

Step 9: Review the accuracy, completeness, and reliability of your information and identify if improvements are needed

Module 1— Asset Management Foundations

After completing this module, participants will achieve the following learning goals:

- Define asset management, service, risk and cost
- Articulate the benefit of asset management and the role it plays in sustainable service delivery
- Describe the tools used in an asset management process and what they are used for
- Describe the attributes of a successful asset management team
- Using the Asset Management Readiness Scale (AMRS) as an Implementation Guide

LEARNING GOAL 1: Define Asset Management, Service, Risk and Cost

Municipalities in Alberta are empowered to provide a range of services to their communities through provincial legislation, specifically the Municipal Government Act (MGA). A major component of service provision is taking care of the assets that make those services possible. An asset is a physical component of a system that enables a service or services to be provided. For example, pipes are the assets that deliver water service to homes, roads and traffic lights are the assets that make transportation possible, and recreation centres are assets that allow recreation services to be provided to the community.

Municipalities have been managing assets for a long time. However, asset management is more than just managing assets — it is a systematic, organized, and integrated approach.

Asset management is a way of thinking about how assets are used to deliver services to a community and its citizens. Asset management helps a community make sure that its physical assets can deliver the levels of service that councils have committed to. Asset management allows a community to examine the services it delivers, understand and manage the risks it faces, and take a holistic view of its assets. Asset management is about making sure communities are sustainable into the future.

"The process of making decisions about the use and care of infrastructure to deliver services in a way that considers current and future needs, manages risks and opportunities and makes the best use of resources"

Handbook & Toolkit for Alberta Municipalities

Asset management is about using systems and processes to balance **cost, risk,** and **level of service** to make informed **decisions** that make sense for your community in the long run. Asset management is not just for large communities. All municipalities make decisions about their assets. The systems and processes don't need to be extensively detailed or expensive; you can start with what you have. Your municipality is likely already using processes for things like planning and budgeting. Asset management is about evaluating and updating those processes to ensure they systematically consider the right kind of information and take a long-term perspective.

WHAT ASSET MANAGEMENT IS:

- a process,
- a means to an end,
- practices for good decisions,
- an ongoing process.

WHAT ASSET MANAGEMENT IS NOT:

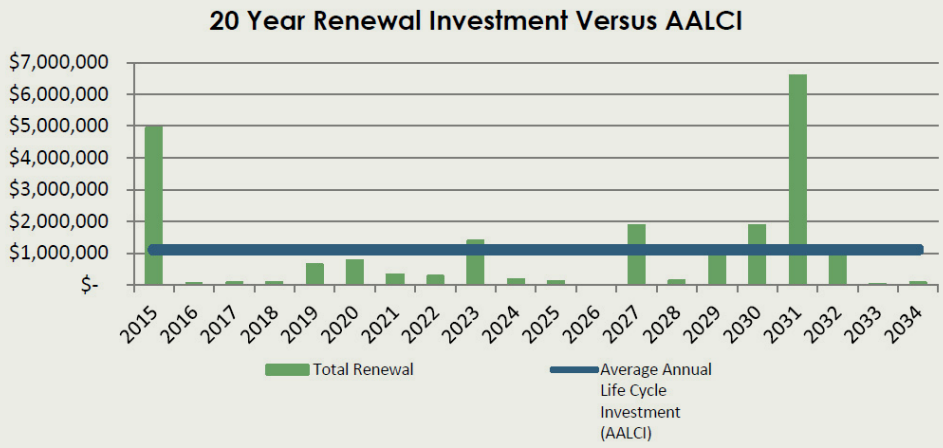
- a single project or plan,
- an end in itself,
- a software program

Asset management means focusing on things like:

- The purpose of your organization and how assets support community goals
- Value, purpose, and long-term outcomes of assets
- Managing risks and understanding the context of risks
- Holistic approaches to budgeting
- Collaboration across municipal service areas and with service partners

When many people think about asset management, they think about developing inventories of assets, doing condition assessments, and undertaking maintenance management tasks. They think this is the job of someone in public works and that they don't need to be involved. Asset management does involve those tasks, but more importantly, it is about connecting asset lifecycle activities to the bigger picture. It requires the integration of information from planning, engineering, public works, and finance.

Renewal investment is the investment needed to replace or renew existing assets that have reached the end of their service life. For example, if a pipe was constructed in 1940 and is expected to have a useful life of 80 years, the full cost of replacing that pipe would be shown in 2020. The total cost shown for each year is the total cost of replacing all assets in a community that are at the end of their service life. It is common to see spikes because often significant infrastructure investments are made at the same time and so the infrastructure reaches the end of its service life at the same time.



Graphic from Building Community Resilience Through Asset Management: A Handbook and Toolkit for Alberta Municipalities.

Average Annual Life Cycle Investment (AALCI) is the average annual investment needed to renew or replace assets at the end of their service life. It's the amount that a municipality would save each year in reserves if the strategy was to pay for the replacement of the assets in full at the end of the assets lives. For example, if a segment of pipe cost $80,000 and the pipe is expected to last 80 years, you would theoretically save $1,000 per year for the life of the pipe so you could pay to replace it at the end of 80 years. The total AALCI for a municipality is the sum of the average for all infrastructure. Since it is very uncommon for municipalities to fully fund replacement of infrastructure from reserves, this is more of a theoretical value that is used for communication and planning purposes only.

This is a common approach to considering the amount that will need to be invested in assets over time. The sample chart above shows the renewal investment and AALCI for a town's asset.

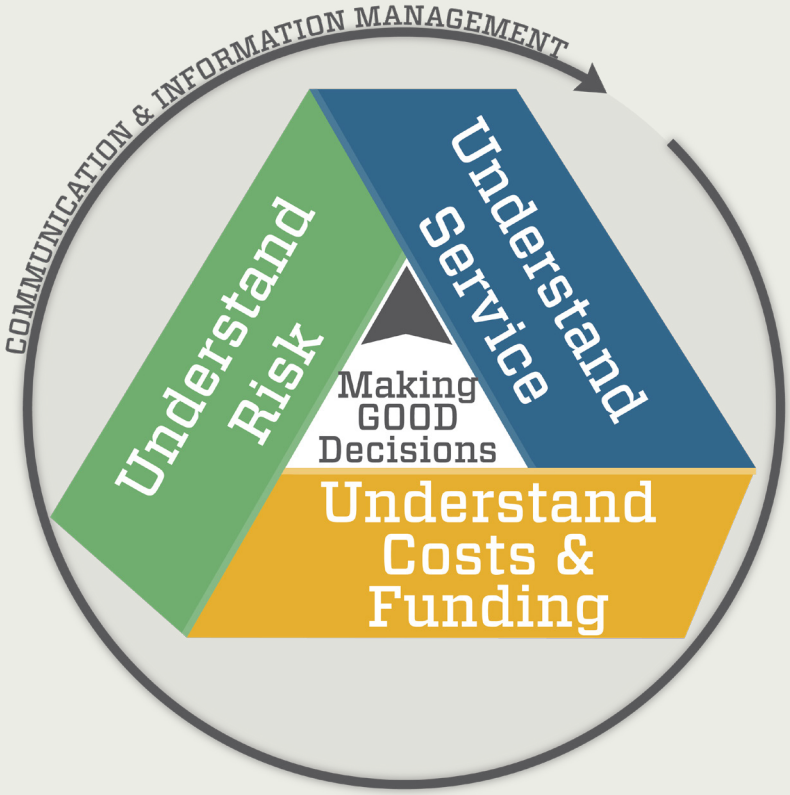
Group Discussion

Do you have this kind of information in your community?

How would you respond to this if you received this information about your community's infrastructure?

Key discussion point

Asset management is a scalable process of ongoing continuous improvement. The purpose of asset management is not to eliminate your deficit, the purpose is to manage it by understanding and evaluating trade-offs between service, risk, and cost.



Source: Alberta Handbook & Toolkit

There are lots of ways of approaching asset management – but at even the most basic level, asset management is always about informed decisions with an understanding of service, risk, and cost.

The difference between an entry level approach to asset management and a mature, in-depth approach is not what content is considered, but increased data accuracy, levels of analysis, integration, documentation, and formalization of processes.

Try it out:

Different people often hold different perceptions of what asset management means based on their role and responsibilities. Ask your coworkers what they think asset management means, and how it could help your community.

Activity

1. What are the services you provide in your community?

2. Why do you provide those services?

3. Who are your service delivery partners – currently and in the future?

4. What mechanisms do you use to define and communicate the level of service?

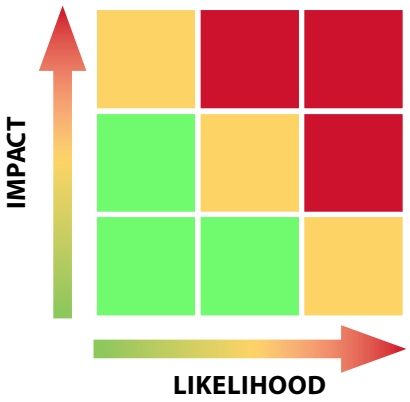
5. Where is there some lack of clarity about the level of service the community provides or is aiming to provide?

Risk

Risks are events or occurrences that will have undesired impacts on services. When assessing risk, it is important to consider the impact of the risk and the likelihood of occurrence.

Understanding risks and where they are is important to managing assets effectively. Risks cannot be entirely eliminated, and sometimes mitigating risks can be expensive. As an organization, you may decide that some risks should be tolerated. Tolerating risks is perfectly acceptable, as long as it is an informed decision to tolerate risk.

Risk = Impact × Likelihood



Asset risk describes the risk of an asset failing to perform the way you need it to deliver a service. For example, a pipe bursting, roadway washing out, or lagoon reaching capacity all describe types of asset risks.

Strategic risk describes a change that would affect your ability to achieve municipal objectives. For example, the public works manager retiring without a transition plan in place, a declining revenue base, or changing regulations are strategic risks.

Managing risk is not always as straightforward as eliminating risk, and every community and asset has a different level of **risk tolerance**. In some cases, a community can mitigate risks but not eliminate them altogether. For example, a community that faces drought conditions each summer can enact water conservation measures and educate the public, but may not be able to prevent the need to enforce water restrictions. In other cases, the level of risk may be manageable, but a municipality may choose to tolerate the risk because other priorities are more urgent. For example, a side road in poor condition may be a nuisance for the small portion of the population that uses it, however, investment in repairing the road may be delayed to pay for the cost of repairing a burst pipe.

Asset management involves the consideration of a community's risk tolerance: the level of risk the municipality can reasonably handle. Attempting to reduce risk as much as possible is prohibitively expensive, and unnecessary. Municipalities and their constituents understand that things aren't going to be perfect 100% of the time – but the important things need to be pretty good most of the time. Your risk tolerance will be informed not just by the magnitude of the risk (the consequence it will have and the likelihood that it will happen) but also the cost of managing or reducing the risk. This is an example of a trade-off between risk and cost.

Risk management refers to the process of identifying and assessing risks, identifying and evaluating actions that can be taken to reduce risk, and implementing the appropriate actions. Risk management is an iterative process, meaning that the desired result is achieved through repeated efforts, rather than through a single action.

Climate Change in Alberta is often experienced through changes in precipitation patterns, temperatures, and the frequency and intensity of extreme events, all of which threaten a community's ability to deliver sustainable services.

Climate change is an example of both asset and strategic risk. It is an asset risk because changes to temperature and weather patterns may impact the ability of your infrastructure to perform as it was intended to; for example, increased rainfall may overwhelm your stormwater system because it was built for a different capacity and range of events. Climate change is also a strategic risk because it changes the assumptions under which services are delivered, which may force your community to draw resources away from some goals towards others. For example, if your community's water source is becoming compromised by hotter, drier conditions, resources may need to be shifted to find another water source or better secure the existing one.

Sustainable service delivery requires continuously balancing trade-offs between service, risk, and cost. Climate change introduces impacts that may:

- Amplify the risk of asset failure
- Reduce the useful life of the asset
- Reduce the level of service
- Increase the costs of managing risk

Incorporating climate change factors into the asset management process can help assess the vulnerability of assets and provide the opportunity to introduce additional considerations into capital planning and operations and maintenance processes to mitigate the potential impacts of climate change on service delivery.

The Municipal Climate Change Action Centre (MCCAC) is a collaborative partnership among AUMA, RMA, and the Government of Alberta. It delivers funding, technical assistance, and education to municipalities and a variety of organizations to reduce the impacts of climate change and enhance climate resilience. https://mccac.ca/

Cost

In asset management, costs include the financial and human resources required throughout the lifecycle of the asset. We intuitively understand that there is a connection between cost, level of service, and risk, but we often limit our considerations to the immediate situation. When considering cost in trade-offs, it's important to think about the following considerations:

- Replacement costs of current assets and the timeline for these costs
- Capital costs of new assets and timeline for these costs
- Expected operating and maintenance (O&M) costs for current and new assets
- Actual operating and maintenance costs for current assets
- Relationship between capital cost and O&M costs (full lifecycle cost)
- Past and projected trends in O&M costs over time
- Revenue sources for future capital and operational costs

LEARNING GOAL 2: Articulate the Benefit of Asset Management and the Role It Plays in Sustainable Service Delivery

Benefits of Asset Management

Asset management helps municipalities deliver services effectively, efficiently, and in a way that protects the long-term interests of the community. It helps you to deliver the services that are important to your community, get the biggest bang for your buck from your assets, and set your community up for success.

Align the organization with things that matter most.

At its core, asset management is about service delivery. Effective service delivery requires that priorities are set and decisions are made through a lens of what matters to constituents in the short and long term. It also helps reduce duplicate work and unnecessary interruption to constituents' access to certain services. For example, asset management would help a community prioritize projects that align with the community's vision and priorities outlined in its strategic plan, or help prioritize a water main replacement based on risk to service outages and coordinate such work with road projects to minimize traffic disruption and lifecycle costs identified in the community's transportation master plan. Asset management should integrate and align with other municipal plans.

Defensibly prioritize projects and allocate resources.

Asset management helps communities decide what infrastructure needs to be replaced, when, and how much needs to be saved for infrastructure renewal. Taking a systematic approach supports efficient use of resources and equips a community with strong evidence that can be used to communicate why decisions are made, particularly when the need for investments is unclear or controversial to the public. For example, asset management can be used to help a municipality identify the need for water main replacement throughout the community, and plan for these costs. It can also be used to evaluate competing priorities, such as a town hall upgrade or the development of a recreation trail.

Systematically manage risks to service delivery.

Asset management supports the management of both **strategic risks** and **asset risks** – leading to sustainable service delivery. For example, many communities in Alberta face risks related to their roads. There are risks that specific roads will fail because they are in poor condition (asset risk) and there is an overall concern that deteriorating road conditions will lead to complaints from the public and potential safety issues (strategic risk). There isn't enough money to fix all the roads, especially given all the other financial demands on the community (also a strategic risk). The level of service for roads is decreasing and there are weight restrictions on some roads with no plans to correct them (risk to service sustainability). Asset management helps a community identify overall funding needs for sustainable service, prioritize where and when money should be spent repairing roads to appropriately manage risks, identify how much should be saved for long-term maintenance, and understand how to effectively respond to public complaints.

Demonstrate accountability to community.

Asset management establishes a clear and systematic approach to making decisions, prioritizing resources, and planning for the future, which in turn demonstrates municipal accountability. For example, asset management will help a municipality explain to a small (but vocal) group.

Position your community to take advantage of provincial or federal government incentives.

There may also be opportunities to align with government incentives for asset management. Provincial and federal governments are increasingly looking for indicators that a local government is practicing asset management in grant applications. The 2014-2024 Gas Tax Agreement between Canada and Alberta included requirements that Alberta develop an approach to asset management. In 2016, the federal government approved Alberta's approach, which includes the following components:

- Publishing an inventory of current asset management tools and resources
- Supporting the development of new tools that support asset management
- Enhancing existing advisory services and training opportunities
- Assessing existing gaps and expanding tools and resources where required
- Reviewing corporate planning requirements as part of the MGA review

ASSET MANAGEMENT IN OTHER PROVINCES

Each province has committed to making progress in asset management through their respective Gas Tax Agreements with Canada, and each province is choosing their own approach. For example, in British Columbia, the emphasis is on making progress on achieving outcomes defined in the BC Asset Management Framework. In Ontario, there are requirements to have specific asset management plans that demonstrate their infrastructure funding needs. The specific provincial requirements may change over time as each province learns what is effective in their context.

Beyond providing a networked community of peers working in Asset Management, Infrastructure Asset Management Alberta (IAMA) hosts three educational workshops per year to advance the practice of Asset Management in our municipalities. Their website, https://assetmanagementab.ca/, provides resources from previous workshops that can provide a valuable source of information on a variety of different topics of relevance to communities of all sizes.

IAMA also includes a membership component. Members receive access to IAMA workshops at a reduced price, access to member-only materials, and the opportunity to join a dedicated and growing community of practitioners dedicated to growing asset management across Alberta. Membership in IAMA is a great way to build on and expand the collaborative relationships formed in this cohort.

LEARNING GOAL 3: Describe Tools Used in an Asset Management Process and What They Are Used For

Asset management isn't just about planning and policy documents. However, as part of a robust process, these can support decision-making by documenting community goals related to assets and providing a roadmap for how to achieve these goals. We're going to spend some time reviewing the different tools available to guide asset management and how these are used. It is not necessary to have all of these documents to practice asset management. You can start with where you are and build your practice, for example, using an asset management lens in decision-making, building an inventory, and starting the asset management planning process. For reference, examples of policies and strategies can be found in the Resources section.

Asset Management Policy

An asset management policy is used as the connection between council's strategic guidance and staff's operational processes. Asset management as a practice touches on many parts of a municipality's operations, and so there are various ways a municipality may choose to adopt policy related to asset management. A municipality may choose to develop a standalone asset management policy, or may choose to develop or update a series of policies related to areas like finances, human resources, training, etc. to incorporate an asset management lens.

The specific way that policies are organized is not important (whether asset management is covered in one policy, or many policies) – as long as it makes sense for your municipality and the policies are followed. The content and purpose of the policies are important though. Policies related to asset management should accomplish the following:

- Outline an organization's commitment and mandated requirements for asset management
- Link to the organization's strategic objectives
- Be shaped by the organization's values and priorities, as well as community objectives
- Outline principles to guide decision-making about assets (for example, incorporate lifecycle costing, adopt a risk based approach to setting priorities, etc.)
- Outline the corporate approach to funding and financing asset acquisition, renewal, and operations and maintenance

Council's role is to provide the direction and strategic guidance that is captured in the policy.

Asset Management Strategy

As part of developing and maintaining asset management practices, council may be asked to endorse an asset management strategy. The asset management strategy is primarily for staff use, but council may provide input on the document. Council's endorsement is an important signal that the implementation of the strategy is important to the municipality. Implementing the strategy may require some re-alignment of staff and financial resources, so it is important that council knows about the asset management strategy being adopted. The asset management strategy should accomplish the following:

- Outline the framework and approach for implementing the asset management policy/ policies
- Serve as the conceptual structure for the asset management system (series of practices and processes developed by the organization)
- Define the key components of the asset management system and interactions with other organizational processes (such as capital planning, budgeting, financial planning, etc.)
- Identify objectives (specific, measurable outcomes required of assets and asset management) and reporting requirements
- Provide an overview of current corporate assets, services, risks, costs, and funding

- State status of corporate asset management practices
- Identify goals (the general intent of your strategy, what you want to achieve at a high level) and timelines for the goals
- Outline the approach that you will take to improve asset management practices
- Outline relationships between other corporate initiatives or plans (such as the Municipal Development Plan, the Integrated Community Sustainability Plan, the Intermunicipal Collaboration Framework, etc.)

Asset Management Plan

An asset management plan supports the implementation of the asset management strategy. An organization may have one asset management plan, or it may have one for each grouping of assets. It is unlikely that council will be involved in the development of the asset management plan – council's direction should be provided through the policy and strategy. However, it is important for council to know whether or not the municipality has an asset management plan(s), and how these plans have been used to support processes like capital planning and budgeting. Asset management plans may also be useful in providing information about cost, service, and risk to support council in evaluating trade-offs in decision-making. Staff may provide updates on the progress of the asset management plan.

Asset management plans will do the following:

- Outline specifically how asset management practices and processes will create, maintain, and renew infrastructure and other assets
- Provide comprehensive information about assets, their condition, and how they are performing
- Identify the current level of service performance and desired level of service
- Categorize asset risks and strategic risks
- Define capital and operational projects required to deliver service and mitigate risks
- Define current and projected costs and funding
- Provide a timeline for implementation
- Articulate the consequences of not following the plan

Software

For some people, when they think about asset management, they immediately think about databases, inventory, and the never-ending quest for good data. Data and information are important—good data ensures that your decisions are based on a solid understanding of your assets. However, it is important to remember that data is just one component of asset management, and data collection is an ongoing process that you can start and improve over time.

Tools are important, but asset management software is best used when there are good processes in place already. Before investing in new software, figure out what your organization needs by reviewing what data you have and what you need to collect and keep track of moving forward. For more considerations in selecting a software, see FCM's questions to ask before your municipality considers asset management software, which is included in the resources section of this binder.

This section will review various aspects of data and information involved in asset management. It is not meant to provide a comprehensive review of how to collect, store, and use data – that will be up to staff in your organization.

Collecting data is often a major hurdle to asset management, but it can start simply and does not have to be overwhelming.

LEARNING GOAL 4: Describe the Attributes of a Successful Asset Management Team

Asset management is intended to build your municipality's capacity to make better organizational decisions. Communication and information management are a key focus of this practice and lay the foundation of AM practices. Decision-making is improved when the right people have the right information at the right time.

In order to support this goal, requires a process of communication and ongoing information management – supported by a culture of teamwork. Asset management is not about having perfect information. It is about ensuring that decisions are made using the best information available, and then improving information where appropriate.

> "Making decisions requires that the right information reaches the right people at the right time. Working across disciplines and departments is required to make this happen."
>
> *A Handbook & Toolkit for Alberta Municipalities*

Building a team

Asset management processes can be scaled according to the size and capacity of any municipality. You don't need to be a big city to have an asset management team, though your team will look different from theirs. It's important that each municipality designs an asset management system that meets their organizational needs and abilities.

Municipalities with smaller staff and capacity will probably have asset management embedded into departments, whereas larger municipalities may have a specific role dedicated to asset management. Either way is acceptable, and still forms a team!

When building your AM team, it is helpful to keep in mind what you will be trying to achieve and what resources you will need to get there. Some communities may choose to appoint or hire a project leader that is dedicated to the task of asset management whereas other communities will draw on existing staff to take on leadership roles within their department. In both circumstances, a culture of teamwork and communication is necessary to deliver the most pertinent information for decision-making.

Cross-functional groups will reflect the size of your community: in smaller communities, it may mean the CAO and the public works manager working together; and in bigger communities, it may mean having a representative from each relevant department meeting regularly. Regardless of the number of participants on your team, you will need cross-functional representation and a champion to drive initiatives forward.

Your AM team will require a minimum involvement of staff who have knowledge in the following areas:

- finance
- public works
- engineering
- planning

All these different perspectives will probably have different objectives for asset management. For example, finance may want to explore long-term financial planning, and public works may want to investigate a new system for organizing and directing repair work. This is absolutely ok – and is actually necessary – for your AM team. Having an interdisciplinary team helps to identify the bigger picture of an approach that can meet multiple, diverse objectives.

Activity

1. Working together, document how your team is going to work together over the course of the cohort. What's your mandate? What are the key steps you will take?

LEARNING GOAL 5: Using the Asset Management Readiness Scale (AMRS) as an Implementation Guide

Participating in this cohort will support you in advancing your understanding of levels of service, defining and documenting current levels of service, and evaluating the cost of delivering those current levels. The Federation of Canadian Municipalities (FCM) Asset Management Readiness Scale (AMRS) is a tool that can help you in understanding your current state of asset management practices and focus efforts on next steps that will help you make meaningful progress.

You may remember completing the AMRS on your own time, or in an introductory asset management workshop. Before we get into talking about service delivery, we're going to look at the Data and Information portion of the AMRS – levels of service appear here in several locations.

Data and information

By developing this competency, your organization is collecting and using asset data, performance data and financial information to support effective asset management planning and decision-making.

	Outcomes: Select the outcomes that your organization has achieved.				
Outcome areas	**Level 1**	**Level 2**	**Level 3**	**Level 4**	**Level 5**
A **Asset data**	☐ We have **asset inventory data**, including approximate quantities of assets within most asset groups. ☐ We have some anecdotal information on asset condition. Some age information exists.	☐ We have a **basic inventory** of most **critical assets**, including information on general asset properties such as size, material, location and installation date. ☐ We are moving our data to a centralized location for use by the **AM team** (note: this does not require AM software). ☐ We have defined **critical assets** and have some information on asset condition for these assets.	☐ We have a consolidated, **basic inventory** of all assets. ☐ We have defined life cycle investment requirements for **critical assets**. ☐ We have standardized condition rating systems defined for most asset groups. ☐ We have asset condition information on all **critical assets**.	☐ We have expanded **inventory** data for some assets ☐ We have evaluated the life cycle investment requirements associated with **critical assets**. ☐ We update data according to cycles defined in our **AM plans** or **strategy**.	☐ We have expanded **inventory data** for most assets. ☐ We have evaluated the life cycle investment requirements associated with most assets.
B **Performance data**	☐ We have informal or anecdotal approaches for measuring asset or service performance.	☐ We have some information on performance of **critical assets**, collected from a variety of sources.	☐ We have defined **level of service** measurements for some service areas. ☐ We have captured data on current **level of service** performance for some service areas. ☐ We have reviewed service levels and asset performance with council.	☐ We have defined **level of service** measurements for critical service areas. ☐ We communicate the results from our **level of service** measurement program to staff and council regularly.	☐ We have defined **level of service** measurements for most or all service areas. ☐ We continually improve how we collect data on **level of service** performance.

	Outcomes: Select the outcomes that your organization has achieved.				
Outcome areas	**Level 1**	**Level 2**	**Level 3**	**Level 4**	**Level 5**
 **Financial information**	☐ We have **financial information** on our assets, supporting minimum PS-3150 reporting requirements.*	☐ We have major capital renewal and operating & maintenance (O&M) expenditure data for some assets. ☐ We have a strategy to link AM and **financial information**.	☐ We have capital (new and renewal) and O&M expenditure data for most assets. ☐ We have linked AM and **financial information** for all **critical assets**. ☐ We can demonstrate the gaps between forecasted infrastructure needs and current spending levels.	☐ We understand the cost of sustaining current **levels of service** for all **critical assets**.	☐ We understand the trade-offs between investment and the **level of service** we deliver and use this to optimize our financial plans.

Readiness level: You have achieved a readiness scale level when your organization can demonstrate achievement of all outcomes for that level.

Readiness level	**Working on Level 1** ☐	**Completed Level 1** ☐	**Completed Level 2** ☐	**Completed Level 3** ☐	**Completed Level 4** ☐	**Completed Level 5** ☐

* PS-3150 is the Public Sector Accounting Board's standard guiding the treatment of tangible capital assets.

Module 2 – Understanding & Defining Levels of Service

After completing this module, participants will achieve the following learning goals:

- The role of local government in delivering services
- Identify how your community currently understands levels of service
- Understand perspectives, roles and responsibilities in service delivery

LEARNING GOAL 1: The Role of Local Government in Delivering Services

Our local governments, in conjunction with provincial and federal governments all work to serve the needs of citizens. Each level of government has different roles and authorities but share the common goal of ensuring a sustainable future for communities[1]. Because our local governments are the closest level of government to the people, it is municipalities that are responsible for providing services and managing the municipal assets required to provide these services

Everything municipalities do today was designed at some point in time to solve a specific challenge. In the 1820's volunteer fire departments emerged in Canadian communities. Urban parks were popularized in the 1880's to provide citizens with greater access to nature. In the 1920's land use regulations were introduced to separate residential areas from noxious industrial uses. Time marches on and the local context continues to change. However, the nature of what municipalities do only expand as the challenge of the day demands a local government response, on top of all the pre-existing services. In some cases, the "new" challenge is something that the provincial or federal government are no longer taking care of.

Municipalities are burdened with a legacy of services, facilities, and infrastructure standards that have simply become accepted as part of the business as usual. It is important for municipalities to continually be reviewing and evaluating the local environment to understand the current reality in terms of service needs. Over time, expectations of services in a community can change along with the financial means of the municipality to maintain or provide a service. Some services were designed specifically to meet a need or issue that may no longer exist. Communities must consider how the assets that were providing the service can evolve to suit current needs, if possible. If the assets are truly no longer needed to provide a service, there are instances where municipalities can allow for planned abandonment of assets. This could be where there is no need to renew assets at the end of their useful life, or the overall demand for a certain level of service is no longer relevant so investment can be reduced or eliminated.

As local governments have often understood the need to try to do more with less, the option of considering planned abandonment is becoming even more pronounced. For example, can a community still afford to have a pool? Does every road in the community still need to be paved? Is it possible to let go of assets or services before it is obvious a community can no longer afford to continue providing the service? This can seem like a rational perspective, but it is important to acknowledge how this accumulation of services impacts expectations from different groups. Different groups in a community may hold differing expectations when it comes to services provided by the local government. Elected officials and municipal staff may have differing expectations from that of higher levels of government. Community groups may have differing expectations than municipal staff. Using an asset management mindset and evaluating trade-offs can help better understand organizational priorities, while communicating difficult decisions with the community.

1 Understanding Alberta's Municipal Governments (MUNIS 101, AUMA)

LEARNING GOAL 2: Identify How your Community Currently Understands Levels of Service

This workshop is the first in a series of three sessions that are planned for the Level 2 Cohort. The goal of Level 2 is to define the level of service for at least one service delivery area by the end of these workshops.

The Level 2 workshops are as follows:

- **Workshop 1-** Asset Management and Level of Service Refresher
- **Workshop 2-** Evaluating Level of Service and Setting Targets
- **Workshop 3-** Implementation and Monitoring

You are probably already talking about levels of service in your community, though you may not be using those words. If you have conversations about things like:

- How often snow should be cleared, and what roads get cleared first
- Assets that are not performing as they need to, like culverts that are blocked
- Resident complaints about flooding
- How much it costs to keep your pool running, compared to how many people are using it
- What a reasonable budget for pothole filling should beevaluate, and monitor levels of service, which can be applied to any asset. Walking through an example together will make defining levels of service for other assets much easier.

We will be using/referencing the Alberta Asset Management Handbook and Toolkit throughout the workshops:
https://www.alberta.ca/municipal-asset-management.aspx

Additional resources:
https://www.assetmanagementbc.ca/wp-content/uploads/Developing_Levels_of_Service_EN.pdf

https://www.assetmanagementbc.ca/wp-content/uploads/Asset-Management-for-Sustainable-Service-Delivery-A-BC-Framework-.pdf (specifically section 5)

https://www.acec.ca/files/Publications/managinginfrastuctureassetsenglish.pdf

https://fcm.ca/sites/default/files/documents/resources/guide/infraguide-developing-levels-of-service-mamp.pdf

https://fcm.ca/sites/default/files/documents/resources/guide/how-to-develop-asset-management-policy-strategy-mamp.pdf

https://fcm.ca/sites/default/files/documents/resources/guide/infraguide-alternative-funding-mechanisms-mamp.pdf

https://fcm.ca/sites/default/files/documents/resources/guide/infraguide-dedicated-funding-mamp.pdf

Activity

With your asset management team, discuss the following questions:

1. How does your municipality currently discuss and evaluate levels of service? Are there tools that you are currently using to help you? If so, how do you think your process is working? Is there anything you would change? If not, how does the municipality evaluate the effectiveness of current service levels and/or the need for enhanced or decreased service levels?

Try it out:

After the workshop, reach out to nearby municipalities to understand how they discuss and evaluate levels of service and what approaches they have found to be challenging or successful.

LEARNING GOAL 3: Understand Perspectives, Roles and Responsibilities in Service Delivery

It is important to clearly define level of service to support prioritization of resources in our communities. When levels of service are clearly defined, dialogue can be supported with the community in terms of willingness to pay for services, especially when they are defined in a way that resonates with those using them. Defined levels of service can also support improvements in service delivery efficiency and effectiveness.

Every municipality is unique in terms of how levels of services are defined. Geography, lifestyle, culture, and density are examples of factors that can influence the desired level of service in a community and/or the ability to deliver that service.

What may make sense for one community may not make sense for another. Understanding your own context is critically important to making any decisions around level of service. Of equal importance to understanding the context, is acknowledging that the context changes. Decisions today are made based on the current reality, but this does not last forever.

People typically understand the context of their community through their own specific lens. This is also true of how different roles within the municipal organization will see the context differently. For example, when new development comes into the community, there may be a variety of different perspectives around how this is changing the local context (whether positively or negatively):

- Planning may consider how it contributes to the quality of life of local citizens
- Finance may consider the impacts to the assessment base
- Engineering may consider the impacts on existing infrastructure networks
- Operations may consider new equipment that may be needed to provide the expected levels of service
- Council may consider that it is "growth" and all growth is seen as a positive contribution to the community
- A citizen who is an adjacent neighbour may consider this as an infringement on their own property rights, while a citizen who lives nowhere near the development may not consider this at all

Activity

1. On your own, consider the local context of your community through your own lens, thinking about levels of service and sustainable service delivery. Is the municipality doing a good job in providing quality levels of service? Is the municipality providing "the right number" of services? Are there any clear gaps in services that should be provided? Do you think that citizens get value for the money they contribute through their taxes? Take a few minutes to provide your thoughts on the local context through your own lens.

2. As a group, share your individual perspectives with your team. Once you have each shared your own thoughts, as a group, select a different perspective (this could be internal to the organization, i.e. council, or external, i.e. a disgruntled citizen who perpetually think their taxes are too high and they don't get anything for them) and discuss your thoughts around how they might view the context of the community differently.

ROLES AND RESPONSIBILITIES FOR SERVICE DELIVERY

It is crucial to understand the specific roles that are at play in a municipal organization. The following graphic outlines the roles and responsibilities for service delivery among council, staff, the CAO and service delivery partners.

Council

- Determine services that will be provided by the municipality, in alignment with the Municipal Government Act
- Determine what level of service will be provided
- Determine how services will be paid for (ensuring the funding mechanism is fair, equitable and financially sustainable)
- Determine how service delivery will support the strategic goals of the municipality (growth, inclusivity, resilience, etc.)

CAO

- Accept the direction set by council and work with staff to develop policies and technical level of service to achieve customer level of service
- Work with staff to provide necessary information to council so they can make informed decisions around level of service (changing, adding, or removing services)

Staff

- Focus on the 'how' of service delivery
- Be technical implementation experts
- Work to develop and implement technical service levels
- Be responsible for meeting the service needs of today while identifying risks to service delivery in the future (i.e. proactively preparing for increases in demand)
- Engaging with the community around service levels (both in terms of gathering community input and communicating customer level of service information)

Service Delivery Partners

- Delivering services that are agreed upon between the partner and municipality (i.e. in house vs. contracted snow removal)

To refresh from Level 1 workshops, there are two distinct parts of level of service.

Try it out:

At your next staff or council meeting, provide an update on your attendance at this course and share your learnings on the roles and responsibilities of municipal council, staff, and service delivery partners.

- **Customer level of service** describes level of service from the perspective of the person using the service in non-technical terms.
- **Technical level of service** describes operational measures that support achieving the customer level of service. These measures are for staff and may be in technical terms.

Technical levels of service can be considered the activities (inputs) that will achieve the desired customer level of service objectives (outputs).

CUSTOMER LEVEL OF SERVICE EXAMPLES ROADS:

Smooth ride, easy transport of goods and services, ability to get somewhere quickly, no dust, safe for various modes of transportation, safe in all weather conditions, safe to cross, reliable access, clear and timely communications related to road closures

TECHNICAL LEVEL OF SERVICE EXAMPLES

Roads: response time for pothole fixes, asphalt repairs (asphalt roads), crack sealing (asphalt roads), frequency of grading (gravel roads), dust control (gravel roads), road classification (i.e. design widths, design speeds) safe road crossings, snow removal, continuous and functioning overland flow paths through ditches and culverts, stormwater design for overland 1:100 year design event.

Activity

With your asset management team, discuss the following questions related to the service that you are focusing on and its current level of service.

1. What are the public perspectives on the current level of service?

2. Is this a technical level of service or a customer level of service? For this service, how are the two related?

3. How is the public's perspective on the current level of service related to Council priorities? What are Council's expectations?

4. Who is responsible for the technical delivery of this service? How have they traditionally defined the level of service? How do they understand their role in delivering service relative to priorities and expectations?

Module 3 – The Connection Between Assets and Service Delivery

After completing this module, participants will achieve the following learning goals:

- Understand how assets provide services
- Understand the current state of the assets

LEARNING GOAL 1: Understand How Assets Provide Services

The role of a municipality is to deliver services to their residents. Residents are not thinking about the pipes in the ground that transport their water or the sewers that take away their sewage until there is an issue. It is the municipality's responsibility to manage the assets, or the physical components of the systems in a way that can enable the delivery of the services at the desired/required level of service.

This responsibility applies to both natural and built assets. We can all look at a tree and derive our own sense of value. However, there are many natural assets that exist in our communities that provide a valuable level of service that goes beyond how they make us feel individually. Trees can play a significant role in air quality, stormwater management, soil management, and even public safety when planted as a buffer between sidewalks and roads.

Road-related Asset Examples:

Gravel roads, asphalt roads, shoulders, ditches, culverts, wetlands, signage, bridge culverts, bridges, rail crossings, line painting, cross walks, signals, streetlights, curb and gutter, catchbasins, etc.

Activity

1. With your municipal asset management teams, identify the assets required for your chosen service delivery areas considering both natural and built assets:

If needed, review the Asset Management Toolkit spreadsheet as a guide when discussing you answer.

LEARNING GOAL 2: Understand Current State of Assets

Condition and Performance

The current state of an asset can be thought of in two ways:

- Condition: the physical characteristics of an asset
- Performance: the ability of an asset to fulfill its desired function

Condition and performance of an asset can be related. For example, a cracked and potholed road both appears to be in poor condition and provides poor performance for those driving on its surface. There is variability in the strength of the relationship between condition and performance depending on asset type, your defined levels of service, and your community context. In a more rural setting, that same road surface may not be considered to be in poor condition because many people drive vehicles that can handle more bumps, and the community is satisfied with that level of service. Or, in another community the speed limit on a similar road may be lower. There are likely dozens of other scenarios where the same road in the same condition would be given different performance ratings, all based on desired level of service.

This variability of relationship between condition and performance can make it difficult to communicate the connection between the two. This is where defined levels of service can be very helpful. Consider these two opening statements of a briefing note to Council:

Our Town has lots of potholes that should be filled.

Vs.

Our Town has four roads that are not performing to the desired level of service, due to the number of potholes that result in a very bumpy ride for residents.

Which statement do you think would set Council and staff up for a more productive conversation about trade-off decisions?

Age and Useful Life

Many communities start their data collection journey with tabulating assets and their install dates, which will give you information about the age of the asset. Age can give you some preliminary information about the condition of the asset, which is a perfectly acceptable place to start! The age of an asset does not give you information about its useful life

- Age: how old an asset is, referenced to its install date
- Useful life: the period of time in which an asset is expected to fulfill its desired function

Age is a fixed number and can't be changed. Useful life can change, in a positive direction through proactive maintenance, or a negative direction through damage or deferred maintenance.

Your TCA can be a place to start for information on estimating the useful life of assets. It's important to remember that the useful lives in the TCA are used for amortization for accounting, not for the prediction of failure of an asset. Based on what you know about the condition and performance of your assets, you can make informed decisions about the physical useful life of your assets.

The useful life of similar assets can be different between communities. For example, some communities in Saskatchewan that have very sandy soils have ductile iron water pipe from the 1960's that is still in good condition and is performing to an acceptable level. However, many communities in Alberta have corrosive soils and the ductile iron pipe that was installed in the 1960's is corroded and failing. It can be helpful to compare assets between communities especially when you're getting started, but it's very important to check those assumptions with condition and performance information over time.

Government of Alberta Tangible Capital Assets Implementation Toolkit:
https://open.alberta.ca/dataset/cc70f459-a92c-4e55-97ed-dfb0f5864346/resource/e145b832-9dc6-446c-b49f-cc946092e501/download/4301699-2008-tca-toolkit-final.pdf

Information Collection and Storage

When developing an understanding of the current state condition and performance of assets in your municipality, it is crucial to balance the amount of information with the usefulness of that information. You could spend a lot of time and money on the collection of endless amounts of data; however, if there is nobody with the capacity to understand and interpret the data, it simply takes up space on a computer and provides little to no value to the municipality. Similarly, making decisions on what services to provide and/or to what level, without enough information is also short-sighted.

While data is important, it is also important to consider data from the perspectives of its quality, quantity, and accessibility. Do you have processes in place to guide the types of data you collect, and how you collect them? Do the people that collect the data understand how it is interpreted and used in decision-making processes? Is the data centralized and accessible to the right people at the right time? Centralization of data could look like a map on a wall with condition information tracked on it, it could be a master spreadsheet, or it could be a software program. There is no single way of doing things and the way you do things will surely evolve as you progress on your journey.

Refer to the FCM resource: "Questions to ask before your municipality considers asset management software" when considering how to proceed with data collection and reporting.

Activity

With your municipal asset management teams, think back to the work completed in Level 1 and discuss the following questions:

1. Have you identified any activities in your strategy that involve the collection of information to fill in any identified gaps?

2. Would having this information support your understanding of the current state of assets that enable your selected service?

Road-related Asset Examples – Prioritizing Data Collection

Municipalities typically have many kilometers of roads and do not have the capacity or resources to assess every road every year. Roads also usually deteriorate at a rate that would make yearly assessment unnecessary. You could consider the following process to develop a plan for making sure all of your roads get a periodic condition assessment :

1. Gather public works staff, grader operators, and anyone else that works on those roads and can provide input on their condition.
2. On a map, record the known condition of your roads using the knowledge in the room. Also make a note of which roads are of unknown condition.
3. If you have a road classification system, apply that classification to your map on top of the condition information (this is where GIS can be very helpful!). If you don't have a road classification system, highlight the roads that are known to have the most traffic.
4. Sit back and discuss the visual results of the comparison between condition and road classification/use. Identify the roads that should be prioritized for data collection and identify how often that data should be updated. When considering how to prioritize the information you need, consider other factors like snowplow priority routes, traffic volumes by number and type, adjacent land use, number of customers serviced by that road, road classification, etc. as you evaluate where to place your efforts.
5. Make a multi-year plan to assess the rest of the roads and identify the capacity and resources you will need to complete the plan. Make sure you write this down, as it will be very helpful for communicating your plan to Council.

This process is specific to roads but could be applied to any other asset class. The data collected in the process above could also be helpful for many other staff:

- Traffic/road use data is used in land use planning
- Specific road condition information can be helpful for identifying root causes. For example, a road that has a severe pothole problem every year can indicate excess water in the base. The fix may not be just to fill potholes, but also to address a drainage problem through the implementation of a drainage master plan.
- Identified capacity and resources for data collection should be included in the operations and maintenance budget for the year

Activity

With your municipal asset management teams, discuss the following questions:

1. What do you know about the current state of the assets that support your service delivery example selected service, in both condition and performance?

2. What form is that information in (i.e. anecdotal? technical evaluation? Or somewhere in between?) and how often is it updated? *Remember you will never have all the exact, up to date technical information you will need. You need to work with what you have and develop strategies to address those gaps.*

3. Brainstorm other staff or initiatives that could also use this information.

Module 4 – Detailed County of Forty Mile Case Study

After completing this module, participants will achieve the following learning goals:

- Understand the Process of the Detailed Case Study
- Identify indicators that can support evaluation and monitoring of service levels

In support of the Level 2 course, the County of Forty Mile agreed to be the subject of a pilot project to collect maintenance cost information on the service they selected in the first workshop. The goals of this pilot included:

Complete the homework ask from workshop 1 with one of the participants to show it can be done:

- Develop a simple tool for a community to use to analyse and understand the cost of service information collected, that can be updated easily using information they already have
- Complete this task with minimal time/effort for staff
- The specific mechanics of the process and product are specific to the County of Forty Mile. Parts of this process may look different for your community depending on how you currently track maintenance information. That said, the general steps completed and described in this case study can be followed by any community.

The County of Forty Mile asset management team started with the Director of Finance, Public Works Superintendent and CAO with the Director of Finance serving as the Asset Management Champion. This smaller core team recognized that more perspectives and larger buy in was key to moving the organization forward on their asset management journey. This team has therefore since expanded to include the Director of Utilities and Director of Emergency Management, Fire Chief, and representatives from Development/Planning and GIS/IT/ Communications.

To define the task at hand, the asset management team posed the question:
What does it cost us to maintain our roads every year?

To answer that question, they followed the process described more fully below.

LEARNING GOAL 1: Understand the Process of the Detailed Case Study

The asset management team initially met to:

- Introduce the exercise to the team and build buy-in- to dedicate time to answering the big question about maintenance costs, the team needed to articulate the reason for doing so. There are always competing priorities, so why should the team spend time doing this?
- Provide an idea of the time commitment required- 2-3 meetings to review the information.
- Confirm who needs to participate - The Director of Finance, Public Works and CAO are the core asset management team members. The team knew these perspectives would be very helpful in determining the costs for roads maintenance activities. The person that supports public works in tracking activities and costs was identified as an additional person that would be necessary to collect and distill information. The asset management team has also engaged a broader group in asset management and felt it would be helpful to include many perspectives in reviewing the outcomes of this exercise to share any learnings. A consultant was also engaged to receive and review information, ask questions, and develop the spreadsheet model.
- Define the outcomes and outputs of this exercise- the intent was to obtain all information on current operations and maintenance activities related to roads and the associated costs for those activities. A simple spreadsheet model would be developed to collect all the information in one place, and complete calculations to determine the past year's maintenance costs per mile of road.

The team agreed this was a worthwhile exercise but seemed like a big task. So… what's next?

Step 1: Identify Necessary Information

Individuals were identified to respond to the consultant's requests for information:

- The draft level of service template you have been working on with the AM cohort.
- For a set timeframe (either for the most recent fiscal year, or whatever makes sense for your fiscal year end):
  - List of all O&M activities you currently complete for your roads (see the table of contents of this Gravel Roads Construction and Maintenance Guide for inspiration if you need it: https://www.fhwa.dot.gov/construction/pubs/ots15002.pdf)
  - For all of the O&M activities identified, the cost of completing those activities per year.
    - If you don't have this split up between activities, that's okay.
    - Consider equipment, material, contracted services, and salary costs.
  - Any O&M activities you do not currently do but want to consider adding.
    - Any information on what that will cost.
  - Audited financial statements from recent fiscal years. This information will help answer:
    - Total revenue that goes towards operating and maintaining roads (if this is something you can pull).
    - Any changes or trends associated with road O&M spending in recent years.

Step 2: Prepare Information

The Director of Finance and Public Works staff worked together to collect and prepare the following information. The County of Forty Mile tracks all this information through Diamond (a financial software) , which exports information in an Excel format. Public Works staff then used pivot tables in Excel to generate summaries of data in the following categories.

Maintenance activities summary spreadsheet, with total costs for all activities in 2020:

- Road Grading
- Oil Maintenance
- Bridge Maintenance
- Sign Maintenance
- Roadside Mowing
- Hamlets
- Dirt Maintenance (in the County of Forty Mile's terminology, "Dirt" is any work done to road subsurface, and doesn't include gravel or oil)
- Gravel Maintenance
- Snow Plowing

Since the County of Forty Mile already employs a detailed project costing system, it was relatively easy to pull this information. All Public Works staff that complete road maintenance activities are asked to record and input their time in maintenance categories. This results in a lot of information over the course of a year – almost 34,000 rows in an excel spreadsheet!

Other information collected included:

- A spreadsheet summarizing dust control customers, including information about cost-sharing.
- Road design specifications and guidelines.
- A spreadsheet summarizing the number of miles or each type of road in all hamlets.
- Hand-highlighted maps showing roads highlighted in various colors to show calcium, gravel, pavement and oiled roads in each hamlet.
- A spreadsheet summarizing costs associated with weed spraying, and a hand-highlighted map showing where spraying was completed.
- A spreadsheet from finance with Public Works Profit and Loss Statements (by Manager): Includes expense information in categories for 2020 for the following:
    - Municipal Supervisor
    - Roads Administration

All this information was sent to the consultant for review. They spent a few days looking through the data and developing questions, clarifications, and assumptions about the data to support the development of a spreadsheet model.

Step 3: Review of Information

A meeting was organized with the consultant, the asset management team and Public Works team to review the information provided. The meeting was structured in two parts: the first hour focussed on Public Works information and the second hour focussed on Finance information. This was in recognition that Public Works is busy, and it can be difficult to get everyone together.

The following observations/clarifications were provided during the discussion:

Operations and maintenance vs. capital costs

As it is not typical for an entire gravel road to be removed and replaced, a description of what would be classified as a capital project vs. an operations and maintenance item was needed to differentiate the capital costs and the operations and maintenance costs.

- *Capital Project:* A project identified during the capital budgeting process.
- *"Patch" or "Dirt":* An unforeseen repair, not included in the capital budget.

Determining when operations and maintenance is required

- **Road Structures, Signs:** The operators inspect when they are out driving the roads. They also use input from residents and bus drivers calling in regarding the state of roads. The County has also recently created an app that can be used by residents to report road issues.

  Public Works staff work together to determine maintenance priorities. All roads are fixed eventually, but typically if there is a high amount of traffic on the road or if there is a large soft spot that makes the road difficult to drive on or unsafe, then the road will be a priority.
- **Road Grading:** The roads operators are constantly grading roads and keeping track of where the grading is done. The service goal is to do enough grading for roads to be safe and reliable.
- **Bridges:** The County does not spend a lot of money, time or resources on bridges. Some inspections are done in a year, but maintenance activities are limited to general upkeep rather than more major maintenance.
- **Mowing:** The County mows throughout the summer. The level of service identified for most roads is to mow each road at least twice. Roads that are within the irrigation district have a level of service of three mows per year, as the grass tends to grow faster in this area.
- **Drainage concerns:** The County addresses drainage concerns via public complaints and observations of operators.
- **Snow Removal:** The County has an established Snow Plowing Policy that identifies a prioritized order for snow removal. There are two parts to the service of snow removal: snow "finding" and actual snow clearing. Public Works will drive around in trucks to "find snow" that may have accumulated. If the conditions meet the guidelines outlined in the Snow Plowing Policy, then they will send a grader to those locations. This reduces the number of miles put on by the grader.

Tracking of operations and maintenance activities

- Timesheets are used to track the amount of time spent in each location and what was done (grading, oiling etc.)
- Wall maps are used to highlight where maintenance has been done.
- Number of miles of maintenance are also tracked.

Determining the costs associated with operations and maintenance activities

- The County utilizes project costing to track the costs of maintenance activities. This means the County has determined an appropriate rate of value for each kind of maintenance activity to determine its cost.
- The County decided at a Council level to use 75% of the Alberta Road Builders Association (ARA) rates based on a review of actual costs and ARA costs. Since the County completes all maintenance in house, they decided to remove the approximately 25% of ARA rates that represent profit. This percentage is reviewed and evaluated every couple of years by Public Works.
- The County will occasionally complete private work. When they do, they charge 100% of the ARA rates.
- The County has a program to allow rate payers to pay for additional dust control in front of their farmsteads.
- Salary, wages, and benefits are included in operations and maintenance costs for hourly employees (does not include administration).
- Time for Dinner/Equipment Servicing/Travel represents operator time that is spent on dinner breaks, servicing their equipment, and traveling to equipment, which is tracked separately from individual maintenance activities.

All this discussion supported the team in better understanding what data is tracked, what is and is not included within the data, and what assumptions are made in the data tracking process. A good understanding of your data is integral to completing any analysis – the subtleties of what numbers represent can limit what you can accurately do with it!

Step 4: Analysis of Information

When reviewing the information, it was noted that although helpful for other purposes, not all the information collected was needed to determine the current costs of road maintenance. A decision was also made about the accuracy of the model results – perfecting the data would require a lot of time and energy. A general understanding of the cost of service, within approximately 15%, was determined to be the right level of accuracy for this exercise.

Step 5: Model Development

With a clear understanding of what information was needed to determine the total O&M cost for roads, the consultant was able to develop a simple spreadsheet model. The model was added as a tab in the Alberta Asset Management Handbook & Toolkit editable Excel file (the same one used in the cohort workshop series), right after the level of service tab. Since the information from the model is to be directly inputted to the level of service template, it made sense to include it directly in the same file.

The model is structured to calculate the cost per mile of each of these maintenance activities:

- Gravel Program
- Dust Suppression
- "Patch" Dirt
- Grading
- Bridge Maintenance
- Sign Maintenance
- Roadside Mowing
- Snow Plowing
- Weed Spraying
- Dinner/Service/Travel
- Administration salaries

An important calculation decision: to determine the cost per mile, all these costs were divided by the total number of miles of road in the County. While every road did not receive the same maintenance activities in a year, the purpose of this calculation is to provide a metric that the County can use to evaluate if their maintenance activities are adequate, and if the cost for each activity is sustainable. Because of this decision, the total maintenance cost per mile is not to be used to budget for individual projects.

The costs calculated in the model were then linked to the level of service template for roads, to support the County in evaluating all these costs next to one another.

At this point in the workshop, facilitators will screen-share the model spreadsheet to show you what it looks like and how it works.

Step 6: Review of Assumptions and Model Results

A final meeting was scheduled with the consultant, asset management team, and Public Works team. The consultant reviewed all the calculations with County staff and made changes in real-time, as necessary. The group also spent some time discussing what the results would be useful for, including:

- Making changes to what information is tracked and to what level of detail.
- Making connections between risk tolerance and level of service – generally, the County spends more on the things that are top of mind services for residents, like snow clearing and grading. They spend a smaller amount on bridge inspections and maintenance, which is very easy to see when all the unit costs are listed together.
- Tracking financial impacts of climate change on service delivery over time, by cross-referencing climate data with the results of the spreadsheet model
- Tracking this information year over year can support reporting back to Council on progress in asset management, communicating any changes to levels of service and the corresponding cost increases/savings.
- Evaluating the projected financial impact of building additional roads or adding new O&M activities

Since the County co-created the spreadsheet model with a consultant, County staff are now well-versed in what the tool is, how it was created, what it can do, and how to update it. This is a tool that the County can update annually at a time in the financial cycle that makes the most sense for them.

LEARNING GOAL 2: Understand Learnings from the Detailed Case Study

The importance of team.

The County of Forty File originally participated in the Level 1 workshops because they were told they needed to take the workshops, and at the time were not sure why. Looking back, the County of Forty Mile participants believe that they sould have engaged more of their colleagues at the Level 1 stage, so the broader team had a more consistent understanding of asset management. Their team has also recognized the importance of having more team members involved to take advantage of the collective brain power – as the saying goes, many hands make light work!

At the start of their asset management journey, the team recognized the need for buy-in and involvement from across the organization to make it work. They also recognized how important it was for them to have senior buy-in to make progress. The team knew that asset management wouldn't move forward if they bit off more than they could chew, so they decided to start in an area of strength (roads) to gain momentum for asset types that may seem less important or where data may be more limited.

The importance of different perspectives.

The County of Forty Mile's team strength was demonstrated during the process of determining the cost of road maintenance per mile. Their strong relationships made it possible to complete a task that was originally expected to take days in a few hours. It is obvious there is a lot of respect within the team for each skill set and a desire to work together and engage one another to use those skill sets effectively.

For this process, the team recognized it was important include Public Works and operational perspectives to determine what information was required to complete the task. Once the individual in Public Works had conversations with operations managers, they knew exactly which information to access to support next steps. They were also able to sort through the large amount of data to summarize what was important because they had those initial conversations with the operations managers.

The importance of tracking operations and maintenance efforts.

All operations staff are required to complete timesheets with descriptions of tasks completed in a day. This data forms the basis of project costing. It has been helpful for the County to have an established process for tracking time and effort that produces detailed data and made the process to develop the spreadsheet model much simpler.

Not all operations and maintenance information is tracked electronically yet – operations staff highlight wall maps to keep track of what activities have been completed on which road in a year. This manual process suits many of the staff at the County, and still successfully records important information. The County has found having a plotter to be helpful, as they can scan the large maps to keep and share a digital record of what was done in a year.

SOME WORDS OF ADVICE FROM THE COUNTY:

Recognize that you might have all the information needed to complete a task like this. That isn't a barrier to trying – it starts with having conversations with the larger group and taking whatever information you have and using it in whatever way you can!

What's next for the County of Forty Mile?

After going through this process, the team has identified some changes to how they track some items which will provide better data for future cost of service and O&M reviews. The team intends to share the results of the spreadsheet model that was created once a year with council to support with level of service and budget discussions. In the future, they will ask staff to use their timesheets to track abnormal weather that may impact the costs associated with providing the current level of service. The County will also review websites containing detailed weather and climate information (like Alberta Agriculture and Forestry or Alberta Environment and Parks resources, and Climate Atlas) to correlate how weather and climate affect the cost of service delivery over time.

The County sees that they can use similar approach to determining the cost of service for other services. They recognize the need to engage the people that are most connected to the service and assets to determine what information is required to complete the task. There will likely be context-specific adjustments that will need to be made to the spreadsheet model for each service.

Activity

1. What is your big takeaway from the story of the County of Forty Mile?

2. Do you think the County of Forty Mile approach would work in your municipality? What would you change from the case study process to suit your community?

3. What barriers are present in your community that would impact completing this process? How would you overcome/address them?

Looking Ahead to Workshop 2

HOMEWORK

In today's workshop, we reviewed the fundamentals of asset management and the role of infrastructure in service delivery. In the next workshop, we will be focusing on defining current levels of service for 1-3 service areas in your community. Your task before the next workshop is to identify up to 3 services you'd like to do this with. To help you do that, here's a suggested process:

1. What are all the services your municipality provides? Make a list.
2. From among the services you listed, which are generating concerns within the community, and what are the concerns? Think about common themes seen in the local media, complaints to the municipality, newspaper articles, etc. Consider the "10/80/10" rule (10% are negative, 80% are in the middle, and the final 10% are positive); are these complaints coming from the 10% that will always be unhappy? How do you know?
3. For what service delivery area are expectations not aligned? These could be resident, business, and/or council expectations.
4. What are the "big ticket" items within your budget? Consider both capital and O&M (lifecycle) costs.
5. There are some services provided by municipalities where the level of service can vary widely and can be considered "discretionary" and others that are straightforward. Where could changes to the level of service significantly impact the cost of service delivery?
6. What are the realistic choices for reducing level of service? What services cannot bear a reduction in level of service? Is there an area where the service level could b enhanced? Can you evaluate whether impacts to level of service in one department will impact level of service in another?
7. Does the current level of service present any risks? Have the risks been evaluated by senior administration? By council?

Activity

With your municipal asset management teams, consider your answers to the pre-work questions and discuss the following:

1. Was it easy or hard to answer these questions? Why?

2. Was it hard to pick the 3 services to focus on?

3. Was there information you did not have that could be helpful in responding to these questions and/or choosing the services that you want to focus on?

PRE-WORK FOR WORKSHOP 2

In the next workshop, we will be working on steps 4, 5, 6, and 7 for your selected service(s). To be able to do this, you will need to gather some information and bring this information to Workshop 2 as you will need it to work through the next steps. For your selected service(s):

- Collect capital, operational and maintenance activities, and associated costs to provide the current level of service
- Gather any reports or information related to the service (recommended service levels related to quantity, quality, minimum regulatory requirements etc.). These may include things like policies, bylaws, master plans, or design standards.
- Talk to all the identified individuals that may help you fill some of the information gaps you identified. They may surprise you with useful information you did not know your municipality had.

Do your best to gather this information. As always, you will not have all the information you will wish for. Remember that you will need to start with where you are, and that high-level estimates are okay to get you going (as long as you make and implement a plan for refining them later!).

Workshop 2A
Defining Levels of Service

Participant Workbook

Welcome

Welcome to Workshop 2A – Defining Levels of Service! Today we will be covering the following:

Module 1: Define Primary Customer Groups

- **Learning Goal 1:** Understand Primary Customers Using the Service
- **Learning Goal 2:** Identify Indicators That Will Support Evaluation and Monitoring of Service Levels

Module 2: Barriers to Implementing Asset Management

- **Learning Goal 1:** Identify and Understand Common Barriers to Asset Management Implementation

Module 3: Connect Common Barriers with Strategies for Change

- **Learning Goal 1:** Lessons Learned from Case Studies
- **Learning Goal 2:** Understand How Change Management Supports Asset Management Implementation

Module 1 – Define Primary Customer Groups

After completing this module, participants will achieve the following learning goals:

- Understand primary customers using the service
- Identify indicators that can support evaluation and monitoring of service levels

LEARNING GOAL 1: Understand Primary Customers Using the Service

Some user groups will care more about a service, either because they use or interact with it more or the service has a large impact on their quality of life or business. The user groups of a service may have differing opinions on what is most important about that service or what the minimum level of service should be. If the service is not used by everyone, some residents may feel disgruntled at the shared cost to provide the level of service. The challenge is to acknowledge and balance these opinions and needs with what the municipality can provide.

Many of these differences in perspective can be addressed through the effective establishment and use of defined levels of service. Though it can be scary to commit to a level of service, the process and results can be useful in facilitating productive conversation between stakeholders. Level of service can also be used to help manage costs, to improve communication with the public, and to plan for resource needs more effectively.

Road-related Asset Examples:

An elderly rural resident who lives at the end of a low-class gravel road may care a LOT about that road because it is the only way for emergency vehicles to access their property. The County snowplow driver may really dislike clearing that road because it can be very difficult to turn the snowplow around at the end. A truck driver that uses the adjacent higher-class gravel road may not even realize the low-class road exists.

While this is seen as a commitment to a specific level of service, it must include a commitment to regularly evaluating that level of service relative to the changing context of the community and who is using the service. The fear of commitment to a level of service can be addressed through consistent and ongoing evaluation that provides a defensible decision-making process as new information becomes available. Periodically revisiting levels of service is a crucial for supporting long-term community resilience and sustainability.

Road-related Asset Examples:

Possible user groups:

- Cars
- Buses
- Trucks
- Farming equipment
- Equestrian vehicles
- Pedestrians (including children, older adults, and people with mobility devices)
- Cyclists
- ATVs
- Snowmobiles
- Heavy industry

Activity

With your municipal asset management teams, think back to the work completed in Level 1 and discuss the following questions:

If needed, review the Asset Management Toolkit spreadsheet as a guide when discussing you answer.

1. Does your asset management policy include any guidance towards consulting with user groups?

2. Identify user groups that are using your identified service(s):

3. Does an analysis of the different user groups translate to a different level of service than what is currently provided? Would this change the type, amount, or quality of the infrastructure that enables the delivery of this service?

LEARNING GOAL 2: Identify Indicators That Will Support Evaluation and Monitoring of Service Levels

We design and deliver services to serve people, but we struggle communicating how and why we deliver services in a way that people can understand. The following are some examples of characteristics to consider when discussing levels of service:

- Quality
- Quantity
- Reliability
- Comfort
- Safety
- Convenience
- Sustainability
- Emergency preparedness
- Resilience
- Longevity
- Legislative requirements

Road-related Asset Examples:

- **School buses** – much more sensitive to potholes, creating more of a safety issue for passengers then for a big truck
- **Farmers** – need a reliable transportation network to move goods, and safety move farm equipment
- **Homeowners** – need access to roads for emergency vehicles and snow clearing purposes

Different user groups will value some of these characteristics over others, depending on how they use the service. It can be very challenging to connect the characteristics above to data that will be helpful for evaluating and defining levels of service. Even more challenging can be deciding how detailed that data needs to be. This is where performance indicators can be very helpful.

Developing Indicators

Effective indicators may include:

- **Manageable:** is the level of detail sufficient to provide the necessary information?
- **Meaningful:** does the indicator tell you something? Does it also say something to others, including decision-makers and the public?
- **Replicable:** can we track this indicator over time?
- **Measurable/quantifiable:** can the indicator be easily measured in a way that is easy to communicate?
- **Well-defined:** has the indicator been defined in an absolute way? Shifting or unclear definitions will introduce a level of inconsistency that will reduce the reliability of the indicators, which can result in a loss of confidence in what the indicator is telling you.
- **Aligned with objectives:** is the indicator aligned with the high-level objectives of decision-makers? Can we relate this indicator back to our strategic plan?

Resource: https://fcm.ca/sites/default/files/documents/resources/guide/infraguide-developing-indicators-benchmarks-mamp.pdf

Chances are you are already using indicators of some kind. Consider the following examples for roads:

Service attributes that matter to customers	Possible Performance Indicators	Supporting Data
• Roads are smooth and comfortable to drive on at design speeds	• User complaints • Average Ride Quality Index • Average potholes per km	• Number and type of user complaints • Damage claims • Ride Quality Index assessment • O&M pothole filling plan
• Roads are easy to navigate and aren't too busy	• Average travel times for popular destinations • Average route length for popular destinations	• Traffic modeling • Traffic count/road use data
• Roads are reliably open	• Unplanned road closures • Planned road closures • Snow clearing frequency	• Number of planned and unplanned road closures, and reasons for closures • User complaints about closures and snow clearing
• Roads are safe to travel on in all seasons	• Collisions	• Number of, type, and severity of collisions • Location and frequency
• Roads last a reasonably long time	• Average useful life of road surface • Average potholes per km • Average Ride Quality Index	• O&M Budget • Actual O&M Costs • O&M pothole filling plan • Completion of planned maintenance activities • Unplanned/emergency maintenance activities • Comparison to other municipalities • Ride Quality Index assessment

The backbone of the supporting data in the table above is your asset database. You'll also notice that some indicators can be used to describe multiple characteristics of a service.

You'll notice in the level of service template and example from the handbook and toolkit that there are two places for performance indicators- one for current performance against levels of service, and one for asset performance indicators. Both are important and illustrate the connection between the condition and performance of an asset relative to its desired level of service.

When choosing indicators, consider the following questions:

- Who is responsible for reporting on this indicator? Depending on the indicator, you will need different perspectives to participate.
- How current/accurate is the information you are using?
- How do you make subsequent evaluations as consistent as possible? Do you need to document your municipality's definition of "good", "fair", or "poor"? Will these definitions vary between services?
- How often should you be evaluating and reporting back on your indicators? How will they need to be communicated?
- How much time and money are required to maintain this indicator internally? How much would it cost to hire a third party to maintain this indicator?
- What information can you reasonably collect relative to the capacity of your available resources?

Activity

1. Work with your team to develop a list of potential indicators for your chosen service. Evaluate each indicator against the following:
    - Data/information requirements
    - Current data availability
    - Level of technical detail of indicator
    - Usefulness of indicator (can it be used for more than one service?)
    - Cost to maintain indicator

When evaluating your list, consider the following questions:

1. Why are these good indicators for this service?
2. What information do we already have that could help us quantify this indicator? Who has access to that information? How current/accurate is that information?
3. How many indicators do you need for this service?
4. Who would have more information that would help you evaluate your service against these indicators?

Road-related Asset Examples:

Based on the user groups, these are the characteristics that are most important:

- Quality/Comfort/Safety/Convenience/Longevity

Based on these characteristics, the following Indicators may be prioritized:

- Gravel Roads- Dust control, mud, washboarding, saddling, loose gravel, secondary ditches, soft spots
- Asphalt Roads- alligator cracking, wheelpath cracking, depressed transverse cracking, subgrade failures, settlements/distortions, spalling and raveling, rutting
- All Roads- bad crown, potholes, high water, standing water, encroaching trees, poor signage, narrow road (that cannot accommodate 2-way traffic), and blind spots.

Want to know more about gravel road construction and maintenance?
https://www.fhwa.dot.gov/construction/pubs/ots15002.pdf

Module 2 – Barriers to Implementing Asset Management

LEARNING GOAL 1: Identify and Understand Common Barriers to Asset Management Implementation

Barriers to Implementing Asset Management

In the Level 1 and Level 2 workshops so far, you have spent a lot of time and effort evaluating your AM practices, building a team and a plan, writing a policy, and diving deeper into defining levels of service. At this point, you are really getting into the implementation of asset management and you are likely running into some challenges at this stage.

Activity

1. In small groups, share your experience in pulling together cost information for your selected services. Were you able to do this? Why or why not? What barriers did you run into?

Several case studies from cohort participants have been collected, which are included as an appendix. These case studies highlight current barriers to progress in asset management and includes successes that others can learn from. From what we heard, the most common barriers to asset management include:

Team turnover

How this shows up: The departure of individuals or changes in roles of team members.

- Turnover is one of the biggest barriers to maintaining momentum. The impact of turnover depends on the individual that is departing the team and their role and involvement in asset management.
- Risk management in your asset management team: it needs to be more than one person, and the asset management Champion needs to be well-connected with the rest of the team.
- A team terms of reference becomes a useful tool to document roles and support bringing in new people.

A thought experiment:

Think about your role in your asset management team. What gap would you leave if you departed?

Think about the others on your asset management team. What gap would they leave if they departed?

Why not share this with the rest of your team? This could be a great way to let others know how valuable their role is, and what you appreciate about their contribution.

Inconsistent support from leadership (CAO and/or Council)

How this shows up: support only when it is politically advantageous, initial enthusiasm that fades over time, turnover in leadership that brings in different perspectives on the importance of asset management.

- An AM Policy is a great tool to assert Council support for asset management in the long term.
- Ongoing communication can keep interest piqued and helps to keep the asset management team accountable
- Use data to support your asset management presentations and approach.

Some tips for engaging senior management in asset management:

- Develop your approach to inconsistent support with a "win-win" mindset. What is important to senior leadership and council? How can asset management help them achieve their individual and collective goals and objectives?
- Show examples of how asset management data and information can be helpful in reporting back to Council.
- Take a look at your community's strategic plan and draw connections between Council's direction and asset management.

Time! And timing.

How this shows up: progress is slow, meetings are often re-scheduled, poor attendance, actions in strategy and roadmap are not implemented.

- There will always be competing priorities, and every time of year is a busy time of year. Budgets, council meetings, audits, and everyday service delivery all require time and attention.
- Manage expectations in terms of how much time you can commit to asset management – and make sure you follow through on that time commitment!
- Your timing is also a consideration – there are certain times or environments when an organization will be more open to bringing in or renewing an initiative.

Expectations on outputs and timelines

How this shows up: deliverables are received poorly, support for asset management wanes, feedback and questions are challenging, staff lose resolve and momentum, fear of failure overtakes progress.

- Asset management is not a silver bullet that will magically make infrastructure deficits or cost of service gaps go away.
- The "big work" of asset management (like developing a database of all your infrastructure for the first time) can be very costly and take a lot of time. Setting clear expectations up front for those committing resources to these initiatives can help with keeping everyone clear on what outcomes are reasonable to expect.

Activity

1. Reflect on the barriers presented so far. Do any of them sound familiar?

Resistance to change (people want to see results before they buy in)

How this shows up: progress is slow or nonexistent, AM team loses momentum, efforts are seen as futile, challenging conversations and dynamics emerge between people and teams.

- Start small, with those that are already curious about change.
- Recognize that you will need to approach different people differently.

Investment required to get started

How this shows up: decision-maker sticker shock, differing opinions on hiring services vs. completing tasks in house causes challenges and slows timelines, too much effort required of too few individuals.

- Starting small is a great way to get some results for minimal investment. You can also target your efforts to address a part of asset management that decision-makers are interested in – this may help them internalize the value of asset management and make them more willing to approve investment.

Maintaining momentum

How this shows up: team fatigue, people are tired of hearing about asset management, questions about the value of asset management appear.

Imagine this – you've made some progress on implementing your asset management strategy and there are more people on board with asset management. The next steps in your strategy are big ones, that are taking lots of time and energy. There are days when you feel like you're not making any progress at all.

- Take some time to reflect on and celebrate your progress! Often the steps ahead of us are daunting, and success isn't internalized until you reflect on how much you have achieved and what the outcomes are.
- Communicate your progress – you're doing well and the rest of your organization should know about it!

Activity

1. Individually, reflect on all the barriers that have been presented. Which are the top 3 barriers for your asset management team in implementing your asset management strategy right now?

2. As an asset management team, discuss your top 3 barriers. Are they all the same? Or do they vary between team members? Brainstorm some ways to help each other in addressing those barriers

Want to read about more case studies? There are several case studies included as an appendix to this workbook, and there are even more in FCM's "The Building Blocks of Asset Management" available here: https://data.fcm.ca/documents/resources/mamp/building-blocks-of-asset-management-mamp.pdf

Module 3 – Connect Common Barriers with Strategies for Change

LEARNING GOAL 1: Lessons Learned from Case Studies

Your team is paramount!

If asset management is the vehicle, your asset management team is the driver. Nothing moves without you! Many communities don't place emphasis on spending time and effort in developing their teams, but those that do are well-equipped to weather many kinds of change that are thrown their way.

Schedule time and make the commitment to each other to make that time important.

Making time is a conscious choice. This is easier to do when there is organizational support for asset management. It is up to you the amount of time that you commit to this – if you are a one- or two- person AM team in a small community, you may not be able to commit much time. The important thing is to commit to what you reasonably can.

Start with high impact, easier wins. Then scale up.

Showing some results before taking a bigger risk can help to bring the skeptics along. Using the pilot approach can also help you in learning about the process and troubleshoot any challenges, which will make implementation easier the next time.

Data helps to keep conversations grounded in facts.

In an era of "fake news", it can be very difficult to keep conversations on track and productive if there's suspicion of the truth. Collecting basic asset register information, in any format, to whatever level of detail you have, is always helpful in conversations about infrastructure.

An adaptive plan that contains many incremental steps is the most successful.

Tasks that are too big, too time-consuming, or too expensive (especially at the beginning!) are momentum-killers. You will try some things that work, and others that will not.

Expectations require constant management.

Some decision-makers may be looking to asset management to eliminate infrastructure deficits and service delivery gaps, without their participation. You will need to put some effort in to helping those decision-makers understand their role in asset management. Frequent communication about progress and lessons learned can be very helpful in keeping expectations in check.

Context-specific asset management and putting energy into what is the most useful.

Think of asset management as a choose-your-own-adventure. You don't need to have an approved Council policy for asset management before you can start implementing or improving your approach to asset management. A policy can be very helpful to engage Council in formalizing their support for asset management, but it is not a prerequisite!

Depending on the size of your team and your organization, some of the asset management tools and documents that you could produce will be more helpful than others. Choose the tools that are going to be most helpful to you.

AM needs to be relevant to short and long time frames.

We often talk about asset management as the right thing to do for the next generation, to have a plan in place to keep assets and services healthy in the long term. There are shorter-term benefits too, like better day-to-day operations and maintenance activity tracking and planning. Some decision-makers may want to see shorter-term results of asset management efforts – including those benefits in your discussions and approach may go a long way in bringing those people along.

Activity

1. Imagine you are getting ready to facilitate the next round of Level 1 Asset Management Cohort workshops. What words of advice would you have for the participants who may be starting on their asset management journey for the first time? What barriers would you warn them about? What successes would you share?

LEARNING GOAL 2: Understand How Change Management Supports Asset Management Implementation

So far, you have outlined the mechanics of how your community will approach asset management in your policy, strategy, and team terms of reference. The mechanics are important – but so is the quality, or "muscles", of how you approach those mechanics. How you and your team approach completing those tasks can fundamentally affect the outcomes and ultimately progress in asset management.

Activity: A Thought Experiment

You are the manager in Public Works. It's the first Monday in April, and the past year's large snowfall accumulation is just starting to melt. The forecast for the week is beautiful, but you know that means some of those culverts that are still frozen will not be thawed in time to drain all the snowmelt that is going to happen. You have called a meeting with your operators to develop a plan to steam the most important culverts that are still frozen. In the middle of the meeting you get a call forwarded to you from a disgruntled resident, who is already starting to see some flooding on their land.

You finish up the meeting with your staff, when you see an email from your asset management Champion asking you to participate in a workshop for three hours on Thursday afternoon. You aren't sure what they mean by a "software implementation workshop", and it just doesn't seem important compared to the culvert situation. You choose to ignore the invite and not reply.

Now, imagine you are the asset management Champion. How do you approach the lack of reply from the manager in Public Works?

APPROACH 1:

- Take their silence as disinterest
- Assume they are not supportive of asset management, and choose to run the workshop without them
- Include the manager on the email after the workshop that identifies several tasks for them to complete.

APPROACH 2:

- Call the manager to ask how the busy time of year is going for them
- Ask if they have any questions about the workshop. Communicate the intent, and connect it to how it will help the manager better plan and track culvert maintenance efforts next year, and may help with building the case for buying an additional steam truck
- Work with the manager to assess their ability to participate in the first half of the workshop to provide specific input on how public works needs to interact with data
- Include the manager on the email after the workshop that identifies a few specific tasks for them to complete

Activity

1. What are the differences between these two approaches? How would you feel if you were the Public works Manager? If you were the asset management Champion?

2. What outcomes do you think would come from each approach? What do you think the long-term implications are to team dynamics in each approach?

Team dynamics require constant attention and thought. The most successful asset management teams are intentional about fostering an environment of:

- Support and advocacy
- Trust and collaboration
- Clear roles and complementary skillsets
- Willingness to take and own risks together
- Curiosity and openness

Signs of Change

The implementation of asset management involves a lot of change with respect to individual, team, and organizational ways of doing things. Change is hard! It is an unnatural state for humans. Certain behaviours appear when change is coming or during change that may surprise you:

- Digging in and resisting change
- Apathy
- Ignoring/tuning out
- Fight or flight
- Confusion

You and others will behave in these ways for a reason: these behaviours are typically signs that change is happening or about to happen. Taking the time to pause, self-reflect, and put yourself in others' shoes, you will be better able to understand what is happening.

Activity

1. Review the collection of barriers to asset management implementation you discussed as a team. Using what was covered today, identify some actions you will take to address those barriers, and where change management will be helpful

What's Next?

In workshop 2B, you will be working with your cost information for your selected services. If you haven't collected that information yet, there is still time! As shown in the County of Forty Mile case study, this process does not have to be onerous. It is possible for you to do this before the next workshop. To help you get going, here are some suggested steps:

1. Meet with your AM team and any other team members that are directly involved with the service and assets. Provide them with the who, what, when and why? for the exercise. Ensure everyone understands how the information will be used and how it will assist with decision making in the future.
2. Gather any reports or information related to the service (recommended service levels related to quantity, quality, minimum regulatory requirements etc.). These may include things like policies, bylaws, master plans, or design standards. List all the O&M activities for the service and record in the level of service template.
3. Gather all financial information you have about that service, in whatever format you have it. Determine the cost for each O&M activity and write down any assumptions you make along the way.
4. Determine an appropriate metric to relate costs back to your asset base (like cost per kilometer of road). Using a metric like this rather than the lump sum cost can help to keep perspective while communicating with others. Record all your work in the level of service template.

Workshop 2B
Cost of Service Delivery

Participant Workbook

Welcome

Welcome to Workshop 2B – Cost of Service Delivery! Today we will be covering the following:

Module 1: Understanding and Articulating the Cost of Service Delivery

- **Learning Goal 1:** Consider Affordability and Sustainability in Service Delivery
- **Learning Goal 2:** Identify and articulate assumptions in data
- **Learning Goal 3:** Understand the difference between cost and rate
- **Learning Goal 4:** Practice articulating the cost of services

Module 2: Connecting level of service to risk

- **Learning Goal 1:** Make direct connections between level of service and risk
- **Learning Goal 2:** Identify vulnerabilities in infrastructure and risks to service delivery

Module 3: Check in on asset management progress

Module 1 – Understanding and Articulating the Cost of Service Delivery

LEARNING GOAL 1: Consider Affordability and Sustainability in Service Delivery

Follow along with step 7 for defining level of service in the Alberta Asset Management Handbook & Toolkit: https://open.alberta.ca/publications/getting-started-toolkit-user-guide-for-building-an-asset-management-program

In the process of defining levels of service for your selected service(s), you have:

- Defined service categories and assets
- Defined primary customer groups
- Developed indicators of the community/customer experience
- Determined current level of service
- Collected capital, operational, and maintenance activities that support the current level of service

You have probably collected a lot of information about the cost of service delivery and may be wondering what to do next. We're going to spend some time evaluating and understanding what all of this information tells you about how much it costs to deliver services.

What are the main drivers of cost for this service? Which of these can be controlled?

- Is the delivery of this service regulated? (E.g. Alberta and Environment and Parks for water and wastewater systems)
- Is this an essential service?
- Is the cost of this service dependent on variability in climate and/or weather?
- Is the cost of this service dependent on service demands?
- Does this service have a policy that defines levels of service that are expected by the public?
- Does the level of service impact risks? What are those risks?
- Are the assets that support service delivery performing efficiently?

How do these costs compare to current levels of funding?

- What revenue source(s) fund this service?
- Do you charge for this service? Do you tax this service?
- Which of these revenue source(s) do you have control over?
- If the cost of the service is dependent on demand, does your revenue also fluctuate with demand?

What is the anticipated future of funding sources?

- Do you predict a change in the number of funding sources? Federal/provincial grants, municipal taxes (residential and business), oil/gas revenue, renewables revenues, others?
- Do you predict a change in the magnitude of funding from existing sources?

Remember that you can't predict the exact future of what funding will look like, but you can plan for it!

Evaluating Affordability

The big question: Are your current levels of service affordable based on expected future funding?

This may be difficult to evaluate if you're looking at one of your many services. Overall affordability is best assessed by considering the costs of all the services you provide. That said, there is value to understanding the costs associated with each individual service. Using your cost and some asset or usage information, you can develop some metrics to help you assess the affordability of services. For most services, you can:

- Divide the total cost per year by a relevant unit to the service. For example, you can determine a cost per kilometer of road for annual O&M costs. For water, you can determine a cost per cubic meter of water. For a recreation facility, you can determine a cost per user.
- Compare the total cost per year to your average annual revenue. What proportion of your total revenue would be needed to cover the cost of this service? Is this an appropriate proportion?

Remember that these calculations will give you metrics, which are useful, but have use in a specific context. They are useful in reflecting on costs over the past year and identifying trends year over year. They can have some use in budgeting for the next year, however it is important to understand what data was used and what assumptions were made to generate the metric.

Are there any changes in regulations that may affect the affordability of your service? For example, many communities in Alberta had to recently expand their lagoons to be in compliance with changes to Alberta Environment and Parks regulations for lagoon discharge.

Small communities have a unique challenge in the delivery of water service – without a large City-sized infrastructure and user base it can become difficult to define levels of service that are appropriate for your context. Here's an example of water level of service definition for small systems: https://efcnetwork.org/wp-content/uploads/2017/07/Level-of-service-handout.pdf

Evaluating Sustainability

This term is often associated solely with the natural environment. However, in this context of service delivery, it is directly connected with long-term affordability. Considering your anticipated expenses and revenues over time, is your current level of service sustainable in the long term?

Signs of sustainability:

- Your costs to deliver services are less than your revenues
- There are minimal anticipated changes to the cost to deliver service and/or the revenues
- You are aware of the larger risks to service delivery and have a mitigation plan in place
- You receive minimal resident complaints about service delivery

If you have negative answers to any of the questions above, it's worth asking the question: Are there other ways to deliver this service that could be more sustainable for your community?

Looking for a framework for evaluating current and future trends for sustainability of individual services? Check out the Service Sustainability Assessment Tool: https://www.assetmanagementbc.ca/resources/ (Search for "Service Sustainability Assessment Tool")

LEARNING GOAL 2: Identify and Articulate Assumptions in Data

Data is essential to understanding the cost, affordability, and sustainability of services in your community. When using data for evaluation, it is critical to understand the origin of data and what biases it represents. Considering possible biases can guide you in appropriately using the data you have to better understand levels of service and cost.

The following tables summarize how two main categories of data can be considered in the municipal context. Your community likely has context-specific similarities and differences in how you consider data, so use this information a starting point in evaluating what your data is and is not.

Financial Data

How data is tracked	• In a software that is structured for accounting purposes. • Information is usually entered by one or a few identified individuals that are most likely part of the finance department. • Most often this data is not tracked spatially (i.e. you couldn't show where it is on a map).
Who is responsible for tracking data	• Finance/accounting makes sure the data gets in the system, but some data may come from other departments. • Finance/accounting is responsible for tracking down and collecting that data.
How data is organized	• Depending on software, finance/accounting can decide how to structure data hierarchy and categories.
Where inputs come from	• Accounting processes (accounts receivable, accounts payable, invoices, bills, taxes, payroll).
What data is intended to be used for	• Accounting requirements (financial statements, Tangible Capital Asset reporting, enabling the flow of money in and out of a municipality's possession). • There are many defined and mandated uses for this data that guide how it should be collected, used, and reported on.
Level of accuracy	• Very accurate – financial data needs to reconcile and add up!

Physical Service Delivery Data

How data is tracked	• Several different processes: some ad-hoc processes that vary between departments and individuals, some highly regulated and reported (like water quality testing). • Some of this data may also be spatially tracked, as location of effort is a key piece of information to support decision-making
Who is responsible for tracking data	• For regulated services, operators are required to track data. • For other services, responsibility may be assigned to operators or managers, or not assigned at all.
How data is organized	• For regulated services, the regulator defines how data is organized. • For unregulated services, data organization may vary across departments.
Where inputs come from	• Data is collected from monitoring processes that identify specific technical measurements (like specific water quality tests that identify the presence of organic chemicals and pesticides). • For services that are not regulated, these inputs can take the form of customer feedback/complaints, operator observations, responses to emergency/reactive repairs and maintenance.
What data is intended to be used for	• For regulated services, meeting regulatory requirements for reporting. • For unregulated services, the intent of this information may be less clear. Uses could include service performance measurement against levels of service, risk assessments, streamlining operations, etc.
Level of accuracy	• Variable. For regulated services, the accuracy required is specified. • For unregulated services, the level of accuracy can depend on the service and on the individuals charged with recording information.

LEARNING GOAL 3: Understand the Difference Between Cost and Rate

What is cost?

In its simplest terms, cost is what you actually spend on delivering a service to a specific level. Having a good understanding of your current level of service is important to help you correlate cost information with what service the public experiences. Since levels of service can vary widely, so can the cost!

Cost includes all activities and materials required to successfully deliver the service. This includes consumables, time, and resources. As many municipal services overlap, the cost of one service requires some scope definition. For example, many small communities have one or a few operators that are responsible for the operations and maintenance of both water and wastewater infrastructure. How do you determine how much time they spend on water vs. wastewater infrastructure? For communities that track operations efforts through a mechanism like timesheets, this may be easier to answer than for those that don't.

What is rate?

Rates are the charges placed on the users of a service. The rate may or may not equal the cost of service delivery. Rate is based on a decision as to what to charge for a service. Not all services have set rates – some services are funded through general revenue rather than service-specific charges. In Alberta, many communities charge rates for water services, and some may charge rates for wastewater and drainage services. Most communities do not charge rates for roads, sidewalks, bridges, or other transportation services.

The relationship between cost and rate

Rates are often quantified for services that can be directly tied to consumption. For example, a cost per cubic metre can be applied to each household or business for water consumption. We establish a rate for solid waste consumption based on the size of the container that you use. In some instances, we can establish a charge (in the form of a toll) for using a specific road, or segment of a road.

While it may seem simple to establish a rate based on consumption, how are we establishing the rate? Do we know how much it costs us to deliver the service? Or are we simply establishing a comparison with what another municipality is charging?

What about services that do not directly relate to consumption? Although we do not charge a specific rate for these (e.g. roads, parks, protective services, etc.), it is important to understand how much it costs to deliver these services as part of understanding the relationship among costs, revenues, and levels of service.

The complexity of cost recovery

In a simple scenario, a municipality would determine how much it costs to deliver each service to their desired level and then charge the users an equivalent rate to cover these costs. This is known as full cost recovery. However, local government does not operate within this simple scenario and determining the relationship between level of service and cost recovery is far more complex.

While we can establish user pay systems for some services, many will be covered through revenue collected from taxes across the municipality. How do we decide how much of the costs to recover for each service (i.e. full-cost recovery, a portion of the costs, or fully subsidized)?

There is no singular formula or answer to this question, other than "it depends". Local context plays a critical role in informing how you think about and determine your strategy for cost recovery. However, a consistent factor across municipalities when determining either rates or a cost recovery strategy, is the importance of understanding how much it costs to deliver the service.

WHAT THE MUNICIPAL GOVERNMENT ACT SAYS ABOUT SERVICE DELIVERY AND COST RECOVERY

When we think about local government's role in delivering services, the Municipal Government Act is often referenced as the guide directing the municipal mandate for service delivery. However, Section 3, which outlines the purposes of a municipality, states in 3 b) that one of the purposes is "to provide services, facilities, or other things that, in the opinion of council, are necessary or desirable for all or a part of the municipality." This provides great flexibility for council in determining which services to provide, though begs the difficult follow-up questions:

- How do we determine what is necessary vs. what is desirable?
- Is this service universal for all the municipality or just a part? Which part? Why?

Beyond answering those questions around which services to provide, it also opens the door to examine whether the municipality has the capacity to provide those services (i.e. staff, equipment, expertise, money, etc.). Is the delivery of these services considered in the public good and, therefore paid for through tax revenue, or should these be covered through a user-pay system and defined rates or fees? The Municipal Government Act does not provide specific direction as to what you should charge for services – it is up to your organization to understand your context and develop an approach to charging for service that aligns with your goals and financial capacity.

Factors to consider in decisions about what to charge

With no direct answer for what to charge, this raises a series of questions requiring multiple perspectives for consideration in understanding the trade-offs required as part of cost recovery analysis for each type of service. The following perspectives, while not exhaustive, illustrate the multiple factors that will be considered as part of understanding how to consider cost recovery through your own context.

While these are presented as individual factors, it is important to understand the interconnections among all of them, which helps to illustrate the challenge in making decisions around levels of service and the expected level of cost recovery through user fees and rates.

- **Our collective social contract:** When we consider specific services through the lens of the broader public good, inevitably some form of subsidization occurs through tax revenues that is meant to decrease any direct user fee. These can come in the form of services/facilities that provide a broader societal benefit, like parks, recreation, or community facilities. This can also include services important to the broader community that are difficult to quantify through a consumption/use-based rate or fee, like roads or protective services. In these instances, the municipality may fully cover these types of services through tax revenue.
- **Fairness:** While you may have determined the different services that are considered part of the broader public good and worthy of subsidy, this introduces the question of what is fair. Depending on the service, you may need to consider whether it makes sense to deliver the same level to all areas of the community or to all users of the services. Your definition of level of service and user groups is an important part of understanding what is fair to charge different groups for service. Beyond services that are subsidized through tax revenue, this also applies to services that apply user fees as well. Looking at the concept of fairness through a different lens, the local government may determine that a particular service should no longer be subsidized and now be fully user-pay. How will this impact those individuals or families that do not have the means to afford those rates, yet rely on the facility/service? How are we thinking about and informing these decisions around establish these rates and/or subsidies through the lens of what is fair?

Fairness Example:

Does it make sense for a citizen living in a mature neighbourhood/established hamlet to pay the same for water/wastewater as it does for someone in a new neighbourhood that required significant investment to extend new infrastructure?

- **Affordability:** One of the important aspects of the relationship among the level of service, the cost of delivery, and revenue is evaluating if you can afford to continue delivering the service to the expected level or, in some cases, if you can afford to deliver it at all. Beyond the existing services, this also applies to the constant demand for new or better facilities/services. It is reasonable to assume that nearly every citizen in nearly every community wants access to as many amenities as possible, while paying as little as possible. There are many examples of local governments making decisions around investments that assume if we only build/establish this new facility/service then that will be the catalyst we need to incentivize growth and development, which will translate to additional revenue. While this may work as a local catalyst, have you fully understood the financial consequences if it does not work? Even if it does work, do you have the revenue generation needed to effectively operate and maintain the facility over the short and long-term?

Affordability Example:

You may determine that you can only afford to keep your pool open on weekends or in some cases you may determine that you can no longer afford to operate your pool.

- **Sustainability:** In service delivery, sustainability is directly connected to long-term affordability. If your municipality provides a service to an expected level without an understanding of costs and the fluctuations in revenue, the municipality becomes vulnerable to any disruptions to the costs or revenues. These disruptions could include things like decreases in provincial funding or tax revenue, requiring trade-off decisions the municipality has not faced before. When the relationship between cost and revenue becomes unbalanced, then continuing to provide that service at the expected level becomes unsustainable, requiring difficult decisions as part of a reactionary response. Do we lower and/or eliminate the service? Do we establish a new user fee/rate? Do we raise taxes across the board to maintain the same level of service?
- **Priorities:** When considering priorities through the lens of cost recovery it is important to understand who established these priorities and how they were established. For example, are these priorities defined through a Council strategic plan or are these priorities defined through a significant community engagement exercise as part of a Municipal Development Plan or Community Visioning exercise? Once we know who directed the creation of these priorities, the next important question to ask is how were they developed? Were these priorities developed with consideration to the financial implications of reality?

Adjusting charges to reflect a changing reality

Decisions about how to approach cost recovery should not be a one-time event, but rather a recurring process as part of implementing your asset management strategy. There are many situations that may prompt you to revisit your evaluation of service affordability and charges – some of these are listed below.

- **Changes to your fiscal reality:** as costs and revenues ebb and flow, you will need to periodically re-evaluate how you are addressing cost recovery.
- **Available tools and charging mechanisms:** as the context of your community changes, you will need to re-evaluate the tools, mechanisms, and policies that you use to address fees and rates associated with service delivery (e.g. increasing permit/application fees, introducing off-site levies, charging for parking, etc.).
- **Changes to risks:** changes to the risks of service delivery can prompt additional spending to maintain risk tolerance or levels of service – this increase in cost to mitigate risk will need to be recovered, or the level of service or risk tolerance may need to change.
- **Changes to risk tolerance:** as elected officials turn over through election cycles the risk tolerance of the local government may change, becoming either more aggressive and willing to make larger-scale investments, or conservative, reducing the amount spent on service delivery.
- **Community changes:** as you experience population growth, decline, or relative stability, the one constant is that things are always changing, which will contribute to the demand for either different services or different levels.

Activity

1. What are the risks of not recovering the cost of services?

2. What are the risks of valuing cost recovery over the social benefit of services?

LEARNING GOAL 4: Practice Articulating the Cost of Services

Many of our day-to-day business and interactions are related to money. Even though we have a lot of practice, it can still be hard to talk about, especially when it comes to what the actual costs of delivering a service. Confronting the affordability and sustainability questions can be challenging to do individually, let alone as a group.

Some tips for approaching the conversation about the cost of services:

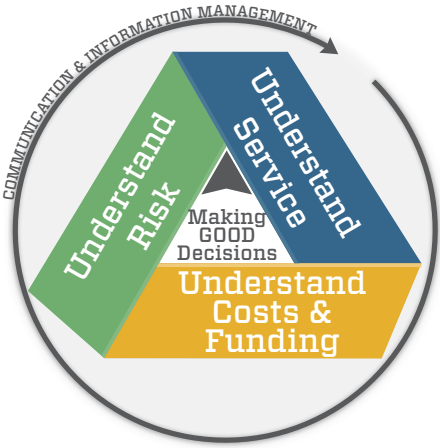
- Tell the story of services and why they're important
- Be direct
- Be clear
- Lay out the facts of what is known
- Clearly state assumptions
- Where possible, highlight the difference between cost and rate

Activity

1. As an asset management team, put together a quick presentation to share the information you've collected about your services so far. The facilitation team will provide you with a PowerPoint template to help you with this.

Module 2 – Connecting Level of Service to Risk

LEARNING GOAL 1: Make Direct Connections Between Level of Service and Risk



To date, most of the content for the Level 2 workshops have been focused on the services a municipality provides and the costs of providing a certain level of service. However, this is not the full picture, as risks and opportunities need to also be considered when making good decisions about the use and care of infrastructure to deliver services. Remember this diagram from the Alberta Asset Management Handbook & Toolkit?

There are always trade-off decisions about service, risk and cost that need to be made. Now that you have a good understanding of the level and cost of service for your selected service(s), we are going to draw some connections to the risk trade-offs of providing that level of service.

Risk Basics

As you'll recall from the Level 1 workshops, risks are events or occurrences that will have undesired impacts on services. When assessing risk, it is important to consider both the impact of the risk and the likelihood of occurrence.

Risk = Impact x likelihood

Understanding where risks may exist is important to maintaining services and managing assets effectively. Risks cannot be eliminated, and sometimes mitigating risks can be expensive. As an organization, you may decide that some risks should be tolerated. Tolerating risks is perfectly acceptable, as long as it is an informed decision to tolerate risk.

- **Asset risk –** describes the risk of an asset failing to perform the way that is needed to deliver a service (.e.g., a specific roadway may be subject to washout with a certain flood event)
- **Strategic risk –** describes a change that would affect your ability to achieve municipal objectives e.g., flooding can cause a shift in resources away from achieving some of the community's strategic priorities
- **Vulnerability –** the inability to withstand an event. This is related to a community's ability to manage risk

Managing risk is not always as straightforward as eliminating risk, and every community has a different level of risk tolerance. In some cases, a community can mitigate risks but not eliminate them altogether. A road may be at risk of flooding and washout with a certain intensity of storm due to an undersized culvert that allows the local creek to pass under the road. The risk is managed by implementing a program to check and clean the culvert of debris every week to maintain the maximum possible flow capacity. However, the culvert is still a point of vulnerability, because a large event storm can still inundate the culvert and flood the road.

Asset management involves the consideration of a community's risk tolerance: the level of risk the municipality can reasonably handle. Attempting to reduce all risk as much as possible is prohibitively expensive and unnecessary. Municipalities and their constituents understand that things aren't going to be perfect 100% of the time – but the important things need to be pretty good most of the time. Your risk tolerance will be informed not just by the magnitude of the risk (the consequence it will have and the likelihood that it will happen) but also the cost of managing or reducing the risk.

Risk management refers to the process of identifying and assessing risks, identifying and evaluating actions that can be taken to reduce risk, and implementing the appropriate actions. Risk management is an iterative process, meaning that the desired result is achieved through repeated efforts, rather than through a single action.

Connecting Level of Service to Risk

Level of service identifies attributes like reliability, safety, and capacity. Risk articulates what happens when the demands or stresses on a service and its infrastructure impact those attributes in an undesirable way. Connecting level of service to risks can be helpful in articulating not only the importance of the existence of the service to the first place, but also the importance of maintaining or changing the levels of that service.

For example, consider the COVID-19 pandemic:

Many municipalities have had to manage risks to service delivery related to the global pandemic. Some systems that are demand-based may suddenly become less utilized, like public transit for commuting. Others may suddenly see greater or different use, like roads being shut down to allow for more room for physically distanced foot traffic.

REFLECTION: how has the pandemic affected the demand for some of your municipal services? What has surprised you about this?

Connecting level of service to risk can be done by using level of service language and considerations in evaluating risks and using level of service language to communicate those risks.

- Some examples of consequence in level of service language:
- Will service delivery be interrupted? Will lots of people be impacted?
- Will the level of service be impacted? Will we be able to meet our targets?
- Will there be negative health/safety/environmental impacts?
- Will other services be threatened?

Some examples of likelihood in level of service language:

- Does the condition of required assets indicate that there may be a failure soon?
- Does the historic performance of the asset indicate that the assets are not performing as needed, and are therefore increasing risk?

Roads Examples:

Consider the following characteristics of the service rural roads provide.

- Quality
- Quantity
- Reliability
- Comfort
- Safety
- Convenience
- Sustainability
- Resilience
- Emergency preparedness
- Longevity

Some of these service characteristics are more closely connected to risk than others. The cost of maintaining some of these characteristics to your desired levels may also be more than others. Examining how your community delivers this service and what you're willing to spend money on can provide you with some indicators to your organization's risk tolerance.

For example, many communities spend a lot of time thinking about their road surfaces. They talk about things like potholes in asphalt roads and washboarding on gravel roads. They likely spend a lot of money fixing potholes or re-grading and gravelling their roads. The service the roads provide is to enable transportation from one place to another. In many communities there are other assets that support transportation like bridges and culverts that allow for the road network to cross major drainage courses. While still essential to the overall service of transportation, these other assets may get less airtime and investment than the road surface. In this case, the community implicitly considers the risk of a major flooding to be less than the risk of a rough road surface. While both aspects of the service are important, should one be more important than the other? This is up to the community to decide.

Activity

1. What are the most important risks to your selected service to consider in trade-off conversations between level of service and cost? What is your organizational tolerance for these risks?

2. What are your minimization or mitigation options? Will these options result in a higher cost of service delivery?

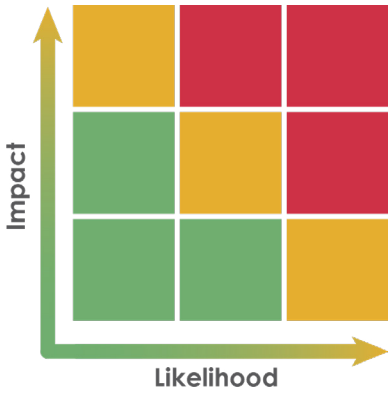
LEARNING GOAL 2: Identify Vulnerabilities in Infrastructure and Risks to Service Delivery

Climate Change and Risks to Service Delivery

Climate change is affecting our evaluations of the impact and likelihood of certain events. This is causing municipalities to consider natural disasters like flooding and forest fires when planning for the future of services and supporting infrastructure.

Climate change is directly connected to asset management, specifically through risk and level of service, in the following ways:

- Design parameters for which an asset was built may no longer be adequate.
- Increased wear and tear on assets may lead to more imminent investment needs, or higher costs over the long run.
- Extreme weather events (e.g., storms, temperature extremes and fluctuations, floods, etc.) may destroy or damage assets well before they have reached the end of their expected useful life.
- A higher level of service or increased maintenance may need to be provided to deal with the impacts of climate change.



An event that is considered a low risk today (or green in a risk matrix like the one above) may become a medium or high risk due to a changing climate. For example, a road recently constructed outside of a river floodplain may eventually be within the floodplain during a 1:100 year event due to the higher intensity of storms that cause higher flow more quickly in the river. The likelihood of the road being impacted by a flood event increases, increasing the overall risk associated with that event.

Efficiencies can be found by addressing climate change risks with other risks. For example, a municipality may have identified some risks to a few large culverts below major roads. The culverts are aging and the bedding around the culverts are showing signs of erosion. Without considering climate change, the municipality may just replace the culverts with similar culverts. However, if extreme weather events from climate change are considered, the municipality may choose to replace the existing culverts with larger sized culverts to accommodate projected increases in flow. In this case, the municipality has now managed current and future risks with a single project and only incremental additional costs.

Managing asset vulnerabilities is part of planning and making appropriate investments in infrastructure. It requires considering several factors that are part of asset management:

- Understand risks and vulnerabilities and how they impact your ability to deliver services.
- Evaluate the reduction of risk/vulnerability vs. the cost of implementing the adaptation action.
- Consider how some infrastructure also protects other infrastructure
- Consider how some adaptation strategies may have multiple benefits of co-benefits that include adaptation to climate change and achieve other priorities, such as habitat rehabilitation, improved air quality, or attraction of businesses.
- Identify potential adaptation strategies and actions.
- Prioritize activities based on return on investment (e.g., asset management approach), the availability of co-benefits.
- Prioritize investment based on anticipated timing of impacts/risk (additional climate change consideration) and how risks will change over time.
- Incorporate climate change considerations when considering the replacement or renewal of infrastructure for other reasons, or the construction of new assets.
- Strategies for managing risk related to climate change include both capital and operations and maintenance actions. Improved roads and drainage operations and maintenance or water use restrictions are both examples of operations and maintenance adaptations to climate change.

Did you know?

The Municipal Climate Change Action Centre (MCCAC) is a collaborative partnership among Alberta Municipalities, RMA, and the Government of Alberta. It delivers funding, technical assistance, and education to municipalities and a variety of organizations to reduce the impacts of climate change and enhance climate resilience. https://mccac.ca/

Impacts on service delivery and assets

Asset management keeps the focus on service delivery in changing conditions. It helps you focus on your goals. Rather than getting swept up in how overwhelming climate change may be – especially when there are so many unknowns – asset management keeps the focus on what services your community delivers, and connects how some services (e.g., roads) are dependent on others (e.g., stormwater system capacity).

Below is a summary of events related to climate change and potential impacts to service delivery:

Flooding

Risk to service delivery

- Overwhelm or damage roads, often times preventing access to essential services or preventing the transport of goods and services
- Damage to facilities can minimize or remove the ability to provide services through that facility
- Existing assets such as water, sewer, storm water can be damaged through floods
- A community's ability to provide emergency services could be limited, either due to inability to access equipment, inability to access certain locations or because of overwhelming need for those services
- The ability of a municipality to communicate to the public may be impacted through flooding (i.e. damage to internet, power outages etc.)
- The efforts required to respond and recover from floods can also limit a municipality's capacity and ability to provide other day to day services.

Infrastructure vulnerability

Existing drainage and flood protection infrastructure may not be built to withstand more intense and/or frequent flood events. If flood mitigation or protection measures fail, there can be a cascading negative impact. In addition to considering social and environmental impacts, it is important to consider the costs associated with building to higher standards vs. the likelihood of an event and consequences/costs associated with the event (i.e. cost of building a berm a couple of meters higher vs. the costs of replacing infrastructure damaged due to the berm overtopping).

Forest fires

Risk to service delivery

- Cut off road access
- Damage or destroy above ground infrastructure
- Increase or overwhelm the demand on fire protection infrastructure and service.
- Long-term impacts to ecosystem services like natural areas that are enjoyed by the public
- Short-to long-term impacts to soils in the area, potential for increased erosion due to sudden decrease in vegetation
- Long-term impacts to surface and/or groundwater quality that may affect water treatment processes
- Long-term impacts to the physical and mental health of first responders, affecting emergency services

Infrastructure vulnerability

If the fire travels into a community with a high density of services like a city, town, or village, many different services and infrastructure will be immediately and severely impacted. The vulnerability of a community to the impacts of fire depends on the surrounding landscape, climate, and implementation of fire protection measures.

Drought

Risk to service delivery

- Impacts to water supply and/or quality, which may result in not having enough water to meet the public's demand.
- Challenges in treating and distributing water due to changes in usage
- Increases the risk of wildfires
- Negative impacts on natural assets like forests and wetlands – the ecosystems services they provide may no longer exist

Infrastructure vulnerability

Reliance on one water source may leave a community particularly vulnerable to the effects of drought.

Did you know?

You can measure your progress as you develop and implement a climate adaptation plan or incorporate risk planning into your asset management plans using the FCM Climate Adaptation Maturity Scale: https://fcm.ca/en/resources/mcip/tool-climate-adaptation-maturity-scale

Impacts of Climate Change on Chosen Service

How do you consider the impacts of climate on services?

- Start by understanding projected changes to climate using a tool like the Climate Atlas: https://climateatlas.ca/
- Based on projected changes, identify potential impacts to services and infrastructure
- Are there some services or geographical areas that are more vulnerable than others?
- Compare these potential impacts to your current service levels and risk tolerance. Are you going to have to adjust how you deliver service to respond to these changes?
- What might need to be done to mitigate these risks and vulnerabilities?

Activity

1. Review the Climate Atlas data and projections for your community. Discuss the potential impacts to your services using the following guiding questions:
    - What impacts will climate change have on the infrastructure that supports this service?
    - Does climate change affect the delivery of this service? If so, how?
    - Can current asset performance and service levels be sustained if these projected changes come to pass?
    - Where are you most vulnerable to adverse impacts on services resulting from climate change?

Module 3 – Checking in on Asset Management Progress

It's time to review your progress! The FCM Asset Management Readiness Scale is one way to measure and monitor your progress in Asset Management. It is also a requirement of the program as FCM wants to understand how this program is supporting communities in progressing on their asset management journeys

Activity

1. Take some time as an asset management team to review and complete the FCM Asset Management Readiness Scale.

RESOURCES

FCM Asset Management Readiness Scale: https://data.fcm.ca/documents/resources/mamp/asset-management-readiness-scale-mamp.pdf

FCM Building Blocks of Asset Management: https://data.fcm.ca/documents/resources/mamp/building-blocks-of-asset-management-mamp.pdf

What's Next?

In workshop 3, we will explore engaging with the public on levels of service. You have spent a lot of time and effort understanding your current level of service, what it costs, and some of the risks to service delivery, now it's time to get some feedback on whether or not these services are meeting the needs and expectations. Between now and the next workshop we suggest:

1. Share what you've learned and collected about your current level of service and cost of service with decision-makers.
2. Review your public participation policy. Does it provide guidance on how to engage the public in conversations and feedback about services?
3. Collect and review any previous public engagement information you have. If relevant, how does this feedback compare to the current level of service you've defined?

Workshop 3
Communicating the Cost of Services

Participant Workbook

Welcome

Welcome to Workshop 3 – Communicating the Cost of Services! Today we will be covering the following:

Module 1: Introducing the idea of civic literacy and the relationship to service delivery

- **Learning Goal 1:** Understand the Importance of Civic Literacy in Your Community and the Benefits of Communicating About Services
- **Learning Goal 2:** The connection between civic literacy and municipal revenue
- **Learning Goal 3:** Identify how public participation is a key component of civic literacy
- **Learning Goal 4:** Identify the benefits of communicating about services

Module 2: Developing a communications plan, tools, and materials to support the cost of service discussion

- **Learning Goal 1:** Understand the differences between communication and engagement
- **Learning Goal 2:** Understand communication tactics for target audiences
- **Learning Goal 3:** Learn how to develop a communications plan to communicate cost of services

Module 3: Leading the discussion about the cost of services

- **Learning Goal 1:** Understand how to implement and adapt your communications plan

Module 1 – Introducing the Idea of Civic Literacy and the Relationship to Service Delivery

LEARNING GOAL 1: Understand the Importance of Civic Literacy in Your Community and the Benefits of Communicating About Services

Today, local governments have a greater role to play in service delivery than at any other time. Yet, despite growing responsibilities, public expectations of local government as problem solvers have become more and more unrealistic. This is not a negative reflection of government services or on the people serving in government. **Rather, it's a growing public awareness that the incremental changes of local government have not kept up with the increasing complexity of community challenges**[1].

What do trade-offs mean to the public?

We have spent a lot of time talking about the trade-offs between service, risk, and cost in the context of municipal administration and Council. But what do these mean from the public's perspective?

Often, constituents see the impacts of a local government's trade-off decisions in their interactions with a service. Even if the change was accompanied by public engagement and communication, the actual impacts of the decision won't be felt until after the change has been implemented. Therefore, it's essential to consider the level of service at the customer's level throughout the decision-making process.

It's also important to communicate that changes made to levels of service may also impact the future capital budget and operation budget for other services that are directly/indirectly tied to the service under review For example, choosing to build and operate a new recreation facility might squeeze resources for road maintenance while also increasing the level of road maintenance required where the facility is being built.

Consider: How does the public react to trade-offs in your community? Do you think they are aware of what those trade-offs are?

1 *Urban Systems. (2020). Discussion Paper: Emerging Stronger Together as a Community.*

Activity

As a group, discuss your experiences in communicating level of service changes to your community members.

1. How was the communication received? Positively or negatively?

2. Why do you think it was received this way? What did you learn from this experience?

What is civic literacy?

Civic literacy is having the knowledge and skills needed to participate in making meaningful change in your community. It applies to people across the community, including those elected and appointed to run a municipality[2].

Often, people in a community may be invited to talk about a project they know nothing about, at a time that isn't convenient for them (like a Sunday afternoon or weekday evenings), and in a format they don't understand—this can put them in a bad headspace before you even get to the discussion.

What are some assumptions we have made about our community members and civic literacy?

When people show up to complain, they're labeled as unreasonable or a "NIMBY" and when they don't show up, they're labeled as apathetic.

NIMBY = Not In My Backyard

There are lots of different versions of this term, but generally it's used to describe community members who oppose development near their home because of a perceived personal threat. There are lots of reasons someone may oppose development near them, but it often stems from uncertainty or a lack of clarity around the project and the impacts they might experience.

2 *Urban Systems. (2020). Discussion Paper: Emerging Stronger Together as a Community.*

Both assumptions can be wrong!

This cycle is problematic and has contributed to decreased public trust and a growing perspective of an ineffective and inefficient government.

Further, some citizens have morphed into simply "taxpayers" with an increasing sense of entitlement who prefer blaming local government rather than taking responsibility for building and strengthening their community[3].

Civic literacy is important for building a more trusting relationship between a government and its constituents and enabling public engagement and communication that is productive and meaningful rather than just an item on a to-do list. It is the foundation for people in a community to be able to take an active role in talking about the levels of service they want and need.

What does it mean to improve civic literacy? Why is this important?

Improving civic literacy across the community can increase understanding of the interrelationships that represent the complexity local governments face. Moving beyond a business-as-usual approach requires finding a common language that can be used to frame discussions, inform decisions, and prioritize investments more effectively[4]. This is where asset management comes in!

Consider: How would you rate the level of civic literacy in your community around:

- Tax rates
- User fees
- Spending on road/bridge maintenance
- Spending on water systems
- Spending on parks and recreation infrastructure
- Spending on Transportation/Recreation (user fee specific)
- Understanding impacts of climate change on infrastructure

3 *Urban Systems. (2020). Discussion Paper: Emerging Stronger Together as a Community.*
4 *Ibid.*

How can we improve civic literacy?

As with everything, there is no single answer to "how" to change the community. The inability to provide a single answer shows that we can't change people—only how they interact. It's important to remember that no matter how much information you share, some people may still disagree—and that's okay. You're not always trying to obtain buy-in or consensus, in some cases you're just providing the necessary information.

Thinking about improving civic literacy through this lens requires incorporating the following aspects into community processes:

Empowering people to meaningfully engage

This cannot simply be a scenario where the public is either informed or they aren't. What role can the community play in empowering people to be more informed in how they participate in decisions that affect them.

Acknowledge the systemic nature of the community

Everything is connected, and we all contribute to the state of our communities. Taking a systems approach to the community reinforces the need for a broader understanding of the interdependencies that exist among our built, social, economic, and natural assets.

Planning is not a linear path

Planning is important, but plans do not predict the future. Context changes and the ability to adapt is critical in the face of change, requiring a commitment to consistently evaluate implementation efforts.

Changes in community processes are hard

We need the courage to embrace changes from the status quo, no matter how incremental these steps may be, with the understanding that these steps may fail[5].

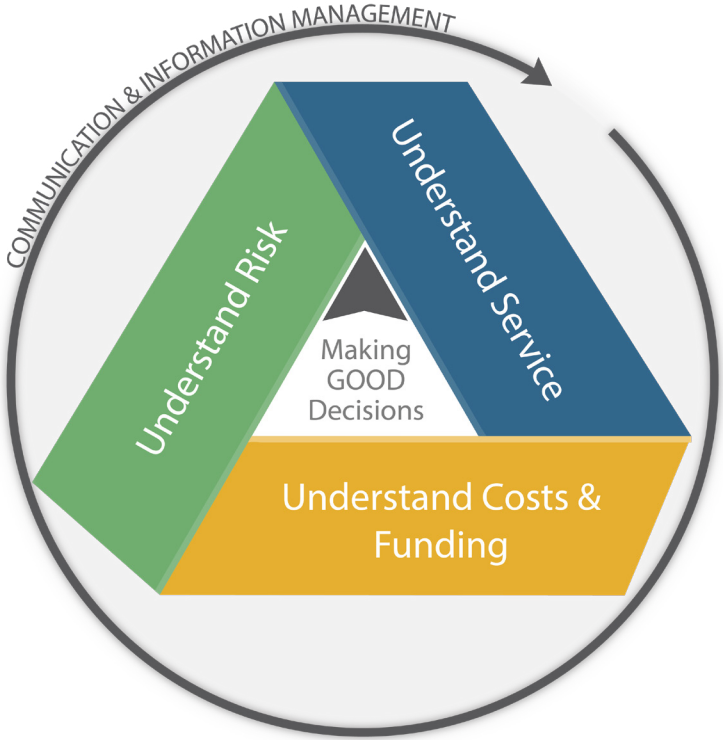
Why is improving civic literacy important for the level of service discussion?

For the public, they can benefit from understanding limitations around what their municipality can and can't do with their tax dollars and user fees. It may also help to increase their sense of responsibility for the services they use and understand how services are impacted. This understanding also makes it easier to explain when change is necessary. Gathering meaningful public input is also an important data source when setting service levels. Effective engagement is a two-way street!

5 *Urban Systems. (2020). Discussion Paper: Emerging Stronger Together as a Community.*

LEARNING GOAL 2: The Connection Between Civic Literacy and Municipal Revenue

In asset management, understanding cost includes knowing where the money comes from, as well as where it gets spent. When you talk to the public about service levels, helping them understand municipal revenue is an important piece of the puzzle.



Alberta Handbook & Toolkit

The mechanics of municipal revenues

What tools are available for municipal revenue generation, and how do we communicate this to the community in relation to levels of service? How do we bridge the gap between what residents pay and how they see their dollars being put to work?

The three main sources of municipal revenue[6]:

Revenue Source	Used For	Pros	Cons
Property Taxes	Capital costs, O&M	• Relatively transparent source of revenue – residents can find out how their tax dollars are used regarding level of service.	• Public misconceptions about how municipalities set tax rates. • Tax tolerance can vary - often a political issue that can be hard to talk about in a productive way. • May be difficult to explain priorities regarding infrastructure due to lack of public understanding of infrastructure life cycles, O&M costs, etc.
User Fees	Covering costs of a service	• High transparency - more direct link between user and service . • Community members may have greater understanding of the 'why' to pay .	• Rising O&M costs may require higher fees – tolerance for this can be low. • May not always cover the cost of providing a service – how do you talk about this with the community?
Municipal Grants (transfers)	Specific projects, specific capital investment, specific O&M costs	• Reduces financial strain on community. • Community members may perceive as saving them money.	• Often only available for capital projects, O&M still needs to be paid for – how can this be clarified for community members? • If paying for O&M, transfers might only cover part of the cost – how do we communicate this to community members? • Grants may not be reliable long-term sources, putting the financial resilience of the municipality at risk. Can be difficult to communicate larger, more sudden changes to revenues.

6 *CUPE. (2014). Municipal Finances 101. Municipal finances 101 | Canadian Union of Public Employees (cupe.ca)*

Activity

In breakout rooms, discuss whether you think your community members understand the following:

1. Direct fee for service vs. general revenue approaches to funding services in your community:

2. What their property taxes pay for and how property taxes factor into maintaining levels of service:

3. What are some assumptions community members may have regarding municipal revenues?

4. How are you currently communicating about municipal revenues to your community members?

Consider:

1. What are some assumptions community members may have regarding municipal revenues?
2. How are you currently communicating about municipal revenues to your community members?
3. Is it working? Why or why not?

Activity

In breakout rooms, review the information you collected on O&M costs for the service you selected.

1. If there is a difference between the actual cost of service delivery and your revenues, is it important to communicate this with the public? Why or why not?

2. What are the key pieces of information about the cost of services to communicate to the public?

LEARNING GOAL 3: Identify How Public Participation is a Key Component of Civic Literacy

In this section we'll be going through how the public understands their role in service delivery and exploring how your public participation policy might support communicating about service delivery in your community.

Some connections are easier than others to understand. For example, when you pay for a gym membership, you can immediately experience the benefit of this cost . However, services like roads, water and wastewater are less direct and there may be a disconnect between how much an individual household pays and the level of service they get for their money.

How does the public understand their role in service delivery?

Explicitly: *They know they pay user fees, provide feedback during public engagement, and vote for candidates during elections.*

Implicitly: *They turn on the tap and receive clean, safe drinking water, drive on paved roads with underground utilities beneath, and enjoy public park spaces.*

Civic literacy and public participation are tools that can help bridge this gap in understanding

Public Participation, as per the MGA

The legal requirement of municipalities to communicate with its public is outlined in Section 216.1 of the Municipal Government Act. Public Participation Policies must be publicly available and must identify how municipalities will approach public participation and engagement. The Public Participation Policy must also identify the types or categories of approaches the municipality will use to engage municipal stakeholders, and the types or categories of circumstances in which the municipality will engage municipal stakeholders.

How does your public participation policy support communication about services in your community?

Your public participation policy is a good starting point for developing communication about service delivery. It's helpful to see what other communities are doing, keeping in mind varying community perspectives and willingness to pay. Generally, Council and public opinion will shape the discussion that takes place.

Case Studies: What's going on in other communities?

Gathering feedback on services in Calgary, AB – The city conducts the annual Citizen Satisfaction Survey to gather people's views and perceptions about programs and services. The findings inform a performance-based report for Council, administration, and the public. Gathering this type of information on a regular basis can help inform asset management strategy, determine the public's willingness to pay and create ongoing two-way communication.

Guiding the budget discussion in Yellowknife, NWT - The city created simple and engaging public-facing infographics to communicate "Where your money goes" in their annual budget. Material like this can be used for many different purposes and across many different mediums – such as social media, mail-outs and as posters. It also ensures the municipality is influencing the discussion about infrastructure spending and providing avenues for increasing public literacy on levels of service.

Discussing water and sewer rate hikes in Winnipeg, MB - To help pay for $1.8 billion treatment plant upgrades, the city recommended a combined increase of 11.6% to water and sewer rates for four years. It's possible that the rates will rise higher if other levels of government do not provide part of the funding for the upgrades. Currently, the city takes 11% of total revenue from sewer and water rates as a dividend—but one Councillor doesn't support this, he argues the city doesn't direct this cash for upgrades to its sewage infrastructure. Another Councillor says rate increases are really taxes disguised as fees.

LEARNING GOAL 4: Identify the Benefits of Communicating About Services

There's a lot of value in communicating about services—both for the public and local government.

What are the benefits of engaging and communicating with the public about services[7]?

- Clearer identification of the values, ideas and recommendations of community members
- More informed residents, greater feelings of ownership over service delivery
- Improved decision-making and actions, with better impacts and outcomes
- More community buy-in
- Improved civil discussions and civic literacy
- More trust - in other community members and in local government agencies and decision makers
- Higher rates of community participation in projects and initiatives
- Leadership development among community members

Engaging with the public about levels of service will require some background information.

Consider: How would these outcomes affect your work in your community around asset management?

The work you have completed in the previous workshops has helped you to collect what you know about services in one place. This will help you identify the key messages to tell the public and the areas where you need some input from the public to support Council in making good trade-off decisions.

Let's look at an example! The facilitators will share the example roads level of service template.

When level of service changes

It's important to provide information about changes to services that impact people, ideally before these changes happen so they can be prepared. If you have already communicated the problem statement behind why a service level may be changing, the conversation about what specific changes are happening becomes less complex. Giving the public a heads up also helps to build trust and can help them adjust their schedules if needed so they can manage the change.

7 *Institute for Local Government, (n.d.). Why engage the public? Text (ca-ilg.org)*

Module 2 – Developing a Communications Plan, Tools, and Materials to Support the Cost of Service Discussion

Learning Goal 1: Understand the Differences Between Communication and Engagement

The term "engagement" is often used by municipalities to describe any formal contact with the public. There are differences between communication and engagement and a time and place for each approach.

There are also different levels of engagement! In this section we will talk about how to communicate with the public about service levels, engage the public specifically in levels of service discussions, and which levels of engagement are most appropriate.

Communication vs. Engagement

Communication and engagement are different practices. Both play a role in interacting with community members and there are situations that call for each approach.

Communication is the approach taken to share information, In a municipal context, communications is the appropriate approach to conveying relevant information about:

- Projects and associated decision(s)
- Your organization's approach to engagement and the public's opportunities to participate in engagement activities
- Input collected through the public engagement activities (what was heard)
- Decisions that were made and how public engagement played a role in the decision-making process

When to Communicate[8]

It is best to communicate to the public when:

- Immediate response is required (e.g. Emergency)
- A person in a position of authority is acting within their authority (e.g. police)
- Routine operations are occurring (e.g. mowing grass after a heavy rain)
- Decisions are made to meet legal requirements (e.g. improvements to water treatment plant)
- The decisions effect only those who have already agreed to be affected through some form of contract (e.g. employment, volunteerism, accepting elected office"[9])

8, 9 AMA Public Input toolkit, accessed from: https://open.alberta.ca/dataset/5266e3ea-55a4-4856-be8b-8924dc48cdd1/resource/8aa5677f-b315-4a8a-8457-c4da3d6a3d94/download/ama-public-input-toolkit-sept2014.pdf

Engagement is the process of involving community in decision making and providing opportunities for stakeholder input. Engagement is the approach taken to:

- Purposefully involving community members in municipal decision making
- Satisfy requirements where public engagement is part of the information required to make informed decisions about public programs, initiatives, and levels of service

When to Engage[10]

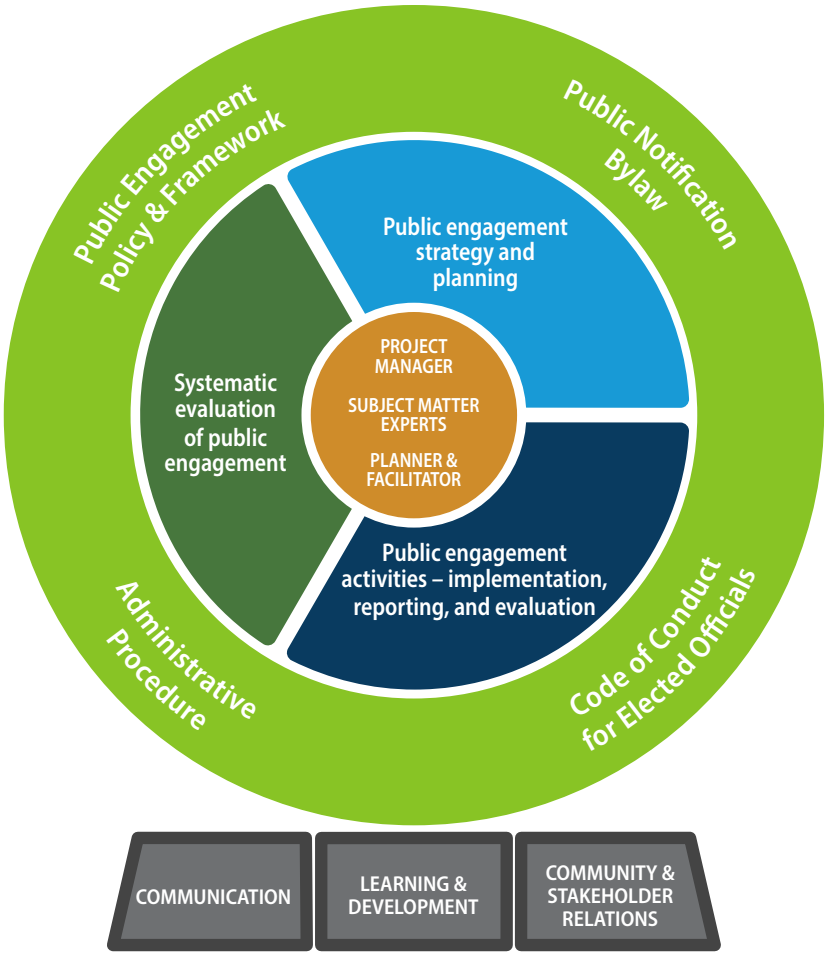
A formal public engagement process should be undertaken when:

- Public notification and input are required by law
- The decision is in response to a known concern or community expectations (e.g. a proposed casino, recreation centre)
- The decision affects the comfort or routine of citizens (e.g. extended road closures)
- There are perceived risks associated with the decision (e.g. brewery development)
- Council or administration requests public input prior to making the decision (e.g. public buildings or open space management"[11])

How do we communicate with the public about asset management?

Most of the public is probably not interested in the details of your municipality's approach to asset management. People will connect more directly with conversation about services that are important in their every day. Want to tell people about the water pipe replacements that are planned for their neighbourhood? Talk about how aging water pipes put their ability to turn on the tap and receive clean water whenever they want at risk. Want to tell people about proposed reductions to your pothole filling program? Tell them about how much of their tax dollars are currently spent on filling potholes and why reductions are necessary.

10, 11 AMA Public Input toolkit, accessed from: https://open.alberta.ca/dataset/5266e3ea-55a4-4856-be8b-8924dc48cdd1/resource/8aa5677f-b315-4a8a-8457-c4da3d6a3d94/download/ama-public-input-toolkit-sept2014.pdf



SUPPORTING ELEMENTS THAT ENABLE PUBLIC ENGAGEMENT

Public engagement is not a single document or approach. It's a system that serves to provide opportunities to better understand the values and priorities in your community. This section provides overviews of some of the components of your public engagement system.

Public Engagement Policy and Framework: directs the purpose and application of public engagement within a municipality and describes when and how it will add value. A framework describes the structures and key elements that underlie a municipality's preferred approach to public engagement.

Public Notification Bylaw: describes how a municipality will give official notice when it advertises a bylaw, resolution, meeting, public hearing, or other municipal business. In addition to newspaper advertising, mail, or delivery to residences, the bylaw may now include electronic advertising.

Code of Conduct for Elected Officials: describes how municipal Councillors' conduct is governed and outlines a municipality's complaint system.

Administrative Procedure: provides an objective set of rules to govern municipal administration's approach to public engagement.

There are many ways to engage with your community. Different scenarios and decisions call for different engagement tools and tactics. Choosing the ways to engage or communicate with your community members can be done using your municipality's guiding documents and policies.

Increasing public engagement and increasing influence in the decision-making process

Type of Decision	Consultative	Deliberative	Participatory	Citizen-led
Level of Engagement	Consultation (Including visioning, ideation, and refining ideas)	Involving	Collaborating	Empowering
Explanation	The municipality makes the decision. It invites people to share ideas and input or, if a concept is already developed, provide feedback to help improve or refine it.	The municipality makes the decision. However, it wants the public's help in assessing and understanding the possibilities as well as the impact and possible trade-offs associated with the possibilities.	The municipality makes the decision. However, the municipality and the public take a shared or joint approach to coming up with, assessing, and prioritizing possibilities. The municipality is committed to working through various scenarios to understand the preferred solution(s).	The municipality authorizes its citizens to make the decision. The citizens lead the consultation, involvement, and/or collaboration, make a decision, and report its decision back to the municipality.

Municipalities typically **inform** or **communicate** service decisions to the public. They also consult the public to better understand community priorities which informs the services and service levels provided. Consultation can help with understanding the willingness to pay for services or willingness to accept decreased levels of service.

Consider your audience: Who needs to be engaged or communicated with and what are the best ways to engage or communicate with that group ?

Activity

With your asset management team, think about the service users you identified in the first workshop.

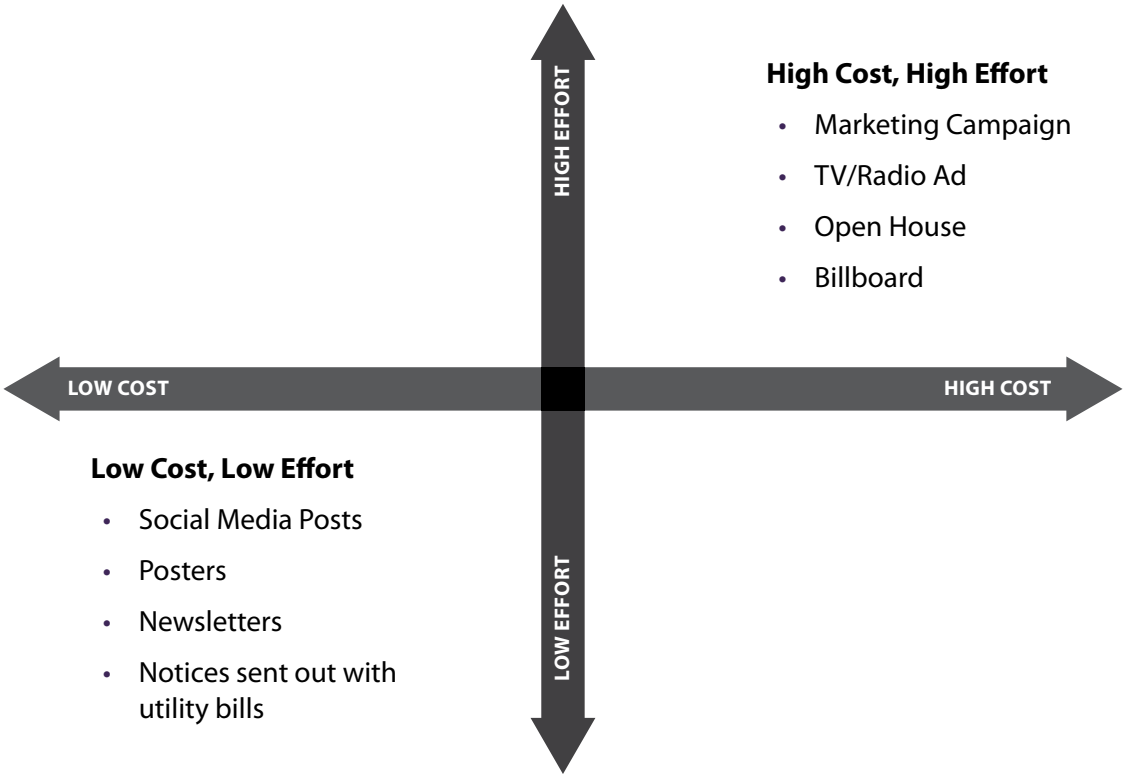
1. What tools are you currently using to communicate or engage with them about your selected service?

2. How often do you communicate or engage about the service?

LEARNING GOAL 2: Understand Communication Tactics for Target Audiences

Good communication can create a culture of transparency and trust amongst stakeholders and citizens which in turn can increase community engagement in decision making and improve civic literacy. Good asset management relies on communicating and engaging with community members in discussions about what is important to them in levels of service.

The Range of Tactics



Identifying realistic tactics for your community:

- What are you already doing?
- What makes an impact with the public?
- What can you afford?
- What does your organization have capacity for?
- Where does your audience already get their information from?

Consider: What is the most effective communication tactic you've used in your community?

Below are some practices for effective communication and engagement. These practices can be used both in targeted engagement events, as well as in general communications. Some can even be used in informal conversations.

- **Keep it interesting** – relate communication to things people care about – their experience with services, having their voice heard, and minimizing taxes and fees.
- **Tell a story** – connect asset management and service delivery to broader community goals.
- **Brand it** – branding helps make the message identifiable.
- **Leverage current events** – connect asset management to local and national news and how asset management plays a role in supporting the community's long-term goals.
- **Find ambassadors** – special interest groups, community leaders, or others who are passionate about preserving the community. These people are credible and who can help you spread the message.
- **Collaborate** – Work with other municipalities, provincial associations and communities of practice, or other levels of government to develop broad communication campaigns to convey important concepts or information. These may apply at a regional or even provincial level. Several municipalities have experience or have developed tools for communication related to asset management, find out what is available for you to leverage.

Some examples of communications tactics and content

- District of Saanich Municipal Budgeting 101 – This is a presentation that communicates how Saanich approaches financial planning to balance the budget. This presentation provides a description of the level of services required to meet the expectations of the community balanced against taxation and user fee levels.
- Cochrane Budget Infographics & Other Material – These materials are a good example of communicating municipal spending in a one-page, visual format. These infographics could be used as ads on social media, print, or mailed out with tax assessments.
- City of Winnipeg Budget Engagement Report (2019) – This is a detailed summary of the tactics the City of Winnipeg used to engage the public on budget planning. This report contains some interesting approaches to how information is structured and delivered, as well as survey, social media, pop-up events and other tactics. This is a comprehensive resource that may not be read by the public, but probably has some useful suggestions for your asset management team!
- Participatory Asset Mapping – Often, building civic literacy about services starts with communicating the scale and impact of infrastructure in a community. This resource provides a toolkit for involving the public in a mapping exercise that visually shows where the assets are in their community.

Other Ideas: Walkshops with asset 'guidebook', community asset mapping, self-guided tours, virtual tours.

Activity

As an asset management team, list all your current tactics for communicating or engaging the public. Rank them in order from most effective to least effective.

Tactic	Communication or Enagagement	Rank (Least effective to most effective)

1. Where do you see opportunity to integrate conversation about the cost and level of services with your municipality's current tactics?

2. What have you learned from the least effective tactics that can help you incorporate the cost and levels of service discussion into the most effective tactics?

LEARNING GOAL 3: Learn How to Develop a Communications Plan to Communicate Cost of Services

Developing a communications plan

Purpose of a Communications Plan

All communication and engagement activities should align with guiding principles of public participation within your public participation policy.

When referring to cost of service or levels of service, you're likely looking to communicate or inform community members about current levels of service and costs to perform.

Communications plans can also help to:

- *Partner with the public:* Your communication and engagement work should support residents in understanding the role they play in general engagement and feedback processes and your communications plan should increase civic literacy within your community.
- *Provide municipal staff with a flexible process:* Your communication and engagement efforts may not go as planned. Developing a plan with clear measures of success and a way to evaluate progress will support staff in adapting the plan as you learn more through doing.
- *Provide accountability and transparency:* Your communication and engagement tactics should be transparent. The communication and engagement process should be made clear so that stakeholders who contribute to engagement in their community understand where their feedback is going and what next steps are.

Components of a communications plan:

A communications plan could include a combination of the following topics:

1. **Background**
   - Community information
   - Relevant information about issues communicated in the communications plan
   - References to relevant policiesies or practices in other departments
2. **Purpose/Communication Objectives**
   - What are you communicating about?
   - Why are you communicating about this issue?
   - Are there guiding principles you will refer to?
   - What are your communication objectives?
3. **Stakeholders & Audiences**
   - Analysis of internal and external audiences/stakeholders and communication objectives for each

4. **Key Messages**
    - Identification of message themes
    - Provide project framing language that is consistent, ongoing, and tailored
    - Create specific, detailed messaging tailored to the identified stakeholders and audiences
    - Include proactive and reactive messaging (how will you notify about anticipated change in service versus responding to complaints) - who will be responding?
5. **Communication Tactics**
    - Specifics of tools used (i.e. email blast, website, twitter posts, signage, open house, etc.), what the purpose is, audience, roles and responsibilities and timeline
    - If your plan has specific objectives, can also think through which objective/s each tactic is for
6. **Schedule/Timeline**
7. **Measures of Success**
    - Monitoring and measuring for each tactic/media
    - Evaluation frameworks

Some options for additional sections that may be helpful:

8. **Issues Analysis**
    - Identification of barriers and benefits around the issue
9. **Media Relations**
    - How will you communicate with the media regarding this project/initiative?
    - Identification of spokesperson(s) or media contact(s)
10. **Complaint & Issues Management**[12]
    - Detailed process for receiving and responding to complaints/concerns from public
    - Who in your municipality will be responding to complaints and concern?

12 *2021-01-12 - Okotoks Engagement Strategy Report -2.pdf (urban-systems.com)*

Activity

With your AM Team, have a look through the Communications plan template. Identify which sections would be most helpful to you in developing a plan to communicate about the levels and costs of your selected service(s).

Ongoing communications as context evolves

Things don't always go to plan! Imagine you are planning to communicate level of service changes to your outdoor pool by hosting a public open house. As the open house gets going, it becomes clear that residents were expecting to hear about new additions or upgrades rather than the proposed decrease in operating hours. Your municipality currently has no plans to do any additions or upgrades to the pool. What would your next step be?

a. Tell residents that the purpose of this engagement is to talk about the proposed changes to hours and continue with the plan.

b. Using sticky notes and a flip chart, add a space to your setup to collect feedback about what residents would like to see for additions or upgrades to the pool.

c. Use the situation as an opportunity to educate residents about what it currently costs to operate and maintain the pool that you already have and start the conversation about what residents would be willing to pay for additions or upgrades.

d. Communicate to residents that you will be taking their feedback into consideration, will be developing some informational materials about the current operations and state of the pool, and will be coming back to talk to them again once they have more information to consider.

Just like asset management, communicating with the public is an ongoing effort. You will never be "done"!

Module 3 – Leading the Discussion About the Cost of Services

LEARNING GOAL 1: Understand How to Implement and Adapt Your Communications Plan

Implementing your communications plan

Just having a plan written down isn't going to advance you in communicating and engaging with the public – it needs to be implemented! As you do so, there are some best practices that you should consider:

- **Evaluate your tactics, key messages, and audiences on a regular basis**
  - Building evaluation into your communication process is a good approach – how often will you check your social media stats? Which key messages performed better or worse than others? Is there a group of people who haven't responded to your communication and engagement? The clearer your evaluation methods are, the easier it will be to adjust and adapt your communication as needed.
- **Use opportunities for feedback from the public to see what's working and how it's being perceived**
  - Communication is a two-way street. Incorporating opportunities for feedback into your communication methods is an important form of measurement and can help you adapt your plan if something's not working. Designing tactics with feedback loops is critical for helping the community understand how their input informs decisions about service changes and levels of service.
- **Granularity in your tactics table will make them easier to implement**
  - Vague, high-level tactics leave space for confusion and ambiguity. The more specific and granular your tactics can be, the easier they will be to implement and pass on responsibility to other team members. Each tactic and its delivery should be tailored to meet the needs of your target audience and should have proposed timing.

Activity

Consider the following scenario:

You have completed a cost of water analysis for your community and have learned that your current water rates and rate structure do not recoup costs to the level that Council has decided is appropriate. The water rates have been the same for the past 15 years. Council has provided direction that the level of service should remain the same and has tasked you with determining what an appropriate rate and rate structure should be. You have talked to your neighbouring municipalities and their rates are about what yours currently are, and they have no intention of raising rates.

According to your cost of water analysis, to fully recover costs ratepayers should be paying a variable rate that is almost double what they are currently paying.

1. Considering what we've discussed today about communication and engagement, what would your first step be in starting this conversation with the public? What are you hoping to achieve with this first step?

2. What would your second step be? How will you know it's time to move from the first step to the second?

Some suggestions: if you haven't already, start with some education about water and the service delivered by the municipality. Consider including this information in your monthly water bills.

Adapting your communications plan

Chances are that your communication and engagement activities may not go according to plan. What do you do when you get results that you didn't anticipate?

- **Take a deep breath!** Even if the results are not favourable, you've made progress in involving the public in discussions about services, which is an accomplishment in itself. The first step is often the hardest.
- **Be adaptive.** Do not give up on your efforts simply because they failed. You can adjust your plan based on what you heard and learned from your previous step. Evaluate your key messages and tactics so you can go back and examine what's working and what isn't and adjust where needed. It may even be beneficial to develop tactics that can be adjusted 'on-the-go' to meet emerging needs and concerns of your community members. In many cases, listening to the public's feedback, adjusting course, and sharing how you adapted the plan based on their feedback results in building trust with people.
- **Take some time to think, regroup, and consult with your team.** Revisit your goals for communication and engagement and brainstorm how to adjust the plan to achieve those goals based on what you now know.
- **Communicate how your plan is changing.** Public suspicion or lack of trust in the engagement process can be minimized by communicating how you've listened and are adjusting your plan. Transparency can build trust.

You've Made It!

You have dedicated 4 days of group learning time, as well as time in between for check ins and homework.

Topics covered in this course:

- Understanding the history of service delivery
- Define level of service
- Define assets required to deliver services
- Define primary customer groups
- Barriers to implementing asset management and strategies for change
- Detailed County of Forty Mile case study
- Understanding and articulating the cost of service delivery
- Connecting level of service to risk
- Introducing the idea of civic literacy and the relationship to service delivery
- Developing a communications plan, tools, and materials to support the cost of service discussion
- Leading the discussion about the cost of services

Looking Forward…

- Develop your communication and engagement plan for involving the public in discussions about your selected service(s)
- Communicate the results of your level of service and cost assessment to Council, and share your proposed communication and engagement plan
- Implement your communication and engagement plan
- Consider expanding your level of service definitions and cost assessments to other services

Check-in on asset management progress

A requirement of this course is to complete a self-assessment on the FCM Asset Management Readiness Scale at the conclusion of the program. You will have time during the workshop to complete this – refer to the links to the FCM Asset Management Readiness Scale below.

https://fcm.ca/en/resources/mamp/tool-asset-management-readiness-scale

Glossary

Asset: A physical component of a system that enables a service, or services, to be provided.

Asset life: The period from asset creation to asset end-of-life.

Asset life cycle: The stages involved in the management of an asset.

Asset management: A process of making decisions about how infrastructure is used and cared for in a way that manages current and future needs, considers risks and opportunities, and makes the best use of resources.

Asset management lens: Integrating asset management practices into decision-making. Specifically, thinking about what information is available, what additional information is needed, what trade-offs are being made, and what are the community's long-term goals and needs.

Asset management goals: the steps that should be taken to move towards defined asset management objectives.

Asset management plan: Documented information that specifies the activities, resources, and timescales required for an individual asset, or a grouping of assets, to achieve the organization's asset management objectives.

Asset management policy: Outlines an organization's commitment and mandated requirements for asset management.

Asset management roadmap: Step-by-step plan guiding the actions, responsibilities, resources, and timescales to implement the asset management strategy and deliver asset management objectives.

Asset management strategy: Outlines an organization's approach for implementing the asset management policy.

Asset management implementation plan: Direction, framework, and approach for implementing the asset management policy to support strategic objectives and sustainable and effective service delivery.

Asset management system: The set of policies, people, practices, and processes that are used in asset management. An asset management system is not a software program.

Asset portfolio: Assets that are within the scope of the asset management system.

Asset register: A database or document containing specific information about the assets owned or controlled by an organization.

Asset risk: The risk of an asset failing to perform the way you need it to (e.g. a pipe bursts).

Average annual life cycle investment (AALCI): The average annual investment needed to sustain an existing asset over its service life and replace or renew the asset once it reaches the end of its service life.

Built Asset: Unnatural physical in the built environment (i.e. structures, roads, pipes, etc.)

Customer Level of Service: Describes level of service from the perspective of the person using the service in non-technical terms.

Level of service: Levels of service statements describe the outputs the organization intends to deliver to customers and other stakeholders. Levels of service typically relate to service attributes such as quality, reliability, responsiveness, sustainability, timeliness, accessibility and cost.

Life cycle costs: The total cost of an asset over its life, including capital, operation, maintenance, renewal, and decommissioning costs.

Likelihood: The probability that an event might happen.

Maintenance: Any activity performed on an asset to ensure it continues to deliver an expected level of service until it is scheduled to be renewed, replaced, or disposed of.

MAMP Readiness Scale: A tool developed by the Federation of Canadian Municipalities that guides the assessment of a municipality's current asset management practices and can serve as a structure for evaluating your progress as you develop a strong asset management program and approach.

National Round Table for Sustainable Infrastructure: The NRTSI was formed in 2015 as an expert resource on infrastructure; a non-partisan body that facilitates the understanding of infrastructure needs and helps to define issues of national priority as well as identify and/or develop and disseminate tools to address these issues.

Natural Asset: Biological assets (produced or wild) of the natural environment (i.e. trees, soil, water, etc.)

Objectives: Objectives are statements that articulate your vision and guide your approach to achieving your vision through strategy

Operation: The act of utilizing an asset. Typically consumes materials and energy.

Renewal (or asset renewal): The replacement or refurbishment of an existing asset (or component) with a new asset (or component) capable of delivering the same level of service as the existing asset.

Renewal investment: The total investment needed to replace or renew existing assets that have reached the end of their service life.

Risk: The chance that conditions or events may occur to cause an asset to fail.

Risk tolerance: The capacity to accept a level of risk, dependent on the likelihood and severity of consequences, and the existence of other priorities that require more immediate investment.

Service Delivery Partner: Organizations that enter into agreements with municipalities to provide specific services in the community (i.e. snow removal)

Strategic risk: The risk of a change occurring that impedes your ability to achieve your overarching strategic goals (e.g. hot, dry conditions put pressure on your ability to provide water service).

Sustainable service delivery: Ensuring that municipal services are delivered in a socially, economically, and environmentally responsible way, and that decisions today do not compromise the ability of future generations to meet their own service needs.

Technical Level of Service: Describes operational measures that support achieving the customer level of service.

Appendix A

Case Studies

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Case Studies

Brazeau County

Brazeau County staff has gathered a significant amount of asset data and is working towards organizing the information and using it in decision making processes. Council and staff members strongly support AM implementation processes, as its value has already clearly been demonstrated. For instance, Council recently requested snow removal costing information from staff. In the past, it would typically take staff one or two days to compile this information, but because they have been working on understanding LOS, they had this information readily available. Because the County has several people involved in implementing AM, it was even easier to provide the needed information quickly.

There have been many LOS discussions among County staff, but it is clear that these service levels aren't communicated well to the public. Staff have recognized that it is important to establish a solid LOS baseline with the public so they understand if they want a higher LOS, it will cost more.

LOS discussions have also helped staff respond to feedback from the public. The County typically receives calls from members of the public who are unhappy with a certain LOS. Now that they are examining LOS in detail, they are able to provide specific answers around what is being provided and why to the public. For instance, the County has implemented a GIS tracking system in their snowplows which allows them to publicly report on snow clearing services and communicate to the public on their progress after snowfalls.

Town of Devon

Because the Town of Devon was only established in the last 70 years, major infrastructure assets are generally in good condition. However, the Town recognizes the need to plan for asset replacements that will be needed 30 years down the road and have a strong capital plan in place. As such the Town's AM team has focused on strengthening their asset data sources and understanding LOS, which has already proved useful during budgeting processes. Council and staff recognize the value of this data and how important it is in planning for the future.

A major challenge that the Town faces is lack of staff capacity to dedicate to AM implementation over and above their regular day to day activities. There are currently a few staff members who are working together on implementing AM processes, but ideally the Town would like to hire someone that would be dedicated to AM and GIS tasks.

A major challenge that the Town faces is lack of staff capacity to dedicate to AM implementation over and above their regular day to day activities.

Town staff have recognized that there are many perspectives to consider when understanding LOS expectations and there is a need to engage with the public to discuss desired LOS, risk, and cost of services. Staff use a combination of public, staff, and Council feedback to determine LOS. Opportunities to adjust LOS have already been identified to achieve some savings. For instance, the Town has started mowing grass areas less often as they identified that change wouldn't impact the public significantly, but would contribute to fewer expenses.

Village of Warburg

The Village of Warburg has developed an understanding of service costs based on historic costs gathered from different departments. Council strongly supports the work of the AM team as this information has already been useful in budget meetings. However, staff capacity to implement AM processes is limited and it has been especially difficult to involve Public

Works staff due to their heavy workloads. Key staff have dedicated a few hours a week to come together and focus on AM tasks, but they recognize the need for Public Works to be involved in collecting detailed LOS information.

The Village gauges the public's satisfaction with LOS by the number of complaint calls received. To help share LOS information with the public, the Village has started highlighting different AM issues in a local newsletter. For instance, one newsletter had a piece on snow removal which showed how much those services cost and what service levels the Village is committed to providing. Staff recognize the need to share this information online as well to cater to different demographics in the community.

The Village had previously planned for capital investments in five-year increments, however due to the number of large-scale infrastructure projects planned in the near future, there is a need to plan over the longer term. They now recognize the challenge of defining LOS, risk, and costs over the long term and how much municipalities rely on this information in decision making processes. It is in their favour to be implementing AM processes now to be able to justify these infrastructure projects and plan for future maintenance and replacement of assets.

Village of Foremost

The Village of Foremost AM team is currently working to develop their asset replacement forecast and have plans to hold an AM education session with Council in the near term. The AM team recognizes that Council lacks the information needed to understand AM and support implementation. Staff also recognize a need for capacity building in AM within their team.

The AM team identified a need to share LOS information with the public and demonstrate the connection between paying taxes and getting the LOS they desire.

The AM team have faced challenges in implementing AM processes due to lack of capacity and asset data available. Most of the asset information they have is stored on compact disks and significant asset knowledge was lost after long term public works staff members retired. These challenges are exacerbated due to the fact that most of the AM team are new to the Village and there has been some turnover on the team since starting AM implementation. However, having multiple people involved has maintained some consistency on the team and has helped them regain momentum.

In terms of LOS, the Village only receives negative feedback when the public is unsatisfied with the LOS being provided. The AM team identified a need to share LOS information with the public and demonstrate the connection between paying taxes and getting the LOS they desire.

Red Deer County

Red Deer County opted to focus on developing their LOS understanding in specific asset categories within one Hamlet. By narrowing their scope and starting with the data they had, the County has taken actionable steps towards implementing AM processes that are manageable, considering their limited staff capacity. Their intention is to build their templates from the first Hamlet to use across the rest of the County.

The County has already completed some field asset data verification, which has been useful to their contractor when needing to locate assets. Confidence is building in the value of data when staff have the information readily available to do their jobs. Both leadership and staff support AM implementation as they have been included in the process and have already seen the benefits in department budgeting.

To determine LOS, the AM team talked to managers from the different asset groups to record customer expectations compared to what services are being provided. Because the County contracts out all their operations and maintenance work, it has been a challenge to track actual service costs as invoices are typically received with lump sum amounts, rather than by projects in specific locations in the County.

Another major challenge the County has identified through this process is their ability to cover full life cycle costs with such a small tax base, and their reliance on grants to fund capital projects. Because of this dependency, it is important for the County to bring taxes inline with actual costs to provide services. The County also recognizes the need to share AM information with the public so they can build an understanding of LOS and what their taxes are going to, and if services are increased or reduced, what the impacts might be.

Village of Delburne

Village of Delburne staff have already completed steps 1-4 for three levels of service and are now focused on understanding asset replacement values. Although Council has yet to sign off on the AM policy, that hasn't stopped the AM team from making progress on gathering asset data and determining LOS. Their next step is to gather service cost information to have that information available in budgeting processes.

The Village recognizes the importance of understanding required service levels from different perspectives in the community including the public, staff, and Council, as well as how decisions around service levels directly impact budgeting and taxes.

Although lack of staff capacity has been a challenge, the AM team has been intentional about scheduling time to work on AM tasks. It has been especially important to have public works staff involved in AM implementation tasks to ensure their personal knowledge and experience is recorded before they retire.

The Village recognizes the importance of understanding required service levels from different perspectives in the community including the public, staff, and Council, as well as how decisions around service levels directly impact budgeting and taxes. The AM team realized that public works staff had a much different perspective on LOS than those staff members that receive feedback directly from the public. For instance, public works focuses on meeting Alberta Environmental Standards for water quality, but the public has issues with the water quality and complains even though standards are being met.

Town of Olds

The Town of Olds AM team has developed a strong understanding of service levels in the community and are now circling back to adjust their previously developed AM policy to incorporate LOS information.

Town Council also recently approved the revised AM strategy which has motivated staff to implement AM processes more quickly. Staff have started to review levels of service at the end of each month which has enabled them to provide detailed data to help with decision making processes. The AM team has also worked to define specific AM terms such as operations and maintenance to ensure there is clarity of understanding across the organization on what those terms mean.

Staff capacity to implement AM processes has been limited as most of the AM team members are Directors. There is also limited time available for other staff to provide their input on asset information and verify that it is correct.

The Town's AM team has realized the importance of organizational buy in at the leadership and council level as well as with other staff. To do so, the AM team has presented at staff meetings to share the importance and applicability of their work. The AM team has provided examples of how LOS are intertwined with all they do and how adjusting LOS could create economic efficiencies. The AM team has identified a need to communicate more thoroughly with Council on AM implementation tasks, so staff and leadership are on the same page in decision making processes.

Town of Taber

The Town of Taber AM team has so far been able to determine service levels for roads, stormwater management, and solid waste management. There is strong support from Town management in implementing AM processes as they recognize how it will support decision making and the value of having asset information easily accessible.

Progress has been made specifically in the area of stormwater management. After receiving complaints from residents last year, the AM team has reviewed the capacity their system needs to handle, how they are going to reach that LOS, and what resources are needed to do so. They were able to address those concerns through understanding LOS and communicating the need to Council. This process has led the AM team to start thinking about how climate change and inclement weather impact LOS and have started to reconsider design criteria for certain assets.

It has been challenging for the AM team to focus on AM implementation work while dealing with low staff capacity, staff turnover, and construction season starting up. Day to day priorities typically get in the way of focusing on AM. Although the Town's AM policy has yet to be passed by Council, staff are still working diligently on AM implementation tasks.

Municipal District of Taber

After rebuilding their AM team, the Municipal District of Taber has spent time reviewing their AM policy, understanding what assets they have, and completing the AM readiness scale. The MD is also working on developing a tracking system that logs the hours that are put into specific projects to increase accuracy in budgeting for certain levels of service. This model will be used to build an understanding of cost and LOS across the organization. The next steps are to develop a dashboard and reporting mechanism that links to each area of operation that will be available to the public and essentially tell the story of all the services the MD provides.

Although there has been turnover in the organization, leadership and staff are generally very receptive to AM concepts and see the value in AM processes. The MD has recognized the importance of having a diverse AM team to bring together a variety of perspectives. There are many voices that are involved in making LOS decisions and communicating decision to staff, council, and the public.

There are many voices that are involved in making LOS decisions and communicating decision to staff, council, and the public.

The AM team has had conversations with public works staff about service delivery and capturing data on specific services to be able to report on LOS provided. In some cases, the AM team has realized it is not possible for staff to consistently meet the LOS they have committed to and adjustments to LOS have been recommended to council and communicated to the public.