

SPECIAL REPORT: ASSET MANAGEMENT

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WANT TO BUILD A RESILIENT COMMUNITY? Start with Asset Management!

Stéphanie Levine, Federation of Canadian Municipalities

In the ever-changing world of municipal governance, asset management is continually preparing Manitoba communities to meet uncertainty and plan for the future. Municipalities own more than 60% of all infrastructure that provides for our economy and supports our quality of life in Manitoba and across Canada. The growing cost and risk of maintaining roads, buildings, fleets, equipment, stormwater, drinking water, and wastewater systems are an enormous challenge for municipal leaders. You have limited resources, your infrastructure is aging, and more frequent and intense weather events are impacting your community like never before. This is the reality that communities across the province are facing. You are not alone.

Fortunately, there is a way forward. Asset management helps communities manage municipal infrastructure assets to ensure maximum performance, reduce risks so municipalities can provide reliable and affordable services and a high quality of life to their residents, and provides a powerful framework enabling municipalities to make informed decisions about how they invest in infrastructure and maintain their physical assets for the future.

You Are Already Doing Asset Management

Municipalities are already engaging in asset management through practices such as having conversations with council about potential risks to their infrastructure and community; doing routine maintenance to their infrastructure; collecting information about what they own and how much it might cost to replace, or making a list of all the services they provide to their community and talk about how operators deliver those services. When you start to put these activities together, you are empowered to make better and more informed decisions with a long-term view of your community. *That* is asset management!

In Manitoba, communities are faced with increasing challenges to maintain and renew their infrastructure. The benefit of developing an asset management mindset is that you and your community will have more resilient assets in the long run and be better prepared to meet the future head-on.

FCM is supporting Manitoba municipalities in their asset management journey in three areas:

- Offering training and workshops for your staff and council.



- Providing grants that enable the implementation of good asset management practices, such as planning and conducting data collection and analysis.
- Gathering and sharing knowledge and best practices through resources such as guides, tools, and case studies.

What Does It Mean to Have Resilient Assets?

Your roads, pipes, and other physical systems work around the clock to serve your community and drive your economy. But events like rain, snow, and extreme cold or heat can strain these systems' ability to deliver important services, impacting their condition over time and resulting in costly repairs and upgrades.

Resilient infrastructure systems are located, designed, operated, and maintained to better withstand climate events with minimal interruption to the services they provide. Planning for resilient assets is a collaborative and proactive process that involves multiple people identifying local climate risks and planning infrastructure projects with those in mind at the outset.

Building resilience into multiple assets can help distribute the demand typically placed on one piece of infrastructure to address an anticipated risk. Take flooding, for example. Replacing your stormwater pipes with larger pipes might not address the challenge of flooding on its own. Natural assets, like a local stream or wetland, are important nature-based solutions that add resilience to drainage and flood protection services. When replacing an aging road, integrating stormwater management infrastructure like permeable sidewalk pavement, bioswales, and planter boxes can help further manage flooding while still providing the transportation services your citizens value.

Proactive Operations and Maintenance of Your Assets Builds Resilience and Long-Term Cost Savings

It's not just about building new resilient assets. Integrating resilience into your operations and maintenance can have a significant effect on your community's infrastructure and your budget sheet.

Regular inspections and scheduled maintenance can extend the life of assets. For example, clearing culverts or stormwater pipes will contribute to the resilience of drainage and flood protection services. Maintaining natural areas in your community also helps to protect your community's built assets. For example, maintenance to a creek to ensure stormwater conveyance could include replanting natural vegetation or making upstream improvements to natural assets such as ponds and wetlands to reduce silt and allow existing creek plantings to become more mature and established.

Find out how your municipality can strengthen its assets against climate impacts through operations and maintenance processes using the new guide: *Operations and Maintenance for Climate Resilience* (found at www.fcm.ca/operations). This suite of tools from FCM's Municipal Asset Management Program



contains actionable strategies, a worksheet, and factsheets that are ready for your organization to use.

What Are the Benefits?

Investing in proactive preventive maintenance is always less expensive than reactive maintenance. More resilient assets have a longer life span and a lower risk of failure. This also means your municipality takes on reduced liability.

There are clear social benefits as well. When assets fail, their ability to provide the expected level of service drops or cannot continue, disproportionately affecting the most vulnerable people who rely on municipal services and benefits. By proactively maintaining your infrastructure and preparing for climate events, you are protecting residents who are vulnerable during climate events such as extreme heat (particularly in areas with less tree cover) and floods (particularly in low-lying areas or near waterways).

When you think and discuss how your community delivers services, manages risk, explores new opportunities, or cares for its infrastructure – you are participating in asset management practices. Communities across Manitoba are on a journey to building climate resilience into their planning and lead Canadians more confidently into the future. Take advantage of the training opportunities available through FCM's Municipal Asset Management Program at www.fcm.ca/training.

Stéphanie Levine is the Manager of Capacity Development for FCM's Municipal Asset Management Program. She works in collaboration with stakeholders and partner organizations to design engaging programming that seeks to create awareness and provide training to municipalities. Stéphanie has more than fifteen years of experience in training, project management, and public engagement and has a master's in adult education and a certificate in asset management from IAM. 🌱

THE AIM NETWORK TOOLBOX: Resources for Asset Management

Atlantic Infrastructure Management (AIM) Network

Municipalities have it hard these days. Inflation is squeezing their modest budgets while climate and other risks to infrastructure and services are growing. Meanwhile, many still struggle with the renewal or replacement of infrastructure built many decades ago. It is challenging to move beyond being reactive to being strategic with infrastructure investments. The best way for municipalities to escape this trap is with strong asset management practices.

Asset management helps municipalities do long-term planning to provide reliable services at the lowest costs while managing the big risks they face. This article explains the steps involved in building an asset management program and introduces AIM Network's toolbox of free resources.

Step 1: Develop an Asset Management Strategy (Roadmap) and Policy

A strategy translates your organization's goals into actions. A good start is a self-assessment process that helps evaluate your current level of preparedness for asset management planning and identify actions required to fill resource gaps to successfully build an asset management program. Your Asset Management Policy provides direction and consensus around principles that guide decisions on services, risk management, and planning to prioritize infrastructure investments. Craft a simple policy written in plain language that everyone in your municipality will understand.

AIM has developed an Excel spreadsheet Roadmap Tool based on AssetSmart 2.0 to help you do this and offers an online course on developing an asset management roadmap and policy: www.aimnetwork.ca/video-course-1.

Step 2: Collect Your Inventory

You need an asset register with key information about each asset – age, material, expected life, replacement cost, condition, and consequence of failure. Geographic Information Systems (GIS) – a computer mapping software – lets you visualize the location and other information about your infrastructure assets. Excel spreadsheets create states of infrastructure reports, tracks costs, and replacement projections.

QGIS is a free and powerful mapping platform: www.qgis.org. AIM Network's **Facilities Collection Tool** and **Capital Inventory Tool** are used to collect data, assess costs, and create projections in spreadsheet format. It can import GIS and Excel

data for projections or be used as a standalone spreadsheet.

The AIM Managing Data course takes a deep dive through the asset management process and supports you in developing a business structure that encourages asset management practice across the organization: www.aimnetwork.ca/video-course-4.

Step 3: Define Levels of Service

You need to understand the services your community wants and is willing to pay for to set investment priorities. Do this by defining the quality and extent of services you will commit to delivering to your community. AIM Network offers a **Level of Service Tool** and an online course that provides a step-by-step approach: www.aimnetwork.ca/video-course-2.

Step 4: Conduct a Risk Assessment and Prioritize Your Projects

Risk evaluates the likelihood and consequences of service disruption to prioritize projects consistently across asset groups with limited time, money and resources. Climate vulnerability looks at the impact of changing climate on the likelihood and consequence of failure. The AIM **Climate Adaptation Tool** is a spreadsheet assessment based on the FCM *Guide for Integrating Climate Change into Asset Management through Levels of Service and Risk Management*.

The AIM Network **Capital Inventory Tool**, or any commercially available asset management software with capital projections, builds in risk-based projections.

AIM's online course on risk assessment and prioritization helps you with this step using your own data: www.aimnetwork.ca/video-course-3.

Step 5: Develop a Capital Plan

Most municipalities need to refine their projections to fit available budgets and funding opportunities. Don't worry; it can be done! By balancing risk, level of service, and cost, you can develop a realistic plan for capital investment. This plan considers when projects can be completed and defines potential impacts on risk levels and service levels.

Once completed, you can engage your community about their willingness to support service levels and reduce the risk of service disruption through taxes or utility rates. The process is consistent, transparent, evidence-based, and designed to align with strategy and policy statements. AIM's online course for

“Asset management helps municipalities do long-term planning to provide reliable services at the lowest costs while managing the big risks they face.”

capital planning and financial decision-making can help:
www.aimnetwork.ca/video-course-5.

These steps may seem daunting, but municipalities that do them effectively reap the benefits of more streamlined and cost-effective service delivery. Consider the following tips to support you in formalizing asset management in your municipality:

- **Take it easy:** Make small but consistent steps forward. Break down tasks into manageable pieces. Start with a few major assets to get good processes in place, and then add to your systems, inventory, and decision-making from there.
- **Think big:** Asset management requires big-picture, long-term thinking. Establish robust processes and begin with larger issues, gradually incorporating finer details.
- **Keep focused:** The primary goal is to deliver financially sustainable services that align with your community's needs, not merely fixing infrastructure assets. Asset management helps to set priorities and stay focused on them.
- **Be efficient:** The 80/20 principle applies here, where 80% of the desired outcomes can be achieved by addressing 20% of the causes. Use consistent, repeatable, and documented processes for significant issues, allowing for gradual expansion over time.

- **Learn from others:** Reach out to other municipalities facing similar challenges and draw from the extensive resource list available at the FCM Resource Library (<https://fcm.ca/en/resources/mamp/asset-management-resources>).
- **Additional resources:** Many communities are becoming interested in natural asset management, and you can find great resources and assistance with this new field at the Natural Assets Initiative: <https://mnai.ca>.

The AIM online courses are low-cost and available to unlimited staff under a single registration. They lead you through building your municipality's asset management program based on your own infrastructure.

The courses use AIM's tools and templates, but the processes are applicable to everyone, regardless of your choice of management tools. Even municipalities who don't register for the courses can access AIM Network (AIM) tools free of charge by emailing info@aimnetwork.ca.

Asset management is not all hard work; it can be fun and rewarding too. It is a process that helps us to turn the challenges of the modern age into building the communities we want and need in the future. The best time to start is now. 🌱

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ASSET MANAGEMENT TRAINING Supports Better Decision Making

PEMAC Asset Management Association of Canada

Municipalities across Canada are embracing asset management training for both elected officials and practitioners as they work together to improve their asset management practices and make better decisions.

PEMAC Asset Management Association of Canada has supported many of these professionals through their asset management learning journey. As a not-for-profit professional association, PEMAC is dedicated to promoting and enabling excellence in maintenance, reliability, and asset management through collaboration, applied learning, leadership, and advocacy.

The association serves the needs of organizations in both the private and public sectors and professionals with a wide range of backgrounds. Though diverse, its members have a common challenge – coordinating efforts to realize value from large-scale physical assets or assets with a high consequence of failure. Municipalities certainly fit this description. PEMAC has always counted a number of municipalities and municipal practitioners as members, but since 2018 when it was selected as a partner in the Federation of Canadian Municipalities' (FCM) Municipal Asset Management Program, its presence in and commitment to the municipal sector have really taken root.

PEMAC subscribes to the comprehensive definition of asset management agreed to by the ISO 55000 Technical Committee (clause 3.3.1), "the coordinated activity of an organization to realize value from assets." The association's goal, demonstrated through its applied learning and other activities, is to assist organizations in building internal capacity for a true coordinated effort. Organizations which take this coordinated approach to their learning strategies find the biggest impact on savings and levels of service for the communities they serve.

Who Benefits from Learning More about Asset Management?

Everyone has a part to play, but not everyone will need the same depth of asset management knowledge. At the highest level of the organization, it is likely enough to arrive at meetings with curiosity and a few good questions based on an understanding of the fundamentals that can be grasped in 10 or 15 minutes. To this end, PEMAC has developed an explainer video and accompanying questions for senior managers and elected officials entitled "The Case for Asset Management" (www.pemac.org/the-case-for-asset-management).

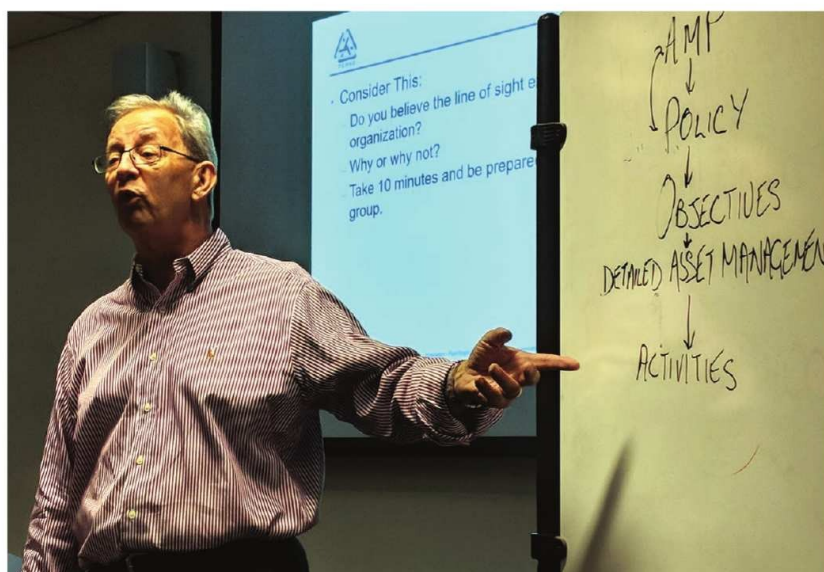
Practitioners working in engineering, business administration, or information technology, for example, managing decisions related to the core life cycle functions, such as design, selection, operation, and maintenance of an organization's assets, will benefit most from a more robust training program.

Choosing the Right Training Program

With a wealth of information and training opportunities available, it can be daunting to know where to start. From awareness sessions to in-depth training and certification programs, there are many options to consider when building the right training plan for your organization.

When evaluating the right asset management training path, considerations should be given to:

- **Methodology.** What type of training is offered, and will it suit the lifestyle of those employees who will be taking the course? For example, is the course in person or online? Is there group work, or is the training for individuals?





- **Adaptability.** How open is the training partner to continuously improving the curriculum?
- **Multiple programs.** Does your organization require more than one type of training? One size does not fit all.
- **Content.** Is the course comprehensive enough to meet your needs? Does it provide opportunities to apply the learnings?
- **Independence.** Is the curriculum based on insights from experts with a variety of backgrounds and perspectives? Learning best practices based on global standards, that are independent from consulting services and product sales, provides a positive learning environment.
- **Accreditation.** Does the program offer any sort of accreditation or certification? Having something to show for their hard work may be important.

PEMAC Education and Recognition Opportunities

PEMAC has developed a variety of asset management tools, from awareness videos to more in-depth learning, such as its Asset Management Professional (AMP) certification program (www.pemac.org/education/amp-program). Delivered asynchronously online by Northern Lakes College, this six-course program introduces participants to the latest in strategic asset management thinking and develops the capacity to engage others and builds their knowledge and skill in key subject areas such as risk management and knowledge management.

Participants have noted that the program delivers opportunities to apply learning to their workplace through projects and assignments, particularly the final Capstone course, which brings the concepts together from previous courses in an applied project. Participants develop an Asset Management Policy and Strategy for an organization and develop and implement an Asset Management Plan for a particular class of assets.

Successful completion of the program leads to the Certified Asset Management Professional (CAMP) certification. Coupled with work experience, the program also provides the depth of knowledge required for PEMAC's globally aligned competency-based certifications: CTAM, CPAM, and CSAM.

Chris Klos, PE, PMP, CAMP, Manager, City of Winnipeg Corporate Asset Management Office, commented, "Having completed the AMP program to get a broader understanding of the concepts and processes related to asset management, I am able to apply the concepts learned directly into practical situations at my municipality. The knowledge from the program has allowed us to incorporate various subject areas into our asset management processes, supporting more robust decision making."

Funding has been available for municipalities through the MAMP initiative, funded by the Government of Canada and delivered by the Federation of Canadian Municipalities. Through this initiative, PEMAC has offered a special subsidized delivery of the AMP program to cross-functional municipal teams

(www.pemac.org/education/amp-program/amp-cross-functional-municipal-teams), and over 400 practitioners from 115 municipalities have participated since 2018. More practitioners and elected officials can get started with the next special delivery of AMP Course One, live online, this fall.

Another opportunity to strengthen asset management knowledge is through events such as PEMAC's annual conference. MainTrain is Canada's largest annual maintenance and physical asset management conference exhibition and networking event, and it takes place this year in Winnipeg, Manitoba, from September 11 to 13. Learn more at www.maintrain.ca.

Whether just starting their asset management journey or well on the road, the municipalities across the country which have embraced asset management training are realizing savings and improved levels of service from a strategic approach, better decision making and the implementation of best practices.

For more information about PEMAC and the learning, recognition, and networking opportunities available, please visit www.pemac.org.



Nicolle Guillen, Education Manager
at PEMAC Asset Management
Association of Canada. 📍

BAM | Buhlin Asset Management

Buhlin Asset Management is a professional services company focused on Infrastructure Asset Management across the province of Manitoba.

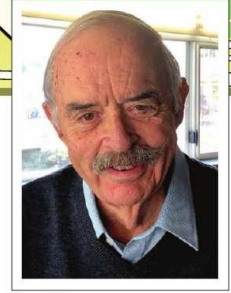
Services:

- Data and Information Management
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- Life Cycle Management
- Policy and Procedure Development
- Program Integration

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THE ELEPHANT in the Room

Wally Wells, Asset Management Master, Mentor, and Coach – Asset Management Saskatchewan



We have heard this expression before, usually meaning something big and overwhelming. Well, to many, that is **asset management**. The message is compelling; think big but start small. The myth is that asset management is not a new task being asked of people already understaffed and busy. Why a myth? Because, from the day your local government was incorporated, you have owned assets, and you have been managing, financially and physically, those assets. Unfortunately, many years ago, our Australian friends took the words ‘managing assets’ and turned them around to ‘asset management.’ The result? They confused everyone.

The Manitoba Municipal Act states in section 82, “A council is responsible for developing and evaluating the policies and programs of the municipality.” A key role of council is establishing by policy the level of service to be provided for the various services the municipality supplies to the residents and the greater community. These include some or all of the roads, water, sewerage systems, arenas, community centers, public trails and parks, aquatic centers, and other public buildings and assets unique to the community. Our smaller governments, which encompass large rural areas, may only provide roads. A key to successful road operation and management is drainage. The asset class, therefore, must include roads, drainage, bridges, signs, and other related assets. In more urban areas, this may include curbs, sidewalks, and additional signage and markings. For financial administration, the council must adopt each year an operating budget, a capital budget, an estimate of operating revenues and expenditures for the following fiscal year, and a five-year capital expenditure program.

Services to residents and the community, in most cases, rely on a physical asset or groups of assets to provide that service. It should be self-evident that constructing capital works will require staffing or staff time allocation of existing staff for operations and maintenance and, in the case of recreational facilities, program staff. Approval of any capital facility (new, upgrade, or replacement) likely directly impacts the operations and maintenance budget. Too often, these two budgets are not presented to the council at the same time, and the need

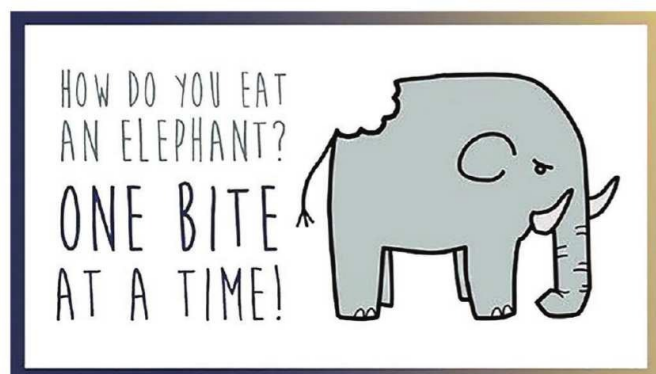
for operational, staffing, and /or maintenance changes is not considered at the time of approval of the capital projects. This is especially true where a major facility is constructed, not requiring operation staff for a few years. One of the principles of asset management is to assess the capital cost but then protect that investment by including the necessary resources for staffing, operations, and maintenance to ensure the asset meets performance requirements and life cycle projections.

The longer-term financial plans, beyond the one-year requirement by legislation, need to reflect life cycle estimated costs and upgrade or replacement and advise council of pending expenditures linking capital projects with the operations and maintenance requirements. Asset management is a process to assist in making informed decisions to protect the value of your capital expenditures by ensuring good maintenance to keep the asset functional to the service level expected and get the full-service life out of it. A simple comparison can easily be made to your truck or car. Do the maintenance routinely, and the vehicle will be reliable and last a long time. Do not cut maintenance budgets. Doing so ultimately costs you money, causes service disruptions, and damages your reputation. Asset management is a structured decision-making process accommodating limited financial resources for making the most prudent decision on using limited resources for maintaining or enhancing services to the residents.

Asset management is more than just a document or a plan. It is a process. Many jurisdictions have developed a framework to describe the process. Shown here is the approach used by Asset Management BC in their document called ‘Asset Management for Sustainable Service Delivery.’ The Asset Management Plan is only one box within the framework. There are many components to it. When is the process complete? As the process is dynamic, as long as you own assets, the process will continue. It never ends. Our experience across the country is that the single largest barrier is our ability to effectively communicate the process and results.

Your maintenance personnel are performing functions every day. That information of work done should be fed back into the database to keep the life cycle predictions up-to-date and continuously refine your data. Many local governments already have very simple systems in place to do this, so it is not necessarily a new or added task. The data inputs should be reviewed to see if the correct information is collected and recorded and is useful. Proper information, especially on assets, makes the job of personnel maintaining the asset on a daily basis easier and quicker.

You have been managing assets for decades. Many of the tasks and activities within the asset management process you already do, from collecting data in the field and making decisions on asset renewals, upgrades, or replacements, to accounting and financial management. Much of the asset management process is tweaking and modifying existing





processes over time to what you are already doing and changing slightly the way information is reported to council. Councils often must make trade-offs, usually because of limited financial resources among priorities brought forward by departments across asset classes. This process helps you look at providing and sustaining services to get the best return for the community.

Why Asset Management?

- It is just good business. It provides an information-based approach to make decisions on the priority actions on your assets considering limited financial and staff resources and the services needed and provided to the community.
- It provides council with a longer-term view of the 'what and when' of financial needs for your community and a timeline to plan for it.
- You improve decision-making by having better information on the assets, conditions, and maintenance records. It makes staff jobs easier in the field and more efficient use of time.
- Better and longer-term financial information allows council to plan for the future and level out potential tax increases over time and/or seek other sources of funds.
- Higher-level government grant programs are now being linked to progress on your asset management journey as it is

recognized that asset management and properly considering the life cycle of the assets protect the capital investment in those assets.

- There are many excellent case studies on project-specific cost savings as a result of the use of the asset management process.
- The insurance industry has shown significant interest in community asset management programs as the information allows them to set premiums more realistically, usually at lower rates.

There are substantial resources available to communities locally, regionally, and nationally. One key resource is the Federation of Canadian Municipalities Asset Management Library. There are Regional Communities of Practice in every province. Most have websites where resources can be accessed, or just call, and we will help.

Find an asset management champion among your staff. As the process carries across the organization, the specific skill set of that champion is not as important as their drive and enthusiasm. All disciplines within the organization are going to be involved.

We are here to help. It is a never-ending journey. Can you afford to do asset management? You cannot afford not to do so. 🌱

ASSET MANAGEMENT Needs Nature

Natural Assets Initiative

Local governments across Canada are faced with significant asset management challenges. Many services they provide – including water and wastewater, waste removal, transportation, and environmental services – depend, in large part, on engineered infrastructure assets in need of renewal. Meanwhile, climate change disruptions are putting even more strain on these assets and on local government budgets.

Manitoba communities are no strangers to these challenges. Over the last two decades, the province has seen more and more drastic effects from our changing climate – according to the CBC, July 2021 was the driest on record since 1873; meanwhile, the following spring saw the wettest March in over 150 years¹ (Caruk, 2022).

Extreme weather coincides with Manitoba's infrastructure deficit, which the Association of Manitoba Municipalities lists at \$11 billion, or \$10,000 per Manitoban. As any community with a stretched budget will tell you, spending more on infrastructure is not always feasible.

Asset management can help alleviate some of this pressure and support better long-term preparedness by inventorying a community's existing assets, determining the current state of those assets, and preparing and implementing a budget and plan to maintain or replace those assets. However, local governments often overlook an entire asset class that could transform the longevity, durability, and livability of their communities: natural assets.

Natural Asset Management 101

Natural assets are the stock of natural resources or ecosystems that contribute to the provision of one or more services required for the health, well-being, and long-term sustainability of a community and its residents. They are part of the broader category of green infrastructure and include things like wetlands, forests, soil, and rivers.

For example, water and water treatment services are supported by wetland vegetation, and healthy forests and wetlands provide stormwater management services. Most natural assets provide multiple benefits: parks may reduce



“Nature is the infrastructure that is already built, providing services you already use.”

flooding risks and provide recreational benefits and can be managed to maximize several objectives.

The Natural Assets Initiative (NAI) has adapted traditional asset management methodologies to ensure that natural assets can be effectively integrated and considered into asset management. Doing so helps to understand and value the services provided by nature and brings them into the heart of mainstream decision-making. Since its first project in 2016, NAI has now worked with over 120 communities to support the understanding and implementation of natural asset management (NAM).

Think of it this way: nature is the infrastructure that is already built, providing services you already use. And unlike a levee or pipe, natural assets can be self-sustaining, lessening replacement or repair costs on communities. With effective monitoring, maintenance, and rehabilitation now, nature can add value for decades in ways that many engineered assets cannot match.

NAM through Reconciliation in Manitoba

Managing natural assets is never a one-and-done solution. It is a continuously adapting process as new data, priorities, and realities of the landscape affect the needs of communities. With this in mind, NAI collaborated with the Winnipeg Metropolitan Region, Chiefs of the Southern Chief's Organization, and the Centre for Indigenous Environmental Resources to develop a natural asset inventory that incorporates Traditional Knowledge and technical approaches for Treaty 1 Territory.

A natural asset inventory determines the type of natural assets a local government relies upon, their condition, and the risks they face. It is an essential first step in the full natural asset management project, which a completed inventory will inform.

The resulting land, water, and other natural resources inventory is an important step for the region and the entire practice of NAM. As the



first inventory to weave First Nations' perspectives with Western technological approaches, this project provides not only improved considerations of the cultural benefits and services of natural assets but also serves as an example of how other local governments can better integrate Reconciliation with Indigenous communities through progressive, climate-proof service delivery. Ideally, it will also provide the basis for years of further action in Treaty 1 Territory.

Where Should You Start?

Communities have the most control over their own assets. What's more, natural assets require management at a local level, so while progress is being made on the national standard, policy, and economic levels, the biggest impacts on your municipality's budget, climate resilience, and sustained services are determined by what you do today.

If you only have three hours, organize a facilitated staff or council meeting to discuss the following:

- What natural assets you rely on, and for what services;
- What you know about these natural assets and what you don't; and
- What risks threaten these natural assets.

If you have three weeks, explore NAI's tools, guidance documents, and open recruitment for natural asset management workshops where you can:

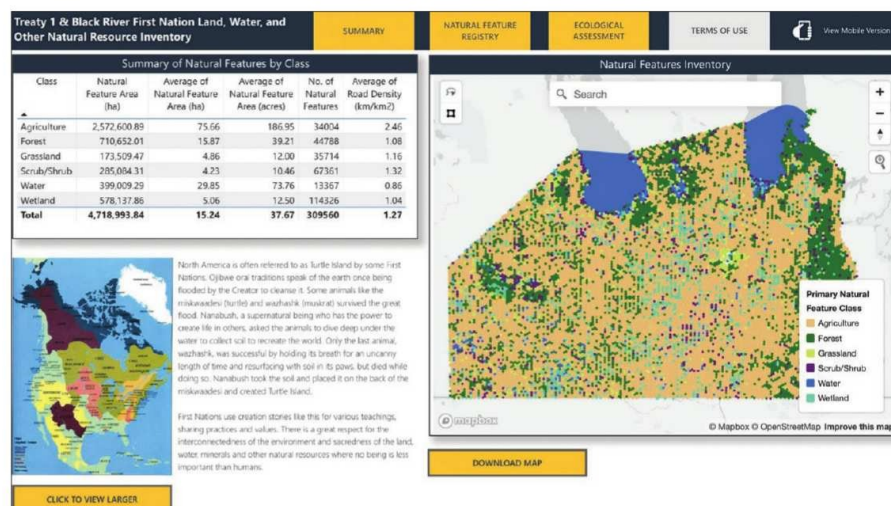
- Set high-level objectives to make progress in natural asset management.
- Build municipal staff capacity and knowledge.

If you have three months, start an inventory of your natural assets.

Organizations like NAI can provide support and expertise to help your community start to work *with* nature. And within weeks, new national standards will be available to guide the development of inventories so results can be comparable across the country.

Reference

- ¹ www.cbc.ca/news/canada/manitoba/climate-change-manitoba-prairies-weather-1.6447990.



Land, water, and other natural resources inventory. NAI works with local governments to develop inventories of their natural assets, which are then displayed in an interactive dashboard that allows municipal staff to organize and understand the scope of their region's natural infrastructure.



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MUNICIPAL CAPACITY Building Fund

Municipal Relations, Outcomes and Strategic Policy
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On February 16, 2023, the Government of Manitoba and the federal government jointly announced the Municipal Capacity Building Fund (MCBF) to help Manitoba's municipalities undertake local and regional long-term infrastructure planning. Under this program, a total of \$780,000 in funding will be administered in 2023 to support a range of asset management planning, infrastructure condition assessment, levels of service determination, and other key data collection and decision-making requirements of Manitoba municipalities. Eligible projects include the development of asset management strategies, asset inventories and collecting asset data, conducting condition assessments, drafting formal asset class operating and maintenance plans, and developing master plans (e.g., transportation). These projects can also involve specific education and training components to support their implementation.

With the initial program intake having closed on April 29, 2023, submitted applications are now being reviewed and assessed. Maximum funding for individual projects is set at \$50,000, with the potential program funding of up to 100% of eligible project costs in support of asset management planning. The application review and selection process is expected to be complete in summer of 2023. All program materials, including the program guide and frequently asked questions, are available at Manitoba Municipalities Online (MMO) – www.gov.mb.ca/mao/subscriber/login.aspx.

Asset Management as the Foundation of Sustainable Community Development

The Manitoba Government is very pleased to support municipal efforts focused on improved asset management through the MCBF. Many successful communities use multi-year strategic plans to help guide their operational, program delivery, community planning, capital infrastructure, and long-term financial needs. Asset management complements these key planning functions to help strengthen the development, operation and sustainable maintenance of municipal infrastructure and the services provided to residents, businesses, and other entities within a municipality's service area.

Successful municipal asset management may include focused policies and procedures in line with municipalities' long-term strategic goals and objectives. This approach can help municipal leaders make informed and consistent capital infrastructure decisions. The general process includes identifying current assets, assessing current conditions, determining requirements for this infrastructure to support levels of service performance or expected outcomes, forecasting future needs, and setting priorities for maintenance and replacement – while also considering the range of potential implications of future demands, emerging issues, and unforeseen events.

By adopting comprehensive asset management processes, policies, and procedures, municipalities can optimize the performance and value of core infrastructure, ensure long-term cost certainty, and enhance the delivery of municipal services provided to citizens, customers, and the community at large. Key benefits of municipal asset management include:

- Ensuring the reliable and efficient delivery of core municipal or essential services, such as roads, bridges, drains, water, wastewater, and solid waste management.
- Improving the quality, accessibility, and safety of public spaces, including parks, community centers, and recreational facilities/services that citizens may expect.
- Enhancing transportation networks to facilitate mobility and connectivity and to support community planning objectives (e.g., with bus systems and handi-transit).
- Promoting transparency and accountability in municipal decision-making and resource allocation in terms of long-term capital asset planning.
- Providing assurance to ratepayers that long-term infrastructure costs are in control.
- Engaging community members and other stakeholders in the process – an essential aspect of municipal asset management and decision-making to support communities.

For additional information on asset management processes, please also refer to the AMM's Asset Management Guide at www.amm.mb.ca/issues/infrastructure-and-asset-management. ▀

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Questions to ask BEFORE your municipality considers asset management software

Ask yourself...

1. Do we need it?

Asset management is a business practice, not a software solution. Many communities find that a spreadsheet is all they need to get started.

2. Are we ready for it?

Software is only useful when it is populated with good data and supports sound business practices. Before buying software, collect and organize your data and put your asset management processes in place. It is also critical to allocate budget for keeping data current and maintaining the software system.

What is Asset Management Software?

While there is no official definition of “asset management software,” this document refers to applications designed to help you collect, manage, store, visualise and/or analyze your asset-related data. Options range significantly in price and functionality from inexpensive applications like programmed excel spreadsheets, to more costly and integrated software suites that can incorporate any mix of inventory, financial, maintenance, and asset life-cycle functions.

Asset management software CAN...	Asset management software CANNOT...
<ul style="list-style-type: none"> ✓ Store data in a central place ✓ Process large amounts of information ✓ Help link data across functional groups (e.g. finance and public works) ✓ Incorporate geo-spatial data into your analysis ✓ Facilitate the modeling of different scenarios ✓ Help conduct standard asset management analysis of your data (e.g. risk, life-cycle costs) ✓ Flag events to support decision-making ✓ Present data in a way that supports decision-making ✓ Support corporate memory 	<ul style="list-style-type: none"> ✗ Make decisions for you ✗ Define your asset management processes ✗ Collect data or keep your data up to date ✗ Ensure the quality of your data ✗ Develop an asset management plan ✗ Tell you what information is useful in your decision-making process ✗ Test the logic of your outcomes ✗ Innovate or improve your asset management practices ✗ Provide leadership on asset management in your organization

Important tips

* Make software a team decision.

Asset management is cross-functional. The purchase of asset management software should include the same group of professionals from across your organization.

* Know the outputs you want to get from your software.

What analysis do you want the software to do? What business processes will it feed? How do you want the information to be displayed or reported?

Hint: Try mapping your requirements using a spreadsheet first!

* Training and implementation support are essential to success.

Have a plan for training staff and a succession plan in case key staff leave. It takes time and energy to adopt a new software system — budget for training and implementation support for staff across your organization.

Questions to ask suppliers

- How well does your solution align with my data and business processes?
- Is your solution compatible with my current information systems?
- Is the data structure open or proprietary?
- Can I add functionality later and how expensive might that be?
- What level of technical support is available and at what cost?
- How close is the nearest technical support?
- What training is included in the set up of the software? How much would each additional session cost?
- Will I own my data?
- Where is the data stored?
- What are the licensing and maintenance fees?
- Will I need to upgrade my hardware?
- What is your commitment to maintenance and updates?
- Have other municipalities used this solution and can I talk to them?

Special Thanks!

This content was developed by the Technical Working Group of FCM's Municipal Asset Management Program. The Technical Working Group is comprised of an exceptional group of municipal practitioners and experts from across Canada.