

Atlantic Infrastructure Management Network

Supporting Asset Management in Atlantic Canada

AIM NETWORK Winter 2021 NEWS

THE TOWN OF Holyrood'S ASSET MANAGEMENT CHAMPION IS JUST WHAT THE DOCTOR ORDERED

If you asked Robert Stacey five years ago whether he would eventually be working for the small Town of Holyrood, Newfoundland, he would have looked at you in disbelief and wondered where the question was coming from. Until just a couple of years ago, Stacey had spent 23 years working as a production manager in the fast-paced environment of the private sector at a structural steel fabrication facility called Metal World. A civil engineering technologist by training, he was responsible for ensuring that the factory was running smoothly to keep a steady stream of projects coming off the line.

Stacey thought for sure he would retire at Metal World, but his life changed unexpectedly when he and the whole management team was shuffled out the door after it was bought out by a larger company. Never in his wildest dreams had he imagined moving to a job in local government.

Stacey's initial misfortune from losing his job at Metal World may be one of the best things that could have happened to the Town of

Holyrood, because he joined them in a new role for the Town as its director of Infrastructure and Public Works. Since he arrived on the scene he's been using his skills to drive change for the better in how the Town operates, and he has become a champion of the Town's formalization of asset management.

Holyrood is a small community of 2,400 residents located about a 25-minute drive away from St. John's and like most small communities in the province, it didn't have a formal asset management system in place before Stacey came on board. At that time, the Public Works department focused mostly on day-to-day work and was quite reactive in its approach. The Town then changed the focus of the role of the director of Infrastructure and Public Works when Stacey was hired because senior management recognized the need for more proactive planning. Stacey spends 90% of his time in the office doing just that.

Stacey's recommendation to Council that the Town join AIM Network's asset management cohort program came from his insight and experience as the plant manager for Metal World. While there he had managed all the assets in the facility, including the equipment, tools and the building itself. Over the years he had put in place a preventive maintenance program for their assets that examined when it was appropriate to repair or replace them. The process didn't happen overnight, and he understood that this approach was exactly what the Town was missing in managing its own assets.



THE TOWN OF HOLYROOD'S BEAUTIFUL COASTAL BEACH

(Source: Town of Holyrood)

>>> Stacey is now putting the same systems in place that he used at Metal World. When he started working for the Town there was no formal documentation system or process to manage the assets' condition or work history. He spent the bulk of last winter pulling data together and organizing it into a useable format. Even before joining the cohort program, Stacey worked with the Finance department to revamp the Town's purchase order system

for their vehicle fleet so that the work done on every vehicle was documented. They can now see more clearly when it's time to replace as opposed to repair. For example, they can now see if they have a vehicle with a book value of only \$5,000 that needs \$10,000 a year to be kept on the road, which may not be the best value for the community.

Stacey knows that asset management is an ongoing process and it takes many years to implement a fully functional system. He felt that a good place to start in Holyrood was with their water system, which he sees as their biggest challenge. The public works department has been continuously chasing water leaks and last summer they were on the cusp of having a water shortage. Stacey

light-heartedly admits that like him, the system is starting to get a little grey around the edges as most of it was put in the ground around 1970. He wanted to be able to be more proactive about how to maintain and rehabilitate the system.

The Town has now completed the cohort program and they have a good sense of the actions that will be needed over the next couple of decades to sustain their water service delivery. The big shock came when they put all the data together and looked at the risks to the system. It has become apparent that the largest section of the system will need to be replaced within the

next 10 to 20 years at a cost of about \$40M. That's a lot of cash for a small community. The AIM Network technical staff concluded that they should be setting aside \$350,000 a year in reserves to stay on top of the system. Stacey thought to himself that this would be impossible. The total annual budget for the Town is only \$4.2M and this was only one of the services they need to sustain. Stacey knows the problem is real though, and

he's taking the approach that he's going to have to think very strategically so that he can move forward in increments, taking advantage of every possible provincial and federal funding source.

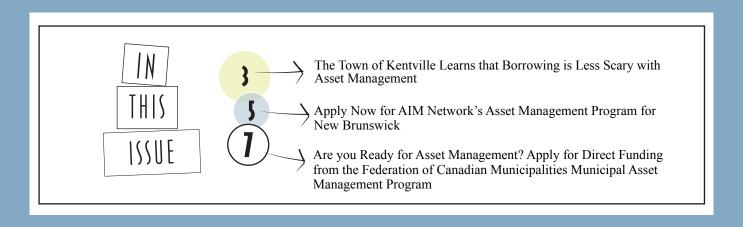
Fortunately, the Holyrood Town Council has known for awhile that a forensic investigation of their infrastructure needed to be done but until Stacey joined the team there was no one to lead the process. Council has welcomed with open arms the work they are doing on asset management and are prepared to develop a long-term plan. Stacey's top recommendation will be for Council to focus on maintaining the infrastructure they already have. Because the Town has been growing modestly and is an expansive community with a large land completed two watermain extensions

base, they had already before Stacey arrived.

What Stacey likes the most about his move from the private sector to local government is that he gets the sense that he's helping to improve the lives of the people of Holyrood every day. He also appreciates the more relaxed environment and the fact that he has the time to schedule, plan and think about asset management and where they need to be 20 years from now. The Town is not going anywhere, and lucky for Council, neither is he.



ROBERT STACEY,
DIRECTOR OF INFRASTRUCTURE AND PUBLIC WORKS,
TOWN OF HOLYROOD



THE TOWN OF Kentville HAS LEARNED THAT BORROWING IS LESS SCARY WITH ASSET MANAGEMENT

The Town of Kentville is a prosperous community nestled in the Annapolis Valley. Located in the heart of Nova Scotia's flourishing wine producing region, it has a small but growing population of 6,271 according to 2016 census data. Mayor Sandra Snow is curious to learn exactly how much growth the 2020 census will reveal. She thinks it's significant.

Snow beams with pride as she chats about the good fortune of her town. Recently elected to her second term as mayor last October, she comes across as a leader with vision combined

with good sense and a genuine caring for her community. One of her goals is to be able to say with confidence to the Town's biggest demographic, the 25-30-year olds, that there will be financial stability there when they retire, that property taxes rates won't get out of control. What is giving Snow that confidence is asset management. progress they're making with the support of AIM Network's cohort program is helping Council and staff to plan and manage its finances in a way that will not lead to any long-term debt, even if that means borrowing now to save money in the long run.

Kentville Council made some savvy financial and planning decisions before they started to formally adopt an asset management program, so the Town is starting its asset management journey on solid financial ground. One of those decisions was to change the zoning of a four-acre parcel of land on

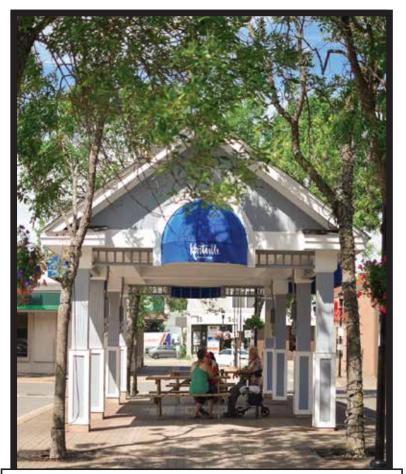
the east side of town to allow for the construction of four new rental apartment buildings. Kentville simply had no other housing options besides the standard single-family homes that characterize small town, rural living. The new apartments are adding flexibility to their housing market, serving a good cross section of people ranging from the older generation wanting to downsize in town, to younger people not interested in buying or ready to buy a home. The development will have around 200 units when completed and demand is already meeting or outpacing the supply. The beautiful location beside a trail system and natural area no doubt adds to the appeal.

What Snow is most proud of about this planning decision is that at the end of the day, it was a pure tax gain for the

town because the Town is not required to pay for or maintain anv infrastructure associated with the development. It was built with a private entrance and the Town provided the lateral system off the Town water and sanitary sewer systems. Those systems and the road entrance will be required to be maintained by the developer. With only the first building built so far, last year the Town's tax base increased by 5% with no tax rate increase for residents. It was a net win for the town. It was also a win for pension plan investors, who invested in this development for the likely reason that it meets the social, environmental and governance goals of the fund's investments.

On the finance side, Kentville's wisdom came from selling its electric utility to Nova Scotia power back in the 1990s, leaving the Town with \$10M in capital that by legislation has to be kept

in the bank to work for them. The annual interest and dividends from the capital lowers the tax rate they would otherwise need to charge by 10 cents. The Town also has good reserves. For example, they already have over \$700,000 in reserve for their water



KENTVILLE'S CENTRE SQUARE IS A FOCAL POINT WHERE PEOPLE GATHER FOR EYENTS AND THE LOCAL FARMER'S MARKET.

(Source: Town of Kentville)

>>> (Continued from Page 3) system alone. Their goal is to keep their borrowing under 10% of the annual operating revenue.

When asked whether the work the Town is doing on asset management is worth the resources, time and effort given the Town is already doing quite well, Snow's answer was a resounding yes.

She and staff completed the cohort program in December, which she says has validated all the decisions they've made while also showing them how to do better. Perhaps that biggest insight she's gained is that she'll have the knowledge needed to inform when and why to support borrowing funds, a decision Council would have avoided whenever possible before asset management.

She gave the example of a decision about renewing the water infrastructure in one of their sub-divisions that was built in the 1930s. They had had several watermain breaks there and their five-year plan called for \$2M worth of infrastructure upgrades in 2017. At that time they were waiting for funding from the federal government that didn't arrive. When the money did become available in 2018, the province didn't have its share ready so the federal government couldn't release its funds. Without the funding in hand, Council deferred the project both times.

Snow says that asset management is now showing them clearly that there's a significant cost to deferral. With more insight about the age, condition of and risks to their infrastructure, they can see how much money they'll need over the next 25 years to fix the things that need to be fixed at the right time. As a Council, they'll have the confidence to be able to say when it's the year they need to borrow \$2M if they have the capacity to do it, knowing it's an investment in the future that will save residents money in the long run. That's a huge eye opener and very empowering. Snow jokes that of course they still want and need the money from the federal and provincial governments to better serve the community, but asset

management is demonstrating when it's wise to proceed with some projects even if that money isn't forthcoming.

Snow says that significant investment is needed to get their transportation system where they want it to be, because they need to fix and upgrade roads, sidewalks and active transportation infrastructure and ensure that the work meets today's accessibility standards. They need a plan for that too. She is now working with a new Council elected in October 2020 that has three new councillors out of a total of seven. She aims to be the asset management champion that will get the rest of Council on board at a strategic level related to the Town's capital expenditure plan. Kentville's new engineering director is the staff champion of all this work and together they are building a solid team.

Snow's final comment is that to her, asset management is very exciting. The community understands that there's a cost to infrastructure but it's Council's job to inform the public about what that means. She envisions the Town doing lunch and learns for people to learn about this and sees strong linkages with other strategic objectives, like environmental stewardship. The day of her interview for this newsletter, the cover story in her morning newspaper focused on what the pandemic relief spending was going to cost a newborn, and it was a pretty penny. It motivates her to steer the Town in the right direction towards ensuring that its decisions won't be adding any unnecessary debt to future generations.



ASSET MANAGEMENT PROGRAM FOR NEW BRUNSWICK • Module 1 •



The Province of New Brunswick is expected to issue Phase 2 Asset Management Requirements for municipalities soon. It is anticipated Phase 2 requirements will include the following outcomes:

- (a) Establish link between Asset management policy and other organizational governing documents
- **(b)** Council endorsement of AM Policy and maintaining currency
- (c) Linking asset management planning and budgets
- (d) Defining acceptable levels of service delivery
- (e) Identifying performance measures
- (f) Climate Change: Evaluating climate change vulnerabilities
- (g) Identifying GHG reduction opportunities
- (h) Condition assessment policy
- (i) Risk evaluation process
- (i) Risk mitigation and adaptation strategies for high risk assets
- (k) State of infrastructure based on condition and performance
- (I) Cost analysis for existing and planned assets over 50 years
- (m) Cash flow forecast for all assets
- (n) Identify funding sources (10-year focus)
- (o) Cashflow forecast assumptions
- **(p)** Strategy for managing funding gaps
- **(q)** Prioritization of investments through good asset management practices

AIM Network is offering a series of online workshops to address the expected outcomes of the Phase 2 requirements. Workshops in this offering (Module One) addresses Outcomes **a - j** on the above list and will take place **February - June 2021**. (Module Two addresses Outcomes **k - q** above and will be a separate offering planned for Fall 2021 - June 2022.)

If your municipality is interested in participating in the program, please complete the linked Expression of Interest form above and return it to dfoster@aimnetwork.ca before January 25, 2021 or contact **Daisy Foster** at (902) 412-3328 or by email to dfoster@aimnetwork.ca.

OUR APPROACH

Participating municipalities will learn and 'do' asset management using their own data and information. Qualified facilitators will lead the workshops. See Page 2 for a description of each workshop and deliverables.

Worksheets and templates will be provided for all activities. The activities completed through each workshop are designed to align with the Province of New Brunswick expected outcomes.

A municipality is encouraged to include multiple participants in each workshop to ensure learning and participation takes place across the organization.

A municipality may register for any of or all 5 workshops. (Note: Municipalities participating in the full Program will benefit from up to 10 hours of additional technical support at no additional cost as well as continuity, consistency and integration within their AM program activities.) Capacity for each workshop will be limited with priority given to those registering for the complete program.

WORKSHOP TOPICS AND DATES

WORKSHOP	SERIES A	SERIES B
1. Levels of Service Part 1	February 19, 2021	February 24, 2021
2. Levels of Service Part 2	March 19, 2021	March 24, 2021
3. Climate Adaptation in Asset Management	April 16, 2021	April 28, 2021
4. Climate Mitigation in Asset Management	May 21, 2021	May 26, 2021
5. Prioritizing by Risk	June 4, 2021	June 11, 2021

REGISTRATION FEE / MUNICIPALITY

TOTAL PROGRAM: \$1,900 + HST PER WORKSHOP: \$395 + HST

- Unlimited participants per municipality
- Workshop materials, templates, and tools.
- For municipalities participating in all 5 workshops: Individual municipality technical support following workshops to assist with completing workshop activities (up to 2 hrs. per w/s).

Note: Municipalities may use their Gas Tax Funds for this Program.

(Continued on Next Page >>>)

WHAT WILL YOUR MUNICIPALITY LEARN AND DO THROUGH MODULE 1?

Policy, Services, Climate Change and Risk

Current Offering: February - June 2021

Workshop 1: Levels of Service Part 1

Review/update AM Policy; Align Organizational Guidance Objectives to Asset Management and Budgeting; Document services provided with a direct link between service and key infrastructure/assets.

Deliverables: Each municipality will produce:

- A new or updated AM Policy for your municipality
- A flow chart linking processes within your municipality from Asset Management Policy through to budgeting.
- A list of services currently provided by your municipality linked to the infrastructure relied on to provide each service.

Workshop 2: Levels of Service Part 2

Review and refine performance measures for all services provided by your municipality; Define acceptable level of service for each service your municipality provides; Identify gaps in service levels; Integrate Climate change considerations as sustainability gaps with timeframes and life cycle costs; Summarize and prioritize service gaps.

Deliverables - Each municipality will produce:

• Level of Service report with defined performance measures and indicators, target levels of service and gaps, action plan to address current and future gaps.

Workshop 3: Integrating Climate Adaptation

Assess services and infrastructure for climate vulnerability; Prioritize and document adaptation options using risk, level of service, cost of doing nothing and adaptation cost using a climate adaptation worksheet.

Deliverables - Each municipality will provide a summary of:

- Climate change effects and impacts.
- At-risk services and infrastructure.
- Prioritized list of adaptation projects.

Workshop 4: Integrating Climate Mitigation

Outline benefits of reducing GHG emissions; Identify current direct GHG emission sources; Identify reduction targets and opportunities; Prioritize mitigation opportunities.

Deliverables - Each municipality will produce a summary of:

- Mitigation targets and opportunities
- Action plan for implementing mitigation activities

Workshop 5: Risk and Prioritization

Understanding risk; Risk assessment process; Impacts of probability and consequence of failure (PoF and CoF) on asset management; Incorporating risk into capital decisions; Case studies on risk impacts on planning and budgeting

Deliverables - Each municipality will develop:

- Consequence of Failure assessment matrix
- Risk tolerance profile and policy statement
- Documented risk evaluation process

Are you Ready for Asset Management?

AIM NETWORK CAN

FCM Accepting Applications in January 2021

The Federation of Canadian Municipalities Municipal Asset Management Program provides grants of up to \$50,000 to municipalities to cover 80 – 90% of eligible costs for an Asset Management Program: https://fcm.ca/en/programs/municipal-asset-management-program

Now is the time to prepare an application to take advantage of this wonderful opportunity to make progress, whether that is by preparing an inventory of your assets or by getting started on long-term capital planning.

Don't let these common barriers hold your municipality back:

- **1.** We do not have a good understanding of where to start with an asset management program; or
- **2.** Our staff just do not have time to work through the application process.



AIM Network has assisted more than 50 municipalities in Atlantic Canada to prepare and submit successful applications to build capacity within their organization to develop an asset management program aligned with their municipality's goals for its services and infrastructure.

How do I start?

Simply send an email with your contact information to dfoster@aimnetwork.ca with Expression of Interest in Asset Management in the subject line and we'll start the conversation there.

Our Services:

- Assist with drafting the application and supporting documents
- Support with program execution from kickoff through to drafting the final report for submission to FCM at the end of the project
- Help tailor your program to what you need so that follow up activities are defined to fit your priority areas of asset management planning

Typical Workplan for a Municipality Getting Started



Introduction to Asset Management and Prepare an AM Policy: AIM Network will facilitate a workshop for Council and senior staff that provides an overview of asset management and how it will benefit the Town. At this introductory session, you will prepare an Asset Management Policy using AIMNet templates to guide decision-making on municipal services and infrastructure renewal and replacement.

Then we will get started on your infrastructure planning.



Complete an inventory of all major assets including sewer, roads, storm, trails, parks and municipal-owned buildings and structures in spreadsheet and GIS

- (A) Obtain data, capture and verify linear assets (roads, sewer, storm and trails) and provide data in Excel spreadsheet format.
- **(B)** AIM Network can manage data collection and provide quality control and quality assurance on the data if you have existing data or have a data collection contactor you would like to work with. Alternately, AIM Network can manage the data collection from start to finish by one of our associated data collection contractors familiar with the AIMNet Solution.
- (6) Set up datasets in GIS system including base maps and asset layers for linear assets. Provide all data in an easy-to-use format to enable town staff to view and query.

Undertake Condition Assessments on all Town Infrastructure.

- (A) Calculate remaining life, condition and replacement cost for linear assets based on age using the standard costs and expected useful life in the AIMNet Solution toolkit.
- (B) Undertake a condition assessment of all major buildings and structures to calculate remaining life, condition and replace-(Continued on Next Page) 7 ment cost using the AIMNet Solution facility inventory tool.



Town staff undertake a training session that familiarizes them with their own data and information contained in the Excel spreadsheets and the GIS system. This will enable them to update and maintain it following the project as capital projects are completed and infrastructure is added or decommissioned.



Prepare State of Infrastructure Reports and a Preliminary Capital Program

- (A) A Preliminary State of Infrastructure Report (P-SOIR) with condition, remaining useful life expectancy, replacement cost and reserve requirements will be generated for each major asset group. This P-SOIR will present information in table and graph formats summarizing the Town's major assets in a format that can be easily understood.
- (B) Prioritize projects based on risk and level of service with input from Council and Staff to generate a Refined State of Infrastructure Report to support capital planning budgets
- **(6)** Prepare a Preliminary 5-year Capital Program including individual projects for Council consideration.
- (2) Prepare 20-year projections based on estimated annual capital requirements for infrastructure renewal and replacement.



Conduct a Project Wrap-up Workshop for Council to present the project deliverables and to discuss findings and next steps in asset management planning.

The Deliverables

At the end of the process, you will have:

- **1.** A sound grounding in principles of asset management planning.
- **2.** Tools, graphs, and data to educate elected officials and residents on the challenges and solutions with service delivery in your municipality.
- **3.** GIS Maps of linear assets showing infrastructure location, probability of failure, consequence of failure and risk.
- **4.** A spreadsheet catalogue of facilities containing all major building components.
- **5.** An Asset Management Policy ready for Council ratification.
- **6.** A level of service report showing current and future gaps in community service levels along with a scheduled plan to address those gaps,
- **7.** A prioritized list of infrastructure renewal and replacement projects based on policy, service levels, interaction of assets with one another, climate vulnerability and risk.
- **8.** A 5-year capital program based on 20-year annualized infrastructure demands with specific projects, rationale for selecting these projects, assessment of potential funding opportunities and a pro-forma budget basis for the Program.
- **9.** A collated Asset Management Program with all Project deliverables and mapping.

55 How Much Will This Cost Our Town?

This varies by size of municipality and amount of infrastructure. Typical direct costs to municipalities are:

\$5000 or less: For municipalities with populations less than 1000 or those collaborating with another town in your region. The FCM grant provides 90% of total project costs up to a maximum of \$50,000.

\$8000-\$10000: For municipalities with populations greater than 1000 and not participating in a collaborative application process. In this case, the FCM grant covers 80% of total project costs up to a maximum of \$50,000.

Contact Daisy Foster, Managing Director of AIM Network at dfoster@aimnetwork.ca with **Expression of Interest in Asset Management** in the subject line to get started.

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FÉDÉRATION CANADIENNE DES MUNICIPALITÉS