

#OurAssetsMatter

AMBC NEWSLETTER



Sharing information, transferring knowledge, and building capacity for sustainable service delivery.

FORTY THIRD EDITION – SUMMER 2024

THE PERFECT STORM Why 'Asset Management for Sustainable Service Delivery' provides solutions

Wally Wells P. Eng. Executive Director, Asset Management BC

Our biggest challenge today is affordability for our residents and businesses. Our local governments and First Nations Councils and Boards are challenged more than ever with balancing priorities of service against tax and fee increases and availability of capital for projects. Capital projects usually relate to asset upgrade, improvement, expansion or retirement of an asset or class of assets. The assets are on there to provide a service. If they do not, they are not needed. Councils and Boards mandated role is providing 'service'. With limited resources, how do we balance priorities across the organization to provide the range of services yet maintain affordability in very tough times.



Our Councils, Boards, and political decision makers must think horizontally to formulate decisions across the entire organization while respecting the range of services that are provided. How and where do they get their advice? Most of our organizations are not organized horizontally but operate vertically in departmental structures or, another way to express it, in silos. That is a challenge both for Council members and for staff.

From experience, most organizations do not have the processes in place to sort out and balance priorities based on service except at Council level. The result is siloed decisions, not always optimum respecting service levels. The driver of the decision should be the service not the asset. In talking daily with local governments across Canada, most acknowledge this weakness as a huge challenge.

Let's look at some of the issues associated with and define 'The Perfect Storm'. Affordability appears to be the main issue. After the pandemic rents and housing costs increased, material supply was disrupted causing increased prices, homelessness increased, and house prices significantly increased. The homeless situation has become very serious, as have deaths from drug overdose causing our local Council and Board members to focus a lot of time on these issues at the expense of others. There is a potential overload position for Council members.

Housing is a critical issue and affects all our local governments, especially medium-sized and larger communities. Senior level governments have mandated zoning changes and tied grants for housing to increasing density.

Housing has become a federal priority which is being translated into local priorities through grant programs to communities to accelerate housing. However, while the grant programs address housing, significant infrastructure is needed to support increased density and new development including possible expansion or upgrading of water and sewage systems and facilities and major recreational and community support facilities. The provision of both hard and soft services falls on the backs of the local government. A report called 'A Jump Start: Providing Infrastructure for More Housing', available

through the Urban Institute of Canada (canurb.org) and funded by the Canadian Infrastructure Bank clearly outlines the need for short- and long-term infrastructure in relation to the potential rapid increase in housing stock. The estimate given for new or upgraded infrastructure is \$100,000 per new home. Infrastructure Canada has changed its name to 'Housing, Infrastructure and Communities Canada'. Infrastructure programs are not lost but will be aimed among other things at housing.

'The Perfect Storm'

There are many other issues that lead to the perfect storm, let's list a few:

- Housing affordability with significant increase in home and rental costs
- The pandemic led to revenue shortfalls in many local governments
- Staff shortages and unfilled positions both in the public and private sector
- Material and contractor shortages
- Limited bids for capital projects
- Bids coming in 15% - 30% over estimate limiting project affordability
- Increased costs require reconsideration of priority projects within a defined budget
- Failing infrastructure with the need to increase taxes, some with double-digit increases
- Increased interest rates / High interest rates
- Cost of living high and limited ability for residents and businesses to pay
- Climate change and significant climate events impacting our infrastructure
- Demands for increased services, especially social services without increasing taxes

Put all these together and we have 'The Perfect Storm'.

The process of asset management takes into account all the assets and services across the entire organization including natural assets. Climate change is upon us as evidenced by the number of costly events across our country and the world. Our infrastructure must be as resilient as possible to these events in order to protect against primary service disruptions and economic loss. The asset management process has been adopted by governments as a means to protect and plan for investments in a highly structured way. The new Canada Community Build fund agreements, we know, has updated more demanding requirements for asset management as part of the Federal /Provincial/Territorial

agreements. We just do not yet know the details until all the agreements are in place. In our province, here in British Columbia, our government is now requesting asset replacement values as part of annual local government financial reporting. While this requirement will likely be made mandatory, the province is working on improving data quality, to make results meaningful. Replacement values most easily come from your asset management program. Without that, you are doing double the work to meet these requirements.

Asset Management Solutions

With an Asset Management policy to drive the process, the asset management framework and plan, along with the long-term financial plan, Councils and Boards have the background and analysis necessary to make informed decisions and stay within financial limits.

Help is there through Asset Management BC training, conference, and resources. Details are on the AMBC website (assetmanagementbc.ca). There are also significant resources available thanks to the FCM Municipal Asset Management Program (MAMP) on the FCM website.

Need help? Call or e-mail info@assetmanagementbc.ca.

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In Memoriam

Danny Higashitani

August 7, 1967 – April 5, 2024



Asset Management BC (AMBC) and the entire asset management community mourns the loss of Danny, a passionate asset management champion and friend.

As an asset management champion, Danny forged a path that continuously improved critical service

delivery in all communities in BC. As a Sr. Engineer with Indigenous Services Canada, he was always focused on solutions, supporting all First Nation communities in their improvements to service delivery through the development and implementation of asset management best practices. He was an advocate of education, training, and collaboration which resulted in building a strong working relationship with AMBC. As a result of his efforts, the Annual AMBC Conference has been enriched by the integration of First Nation community content and strong First Nation community participation. Danny was an active participant and partner with AMBC since 2008.

Moreover, Danny was respected and admired. You did not have to know Danny long before you considered him a friend. He will be missed, but not forgotten. While he is no longer with us, his legacy will continue.

For more information, Danny's obituary can be found at: <https://dignitymemorial.com/obituaries/burnaby-bc/danny-higashitani-11774315>

CASE STUDY:

Kelowna shifts to service-based budgeting

Joel Shaw, P.Eng., Asset Management & Capital Planning Manager, City of Kelowna

'Providing greater clarity on complete service offerings and their associated costs, which translates to more informed decision making'.

The Challenge

The City of Kelowna, like all local governments, delivers services to the community such as clean water, sanitation, transportation, parks, and protective, community and recreational services. However, Kelowna has traditionally used an organizational approach for presenting the annual



budget whereby each division or department budget was presented to Council based on the organizational structure of the day. This **department-centric approach** did not make a clear connection between capital and operating budgets and the services Kelowna provides. It also made it difficult to present the cost of services that are delivered across multiple divisions and the connection between the service levels observed by citizens was not necessarily tied to the budget presentation in a meaningful way.

Recognizing this disconnect, Kelowna introduced **service-based budgeting** for the first time in 2024. This transformative process will enhance our financial planning and better serve Council as they make the decisions that shape Kelowna as a City of the Future.

The Approach

The new approach is a paradigm shift that helps **more clearly align the budget** with community priorities, needs, and goals, and it will allocate resources more effectively and efficiently. Service-based budgeting organizes Kelowna's Financial Plan around delivering the services that are needed to meet the needs of our growing community, resulting in a more complete picture of the costs involved for each service area. This model aims to enhance transparency and accountability by making it easier to see, understand, and measure the outcomes of where tax dollars and other revenues are being invested.

The Barriers

Managing change and expectations was a major challenge. Shifting to **service-based budgeting** is neither fast nor simple, and, as expected, there were some resisters. However, early, and vocal **endorsement from Council and senior leadership**, along with a strong message that participation was mandatory, helped get everyone on board. In fact, as the benefits of using service-based budgeting to guide decisions and support budget requests

were demonstrated in practice, many of the resisters ended up becoming some of the most enthusiastic users.

What Do Tax Dollars Pay For:



Figure 1. Service based budgeting highlights cost of municipal services.

The Results

For Council, **service-based budgeting** means greater clarity on complete service offerings and their associated costs, which translates to more informed decision making. This not only facilitates more thoughtful discussion and review of service levels and performance impacts, but also provides a better understanding of how, where, and when Kelowna may be able to deploy finite resources to areas of need.

Residents, community partners, and staff will also now be able to visualize the budget and City services more holistically and concretely, enhancing the ability to work together to identify areas of improvement, innovation, and collaboration.

With citizens increasingly holding municipalities accountable for the cost of services provided, the [2024 Financial Plan](#) was presented under a service-based budgeting methodology, with services and associated service levels being determined through Council’s priorities, and the City’s strategic plan.

Under this approach, budget is created and presented around the service being delivered to the community, rather than around the departments and divisions under which the organization is structured. Service Based Budgeting has many benefits for Council and the Community including:

- Enhanced accountability and transparency
- Better communication of where tax dollars are being spent and for what outcome.
- Greater clarity of services offered to the community & their associated costs.
- Council establishes the endorsed level of service & associated investment.

Summary

One of the challenges of traditional budgeting is that it is department-centric and **often based on incremental adjustments to previous budgets, rather than reflecting the actual costs and outcomes of delivering services.**

By adopting a service-based approach, Kelowna aims to create a more transparent and accountable budget process that aligns with the community's priorities and expectations. A service-based budget **shows the full cost of each service**, including staff, materials, equipment, contracts, and overheads, as well as the sources of funding, such as taxes, fees, grants, or reserves. It also shows the performance measures and targets for each service, such as quality, timeliness, efficiency, and customer satisfaction.

This way, Council and the public can see the value and impact of each service and make informed decisions about how to allocate resources and adjust service levels.

“I am excited about the move to Service-Based Budget for our city, and I am confident that it will help target investments that will improve the quality of life for all residents.”

- **Doug Gilchrist, City Manager**



Next steps

Kelowna is improving business processes and leveraging technology to better track operating and capital costs to support **service-based budgeting**. Improvements for 2025 include configuring the maintenance management system (Cityworks), so staff record time and materials to activities and assets which rolls-up to the total cost of service. Kelowna is also including capital in addition to operating budgets in the 2025 service-based budget cycle.

CASE STUDY:

Technology: Increasing Asset Knowledge in Real Time with Physical Inspections

Greg Sawatzky, City of Kamloops

This may appear, at first, to be a story about software, but **software is only an enabler**. This is really a story about how the maximization of available skill sets through active collaboration can bring about meaningful, lasting, organizational change that better serves Asset Management goals.



Asset Management practitioners know the importance of inspection verified asset fitness and condition tracking when analysing key performance indicators in the context of service level compliance. Inspections help in the early identification of risks and can guide maintenance treatment decisions based on asset performance trends. Additionally, inspection results increase essential accuracy to long term financial plans and asset class blended project prioritization.

With these and other benefits in mind the City of Kamloops long ago set the goal of collecting and maintaining inspection-based asset performance for analysis. This meant addressing shortfalls in past inspection processes and data governance protocols.

The new process started with the development our playground equipment inspection program and included a blend of technologies intended to streamline this important activity.

The Former Process

The City of Kamloops Carpentry Department provides inspection services to the Parks Department. Certified carpenters are tasked with inspecting and recording the results for playground, green space, washroom, waterpark, hard surface court, and skate park assets. These inspections are performed monthly except in winter months.

Carpenters would begin the monthly inspection cycle by obtaining 3-part carbon paper forms for each of the approximately 100 separate inspections. These forms differ slightly depending on the type of asset to be examined and were customized with the name of each specific asset. The forms were placed in a binder and carried on the inspection route where the forms were completed.

At the end of each day the inspector returned to the office and separated the 3-part form with one copy retained in the carpentry shop, one copy sent to the Parks Department Supervisor, and one copy to the Risk Manager. The inspector then listed, and prioritized for repair, the defects discovered during the day's inspections. The time required for this process varied but usually required at least an hour daily.

Challenges

Several shortfalls were identified in this former inspection process that had negative impacts on data integrity, effective use of departmental resources, asset condition tracking, capital renewal planning, and risk exposure.

The paper process did not promote reporting and trending since a great deal of physical searching and compiling was required to group the results in a meaningful way. The paper forms relied on qualitative free form observations as opposed to quantifiable rating and scoring procedures so inspection results could be left open to interpretation. Three physical copies made it difficult to track individual changes, should they occur and there were differing methods of storage and filing for each copy.

The paper forms required the inspector to spend considerable amounts of time organizing and prioritizing the paper copies, while consolidating work required, or recommended reports. This usually occurred daily and took time away from the actual inspection process.

There were no provisions to update GIS data within the process. The assets inspected were not given a condition rating so incremental data driven planning of maintenance and renewal was not possible.

Paper copies did not encourage communication across departments or facilitate corrective measures through

collaboration and communication reducing the oversight of departmental responsibilities.

When historical inspection records were required to address public or legal inquiries the task of locating, compiling, and quantifying these documents was a time consuming and costly process and the results often fell short of expectations.

Based on these issues the following goals were identified:

1. Create easy to find and quantifiable inspection histories for playground assets.
2. Configure existing software for easy sensible work processes.
3. Update GIS asset records directly from the inspections.
4. Make all inspection results shareable, accessible, and relevant to all stakeholders.

Our Computing Environment

A corporate decision was made prior to 2010 that all the City of Kamloops asset records (the asset repository) would be held in our Geographic Information System (GIS) tables. The goal was to limit duplication of the records increasing data integrity and accessibility for those who need the information. Our GIS system is also internally configured and maintained.

Building on our strong GIS presence, the City acquired Trimble Cityworks (Cityworks), an enterprise Asset Management solution supported by ESRI Canada. This GIS-centric asset lifecycle management system leverages our existing GIS records and creates lasting work histories for individual assets.

Cityworks integrates with our JD Edwards financial software allowing actual equipment, labour, and material costs to be tracked against activities on specific assets for both operational and capital expenditures.

Our New Approach

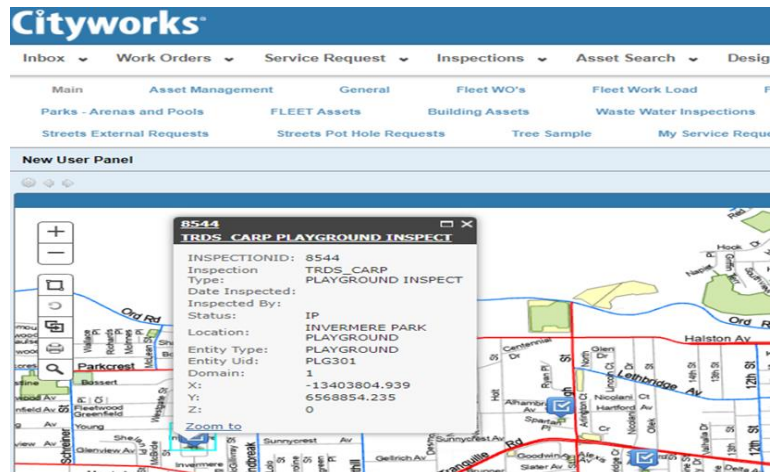
Cooperation and collaboration can mean essentially the same thing, however in the context of local government, cooperation can take on a one-sided lean. For this reason, a collaborative approach was selected to manage our change of process with equal consideration given to the needs and input of all stakeholders including our Risk Management department, Parks, Finance, GIS, IT, and the Carpentry Department inspectors.

Starting with our successfully deployed and integrated Cityworks website accessed in the field using iPads, custom inspection templates were developed for each type of asset associated with playgrounds. All assets to be

inspected were then associated to an inspection template according to its type. These inspections were enabled as cyclical and regenerated once a month. A query was created and saved to be deployed in user inboxes as needed. This query displays the active inspections and can be viewed as a grid or as icons on a map.

Map View - Inspections in Progress

This method of inspection access and location represents a simple procedure for end user interaction requiring little



additional training.

There were several options available when considering configurations of the software based on but not limited to current workflows, operational data requirements, reporting requirements, task costing, long term planning, and risk management.

The Cityworks inspection forms were designed to require questions be answered by selecting “pass” “fail” or “n/a” with a provision to add notes to each response to clarify the issues. This was done to add a layer of easily quantifiable data for analysis and condition scoring. Overall recommendations and observations and work done on site can be added to the free form boxes associated general inspection. There is also an attachment section to attach files, photos, and videos to the inspection form.

Upon completion and closure of each inspection, results could be mapped directly to the GIS tables and information such as inspector name, inspection date, and condition could automatically update the corresponding GIS records. The updating of condition scores remains a work in progress as we create a better understanding of scoring parameters and train end users to ensure reliable results.

Cityworks Playground Inspection Form Configuration

Benches/Seating
 Pass Fail N/A

Fence
 Pass Fail N/A

General Items

Health and Safety Hazards (Needles, Broken Glass)
 Pass Fail N/A

Signs and Notices
 Pass Fail N/A

Trip Hazards (Roots, bushes, Sidewalks)
 Pass Fail N/A

Overhead Hazards (Trees)
 Pass Fail N/A

Wildlife Issue (insects, Vermin, Predator)
 Pass Fail N/A

Condition Score 1 - 5 (1=Like New, 5=Unserviceable)
 1 2 3
 4 5

Reset

Observation:

Repairs:

Recommendation:

Cond. Score: 0

- Inspector begins physical field inspections completing each form for each asset.
- Inspector completes each form by changing, "Status", "Resolution", "Inspection Date", and "Inspected By" fields.
- Inspector makes minor repairs on site if time, parts, and tools are available.

The potential of access to live time quantifiable data across departments required a plan for completed inspections to ensure all stakeholders could view and use inspection results from their Cityworks inbox. It was decided that completed inspections should be divided into two types for query development purposes.

1. Pass - This state requires no further consideration or action from any department.
2. Fail or Pass with Recommendations - Requires further maintenance consideration and possibly inter departmental prioritization of corrective actions.

The queries for "Passed with Recommendations" or "Failed" inspections were saved in a separate Inbox display and could be opened and handled from the inbox at any time. This view can be provided to any stakeholder through Cityworks role assignments and security settings.

The flexibility of Cityworks data tables meant it was possible to create a report using Crystal Reports software that displayed the results of completed inspections requiring remedial work. Since this report was displaying live results, repairs could be completed concurrent to the inspection process.

Workflow Development

There were several workflows that required consideration in the overall process configuration. There was the main workflow affecting the inspector and the Carpentry Department and workflows that are driven by the inspection results for example, how would a "failed" inspection be handled by Risk Management or the Parks Department. Since the results of inspections will potentially be used by several departments, for example in this case GIS, Finance, Trades, Parks, and Risk Management it was necessary to conceptualize a high-level task and communications process.

The workflow developed for the Carpentry Department was meant to mirror but enhance the previous hard copy practice:

- Inspection kick-off meeting; Carpentry and Parks staff planning session.
- Crew leader prepares Inspection work order (cyclical, auto created monthly).
- Inspector confirms iPad (or other device) operational and properly viewing inspection plan in map view before leaving the works yard each day.

Parks Remedial Work to be Completed Based on Inspection Program

2024-05-21

ABERDEEN HILLS PARK		1245 HOWE RD	PLAY AREAS
INSPECTION	29363	2023-10-10 8:51:09AM	Remedial Work Needed
[Play Area (Inspect: Impact Surface, Borders, Debris, Broken Glass)]			
Borders are partly missing or buried.			
[Play Structure (Inspect: Entrapment Points, Sharp Edges, Plastic Components, Springs, d			
Replace cracked panel on play structure.			
BACHELOR NATURE PARK		1750 BACHELOR DR	PLAY AREAS
INSPECTION	29371	2023-10-23 12:24:23PM	Remedial Work Needed
[Trip Hazards (Roots, bushes, Sidewalks)]			
Repair wooden lid for irrigation box.			
BROCKLEHURST PARK		2470 FLEETWOOD AVE	PLAY AREAS
INSPECTION	29347	2023-10-12 11:24:12AM	Remedial Work Needed

Crystal Report Playground Remedial Work Required "To-do list"

To remove failed inspections from this view they must be acted on then closed by the appropriate stakeholder, for example, they can be prioritized by the Parks crew leader for action in the comments (i.e. cosmetic defect, no risk of

damage or injury. No further action required). Comments and status changes are fully audited by the software.

Closed inspection results will never be changed, they will exist as a snapshot of that asset at the time of the inspection. Corrective action will be captured by the results of subsequent inspections.

Lessons and Recommendations

Many insights have come to light from this process, some of them include:

- **Promote organizational empathy** – To avoid unnecessarily complex and difficult workflows first understand who will be needing the information and its purpose before beginning process configurations.
- **Collaboration** – All stakeholder needs are connected to your own success. What changes for one will cause change for another.
- **Understand your process** – Do not expect software to correct a process problem. Know your current state and determine what can be done to fix it now. Once a “to be” state is envisioned and implemented to the extent possible, employ software improvements and configurations to enable and refine the process.
- **Simple and useful solutions work best** – Sensible workflows produce better information from an end user. The data collected should be clear and quantifiable so it will make as much sense 20 years from now as it does today.

For whatever asset repository system is employed, have a tested and verified method of updating asset records before undertaking the time consuming, complex, and expensive process of creating an extensive asset inventory. Inventory records can get out of date very quickly on live assets and there is no easy solution when that happens.

Wrapping Up

Assuming asset condition based on age has been a contributing factor to inaccuracy in long term Asset Management planning. Physical inspections with verifiable condition scores will help define asset renewal, replacement, and upgrade strategies while informing level of service parameters for maintenance targets.

These inspections will facilitate a reduction in risk exposure to the City of Kamloops through live time departmental and risk management access to inspection results including photos and other documentation. Through this process a great deal of information will

become available to inform service level parameters and frame current asset maintenance and replacement program needs. These requirements can then be projected into the future in a meaningful way for the future decision makers.

Next steps

From the start, this process was conceptualized based on common, organizational departmental practices. As such, similar processes have been launched for our Arborist’s tree inspections, the Solid Waste multi-family bin inspections, and sports field inspections. Future considerations are to convert current sidewalk and electrical pole inspections among others to this process.

Our latest software updates provide enhanced mobile application tools which will reduce asset information data collection overhead. When configured, these Cityworks applications will assist end users perform their tasks more efficiently and contribute to the organization’s asset knowledge base.

Consolidation of verifiable asset condition scores into long term AM planning replacing age-based assumptions which will contribute to more accurate lifecycle planning with better useful life and estimated replacement cost information.

Conclusion

Implementing Asset Management processes under ISO 55000 guidelines requires organizations to “know” their assets physically and financially. Doing so is an “all in” effort drawing on several skillsets and related technological support.

Promoting organizational empathy increases the likelihood that changes will become part of the organization’s DNA. Empathy will hopefully help replace the outdated aphorism “fake it till you make it” with my more favored approach, “**learn it till you earn it**”.



Canada’s Tournament Capital

Critical thinking is a prerequisite for meaningful data collection!

Kim Stephens, M.Eng., P.Eng., Executive Director, Partnership for Water Sustainability in BC

The Oxford English Dictionary defines critical thinking as "the objective, systematic, and rational analysis and evaluation of factual evidence in order to form a judgement on a subject, issue, etc."



When Wally Wells invited me to contribute an opinion piece to this edition, he said the newsletter theme is data management. So, I asked, what is the issue that you are highlighting?

Local governments need data that is meaningful for infrastructure asset management, Wally answered, but quality and usefulness have emerged as issues of paramount concern. Unfortunately, he added, we have stopped talking about THE SERVICES THAT ASSETS PROVIDE because asset managers have become preoccupied with THE ASSETS THEMSELVES.

Tell me more, I said. Wally then proceeded to explain that so much data is being generated by asset managers and in so much detail, yet the \$64,000 question is whether the data can even be trusted by decision makers. And if it cannot, then the issue quickly becomes one of trust in staff. Without trust, the decision process breaks down.

As I listened to Wally, my mind flashed back to what I learned from an American management consultant named John Rogers. A generation ago, we adapted his 6-step process and incorporated it in **Stormwater Planning: A Guidebook for British Columbia**.

Simply put, John Rogers identified a problem with system planning when data collection is disconnected from a clearly defined strategic purpose.

Through case study experience, he observed a recurring pattern of asset managers jumping in to immediately collect what turned out to be unhelpful data and then wondering why the process blew up politically. When that happens, elected officials lose confidence in the judgement of their staff.

That is why in the Stormwater Guidebook we introduced the **Seven Step Process** for watershed planning. It is of universal process application and is relevant to any aspect of asset management. Because the spotlight shines brightly on **critical thinking**, we added Step 7 to provide a feedback loop. You must have the ability to make course corrections!

Before collecting data, make sure you ask the right questions. As shown on Figure 1, collecting data is Step 4. The first three steps are so much more important. And that goes to the heart of Wally’s important distinction between the service and the asset. Don’t jump directly to Step 4!

Be clear on why data is needed. What is the desired outcome? How will you use the information or data? Will it help you make better decisions? How much and what kind of data do you actually need? Does the cost meet the test of being affordable and effective? What are the trade-offs between risk, complexity, and cost?

When data collection is undertaken in the absence of critical thinking that addresses questions such as the foregoing, one runs the risk of “analysis paralysis” or “garbage in, garbage out”. And those situations are to be avoided because they are unlikely to end well.



#OurAssetsMatter: Posting by City of Mission

Asset Management Day, May 15, 2024

The City of Mission’s distinctive topography and evolving development necessitate tailored infrastructure solutions and their efficient implementation. Among these critical infrastructural components are our water pressure stations, engineering to uphold consistent and sufficient pressure across existing, new, and prospective developments.

In 2022, Mission constructed its latest water booster station, strategically positioned to cater to the new developments at the north end of Nelson Street. This facility, named the 'Tim Henry Water Booster Station,' pays homage to the late Mission employee Tim Henry, whose invaluable contributions shaped its design and realization.

The Tim Henry Water Booster Station elevates water pressure levels from approximately 80 to 130 psi, with contingency provisions for further escalation during emergencies. Presently servicing around 70 residences, it boasts surplus capacity to accommodate forthcoming development potential.

As you engage in daily activities such as turning on the faucet, washing your vehicle, or indulging in a refreshing shower, take a moment to acknowledge the ceaseless dedication of the City of Mission’s water pressure station, diligently operating round-the-clock to ensure uninterrupted water supply.



#OurAssetsMatter: Asset Management Day, May 15, 2024

Local government week was May 12–19. During that week Asset Management Day was Wednesday, May 15, 2024. Through social media we encouraged local government to ‘post’ their asset management activities.

A random draw was held at the end of the week for a **free registration for the AMBC conference in November**.

We extend our heartfelt thanks to everyone who participated in the **Show Us Your Assets contest** for Asset Management Day 2024! Your enthusiastic entries have played a crucial role in spreading awareness about the importance of asset management and why **#OurAssetsMatter**.

Congratulations to the **Peace River Regional District** for being the randomly selected winner of a free registration to the 2024 AMBC Conference. Your commitment to asset management excellence inspires us all! See you at the conference!

Peace River Regional District (PRRD) @prrdistrict · May 15
 We're showing off our assets for #AssetManagementDay!

We couldn't choose our favourite asset for #AMDay2024, so we're highlighting our portfolio because #OurAssetsMatter.

At the PRRD, 76 million dollars of assets work daily for our residents and communities! 🙌 @AssetMBC

a quick look at some of our **ASSETS**

<ul style="list-style-type: none"> Community Halls 07 Recreation Centres & Library 03 Regional Parks 05 Regional Landfills 03 Attended Transfer Stations 16 Unattended Transfer Stations 11 Wastewater Treatment Systems 03 Wastewater Collection Systems 07 Potable Water Stations & Systems 06 Fire Halls 02 First Response Vehicles 25 Emergency Repeater Towers 12 <p><small>* 22 Fleet Vehicles + Trailers</small></p>	<p>76 MILLION total asset book value <small>#AMDay2024 #OurAssetsMatter</small></p>
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Setting the Foundation for Asset Management

Gracelyn Shannon, MA,
Senior Asset Management Manager, City of Abbotsford

Asset management is a complex, arduous, exciting, long-term, involved process. As practitioners, we wholeheartedly embrace this journey because it empowers us to collaboratively make informed decisions about our infrastructure, ultimately benefiting the public we serve.



But where do we begin? Before data collection, Asset Management Plans, and software procurement, consider these crucial starting points:

1. Relationships and roles
2. Understanding current practices
3. Reviewing or developing policy

In this article, I'll explain what tools, documents, or processes I'm using to set the foundation for the asset management work to come at the City of Abbotsford.

Building Relationships and Clarifying Roles

When I started at Abbotsford, I focused on getting to know the people and the organization. This phase was about meeting people, understanding their roles, and gauging how ready we were to improve our asset management. My first priority was connecting with colleagues across different departments. I wanted to understand their understanding of asset management and see who was keen to work together to improve it. Allies are everywhere when we're willing to spend the time connecting.

Once I understood the organization's structure and who the key players were, I drafted an **Asset Management Governance and Accountability Framework** which spelled out who was responsible for what, from our Asset Management Steering Committee to our service-specific Working Groups:

- **Asset Management Steering Committee:** Guides the corporate asset management program (policy, strategy, frameworks, corporate assessments). Meets a few times a year. Most participants are at the Director level.

- **Asset Management Working Groups:** Focused on improving asset management practices (data quality, annual budgeting, maintenance planning) at the service level (water, sewer, drainage, facilities, solid waste, airport, police, etc.). Meets at various frequencies depending on what the group has chosen. Participants are managers, supervisors, and coordinators between 1 to 8 people.

I met with the Steering Committee first, introducing the foundational pieces of what asset management is, what their role will be in developing the program, and feedback on participants, terms of reference, and meeting frequency.

Next, each working group had a kick-off meeting where we reviewed the results of their asset management practices assessment survey, came up with an action item to commit to achieving this year, and discussed how often we should meet. This resulted in a maturity score, action item, participant list, and agreed upon meeting frequency for each service across the City.

At the end of the process of meeting colleagues, developing the governance framework, and meeting with the steering committee and working groups, I had a good network of allies and subject matter experts that would now be most of the key players for the next step in developing our asset management program.

Understanding Current Practices

A good strategy asks - Where are we? Where do we want to be? And how are we going to get there? There are tools already developed which help us understand where we are, including the FCM Readiness Scale, AMBC's AssetSMART2.0, and the AMBC Roadmap.

At the City, I translated the AMBC AssetSMART2.0 assessment tool into a Microsoft Forms and sent the link to anyone participating in a working group. I asked them to submit their answers independently from each other. An anonymous summary of the results was the starting point for the first working group meetings. It created rich discussions around the table and also lent itself well to coming up with action items for how we as a group will move forward in our asset management practice maturity this year.

I summarized the results of the assessments into a tool for discussions with senior leadership demonstrating "this is where we want to be, this is where we are, and this is where we're starting from". I am hopeful that over time, this initial assessment will act as a benchmark for progress of the City's asset management program over time.



Developing the Asset Management Policy

With a better understanding of our stakeholders and current practices, we wrote our Asset Management Policy. The Policy distilled the City’s asset management objectives into three categories:

1. Good Services
2. Good Decisions
3. Good Program

All policy statements feed into one of those three objectives. We want proactive maintenance because it helps our services being as reliable as possible. We want high quality risk data because that’s what helps us make good decisions. We are going to coordinate all this in the form of a quality, coordinated, continually improving corporate asset management program.

The policy went through quite the journey before reaching Council. It went through many iterations, reaching out for feedback from the steering committee and working group participants, legal review, and our senior leadership team.

The City’s Asset Management Policy was adopted on May 28th, 2024.

Conclusion

All asset management work is rooted in continuous improvements so the work on governance, assessments, and policy are far from over. At the same time, we have shifted our focus to data quality assessment and then we will be procuring and implementing software solution(s).

Meanwhile, our investments in relationships, clarity, understanding, and direction-setting will help us in the work to come. We’ve laid the foundation, and now it’s time to build upon it.

How to Integrate Natural Assets into AMPs: New Planning Guidance

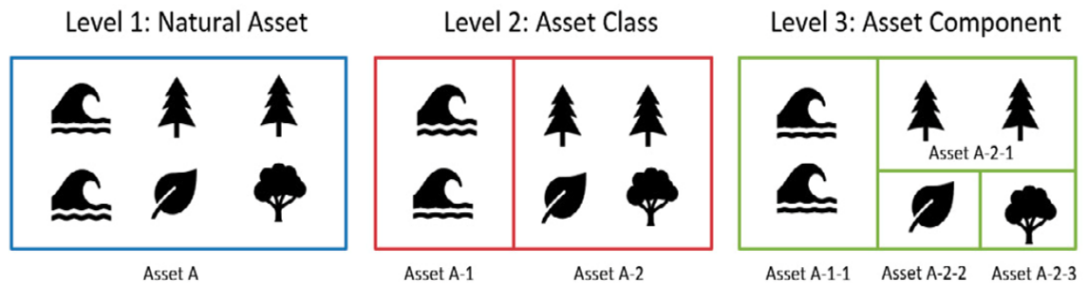
*Emily Sharma, Communications & Outreach Advisor,
Natural Assets Initiative*

As the AMBC community undoubtedly knows, asset management planning is a crucial part of delivering quality, reliable, services for the long term. But as climate change impacts and housing pressures become more pronounced, municipalities are increasingly challenged to meet infrastructure needs in innovative ways — now, it’s time to bring natural assets into the fold.

A new guide, [Nature is Infrastructure: How to Include Natural Assets in Asset Management Plans](#), aims to bridge the gap and standardize effective asset management plans which include *all* of the assets they rely on. Developed by NAI and expert collaborators, the comprehensive guide aligns natural asset management (NAM) with existing asset management frameworks and terms and outlines the unique characteristics of natural assets. Unlike built infrastructure, natural assets often have much longer lifespans and offer multiple benefits, such as flood control, water filtration, and recreational spaces.

Nature is Infrastructure is designed to be applicable to local governments and ecological landscapes across Canada, with additional considerations for navigating Ontario’s provincial regulations; Ontario is currently the only province to regulate asset management planning at the municipal level and to require consideration of both human-made and natural assets as part of this process.

The guide provides a roadmap for asset managers so they can tackle planning with natural assets without feeling as though they need to reinvent the wheel. It outlines approaches for estimating values, addressing risk, developing levels of service, lifecycle management strategies, and funding sources.



Pictured: Sample Approach for Aggregating Spatial Data and Assigning Unique IDs as part of developing a natural asset inventory

Grown from Best Practices

Many local governments in BC (and beyond) have already started to adopt natural asset management — whether by establishing commitments in official plans, inventorying natural assets, or implementing restoration or management initiatives. By valuing and managing natural assets such as wetlands, forests, and rivers, they are able to enhance service delivery, reduce costs, and build resilience.

As an emerging field of practice, natural asset management is progressed by innovative leaders whose projects test and cement NAM, such as AMBC's Asset Management for Sustainable Service Delivery Framework. But in order to bring NAM fully mainstream, there is an ongoing need to develop and refine the 'rules of the game' that are transferable from community to community; the new guide is one big step in providing a clear path forward, but it is worth celebrating that it's based in best the practices that were spearheaded by NAM innovators — such as the City of Courtenay, BC, who are progressing in NAM and solidified recognition of, and commitments to, key natural assets in its 2022 OCP.

From Isolation to Integration

A tricky aspect of natural asset management is the likelihood that not all of those assets will be under a single jurisdiction, demonstrating the need to have consistent language and approaches between neighbouring local governments and other entities. Collaborative management will be integral to achieving a fully formed NAM approach.

To underscore this and tie us back to Courtenay, the guide provides a case example from the Comox Valley Regional District (CVRD). Responsible for delivering water services to multiple communities, including the Town of Comox, the City of Courtenay, and the K'ómoks First Nation, CVRD relies on the health of the Comox Lake watershed. A big challenge for CVRD in providing water services is that it owns virtually none of the land in the watershed; it's largely privately owned, requires cooperation with forest companies, BC Parks, and other stakeholders and rightsholders. CVRD may need to tap into a whole suite of NAM activities to manage the costs and risks to water service delivery; to this end, CVRD chairs a watershed advisory group with all relevant parties to sustain head of the watershed.

As municipalities across British Columbia face similar challenges, integrating natural assets into asset management plans is essential for sustainable service delivery — and asset managers are at the helm.

The first edition of *Nature is Infrastructure: How to Include Natural Assets in Asset Management Plans* is available at <https://mnai.ca/nature-is-infrastructure-how-to-include-natural-assets-in-asset-management-plans/>.

Nature is Infrastructure: How to Integrate Natural Assets in Asset Management Plans (2024) was generously supported by the Greenbelt Foundation and the Municipal Finance Officers' Association of Ontario. Special thanks to local government staff advisors and Ontario Conservation Authorities for their contributions to this Guidebook.

CNAM News: Successful Conference and New Events

Bernadette O'Connor, CNAM Immediate Past Chair

Champions for Sustainable Communities – this was the theme for the 2024 CNAM conference hosted in Edmonton in May. It was an energizing event packed with opportunities for learning, sharing, connecting people, and finding solutions and support. There were 48 technical sessions, 5 keynote speakers, 3 workshops within the conference, plus optional pre-conference workshops and post-conference tour options. The event also included networking, business, and celebration opportunities with a welcome reception, awards gala and dinner, AGM, industry vendor booths, and an in-person “Knowledge Pod” session where people could come and discuss their issues and find solutions, suggestions, and connect with people who could support them.

The Edmonton scene was also alive with the first game of the Oilers vs Canucks series also happening and this theme was skillfully blended into several events including game screens at the awards dinner.

Coming Up

Look out for the **CNAM newsletter** coming out soon with CNAM news and events and reporting back on some of the key conference highlights, discussions, and outcomes. Also, save the date for **CNAM Virtual Summit** (October 9 & 10 | 12 – 4 pm EDT).



This is a national event for public infrastructure asset managers from coast to coast to coast. Details are

provided in the CNAM newsletter and on the CNAM website and registration is now open. It is not your “business as usual” type of event. It is an extraordinary opportunity (at low cost compared to in-person events) to engage with leaders within your region and across the country, to explore issues, hear and provide industry insights, learn new things, be inspired, find support, and be part of the country-wide community of asset management leaders – “Shaping the Future”.

Other News

CNAM’s MAMP 4 Climate Knowledge Products and resources are now available in both French and English on CNAM’s website cnam.ca.

Asset Management BC Training Programs and Schedule

AMBC has training programs available as follows:

Working with Levels of Service

Led by expert Colwyn Sunderland of Kerr Wood Leidal, AMBC is offering a practical webinar/workshop series that examines what Levels of Service (LOS) are, why they’re important, and how to define and work with them for your community. Using a customizable, spreadsheet-based LOS tool (developed by leading asset management experts and customized for use in BC), you’ll get to work with your own data and information.

The course delivery is highly interactive and collaborative. Participants are invited to use and share real-world examples in working through defining levels of service, identifying gaps, and developing strategies to address them in breakout groups and whole-group discussions.

Here are upcoming opportunities:

- **September 27, In-person training Workshop**
Grand Pacific Hotel, Victoria BC
September 19, optional 1-hour pre-workshop webinar
- **November 5, In-person pre-conference workshop**
Radisson Vancouver Airport Hotel, Richmond BC
October 30, optional 1-hour pre-workshop webinar
- **November to December, 6-session online workshop**
Sessions 1 and 6 – 1 hour each
Session 2 through 5 – 2 hours each

Long-term Financial Planning

Led by Join Christopher Paine, Principal of FIT Local Government Consulting, AMBC is offering workshops on Long Term Financial Planning for asset management.

This workshop will help equip your community with the knowledge to address sustainable service delivery through financial sustainability. You will learn how to value your assets, forecast your spending, and improve financial sustainability.

The workshops provide learning and experience of how to develop and implement long-term financial plans based on objectives established within the Guide. Preparing a long-term financial plan in a manner consistent with the Guide will accomplish the following:

Highlight unsustainable funding levels that may result in intergenerational inequitable access to capital services or intergenerational inequitable funding levels. Demonstrate the life-cycle costing benefits to long-term financial planning, and construct “course-correction” options to achieving sustainable funding levels.

Recommended for: Municipal, Regional District and First Nation community staff. You will get the most out of this workshop if a minimum of two people from different departments and disciplines attend together – ideally finance and public works/engineering. Councillors and Area Directors interested in rolling up their sleeves are also encouraged to attend.

Here are upcoming opportunities:

- **September to October, Online workshop**
3 sessions, 3 hours each
- **November 5, In-person pre-conference workshop**
Radisson Vancouver Airport Hotel, Richmond BC
- **November, Online workshop**
3 sessions, 3 hours each

Other in-person sessions for a group of a specific local government can be arranged on demand. Contact Asset Management BC to arrange these.

Training subsidies of up to 50% per registration are available to eligible participants. For more information, please email us at info@assetmanagementbc.ca.

Registration and course details on CivicInfo at civicinfo.bc.ca/events.



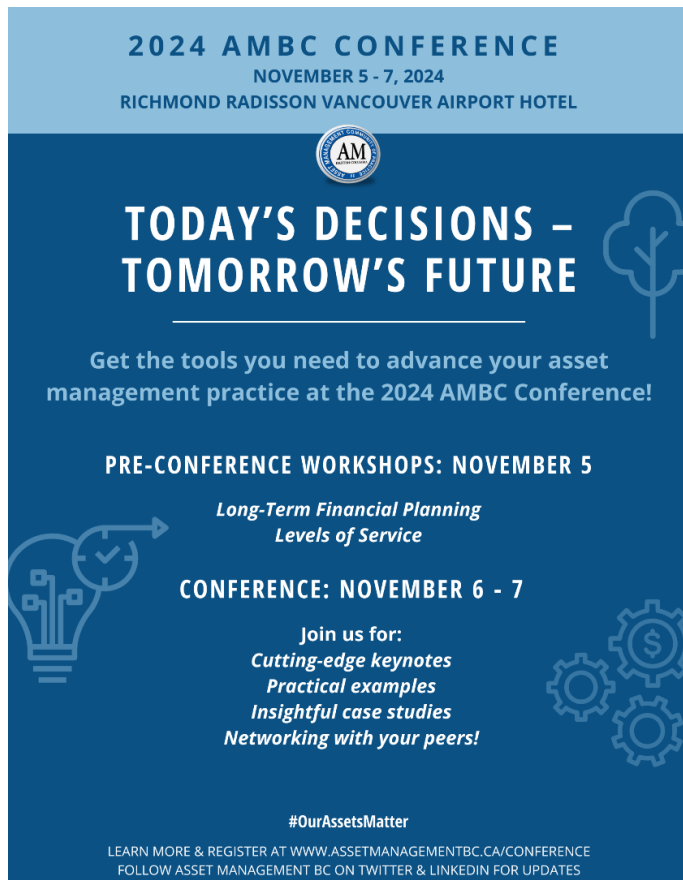
MARK YOUR CALENDAR!

Asset Management BC 2024 Annual Conference

Another great conference is in the works. **The Radisson Vancouver Airport Hotel** will be the location of the conference. The annual **Asset Management BC Conference** is AMBC's largest on-site signature event of the year, comprised of presentations, plenaries, social functions and a mini trade show of exhibitors and, oh yes, a great networking opportunity!

Today's Decisions, Tomorrow's Future - The decisions we make today significantly shape our future. Yet, it's not always easy. Asset management often requires making difficult decisions now, to ensure sustainable service delivery in the future. These decisions are key to ensuring our current community service needs, and how those services are delivered in a socially, economically, and environmentally responsible manner without compromising the ability of future generations to meet their own needs.

Advance your asset management practice with the knowledge, information, and data necessary to transform these difficult decisions into sustainable service delivery.



2024 AMBC CONFERENCE
NOVEMBER 5 - 7, 2024
RICHMOND RADISSON VANCOUVER AIRPORT HOTEL

TODAY'S DECISIONS – TOMORROW'S FUTURE

Get the tools you need to advance your asset management practice at the 2024 AMBC Conference!

PRE-CONFERENCE WORKSHOPS: NOVEMBER 5

*Long-Term Financial Planning
Levels of Service*

CONFERENCE: NOVEMBER 6 - 7

Join us for:
*Cutting-edge keynotes
Practical examples
Insightful case studies
Networking with your peers!*

#OurAssetsMatter

LEARN MORE & REGISTER AT WWW.ASSETMANAGEMENTBC.CA/CONFERENCE
FOLLOW ASSET MANAGEMENT BC ON TWITTER & LINKEDIN FOR UPDATES

Don't miss this opportunity to network and share ideas with asset management champions, sustainability experts, CAO's, Local Government decision makers, front line operators and our First Nations delegates. Join the conversation about your progress towards Sustainable Service Delivery. Go to assetmanagementbc.ca for conference details. Check back regularly for updated conference information.

Full Registration is \$649. There will be no single day registration rate. Young professionals 30 and under \$449. Student registration is \$199. GST extra on all. Go to civicinfo.bc.ca under events for registration for both the conference and the pre-conference workshops.

Book your accommodation at the Radisson Vancouver Airport Hotel in Richmond. Rates are \$209 sgl/dbl occupancy plus applicable taxes. **Ask for the special rate for the Asset Management BC conference.** The reservations block at this special rate expires Saturday, October 5th, 2024. Call central reservations at 1-800-333-3333 or the hotel directly at (236) 305-5339, or e-mail reservations@radissonvancouver.com.

Tips and Tactics: Ideas on Priority Ranking – How to define importance

*Bernadette O'Connor, PMP, IAM Dip, CAMA, NZCE(Civil),
Senior Principal, Asset Management, WSP*



Whether you are trying to filter and sort capital projects for funding, operational tasks to do with limited resources, or service and climate risks to mitigate, you have to apply some prioritizing logic. And this is where, for some, the wheels start falling off the bus, and people get stuck in the process of defining and deciding what parameters to use.

Clarity is often discovered when you step back from an issue and take a broader look at it. It is true I think in the case of prioritization. Frequently, we can get drawn into deciding priorities based primarily on technical issues. This is understandable, given that technical issues are often well known and understood by the people doing the initial prioritizing and non-technical issues – not so much.

However, non-technical issues that can and should be considered in any prioritizing include the impact on the **service delivery experience** for customers and the **corporate strategy** and focus of the organization. The corporate strategy should incorporate/represent local community needs (current and future) and community culture. Unfortunately, not all organizations have a clear

corporate strategy and focus, or their strategy does not well represent community needs and culture but is perhaps project or task-based with a short-term focus.

In such cases, it may be necessary for prioritization purposes, to develop appropriate strategic criteria that could later be incorporated into a corporate strategy.

Some typical strategic criteria include:

- Responsible Governance
- Healthy Communities
- Environmental Stewardship
- Natural Disaster Mitigation / Preparedness
- Financial Sustainability
- Equity and Inclusion

Some typical service delivery criteria include:

- Safety
- Reliability
- Capacity
- Infrastructure/Asset sustainability
- Service Sustainability
- Emergency Response / Preparedness

The next challenge to resolve is working out the best way to represent (and report on) the range of criteria you want to include in your priority ranking. Here are two suggestions that I have used successfully in a wide variety of circumstances and organizations.

Group Criteria

After you choose the criteria for determining priority, group them into different focus areas such as strategic, service, technical or other grouping.

Ideally if you can group criteria into two primary groups, it will be easier to graphically present results and easier for decision-makers. The most commonly used groupings are “Strategic” and “Service”, with any important technical criteria incorporated into the service grouping and any community focussed criteria included in the strategic grouping.

Use Weightings

Weightings can be used to represent an appropriate difference between the importance of one criterion compared to another. This is an option and although some organizations do not use it initially – but rather they include all criteria as equally important – most organizations will eventually apply a criteria weighting.

When you are determining what weightings to use, consider the focus of the criteria grouping. For example, in

the group of “Service” criteria, consider how much impact each criterion has on the overall service delivery experience. This comparison provides a good guide for determining relative importance within the group.

Weightings can also be used to include a difference in

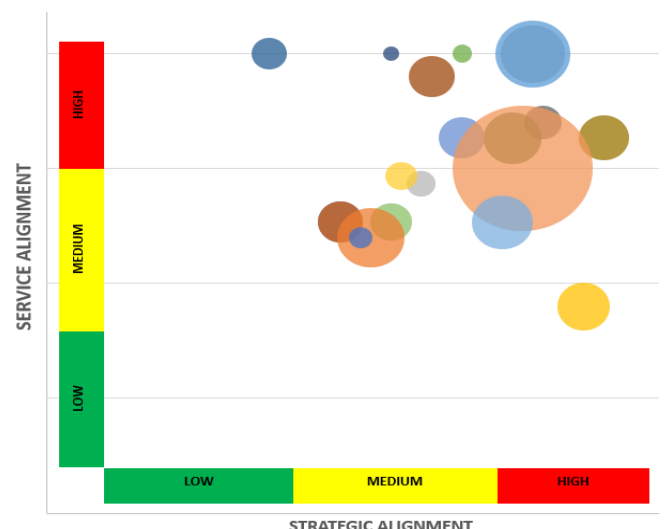
Score	Safety 35%	Infrastructure sustainability 30%	Reliability 20%	Capacity 15%	RATING 100%
0	Has no impact on safety goals	Has no impact on infrastructure sustainability goals	Has no impact on reliability goals	Has no impact on capacity goals	None
1	Does not contribute to safety goals although there may be some minor improved safety effect or feeling of security from project.	Does not contribute to lifecycle cost minimization goals although there may be some minor lifecycle management or budget planning benefit from project	Does not contribute to reliability goals although there may be some minor improved reliability effect from project	Does not contribute to capacity goals although there may be some minor improved capacity effect from project	Low
2	Project will maintain or achieve a moderate impact on reducing the probability of accidents and/or improving some element of safety	Project will moderately support infrastructure sustainability, or reduce lifecycle costs, or increase expected asset life, or reduce organizational liability and risk.	Project will maintain or achieve a moderate reduction in the number or severity of preventable events causing loss of service	Project will maintain current capacity and reduce the frequency or degree of impact of overloading/under-capacity events	Medium
3	Project will significantly reduce probability of fatal accident and/or significantly reduce safety risks; or significantly support maintaining safety.	Project will significantly support infrastructure sustainability, or reduce lifecycle costs, or increase asset lifespan, or reduce organizational liability and risk.	Project will significantly improve reliability of service delivery, or reduce number of loss of service events, and/or reduce adverse impacts of service outages.	Project will contribute significantly to maintaining capacity and reduction/mitigation of any adverse impacts from overloading/under-capacity events.	High

importance between strategic criteria and service criteria, although this is less common. Generally, most organizations report the results for strategic priority and service priority as being equally important.

Reporting Results

If you have limited your criteria groupings to two primary groups, you can easily report results in a comparative graph. The diagram below provides one example/option representing how much a proposed project, program, task, or initiative is aligned to the strategic focus of the organization as well as the service obligations. The size of each bubble represents the value of the project/task.

This graph would typically be reported with a tabular list of the analysis results including project/task name, numerical score for service and for strategic alignment, and key project/task details to assist decision-makers.



Upcoming Events



Asset Management BC

November 5, 2024

Pre-conference Workshops

- **Level of Service training**

- **How To Write an LTFP for Asset Management**

Radisson Vancouver Airport Hotel

Richmond BC

Registration open: civicinfo.bc.ca

Asset Management BC

November 6-7, 2024

Annual Asset Management Conference

Theme: Today's Decisions – Tomorrows Future

Radisson Vancouver Airport Hotel

Richmond BC

assetmanagementbc.ca

Registration open: civicinfo.bc.ca

Union of British Columbia Municipalities (UBCM)

September 16-20, 2024

Annual Conference and Trade Show

Vancouver Convention Centre East

Fairmont Hotel, Pan Pacific Hotel

Vancouver, BC

ubcm.ca

Public Works Association of BC (PWABC)

October 7 - 9, 2024

Joint Annual Conference and Trade Show

with BC Municipal Safety Association

Conference Centre

Penticton BC

pwabc.ca

Canadian Network of Asset Managers (CNAM)

October 9 – 10 (12 – 4pm EDT), 2024

Virtual Summit – Shaping the Future

See Website for Registration

cnam.ca

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