



## Asset Management Newsletter

TENTH EDITION – WINTER 2014 ISSUE



### Feature Article: Why Asset Management?

*By Wally Wells, Asset Management BC*

Asset Management is the title given to the process of defining our needs, strategies and priorities for our infrastructure, renewal, upgrade, replacement or decommissioning. For local governments, the process is limited to those assets owned by that local government. For over a hundred years we have managed our communities with virtually no recorded inventory of what we actually own or what we are collectively responsible for. This, of course, varied considerably by community and certainly our linear infrastructure, roads, water, and sewer, was better understood than buildings and other stand-alone facilities. Starting in 2009, our accounting profession required local governments to report the value of all capital assets (greater than \$5,000) on their annual balance sheet (PSAB 3150). Depreciation on these assets also had to be reported. While the accounting standard is based on historic costs and has some limitations; it was a start.

Our current local government budget systems are short-term reflecting, at best 2 years out, with the requirement for a 5 year budget. Year 3 through 5 is often completed by adding a few percent points to the last budget without much analysis of what the actual requirements might be. Budgets reflected capital improvements and additions of new assets but a separate budget was prepared respecting for 'operations' reflecting a mix of maintenance, operations, grants and other on-going activities. From the later it was difficult, if not impossible,

to track actual costs of owning and operating any specific asset.

From implementation of PSAB 3150 came the inventory of assets. Several communities had a few surprises in learning what they actually own. As some level of condition assessment was included in the PSAB exercise, interest was sparked in gaining more complete and accurate information about those assets. For the past several years, at least our larger communities have called attention to aging, deteriorating, and failing infrastructure. Periodic news items of major watermain breaks or bridge collapses were not uncommon. Infrastructure Canada, with joint Provincial programs, started funding infrastructure but initially a substantial portion of that funding was for new infrastructure.

*(Feature Article continued on page 2)*

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So where does that take us respecting asset management? Communities started to recognize that, due to aging infrastructure, funding for infrastructure renewal and replacement was not adequate when compared to the growing need. Any infrastructure funding directed to new infrastructure created an even larger funding gap. Today, municipal Councils and Regional District Boards are paying more attention to the long-term financial needs but we have a way to go. With current funding programs, senior governments have started to insist on more information on our ageing infrastructure to justify funding requests and are starting to make this a criterion of grant applications.

Many tools were developed, a number of them proprietary, filling the need of information and data management and analysis. Communities started down the road of defining long-term needs. In doing so there was a clear recognition that *'the way we have always done it'* just does not work anymore. Few tools are available that integrate financial and technical results in a manner that fits long term community budget needs. Most tools relate to either the technical side or the financial side fail to merge the information sufficient to define needs in relation to a funding strategy. Our challenge is to bring all this complex information together in a manner that our elected officials and the community members can clearly understand the issues.

So what do we need to do? We must redefine our business processes in our communities to include long-term financial plans for asset replacement and renewal where appropriate. The assets management database must include life cycle costing for assets. With the asset database created as a result of PSAB 3150, financial information is based on historic value. Tools are needed to assist in translation of this information to replacement value required for long term planning. It is important that all disciplines work together to understand the database, the financial information in that database and how it is or can be specifically used. Fundamental cultural change is needed in organizations to adopt and promote new business processes that integrate the information for effective decision making. Asset management requires a corporate commitment and involves all of our traditional local government departments.

New terms such as level of service and life cycle costing are being introduced. Each discipline must ensure there is a common understanding of how all terms are used and develop uniform practices. Are you ready to carry out asset management? **Asset Management BC** has published the tool AssetSmart on our website

([www.assetmanagementbc.ca](http://www.assetmanagementbc.ca)) which will help you make those decisions.

Our communities need to ensure an asset management policy is in place. A guide for such a policy is also available from **Asset Management BC**. Councils and Boards can and should adopt such a policy, or similar, that clearly spells out the directions the community will head and provides direction to staff accordingly.

Here are four areas to consider for change:

- **Senior Management:** The Chief Administrative Officer is a very important position in the link. Asset Management will succeed if it is managed as a corporate function. Success requires integration of the skills and disciplines usually found in several departments. The CAO is the major communication link to Councils and Boards.
- **Public Works and Operations (including community facilities):** Tracking of maintenance costs separate from operations costs should become the norm. Maintain records specific to an asset and asset class. Recognize that everyday tasks alter the asset inventory. Ensure all staff understand their role in asset management.
- **Finance:** Change the way we account for assets. Track maintenance costs separate from operations. Develop long-term financial plans. Government Financial Officer Association of BC has an extensive training program for long-term financial plans. Assist non-finance personnel to understand the meaning of the financial information and the value of using it as it relates to their jobs.
- **Planning:** Recognize that both short-term and long-term planning decisions can significantly affect the asset inventory. For long range planning, include assessment of infrastructure needs and affordability through a life cycle cost assessment.

**Asset Management BC** exists to provide you with knowledge transfer and tools for developing and implementing your programs. Is asset management a 'plan'? No. Asset management is a 'process' that will never end as long as we have community assets. The "[Roadmap for Asset Management](#)" was prepared using four BC communities as examples and provides a valuable guide for moving forward with your processes. This is an excellent reference document for communities to use as a starting point or a check on where you are in the process. The guide is available on the website as is other reference resources and cases studies.

## Case Study

### Developing a Long-Term Civic Facilities Renewal Program in Prince George

Prepared by Frank Blues ASCT, Asset Manager  
Supported by Donald Parent, P Eng, MBA, and Joshua Kelly, EIT

#### Background:

**Asset Management** (AM) activity in Prince George had an early focus on the renewal/replacement of its linear infrastructure and took a “top-down” approach to identifying its long-term funding requirements which have helped identify the capital infrastructure gap for those assets. The AM function moved from Development & Operations to Corporate Services in 2011, and broadened its perspective to consider all asset intensive departments. An **AM Policy** was adopted by Council in December 2012 and a **Strategic Work Plan** was approved in February 2013. A high priority corporate objective was the identification of the long term funding requirements (Annual Average Re-investment Requirements) for facilities.

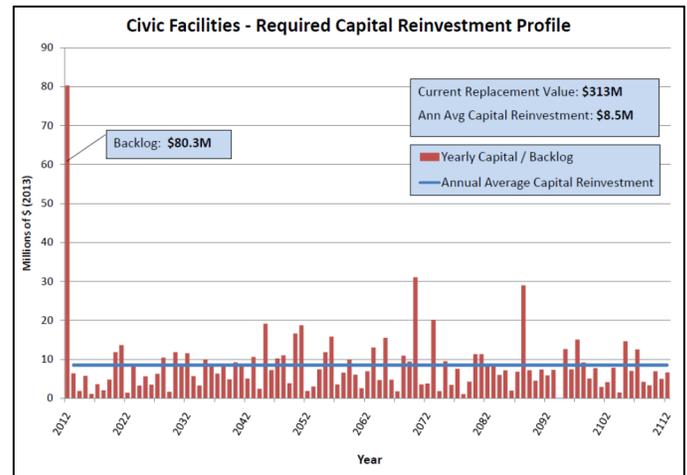
#### The Project:

Facilities are generally considered complex assets due to their complex structure and the many interactions and interdependencies between the various facility components. For example, if a mechanical system component is to be replaced, is the same equipment available or is this equipment now obsolete; will the electrical system supporting the mechanical components need to be replaced or changed? Having said this, if we are simply looking at a high level planning activity to consider the renewal requirements, perhaps we don't need to consider this level of detail which is more appropriately considered once a specific project has been identified. At a high level how do we begin to understand what the long term funding requirements are and when those funds may be required?

A **Facility Hierarchy** incorporating industry standards was developed to describe the various Facility Elements and to align how the replacement cost of the various Elements might be estimated. It is important to note that Prince George staff resources tend to be generalists in their area of practice and specialist expertise is hired on an as-required basis. Our Facilities staff were very supportive in this project by giving their time and support when assistance was requested.

Having identified the method of cost estimation we then started to collect the required inventory and support information. An **MS Excel Model** was developed with a

worksheet for each facility complete with its own component list, install date, dates of component renewal (if any), and the Estimated Service Life (ESL) of each component. Summary data from each worksheet was linked to an overall summary worksheet which then in turn rolled up the details for all of the City's Civic Facilities.



Annual Average Capital Reinvestment

Not surprisingly, the project had its challenges including, the limited existing cost data, the gathering of facility drawings and other records, the development of “local” unit rates for costing and the costs for specialty equipment.

#### Project Outcomes:

The project had a number of beneficial outcomes with the main benefits including; 1) the development of a unified facility hierarchy that can be applied across all city facilities (including Utilities), 2) the identification of the long-term Annual Average Re-investment Requirements, 3) the development of costing methods for consistent application and updating across all facilities, 4) the identification of each (and summary) Facility's Condition Index (FCI) and a “backlog” listing of facility components that may require a detailed condition inspection to confirm their funding requirements and associated scope of work, 5) availability of the facility hierarchy for use by a Computerized Maintenance Management System (CMMS) to track and report operating and maintenance costs, 6) the development of a comprehensive list of facility components with associated ESL's, and 7) the availability of the replacement values of facilities that can inform insurance requirements.

#### Going Forward:

The project has developed some in-house capacity in long-term facility capital planning with tools that can be

consistently and broadly applied to other areas – specifically to Utility Facilities. Current PSAB reporting and depreciation is at the facility level. The development of component ESL's and an understanding of the cost breakdown of components allows a review of the current depreciation method and values. The facility hierarchy can be implemented into a CMMS to improve our understanding of the associated maintenance and operating costs. More complex facility modeling can be undertaken at a future date with an improved understanding of capital, maintenance and operating costs and component relationships. The collaborative efforts of the AM and Facilities Divisions helps establish improved integration across Departments/Divisions.

## Cross Canada Checkup

### NEWS from CNAM

#### 2014 CNAM Conference Update

#### We're "Moving Plans to Action"



The Canadian Network of Asset Managers (CNAM) invites you to join us in Toronto, Ontario May 20 - 23, 2014 for the 8th Annual Conference and Tradeshow. Like many asset managers across Canada, CNAM is

"Moving Plans to Action" with an exciting program focused on case studies and actionable tools for AM. The CNAM conference offers an exceptional professional development and networking opportunity for municipal and professional leaders driving asset management practices in their organization. CNAM 2014 is THE professional development opportunity in Canada this year and is an integral part of AM initiatives on local, regional, national and international levels.

Infrastructure is at the core of Canadian quality of life and Asset Management is emerging as the primary tool to assist in the sustainable management of infrastructure. Join industry leaders and your colleagues from across the country this May in Toronto to engage in plans and policy and gain the skill and confidence to translate them into action in your community.

#### New to the CNAM Conference in 2014:

##### *New Professionals Group*

CNAM is excited to announce the creation of a "New Professionals Group" which will host their inaugural event at this year's conference. The objective of the New

Professionals Group is to provide a comfortable forum for new professionals (young and old!) to actively contribute to the growth of CNAM and the Asset Management profession. The group will also play an active role in supporting and introducing more students and career-shifting professionals to the field of Asset Management.



##### *Asset Management in Small Municipalities*

CNAM 2014 will include a track session dedicated to showcasing the advancements being made by small municipalities across Canada. This session will highlight Asset Management initiatives undertaken by several small municipalities, including Asset Management Plan development.

##### *Utility Asset Management*

CNAM 2014 has also expanded to include a track session showcasing Utility Asset Management. This session will highlight the advancements in Asset Management by several utilities, including Hydro, Gas and Water/Wastewater.



##### *Poster Session*

CNAM 2014 will be holding its inaugural student research symposium to showcase asset management research projects in Canadian universities and provide a platform for communication and collaboration among young researchers and practitioners. Selected posters will be displayed in the Trade Show area on May 21st and 22nd for attendees to view and discuss with authors. The projects will be judged and winners recognized during the conference proceedings.

Come to Toronto this May – we're going to have fun and learn a lot. Register and get more details at [www.cnam.ca](http://www.cnam.ca) or by calling our office at 1.800.267.9180.

## NEWS from Alberta

Infrastructure Asset Management Alberta (IAMA) keeps moving forward spreading the knowledge and best practices between all forms of local governments, the province and utilities companies in Alberta. During 2013 IAMA established a solid Working Group that coordinates and helps with efforts to share best practices with our participants. They are able to integrate all the activities and processes in order to provide Alberta residents with the required level of service through the cost effective life cycle management of assets for present and future residents.

The Working Group is formed by participants from the following local government and associations: City of Lethbridge, City of Red Deer, Municipal Affairs Alberta, Alberta Urban Municipalities Association (AUMA), City of Airdrie, City of St Albert, City of Calgary and Aquatera. During 2013, the IAMA and the TCA group joined their effort and hosted their meetings on the same date and venue. This allows our members to discuss the same topics in the workshops and move towards the integration between the Finance and Engineering departments.

One of the key strengths of IAMA is the bottom-up approach the group has adopted. Since the formation of the group in 2011 by volunteers from the City of Lethbridge, the City of Red Deer and the City of St Albert, IAMA has been advocating for the advancement of asset management for local governments. The group has engaged stakeholders from all levels of local government and provided an environment for them to meet and set the foundation for advancing asset management best practices in Alberta.

In June 2013, IAMA offered the first NAMS (National Asset Management System) training program in Alberta with two successful workshops given for the local governments in Lethbridge and Red Deer. These workshops were also attended by Leduc County, St Paul County, RM Wood Buffalo, Airdrie and Calgary. Feedback from all attendees was very positive and worth the investment of time and cost.

For 2014 the group has already set the dates for their meetings, March 20<sup>th</sup>, June 11<sup>th</sup> and October 8<sup>th</sup> 2014. During these meetings specific topics will be discussed regarding Water/Wastewater, Transportation, Solid Waste, etc. sharing best practices between the participants. Also for 2014 a new website will be launched with its intent to have features such as a Forum to exchange best practices and ask for advice, knowledge

center, workshop materials and links to other AM groups in Canada and other countries. IAMA will again offer the NAMS training program in 2014 and we hope to keep growing as a local Asset Management group. For more details contact Joel Sanchez at 403-320-3037 or email [joel.sanchez@lethbridge.ca](mailto:joel.sanchez@lethbridge.ca).

## NEWS from Saskatchewan

Asset Management continues to grow and mature in Saskatchewan. During December 2013 two additional NAMS training courses were attended by 13 communities. The majority of these communities were from the Mid Sask Municipal Alliance (MSMA) region within the province. The MSMA communities are working on a number of regional planning initiatives and propose to use asset management planning to support long term regional decision making. With these two recent training sessions 37 Saskatchewan communities have now attended the NAMS training over the past 3 years.

There continues to be a high level of enthusiasm for progressing asset management within Saskatchewan. The continued development of asset management will be showcased at the second annual Saskatchewan *Municipal Infrastructure Conference*. The conference is taking place from April 15-16<sup>th</sup> in Kindersley Saskatchewan. The theme is "Plan. Prepare. Execute.". The summit will focus on strategic understanding and implementation of infrastructure planning.

Finally, the provincial government continues to support asset management initiatives. A long term infrastructure report, steered by provincial and municipal representatives, has recently been completed. This research continues to illustrate, using tangible examples, the value of asset management plans. This summary illustrates that asset management plans are key to the sustainable management of infrastructure and that municipalities who plan effectively will be successful in the long term. This report is scheduled to be made public in coming months.

## NEWS from Ontario

### *Ontario Coalition for Sustainable Infrastructure (OCSI)*

*By Darla Campbell, P.Eng., Executive Director*

Ontario continues to be very active in the infrastructure portfolio. In addition to the work being done by the legislature, Toronto will be hosting CNAM 2014

conference May 20<sup>th</sup> to 23<sup>rd</sup> and the APWA Congress August 17 to 20, 2014.

### New Municipal Infrastructure Fund

In August 2013, the Ministry of Infrastructure and the Ministry of Rural Affairs co-hosted consultations across the province for the new \$100 million critical infrastructure fund for small, rural and northern communities. They were looking for feedback in two key areas: 1) how to distribute the funds targeted for October 2013; and 2) how to distribute the funding in the future.

Funding applications were announced in October 2013 for the Small, Rural and Northern Municipal Infrastructure Fund. The program will help address critical infrastructure needs for these communities, including roads, bridges, water and wastewater projects, and will support local jobs.

The new fund has three components: \$4 million to help municipalities with populations under 5,000 complete their asset management plans; \$25 million to fund 20 previously submitted critical project proposals; and \$71 million for capital projects.

Over the next three years, the Ontario government has committed to invest more than \$35 billion in infrastructure, which will support more than 100,000 jobs on average each year.

**Bill 141 – Infrastructure for Jobs and Prosperity Act** was introduced on December 5th for second reading. If passed, the proposed act would require the province to regularly table a long-term infrastructure plan in the legislature covering a period of at least 10 years. The proposed act also includes guiding principles to help planning align with demographic and economic trends to maximize the value of provincial infrastructure investments and promote innovation, competitiveness, and job creation and training. This act will cover provincially owned infrastructure as well as provincially funded infrastructure, such as supporting municipal water sustainability plans under the Water Opportunities Act, 2010.

**Outreach to Future Leaders** - On November 7<sup>th</sup> in London, OCSI organized a career panel as part of the program at the Canadian Water Network (CWN) workshop for young professionals on the topic “The

Value of Water”. Panelists representing three of OCSI’s six member associations included: Tom Copeland (MEA, City of London engineering), Dan Huggins (OWWA, City of London operator) and Debbie Korolnek (OPWA, County of Simcoe General Manager, Engineering, Planning and Environment). The panel was moderated by Darla Campbell (OCSI, Executive Director).

## NEWS from NWT

### Updates from North of 60<sup>o</sup>

*By Sudhir Jha, Manager,  
Community Infrastructure & Planning, MACA*

NWT Municipal and Community Affairs (MACA) continues to organize and deliver workshops on community asset management. The most recent was the North Slave region Asset Management workshop in Yellowknife on September 19, 2013.

Three communities Behchoko, Dettah and Wekweeti participated to learn Asset Management techniques from awareness to excellence. Participants were Senior Administrative Officers, Finance officer, Works Manager and town Foreman and MACA staff. Sid Smith of Associated Engineering, a participant of Asset Management BC, was the presenter.

Our NWT communities are making progress in Asset Management, area in North of 60<sup>o</sup>. MACA staff last year participated in the NAMS training course which has been carried out in British Columbia, Alberta, Saskatchewan and now NWT.

Community Government of WhaTi and Community Government of Gameti are getting regular support and ongoing training. Gameti were one of the original communities to appoint a staff member focused on Asset Management: Melinda McGee. Now she is more comfortable with the Asset Management system.



*Sid Smith - third from left, Sudhir Jha - third from the right*

# Vancouver Island 2065: Moving Towards Sustainable Service Delivery

By Kim Stephens<sup>1</sup>, Eric Bonham<sup>2</sup>,  
George Hanson<sup>3</sup> and Derek Richmond<sup>4</sup>

A new partnership initiative – **Vancouver Island 2065** - was announced at the 2013 'State of the Island' Economic Summit, held in Nanaimo this past October. Because affordability ultimately drives infrastructure standards of practice, **Sustainable Service Delivery** is a foundation piece for this initiative.

Sustainable Service Delivery integrates all the principles of Asset Management. It understands the value of land-use planning; and it understands the impacts that land-use planning has on service delivery. It also integrates the 'design with nature' philosophy.

*Vancouver Island 2065* calls for a 'top-down bottom-up' strategy that forms collaborative and effective relationships among key stakeholders Island-wide to achieve a settlement in balance with economy and ecology.

## A Novel Partnership

*Vancouver Island 2065* is a partnership initiative of Convening for Action Vancouver Island (CAVI) and the Vancouver Island Economic Alliance (VIEA). Joining this collaboration is Royal Roads University (RRU). A key component of the *Vancouver Island 2065* vision is a secure water supply for commerce, industry and human settlement, essential for food and energy security and a healthy economy.

VIEA has a mandate to foster collaboration for a vital and sustainable Island economy while CAVI is a regional initiative delivered by the Partnership for Water Sustainability in BC under the umbrella of the Water Sustainability Action Plan for BC. Commencing in 2010, VIEA and CAVI have aligned efforts.

This novel partnership of VIEA, CAVI and RRU draws together the business sector, water resource specialists and an innovative university, to frame through a network of partners, a long-term vision for Vancouver Island based upon sustainability principles.

## A Pragmatic Approach

Adopting a long-term vision calls for creative partnerships, multi-disciplinary involvement and collaboration that attracts a diverse group of players to work towards a common vision based upon the underlying principle of an economy and ecology sustained in balance. Each agency or organization fulfills a vital role in addressing this goal, including the province, regional and local governments, business, developers, academia, First Nations, community stewardship groups, agriculture and the resource industry.

This partnership has the potential of being a model for other regions in the province and beyond. A grassroots initiative developed through working partnerships and collaboration, it is nevertheless pragmatic in its approach and sustains connection to the decision makers at the local, regional and provincial levels of government. The operating principles include establishing universal values that all can agree upon, while recognizing and respecting the unique opportunities and challenges within each community. The goal is to develop creative partnerships while fashioning and then adopting a common vision.

## A Solid Foundation

Two initiatives have laid the foundation for the partnership between CAVI and VIEA and the creation of the *Vancouver Island 2065* vision.

CAVI has been collaborating since 2006 with local governments and regional districts on the east coast of Vancouver Island under the umbrella of the *Water Sustainability Action Plan for British Columbia*, culminating in the Georgia Basin Inter-Regional Educational Initiative (IREI). The focus of the IREI is on a watershed-based approach to community planning and development. The IREI has been endorsed by the Boards of four regional districts, including the Capital Regional District, Cowichan Valley Regional District, Regional District of Nanaimo and Comox Valley Regional District.

Complementing the IREI initiative is VIEA's LINK project, a Collaborative Model of Regional Economic Development for Vancouver Island. This comprehensive *State of the Island* report, conducted in 2009-2010 throughout Vancouver Island, was inclusive in its mandate, collaborative in its approach and as a result, identified three common objectives: support for a

diversified local economy, improved relationships with First Nations and long-term sustainability.

### View Watersheds through an Asset Management Lens

Asset management usually commences after something is built. The challenge is to think about what asset management entails BEFORE the asset is built. Cost-avoidance is a driver for this 'new business as usual'. This paradigm-shift starts with land use and watershed-based planning, to determine what services are affordable, both now and over time.

Developers, governments and agencies understand that a collaborative balancing of economy, settlement and ecology provides an opportunity for the best of outcomes for all parties. Proof of success for this approach can be found in the Comox Valley, where through 'developer dialogue', the approach of planning for development on a watershed basis and getting things right at the front end has emerged as essential for investing in the right infrastructure for pragmatic asset management.

Vancouver Island 2065, building upon the IREI and LINK initiatives, seeks to establish an Island-wide forum to provide opportunity for sharing of ideas and stories of successful projects that integrate watershed management and asset management principles. It is hoped that this collaborative approach will set a new standard for land use planning on Vancouver Island—one that recognizes the importance of settlement in balance with the economy and ecology.

<sup>1</sup> Executive Director, Partnership for Water Sustainability in BC

<sup>2</sup> CAVI-Convening for Action on Vancouver Island

<sup>3</sup> President, Vancouver Island Economic Alliance

<sup>4</sup> Chair, CAVI-Convening for Action on Vancouver Island

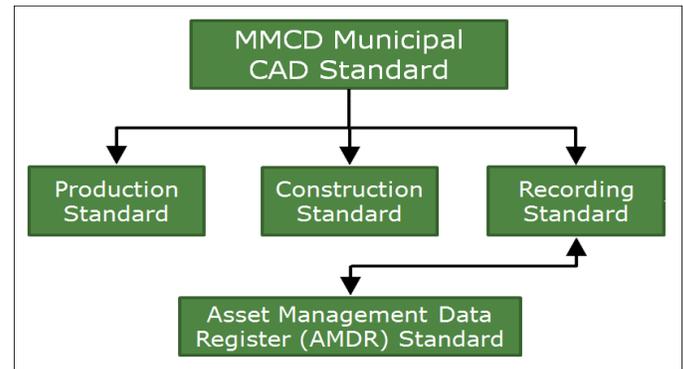
## Consistency of Approach

*Developed by MMCD*

### Overview

Today's BIM (Building Information Modeling) infrastructure design and construction technologies are dependent on consistent data standards for all infrastructure project phases. Municipal Master Construction Documents Association (MMCD) introduced the *Municipal CAD Standard* in 2009 and since then, has designed a framework for the development of a suite of infrastructure data standards

for the design, engineering drawing production, construction, record data collection/reduction and asset management phases of infrastructure projects. These standards will assist your asset management program due to their emphasis on the collection and reduction of post construction record data recording of data in your asset register.



### MMCD Municipal CAD Standard

Since its introduction, the MMCD Municipal CAD Standard has undergone 3 major updates, and includes standardized elements required for infrastructure design using AutoCAD and AutoCAD Civil 3D, which are the primary design tools used by most BC Consultants and Local Governments. The Municipal CAD Standard is significant because it not only makes it easy to design in a standardized environment, but also serves as the basis for the development of the drawing production, construction and data recording standards. This means that your designs, created using the Municipal CAD Standard, makes it easy to produce construction drawings, generate construction staking data, and deliver consistent record data required for post construction submissions and ongoing lifecycle management.

### Drawing Production Standard

The Drawing Production Standard is a subset of the Municipal CAD Standard and introduces consistency to the visual appearance of infrastructure drawings. Standardized components include text styles, symbols, line types and drawing borders. The drawing production standard greatly simplifies design review and construction processes.

### Construction Standard

The Construction Standard is also a subset of the Municipal CAD Standard and relates to the level of detail

for design models created in AutoCAD Civil 3D. In addition to drawing production, BIM (Building Information Modeling) processes also result in the calculation of quantities and generation of construction staking data. The Construction relates to the level of detail to which these design models are created, and their suitability for construction.

### Record Data Standard

The Record Data Standard is also a subset of the Municipal CAD Standard, and introduces consistency for submitted construction data. The record data standard is used to develop a *record of change*, which is represented in an AutoCAD Civil 3D drawing. Infrastructure that is new, removed, abandoned and even set aside for future use is represented in the record data submission. The submitted drawing file is spatially coordinated and contains both physical properties and lifecycle management attributes such as install date, cost and expected life.

### Asset Management Data Register Standard

The Asset Management Data Register (AMDR) Standard is used by Local Governments and offers standards for infrastructure data storage. The AMDR standard was developed in response to the introduction to the PSAB3150 accounting standard and represents a data schema that offers guidelines for infrastructure features, naming conventions, physical properties and lifecycle management attributes. Asset Management and GIS technology vendors have incorporated the MMCD AMDR schema into their software, thereby offering a localized flavour to their respective technologies. In addition to the schema, the AMDR also delivered a MS Access utility – the Infrastructure Data Manager – for use by the many smaller Local Governments and First Nation Communities lacking access to sophisticated GIS and Asset Management Systems.

### Summary

The MMCD suite of infrastructure data standards are easy to implement. The strength is in the cohesive relationship of the individual standards products. Many organizations have already started with the MMCD Municipal CAD Standard and are already reaping the benefits. The cohesiveness is in the fact that the drawing production, construction and recording data standards are all subsets of the Municipal CAD Standard. Finally,

the AMDR standard dictates the information that is presented in the record data standard. The infrastructure standards are in various stages of development and are continually being adopted by BC Local Governments and Consulting Firms.

## Infrastructure Report Card – The next version

*By Darwin Durnie P. Eng., Stantec Engineers  
President of the Canadian Public Works Association*



Plans are underway for Canada's next Report Card for Infrastructure. All of the Report Card founders -- CPWA, the Canadian Construction Association, the Federation of Canadian Municipalities and the Canadian Society of Civil Engineering have returned to

the table with plans on updating data on all the assets reported in the original Report Card (2012). A future Report will also cover transit. The four founding organizations have solicited proposals for project managers and are reviewing their options. CPWA is pleased to have Steve Wyton, P.Eng., MBA, Manager, Corporate Project & Asset Management, Infrastructure & Information Services, City of Calgary, AB as CPWA's representative on the Steering Committee on this important project.

**Plan to attend the "Best Show in Public Works". The 2014 APWA Congress comes to Canada. - Toronto Convention Centre, August 2014 ([www.apwa.net](http://www.apwa.net))**

## AM BC & LGMA Host Workshop



On October 10, at the River Rock Hotel in Metro Vancouver, over 110 people gathered to hear a series of presentations on integrated asset management. The 2013 federal budget included the statement:

*“To maximize the value and ensure the sustainability of investments in our public infrastructure, the Government encourages all jurisdictions to undertake life-cycle cost assessments and develop robust capital asset management plans. These tools allow governments to take into account the costs associated with building the asset, as well as maintenance and rehabilitation costs over the projects full life cycle. By incorporating such analysis and planning in infrastructure investment decisions, governments maximize the value of these investments for taxpayers by minimizing the costs of maintaining assets at an acceptable standard and ensuring sustainability over time. This approach contributes to improved benefits for our communities.”*

An excellent presentation by Claude Blanchette, Director General, Program Operations, Infrastructure Canada explained the renewed gas tax agenda and Build Canada beyond 2014. The important point to note is the need for communities to undertake life-cycle cost assessment. This was followed by Glen Brown, Executive Director, Local Government Infrastructure and Finance Division Ministry of Community, Sport and Cultural Development. The key message from Glen was elaborating on the Provincial position previously stated:

*“The importance of the role of asset management has been steadily increasing across all levels of government. Local governments face pressures from their citizens to maintain high levels of service while minimizing the cost of delivery to keep taxes and service fees low. The information derived from asset management practices provides a sound basis for effective decision making on community infrastructure. A clear understanding of your infrastructure needs and appropriate level of service is required before advancing a solution or requesting new revenues.*

*Further, with local governments interested in finding alternative revenue sources, in many cases from opportunities that exist through senior governments, it will be increasingly important for local governments to fully understand their respective infrastructure and service needs – basically, it becomes critical to be able to articulate what is needed, when it is needed, and how much is needed \$!!*

*Finally, future funding programs will further incorporate asset management into the process.*

*Communities with their asset management practices and infrastructure priorities clearly established will find greater support in future programs as they will be able to effectively identify the problem and resources and steps required to resolve the issue.”*



Christina Benty, Mayor of  
Town of Golden

Presentations by Mayors, CAO's finance and technical personnel, including case studies, reinforced the value of carrying out an asset management strategy and of the need for integrating the work of all financial, technical, planning and executive disciplines within our local governments for addressing the necessary political outcome.

Most presentations from the workshop are on the **Asset Management BC** website at: [www.assetmanagementbc.ca](http://www.assetmanagementbc.ca)

## ISO 55000 published as of January 15, 2014

In 2002-2004 the UK **Institute of Asset Management**, in conjunction with **British Standards Institution**, developed **PAS 55**. (See [www.theiam.org](http://www.theiam.org)). The International Standards Organisation (**ISO**) has accepted PAS 55 as the basis for development of the new ISO 55000 series of international standards.

The ISO 55000 series comprises three standards:

- **ISO 55000** provides an overview of the subject of asset management and the standard terms and definitions to be used.
- **ISO 55001** is the requirements specification for an integrated, effective management system for assets.
- **ISO 55002** provides guidance for the implementation of such a system.

The development of these standards is ongoing, through ISO Committee PC251, with 31 countries participating including Canada. The standards are now finalised and approved, and have been published January 15, 2014. (See [www.iso.org](http://www.iso.org))

## Upcoming Events

### Government Financial Officers Association of BC

**May 26-30, 2014**

Annual Conference  
Conference Centre - Nanaimo BC  
[www.gfoabc.ca](http://www.gfoabc.ca)

### Planning Institute of BC

**May 14 - 16, 2014**

BC Land Summit  
Sheraton Wall Centre - Vancouver  
[www.bclandsummit.com](http://www.bclandsummit.com)

### BC Water & Waste Association

**May 3 - 6, 2014**

42nd Annual Conference & Trade Show  
Whistler BC

**June 4-7, 2014**

7th Canadian Biosolids and Residuals Conference  
Sheraton Wall Centre - Vancouver  
[www.bcwwa.org](http://www.bcwwa.org)

### Canadian Network of Asset Managers

**May 21 - 23, 2014**

7<sup>th</sup> Annual Workshop  
Toronto Convention Centre  
[www.cnam.ca](http://www.cnam.ca)

### Public Works Association of BC

**Sept 15 - 17, 2014**

82nd Annual Technical Conference  
Kamloops, BC  
[www.pwabc.ca](http://www.pwabc.ca)

**August 17-20, 2014**

International APWA /CPWA Congress  
Toronto Convention Centre  
[www.apwa.net/Congress](http://www.apwa.net/Congress)

### Local Government Management Association of BC

**June 10-12 2014**

Annual Conference and General Meeting  
The Westin Bayshore - Vancouver  
[www.lgma.ca](http://www.lgma.ca)

### Association of Consulting Engineering Companies - BC

**April 12, 2014**

2014 Awards for Engineering Excellence Gala  
Vancouver Convention Centre  
[www.acec-bc.ca](http://www.acec-bc.ca)

## Information Sheets Now Available

**Asset Management BC** has initiated a series of information sheets. More will follow as new subject areas are explored. The 5 sheets currently available can be downloaded at [www.assetmanagementbc.ca](http://www.assetmanagementbc.ca) and are:

- What is Asset Management?
- Asset Condition Types
- Asset Management NAMS Training
- The Sustainable Foundation
- Who is **Asset Management BC**?

What help are you looking for? Give us your needs and we will research it and produce an information sheet for all.

## Tips and Tactics: Finding the right AM pathway for you

*By Bernadette O'Connor*

Implementing Asset Management (AM) is a process. It includes a continuous improvement cycle of review, performance measurement and action. Every Asset Management framework consists of interrelated business practices and tools. Knowing where to start can be a challenge. Some of the common 'ideals' that advisors will advocate as the starting point are:

- Corporate commitment and policy
- Level of Service definition
- Financial models
- Asset data, condition data, data management

It is useful to read success stories and case studies of other organizations. The **Asset Management BC** website [www.assetmanagementbc.ca](http://www.assetmanagementbc.ca) and this newsletter (and past newsletters) include such stories and case studies. These provide helpful insights and inspiration, but you should keep in mind the context of the organization that they relate to. There is no "one size fits all" when it comes to designing an asset management pathway that will be the best fit and the most successful for your organization.

All of the 'ideal' starting points have their merits and may or may not be the best option for you.

Without a doubt, corporate commitment will greatly improve your chance of successfully implementing asset management practice. However if you do not already have a strong AM advocate at corporate level, a different starting

point may be more effective. It can be easier to obtain corporate level buy-in if you first implement one or two key asset management practices. This enables you to demonstrate meaningful results when you take the message of asset management to the corporate or political levels. This has been successful for some organizations and it may be an approach that will suit your organization. You know your corporate and political environment and whether the benefits of asset management and the critical need to implement it is something that can be communicated with or without real examples.

Level of service definition is another commonly advocated 'ideal' starting point. However if your organization lacks the asset data and cost data to understand the true lifecycle cost of the current service; or be able to analyze the consequences (cost, quality, quantity, change in risk exposure) for different level of service options, then this may not be the best starting point. It is an asset management practice that you must get to as soon as you can, to find the affordable balance between service and cost, but it may not be the most effective place to start.

The key to **finding the right asset management pathway** is to think carefully about what approach will work best for your organization. Plan a strategy that best fits your issues, corporate culture, community, assets, and most importantly where you are starting from (your asset management gaps and your organizational strengths and weaknesses).

The key to **maintaining commitment to your asset management pathway** is to ensure you design your program for success and communicate successes achieved.

Monitoring and reporting progress may keep the benefits of asset management sufficiently highlighted to secure ongoing commitment. However if the task being reported is a longer term strategic task that will take some time to show results, progress reporting may not maintain corporate commitment. Your program should therefore include some high benefit, quick result tasks as well as longer term strategic tasks.

In summary:

1. Identify your starting point, asset management gaps and actions
2. Consider what approach(s) will work best for you

3. Plan a strategy that best fits your organization and your starting point
4. Measure a baseline for AM practices within your organization (AM Maturity score), periodically re-measure and report progress
5. Measure a baseline for each significant asset management project, demonstrate continued improvement in tangible things that matter to your organization

## Asset Management: Questions and Answers

*Responses provided by Editorial Panel*

**Note to Readers:** You are invited to email questions or comments to Asset Management BC or to the editor – see final page - and you can note in your email whether you wish your comment or question to be published.

*Raising questions and making comment are strongly encouraged as this newsletter is provided for the greater good of all types of Local Governments managing infrastructure and for the advancement of Asset Management within the Province.*

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