



Monday, May 10, 2021

Time	Function	Speakers
12:00 PM - 12:10 PM	Conference Welcome	Matt Dawe
12:15 PM - 12:45 PM	Breakout Session: Building a Robust Asset Management Strategy in Grey County <i>Session description coming soon!</i>	Israr Ahmad, Amanda Brooks
	Breakout Session: How Your Approach to Climate Change fits within the AM System <i>Session description coming soon!</i>	Akeel Ali, Aman Singh
	Breakout Session: Treating Stormwater Management as an Asset The City of Mississauga was a forerunner in Canada when they implemented a stormwater charge to provide dedicated funding for their stormwater programs. This revenue allows the City to more effectively plan and manage their stormwater assets and has helped to adopt a more systematic asset management approach to address aging infrastructure and mitigate the risk of flood events. The City recently completed their asset management plan for their stormwater portfolio, and despite robust reserve funds supported by the stormwater charge, there remains a long-term funding gap in their forecast investment needs. This presentation will provide an overview of the City's approach, and lessons learned from their asset management journey.	Raphaelle Cardyn, Thomas Nightingale
12:55 PM - 1:25 PM	Breakout Session: Incorporating Agencies, Boards, and Commissions into the City of London's Corporate Asset Management Program City of London developed its Corporate Asset Management (CAM) Plan in 2019 which included all directly owned assets without its owned Agencies, Boards, and Commissions (ABCs).	Ahmed Eweda, Khaled Shahata, Nathan de Witt

The program times are displayed in Eastern Standard Time. Program subject to change



	<p>O.Reg. 588/17 requires municipalities across Ontario to develop an asset management plan for all its directly owned municipal infrastructure assets by 2023. The scope involves all assets included on the municipalities' consolidated financial statements. The City explored several ways to expand the scope of the CAM Plan to include the ABCs in its next comprehensive CAM Plan update in 2023. The focus was to initially understand the ABCs level of Asset Management (AM) maturity in terms of their organization AM practices as well as the people AM knowledge. CAM team developed an Asset Management Maturity Assessment (AMMA) tool, and a complete methodology that includes workshops, analysis, reporting, and conclusions. The presentation highlights the AMMA methodology, work plan, tool, final outcomes, challenges, and lessons learned.</p>	
	<p>Breakout Session: Refocusing Underground Utility Asset Management</p> <p>This session will demonstrate how the City of Selkirk has refocused asset management practices in the City's underground utilities service areas to make significant improvements in the Capital Asset Management Program. This presentation will demonstrate how the city has migrated from a predictive method of determining underground utility network conditions to a visual inspection method that allows conditions to be reflective of independent assets. Additionally, this presentation will introduce methodologies and tools that the city uses to assign conditions to these assets, as well as the evaluation policy, procedure and schedule that has been developed to ensure condition is updated for each asset in an acceptable timeframe.</p>	<p>Raven Sharma, Megan Jakilazek</p>
	<p>Breakout Session: Developing a Strategic Service Delivery Model to Support Long Term Financial Sustainability</p> <p>The Town of Ajax Infrastructure and Asset Management (AM) Section (IAMS) – Operations and Environmental Services</p>	<p>Rick Chalmers, Aman Singh, Roop Lutchman</p>

The program times are displayed in Eastern Standard Time. Program subject to change



**2021 CNAM Virtual Conference
Conference Program**

	<p>Department supports AM planning for its Facility, Fire, Fleet, Forestry, Recreational, IT, Library, Stormwater and Transportation assets. The IAMS is undertaking a multiyear strategic service delivery initiative to support the development of a sustainable long term financial plan. Key elements of the initiative include: Developing a framework to understand current and future service delivery requirements, together with risk and cost of service Public / stakeholder engagements to understand future service delivery needs An implementation roadmap that will addresses components of the following AM elements: AM Strategy Setting AM Objectives Costing and Accounting Maintenance and Operational Planning AM Plans Asset Monitoring Risk Management People & Organization – Governance Data Technology.</p>	
1:35 PM - 1:50 PM	Coffee Break	
1:50 PM- 2:50 PM	Keynote Speaker	Brian Burke
3:00 PM- 4:00 PM	Virtual Networking	

The program times are displayed in Eastern Standard Time. Program subject to change



Tuesday, May 11, 2021

Time	Function	Speakers
10:30 AM - 12:00 PM	AGM	
12:00 PM - 1:00 PM	Sponsor / Vendor Showcase	
1:00 PM - 1:30 PM	<p>Breakout Session: Using ISO 55000 to Guide Asset Management Implementation</p> <p>Asset management is a complex process that benefits from applying a logical framework. Working with the Government of Yukon, Highways and Public Works, WSP employed the ISO 55000 to guide the implementation of their asset management change program. To date they have implemented over 25 targeted asset management projects, each one furthering their alignment to ISO 55000. In this presentation we discuss the journey over the last four years including how the standard was used, and the lessons learned from using it and the benefits that the Yukon Government has realized by following the ISO standard.</p>	Simon Bush, Dave Comchi
	<p>Breakout Session: Valuing Green Infrastructure</p> <p>As municipalities in Canada become more advanced in their asset management practices, many are realizing that the services they provide are supported by non-traditional infrastructure, including forests, street trees and other green assets. Green infrastructure provides a variety of secondary benefits including storm water retention, cooling, improving air quality and carbon capture. And unlike most assets, they appreciate, not depreciate, for most of their service life. Placing a value on green infrastructure can be tricky, and municipalities have adopted a variety of creative and innovative methods to develop valuation techniques to support financial and state of the infrastructure reporting. This presentation will explore alternative approaches for urban forest, street tree and other green infrastructure valuation, and leading practices in Canada. We will highlight examples from municipalities like the City of Edmonton and York Region and discuss their chosen approach for their communities.</p>	Martin Gordon, Karen Robichaud

The program times are displayed in Eastern Standard Time. Program subject to change



	Breakout Session: TBD	
1:40 PM - 2:10 PM	<p>Breakout Session: Peel's Enterprise Asset Management Optimization: Resources, Processes and Technology</p> <p>The Region of Peel manages over \$30 billion of infrastructure assets to continually provide a range of high quality and affordable municipal services for approximately 1.4 million citizens and 35,000 businesses across Caledon, Brampton, and Mississauga. The Region has been advancing its asset management practices since 2008, however has recently embarked on several key initiatives to advance the corporation's overall asset management capabilities. One key initiative is defining the future for asset management by creating a set of future-state business process maps for all services to adequately support the configuration of an Enterprise Asset Management system and integrated business environment. This presentation will provide insights into the challenges and opportunities in taking a holistic approach to the implementation of Enterprise Asset Management. While selecting the right software is extremely important, this presentation will highlight how to establish the business processes, data, and resources to lay a solid foundation for success.</p>	Sam Sidawi, Daryush Esmaili, Terry Martins
	<p>Breakout Session: Digitizing your Asset Management Practices</p> <p>The effective lifecycle management of municipal assets requires continuous maintenance and ongoing tracking. This can be an onerous task when staff are equipped with the proper tools. The pandemic has also made the requirement for remote operations management essential. This panel session will highlight the benefits of digitizing your asset and maintenance data and showcase how two municipalities have been able to use software tools with mobile capabilities to work remotely and manage data in the field. PSD will present alongside staff from the Township of Springwater and the City of Windsor to illustrate how digitizing your asset management practices can lead to better overall management and more accurate asset information.</p>	Christie Wiggers

The program times are displayed in Eastern Standard Time. Program subject to change



	<p>Breakout Session: Stratégie de Gestion des Actifs : s'adapter à la pandémie</p> <p><i>Session description coming soon!</i></p>	Marie-Christine Ayoub
2:20 PM - 2:35 PM	Coffee Break	
2:35 PM - 3:05 PM	<p>Breakout Session: Interactive Virtual Consultation: We did it - Case Study</p> <p>Trying to engage the public in meaningful consultation is often challenging. Numbers attending a public meeting (even before the COVID situation) were often low and not a good representation of the majority opinion. Another consultation issue is the ability to share project information between multi-discipline teams which can be difficult to do well. This presentation gives a real-life case study for external consultation and another for information sharing on a complex project. Both case studies used the same interactive virtual environment but adapted it for the specific needs of the two very different projects. The virtual platform for the consultation project reached people who were curious enough to engage online would not typically have attended a public meeting about the project. For the other case study, the interactive virtual platform made information sharing easy, quick, and fun to do. Both case studies show new options and significant benefits for consultation.</p>	Bernadette O'Connor, Jean-Frederick Duquette, Michele Laflamme
	<p>Breakout Session: City of Richmond Hill Asset Management Technical Strategies & EAM Decision Support Tool</p> <p>This project is the latest evolution of the City of Richmond Hill's Asset Management journey. Following our policy, strategy and governance project the City has now completed the Level of Service, Lifecycle and Risk Technical strategies that are the foundation of the new Enterprise Asset Management Decision support system. The EAM currently focuses on core assets as defined by O.Reg. 588/17, as well as facilities. The EAM system was built in-house and is web based. It allows staff access to asset information including the outputs of the LOS, lifecycle and risk</p>	James Jorgensen, Andrew Nichols, Thomas Uda

The program times are displayed in Eastern Standard Time. Program subject to change



	<p>management strategies. The EAM system provides a snapshot view of the City’s assets and uses the risk-based outputs from the strategies to provide a decision support tool to determine optimal investment plans for core assets and facilities. It will support the difficult decisions of investment prioritization and allow scenario planning to predict future impacts of investment decisions on service levels.</p>	
	<p>Breakout Session: TBD</p>	
3:15 PM - 4:15 PM	<p>CNAM’s Capacity Building Efforts - Past, Present and Future</p> <p>Over the past several years, CNAM has been working with FCM and the Government of Canada to develop resources to build asset management capacity across the industry. This includes AM awareness building, training, and competency management programs. Come to this session to hear how CNAM has been working hard to help YOU! CNAM’s “New to AM” program including the AM101 Booklet and more.</p> <ul style="list-style-type: none"> i. CNAM’s AM Competency Framework to help identify and build the knowledge, skills and behaviors behind being a great AM’er. ii. Initial Findings from CNAM’s Capacity Needs Survey iii. Gather YOUR input on what else can help you to thrive in your AM roles and careers! iv. Plus more! 	Ian Gerritsen, Joey Thibault, Iain Cranston
4:15 PM - 5:15 PM	Virtual Networking & Knowledge Pods	



Wednesday, May 12, 2021

Time	Function	Speakers
11:00 AM - 11:10 AM	Conference Update / Recap	Tonya Knopp
11:15 AM - 11:45 AM	<p>Breakout Session: Building The Strategic Asset Management Plan (SAMP) For Current & Future Needs</p> <p>The Water and Wastewater Division of the Region of Peel has been pursuing many AM best in class practices over the past decade. However, it had not carried a formal AM maturity assessment based on relevant standards/guidelines. This project discusses the approach taken by the Division to develop a formal Strategic AM Plan (SAMP). The approach followed the ISO Standard, IIMM and IAM Guidelines for best-in-class AM practices. The SAMP initiative followed a three-step process:</p> <ul style="list-style-type: none"> • Step 1 – Current Situation Analysis (desk audit of available information, stakeholder interviews and Software Walkthroughs) • Step 2 – Future State Development (Opportunity gaps and improvement initiatives were aligned to four focus areas: Line of Sight, Monitoring, Management System Review and AM Enablers) • Step 3 – Implementation Strategy This presentation will provide insights and learnings from the above activities and how the project successfully built on existing AM foundation elements and set the stage for future AM development. 	Roop Lutchman, Aman Singh, Imran Motala
	<p>Breakout Session: Advancing Municipal Natural Asset Management through Standardized Evaluation</p> <p>Some Canadian municipalities are beginning to incorporate ecosystems and the services they provide into their asset management planning and service delivery frameworks, an approach known as municipal natural asset management (MNAM). To conduct MNAM, municipalities restore, conserve, inventory, and track ecosystems under their jurisdiction. As more municipalities</p>	Lucas Mollame

The program times are displayed in Eastern Standard Time. Program subject to change



	<p>start natural asset pilot projects, evidence of the efficacy of MNAM is required to enable the upscaling and mainstreaming of this approach. Here we present results from a standardized monitoring and evaluation of MNAM projects to show its potential for contributing to municipal service delivery. This work has resulted in an evidence database, including for beneficial ecosystem service outcomes of MNAM and how pilot communities are reaching awareness, capacity and implementation outcomes as measured by key indicators. Finally, we highlight the economic co-benefits of municipal investments in ecosystem restoration and conservation, which can help communities build back better in a post-COVID-19 world.</p>	
	<p>Breakout Session: The Nova Scotia Asset Management Program: Re-Aligning our Path-Forward</p> <p>The purpose of this presentation is to provide an overview of how the Nova Scotia Asset Management Program has continued to evolve/re-align to better meet the needs of our municipal clients. The presentation will highlight asset management partnerships/collaborations (both formal and informal) that have supported our ongoing program development and creation of standardized tools/resources within Nova Scotia. An overview of program re-fresh initiatives conducted in association with the Nova Scotia Asset Management Working Group (i.e. comprised of municipal public works, CAOs, finance, elected officials, Nova Scotia Federation of Municipalities and NS Department of Municipal Affairs members) that have assisted to re-align our program direction will also be provided. This discussion will focus on the continued evolution of our technical support model for municipal clients, our experience initiating mentoring networks within the province, as well as our associated lessons learned etc.</p>	<p>Jennifer Duncan</p>
<p>11:55 AM - 12:55 PM</p>	<p>Sponsor / Vendor Showcase</p>	

The program times are displayed in Eastern Standard Time. Program subject to change



<p>12:55 PM - 1:25 PM</p>	<p>Breakout Session: Asset Management: Beginning, Refocusing and Growing</p> <p>Shifting priorities got you down? Still reeling from 2020? Lack of Data? Does your AMP need a refresh? Join our interactive session and help get your organization refocused to navigate the road ahead through asset management planning. Whether you are beginning your asset management journey or you are continuing to grow we can help begin, refocus and grow through AM Planning/ Training? This session is brought to you by NAMS Canada. We will illustrate how organizations who have just started out in asset management can progress efficiently and create defined levels of service, risk management plans and link asset management plans to long term financial plans. Finally, we will describe how organizations have used asset management practices as a communication tool for decision makers to determine a sustainable level of service and accept appropriate amounts of risk for their organization.</p>	<p>Troy Sykes, Lee Anne Harder</p>
	<p>Breakout Session: Climate Change Adaptation Integrated with Asset Management: Peel and Halton's Approach</p> <p><i>Session description coming soon!</i></p>	<p>Imran Motala, John Duong, Terry Martins</p>
	<p>Breakout Session: Remote Video Condition Inspections</p> <p>This presentation will be a case study of completing joint on-site condition inspections using a remote video for a First Nation community. The presentation will describe the methodology used, challenges faced and overcome, and benefits.</p>	<p>Miles Dean, Neil Forrest</p>
<p>1:35 PM - 2:05 PM</p>	<p>Breakout Session: Service-Oriented Integrated Facility Portfolio Asset Management at the City of Calgary</p>	<p>Ryan Meier, Shela Luprypa, Seb Cox</p>

The program times are displayed in Eastern Standard Time. Program subject to change



	<p>The City of Calgary’s Corporate Facility Planning and Development Framework bridges asset portfolio management and project program & portfolio management (P3M) for the City’s vertical infrastructure. Our team leverages asset management, facility management, architecture, P3M, urban planning and other disciplines. We discuss our journey and challenges and opportunities ahead.</p> <p>Topics include</p> <ol style="list-style-type: none"> 1) modeling facility supply and demand with a service-centric geo-database. 2) expanding facility assessment beyond condition tracking to include performance and risk indicators. 3) portfolio prioritization and benefit-risk-cost analysis of execution options. <p>Our aim is to stimulate thought within this strategic facility asset management context, leveraging multiple bodies of knowledge and discipline perspectives.</p>	
	<p>Breakout Session: Moving Towards an Effective Organization-Wide Physical Asset Management System</p> <p><i>Session description coming soon!</i></p>	<p>Dharmen Dhaliah</p>
	<p>Breakout Session: Waabnoong Bemjiwang Association of First Nations – Asset Management System</p> <p>This presentation will describe how WBAFN is supporting 6 First Nation member Communities, reform to Asset Management. A PPT presentation will provide high level descriptions of the work WBAFN has accomplished to date.</p> <p>Originally engaged as a pilot project, WBAFN Communities recognize many of the benefits of Asset Management and are</p>	<p>Randy Roy</p>



	moving forward to continue implementing and practicing Asset Management.	
2:05 PM - 2:20 PM	Coffee Break	
2:20 PM - 2:50 PM	<p>Breakout Session: Integration of Climate Change and Asset Management for Town of Halton Hills Recreation Facilities</p> <p>The session will discuss a pilot project completed in 2020 that saw the integration of climate change into asset management for levels of service. FCM's Framework for Integrating Climate Change into Asset Management was applied to the Town's existing Recreation Facilities levels of service framework. Key documents that assisted the climate analysis were the Town's Climate Change Adaptation Plan and the Facilities Vulnerability Assessment. The application of the framework brought about significant improvements to the Town's level of service framework for recreation facilities and considered the impact that climate change has on the chosen metrics. Strategies to address these impacts through a mixture of mitigation and adaptation were identified and combined into a roadmap broken out into short, medium, and long-term actions that will inform lifecycle activities and financial planning for these assets</p>	Christine Smith
	<p>Breakout Session: Asset Deterioration Modeling - A Calgary Story</p> <p><i>Session description coming soon!</i></p>	Henry Fang, Arnold Yuan, Kai Li and Chris Yang
	<p>Breakout Session: TBD</p>	
3:00 PM - 4:00 PM	<p>From Inventory to Climate Adaptation: One Municipality's Journey</p> <p>Local governments across Canada are teaming up with municipal sector organizations to improve their asset management skills and capabilities. The Municipal Asset Management Program offers financial support to partner organizations and municipalities to enable just that. Through training and coaching, by using tailored tools and guides, and by sharing their asset management</p>	Matt Delorme, Paul Ryan, Dustin Carey, Juan Clavijo(moderator)

The program times are displayed in Eastern Standard Time. Program subject to change



**2021 CNAM Virtual Conference
Conference Program**

	<p>experiences through a cohort, communities are making cost-saving and sustainable infrastructure decisions.</p> <p>Learn about what local governments and organizations are doing to collaborate and work together, hear from a small community in Newfoundland who progressed quickly in asset management, and get to know some of resources available to support your community's work.</p> <p>Yet climate change is altering the rules of managing infrastructure. Learn about the tools developed through the Municipalities for Climate Innovation Program on how to integrate climate change considerations in your community's asset management approach and new training opportunities to advance your familiarity with climate, levels of service and risk concepts. Visit FCM's virtual booth for more information about resources, training and funding opportunities</p>	
4:00 PM - 5:00 PM	Virtual Networking	

The program times are displayed in Eastern Standard Time. Program subject to change



Thursday, May 13, 2021

Start Time	Title	Speakers
11:00 AM - 11:10 AM	Conference Update / Recap	Patrick Kelly
11:15 AM - 11:45 PM	Breakout Session: Asset Management Plan + Related Studies = Efficiency <i>Session description coming soon!</i>	Kaelee Oxford, Michael Asselin
	Breakout Session: Combining Economic Development & Asset Management to Strengthen Communities <i>Session description coming soon!</i>	Chris Chen
	Breakout Session: Implementing CNAM's AM Competency Framework in Oakville Join us to hear about a real world example of implementation of CNAM's AM Competency Framework for Canadian Communities (AMCF). Hear how the Town of Oakville has begun to integrate the AMCF with their existing competency model and competency management practices. Learn how Oakville is building their AM capacity by developing the AM competencies of both their corporate AM team and the broader organization. Hear about some of the challenges and opportunities of undertaking this process and how you can realize the benefits of competency management and the AM competencies in your own organization.	Ian Gerritsen, Shawn Boast
11:55 AM - 1:25 PM	Student Research Symposium	
1:35 PM - 2:05 PM	Awards Presentation	
2:15 PM - 2:45 PM	Breakout Session: Overview of Capital Planning "How does Infrastructure Ontario do capital reinvestment planning?"	Rameez Siddiqui, Benjamin Ghavami

The program times are displayed in Eastern Standard Time. Program subject to change



	<p>The session is an overview of how capital planning is performed at Infrastructure Ontario for our Real Estate portfolio. The presentation goes over our framework and how we optimize our funding and mitigate risk while dealing with funding challenges. We will begin by providing a brief overview of our program, then we will go into discussing the evolution of our program and how we got here. We will also discuss our planning phase and how it is built to meet ISO 5500 standards and how managing data is critical for good Asset</p>	
	<p>Breakout Session: City of Lethbridge Takes New Spin on Previous Project: Partnering Public works and CIPP Contracting.</p> <p>Like many other Canadian Cities, Lethbridge experienced a post-war boom in the 1950s which expanded the underground watermain infrastructure. The local hot soil condition causes metallic pipe to corrode quickly, leaving the asset management team to develop an aggressive rehabilitation program. In 2018 the City determined the feasibility of CIPP Lining via a demo project which was compared to the traditional replacement project taking place a few blocks away. The project was successful, and the City looked for further ways to make this project more responsible to its taxpayers. By combining a highly technical contractor with City's own forces in 2020, Lethbridge was able to maximize the return on investment and rehab more watermain for less. A project which traditionally cost an estimated \$2.93 million using the open cut, only totaled \$1.44 million using the combination of City Crews and CIPP Lining. This paper will follow the progression of the program from concept to result and present the successes and the lessons learned.</p>	<p>Jeremy Charlesworth, Eden McKaigue</p>
	<p>Breakout Session: Consistency, Consolidation and Coordination</p>	<p>Alida Cameron</p>

The program times are displayed in Eastern Standard Time. Program subject to change



**2021 CNAM Virtual Conference
Conference Program**

	<p>How many times have you had an asset inspected first by operations, then maintenance, then asset management? Each group has their own individual needs, but the City of Edmonton wanted to find a way to reduce duplication in effort. One example where this was able to be achieved was with Edmonton's sports fields. A series of cross-functional workshops were held to determine which criteria needed to be collected for each purpose. Thresholds were discussed for triggering operational and maintenance activities. Then these criteria were consolidated into a weighted rolled up value for triggering renewal activities. Detailed descriptions of how to assess each criterion were developed to ensure consistency in ratings no matter who does the inspection.</p>	
2:55 PM -3:10 PM	Conference Closing	Matt Dawe
3:10 PM - 4:10 PM	Virtual Networking	

The program times are displayed in Eastern Standard Time. Program subject to change