





#### **WELCOME** Introductions

#### Ian Gerritsen CNAM Program Manager and AMCF Lead Editor (Presenter)



- Business consultant and experienced operational leader with icInfrastructure
- AM journeys, developing strategic AM processes and decision-making frameworks
- Lead Editor of CNAM's AM Competency Framework for Canadian Communities

#### **lain Cranston** CNAM Program Manager & Trainer



- Helps public and private sector improve business practices and make better decisions
- Developed CNAM's "New to Asset Management" & AM101 Booklet
- Canadian mirror committee to ISO/TC 251 on Asset Management

#### **Joey Thibault** CNAM Program Coordinator



- AM Analyst, background in Finance
- Project coordinator for CNAM's MAMP & AMCF Program





# WELCOME Agenda

- Welcome
- Background
- Why a Competency Framework?
- Competency Management
- The AM Competency Framework
- Implementing the AMCF
- Ongoing Development
- Wrap Up







MAMP | Program Funding Partners | Program National Partners | Program Goals |
AMCF Development



# BACKGROUND Municipal Asset Management Program

Municipal Asset Management Program:

**MAMP** 

"... funding, training and resources to help you strengthen your asset management practices..."

This initiative is offered through the Municipal Asset Management Program, which is delivered by the Federation of Canadian Municipalities, and funded by the Government of Canada



FÉDÉRATION CANADIENNE DES MUNICIPALITÉS



Government of Canada

Gouvernement du Canada

https://fcm.ca/en/programs/municipal-asset-management-program





# **BACKGROUND** Program Funding Partners



FÉDÉRATION CANADIENNE DES MUNICIPALITÉS



Government of Canada

Gouvernement du Canada













# **BACKGROUND** Program National Partners











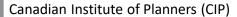












http://cip-icu.ca/

Canadian Public Works Association (CPWA/APWA)

https://www.cpwa.net/

Canadian Society for Civil Engineering (CSCE)

https://csce.ca/

Government Finance Officers Association (GFOA)

http://www.gfoa.org/

The Institute of Asset Management (IAM)

https://theiam.org/

Institute of Public Works Engineering Australasia (NAMS Canada / IPWEA)

https://www.ipwea.org/

Municipal Natural Assets Initiative (MNAI)

http://mnai.ca/

PEMAC Asset Management Association of Canada (PEMAC)

https://www.pemac.org/





# **BACKGROUND** Program Goals

Develop an Asset Management Competency Framework for Canadian Communities (AMCF) that will:

- 1. Provide alignment on the scope of AM, while highlighting the connections between the various professions that overlap with the interdisciplinary practice of AM, as represented by the range of national partners involved in the development process.
- 2. Establish a shared understanding of the competencies the knowledge, skills, and behaviors that a community's workforce *should possess* to *best deliver* their asset management programs.
- 3. Provide communities with a foundation to identify AM capability gaps and the structure needed to create a plan to address those gaps with targeted development opportunities.
- 4. Provide communities with better information to facilitate the hiring of qualified candidates in their organization.





### **BACKGROUND** AMCF Development

Lengthy development through 2019

Alpha Release - May 5, 2019

Reviewed by Cohorts, Working Groups

Beta Release – Oct 5, 2019

Reviewed by Regional CoPs and others

Public Release - Feb 10, 2020

 Ongoing collection of feedback from users



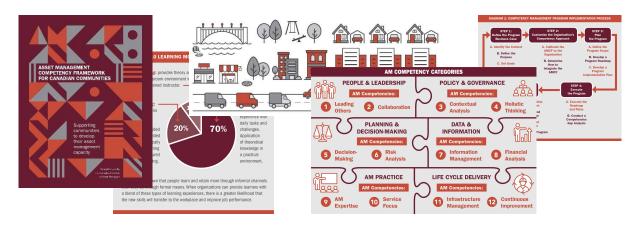




### **BACKGROUND** AMCF Development

Download your copy of the AM Competency Framework for Canadian Communities today!

https://cnam.ca/resources/am-competency-framework/



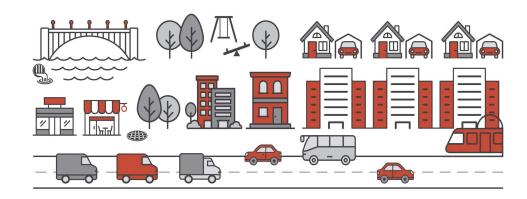
Electronic copies of the AMCF are available for **FREE for everyone!** 





### **BACKGROUND** AMCF Development

- Program currently underway Jan 2020 to Dec 2021
- Developing additional content and tools for the AMCF
- Developing an AMCF Web Portal (coming in 2021)
- AMCF Cohort Programs (coming in 2021)



Details at the end of the presentation







### WHY A COMPETENCY FRAMEWORK?

The Canadian AM Capacity Problem | How Competency Management Can Help



## WHY A CF? The Canadian AM Capacity Problem

"Attracting and retaining qualified employees ranks second only to the economy as the most significant threat to municipal organizations today"

Canadian Association of Municipal Administrators (CAMA)

#### AM is even more challenging:

- AM is new
- AM is growing
- AM is interdisciplinary
- AM has no comprehensive institutional learning programs

#### How Big is the Problem?

~ 5000 Municipalities in Canada
Assume just 10% want to hire
That's 500 people!
What if its 25%?
What about the private sector?





# WHY A CF? How Competency Management Can Help

CNAM and the National Partners felt that capacity/capability development was the most beneficial action for supporting Canadian public sector organizations.

**Competency Management is about developing ability** 

A Competency is...

... the ability to perform a set of related tasks.







### **COMPETENCY MANAGEMENT**

Terminology | How it Fits Together | What You Use It For | Benefits



# **COMPETENCY MANAGEMENT** Terminology

Competency	The integration of a cluster of related knowledge, skills, and behaviors that contribute to individual and organizational performance.						
Competency Management	The cataloging, management, and development of competencies in an organization.						
Competency Proficiency  A defined "level" at which an individual in a group should perform a competency							
Competency Profile	An outline of the specific competencies and target proficiency levels required to be successful within a defined group (i.e., those who perform a bundle of related tasks).						
Competency Assessment	The process of measuring and judging evidence of an individual's capability or proficiency relative to a defined standard (i.e. the proficiency level).						
Competency Model	A set of key competencies that define the required capabilities for superior performance in a defined group in an organization.						
Competency Framework	A broad conceptual structure for integrated, organizing, and aligning multiple competency models.						





### **COMPETENCY MANAGEMENT** Terminology

Competency **Descriptions** 

**Competency Name** 



**Competency Description** 



**Competency Elements** 



**Proficiency Level** (optional)



4.0 THE ASSET MANAGEMENT COMPETENCY FRAMEWORK FOR CANADIAN COMMUNITIES (Continued)

#### PEOPLE & LEADERSHIP (Continued)

#### 4.5.2 COLLABORATION

Collaboration involves the ability to identify and initiate working relationships and to develop and maintain them in a way that benefits both parties. An AM practitioner would use their emotional intelligence to effectively manage relationships, facilitate team problem-solving, and communicate purpose, values and vision. They would build and support crossdisciplinary and cross-functional teams. They would foster collaborative, contextual decision-making and planning that empowers individuals and teams.

#### Effective Rehaviours

- ✓ Works with others towards shared goals. Participates actively and equitably in group work. Facilitates the same in others. Able to identify, initiate, and maintain relationships between the right stakeholders to effectively achieve goals.
- ✓ Facilitates the sharing of diverse viewpoints to achieve a more comprehensive understanding of a problem or situation. Encourages respectful dialogue which explores underlying perspectives, interests, and biases, acknowledges feelings, and gives all participants equitable attention and

consideration. Can appropriately and effectively identify, surface and communicate disagreements and sensitive topics. Focuses on facts and reasoning, while being descriptive and nonjudgmental, Utilizes direct, simple, transparent, and honest communication. Maintains a calm, rational and attentive demeanor. Tactfully challenges conclusions and seeks verification of evidence and assumptions from other unbiased sources. Leads value-based discussions on solutions or trade-offs.

- ✓ Observes both verbal and nonverbal cues from others to recognize feelings, interests, thinking and perspectives. Asks questions to clearly understand what is being communicated and the underlying causes, feelings, biases and reasoning behind what has been communicated. Applies knowledge of organizational and community emotional currents and power dynamics to persuade or convince key decision-makers and influencers.
- ✓ Communicates complex or technical concepts effectively to all audiences. Identifies the audience for communications, then assesses and applies best methods for communicating to that audience. Produces clear, concise, logical and grammatically correct written material to convey intended information in a compelling manner.

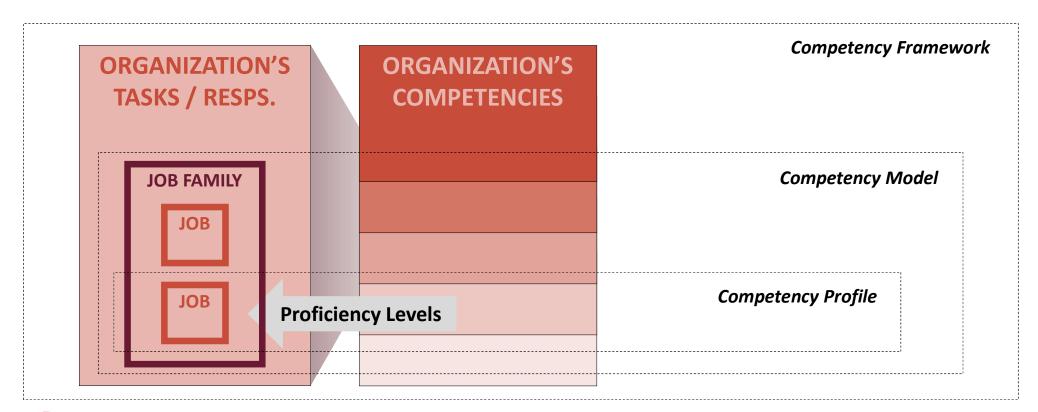
#### **Expected Proficiency:**

AM FUNCTIONAL AREA	BASIC	INTERMEDIATE	ADVANCED	EXPERT
General AM				
AM Role: AM Manager				X
AM Role: AM Project Manager/AM Advisor			Х	
AM Role: AM Coordinator/AM Analyst		X		
Senior Leadership				Х
Engineering		Х		
Operations & Maintenance		X		
Planning		X		
Finance		X		
Human Resources		Х		
Procurement/Supply Chain		X		
Information & Records		Х		
Π/IS	1	X		





### **COMPETENCY MANAGEMENT** How It Fits Together







### **COMPETENCY MANAGEMENT** What You Use It For

Competencies are a tangible expression of the culture an organization wants





#### **COMPETENCY MANAGEMENT** Benefits

- ✓ Better strategic alignment
- Modular, but integrated development
- ✓ Communicates clear expectations
- Can improve diversity, inclusivity and equality
- Consistent people management processes

- Improved resource and succession planning
- ✓ Mirrors many AM best practices

- Iterative
- Collaborative
- Transparent
- Objective

- Strategically aligned
- Integrates silo's
- Changes culture





#### **COMPETENCY MANAGEMENT** What You Use It For

#### **Learning & Development**

Develop strategies and programs for AM training; Select or develop training material; Align development initiatives with competency gaps; Individually target development opportunities

#### **Performance Communication**

Give managers and staff clarity about job responsibilities; Support coaching; Better identify skill deficiencies and strengths

#### **Recruiting & Selection**

Streamline and support recruiting based on competencies; Identify capacity/capability gaps; Build teams with the right mix of competencies

#### **Succession & Workforce Planning**

Understand workforce capabilities, capacity, and future needs; Design and structure AM roles and responsibilities in alignment with organizational strategy and AM program needs







### THE AM COMPETENCY FRAMEWORK

Document Structure | The AM Responsibilities | The Framework | AM Functional Areas and Roles | Proficiency Levels | The AM Competencies



### THE AMCF Document Structure





#### Two main parts:

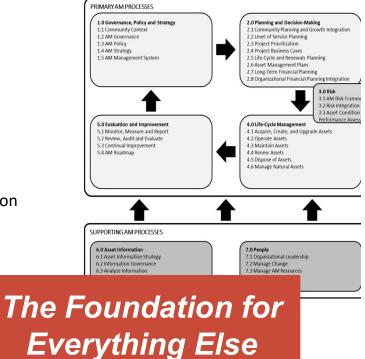
- The AM Competency Framework
- An Organizational Implementation Guide





### THE AMCF The AM Responsibilities

- Community Context
- AM Governance
- AM Policy
- AM Strategy
- AM Management System
- Level of Service
- Project Prioritization
- Project Assessment
- AM Plans
- AM Long-Term Financial Plans
- Organizational Financial Integration
- Risk Integration
- Life-Cycle Management
- AM Roadmap
- Information
- Information Systems
- AM Culture
- Resources
- Stakeholders



#### Evolved from earlier drafts

APPENDICES (Continued)

		TABL	E 23:	THE	AM R	SPON	ISIBU	ITIES					
	TABLE 23: THE AM RESPONSIBILITIES  AM PUNCTIONAL AREA ACTIONS												
		GENERAL AM											
AM RESPONSIBILITY		MWGS	PROECT NAMICS / ACVESSR	DESCOURSE	SENIOR	MONEERING					PECCUREMENT, SUPPLY CHIN	INFORMATON, RECORDS	
Community Content   Analyze, intograto and manage the community content	<ul> <li>Integrate commanity mader plans and apprinctional systegic plans</li> <li>Analyse notes, cercognophies</li> <li>Analyse notes, cercognophies</li> <li>Analyse notes, cercognophies</li> <li>for future and/or growth</li> <li>community resources, Seniore</li> <li>B), and valuation</li> <li>Hamping medics, growth, and cercognophies, environmental, commonits, coald, to chicali, and political changing</li> </ul>	Know, Use, Integrate	Know, Use, Menage, Integrate	Analyse, Vanago, Integrate	Sapport, Advise Know, Use, Vanage, Integrate	Use, Integrate	Use, Integrate	Support, Advise Know, Use, Manage, Integrate	•	•	-	-	•
AM Scremance  Develop, follow and maintain as AM Governance Structure	<ul> <li>Includes authorities, accountabilities, and roles and responsibilities</li> </ul>	Denelop, Resiew, Update	Sapport, Advise (Manager)	Assist, Fellow	Support, Advise, Auth., Approve, Commit, Comms.	-	-	-	-	Support, Advise	-	-	-
AM Policy  Develop, follow and maintain an AM Policy	Includes intent, outcomes, principles, and values	Deselop, Rosiaw, Updata, Maintain	Support, Review, Advise, Follow	Assist, Fallow	Support, Advise, Auth., Approve, Commit, Comm.	Follow, Integrate	Follow, Integrate	Follow, Integrate	Assist, Follow, Integrate	Fallow, Integrate	Follow, Integrate	Follow, Integrate	Follow, Integrate
AM Strategy  Develop, follow and maintain an AM Strategy	<ul> <li>Includes AM gools (strategic objectives), decides precesses, objectives and targets, key initiatives, and risks</li> </ul>	Denelop, Resiew, Updetz, Maintain	Sapport, Resiaw, Advisc, Fellow	Assist, Fallow	Support, Advise, Autr., Approve, Commit, Comm.	Follow, Integrate	Follow, Integrate	Follow, Integrate	Assist, Fellow, Integrate	Fellow, Integrate	Follow, Integrate	Follow, Integrate	Follow, Integrate
AM Management System  Develop, folion and maintain as AM moragement system framework  Microgor the AM projects  Plan and deliver AM projects	Includes practices, procedures, bots, and documents in Include and incomment in Including an Including and practices (environment, health and as slay, dat, information management, braich and practices (experiently and procedure in Including in Includi	Deselop, Reniew, Update, Maintain Manage (prog.)	Support, Review, Advise, Follow, Maintain Manage (spiters, process) Plan, Deliver, (AM projects)	Assist, Follow, Camm. Monitor, Assess, Measure, Report	Support, Advise, Auth., Approve	Fallow	Follow	Follow	Assist, Follow	Follow	Folion	Follow	Foliav
Limet of Service  • Identify and value the community's infrastructure services  • Denetop levels of service (LOS), set targets, and measure service performance	Stemmy and mouse infrastructure services infrastructure services infrastructure, technicall services infrastructure, technicall services infection services infrastructure infrastruc	Sapport, Advisa, Reniew, Approve	Denelop, Reniew, Update	Assest, Monitor, Assess, Report	Support, Auth.	idensity, Support, Advise Integrate Measure, Review, Update	Support, Advise Integrate Measure, Review, Update	Identify, Support, Advise Integrate Measure, Review, Update	Support, Advise Integrate Measure, Review, Update			Support, Advise Integrate Measure, Review, Update	Support (IS)

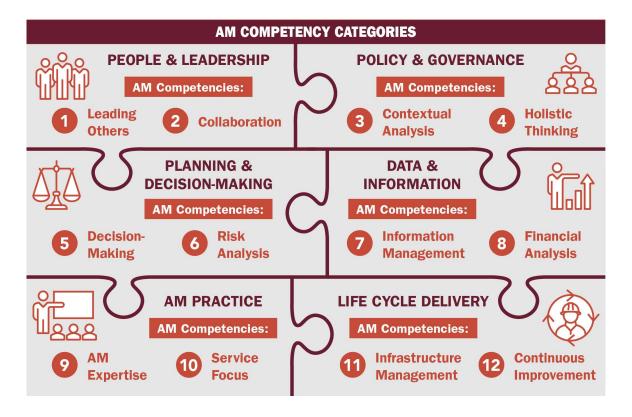
See Appendix C





### THE AMCF The Framework

Based on the FCM AM Readiness Scale



A Meaningful Whole





#### THE AMCF AM Functional Areas and Roles

- General AM
  - AM Manager
  - AM Project Manager / AM Advisor
  - AM Coordinator / AM Analyst
- Senior Leadership
- Engineering
- 0&M
- Planning
- Finance
- HR
- Procurement / Supply Chain
- Information & Records
- IT / IS

- A bundle of related AM Responsibilities
- 'General AM' Functional Area further broken down into 3 generic AM Roles
- AM Competencies are mapped to each AM Functional Area or AM Role with a standard proficiency level
- AM Roles are initial effort to establish standard profiles for ongoing development efforts
- Used to define AM Competency Profiles in future





# THE AMCF Proficiency Levels

- Standardized scale not specific to each competency
- Generic descriptions or examples of expected behavior
- Broadly cover dimensions of:
  - Knowledge
  - Cognitive ability
  - Experience
  - Emotional intelligence
- A communication support tool
  - a common language for discussing expectations
  - focuses on degree of understanding, ability or expertise

TABLE 3: AM PROFICIENCY LEVELS SCALE								
BASIC	INTERMEDIATE	ADVANCED	EXPERT					
<ul> <li>Familiar with basic concepts and terminology.</li> <li>Developing understanding of the competency within the scope of the job.</li> <li>Applies simple, well-defined processes and established practices in routine situations.</li> <li>Requires structured direction and guidance.</li> <li>Seeks to understand broader context and develop capability.</li> </ul>	<ul> <li>Well versed in theory and applies key concepts or principles.</li> <li>Understands context, rules and processes. Anticipates and addresses problems.</li> <li>Applies a structured analytical process to unfamiliar or more complex problems.</li> <li>May require guidance and review with complex or non-routine applications.</li> <li>Applies judgement and takes appropriate actions within job scope.</li> </ul>	Capable of guiding and coaching others in theory and practice. Acknowledged go-to person.  Has a thorough understanding of the competency within the local application.  Leverages internal and external best practices to break down systemic barriers and resistance to change.  Provides creative solutions to complex or undefined problems without assistance.  Explores innovative ways to enhance processes and procedures to improve overall results.	<ul> <li>Possesses extensive knowledge and experience, both broad and deep – an authoritative source and recognized thought leader.</li> <li>Improves standards of practice relative to the competency area.</li> <li>Contributes integrated thinking at a strategic level. Anticipates and facilitates change.</li> <li>Applies abstract or conceptual thinking to resolve problems where no precedents exist.</li> <li>Drives continuous improvement, leads transformational change and/or industry innovation.</li> </ul>					

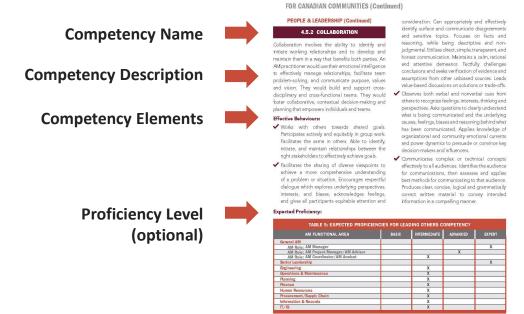




# THE AMCF The AM Competencies

# 12 Competencies 2 per Competency Category





4.0 THE ASSET MANAGEMENT COMPETENCY FRAMEWORK

#### Each one described in detail





### IMPLEMENTING THE AMCF

The AM Practitioner | The Implementation Process | Scaling to Your Organization | Competency Management Activities | Implementation Process Details | Managing Common Challenges | Key Points for Success



#### **IMPLEMENTATION** The AM Practitioner

The AM Practitioner is...

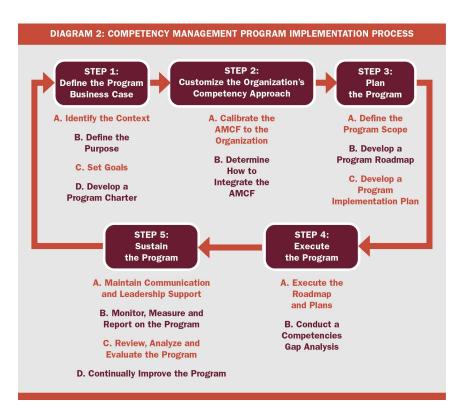
... the person who performs the relevant AM Responsibilities

- The AMCF is built around the AM Practitioner
- Not necessarily an AM staff-member
- May perform part of or many "AM Roles" as part of a "job"
- Will be proficient in other competencies too





# **IMPLEMENTATION** The Implementation Process



How to create a competency management program, based on the AMCF, and customize if for your organization





# **IMPLEMENTATION** Scaling to Your Organization

- The AMCF is designed to be used by communities of all sizes.
- Throughout the document we describe different options depending on:
  - Population size
  - Size of the infrastructure base
  - Whether the organization is new to AM
  - Whether the organization is new to competency management
  - Whether the organization has any full-time AM staff

#### 1. Small / New to AM Communities ("S/N")

Communities with a small population and/or a limited infrastructure base and/or are new to the practice of AM and/or are new to competency management and/or do not yet have any staff whose jobs are primarily AM-related.

#### 2. Mid-Sized / Developing AM Communities ("M/D")

Communities with a mid-sized population and/or a midsized infrastructure base and/or are developing AM practices and/or are progressing competency management and/or have a single staff-member whose job is primarily AM-related.

#### 3. Large / Mature AM Communities ("L/M")

Communities with a larger population and/or a large and complex infrastructure base and/or a mature AM practice and/or a mature competency management program and/or one or more teams or departments dedicated to AM.





### IMPLEMENTATION Competency Management Activities



#### **Learning & Development Activities**

**Experiential Learning Activities** Social Learning Activities Formal Learning Activities



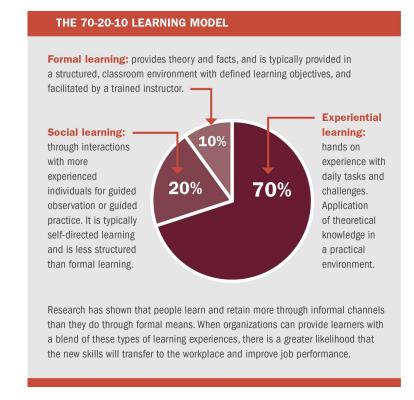
**Recruiting & Selection Activities** 



Performance **Communication Activities** 



Succession & Workforce **Planning Activities** 







# ONGOING DEVELOPMENT

Survey | Web Portal | Cohort Program



# **ONGOING DEVELOPMENT** Survey

- Comprehensive industry survey on AM capacity needs in the Canadian Public Sector.
- Informing the future direction of the AMCF and CNAM's programming
- Results will be publicly available

https://www.cnam.ca/resources/a m-capacity-needs-survey/

(Available in English and French)

#### Fill out the survey now!

Chance to win a gift card, support the public sector AM industry, and receive an early report of survey results

#### **AM Capacity Needs Survey 2020**

#### Welcome to the Survey!

#### Introduction

The Canadian Network of Asset Managers (CNAM) is putting out this survey to help the public sector Asset Management (AM) industry identify and examine the current needs and demand for workforce AM capacity and capability development in Canada. By participating in this survey, you will allow us to better understand:

- $\cdot$  What gaps in individual and organizational competency (knowledge, skills, and behaviours) are prevalent in Canadian public sector AM.
- · What areas are organizations struggling with as they implement and sustain their AM programs.
- · What individuals and organizations are currently doing to develop their AM capacity and capabilities, and where they seek to improve.

0 of 59 answered





#### **ONGOING DEVELOPMENT** Web Portal

# AMCF Web Portal Available 2021!

#### FREE - ONLINE - ANYTIME

Find all the AMCF content

Easy to use and easy to navigate format

Find examples, tools, templates and more

# Additional content and tools for the AMCF coming soon!

- Expanding the functional areas into defined career streams, additional roles, and detailed competency profiles
- Effective behaviours by proficiency level and competency profile
- Expanded competency management activity examples and lists of region-specific activities and providers
- A new competency gap assessment tool
- Other improvements, updates, and tools TBD based on feedback and survey results

What do you need? Share with us.





# **ONGOING DEVELOPMENT** Cohort Program

#### **Become an AMCF Cohort Participant!**

- Pilot the AMCF web portal
- Develop a personal AM competency development and career plan
- Develop an organizational AMCF implementation plan
- Includes monthly virtual support meetings, a peer support forum, and more!

Cohort #1 recruiting in Fall 2020 Cohort #2 recruiting in Spring 2021 To participate contact us at competency@cnam.ca

Cohort #1: Jan to Jun 2021

Cohort #2: Jul to Dec 2021





For additional information or to participate in the AMCF program please contact us at competency@cnam.ca

Brought to you by:





#### Thank you for your time! Questions?

