



icINFRASTRUCTURE



## ASSET MANAGEMENT MADE SIMPLE

*Training For Community Leaders, First Nations And Small Communities*

## Asset Management BC 2025 Conference

November 5, 2025

**Iain Cranston**

Director and Trainer, icInfrastructure

[iain@icinfrastructure.com](mailto:iain@icinfrastructure.com)

**Lilani van Niekerk**

Delivery Lead and Trainer, icInfrastructure

[lilani@icinfrastructure.com](mailto:lilani@icinfrastructure.com)



# Funding Recognition Statement



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# Our Agenda

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- ◆ Challenges – Present and Future
- ◆ What is Asset Management
- ◆ Great first step...an Asset Registry
- ◆ Free Training & Resources to help you

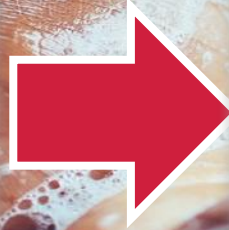
Copy of slides available  
[training@icinfrastructure.com](mailto:training@icinfrastructure.com)





# First the Basics

Assets



Services

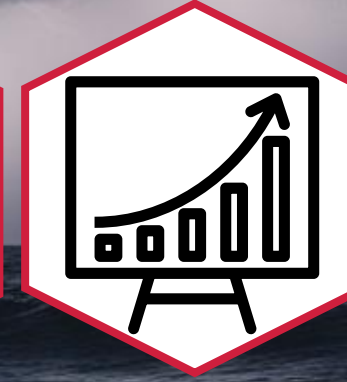


Quality of Life

Are your revenues/funding/rates set correctly?



# Perfect Storm



Aging  
Infrastructure

Funding

Staffing

Community  
Expectations

Population

Climate

Regulations

What's the biggest challenge for your community?



# WHAT IS ASSET MANAGEMENT?

# Asset Management



“The **coordinated activity** of an organization to **realize value** from assets.”

- Source: ISO 55000



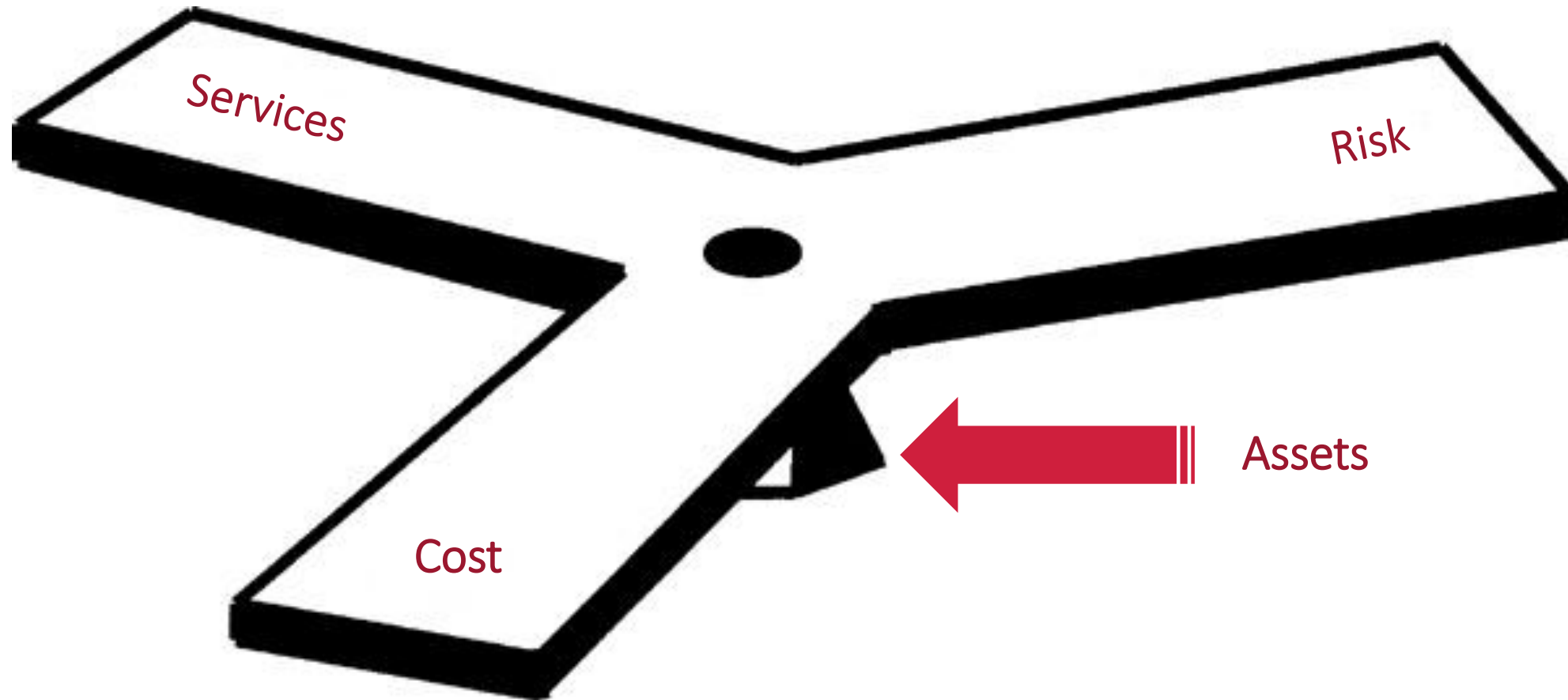
- Working Together
- Common processes
- Sustainable Services



- Source: AMBC Framework



# Sustainable Service Delivery

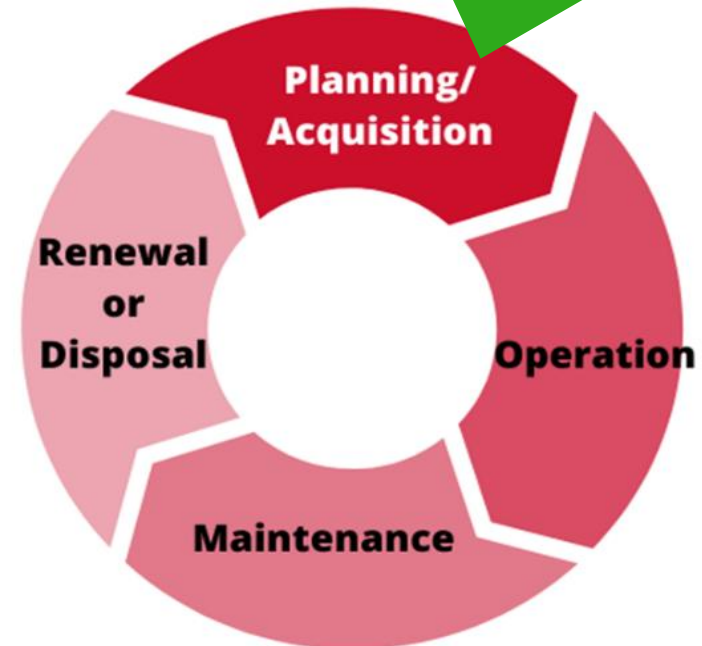


# Life Cycle Cost

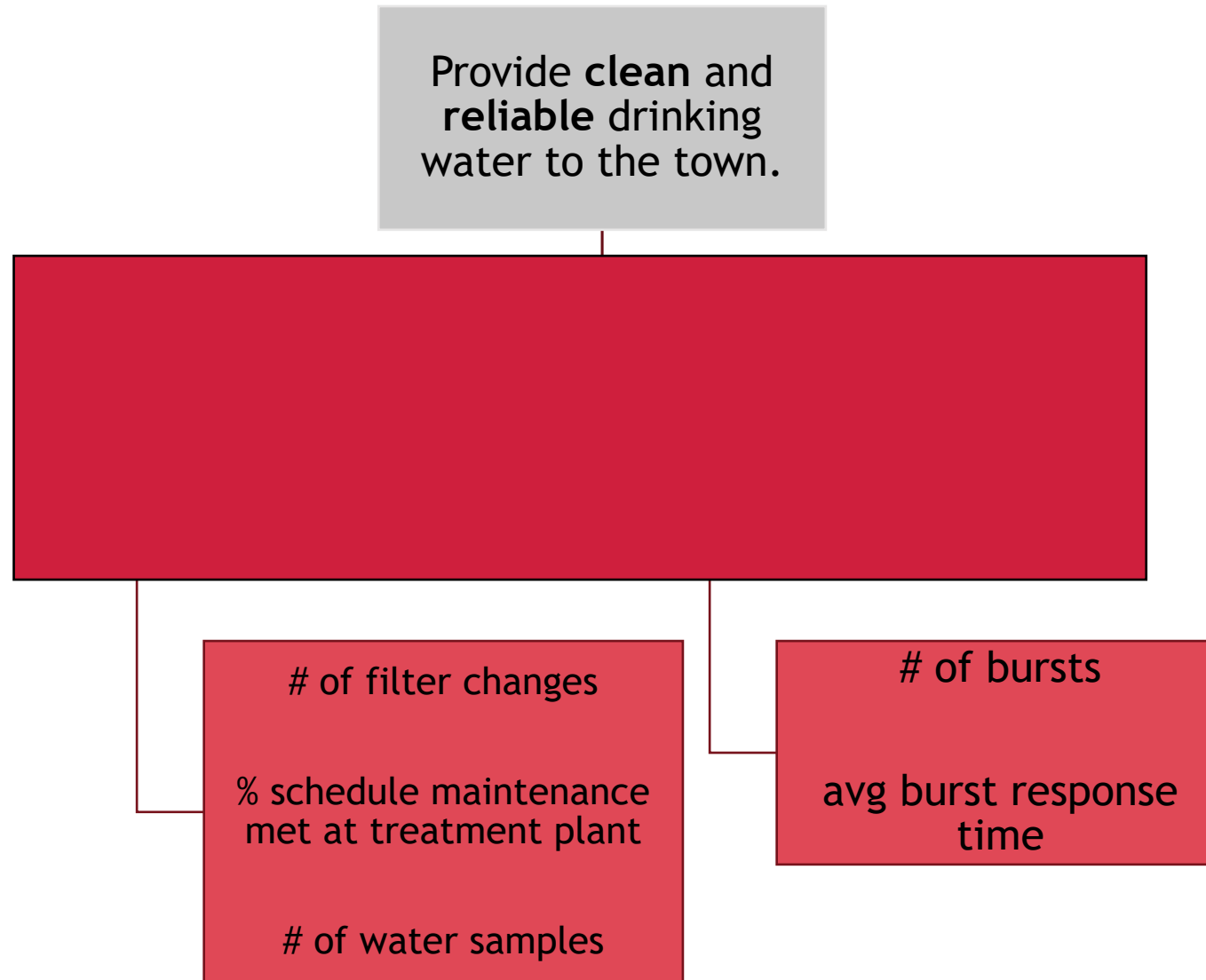


Upfront Capital costs can be as little as 20% of the full life cycle costs

- ◆ Think of an asset's life in stages
- ◆ Each stage has a cost
- ◆ Consider **whole life cost** when making decisions



# Levels of Service – Example



# Equity, Diversity, Inclusion, and Reconciliation



- ◆ To determine what level of service the public should expect
- ◆ To assess who is and isn't receiving it

“Despite progress over the past number of years, significant challenges remain in fostering equitable and respectful relationships between municipalities and Indigenous communities.”

**- Federation of Canadian Municipalities (FCM)**



# Service Level Agreements with Indigenous Communities



Tla'amin Nation Partners with  
the City of Powell River for  
Sewage Treatment Services



Learn more:

<https://www.tlaaminnation.com/tlaamin-nation-partners-with-the-city-of-powell-river-for-sewage-treatment-services/>



Canada's Tournament Capital

Learn more:

<https://www.kamloops.ca/our-community/indigenous-relations/tkemplups-te-secwepemc>



# Risk



		Financial	Health and Safety	Environmental	Reputation					
Severity	5	Defined outcomes				Medium Risk	High Risk	Critical Risk	Critical Risk	Critical Risk
	4					Medium Risk	High Risk	High Risk	Critical Risk	
	3					Low Risk	Low Risk	Medium Risk	Medium Risk	High Risk
	2					Low Risk	Low Risk	Low Risk	Medium Risk	Medium Risk
	1					Low Risk	Low Risk	Low Risk	Low Risk	Medium Risk
					1	2	3	4	5	
					Likelihood					

- Low Risk
- Medium Risk
- High Risk
- Critical Risk



## Community Spotlight

Matthew Osler, Project Engineer with the City of Surrey, explains how natural infrastructure is addressing climate risks such as erosion, storms, and rising water levels.



Matthew Osler, Project Engineer, City of Surrey

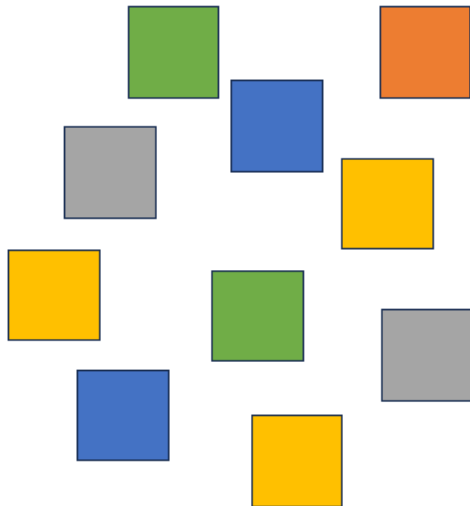
**Matthew Osler**

Project Engineer, City of Surrey

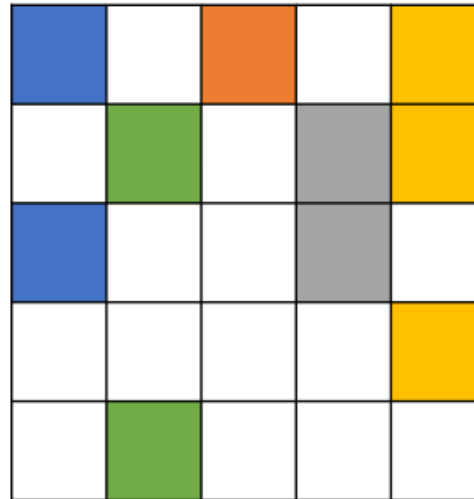
# Don't Panic



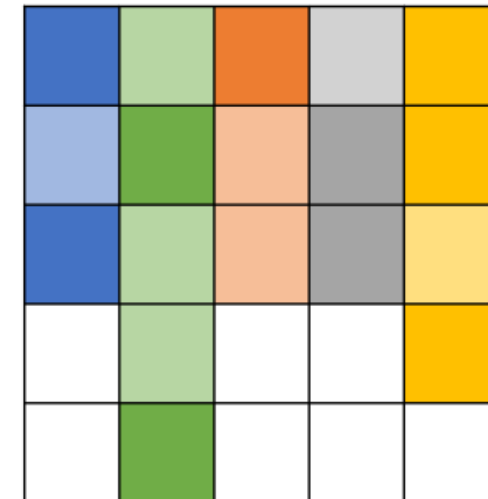
## Current Practice



## Compared to AM Framework



## Future Practice





# STRATEGIC PLANNING – ASSET REGISTRY

# What is an Asset Registry?

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## ◆ Single source of the truth, containing:

◆ What do you own?

◆ When did you acquire it?

◆ What is its estimated useful life?

◆ How much does it cost to replace?



# Examples



- ◆ Asset: **Community Arena**
- ◆ Year Acquired: **1980**
- ◆ Estimated useful life: **50 years**
- ◆ Current Replacement Cost: **\$20M**



- ◆ Asset: **Main Street**
- ◆ Year Acquired: **2005**
- ◆ Estimated useful life: **30 years**
- ◆ Current Replacement Cost: **\$1.5M**



# Examples

Hands up if you have something like this?



Asset Class	Asset ID	Material	Year Built	Replacement Cost	Estimated Useful Life (Years)	Replacement Year
Roads	RDS001	Asphalt	2011	\$5,720,000	25	2036
	RDS002	Asphalt	2015	\$8,140,000	25	2040
	RDS003	Asphalt	1997	\$11,000,000	25	2022
	RDS004	Asphalt	2005	\$2,475,000	25	2030
	RDS005	Asphalt	2007	\$3,300,000	25	2032
	RDS006	Asphalt	2001	\$4,950,000	25	2026
	RDS007	Gravel	2019	\$750,000	5	2024
	RDS008	Gravel	2017	\$1,140,000	5	2022
	RDS009	Gravel	2021	\$1,260,000	5	2026



# Why is this valuable?



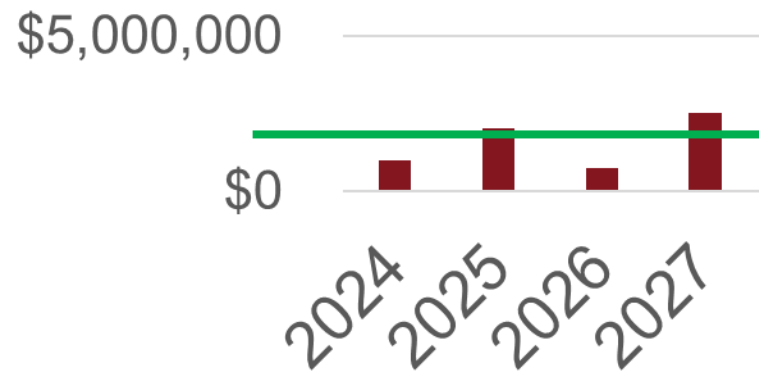
- ◆ Reminds us of the assets we own to maintain current quality of life will eventually need to be replaced
- ◆ Let's us estimate the future cost and whether we have enough resources
- ◆ Inform saving to maintain services versus spending to increase services
- ◆ Helps shift from “Capital Improvement Plan” to “Capital *Investment* Plan”



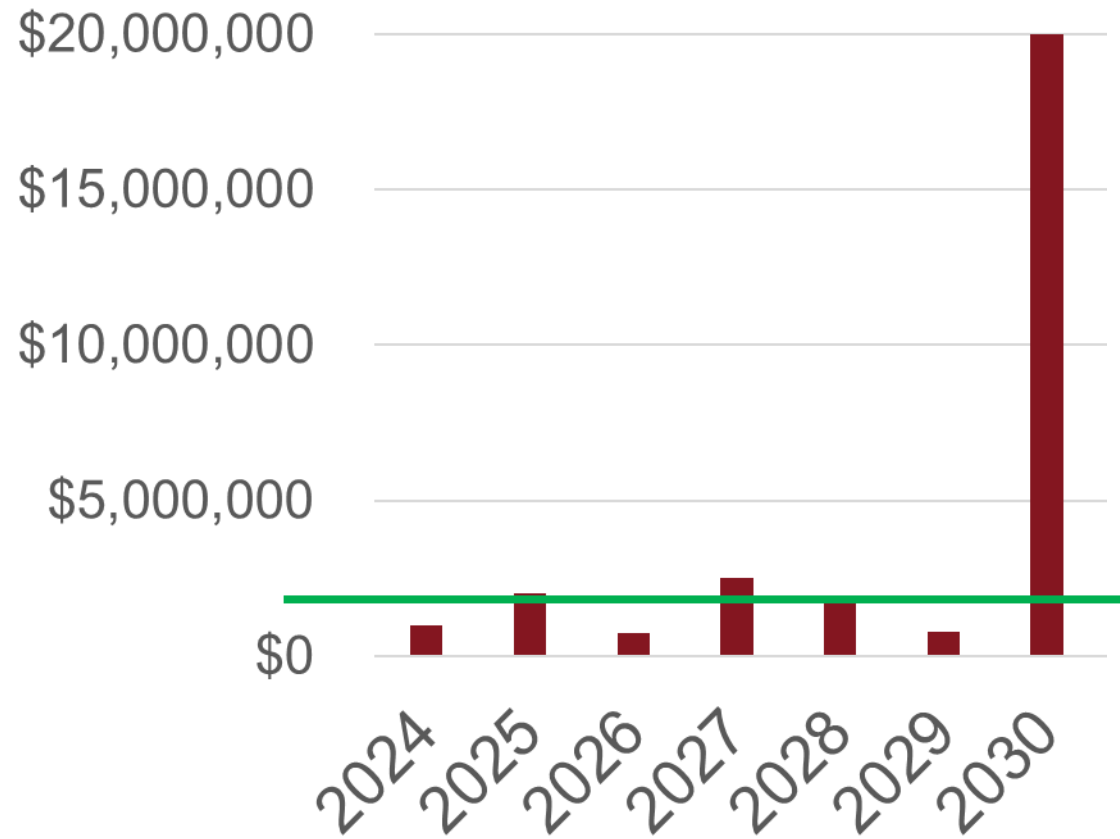
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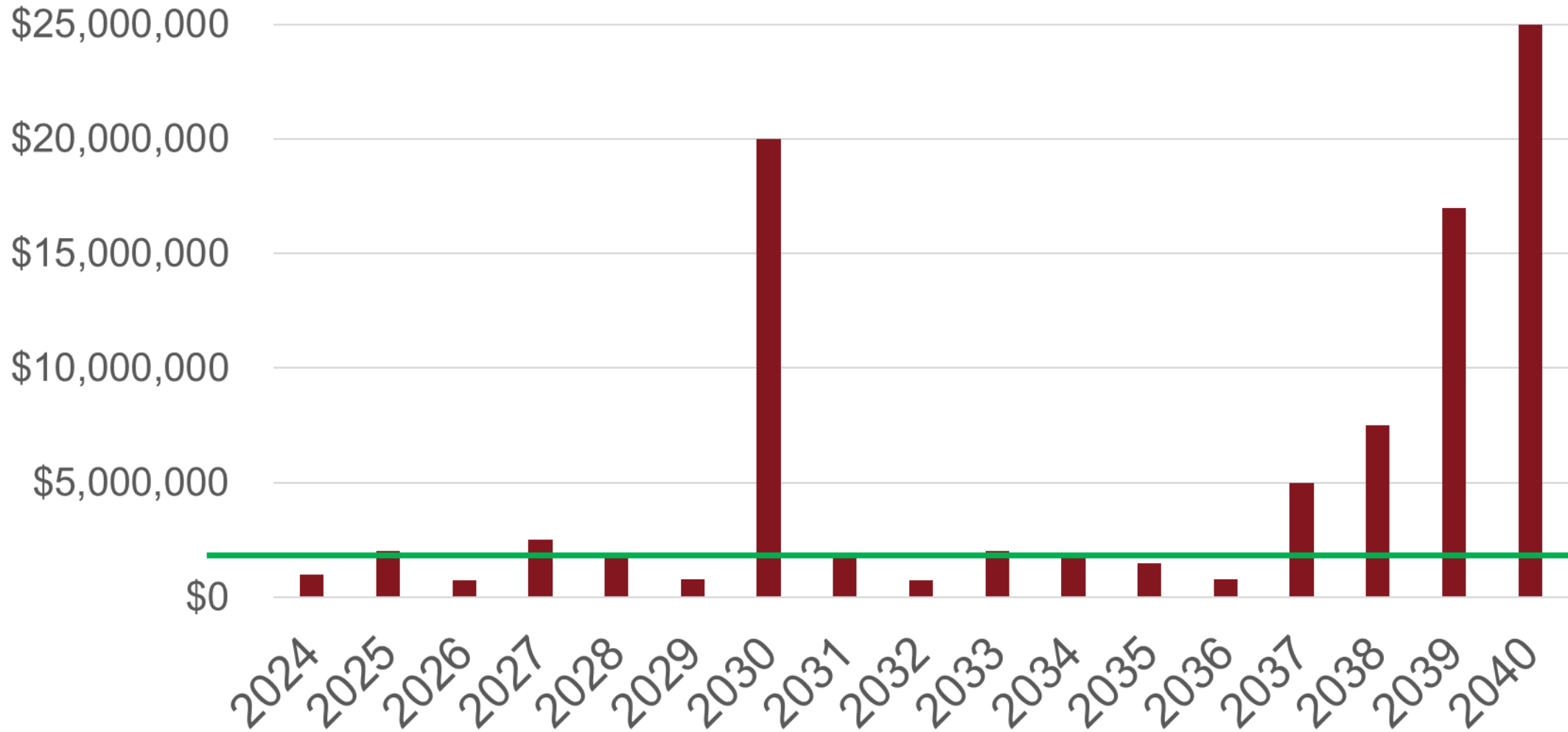
# Why is this valuable?



# Why is this valuable?



# Why is this valuable?



# More Benefits!

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- ◆ Reduced Budgeting Efforts
- ◆ Inform your Long-Term Capital Improvement Plan
- ◆ More Effective Grant Applications
- ◆ Proactive action means fewer service interruptions
- ◆ Increased transparency = Community Trust



# How to get started

As apart of your next planning session, ask your staff...



Do we have a complete list of assets?



Do we know what they would cost to replace?



Do we know their average lifespan?



Do we know when we'll have to replace them?

**Keep it simple to start**



# LEARNING OPPORTUNITIES!

Training and support from AMBC x icInfrastructure



# Training Programs



iCINFRASTRUCTURE

## BC Community Infrastructure, Climate, and Equity

- ◆ Tailored for **Elected Officials**
- ◆ Learn how asset management practices help you **tackle infrastructure challenges, prepare for climate impacts, and ensure fair and sustainable service delivery**—all while making the best use of taxpayer dollars.

## BC Community Infrastructure, Climate, and Equity

- ◆ Tailored for **CAOs and Senior Management**
- ◆ Understand how asset management **supports risk management, strategic decision-making, and efficient use of resources** to strengthen infrastructure, optimize services, and secure funding.



### Training Delivery Method

1. 2hr eLearning course



<https://www.assetmanagementbc.ca/training/asset-management-essentials/>



# Resource: Reflection Questions Handout



## Community Infrastructure, Climate, and Equity Resource: Reflection Questions for Elected Officials

Use the following questions to spark strategic discussions among council members, senior staff, and community members. These prompts are designed to translate insights from the Community Infrastructure, Climate, and Equity course into practical, forward-looking decisions that promote sustainable, resilient, and equitable infrastructure and service delivery.

### Understanding Our Infrastructure Legacy

- How have past decisions shaped the state of infrastructure in our community today?
- Have any past infrastructure decisions unintentionally contributed to inequities or heightened climate risks?
- What compounding factors (i.e. population growth, aging infrastructure, or climate impacts) are most pressing for our community?

### Strengthening Asset Management Practices

- Do we have a complete and up-to-date asset registry, and how is it being used in decision-making?
- Do we look at life cycle costs and risks when making decisions?
- Have we defined the services we deliver, and do we deliver those services at the level expected by our community?

### Integrating Climate Risk & Resilience

- What climate-related risks pose the greatest threat to our infrastructure?
- How are we aligning our asset management practices with climate adaptation, mitigation, and resilience goals?

## Community Infrastructure, Climate, and Equity Resource: Reflection Questions for Chief Administrative Officers

Use these questions to guide strategic reflection among you and your senior staff. Grounded in the Community Infrastructure, Climate, and Equity course, the questions support the informed decision-making that asset management enables, which can help build climate resilience, and advance equity in infrastructure planning.

### Understanding Our Infrastructure Legacy

- How have past decisions shaped current service delivery challenges?
- Have any past infrastructure decisions unintentionally contributed to inequities or heightened climate risks?
- What compounding factors (i.e. population growth, aging infrastructure, or climate impacts) are most pressing for our community?

### Strengthening Asset Management Practices

- Do we have a complete and up-to-date asset registry, and how is it being used in decision-making?
- Are we presenting information and on life cycle costing and risk when making recommendations?
- Have we defined the services we deliver, and do we deliver those services at the level expected by our community?

### Integrating Climate Risk & Resilience

- What climate-related risks pose the greatest threat to our infrastructure?
- How are we aligning our asset management practices with climate adaptation, mitigation, and resilience goals?



# Training Programs



## Leveraging Your Asset Data (BC)

- Learn how to **build an asset registry, assess infrastructure conditions, and use data-driven insights** to improve long-term planning, budgeting, and service reliability. Get the tools to secure funding and make the case for infrastructure investments.

**Asset Registry and Forecast Tool**

**Introduction**

This tool is designed for local governments that are just beginning their Asset Management practice. It is a simple yet comprehensive tool to document what you own, its current value, its condition, when it is likely to be replaced, and use this data to inform decision making.

This tool assumes users have completed icInfrastructure's "Leveraging Asset Data" course, or have an intermediate knowledge of utilizing asset data to produce summary reports and forecasts. Additionally, the tool assumes that users have a basic understanding of MS Excel. Only data entry is required for the worksheet to function properly.

Asset UID	Service	Status	Asset Class	Asset Subclass	Acquisition Cost	Age	Estimated Service Life	Estimated Replace
FLT0000	Drinking Water	Active	Fleet	Heavy Duty Vehicles	\$200,000.00	15	8	2018
FLT0001	General Transportation	Active	Fleet	Heavy Duty Equipment	\$50,000.00	20	20	2025
RDS0000	General Transportation	Active	Roads	Arterial Road	\$605,034.56	14	30	2041
RDS0001	General Transportation	Active	Roads	Local Road	\$968,833.48	10	30	2045
FAC0000	Parks/Recreation/Culture	Active	Facilities	Ice sheet	\$1,000,000.00	15	50	2060
FAC0001	Drinking Water	Active	Facilities	Water Treatment Plant	\$1,500,000.00	35	50	2040
PIP0000	Drinking Water	Active	Pipes	Water Mains	\$200,000.00	70	100	2055
PIP0001	Drinking Water	Active	Pipes	Water Mains		70	65	2020

**Estimated Long-Term Replacement Forecast for All Services**

**Current Replacement Value by Condition for All Services**

Condition	Sum of Current Replacement Value	% Current Replacement Value
Very Good	\$3,346,184	7.3%
Good	\$4,222,907	9.3%
Fair	\$1,172,814	2.6%
Poor	\$10,870,799	23.8%
Very Poor	\$25,839,147	56.9%
<b>Grand Total</b>	<b>\$46,413,830</b>	<b>100.0%</b>

### Training Delivery Methods

- 2hr eLearning course
- 2hr eLearning course + 1:1 support (online)
- 2hr eLearning course + cohort (online)



<https://www.assetmanagementbc.ca/training/leveraging-your-asset-data/>

# Training Programs



**Risk Matrix and Registry Tool**

**Introduction**

This tool is designed for local governments that are just beginning their Risk Management practice. It is a simple yet comprehensive tool to facilitate and document risk discussions and support the inclusion of risk management in decision-making. It can facilitate discussion and alignment on risk tolerance through use and modification of the Risk Matrix, can act as a knowledge capture tool through use of the Risk Registry, and can support budget application and risk reduction through use of the Risk Treatment Request.

This tool assumes users have completed iCInfrastructure's "Risk Management Essentials" course, or have an intermediate knowledge of risk management

Criticality	Consequences	Financial	Health & Safety	Environmental	Community Trust	Local Economy	Heat Map							
Very High	5 Catastrophic	Over \$5,000,000	Fatalities or permanent disabilities; severe long-term health effects.	Irreversible negative effects on the ecosystem.	Organized movement to replace all elected official senior management.	Threatens the viability of the community.	Medium	High	Extreme	Extreme	Extreme	Extreme	Extreme	Extreme
High	4 Major	\$1,000,000 to \$5,000,000	Long-term health effects or disabilities; widespread illness.	Reversible negative effects requiring long-term restoration.	Organized movement for resignation of individual elected official staff.	Widespread business closure.	Medium	High	High	Extreme	Extreme	Extreme	Extreme	Extreme
Moderate	3 Moderate	\$250,000 to \$1,000,000	Hospitalization required; short-term health effects or disabilities; Limited illness.	Reversible negative effects requiring medium-term restoration.	Large amount of negative feedback from community.	Noticeable increase in business closures.	Low	Medium	High	High	Extreme	Extreme	Extreme	Extreme
Low	2 Minor	\$50,000 to \$250,000	Medical treatment required; no long-term health effects.	Reversible negative effects requiring short-term restoration.	Noticeable increase in negative feedback from community.	Noticeable impact on business revenues.	Low	Medium	Medium	High	High	High	High	High
Very Low	1 Insignificant	Up to \$50,000	First aid required.	Within ecosystem capacity to reverse.	Insignificant impacts.	Insignificant impacts.	Low	Low	Low	Medium	Medium	Medium	Medium	Medium

Risk Rating	Action
Low	No action
Moderate	Monitor
High	Action in 6 months
Extreme	Immediate

Frequency	Rare	Unlikely	Possible	Likely	Almost Certain
Every 25+ years	1	2	3	4	5



## Risk Management Essentials (BC)

Learn how to **identify, assess, and prioritize risks**—from climate threats to infrastructure failures—using a structured framework. Discover how to integrate Indigenous knowledge, equity considerations, and natural assets to create effective, future-ready risk management strategies.

**Training Delivery Methods**

- 2hr eLearning course
- 2hr eLearning course + 1:1 support (online)
- 2hr eLearning course + cohort (online)

<https://www.assetmanagementbc.ca/training/>



Thanks for your time! Any Questions?

Did you fill out sign in sheet??

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