

CVRD Asset Management Strategy

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Introduction

The Comox Valley Regional District (CVRD) is a regional district on Vancouver Island in British Columbia, Canada, centred around the Comox Valley and covering over 1,725 square kilometers (666 square miles) to serve a population of 72,445 (2021 Census). The CVRD also administers the Comox Strathcona Waste Management Service (CSWM) which covers both the CVRD and the Strathcona Regional District, serving a combined population of 102,595.

The region's borders extend from Cook Creek in the south, to the Oyster River in the north, west to Strathcona Park, and east to include both Denman and Hornby Islands. The CVRD acknowledges that it is on the unceded territory of the K'ómoks First Nation. The CSWM service spans nearly 22,000 km² from Kyuquot/Nootka on the west coast of Vancouver Island, across the island of Cortes, Quadra, Denman, Hornby and the Discovery Islands, into a portion of the British Columbia mainland north of Powell River. The CSWM service area is located in the Coast Salish, Kwakwaka'wakw, and Nuuchahnulth territories.

One of the most important functions of the CVRD's municipal services is providing cost effective and efficient management of municipal infrastructure.

The Asset Management (AM) Policy defines the Board's expectations and principles around the management of the CVRD's assets. The AM Strategy articulates management's commitment to implementing the policy, how the policy will be implemented, and details the necessary resources and timelines for implementation.

While the AM Policy is expected to remain relatively constant over time, the AM Strategy will evolve in response to internal and external changes, challenges or opportunities faced by the CVRD.

1. Purpose and Scope

1.1 Purpose of the AM Strategy and Roadmap

The AM Strategy is a critical component of the CVRD's asset management program. The purpose of the AM Strategy is to:

- Provide a baseline understanding of AM practices.
- Establish a roadmap for the formalization and continuous improvement of CVRD's AM practices in order to achieve sustainable service delivery, as set out in the key principles of the AM Policy.
- Establish AM guidelines and targets to ensure all department activities are in alignment with organizational priorities.
- Help ensure sustainable service delivery in the face of climate change, financial uncertainty, and economic volatility.

1.2 Scope of the AM Strategy and Roadmap

The Scope of the AM Program includes all the assets owned by the CVRD that support the eight core services outlined below. It also covers assets owned by the Comox Strathcona Solid Waste Management, for which CVRD has administrative responsibility.

Additionally, CVRD oversees two other corporations – the North Island 9-1-1 and the Comox Strathcona Regional Hospital District. The assets of these corporations are not included in this Strategy's scope.

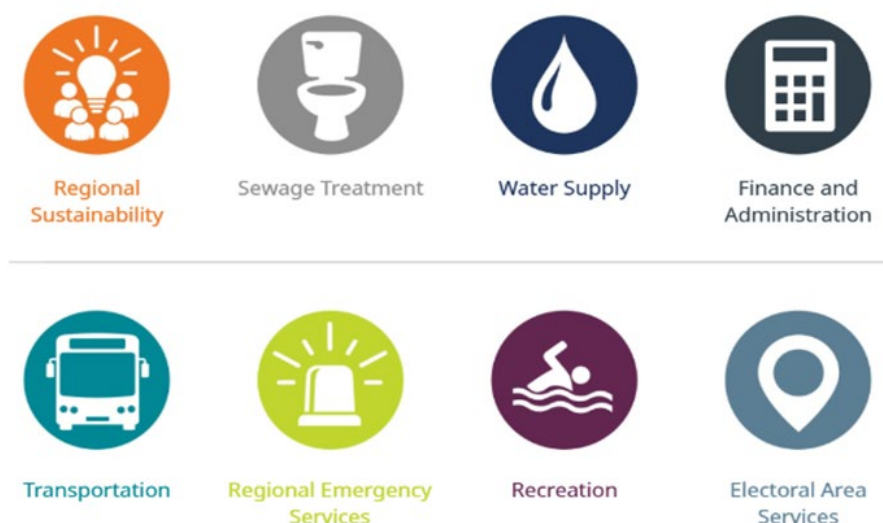


Figure 1: CVRD Core Services

The table below provides an illustrative breakdown of the capital assets by their respective owners. It is not an exhaustive list but serves to demonstrate the ownership relationships.

Table 1: Scope of Asset

Asset Owner (Branch)	Asset Owner (Department)	Tangible Capital Assets (TCA)	
		Core TCA	Non-Core TCA
Engineering Services	Water	Watermains Water Services Valves Hydrants Water Meters Water Treatment Plants Water Pump Stations Reservoirs Dams River Infiltration Gallery SCADA-Hardware	Fleet Equipment Facilities Application/Software
Engineering Services	Wastewater	Water Pollution Control Centre Sewer Treatment Plants Sewer mains Force mains Manholes Sewer Pump Stations Gravity Systems Compost Site King Koho Package Plant Jackson Drive Package Plant SCADA-Hardware	Fleet Equipment Facilities Application/Software
Engineering Services	Solid Waste	Transfer station Gore Cover system Wells Storm Drain - metal Tanks - underground Landfill Cell Leachate Plants Flares Organic Facility Compactor Loaders Excavators	Fleet Application/Software
Community Services	Park	Land Parks Trails Paved Path Natural Assets	Fleet Equipment Facilities Application/Software
Community Services	Fire	Fire Engines Safety Equipment	Fire Halls Fill Stations Equipment IT Fleet Training Buildings Application/Software
Community Services	Recreation	Aquatic Center Exhibition Grounds Curling Center Sports Center	Fleet Tractor IT Application/Software
Corporate Services	IT	Fiber Optic Servers Computers Software/Applications	SCADA Hardware
Planning & Development Services	Facility, Transit & Fleet	CVRD Head Office Facilities Fleet Bus Stops Bus Shelters Transit Exchanges	N/A

In a multi-service organization like CVRD, core and non-core asset classifications are department specific. An asset can be non-core for one department but core to another. This distinction reflects the expertise and primary responsibilities of each department.

Core assets are those that:

- Directly support the department's primary service delivery
- Align with the department's expertise and technical capabilities
- Are actively maintained, monitored, and prioritized by the department

Non-core assets are those that:

- Do not directly contribute to the department's primary service delivery
- Serve a peripheral or support role within the department
- May be better managed or maintained by a department with specialized expertise

To enhance efficiency, economic scale, and specialized oversight, the CVRD aims to centralize the management of non-core assets within corporate departments that have the relevant expertise.

2. Background

2.1 Asset Management Vision

The vision statement is essential to provide a clear direction and purpose for asset management.

The vision of Asset Management in CVRD is to:

"Maximize asset value through a standardized, data-driven, and risk-based asset management framework."

2.2 What is Asset Management

AM is the coordination of organizational activities aimed at maximizing the value of community assets and supporting the achievement of Sustainable Service Delivery and the organization's objectives.

The Asset Management Program encompasses sets of policies, governing principles, strategies, processes, and practices, including essential enablers such as technology tools, data, materials, equipment, and human resources, to effectively manage assets throughout their lifecycle.

By providing a structured framework for managing both engineered and natural assets, asset management enhances decision-making, ensures reliable service delivery, and minimizes lifecycle costs. It also enhances community investments, supports transparent resource prioritization, and improves long-term financial planning.

2.3 Why Asset Management Matters

Looking after the community's assets is a statutory responsibility. The *Community Charter (sec 7)* and the *Local Government Act (sec 185)* outlines the local government's responsibility to steward the public assets within its community.

Over the past decade, provincial and federal governments have introduced incentives and programs to improve local government AM. To qualify for grants, local governments must adopt sound AM practices and report asset data annually. Recently, the Union of BC Municipalities (UBCM) highlighted that few local governments have advanced AM maturity, prompting increased regulation and oversight.

The increasing frequency and severity of climate-related events such as flooding, wildfires, and extreme weather underscore the urgent need for resilient infrastructure. This strategy aims to proactively address these challenges by integrating climate adaptation and mitigation measures into asset management practices.

While the *Local Government Act* shields local governments from certain infrastructure-related claims, negligence claims are not covered. Service delivery risks can be reduced through a strong AM program. Such programs not only support sustainable service delivery and protect local governments from costly legal claims, but they also play crucial roles in reducing greenhouse gas emissions and contribute towards climate change mitigation efforts.

By integrating both mitigation and adaptation strategies into our AM approach, we can ensure that infrastructure is designed, maintained, and

operated in a way that minimizes environmental impact while also strengthening our community's resilience against future climate challenges.

A formalized Strategy is essential to ensure responsible and effective AM implementation. It will enable funding access and enhance community sustainability and resilience.

2.4 What Assets Do We Own

The CVRD manages a range of assets, including land, buildings, equipment, vehicles, infrastructure, parks, and other natural assets. Asset information is currently stored in different systems and formats. Based on 2024 financial statements, tangible capital assets are valued at \$365 million, with 51 per cent (\$186 million) supporting water and wastewater services. Other assets, including land and buildings, provide essential recreational facilities and spaces for community activities in parks and pathways.

Table 2: Tangible Capital Assets

	Cost	Accumulated Amortization	Net Book Value
Land and Improvements *	\$103,984,546	(\$24,726,866)	\$79,257,680
Buildings and Improvements	62,120,520	(28,239,099)	33,881,421
Equipment, Vehicles and Fixtures	28,609,832	(13,561,233)	15,048,599
Water Infrastructure	202,634,606	(49,404,258)	153,230,348
Sewer Infrastructure	70,154,020	(37,598,429)	32,555,591
Asset Under Construction	50,811,921	-	50,811,921
Total	\$518,315,445	(\$153,529,885)	\$364,785,560

* Solid waste infrastructure has been grouped together in the land and improvements categories

A comprehensive understanding of our assets allows us to manage them efficiently, ensuring long-term functionality, maximizing value, minimizing service disruption, and meeting service levels at the lowest cost. It also supports fiscal sustainability to meet current and future community needs.

2.5 Business Context and Analysis

The implementation of an effective AM Strategy will provide a level of mitigation to the business operation risks as shown below:

- **Geographical Diversity.** The compact geographical size of the CVRD, combined with its inclusion of remote areas and islands (Denman and

Hornby), creates unique logistical challenges for AM. In addition, responsibility for waste management infrastructure located in the Strathcona Regional District creates further logistical challenges.

- **Limited Information.** CVRD is still in the early stage of its establishment of an AM program. The understanding of climate change vulnerabilities across the infrastructure portfolio is limited, as well as the condition and longevity of its various assets.
- **Data Gaps and Tool Limitations.** Accurate and complete asset data remains a challenge. Asset inventory data is currently kept in different formats, held by different departments, and mixed with outdated records. Without correct data and tools, decision-making can be hindered, delayed, or compromised, which further disrupts asset management efforts.
- **Limited Funding Resources.** Managing public infrastructure requires adequate resources to fund operations and maintenance of assets, including the renewal or replacement of assets that have deteriorated to where it is no longer cost effective to operate, or reliable enough to provide the service needed. The CVRD faces budgetary constraints that limit its ability to meet AM needs. Balancing investment in new projects, maintaining existing and aging infrastructure, and gaining buy-in from residents' remains challenging.

In a regional district, each service has its own group of participants, that pay for the local service. Each service has its own budget-revenue, and costs cannot be shifted from one service to satisfy another. This structure further constrains funding resources, especially for smaller services where economies of scale are not available.

- **Limited Human Resources.** All corporate initiatives are competing for the same human resources across the organization which can cause delays.
- **Potential Resistance to Change.** As asset management practices evolve, there may be some resistance from staff or stakeholders who are accustomed to traditional approaches or who face challenges adapting to innovative technologies and systems.
- **Rapid Population Growth.** The regional population will reach 92,790 by 2041 based on the 2024 CVRD Housing Needs Report. As communities grow and land use changes, the demand for new and

improved services grows. Rapid growth will increase demand for infrastructure, straining current assets and leading to higher costs.

- **Climate Change and Natural Disasters.** Increased flooding, wildfires, and extreme weather events pose threats to infrastructure in the CVRD. These events can increase repair and maintenance costs and require urgent, unforeseen investment in climate-resilient infrastructure.
- **Regulatory Changes.** Shifts in environmental policies, land-use regulations, or compliance requirements could impact asset management plans. Meeting new regulatory standards may require additional funding and operational adjustments.
- **Economic Volatility.** Economic downturns, fluctuating government revenue, international relationships, and high inflation can impact the cost of infrastructure projects. Rising construction costs may delay asset maintenance and renewal, further exacerbating challenges inherent with aging infrastructure.

The implementation of an effective Asset Management Strategy will also provide opportunities as shown below:

- **Federal and Provincial Funding.** There are opportunities for the CVRD to access provincial and federal funding for infrastructure upgrades, especially those related to sustainability, climate change, and essential public services (e.g. water systems, public buildings). Programs such as the Green Municipal Fund and AM Planning Grant can be explored.
- **Technological Advancements.** Implementing advanced AM technologies, such as GIS, data analytics and predictive modeling, can improve efficiency in managing assets and allocating resources. Automation in monitoring and maintenance can reduce operational costs. Improved technologies or other innovations may create new ways to deliver services with different or less costly infrastructure.
- **Sustainable Awareness.** Growing public awareness in sustainability and environmental stewardship will help the CVRD to implement green technologies, renewable energy solutions, and climate resilient infrastructure into the AM practices.
- **Collaborations with Other Local Governments and Indigenous Communities.** Strengthening relationships with other local

government and indigenous communities, especially with the K'ómoks First Nation, can open up opportunities for joint AM of cultural, natural, and land-based assets. Neighbouring communities may be willing to collaborate and share the cost-of-service delivery in some areas.

2.6 CVRD's Asset Management Journey to Date

CVRD is one of 27 regional districts in B.C. A regional district that covers over 1,725 square kilometres (666 square miles) and serves a population of 72,445 (2021 Census). The CVRD operates approximately 100 individual services, most of which rely significantly on infrastructure to provide the services.

The CVRD is a federation of three electoral areas and three municipalities (Figure 2) providing sustainable services to the area.

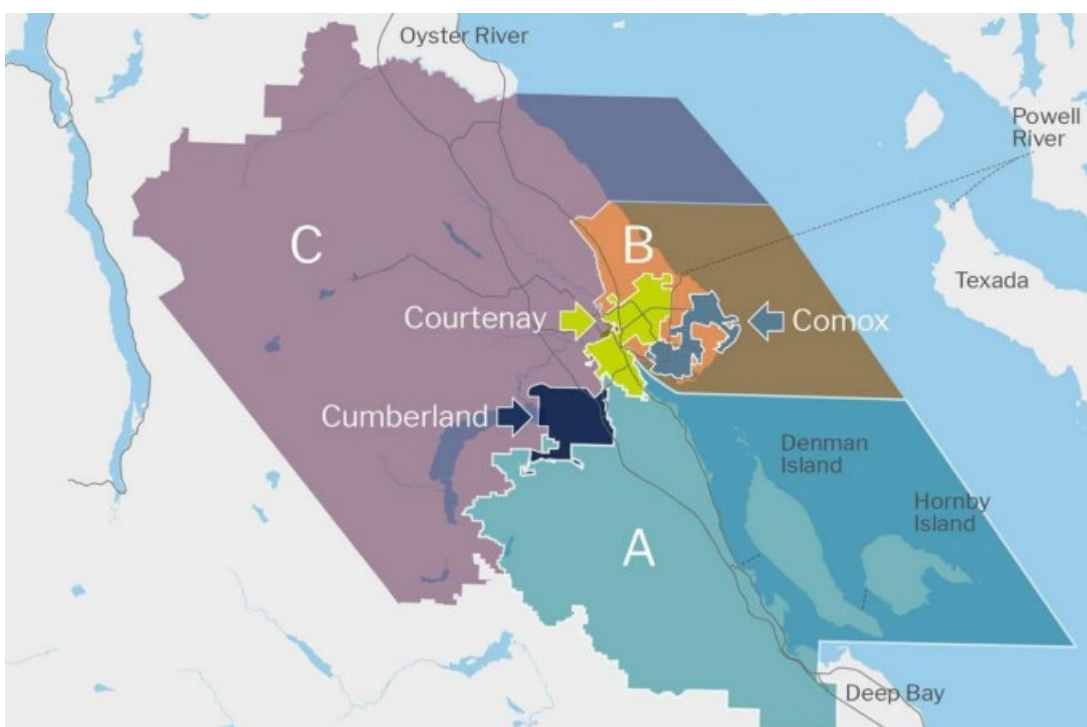


Figure 2: Map of the Comox Valley Regional District

The CVRD also administered the CSWM service (see Figure 3), which serves a combined population of 102,595 across the CVRD and Strathcona Regional District. The service area spans nearly 22,000 km², extending from Kyuquot/Nootka on the west coast of Vancouver Island, across the island of Cortes, Quadra, Denman, Hornby and the Discovery Islands, into a portion of the British Columbia mainland north of Powell River. The CSWM service area is located in the Coast Salish, Kwakwaka'wakw, and Nuuchahnulth territories.

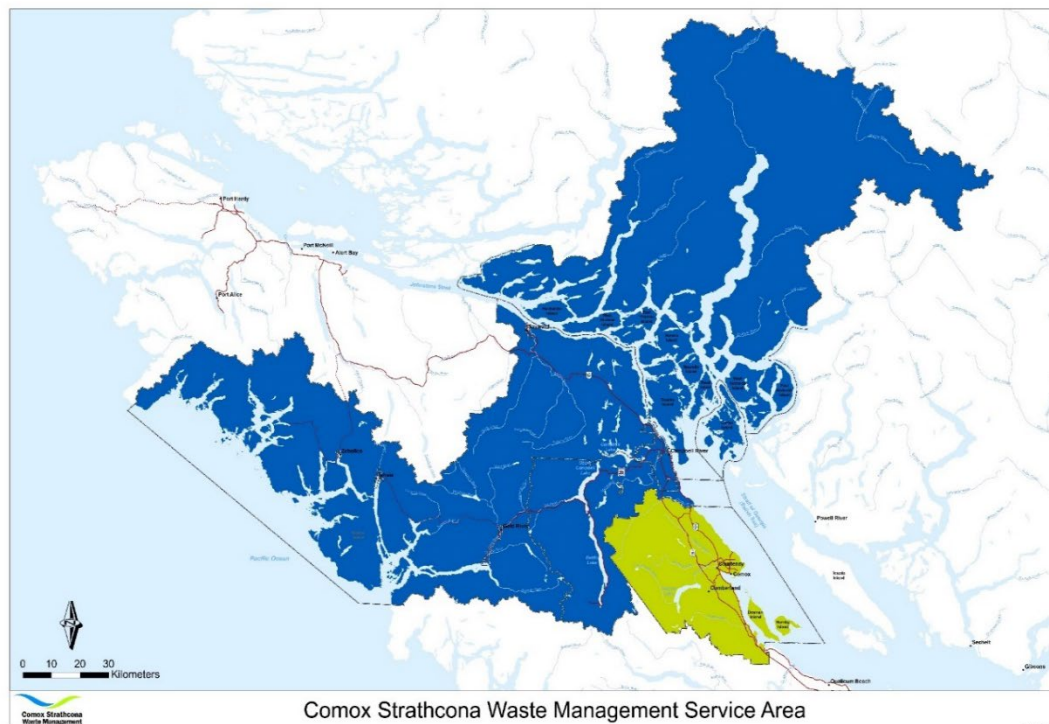


Figure 3: Comox Strathcona Waste Management Service Area

The scope of services provided by the CVRD, and the assets that support these services are outlined in section 1.2.

The CVRD has made some notable progress in developing and enhancing its AM capabilities, establishing a solid foundation for future improvement. Key milestones include:

- Completed three initial AM Plans
- Begun implementation of a corporate wide Computerized Maintenance Management System (CMMS) - CityWorks
- Established the AM Steering Committee
- Board adopted AM Policy
- Exempt Management Team (EMT) approval of this AM Strategy

Similar to other local governments, the CVRD's physical assets are aging, costs are increasing, and risks need to be carefully managed in order to deliver services at agreed levels. Therefore, there is a critical need for the CVRD to prioritize AM, allocate resources effectively, and explore innovative solutions to ensure sustainable service delivery.

2.7 Maturity Assessments

In early of 2025, the AM maturity of the CVRD was assessed at both corporate and department levels using Federation of Canadian Municipalities (FCM) Asset Management Readiness Scale and Asset Management British Columbia (AMBC)'s AssetSMART tool.

2.7.1 Asset Management Readiness Scale (AMRS)

The FCM's AMRS is a tool developed to help local governments measure overall corporate AM maturity through five core competency areas:

- Policy and governance
- People and leadership
- Data and information
- Planning and decision-making
- Contribution to AM practice

Each competency area is measured on a progressive improvement scale from Pre-Level 1 through to Level 5 as follows:

- Pre-Level 1- Working on Level 1
- Level 1- Initial investigation into the competency area
- Level 2- Beginning to integrate processes and systems into daily routines
- Level 3- Integrating processes and systems into daily routines
- Level 4- Regular monitoring and continuous improvement; this level is roughly aligned with the requirements of the ISO55000 standard for AM
- Level 5- Advanced maturity beyond the requirements of the ISO 55000 standard

Table 3: FCM AMRS Competency Areas

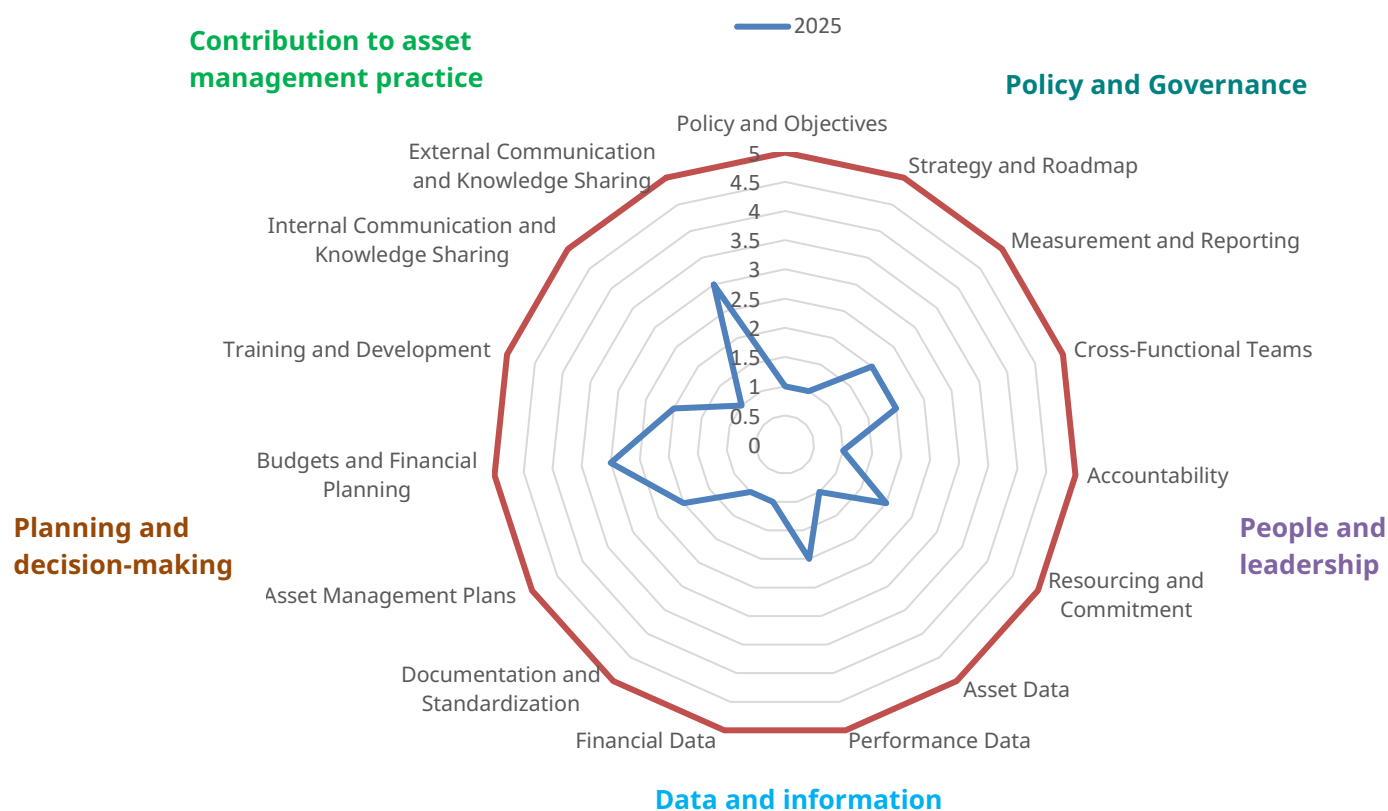
Area	Policy and Governance	People and Leadership	Data and Information	Planning and Decision-Making	Contribution to Asset Management Practice
A	Policy and Objectives	Cross-Functional Teams	Asset Data	Documentation and Standardization	Training and Development
B	Strategy and Roadmap	Accountability	Performance Data	Asset Management Plans	Internal Communication and Knowledge Sharing
C	Measurement and Reporting	Resourcing and Commitment	Financial Data	Budgets and Financial Planning	External Communication and Knowledge Sharing

CVRD has been assessed at Completed Level 1 in overall corporate AM maturity using the AMRS (see Figure 4) with a detailed assessment provided in Appendix A. However, the organization demonstrates more advanced progress in the budgets and financial planning category, as well as in external communication and knowledge sharing areas.

This assessment indicates that CVRD is in the early stages of its AM maturity and highlights key competency areas for improvement. Based on these findings, an implementation plan has been developed and outlined in Section 7 below.

The AMRS is a recognized framework and a requirement for federal grant programs. It is also commonly required for participation in national AM collaboration programs.

Figure 4: AM Maturity Rating Results per AMRS



2.7.2 AssetSMART

AssetSMART is a tool designed to help local governments assess their capacity to manage their assets through four core elements: assets, information, finances and people. Each core element area is measured on a progressive improvement scale from Level 1 through to Level 4:

- Level 1- Very low capacity
- Level 2- Fair capacity
- Level 3- Good capacity
- Level 4- High capacity

Table 4: AMBC-AssetSMART

Capacity Areas			
Assets	Information	Finance	People
Location	Policy	Long Term Financial Plan	People Capacity
Key Attribute Data	Strategy	Revenue	Awareness
Install Date	Level of Service	Reserves	Teamwork
Historic Cost	Risk	Debt	Role
Natural Assets	AMP-Asset Replacement Plans		Decision Making
	AMP-Long Term Capital Plan		
	Climate Change		

CVRD conducted an AssetSmart assessment to evaluate AM maturity at the department level, recognizing that some departments are more advanced than others. The assessment yielded an average score of 2.24 (see Figure 5), with detailed results provided in Appendix A. The Water, Fire, IT, Facilities and Fleet departments demonstrated higher levels of AM maturity, with scores exceeding the corporate average.

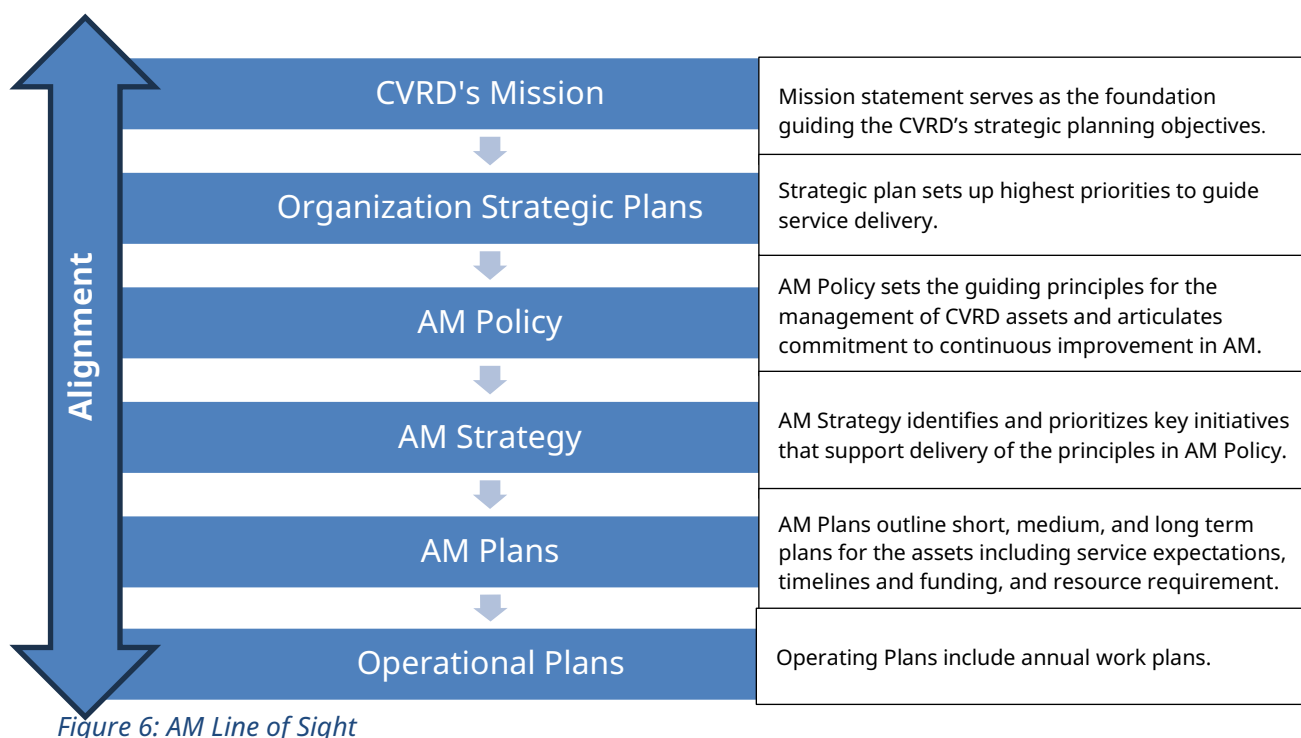
Overall, further development is needed in each category: asset, information, finance, and people. The implementation plan included in Section 7 (below) has incorporated this assessment result.

Figure 5: AM Maturity Rating Results per AssetSMART



3. Strategic Alignment

AM Strategy identifies linkages to other organizational plans, initiatives, and priorities. Figure 6 below is a visual representation of strategic alignment of the CVRD.



3.1 CVRD's Mission

"The Comox Valley Regional District is a partnership of three electoral areas and three municipalities providing sustainable services for residents and visitors to the area. The local government work collaboratively on services for the benefit of those living and visiting the diverse urban and rural areas of the Comox Valley."

The mission serves as the foundation guiding the CVRD's strategic planning objectives. Providing sustainable services in the mission statement has been incorporated into the AM policy as a key principle.

3.2 Strategic Plan

Following the October 2022 local government elections, the CVRD Board reviewed its strategic planning process and defined an approach to address its highest priorities items: social development supports, active transportation, climate crisis response, advocacy and housing.

The Board established strategic drivers to guide service delivery. Those drivers are applied to delivery of the CVRD's core services. During the financial planning process, the Board approved work plans ensuring alignment with the strategic drivers. The CVRD's AM program plays a vital role in supporting the organization's strategic drivers by providing a structured framework and reliable data to guide decision-making.



Figure 7: Strategic Drivers

3.3 Rural Comox Valley Official Community Plan (OCP)

The OCP contains a set of policies that inform community members, developers, real estate agents, approving authorities and elected officials of the goals and objectives of rural residents of the Comox Valley, together with policy direction about what type of future developments are acceptable. The OCP takes into consideration services, infrastructure availability and capacity when designating where, and to what level, future

developments should occur. The OCP further designates properties into different land use categories and outlines policies and objectives for each of these uses.

Protection of the natural environment and building resilience to climate change have been set up as objectives in the OCP. These priorities are also reflected in the AM Policy under the principle of *continuous improvement of Sustainable Service Delivery and the measurement, tracking, and communication of progress*.

3.4 Comox Valley Regional Growth Strategy

The Regional Growth Strategy (RGS) provides a common vision for the entire region through eight goal areas. The RGS is implemented in each community through a local OCP, as well as regulatory tools such as zoning.

The Regional Growth Strategy represents eight goal areas:

- Complete Communities
- Food Systems
- Multi-Modal Transportation
- Health & Wellness
- Environmental Stewardship
- Climate Change
- Local Economy
- Growth Management

Each of these goals have objectives associated with them. For example, under Climate Change, Objective 8-A aims to reduce Green House Gas emissions created by the building sector which will guide AM Strategy to align with the Corporate Energy and Emissions Plan.

3.5 Asset Management Policy

The CVRD's AM Policy is a tool that aims to support the CVRD in achieving its vision and goals by establishing principles for AM. These principles provide direction for developing the AM strategy, plans, actions, and decisions that are implemented at the CVRD so that they are in accordance with AM best practices. It also articulates senior management's commitment to AM and continual improvement of the AM program.

The CVRD's AM program strives to achieve the following goals:

- (1) Decisions about service delivery are prioritized in a clear, consistent, and transparent way based on trade-offs between levels of services, lifecycle cost, and risk.
- (2) Demonstrates organizational alignment and commitment to Sustainable Service Delivery.
- (3) Ensure appropriate information and tools are available, integrated, and used alongside professional judgement to inform decisions.
- (4) Sufficient financial resources are in place to enable Sustainable Service Delivery and continuous improvement in AM.
- (5) Sufficient human resources are in place to enable Sustainable Service Delivery and continuous improvement in AM.
- (6) Allows for continuous improvement of Sustainable Service Delivery and the measurements, tracking, and communication of progress.
- (7) Stakeholders are appropriately engaged in decisions about Sustainable Service Delivery.

The CVRD's AM Policy provides additional details on the principles which make up the CVRD's AM objectives and goals.

3.6 Asset Management Strategy

AM Strategy identifies and prioritizes key initiatives that support the delivery of the AM Policy principles.

An implementation plan has been developed to incorporate the required initiatives to ensure progress is made in achieving the seven principles defined by the AM Policy. This implementation plan will be regularly monitored and updated to acknowledge completed initiatives and modify initiatives as needed to adapt to change in internal and external environments.

3.7 Asset Management Plans

AM Plans provide clear direction on what to do, when to do it, and how much it will cost. The Plans support the implementation of the AM Strategy and Policy, identifies actions for achieving AM objectives, helps plan for and

allocate human and financial resources, and provides the basis for developing the long-term financial plans.

3.8 Operational Plans

Operational Plans include annual work plans, which outline short-term priorities and resource allocation for day-to-day operations. Those plans improve efficiency, support informed decision-making and align operations with strategic goals, helping to ensure the long-term sustainability of services and assets.

3.9 CVRD Documents

A detailed list of CVRD strategies, plans and programs that inform the AM Program are provided in Appendix B.

4. Needs and Expectations of Stakeholders

Stakeholders, both internal and external, are affected by, and therefore have an interest in the management of CVRD's assets. Their need must be understood and addressed for the AM Strategy to be successfully implemented.

The implementation plan includes steps to better understand CVRD stakeholders' needs and expectations related to levels of service and engagement strategies.

A list of key stakeholders has been identified in the table below to facilitate the levels of service discussion and communication plan.

Table 5: List of Key Stakeholders

External Stakeholders	Internal Stakeholders
Residents (taxpayers)	CVRD Board of Directors
Businesses	CSWM Board of Directors
Societies, community groups	Electoral Areas Services Committee
Regulatory agencies	Comox Valley Water Committee
Other local governments	Comox Valley Recreation Commission
Municipal partners	Black Creek-Oyster Bay Service Committee
Service providers and non-profit partners	Sewage Commission
First Nations	Regional Parks and Trails Committee
Suppliers	CAO and Senior Leadership Team
Academics and researchers	Asset Management Steering Committee
Funding bodies	Employees

5. Decision-Making Approach

5.1 Current Decision-Making Approach

It is through the financial planning process and annual budget bylaw that authorization is given to deliver on existing services and advance the Board's strategic direction. Each year the CVRD goes through a multi-staged process to update the financial plan. Senior level management and board decisions related to assets are made at each stage – whether for preventative maintenance, renewal, or the purchase/construction of new assets. The current process considers both verifiable and non-verifiable asset data, including existing asset inventory, informal condition and risk assessment, various assessments and studies. Over the last two cycles, improvements have focused on long term capital plans.

5.2 Ongoing Improvements to Decision-Making Approach

The CVRD is actively enhancing its decision-making processes by embedding more robust AM principles and practice. These improvements align with the AM Policy principles of balanced, evidence- informed, decision- making and continuous improvement.

Key improvements include:

- **Lifecycle Costing:** A practice recently adopted by the CVRD board that sees lifecycle costing incorporated into capital decisions where relevant.
- **Risk Assessment Framework:** Strengthening risk- based decision-making by applying more formalized risk assessments, ensures that asset-related decisions will consider the potential impacts on service delivery, safety, and resilience.
- **Prioritization Framework:** Introducing prioritization frameworks to rank projects based on factors such as criticality, condition, risk, and alignment with strategic objectives. This will support more transparent and effective resource allocation.
- **Integration with AM:** The incorporation of comprehensive data, level of service and prioritization will allow for improved decisions regarding tax dollar allocation.

This Strategy outlines an agile approach where key asset management practices are incorporated with existing processes whenever new information and data becomes available.

6. AM Framework

Industry best practice is used to guide the implementation of the CVRD's AM Program. This includes the consideration of frameworks from organizations such as the FCM and AMBC.

6.1 AM Maturity Assessment

The CVRD utilized FCM's AMRS and AMBC's AssetSMART tool to conduct AM maturity assessments in corporate and department level. The maturity assessment findings can be found in section 2.7 of this Strategy. Recommendations that result from these findings are documented in the Strategy's implementation plan (Appendix D).

6.2 AM Strategy

The FCM has published a best practice guide entitled, *"How to develop an asset management policy, strategy, and governance framework"*. This guide outlines several recommended components of an AM Strategy. The CVRD has used this guide to help formulate and organize this AM Strategy.

6.3 AM Program

The CVRD's AM Program follows the AMBC framework, *Asset Management for Sustainable Service Delivery -A BC Framework* (see Figure 8 below), which is focused on sustainable service delivery with four core elements:

- **People** - The training, skills, expertise, activities, and leadership of staff and elected officials.
- **Assets** - The engineered and natural assets that allow the delivery of services to a community.
- **Finances** - The understanding of long-term costs of capital, operations, and maintenance of engineered and natural assets.
- **Information** - The information you need to make decisions about your services and assets, such as the age, condition, and lifecycle costs of engineered and natural assets.



Figure 8: AMBC Framework

The Framework is based on current international best practices, including the *International Infrastructure Management Manual* (IIMM) and the International Organization for Standardization (ISO) standard for AM (ISO 55000).

7. AM Implementation Plan

The AM Implementation Plan aims to deliver the following initiatives:

- Data Governance Standard
- Asset Inventory
- Condition Assessment Framework
- AM Technology Solution
- Risk Assessment Framework
- Levels of Service Framework
- AM Plans
- Report Cards/Dashboards
- Long-term Financial Plans
- Prioritization Framework
- AM Training
- AM Engagement
- Human Resource Plan
- Documented Workflows/Procedures

The Roadmap for delivering the Implementation Plan has been designed to be achieved in five years and is shown below:

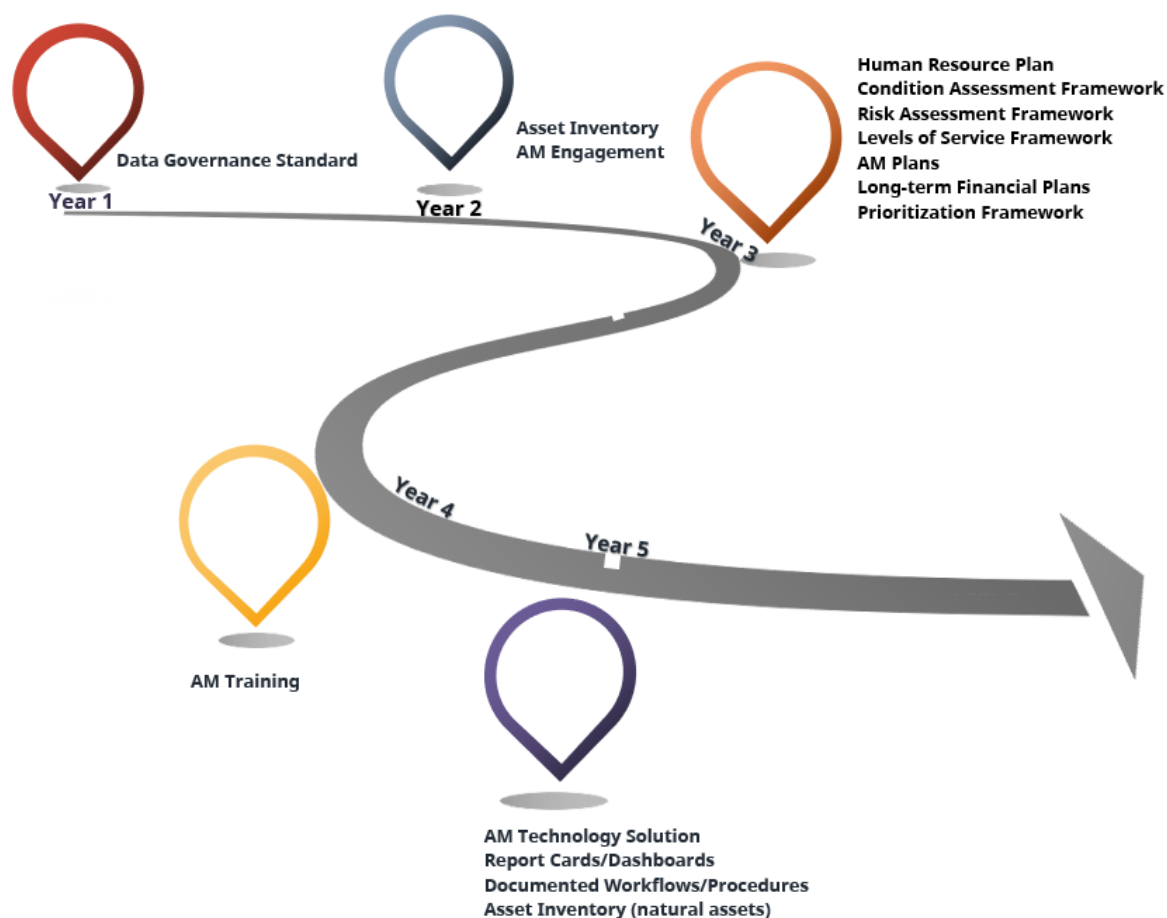


Figure 9: CVRD AM Roadmap

Each initiative moves us closer to achieving the principles of the AM Policy. A detailed checklist showing how each initiative aligns with the AM Policy is provided in Appendix C. An implementation timeline is provided in Appendix D. The associated resource requirements are detailed in Appendix G.

The timeline established in the AM Roadmap sets the corporate deadlines for each initiative. Many of these initiatives require significant lead time and must be initiated well in advance, if not immediately, to ensure they are completed on schedule.

To ensure logical and effective progression, certain initiatives must be completed in sequence. Further details on these dependencies are provided in Appendix E.

7.1 Assets

7.1.1 Develop Data Governance Standard

Objective:

To establish clear guidelines for data management, improving data quality, accessibility, regulatory compliance, and ensuring the accuracy and consistency of organizational asset data.

Key Actions:

- Identify data attributes that need to be tracked for AM purposes, including regulatory compliance requirements, for each asset type
- Identify in what system the asset data needs to be stored
- Develop a corporate asset hierarchy and naming convention
- Develop a means by which the data can be matched through a unique identification number

Success Criteria

- A standardized template, including asset hierarchy and data attributes for asset management purposes, developed as per the implementation schedule
- All applicable regulations related to asset data are identified and documented (e.g. environmental reporting, health and safety, financial accountability, etc.)

7.1.2 Build Corporate Asset Inventory

Objective:

To establish a complete asset inventory including key attributes; To develop and implement practice to see continuous updates to asset inventory to keep it current and accurate.

Key Actions:

- Validate core vs. non-core assets and responsibility
- Develop basic corporate asset inventory
- Make the centralized, digitized corporate asset inventory accessible to all staff
- Identify natural assets and build first generation of natural asset inventory

Success Criteria

- Centralized asset registry is developed
- Roles and responsibilities regarding data management are defined
- Asset data being updated in real time

7.1.3 Conduct Condition Assessment Framework

Objective:

An asset condition assessment framework will allow the condition of all CVRD assets to be evaluated and scored in a consistent manner; and the data to be used to help improve risk and criticality assessments and prioritize asset replacement projects.

Key Actions:

- Define the standards for a condition assessment system
- Conduct condition assessments using industry-standard methods
- Through direct or statistical methods, determine basic condition of all assets

Success Criteria

- Condition assessment framework is developed and condition assessments for highest criticality assets complete with a clear plan for on-going condition assessments to mitigate risk and ensure accurate long range capital planning
- Once collected, condition data is successfully integrated into corporate registry and accessible to key stakeholders
- The most up to date condition data is actively used in capital planning, maintenance prioritization, and risk assessment

7.1.4 Develop AM Technology Solution

Objective:

Suitable software systems are in place to develop and maintain a complete, accurate and centralized asset inventory, as well as to manage operations and maintenance activities to support decision making.

Key Actions:

- Build a technology plan to prioritize and deliver software projects
- Optimize existing software (Cityworks is currently used for asset maintenance and data collection)
- Transition existing ad-hoc AM Technology towards Cityworks
- Optimize existing software: Esri ArcGIS for asset data storage
- Optimize existing software: Survey123 for Parks asset data storage
- Optimize existing software: FirePro for fire department asset maintenance
- Establish Cityworks training coordination group and develop a technical Cityworks training plan on asset data management

- Onboard appropriate departments to Cityworks and Esri ArcGIS
- Prepare a needs assessment for asset management and decision support software
- Build a business case for fleet support software
- Phased implementation of approved software

Success Criteria

- All departments use Cityworks as Computerized Maintenance Management System (CMMS) consistently
- Applicable staff complete the Cityworks training program (with an optimal number of super users in each department)
- Single source of truth developed for all asset data

7.2 Information

7.2.1 Develop Risk Assessment Framework

Objective:

Apply a consistent risk assessment framework to help in setting of maintenance and capital priorities, and to support operational and capital replacement decision-making.

Key Actions:

- Define risk profiles with the likelihood and consequence of failure for all major assets outlined
- Integrate risk framework into all AM practices and plans
- Define corporate critical assets based on criticality
- Rank assets by criticality for decision-making on resource allocation
- Link the risk profile identified into the decision support system once selected and implemented

Success Criteria:

- Risk assessment framework is developed
- Risk data is successfully integrated into corporate registry and accessible to key stakeholders
- Risk data is actively used in capital planning and maintenance prioritization

7.2.2 Develop Levels of Service Framework

Objective:

Align service with community needs, regulatory requirements, and organizational goals.

Key Actions:

- Identify the specific services to be included in the framework
- Define levels of service measurements
- Consult with staff, service providers, and elected officials to identify current levels of service
- Consult with staff, service providers, elected officials, and public where appropriate to set up objective levels of service
- Conduct a gap analysis to compare current vs. objective levels of service
- Establish implementation plans to mitigate gaps identified
- Align levels of service with asset lifecycle planning, maintenance schedules, and long-term financial planning
- Include levels of service requirements into AM technology solution

Success Criteria:

- Levels of service framework is developed
- Levels of service for technical and regulatory requirements are documented for all core services
- Levels of service is actively used in budgeting, capital planning, and asset management decisions
- Service expectations are clearly communicated to internal and external stakeholders

7.2.3 Develop AM Plans

Objective:

To create detailed plans outlining how assets will be managed to achieve service delivery objectives within available resources.

Key Actions:

- Use asset inventory, condition assessment, levels of service, risk assessment, and operational and lifecycle costs to create department specific management plan

- Develop prioritized capital works, renewal programs, and maintenance strategies
- Implement continuous improvement processes for refining and updating AMPs based on performance and feedback

Success Criteria

- Department asset management plans are developed and kept current

7.2.4 Build Asset Report Cards/Dashboards**Objective:**

To serve as a communication and decision-making tool that provides a clear and visual representation of asset conditions, risks, and replacement costs.

Key Actions:

- Define the audience
- Define measurable indicators such as condition, risk, remaining useful life, replacement costs, funding gap, regulatory compliance
- Establish regular update cycle (e.g. annual report cards, real-time dashboards)
- Assign responsibilities for data collection, validation, and reporting
- Continuously refine reports based on feedback

Success Criteria:

- The reports/dashboards reflect all defined indicators with consistent application across assets
- Positive feedback from stakeholders on the relevance and usefulness of the report cards/dashboards
- Timely update of report cards/dashboards as per the defined cycle

7.3 Finances**7.3.1 Develop AM Long Term Financial Plans****Objective:**

Develop long-term financial plans to ensure that sufficient and sustainable financial resources are available to replace or renew infrastructure assets to meet asset lifecycle needs.

Key Actions:

- Predict the future costs of asset management, including capital, operating and maintenance, energy and cost of carbon, upgrades, renewals, and disposal
- Funding analysis (e.g. projected cost, gaps, options, risks, etc.)
- Develop asset replacement funding strategy (e.g. reserve, tax rate, debt, grants, user fee, sales revenues, etc.)
- Assess how financial needs and forecasts address service and levels of services needed
- Develop a 10–20-year financial forecast based on asset lifecycle requirements and define levels of service
- Develop financial models that consider different scenarios (best-case, worst-case)
- Align long-term financial plans with capital works programs and asset renewal schedules
- Align long-term financial plans with Fiscal Framework

Success Criteria

- Long-range financial plans are completed including detailed and quantifiable data
- Decision makers understand the needs and impacts

7.3.2 Develop Prioritization Framework for Annual Budgeting**Objective:**

To create a structured, transparent, and data-driven approach to allocating financial resources efficiently.

Key Actions:

- Develop business case template for describing funding needs, options, impacts, outcomes, and integration opportunities
- Analyze, review, evaluate and decide on preferred options
- Develop framework, model, process, decision criteria matrix, weighting, and scoring
- Set criteria for asset investment, renew, and replacement

Success Criteria

- The prioritization framework is developed and includes clearly defined and appropriately weighted criteria

7.4 People

7.4.1 Establish AM Training Plan

Objective:

To ensure appropriate staff have the necessary skills and knowledge to implement and sustain effective asset management practices in their area of work.

Key Actions:

- Conduct a skill set analysis to identify training requirements
- Review AM training opportunities through credible industry providers (e.g. National Asset Management Standards, AMBC, Canadian Network of Asset Managers, FCM)
- Align training opportunities with relevant positions in consultation with department managers
- Provide AM training for staff at all levels, from front-line workers to senior leadership

Success Criteria

- AM training plan is completed and implemented

7.4.2 Establish AM Engagement Strategy

Objective:

To ensure clear, consistent, and effective communication about asset management strategies, priorities, and benefits to all stakeholders. To facilitate change management and improve transparency and accountability.

Key Actions:

- Develop an AM awareness program for asset management implementation
- Develop communication materials
- Select communication channels for internal, external, board, and public where appropriate
- Assign roles and responsibilities for communication efforts
- Track engagement level, feedback, and effectiveness of communication methods

Success Criteria

- A clear and detailed communication plan is created and implemented
- Stakeholders demonstrate improved understanding of AM initiatives and show support through participation and feedback

7.4.3 Develop AM Human Resource Plan

Objective:

To ensure CVRD has the right people, skills, and structure to support effective AM program.

Key Actions:

- Establish an appropriate number of dedicated AM roles at the Branch level
- Clearly outline AM-related responsibilities across departments (e.g. finance, engineering, operations, IT)
- Establish a plan to shift non-core asset (e.g. fleet, facility, IT) from individual departments to corporate departments
- Evaluate whether current staffing aligns with AM needs
- Explore opportunities for reallocation, upskilling, or hiring to fill key gaps
- Consider outsourcing specialized AM tasks where needed
- Establish cross-functional AM teams to improve coordination
- Incorporate AM into the job description for all applicable positions

Success Criteria

- Human resource plan prepared by each department by considering AM-related responsibilities for next five years in 2025/2026 budget cycle
- All applicable job descriptions include AM-related duties
- Hiring of additional FTEs to address staffing gaps for AM Strategy implementation include item such as, but not limited to:
 - Information Technology
 - Project Management – dedicated project support to oversee the implementation of CityWorks
 - CityWorks Support- to provide ongoing system support for departments
 - GIS - assist to onboarding all departments onto CityWorks
 - Branch AM Specialists – will support asset inventory development and management, conduct condition and risk assessments, support development of levels of service, assist with process mapping, etc.
 - Facilities & Fleet Coordinator- to centralize most of the facility and fleet management

7.4.4 Documented Workflow and Procedures

Objective:

To ensure that AM is optimized through standardized processes, procedures and work practices.

Key Actions:

- Develop processes for annual work plan
- Develop processes for building of AMPs
- Develop processes for critical business activities (e.g. business case, reporting)
- Develop audit and continuous improvement strategies
- Identify the appropriate roles and responsibilities for the processes

Success Criteria

- Written procedures for annual work plan development and approved by key stakeholders
- Written procedures for asset management plan development and approved by key stakeholders
- Audit and continuous improvement strategy approved by key stakeholders

8. AM Roles and Responsibilities

For an AM program to be successful, it requires strong collaboration and support across all levels of the organization, from operational teams to governance, and across all departments.

8.1 Implementation

The roles and responsibilities for AM Program are set out in the CVRD's AM Policy.

The diagram below shows the governance structure for the implementation of the AM program.

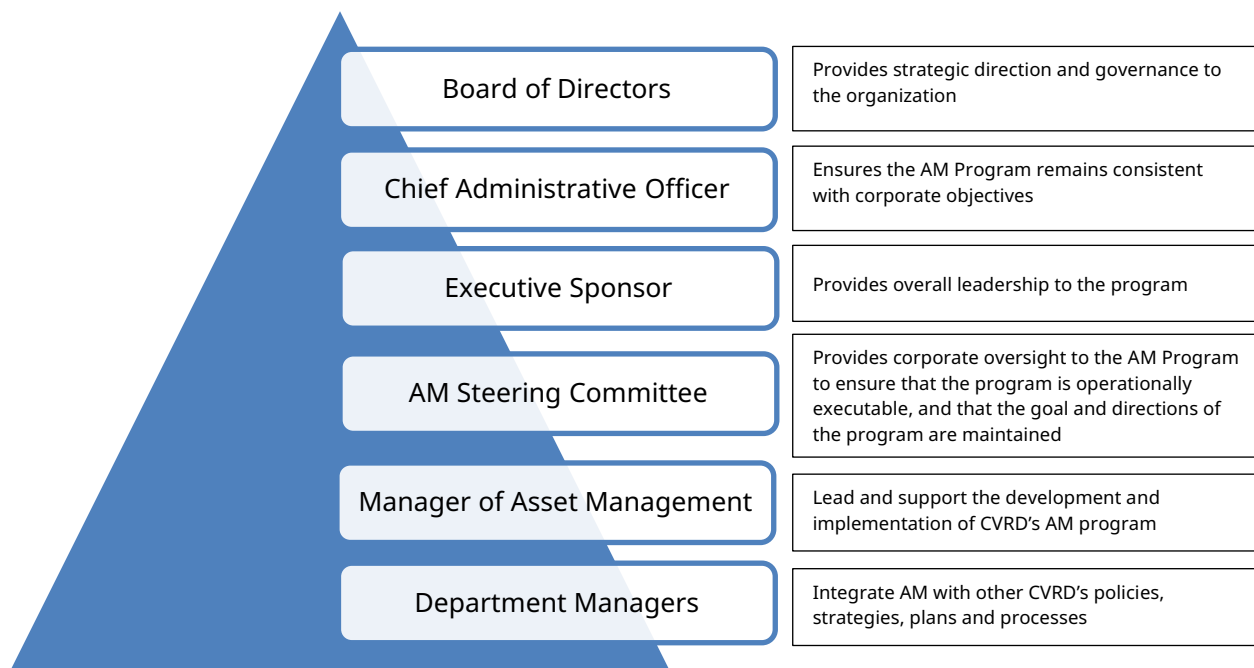


Figure 10: CVRD Governance Module -Implementation

8.2 Post-Implementation

The diagram below shows the governance structure once the AM program has been implemented.

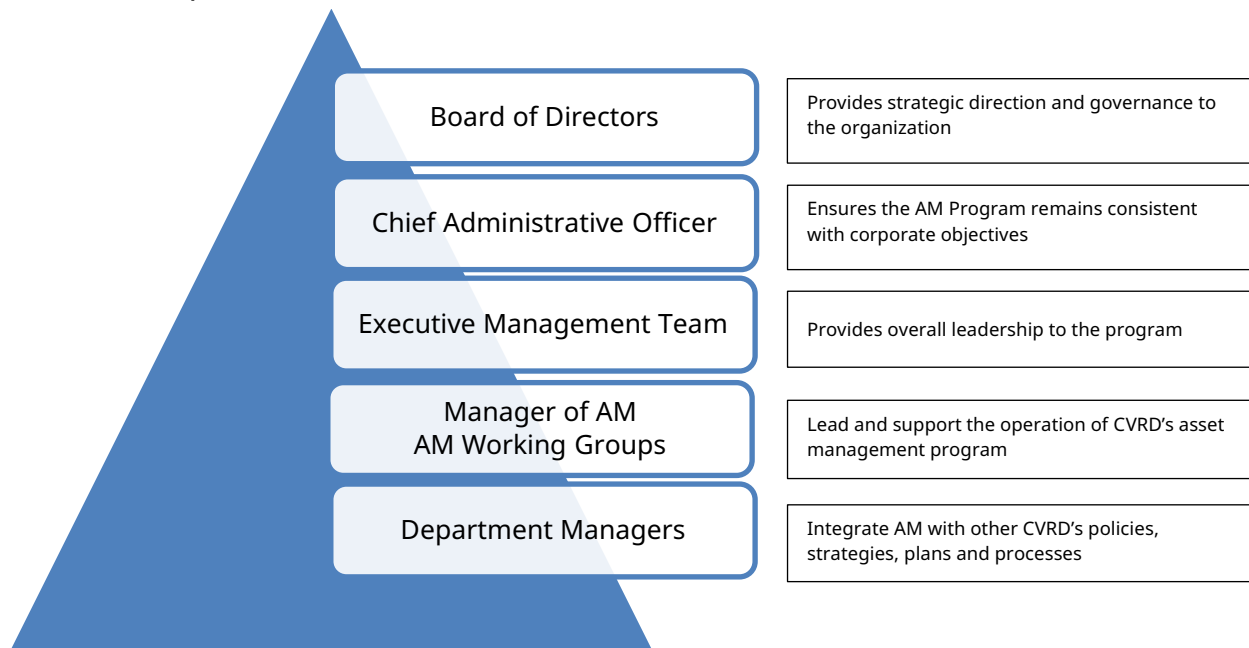


Figure 11: CVRD Governance Module - Post-implementation

9. AM Strategy Progress Reporting

Appendix D of this Strategy details specific initiatives for the CVRD to undertake over the life of the implementation. Progress reporting on stages of the implementation will be reported to the AM Steering Committee on a regular basis.

10. AM Strategy Risk Assessment

Implementing an AM Strategy comes with inherent risks that can hinder its success and effectiveness. Some risks have been identified as follows:

- Assets
 - Failure to prioritize high-risk assets
 - Misidentifying or undervaluing asset risk
 - AM Technology Solution not properly planned or implemented
- Information
 - Unidentified levels of service
 - Failure to track performance
 - Implementing too many initiatives or unrealistic timelines, causing items to fall out of sequence
 - Progress on improvement of AM practices is too slow
 - Climate change impacts not appropriately assessed, causing unforeseen challenges
- Finances
 - Lack of long-term financial plan greater than five years
 - Resources and funding requests not approved
 - Asset replacement funding is not sustainable
- People
 - Lack of Board support
 - Failure to get EMT's approval for necessary resources
 - Inadequate communication within the community
 - Disconnected organizational effort
 - Lack of staff buy-in
 - Staff do not have capacity and/or capability
 - Unclear roles and responsibilities
 - High rate of outsourced asset management

Detailed risk assessment with likelihood, impact, and mitigation options are included in Appendix F.

11. Continual Improvement, Monitoring and Innovation

AM is a continuous improvement process, and processes are more likely to improve when results are measured. Appropriate reporting requirements and compliance will be implemented to show the CVRD's commitment to stewardship of its public assets within the community.

Performance indicators are required to ensure alignment with the objectives and key principles of the AM Program. Some examples of potential performance indicators are as follows:

- **FCM's Asset Management Readiness Scale** – Scoring for each competency area will be updated yearly and compared to the original score found in the maturity assessment section of this strategy.
- **Average Physical Condition by Asset Class** - The average physical condition of CVRD's assets will be reported on an annual State of Assets Report and tracked over time to assess progress in understanding the overall physical condition of CVRD's assets.
- **Greenhouse Gas Emission Reductions**- As part of its efforts to curb the impacts of climate change and be a climate leader in the Comox Valley, the CVRD board adopted an updated Corporate Energy and Emission Plan in 2023. The plan charts a pathway to reduce corporate greenhouse gas (GHG) emissions by 50 per cent by 2030 and to achieve net zero carbon emissions by 2050. GHG emissions are reported to the board annually.
- **Financial Sustainability Ratios** - The Province of BC has identified the following two sustainability indicators as the most important measures of local financial sustainability to sustain service and infrastructure and has indicated that these will be a requirement of future LDGE reporting.
 - **Operating Surplus Ratio:** This is an indicator of CVRD's financial capacity to fund existing assets. The goal is to bring between 0% and 15% more in revenue than operating costs each year (minimum benchmark of 0%).
 - Numerator – use only major controllable revenues (exclude land sales as they are not sustainable over the long term in the replacement of asset, grants from senior governments, and minor revenues like donations).

- Denominator- use total expenses but replace amortization cost (historical cost) on the Statement of Operations with the replacement value of amortization cost (fair value).
- **Asset Sustainability Ratio:** This is a measure of the progress being made on the renewal of existing assets. It is the ratio of annual actual capital expenditures on the renewal of assets and additions, as reported in audited financial statements, compared to the AMPs requirement for annual capital renewal, with a goal to spend between 90% to 110% of all AMPs. This ratio takes time to build and will be measured and reported on a 5-year moving average (minimum benchmark 90%).
- **Statistic Canada's Core Public Infrastructure Survey** - CVRD must submit a more detailed AM survey through Statistic Canada every two years. The survey collects statistical information on the asset, condition, performance and AM strategies of Canada's core public infrastructure assets owned or leased by the various levels of government and indigenous entities.
- **BC Local Government Data Entry** - The local government data entry (LGDE) system provides a standardized financial measure of local government activities over the previous fiscal year in the Province of BC. The CVRD must submit data that is based on its audited Financial Statements. To supplement this information, local governments are asked to submit AM information, including physical condition, asset capacity, functional condition, useful life, average age and replacement value. Some of those fields are currently optional but are expected to become mandatory in the near future. CVRD will compile and submit this information annually. Based on Union of British Columbia Municipalities (UBCM) and the Ministry of Municipal Affairs presentation at the AMBC 2024 annual conference, long-term financial plans are required to be integrated into LGDE by 2030.
- **Community Building Fund Agreement** - The UBCM provides reporting on the status of AM practice in BC, which is a requirement under the Canada Community Work Fund (CCWF) Agreement. Local governments, including CVRD, are required to implement and improve AM practices in order to receive funding under this agreement.

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Definitions

- **Asset:** an item, thing or entity that has potential or actual value to an organization.
 - **Engineered Assets:** are owned, bought or constructed by the CVRD.
 - **Natural Assets:** are naturally occurring features which perform or support CVRD service delivery. They may include artificial features that mimic naturally occurring features, such as the watershed, ditches, ponds and wetlands. Natural assets may or may not be owned by the CVRD.
 - **Intangible Assets:** also provide value to the organization and include people, processes, relationships, culture, reputation, or economic context.
- **Asset Hierarchy:** a framework for segmenting an asset base into appropriate classifications.
- **Asset Inventory:** a record of assets that includes unique identifying information and key attribute data such as installation or construction date, size, material, location and any other relevant operational and technical information.
- **Asset Management:** the coordinated activities to deliver value to the community from its assets in the achievement of sustainable service delivery and organizational objectives.
- **Asset Management Program:** the set of policies, governing principles, strategies, processes, practices, and enablers (such as technology tools, data, materials, equipment, and human resources) that are applied to manage assets through their lifecycle.
- **Asset Management Policy:** the asset management policy is a document that formalizes corporate commitment to asset management. The policy broadly outlines the principles and guides the development and implementation of asset management across the organization in a systematic and coordinated way, consistent with the organization's plans.
- **Asset Management Plans:** a plan developed for the management of infrastructure assets that combines multidisciplinary management strategies (including technical and financial) over the lifecycle of the asset in the most cost-effective manner to deliver a specified level of service. It specifies the activities, resources and timescales required for individual assets (or asset grounds) to achieve the organization's asset management objectives. A significant component of the plan is therefore a long-term

program of works and cash flow projection for the activities. Each plan will vary in complexity depending on the asset group it pertains to.

- **Asset Management Readiness Scale:** a framework tool designed by the Federation of Canadian Municipalities to help local governments measure their progress in asset management across five key competency areas.
- **Asset Management Steering Committee:** a group of individuals, that decides on the priorities or order of business or an organization and manages the general course of its operation. The steering committee provides direction and support to the asset management team through the delivery of the asset management implementation plan.
- **Asset Management Strategy:** a high-level plan that outlines how an organization will manage its assets to achieve its strategic objectives. It includes the principles, policies, and goals that guide asset management activities.
- **Asset Type:** a specific grouping of assets with shared characteristics and performance expectations.
- **Climate Change:** climate change refers to changes over a long period of time in the average weather conditions of a region, such as its typical temperature, rainfall or snowfall, and other measure of climate such as wild frequency and speed.
- **Condition Assessment:** a systematic process used to evaluate the current state of infrastructure assets. This involves inspecting, testing, and analyzing assets to determine their operational status, performance levels, and potential future risks.
- **Computerized Maintenance Management System (CMMS):** software that centralizes maintenance information, helps teams schedule work orders, gauge parts and supplies inventories, and make informed maintenance decisions. A CMMS helps front-line workers execute work orders. It helps management plan, schedule, and report on work being done. It allows leadership to create forecasts as well as report back to completions, compliance, audits, or other maintenance KPIs.
- **Critical Asset:** assets for which the financial, business or service level consequences of failure are sufficiently severe to justify proactive inspection and rehabilitation. Critical assets have a lower threshold for action than non-critical assets.
- **Disposal:** actions necessary to decommission, dispose, or repurpose assets that are no longer required.
- **Fiscal Framework:** refers to a set of policies, rules, and principles that guide how a government or organization manages its revenues, expenditures,

borrowing, and overall financial strategy over a given period. It provides a structured approach to budgeting, financial planning, and sustainability.

- **Governance:** governance determines who has power and accountability, who makes decisions, and how other players make their voices heard.
- **Levels of Service:** service level delivered to the public by the CVRD. This can take the form of the selection of services that are provided, the standard of infrastructure in place, or the standard to which an asset is maintained. The desire for a particular level of service will directly affect utility user rates or taxation.
- **Lifecycle:** a series of stages through the age of an asset that characterizes the ability of the asset to meet an expected levels of service and retain its identity as an asset.
- **Lifecycle Cost:** costs associated with an asset from identification of need until disposal including costs associated with design, construction, acquisition, operations, maintenance, energy, and cost of carbon, upgrades, renewals, and disposal. Costs may be direct or indirect.
- **Linear Asset:** An asset inventoried by length, typically as part of an interconnected system or network such as watermain or sewer pipe. A managed asset often represented by a point, line, or polygon in GIS with a spatial location.
- **Long-term Financial Plan:** a plan that balances the required costs and funding sources to meet infrastructure and service needs, over a minimum of ten years.
- **Maintenance:** all actions necessary for retaining as asset as near as practicable to its original condition but excluding rehabilitation or renewal.
- **Official Community Plan:** a key document that outlines the long-term vision and objectives for a community's development. It serves as a guide for local government decision-making on land use, housing, transportation, infrastructure, and environmental protection.
- **Renewal:** works to upgrade, refurbish or replace existing facilities with facilities of equivalent capacity or performance capability.
- **Replacement:** the complete replacement of an asset that has reached the end of its life, so as to provide a similar, or agreed alternative, level of service.
- **Risk:** a chance of an event occurring that could have a negative impact; it is measured in terms of a combination of the likelihood of an event and its consequences. Consequences may affect the environment, community

(social), service delivery, lifecycle cost, strategic and operational objectives, or ability to fulfil regulatory requirements.

- **Risk Assessment:** a systematic process used to identify, evaluate, and prioritize potential risks that could impact an organization's assets. This involves analyzing the likelihood and consequences of various risk events, such as equipment failure, natural disasters, or cyber-attacks.
- **Stakeholders:** includes but not limited to CVRD residents, elected officials, community partners (such as neighboring municipalities, nations, and non-profit partners), staff, and organizations that affect or are affected by asset decisions.
- **Sustainable Service Delivery:** providing the desired services, at the desired levels, to the appropriate people at the right time in the most effective and responsible manner possible.
- **Tangible Capital Asset (TCA):** in accordance with PSAB 3150.05, tangible capital assets are non-financial assets having physical substance that: i) are held for use in the production or supply of goods or services, for rental to others, for administrative purposes or for the development, construction, maintenance or repair of other tangible capital assets; ii) have useful economic lives extending beyond an accounting period; iii) are to be used on a continuing basis; and iv) are not for sale in the ordinary course of operations.
- **Useful Life:** useful life is the estimate of the period over which the owner expects to use the asset. For a tangible capital asset, it is the shortest of the physical, technological, commercial and legal life. The physical life of an asset may extend beyond its useful life.
- **Vertical Asset:** An asset inventoried by item (not by length), such as a treatment plant, lift station, or recreation centers.

Asset Management Readiness Scale

Municipal Asset Management Program



Asset Management Readiness Scale Assessment Tool

Policy and governance



Policy and governance: By developing this competency, your organization is putting in place policies and objectives related to asset management (AM), bringing those policies to life through a strategy and roadmap, and then measuring progress and monitoring implementation over time.

Note: To achieve each level, you must meet every requirement of each level before it.

Current State

Outcomes: Select the outcomes that your organization has achieved.										
Outcome areas		Level 1		Level 2		Level 3		Level 4		Level 5
A: Policy and Objectives	☒	Senior management is committed to formalizing an AM program .	☒	We have drafted an AM policy .	☒	We are starting to use our AM policy to guide our actions.	☐	We manage assets and services in accordance with our AM policy and organizational objectives.	☐	We continue to validate and refine our corporate, service and AM objectives based on the evolving needs of our community.
	☐		Senior management and council have endorsed the AM policy .							
Please provide notes that describe how you have achieved your current level	There is strong corporate support and backing from senior management in reinstating the asset management AM Policy is set to be adopted by the CVRD Board and CSWM Board in early 2025. Staff have already begun aligning their activities with the draft policy.									

Current State
1

Asset Management Readiness Scale Assessment Tool

Policy and governance



Current State

Outcomes: Select the outcomes that your organization has achieved.										
Outcome areas		Level 1		Level 2		Level 3		Level 4		Level 5
B: Strategy and Roadmap	☒	We have identified the benefits that we want AM to deliver, and the benefits support organizational objectives.	☐	We have a strategy for our AM program .	☐	We have a roadmap that details the actions for implementing our AM strategy over the next 3 to 5 years.	☐	We are achieving our AM policy objectives. The necessary workflows, documents, and reporting tools are in place.	☐	We follow our roadmap and continually improve our AM practices.
				We have a draft roadmap that outlines our approach for the next 1 to 3 years.				We update our roadmap to address evolving needs.		We document improvements to our AM practices.
Please provide notes that describe how you have achieved your current level	We have identified the benefits outlined in the AM policy and are currently working on the AM Strategy and Roadmap for the next three to five years.									

Current State
1

Asset Management Readiness Scale Assessment Tool

Policy and governance



Current State

Outcomes: Select the outcomes that your organization has achieved.										
Outcome areas		Level 1		Level 2		Level 3		Level 4		Level 5
C: Measurement and Monitoring	☒	We have identified short-term actions that will demonstrate early progress on AM.	☒	We are collecting baseline data on our current AM practices.	☐	We have established performance measures to monitor our asset management progress, outcomes, and the benefits to our community.	☐	We use performance measures to monitor AM progress, outcomes, and benefits.	☐	We monitor performance and use the feedback to prioritize and make ongoing refinements and improvements to AM practices.
Please provide notes that describe how you have achieved your current level	An AM Steering Committee is in place, and staff are actively engaged in AM training. Short-term actions, such as building assessments for recreation, fire hall and community centers, have been identified to advance AM. Baseline data has been collected or is currently being gathered.									

Readiness level (automatic)	Working on Level 1	Completed Level 1	Completed Level 2	Completed Level 3	Completed Level 4	Completed Level 5
		☒				

Current State
2

Asset Management Readiness Scale Assessment Tool

People and leadership



People and leadership: By developing this competency, your organization is setting up cross-functional teams with clear accountability and ensuring adequate resourcing and commitment from senior management and elected officials to advance asset management.

Note: To achieve each level, you must meet every requirement of each level before it.

Current State

Outcomes: Select the outcomes that your organization has achieved.						
Outcome areas	Level 1	Level 2	Level 3	Level 4	Level 5	
A: Cross-functional Teams	☒ We have identified the representation we need on our cross-functional AM team .	☒ We have a cross-functional AM team* that guides the planning and implementation of our AM program .	☐ Our AM team* works within our organization to lead, communicate, and support AM improvements and organizational changes.	☐ Our AM team* is permanent and tasked with guiding and supporting AM across the organization on an ongoing basis.	☐ Our AM team* guides and supports the ongoing improvement of AM within the organization.	
Please provide notes that describe how you have achieved your current level	CVRD's Manager of Asset Management started in October 2024, is leading program implementation with support from the AM Steering Committee. A proposed AM Business Analyst position is included in the 2025 budget cycle. Key governance initiatives are underway, including the AM Policy (set for board adoption in early 2025), the AM Strategy (to be drafted in 2025), and condition assessments for recreation facilities, fire halls, and community centers, scheduled for completion in 2025.					
*Note: Larger organizations may have both an AM team responsible for implementation and an AM steering committee to provide direction and oversee the work. Smaller organizations may group these functions together. This outcome may be better suited to an AM team or an AM steering committee, depending on the organization. In some small communities the AM team may be as few as two people.						

Current State
2

Asset Management Readiness Scale Assessment Tool

People and leadership



Current State

Outcomes: Select the outcomes that your organization has achieved.										
Outcome areas		Level 1		Level 2		Level 3		Level 4		Level 5
B: Accountability	☒	We have a champion who has been tasked with planning for our AM program.	☐	Our AM team* has a documented mandate to develop our AM program, which is outlined in a terms of reference and a one- to three-year roadmap.	☐	Our AM team* is accountable for implementing our AM program.	☐	We have operationalized AM roles and responsibilities across our organization.	☐	We document changes to AM roles and responsibilities as needed to support our evolving requirements.
	☒		☒	Our AM team is accountable to senior management and council.	☐	AM roles and responsibilities are included in staff job descriptions.				
Please provide notes that describe how you have achieved your current level	The CFO and GM of Engineering Services serve as the Executive Sponsors of the AM Program. The AM Steering Committee provides direction and oversight, while the Manager of Asset Management is accountable to senior management and AM Steering Committee for the program. The AM roadmap will be integrated into the AM Strategy, and AM roles and responsibilities will need to be coordinated with HR for inclusion in staff job descriptions.									

Current State
1

Asset Management Readiness Scale Assessment Tool

People and leadership



Current State

Outcomes: Select the outcomes that your organization has achieved.										
Outcome areas		Level 1		Level 2		Level 3		Level 4		Level 5
C: Resourcing and Commitment	☒	Council knows that resources must be dedicated to exploring the requirements for AM and for drafting an AM roadmap .	☒	Council demonstrates buy-in and support for AM and allocates resources (funding or staff time) to further develop the AM program .	☐	Council champions AM as a core business function and has approved funding to continue AM roadmap activities.	☐	Council funds ongoing AM monitoring and enhancement.	☐	The AM team measures and monitors progress.
										Council demonstrates commitment to ongoing improvement of AM practices.
<i>Please provide notes that describe how you have achieved your current level</i>	The Board has supported studies and the Manager of Asset Management position to advance the AM program.									

Readiness level (automatic)	Working on Level 1	Completed Level 1	Completed Level 2	Completed Level 3	Completed Level 4	Completed Level 5
		☒				

Current State
2

Asset Management Readiness Scale Assessment Tool

Data and information



Data and information: By developing this competency, your organization is collecting and using asset data, performance data and financial information to support effective asset management planning and decision-making.

Note: To achieve each level, you must meet every requirement of each level before it.

Current State

Outcomes: Select the outcomes that your organization has achieved.						
Outcome areas	Level 1	Level 2	Level 3	Level 4	Level 5	
A: Asset Data	☒	We have asset inventory data , including approximate quantities of assets within most asset groups.	☒	We have a basic inventory of most critical assets , including information on general asset properties such as size, material, location and installation date.	☐	We have a consolidated, basic inventory of all assets.
	☐		☐	We have defined life cycle investment requirements for critical assets .	☐	We have expanded inventory data for some assets.
	☒	We have some anecdotal information on asset condition. Some age information exists.	☒	We are moving our data to a centralized location for use by the AM team (note: this does not require AM software).	☐	We have standardized condition rating systems defined for most asset groups.
	☐		☐	We have defined critical assets and have some information on asset condition for these assets.	☐	We have asset condition information on all critical assets .
<u>Please provide notes that describe how you have achieved your current level!</u>	Water, wastewater, and solid waste have completed inventories and condition assessments, working with a consultant in 2019. Finance also maintains a Tangible Capital Asset list with historical cost, useful life, and amortization details, as required by the Public Sector Accounting Board (PSAB). However, asset information is currently stored across multiple platforms, including CityWorks, GIS, FirePro, PDFs, and Excel. A corporate-wide definition of critical assets has not yet been established, and condition assessments have only been completed for select assets. Improving asset data will be an ongoing process.					

Current State
1

Asset Management Readiness Scale Assessment Tool

Data and information



Current State

Outcomes: Select the outcomes that your organization has achieved.											
Outcome areas		Level 1		Level 2		Level 3		Level 4		Level 5	
<u>B: Performance Data</u>						☐	We have defined level of service measurements for some service areas.	☐	We have defined level of service measurements for critical service areas.	☐	We have defined level of service measurements for most or all service areas.
	☒	We have informal or anecdotal approaches for measuring asset or service performance.	☒	We have some information on performance of critical assets , collected from a variety of sources.	☐	We have captured data on current level of service performance for some service areas.		☐	We communicate the results from our level of service measurement program to staff and council regularly.	☐	We continually improve how we collect data on level of service performance.
					☐	We have reviewed service levels and asset performance with council.					
<u>Please provide notes that describe how you have achieved your current level</u>	Performance indicators are currently anecdotal and informal, based on factors such as failure frequency versus in-service operation, outage tracking, and regulatory performance. While some informal discussions on levels of service have taken place, no formal definitions have been established.										

Current State
2

Asset Management Readiness Scale Assessment Tool

Data and information



Current State

Outcomes: Select the outcomes that your organization has achieved.						
Outcome areas	Level 1	Level 2	Level 3	Level 4	Level 5	
C: Financial Information	☒ We have financial information on our assets, supporting minimum PS-3150 reporting requirements.*	☒ We have major capital renewal and operating & maintenance (O&M) expenditure data for some assets.	☐ We have capital (new and renewal) and O&M expenditure data for most assets. ☐ We have linked AM and financial information for all critical assets.	☐ We understand the cost of sustaining current levels of service for all critical assets	☐ We understand the trade-offs between investment and the level of service we deliver and use this to optimize our financial plans.	
Please provide notes that describe how you have achieved your current level	CVRD maintains a Tangible Capital Asset (TCA) spreadsheet to track essential data for PS 3150 reporting. In 2019, a consultant was engaged to develop the first-generation asset inventory and assess major capital renewal needs for water, wastewater, solid waste, and partially for recreation. While some connections exist between asset management and financial data, funds set aside for asset renewal are not always earmarked for specific assets.					
*PS-3150 is the Public Sector Accounting Board's standard guiding the treatment of tangible capital assets.						
Readiness level (automatic)	Working on Level 1	Completed Level 1 ☒	Completed Level 2	Completed Level 3	Completed Level 4	Completed Level 5

Current State
1

Asset Management Readiness Scale Assessment Tool

Planning and decision-making



Planning and decision-making: By developing this competency, your organization is documenting and standardizing how the organization sets asset management priorities, conducts capital and operations and maintenance (O&M) planning, and decides on budgets.

Note: To achieve each level, you must meet every requirement of each level before it.

Current State

Outcomes: Select the outcomes that your organization has achieved.										
Outcome areas		Level 1		Level 2		Level 3		Level 4		Level 5
A: Documentation and Standardization	☒	Our asset planning approaches vary across the organization.	☐	Our departments follow a similar but informal asset planning approach.	☐	We have a structured asset planning approach, but application is inconsistent.	☐	We employ a consistent structured asset planning approach for each of our critical services .	☐	We employ a consistent structured asset planning approach for all services.
	☒		We evaluate investment needs and priorities based on a mix of structured and ad-hoc practices and criteria.	☐	We set priorities using criteria based on organizational goals and objectives.	☐	We set priorities using criteria that are fully aligned with our organizational goals and objectives.	☐	We adapt our planning approach and criteria to align with evolving organizational goals and objectives.	
Please provide notes that describe how you have achieved your current level	Some departments are more advanced, having used similar approaches and consultants while others are just beginning the process.									

Current State

1

Asset Management Readiness Scale Assessment Tool

Planning and decision-making



Current State

Outcomes: Select the outcomes that your organization has achieved.							
Outcome areas	Level 1	Level 2	Level 3	Level 4	Level 5		
B: Asset Management Plans	☒ Our approach to asset renewal focuses on reacting to basic needs (e.g. growth, regulation and known problems).	☒ We have draft AM plans for some asset classes, with forecasted financial needs based on estimated data.	☐ We have AM plans for critical services , based on a mix of estimated and actual data.	☐ We have AM plans for most services based on actual data.	☐ We have AM plans for all services based on actual data.		
			☐ Our AM plans include available information about level of service (current and target) and risk management.	☐ Our AM plans include basic needs forecasting and risk management strategies for critical assets .	☐ Our individual AM plans are integrated across services.		
	☒ We evaluate priorities based on available information, staff experience, and input from council and management.		☐ Our AM plans identify short-term issues and priorities.	☐ Our AM plans are based on both short- and long-term issues and priorities. They balance short-term service objectives with longer-term goals and risks .	☐ Our AM plans include needs forecasts and risk management strategies for most assets. Plans address risks to both service and business goals.		
Please provide notes that describe how you have achieved your current level	Water, wastewater, solid waste, and partially recreation have existing AP Plans, developed in 2019 by a consultant, while plans for other areas will be created in the future. Additional work is required to define critical services and assets, as well as to establish current and target levels of service moving forward.						

Current State
2

Asset Management Readiness Scale Assessment Tool

Planning and decision-making



Current State

Outcomes: Select the outcomes that your organization has achieved.						
Outcome areas	Level 1	Level 2	Level 3	Level 4	Level 5	
C: Budgets and Financial Planning	☒	We prepare annual capital and operating budgets based on historical values		☒	We prepare an annual capital budget based on an annual assessment of current needs.	☒
			We prepare annual capital and operating budgets based on a mix of historical values and new priorities.		☒	We have a 5-year capital plan* and update it annually.
	☒	We deal with new needs reactively, as they occur.		☒	We have a 3-year capital plan that addresses short-term issues and priorities.	☐
				☐	We update our long term financial plan (at least 10-year) annually and understand the risks associated with our investment gap.	☐
Please provide notes that describe how you have achieved your current level	CVRD does not yet have a corporate-level 10-year plan, and the level of risk and investment gap remains unclear. While there is a 5-year capital plan that is updated annually, departments are generally more comfortable with capital requirements within a 3-year timeframe.					
*Communities may benefit from long-term capital plans that extend beyond five years to ten years or more.						

Current State
3

Readiness level (automatic)	Working on Level 1	Completed Level 1	Completed Level 2	Completed Level 3	Completed Level 4	Completed Level 5
		☒				

Asset Management Readiness Scale Assessment Tool

Contribution to asset management practice



Contribution to asset management practice: By developing this competency, your organization is supporting staff in asset management training, sharing knowledge internally to communicate the benefits of asset management, and participating in external knowledge sharing.

Note: To achieve each level, you must meet every requirement of each level before it.

Current State

Outcomes: Select the outcomes that your organization has achieved.										
Outcome areas	Level 1		Level 2		Level 3		Level 4		Level 5	
A: Training and Development	☒	Our AM training and development approach is informal and largely driven by the personal initiative of staff.	☒	Our AM training and development requirements are defined by management based on short-term needs.	☐	We provide all staff with basic AM awareness training.	☐	We define AM knowledge and skill requirements. A training plan is in place for all positions.	☐	We train select staff members as internal experts to support the ongoing development of organizational capacity.
	☒	Some staff conduct targeted research, seeking out basic information on AM concepts and techniques.	☒	Selected staff are trained on basic AM concepts.	☒	Some staff undergo training on advanced AM concepts specific to their roles and responsibilities.	☐	Council, management and staff receive role-appropriate AM training to establish needed capacity across the organization	☐	Proactive, role-based training serves as a support for career development and succession planning.
	☒		Council has opportunities to increase their understanding of AM concepts.	☐	Staff and council are able to communicate the value of AM in their own words.					
	Please provide notes that describe how you have achieved your current level	Several staff members have completed or are currently completing asset management training, including the NAMS course and workshops organized by AMBC. Some of the training is self-directed, while others are more informal.								

Current State

2

Asset Management Readiness Scale Assessment Tool

Contribution to asset management practice



Current State

Outcomes: Select the outcomes that your organization has achieved.										
Outcome areas		Level 1		Level 2		Level 3		Level 4		Level 5
B: Internal Communication and Knowledge Sharing	☒	We are aware of the need to mitigate the risk of losing information held in the minds of long-term staff.	☐	We mitigate the risk of losing information held in the minds of long-term staff, through improved record keeping.	☐	A culture of knowledge sharing is emerging internally, supported by official initiatives.	☐	A culture of knowledge sharing exists and is supported by a mix of formal and informal initiatives.	☐	We capture AM knowledge and it flows freely throughout the organization.
					☐	We collect and maintain AM knowledge resources.				
					☐	We communicate the benefits of AM internally to staff and council.	☐	We disseminate AM knowledge resources within the organization.	☐	Staff leverage internal and industry knowledge and leading practice resources.
Please provide notes that describe how you have achieved your current level	CVRD recognizes the need to mitigate the risk of losing valuable knowledge held by long-term staff, but formal documentation requirements have not yet been fully established. To improve record-keeping, we plan to digitize hard copy reports and plans, use CityWorks for operations records management, automate the work order system, and leverage GIS to document assets and asset information. The AM culture is beginning to take shape, especially through the AM Steering Committee/Working Groups and those participating in AM training.									

Current State
1

Asset Management Readiness Scale Assessment Tool

Contribution to asset management practice



Current State

Outcomes: Select the outcomes that your organization has achieved.										
Outcome areas	Level 1	Level 2	Level 3	Level 4	Level 5					
C: External Communication and Knowledge Sharing	☒	We are investigating AM-related organizations and resources.	☒	Staff or elected officials attend AM-related events.	☒	We are members of one or more AM organizations and actively share our AM experience.	☐	We are actively involved in AM organizations and present at AM events.		
			☒	We share basic information on current capital projects with the public.	☒	We share basic information on our assets, the services we provide, and future needs with the public.	☐	We share information with our peers on our experience, innovations and lessons learned.	☐	We are a thought leader on AM within the municipal sector.
			☒	We share basic information on current capital projects with the public.	☒	We share basic information on our assets, the services we provide, and future needs with the public.	☐	We rely on the data from our AM program to explain decisions to the public.	☐	We are active in coaching other organizations to improve the overall body of AM knowledge.
Please provide notes that describe how you have achieved your current level	CVRD shareS information with the public, board, and peers on specific AM and capital projects. CVRD is also beginning to attend AM events and are members of AMBC and GFOA. Additionally, staff are involved in IPWEA/NAMS training.									

Current State
3

Readiness level (automatic)	Working on Level 1	Completed Level 1	Completed Level 2	Completed Level 3	Completed Level 4	Completed Level 5
		☒				

AssetSMART 2.0

A Tool to Assess Your Community’s Asset Management Practices

What is AssetSMART?

AssetSMART is a tool that local governments can use to assess their capacity to manage their assets. This tool has been designed to help local governments:

- ◇ Evaluate their asset management practices in a comprehensive way
- ◇ Identify particular areas of strength and areas for improvement
- ◇ Establish priorities
- ◇ Build awareness of the many dimensions of asset management
- ◇ Generate productive discussion across departments
- ◇ Measure progress over time
- ◇ Benchmark against other communities
- ◇ Set short-, mid-, and long-term objectives in specific areas

Which communities should use AssetSMART?

AssetSMART has been specifically designed to reflect the unique challenges that local governments face in managing their assets. This tool is intended to be used by any local government, of any size, and at any stage of implementing an asset management program. Whether your community is in the initial or advanced stages of asset management, AssetSMART can help your organization take stock of where it is today and plan for the future.

DATE January 2025

NAME Solid Waste, Recreation, Park, Water, Waste Water, IT, Facility, Fleet, and Fire Services department being assessed individually.

ORGANIZATION Comox Valley Regional District

The Framework

AssetSMART uses Asset Management for Sustainable Service Delivery: A BC Framework (the Framework) as a foundation. The Framework establishes a high-level, systematic approach that supports local governments in moving toward service, asset and financial sustainability through an asset management process.



The Core Elements of Asset Management

People, Information, Assets, and Finances are considered the core elements of asset management. Each of these elements are necessary for sustainable service delivery. Success requires the integration of these four elements throughout the process of asset management. The four core elements form the AssetSMART assessment categories.



ASSETS

	LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4	EVIDENCE / NOTES
1 Location	Accurate location data is available for fewer than half of the assets and is in a format or location that is generally inaccessible to those who need it.	Accurate location data is available for at least 50% of the assets.	Complete and accurate data is available for most assets, including all critical assets. Data is easily accessible to all who require it.	Complete and accurate data is available for all assets, including new assets. Data is easily accessible to all who require it.	Average Score 3.06
2 Key Attribute Data	Accurate attribute data is available for fewer than half of the assets and is in a format or location that is generally inaccessible to those who need it.	Accurate attribute data is available for at least 50% of the assets.	Complete and accurate data is available for most assets, including all critical assets. Data is easily accessible to all who require it.	Complete and accurate data is available for all assets, including new assets. Data is easily accessible to all who require it.	Average Score 2.39
3 Install Data	The installation date is available for fewer than half of the assets and is in a format or location that is generally inaccessible to those who need it.	Asset installation date is available for at least 50% of the assets.	Accurate install date is available for most assets, including all critical assets. Data is easily accessible to all who require it.	Complete and accurate data is available for all assets, including new assets. Data is easily accessible to all who require it.	Average Score 2.44
4 Historic Cost	Accurate historic cost data is available for fewer than half of the assets and is in a format or location that is generally inaccessible to those who need it.	Accurate historic cost data is available for at least 50% of the assets.	Complete and accurate historic cost data is available for most assets, including all critical assets. Data is easily accessible to all who require it.	Complete and accurate historic cost data is available for all assets, including new assets. Data is easily accessible to all who require it.	Average Score 2.11
5 Natural Assets	No consideration is given to natural assets in planning for sustainable service delivery.	There is general awareness of the services provided by natural assets, but natural assets are not included in planning or decision making.	Some natural assets have been identified and the value of service is partially understood.	All significant natural assets have been identified and the value of service they provide is understood. This value is considered in decision making and planning.	Average Score 2.33

INFORMATION

6
Policy

LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4	EVIDENCE / NOTES
No policies are in place related to sustainable service delivery.	Some policies related to sustainable service delivery are in place, but there are significant gaps or policies are not actionable.	Good policies are in place related to sustainable service delivery, but they are not all referenced for decision making.	Policy(ies) adopted by council that are understood and provide clear direction on how the community will achieve sustainable service delivery. Policies are a regular reference for guiding decisions.	Average Score 2.00
☐	☐	☐	☐	

7
Strategy

No strategy is in place.	Components of a strategy or framework are in place, but there are significant gaps in providing direction for sustainable service delivery and the linkage of plans and initiatives.	A strategy / framework is in place that identifies specific sustainable service delivery goals, the approach to achieving them, and identifies how organizational plans or initiatives fit together to inform decision making and achieving the goals. The strategy is not being widely implemented.	A strategy / framework is in place that identifies specific sustainable service delivery goals, the approach to achieving them, and identifies how organizational plans or initiatives fit together to inform decision making and achieving the goals. The strategy is being implemented.	Average Score 1.11
☐	☐	☐	☐	

8
Level of Service

The levels of service currently delivered are not consistently understood by the public or documented.	In some of the core service areas, the current level of service is understood and documented, and the desired level of service has been defined.	In all service areas, the current level of service is understood and documented, and service targets have been set.	Current and desired levels of service, and trade offs between costs and services are well understood by both staff and the public.	Average Score 1.33
☐	☐	☐	☐	

 INFORMATION

	LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4	EVIDENCE / NOTES
9 Risk	Risks to assets and service levels are not understood or documented	Asset risk is estimated according to asset remaining life only, condition assessment information is not available. Broader service delivery risks have not been considered.	Estimated remaining life is known for all assets and is supported by a condition assessment for critical assets or assets nearing replacement. Risk assessments consider the consequence of failure. Some 'big-picture' risks to service delivery for the organization are understood at a corporate level.	Asset risks are well understood and documented based on evidence of the probability and the consequence of failure. High-level organizational risks to service delivery are well understood throughout the corporation.	Average Score 2.11
10 AMP - Asset Replacement Plans	No Asset Replacement Plan exists to show the theoretical timing for asset replacement.	Parts of an Asset Replacement Plan exist (e.g. for some asset categories, for a duration <20 years, etc.) but it is not consolidated into an organizational long term view.	An Asset Replacement Plan has been developed, but it is either <20 years in scope or does not include all assets.	A long term (75+ year) plan is in place that illustrates the timing of expenditure to replace all existing assets, the current infrastructure deficit, and the average annual sustainable funding level.	Average Score 2.44
11 AMP - Long Term Capital Plan	No long term (10 year) capital plan is in place.	A ten year capital plan is in place but it is limited to new projects and it does not reflect anticipated asset renewal.	A ten year capital plan is in place that reflects new capital projects for growth or regulatory compliance, and the replacement of existing assets to manage risk and deliver an appropriate level of service.	A ten year capital plan is in place that is current, informed by level of service targets, risk to service delivery. The capital plan is integrated with the long term financial plan, and is being followed and tracked.	Average Score 2.50

INFORMATION

12

Climate Change

LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4	EVIDENCE / NOTES
Climate change is not considered in service delivery risk or long term asset replacements.	Probable local impacts of climate change have been identified and are considered in some organizational plans.	An assessment of risk to some critical existing infrastructure has been conducted. Design and construction of new assets consider climate change.	An assessment of risk to existing infrastructure has been conducted, and plans are in place to manage this risk. Design and construction of new assets consider climate change.	Average Score 2.22





FINANCES

13
Long Term
Financial
Plan

LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4	EVIDENCE / NOTES
No long term financial plan is in place.	A financial plan is in place but it covers <10 years or does not reflect the future costs of replacing existing assets.	A long term (10+ years) financial plan is in place that reflects the revenue required and funding sources to fund new assets and asset replacements, but the plan is not being followed or updated.	A comprehensive long term financial plan exists and is based on up to date information. The plan looks forward 10 years or more and is integrated with long term capital plan. The plan is being tracked and followed.	Average Score 2.50
☐	☐	☐	☐	

14
Revenue

Revenue is year to year and there is no linkage between revenues and long term requirements. Revenues are not sufficient to meet needs without reliance on grants or subsidies.	Revenue is sufficient and reliable to fund the requirements for the next 5 years, but there is a significant gap between revenues and sustainable funding levels for later years.	Revenue is sufficient and reliable to fund the requirements in the 10 year capital plan, but there is still a gap between revenues and sustainable funding levels for the long term.	Revenues are sufficient, predictable, and stable to fund long term sustainable service delivery in alignment with the long term financial plan and the asset replacement plan.	Average Score 2.11
☐	☐	☐	☐	

15
Reserves

No reserves are in place.	Minimal reserves are in place that can buffer short term fluctuations in revenue (e.g. 6 weeks operating expenses).	Reserves are in place to buffer short term revenue fluctuations. There are dedicated reserves for future capital renewal, but do not meet the levels required as identified in the financial plan.	Reserves are held at levels established in accordance with the financial plan in order to meet long term requirements.	Average Score 2.72
☐	☐	☐	☐	

16
Debt

Debt levels are high (at or very near the maximum), limiting capacity for additional borrowing and no plan is in place to reduce debt.	Debt levels higher than desired and debt management strategy is being considered.	Debt levels are reasonable but is trending upward and are not aligned with the long term financial plan.	Debt levels are prudent and reasonable. Debt levels are in line with the long term financial plan and relatively stable.	Average Score 3.50
☐	☐	☐	☐	

 PEOPLE

	LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4	EVIDENCE / NOTES
17 People Capacity	Staff have no time for asset management.	Some staff time could be made available for asset management, but staff have limited or no knowledge of the tasks and processes required to meet asset management outcomes.	Staff are investing some time in asset management and are working to build the capacities, knowledge, and systems needed.	Staff have the necessary time, knowledge, skills, and capacities to achieve asset management outcomes and are implementing asset management as part of their jobs.	Average Score 2.22
18 Awareness	There is no awareness of the needs to manage assets and sustainably deliver services among staff, elected officials, or members of the public.	Staff are generally aware of the major issues related to Asset Management and service sustainability in the community, and what is needed to address these issues.	Staff members and elected officials are aware of community issues and future risks related to sustainable service delivery.	Members of the public are aware of the issues related to sustainable service delivery, and there is evidence these issues are considered in public decision making.	Average Score 2.00
19 Teamwork	No cross functional team is in place to manage assets. There are significant siloes in the organization that prevent information from being shared and used in decision making.	A cross functional team is in place, but siloes among departments or staff positions (e.g. between operations and management) still prevent information from being shared.	A cross functional team is in place that is effectively bridging siloes in the organization.	There is no perception of siloes across departments at all levels of the organization. There is a strong culture of teamwork and information is readily and consistently shared through formal and informal channels.	Average Score 1.89
20 Role	People do not understand their role in asset management or sustainable service delivery which hinders the ability to manage assets.	A small group of people understand their role as it relates to sustainable service delivery, but there are some significant gaps causing things to fall through the cracks.	Most people in the organization understand their role as it relates to sustainable service delivery.	Roles are clearly understood by everyone, including council, resulting in nothing 'falling through the cracks'.	Average Score 2.11

 PEOPLE

21

Decision Making

LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4	EVIDENCE / NOTES
Decisions are made based on a short term frame or reactive in nature and in isolation of appropriate information.	Decision making based on a long term frame, but are informed only by incomplete or anecdotal information.	Decision making is based on the long term and incorporates appropriate information.	Decision making about assets and service delivery is informed with appropriate and timely information, is transparent, and is aligned with community priorities and long-term sustainable service delivery.	Average Score 1.89
				



2025 Department AM Maturity Assessment per AssetSMART												
Core Elements	#	Capacity Areas	Solid Waste	Recreation	Park	Water	Wastewater	Facility	Fleet	Fire Services	IT	Average
Assets	1	Location	2.00	2.00	3.00	3.00	3.00	4.00	4.00	2.50	4.00	3.06
	2	Key Attribute Data	1.00	1.50	2.00	2.00	2.00	3.00	4.00	2.50	3.50	2.39
	3	Install data	1.00	1.50	2.00	2.00	2.00	3.00	4.00	2.50	4.00	2.44
	4	Historic Cost	2.00	2.00	2.00	1.50	1.50	2.00	4.00	1.00	3.00	2.11
	5	Natural Assets	2.00	2.00	2.00	3.00	3.00	2.00	N/A	N/A	N/A	2.33
Information	6	Policy	1.00	1.00	1.00	3.00	3.00	2.00	2.00	2.00	3.00	2.00
	7	Strategy	1.00	1.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.11
	8	Level of Service	1.00	1.00	2.00	1.00	1.00	1.00	1.00	3.00	1.00	1.33
	9	Risk	2.00	2.00	2.00	2.00	2.00	1.00	2.50	2.50	3.00	2.11
	10	Asset Replacement Plans	2.00	2.00	2.00	2.00	2.00	3.00	3.00	3.00	3.00	2.44
	11	Long Term Capital Plan	2.00	3.00	2.00	2.00	2.00	2.50	4.00	3.00	2.00	2.50
Finances	12	Climate Change	1.00	2.00	1.00	3.00	3.00	2.00	4.00	3.00	1.00	2.22
	13	Long Term Financial Plan	2.00	3.00	2.00	2.00	2.00	3.00	3.00	2.50	3.00	2.50
	14	Revenue	2.00	1.00	1.00	3.00	1.00	3.00	3.00	2.00	3.00	2.11
	15	Reserves	3.00	3.00	3.00	2.50	3.00	3.00	3.00	3.00	1.00	2.72
People	16	Debt	3.00	4.00	3.50	3.50	3.50	N/A	N/A	3.50	N/A	3.50
	17	People Capacity	2.00	2.00	2.00	3.00	3.00	2.00	2.00	2.00	2.00	2.22
	18	Awareness	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
	19	Teamwork	2.00	2.00	2.00	2.00	2.00	2.00	2.00	1.00	2.00	1.89
	20	Roles	2.00	2.00	2.00	2.00	2.00	2.00	2.00	3.00	2.00	2.11
	21	Decision Making	1.00	3.00	1.00	2.00	2.00	2.00	3.00	2.00	1.00	1.89
Average Score			1.76	2.05	1.98	2.26	2.19	2.28	2.82	2.35	2.34	2.24

Appendix B – CVRD Documents Informing the AM Program

Asset Type(s)	Document	AM Program Alignment	Endorsement Year
Regional-wide	Comox Valley Regional Growth Strategy	Builds consensus among local governments on future policies regarding land use activities and development over the next 20 years.	2018
Regional-wide	Sustainability Strategy	It's a regional plan that creates new knowledge and guides approaches to sustainability for communities in the Comox Valley. The Sustainability Strategy is a tool for generating innovative actions, guiding future policy decisions of regional/local governments, mobilizing community resources and inspiring collaboration	2010
Regional-wide	Housing Needs Report	Provides housing needs assessment findings for the region.	2024
Regional-wide	CVRD Climate Action Strategy	Outlines the priority actions to be undertaken over the next five plus years, including those related to Asset Management	In progress
Corporate-wide	Rural Comox Valley Official Community Plan	Designates properties into different land use categories, and outlines policies and objective for each of these uses	2014, last amendment 2023

Asset Type(s)	Document	AM Program Alignment	Endorsement Year
Corporate-wide	Strategic Plan	Establishes commitment to asset management and sets priorities of the current term of the Board	2024
Corporate-wide	Corporate Energy and Emissions Plan	Establishes the target of reducing corporate greenhouse gases	2023
Corporate-wide	Internal Cost of Carbon Policy	Sets a corporate carbon price to better account for the social, environmental and economic benefits of reducing carbon pollution	2023
Corporate-wide	Annual Financial Plan	Financing for capital and operating costs for the current fiscal year and four-year forecast	2024
Corporate-wide	Procurement Policy	Requires whole life cycle cost being considered into procurement	2018
Corporate-wide	Asset Management Policy	Establishes principles for asset management program	2025
Corporate-wide	Annual Corporate Report	Report on service delivery performance	2024
Corporate-wide	Tangible Capital Assets Policy	Compliance with legal requirements for financial reporting on physical assets	2020
Corporate-wide	Comox Valley Rural Areas Community Climate Action Strategy	It serves an action plan for the three electoral areas to achieve the targets set out by the Regional Growth Strategy and Sustainability Strategy.	2015
Corporate-wide	Green Building Policy	Creates more environmentally and financially sustainable	2024

Asset Type(s)	Document	AM Program Alignment	Endorsement Year
		buildings, lower corporate GHG emissions, improves occupant health and comfort, increases climate resilience of CVRD buildings, and demonstration of climate action leadership.	
Corporate-wide	Coastal Flood Adaptation Strategy (CFAS)	Develop preferred adaptation options for managing coastal flood resiliency and mitigating coastal flood hazards. Build adaptive capacity to respond effectively to climate change impacts over time.	In progress
Corporate-wide	Comox Valley Agricultural Plan	The plan aims to steward water resources to meet agricultural water needs, maintain agricultural and protection policies, collaborate towards climate change adaptation, mitigation, and emergency preparedness.	2025
Park	Regional Parks and Trails Strategic Plan	Provides a mechanism to protect valued natural areas and complements the existing community and provincial parks network. Guides how the CVRD plans and manages regional parks and trails over the next 20 years.	2024
Parks	Rural Comox Valley Parks & Greenways	It sets out a long-term vision for the Comox Valley's rural parks and	2011

Asset Type(s)	Document	AM Program Alignment	Endorsement Year
	Strategic Plan 2011-2030	greenways system. It also provides criteria for parkland acquisition and 20-year acquisition priorities and identifies possible funding mechanisms and partnerships to achieve the goals of the plan	
Parks	Demman Island Parks & Greenways Master Plan	It identifies all existing parks, greenways, nature reserves and developed and undeveloped beach access road ends on Denman Island. It identifies priorities for future parks and greenways that will guide the CVRD in parkland acquisition and park and trail development on the island.	2011
Recreation	Sport Centre Commission Strategic Plan	It sets strategic priorities for Sport Centre. Asset Management is the first strategic goal.	2019
Recreation	Recreation Strategic Plan	The Comox Valley Recreation Commission completed strategic planning sessions in February 2023 and identified several facilities/recreational upgrade opportunities in the Comox Valley.	2023
Water	Watershed Protection Plan (WPP)	The objective of the WPP is to guide the management of the watershed for the	2022

Asset Type(s)	Document	AM Program Alignment	Endorsement Year
		long-term protection of drinking water at the highest possible quality	
Water	Comox Valley Regional Water Supply Strategy	A strategic plan that details where our drinking water comes from, what type of treatment and how watershed protection requirement will be met and how the system will be expanded.	2011
Sewer	Comox Valley Regional District Sanitary Sewerage Master Plan	A high-level planning document, intended to guide the technical aspects of infrastructure planning over the coming fifty-year period.	2011
Solid Waste	CSWM Solid Waste Management Plan	The Solid Waste Management Plan is a provincially mandated, long-term vision for a regional district's garbage and recycling, outlining programs, services, infrastructure, and policies. It guides the management of solid waste and is typically renewed every ten years to reflect best practices and changing needs.	In progress

Appendix C- AM Policy Checklist

#	Balanced Decision Making	Sustainable Service Delivery	Appropriate Information and Tools	Sufficient Financial Resources	Sufficient Human Resources	Continual Improvement	Engage Stakeholders
1	Establish AM Engagement Strategy						
							✓
2	Develop Data Governance Standard						
			✓				
3	Establish AM Training Plan						
						✓	✓
4	Establish AM Human Resource Plan						
					✓		✓
5	Build Corporate Asset Inventory						
			✓			✓	✓
6	Conduct Condition Assessment Framework						
			✓				
7	Develop Risk Assessment Framework						
	✓		✓				
8	Develop a Levels of Service Framework						
	✓	✓					✓
9	Develop AM Plans						
		✓	✓				
10	Documented Workflows/Procedures						
		✓	✓			✓	
11	Develop AM Long-Term Financial Plans						
	✓	✓	✓	✓			
12	Develop Prioritization Framework for Annual Budgeting						
	✓	✓	✓				
13	Develop AM Technology Solution						
			✓				
14	Build Asset Report Cards/Dashboards						
						✓	✓

Appendix D- AM Implementation Plan

FCM AM Framework	AMBC Framework	# Initiatives	Year 1				Year 2				Year 3				Year 4				Year 5			
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Contribution to Asset Management Practice	People	1 Establish AM Engagement Strategy																				
Data and Information	Asset	2 Setup Data Governance Standard																				
Contribution to Asset Management Practice	People	3 Establish AM Training Plan																				
People and Leadership	People	4 AM Human Resource Plan																				
Data and Information	Asset	5 Build Basic Corporate Asset Inventory (natural asset start in 2028)																				
Data and Information	Asset	6 Conduct Condition Assessment Framework																				
Data and Information	Information	7 Develop Risk Assessment Framework																				
Data and Information	Information	8 Develop a Levels of Service (LoS) Framework																				
Data and Information	Information	9 Updated AM Plans																				
People and Leadership	People	10 Documented Workflows/Procedures																				
Planning and decision-making	Finance	11 Develop AM Long-Term Financial Plans																				
Planning and Decision-making	Finance	12 Develop Prioritization Framework for Annual Budgeting																				
Data and Information	Asset	13 Develop AM Technology Solution																				
Data and Information	Information	14 Build Asset Report Cards/Dashboards																				

Appendix E- AM Initiative Dependencies

#	Improvement Initiatives	Pre-required Initiatives
1	Establish AM Engagement Strategy	N/A
2	Setup Data Governance Standard	N/A
3	Establish AM Training Plan	N/A
4	AM Human Resource Plan	N/A
5	Build Basic Corporate Asset Inventory (natural asset start in 2028)	Setup Data Governance Standard
6	Conduct Condition Assessment Framework	Setup Data Governance Standard Build Basic Corporate Asset Inventory
7	Develop Risk Assessment Framework	Data Governance Standard Build Basic Corporate Asset Inventory
8	Develop a Levels of Service Framework	N/A
9	Develop AM Plans	Setup Data Governance Standard Build Basic Corporate Asset Inventory Conduct Condition Assessment Framework Develop Risk Assessment Framework Develop Levels of Service Framework
10	Documented Workflows/Procedures	N/A
11	Develop AM Long-Term Financial Plans	Setup Data Governance Standard Build Basic Corporate Asset Inventory Conduct Condition Assessment Framework Develop Risk Assessment Framework Develop Levels of Service Framework Develop AM Plans
12	Develop Prioritization Framework for Annual Budgeting	Setup Data Governance Standard Build Basic Corporate Asset Inventory Conduct Condition Assessment Framework Develop Risk Assessment Framework Develop Levels of Service Framework Develop AM Plans Develop AM Long-Term Financial Plans
13	Develop AM Technology Solution	Setup Data Governance Standard Build Basic Corporate Asset Inventory Documented Workflows/Procedures
14	Build Asset Report Cards/Dashboards	Setup Data Governance Standard Build Basic Corporate Asset Inventory Develop AM Technology Solution

Appendix F- AM Strategy Risk Assessment

#	Potential Risk Description	Likelihood	Impact	Risk Rating	Mitigation Options
Assets					
R1	Failure to prioritize high-risk assets	M: Formalized risk assessment has not started; asset might fail unexpected	H: Asset failure can have social, environmental and financial impacts	H	-Develop Risk Assessment Framework -Complete risk assessment for all asset types and prioritizing asset replacement, renewal for high-risk assets
R2	Misidentifying or undervaluing asset risk	M: Formalized risk assessment has not started; asset might fail unexpected	H: Asset failure can have social, environmental and financial impacts	H	-Develop Risk Assessment Framework -Complete risk assessment for all asset types
R3	AM technology solution is not properly planned and implemented	M: Lack of project manager or IT capacity	H: Implementing new software can be expensive and require organizational effort to integrate into regular business practices	H	-Build a business case and technology plan based on need assessment. -Ensure buy-in from all stakeholders before proceeding
Information					
R4	Unidentified levels of service	M: No clear levels of service documented	H: Unclear performance targets	H	-Develop a Levels of Service Framework
R5	Failure to track performance	L: AM Implementation plan will be tracked	L: Difficulty in achieving continuous improvement	L	-AM Strategy Progress Report
R6	Implementing too many initiatives or unrealistic timelines, causing items to fall out of sequence	M:AM is a complex practice. It can take years to progress	L: Slow progress and low morale within staff	L	-Implementation plan will be reviewed by AM Steering Committee and EMT
R7	Progress on improvement of AM practices is too slow	M: The speed of progress will depend on resources available	M: Low morale within staff and board level	M	-Continue to improve practices and identify resources needs -Incorporate AM into the job description for whoever applicable
R8	Climate change impacts not appropriately assessed, causing unforeseen challenges	M: increased frequency of extreme weather events, risking sea levels, and changing precipitation patterns	M: Impact infrastructure resilience and service delivery	M	-Incorporate climate change in Risk Assessment Framework -Incorporate climate change in Levels of Service Framework -Incorporate climate change in AM Plans Incorporate climate change in Asset Report Cards/Dashboards -Incorporate in Long-Term Financial Plans

#	Potential Risk Description	Likelihood	Impact	Risk Rating	Mitigation Options
Finances					
R9	Lack of long-term financial plan greater than five years	M: CVRD currently publish five-year budget per provincial legislation; however, projections beyond this period require additional justification	H: Uncertainty in financial liabilities	H	-Develop Levels of Service Framework -Predict full lifecycle cost -Develop AM Long Term Financial Plan
R10	Resources and funding requests are not approved	H: Budget constrain with current economic environment	H: Without funding and enough human resource, it will be hard to move forward	H	-Conduct needs assessment/business case to support the requested resources
R11	Asset replacement funding is not sustainable	H: Lack of updated asset replacement cost	H: Increased risk of asset failure and/or deferring costs to future generations	H	-Develop AM Plan -Develop AM Long Term Financial Plan
People					
R12	Lack of Board support	L: AM is a strategic priority	H: Impacts on service level and deferral of costs to future generations	M	-Implement AM Engagement Strategy
R13	Failure to get EMT's approval for necessary resources	L: Two Executive Sponsor supporting the AM Program	H: Impacts on service level and deferral of costs to future generations	M	-Implement AM Engagement Strategy
R14	Inadequate communication within the community	L: During the budgeting season, CVRD engage the community regarding how tax dollars are being invested	H: Unwillingness by the residents to pay the costs, unclear expected levels of service	M	-Implement AM Engagement Strategy -Provide more transparency on asset condition, risk and cost
R15	Disconnected organizational effort	M: AM is an integrated program that requires different branches within the CVRD to interact with and develop sustainable service delivery plans	M: Inaccurate plans and inefficient process	M	-AM Steering Committee with cross-functional members -Build AM Working Groups based on the needs
R16	Lack of staff buy-in	L: Senior leadership is supporting the AM Program	H: Without buy-in from staff, program implementation will be challenging	M	-Develop a change management strategy -Incorporate AM into the job description
R17	Staff do not have capacity and/or capability	H: Staff are already at full capacity on existing priorities	H: Each department owns their AM Plans and delivers services to the community	H	-Develop AM HR Plan -Establish AM Training Plan
R18	Unclear roles and responsibilities	M: Although the governance structure is clear, AM roles and responsibilities has not been incorporated into the job description yet	M: Lack of coordination between programs and silos between departments results in inefficiencies	M	-Document roles and responsibilities clearly so they are easy to understand, and communicate them out to appropriate members -Incorporate AM into the job description

#	Potential Risk Description	Likelihood	Impact	Risk Rating	Mitigation Options
R19	High rate of outsourced AM	L: using consultants to aid in the CVRD's asset management activities is a reasonable approach depending on internal capacity. However, being too reliant on external resources will inhibit building asset management maturity within internal staff	M: Slow progress on building internal capacity for practicing asset management practices	M	-Establish AM Training Plan -Ensure that proper rationale is developed when engaging external resources



Asset Management Program

Asset Management Strategy Resource Requirements

PURPOSE

- The purpose of this memo is to outline the financial resources required to implement the initiatives proposed in the Asset Management (AM) Strategy, including:
 - Staff Resources:** 6.5 additional staff to complete the five- year implementation plan and support continuous AM improvements.
 - Overall Funding Resources:** One-time and recurring funding to execute the five-year implementation plan, estimated to be about \$5.7 million.
- This memo provides a preliminary review of the staff and funding resource requirements. A detailed business case for additional staff requests will be submitted to the CAO and Executive Management Team for consideration as part of the 2026 annual financial planning process. Other expenses will be included within Corporate AM and/or within the department's 2026 budget. Staff will explore all opportunities to obtain the most competitive pricing and ensure the responsible use of taxpayer dollars.

BACKGROUND

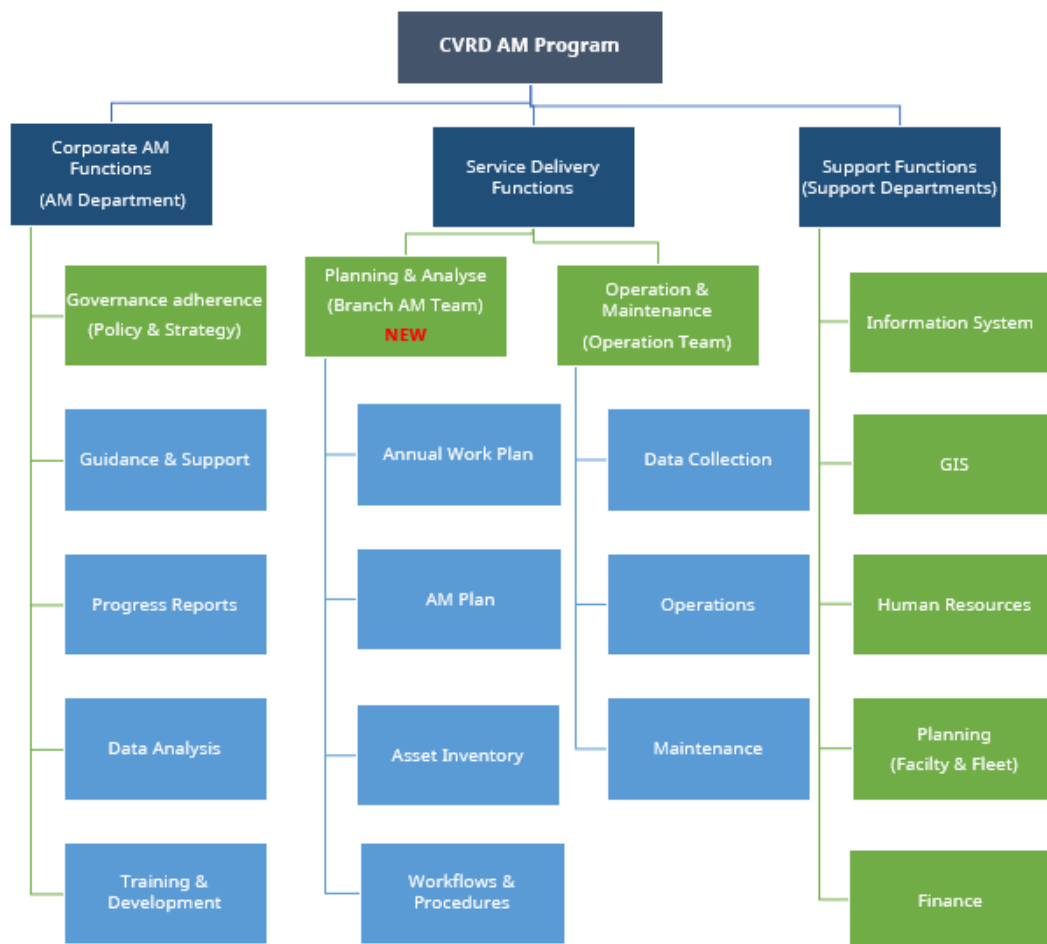
- The AM Strategy includes a five-year implementation plan (figure 1) designed to advance CVRD's AM maturity and align with the principles of the AM Policy.

Figure 1- Year 1 to Year 5 Implementation Plan

AMBC Framework	#	Initiatives	Year 1				Year 2				Year 3				Year 4				Year 5			
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
People	1	Establish AM Engagement Strategy																				
Asset	2	Setup Data Governance Standard																				
People	3	Establish AM Training Plan																				
People	4	AM Human Resource Plan																				
Asset	5	Build Basic Corporate Asset Inventory (natural asset start in 2028)																				
Asset	6	Conduct Condition Assessment Framework																				
Information	7	Develop Risk Assessment Framework																				
Information	8	Develop a Levels of Service (LoS) Framework																				
Information	9	Updated AM Plans																				
People	10	Documented Workflows/Procedures																				
Finance	11	Develop AM Long-Term Financial Plans																				
Finance	12	Develop Prioritization Framework for Annual Budgeting																				
Asset	13	Develop AM Technology Solution																				
Information	14	Build Asset Report Cards/Dashboards																				

- Successful implementation of a formalized AM approach will require additional staffing and funding resources to support the development and integration of new business processes over time.
- As shown in figure 2, the CVRD AM operating model includes corporate AM functions, service delivery functions, and support functions:
 - **Corporate AM Functions:** provides corporate oversight of the AM program, including governance adherence, guidance & support, data analysis, training & development, and progress reporting.
 - **Service Delivery Functions:** the service delivery function being further divided into two areas:
 - **Branch AM Team-** dedicated branch asset management staff to develop annual work plans, 3–20-year asset management plans, applicable department asset inventories, workflows and procedures.
 - **Operations Team-** responsible for job execution, ensuring timely and effective delivery of services.
 - **Support Functions-** provides necessary technical and administrative expertise.

Figure 2- CVRD AM Operating Model



STAFFING REQUIREMENTS

A preliminary assessment was conducted to identify the staffing resources required to implement the AM Strategy and support ongoing improvements to CVRD AM practices. This assessment is based on the best available information.

1. Corporate AM Function

The Corporate AM team currently consists of:

- One Manager of Asset Management (approved in 2024)
- One Asset Management Business Analyst (approved in 2025, vacant)

No additional corporate-level staffing is anticipated at this time.

2. Service Delivery Function

- Each service delivery has indicated a limited capacity in which existing staff can implement the initiatives (outlined by the AM Strategy Implementation Plan in figure 2) or take on new and formalized AM responsibilities over the long term.
- In early 2025, the CVRD engaged a consultant to conduct an independent AM review, which included an AM structure assessment. The review recommended additional staffing at the branch level (*Planning & Analysis – Branch AM Team in figure 2*) to advance the AM program, including:
 - Support for corporate asset inventory development (**Initiative 5**) and Asset Reports/Dashboard building (**Initiative 14**)
 - Contribute to condition assessment (**Initiative 6**), risk assessment (**Initiative 7**), and levels of service development (**Initiative 8**)
 - Develop AMP (**Initiative 9**) and document processes (**Initiative 10**)
 - Assist with technology projects (**Initiative 13**) as business leads or subject matter experts

Table 1- Staff Resources Requirements – Service Delivery Function

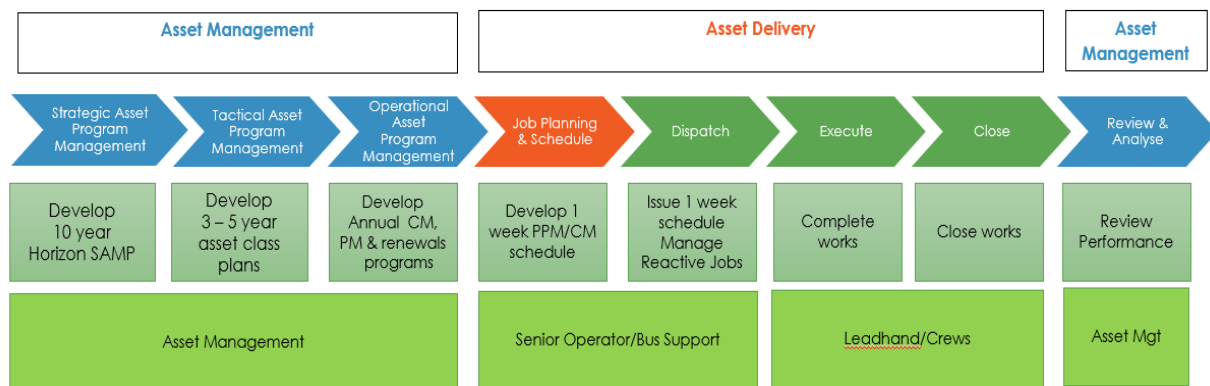
Branch	Position	FTE Count	Budget Cycle
Engineering Service and Community Services	Branch Asset Management Specialist	3	2026-2030

- Currently, operational teams are handling the full works management value chain activities (see figure 3). The Branch Asset Management Specialists proposed above will ensure a clear separation of asset management functions from the delivery teams (see figure 4) and will support the asset management functions from the delivery teams and support the asset management strategy while enhancing the focus on service delivery.

Figure 3- Current State Value Chain Management



Figure 4- Proposed Future State Value Chain Management



3. Support Function

The successful implementation of the AM Strategy will require support from corporate support functions, including Information Systems, GIS, Human Resources, Facility & Fleet, and Finance.

- Information System
 - Technology solutions are a key component of the five- year implementation plan, involving several projects:
 - Onboarding all departments to Cityworks (**Initiative 13**)
 - Implementing decision support software (DSS) and fleet management software (**Initiative 13**)
 - System integrations (**Initiative 13**)
 - To effectively execute these initiatives, it is anticipated that the CVRD will engage external consultants to lead the technical implementation of Cityworks onboarding, DSS, fleet management software, and system integrations.
 - Given the scale and complexity of these projects, two critical roles have been identified to support our technology-based initiatives:
 - **Project Management** to oversee the technology implementation. Technology implementations are scheduled across 2026-2029.
 - **Dedicated Cityworks Support Specialist** to provide ongoing system support. Currently, the IS department

allocates 0.10 to 0.25 FTE to the Water Department's Cityworks support; as additional departments are onboarded in 2026, the Water Department anticipates that the current level of support from the IS team will remain unchanged. However, the level of support from IS team will no longer be sufficient to meet the expected service standards. To ensure consistent and adequate support, the addition of one FTE position is essential.

- Resource planning for the Information System department is currently underway as part of the broader IT Strategy. A key consideration is whether these roles can be fulfilled by reallocating existing staff, or if external resources are required. A decision on whether to contract a business analyst / project management service or to redirect internal resources will be made as more information becomes available; this includes the completion of the IT Strategy and individual technology project scope documents. The consultant's recommendations for the IT Strategy include the establishment of an IT Service Desk. This will not free up staff to support Cityworks but may allow existing staff to fully return to their roles of supporting all business applications across the CVRD - including MARS, SharePoint Transformation, ELF and other new processes as we integrate onto M365 SharePoint. In order to fully support Cityworks, dedicated staff member(s) are needed to support after ESRI has completed their contract work for both the AMS and PLL portions of Cityworks.
- GIS
 - CVRD, with assistance from ESRI, will onboard all applicable departments into Cityworks and ArcGIS (ESRI consultant cost, have been included in the initiative 13 of funding requirements, below).
 - Extensive support will be required from the GIS team and ESRI regarding:
 - Corporate asset inventory (**Initiative 5**)
 - Technology solution - onboarding to ArcGIS/Cityworks (**Initiative 13**)
 - Asset Reports/Dashboards (**Initiative 14**)
 - The GIS department is currently operating at full capacity, with 0.45 FTE allocated to support the Water Department's CityWorks GIS needs. To effectively support the implementation of the AM Strategy and meet increasing demands, an additional 0.55 FTE will

be required. This increase brings the position to a full-time (1.0 FTE) GIS Analyst role with both Cityworks and AM support.

- Human Resources
 - No additional staff are required.
- Facility & Fleet
 - The Facility & Fleet department currently manages the CVRD administration building, visitor center, and passenger vehicles used by the main office.
 - In early 2025, CVRD engaged a consultant to conduct an independent AM review, which recommended centralizing the management of all facilities (structures) and fleet under a Facility & Fleet department. This shift aims to enhance efficiency, achieve economies of scale, and ensure specialized oversight.
 - Facility management responsibilities are currently distributed across the Community Services Branch, Engineering Services Branch, and Planning and Development Services Branch. Those responsibilities also involve multiple unionized employee groups. As such, further analysis is required to assess the implications of any changes to these responsibilities within unionized work environments, including determining which branch has the expertise to manage organization-wide facilities.
 - Centralizing fleet can be a quick win; a business case will be developed outlining different scenarios – such as contracting out fleet management or hiring additional FTE to manage it - which will be submitted to CAO and EMT for consideration at a later date.
- Finance
 - No additional staff are required.

Table 2- Staff Resources Requirements – Support Function

Branch	Position	FTE count	Budget Cycle
Corporate Services- GIS	GIS Analyst	0.5	2026-2030
Corporate Services- IS	Business Analyst/Project Management	1.0	2026-2030
Corporate Services- IS	Cityworks Support Specialist	1.0	2026-2030
Planning and Development Services	Fleet & Facilities Coordinator	1.0	2026-2030

- The addition of dedicated AM-specific and supporting roles will alleviate workload on existing staff. This strategic investment is expected to help defer, or potentially avoid, future operational resource requests or service drops.
- While it is widely acknowledged that infrastructure deficits exist in CVRD, we currently lack the necessary data to justify the significant funding required to address them. Collecting, validating, and analyzing asset data requires both staff capacity and technological resources that are presently insufficient. Delaying action will only increase the funding gap. Without adequate human resources, the CVRD will remain unable to effectively address infrastructure challenges. Ultimately, the Board may be forced to approve sudden and substantial tax increases in response to unexpected infrastructure failures.

FUNDING REQUIREMENTS

- The AM program is a significant investment due to the need for comprehensive data collection, advanced technology solutions, specialized expertise, and ongoing maintenance. Successful integration of AM practices across departments also requires staff training and change management, which contributes to overall costs. However, while the upfront and operational expenses are substantial, a well-implemented AM program delivers long-term financial benefits by optimizing asset performance, minimizing unexpected failures, and supports data-driven decision-making, with enhanced sustainable service delivery. Efficiencies will be gained and taxation dollars optimized.
- Preliminary estimates of the required funding for the AM Strategy are outlined in Table 3 and include both one-time items and recurring expenses. These estimates are based on the best knowledge of the AMSC at this time and will be further refined and formally submitted to the CAO for consideration as part of the annual financial planning process.

Table 3- Funding Requirements

#	Description	Year 1	Year 2	Year 3	Year 4	Year 5	Total
1	Website Ads	-	-	-	\$30,000	-	\$30,000
2	Consultant service for asset hierarchy and data attributes	\$30,000	-	-	-	-	\$30,000
3	Provide staff with AM trainings	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$100,000
4	Dedicated AM roles at branch level	-	\$345,000	\$345,000	\$345,000	\$345,000	\$1,380,000
	Supporting roles		\$359,975	\$359,975	\$359,975	\$359,975	\$1,439,900
5	Consultant for natural asset inventory	-	-	-	\$150,000	-	\$150,000
6	Consultant for condition assessment	-	\$275,000	\$275,000	\$275,000	\$275,000	\$1,100,000
7	Risk assessment ¹	-	-	-	-	-	-
8	Levels of Services	-	-	-	-	-	-
9	AM Plans	-	-	-	-	-	-
10	Consultant for documented procedures	\$170,000	\$170,000	\$170,000	\$170,000	\$170,000	\$850,000
11	AM Long-term financial plans	-	-	-	-	-	-
12	Prioritization framework for annual budgeting	-	-	-	-	-	-
	Technology Solution - Training		\$45,000				\$45,000
	Technology Solution- Optimization	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000	\$200,000
13	Technology Solution – Cityworks onboarding & new software	\$42,000	\$173,000	\$80,000	\$115,000	\$40,000	\$450,000
14	Asset Dashboards	-	-	-	-	-	-
	Total	\$302,000	\$1,427,975	\$1,289,975	\$1,504,975	\$1,249,975	\$5,774,900
	Personnel Cost²		\$704,975	\$704,975	\$704,975	\$704,975	\$2,819,900
	Total Cost Excluding Personnel	\$302,000	\$723,000	\$585,000	\$800,000	\$545,000	\$2,955,000
Total annual costs							\$1,154,980

¹ No cost shown means the initiative will be supported using internal staff resources.

² Personnel costs do not include office furniture & related IT costs; those costs will be included in the regular operational budget.