District of Oak Bay

Asset Management Strategy

December 2024

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1 TERMINOLOGY AND ACRONYMS

1.1 TERMINOLOGY

Term	Description
Accountabilities	The obligation to be answerable for the results, which is the liability created for the use of the assigned authorities.
Asset Management	Asset Management (AM) is an integrated and systematic approach to delivering value to the community through the effective management of existing and new infrastructure assets.
Capital Regional District	The Capital Regional District (CRD) is the regional government for 13 municipalities and three electoral areas on southern Vancouver Island and the Gulf Islands, serving about 440,000 people.
District	The District of Oak Bay
Infrastructure assets	Physical structures and facilities, such as roads, bridges, water and sanitary, support fleet, and buildings, that support the functioning of a community and the organization.
Oak Bay	The District of Oak Bay
Recommended Useful Life	The replacement cycle recommended by the National Asset Management System

1.2 ACRONYMS

Term	Description
AM	Asset Management
AMP	Asset Management Program
CRD	Capital Regional District
LOS	Levels of Service
SIR	Sustainable Infrastructure Replacement
TCA	Tangible Capital Assets
SMART	Specific, Measurable, Achievable, Relevant, and Time-Bound

2 BACKGROUND

2.1 OVERVIEW OF ASSET MANAGEMENT AT OAK BAY

The District faces the critical responsibility of ensuring the sustainability of its infrastructure assets. One of the District's core duties, as outlined in Section 7 of the Community Charter, is the stewardship of these assets, which are essential for providing crucial services to residents.[1] However, a significant

[1] https://www.bclaws.gov.bc.ca/civix/document/id/complete/statreg/03026_02#section7

portion of Oak Bay's infrastructure has exceeded its recommended useful life.[2] The aging of these assets presents an urgent challenge, with many nearing the point of needing replacement, which will incur substantial cost.

The District's ability to maintain its current levels of service (LOS) hinges on addressing these infrastructure needs. Failure to replace aging assets at the necessary pace could lead to an increase in water main breaks, water quality issues, sewer backups, and stormwater problems, all of which could have serious repercussions for private properties and the community at large. Recognizing the gravity of this situation, the Council has provided strategic direction to tackle the issue through the development of a comprehensive Asset Management Program (AMP), increased funding, and an expansion of capital programming. This led to Council making significant strides in reducing the projected 100-year funding gap.

2.1.1 Adaptation of the Asset Management BC Framework

Since 2015, the District has made substantial progress in implementing the Asset Management BC Framework, guided by Council's strategic decisions. Further details on this program can be found in Section 8.

3 PURPOSE AND SCOPE

A well-structured AM system is built on foundational elements that provide clear "line of sight" from strategic objectives to daily operations. These elements include the Asset Management Policy, which sets the overarching principles; the Asset Management Strategy[3], which outlines the framework and governance structure; and the Asset Management Plans (AMPs), which guide the day-to-day management of assets. This hierarchy ensures that all municipal activities are aligned with the organization's strategic goals, breaking down departmental silos and promoting collaboration across different functions.

3.1 PURPOSE OF THE STRATEGY

Asset Management Strategy is a high-level document whose purpose, in accordance with the ISO 55001 standard, is threefold:

i. To document information that specifies how organizational objectives have been translated into **Asset Management Objectives.**
ii. To describe the **Asset Management System (AMS)** and its role in supporting achievement of the AM Objectives including cost effective delivery of appropriate Level of Service (LOS), while meeting legislative requirements and having regard for the long term stewardship of the asset base, and
iii. To inform the approach for developing **Asset Management Plans (AMP).**

[2] https://www.oakbay.ca/sites/default/files/sirp.pdf
[3] The asset management strategy can also be referred to as the Strategic Asset Management Plan (SAMP). The term "SAMP" was introduced by the ISO 55000 International Asset Management Standard Committee and many industries refer to the asset management strategy as a SAMP

At its core, this strategy serves as the charter for the District of Oak Bay's Asset Management Program, defining the framework for activities and projects aimed at delivering sustainable service delivery.

The processes and activities described in this document are continually changing. Any significant changes to the District's strategic priorities and policy will trigger a review, but any other changes will be captured during the next periodic review.

3.1.1 Asset Management Objectives

The purpose of converting the District's organizational objectives into Asset Management Objectives will enable the Oak Bay to:

- Create a "line of sight" between the District's organizational objectives and day to day activities on the assets
- Develop and implement condition assessment plans to monitor the health and performance of assets, ensuring sustainable service delivery
- Establish a governance structure that ensures the successful implementation of the Asset Management Program
- Identify the risks that may impact the successful performance of the District's objectives
- Operationalize management best practices to ensure the District achieves optimal value in asset design, operation, maintenance, and disposal.
- Articulate the District's decision-making criteria

3.2 SCOPE OF THE STRATEGY

The scope of the Asset Management Strategy is determined by three primary parameters: (i). the assets contemplated; (ii). The services contemplated; and, (iii). the documented processes contemplated.

3.2.1 By Assets

This Asset Management Strategy contemplates the majority of the Tangible Capital Assets (TCS) owned, operated or maintained by the District. The assets have been arranged into eight asset classes[4] and the **Table 1** below correlates the District's asset categories with the asset class names referenced throughout the Asset Management Strategy.

***Table** 1 Summary of In-Scope Asset Classes*

#	Asset Class	Asset Elements
1	Natural Assets	Trees, Creeks and Streams, Waterfront, Land
2	Park Structures	Benches; Irrigation; Parking Lots; Play Structures; Sports Courts; Other Structures
3	Road Infrastructure	Local; Collector; Arterial; Other; Curb & Gutter; Sidewalk, Street Lights
4	Building Assets	Buildings
5	Vehicles and Equipment	General Vehicles & Equipment; Fire Vehicle & Equipment; Police Vehicle & Equipment; Parks, Recreation, and Culture
6	Drainage Infrastructure	Mains; Laterals; Manholes; Lift Stations

[4] https://www.oakbay.ca/sites/default/files/sirp.pdf

#	Asset Class	Asset Elements
7	Sanitary Sewer Infrastructure	Gravity Mains; Pressure Mains; Laterals; Lift Stations; Manholes
8	Water Infrastructure	Mains; Laterals; Hydrants; Valves; Meters; Lift Stations

3.2.2 By Services

The District has identified six service categories, which are articulated on the corporate website at https://www.oakbay.ca/municipal-services. To illustrate the correlation between the District's asset and services, the **Table 2** provides a summary cross reference.

***Table** 2 Correlation of Services to Assets*

Services			Corresponding Asset Class
ID	Category	Core Services	
1	Online Services & Payments	Home Owner Grant; Parking Ticket; Dog Licenses; Business Licenses; Tax Certificates	Building Assets;
2	Taxes & Utilities	Property Taxes; Utilities; Watering Restrictions	Building Assets; Drainage, Sanitary Sewer, and Water Infrastructure
3	Garbage & Recycling	Curbside Garbage and Recycling Collection; Collection & Schedule; etc.	Vehicles and Equipment; Road Infrastructure
4	Permits	Permits, Building Permit Checklist	Building Assets;
5	Licenses	Business Licenses, Dog Licenses	Building Assets;
6	Maps (GIS)	My Oak Bay	Building Assets; Road, Drainage, Sanitary Sewer, and Water Infrastructure

The preceding list is not exhaustive and is intended to provide an illustration of the relationship between the District's many services and assets. The Asset Management Strategy is intended to help implement changes that will improve alignment of Council, Corporate, and Business Unit service delivery, planning, prioritizing, and costing.

4 STRATEGIC ALIGNMENT

4.1 ASSET MANAGEMENT SYSTEM & LINE OF SIGHT

This Asset Management Strategy serves as the foundation for implementing the Asset Management Policy, ensuring efficient compliance with business requirements and alignment with corporate goals and priorities. The asset management objectives are SMART (Specific, Measurable, Achievable, Relevant, and Time-Bound) and align with the District's strategic direction. **Figure 1** illustrates the "line of sight" from the District's Vision, Mission, and Values through the Organizational Strategic Plans, Asset Management Policy, Asset Management Strategy, and Asset Management Plans.

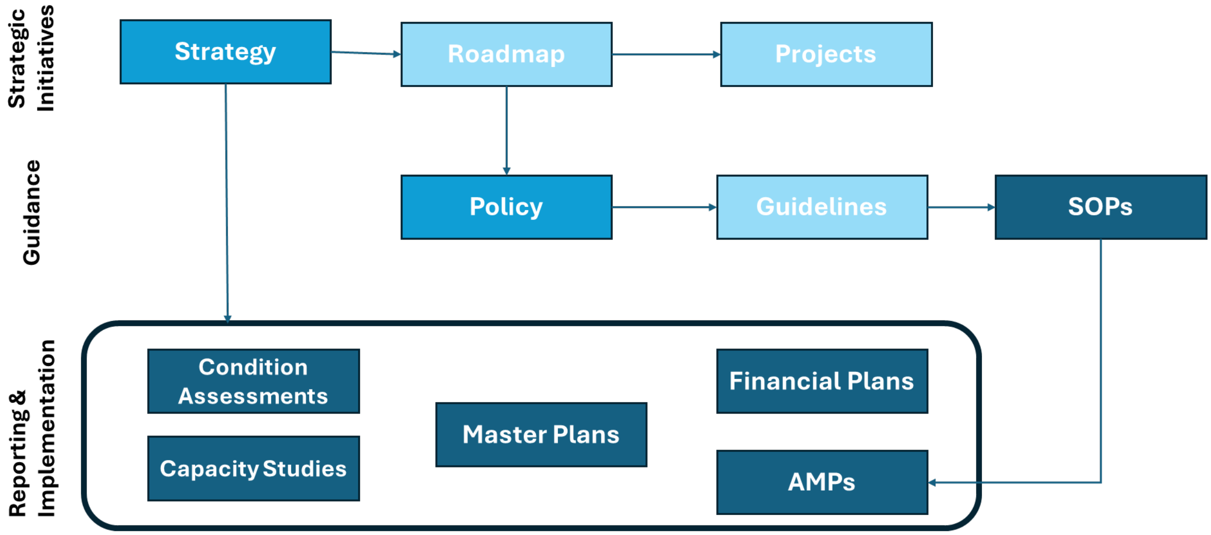

Figure 1 *Asset management line of sight*

The management and operation of the District's assets play a crucial role in achieving the District's strategic goals and objectives. Many of these goals and objectives depend on the long-term sustainability of the District's infrastructure. Consequently, one of the key aims of this Asset Management Strategy is to establish a clear connection between these high-level objectives and the day-to-day activities performed on the assets.

4.2 Council Priority Linkage

District has developed strategic documents as well as master plans. Asset management will take corporate objectives and convert them into technical and financial objectives, decisions, plans, and activities related to asset management. This approach will ensure that these objectives are achieved sustainably over a reasonable and realistic timeframe.

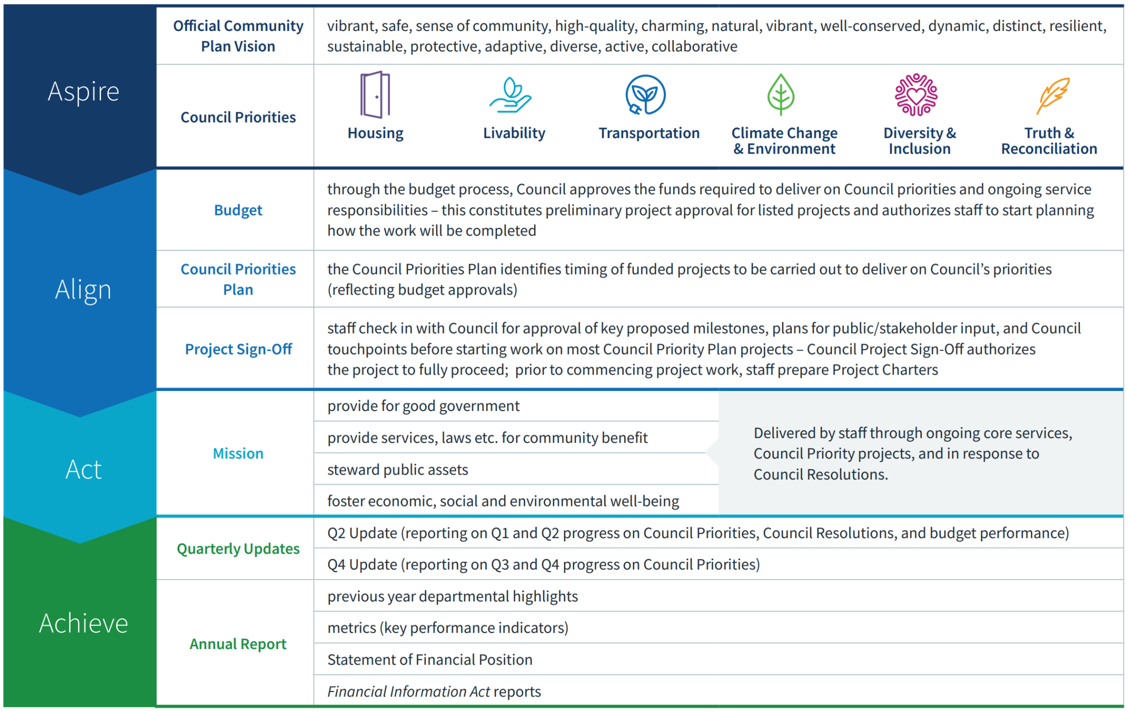

***Figure 2** 2022–2026 Council Priorities Plan*[5]

The Asset Management Program aligns with the Council's priorities, as strong asset management principles support the capital needed to delivery Council approved service levels. For instance, asset management information is needed to make decisions related to Housing and Transportation. Furthermore, asset management information is used to prioritize corporate spending whether it can be on physical infrastructure or natural assets that mitigate and adapt to climate change. The **Table 3** provides high level linkage between Council priorities and Asset Management Program.

***Table 3** Council Priority Linkage*

#	Council Priority	Linkage Brief Description
1	Housing	Strong linkage as capital services are built to support housing.
2	Livability	Strong linkage between built environment, natural environment and livability
3	Transportation	Strong linkage as transportation services are primarily delivered via capital
4	Climate Change & Environment	Strong linkage as our asset management decisions have a direct impact on the environment.
5	Diversity & Inclusion	Mild linkage, however built infrastructure can support greater inclusion and natural assets support diversity
6	Truth & Reconciliation	Mild linkage, however built and natural infrastructure and land use has an impact on the District's relationship with Indigenous peoples.

[5] https://www.oakbay.ca/sites/default/files/2024-05-14-Council-Priorities-Plan-web.pdf

5 Asset Management Maturity Assessment

5.1 Components of the Maturity Assessment

The District used AssetSMART 2.0 as a tool to assess the maturity of the asset management practice. This assessment helps:

- Evaluate different aspects of the asset management practice
- Identify areas of strength and areas for improvement
- Identify gaps and establish priorities
- Build awareness of the many dimensions of asset management within the wider team
- Start productive discussion across departments
- Measure progress over time
- Set short-, mid-, and long-term objectives in specific areas

The tool uses AMBC's Asset Management for Sustainable Service Delivery: A BC Framework as a foundation. This assessment establishes a baseline and should be repeated within the next five years to measure progress against the same parameters. Our assessment covered the following four areas:

People	Assets
- Is there a cross-functional team in place? - What is the level of asset management knowledge of relevant staff? - Are roles and responsibilities clear? - How do we communicate across departments and ensure our priorities are aligned?	- Do we have the data we need about our engineered and natural assets? - Is the asset data complete, accurate, and reliable? - Is asset data compiled into a format that is accessible?
Information	**Finances**
- Have we processed our asset data into information that can be used for decision-making? - Have we developed asset management policies, strategies, and plans? - Are we using our asset management policies, plans, and strategies?	- Do we have policies and practices in place related to: o Long-term financial planning? o Infrastructure backlog? o Cost recovery? o Reserves? o Debt? o Financial tracking?

5.2 Summary of Assessment Findings

The assessment is based on a review of current documents and a consultations with partners across leadership, the AM Core Team, Asset Class Managers, and Finance. The findings of these workshops are summarized under the four main categories:

Assets

The District's team has a good view of the assets they own and maintain. Data quality for older infrastructure, particularly pre-1970s underground infrastructure, is less reliable, with pooled and estimated installation dates. Comprehensive data exists for assets requiring regular assessments due to insurance or regulatory obligations, such as buildings and facilities. The Geographic Information System (GIS) contains a good representation of linear assets while non-linear assets are better represented outside of the current GIS.

The assessment revealed a general awareness of the benefits provided by natural assets such as trees and creeks, but these are not yet integrated into service or financial planning. Most participants agreed that decision-making does consider these natural assets, albeit weakly. Despite the lack of specific studies or formal inventories for these assets, their value is recognized, albeit not fully quantified or utilized in planning processes. The overall goal is to continually improve data accuracy and integration of all asset types to better support the District's Asset Management Strategy.

Information

An Asset Management (AM) Policy was adopted by the Council in 2018 and is currently being updated. The 2025 update aims to better align the policy with strategic goals and provide clear guidance for asset management activities. Additionally, the AM Strategy issued in 2021, now under revision, focuses on specific initiatives but needs better alignment with current priorities. Levels of service are inconsistently defined, with gaps in key performance indicators and responsibilities. Various departments are working on understanding community needs through surveys, with plans for future improvements, such as the Parks, Recreation, and Culture Master Plan in 2025.

Recent reports highlight risks but indicate gaps in condition data for some assets, affecting decision-making. The Sustainable Infrastructure Replacement Plan (SIRP) of 2021 addresses a long-term forecast for infrastructure spending, with strategic direction on funding levels. Some departments have more developed Asset Management Plans (AMPs), like Fleet and Fire services. Capital planning is short-term, though efforts are being made to extend planning horizons. Climate change impacts are considered in strategic documents, but integration into decision-making is limited, with older assets and infrastructure challenges, such as the transition to an electric vehicle fleet for police services.

Finances

The current Financial Plan for 2024-2028 covers a span of less than 10 years, focusing on the cost of maintaining and replacing assets. Reports like the Sustainable Infrastructure Replacement Plan (SIPP 2021) highlight the funding levels needed for long-term infrastructure replacement and suggest various options to address funding gaps. There is concern about the ability to maintain asset needs with existing and future funding levels beyond a five-year period, especially as inflation and costs drive up replacement expenses. Reserves exist to cover significant replacement needs and potential revenue fluctuations, but these may not be sufficient for evolving infrastructure and equipment needs.

Although there is currently no outstanding debt. The team anticipates significant upcoming capital renewals that will challenge debt levels. The 2021 Sustainable Infrastructure Replacement Plan recommended increasing reserves for utilities by 2.5% over eight years, but there are concerns about the sustainability of these levels given the rapid pace of technological advancements and IT infrastructure needs.

People

The organization faces challenges with staff turnover, which leads to issues with continuity and knowledge retention. Asset management is often seen as a peripheral task rather than a central focus, and there is a lack of unified understanding of what asset management entails across different teams. While some departments like Parks, Recreation & Culture have a deeper awareness of the connection between assets and community service levels, other teams remain siloed and the definition of roles, especially concerning future needs and levels of service, remains unclear.

There are efforts to form cross-functional teams, though they are not necessarily focused on asset management, and decisions are typically made with a short-term focus, except for certain asset classes guided by specific reports. Initiatives are emerging to adopt a bottom-up approach in identifying facility needs, but gaps remain in translating departmental roles into actionable plans for asset replacement and maintenance. Reports like the Financial Plan and Sustainable Infrastructure Replacement Plan provide some data-driven guidance, yet a comprehensive, long-term strategy is in development.

6 PARTNERSHIPS

The District's Asset Management Strategy defines partnerships as relationships with any individual or organization that can influence or be influenced by a decision or activity undertaken by the District. The lists below are not comprehensive; however, they represent a sample of key internal and external partnerships.

6.1 INTERNAL & EXTERNAL PARTNERSHIPS

The District has identified partnerships as a key mechanism to achieving a strong asset management program. These partners (internal or external) play an important role in the development of the Comprehensive Asset Management Plan and Asset Management Program in general.

6.1.1 Key Internal Partnerships

- Council (Governance role)
- Corporate Services (supporting decision-making)
- Protective Services (utilizing capital for service delivery within the community)
- Engineering Capital Programming staff
- Public Works Operating staff
- Program Manager – Facilities/Asset Management
- Parks, Recreation, and Culture Facilities staff
- Communications staff
- Procurement staff
- Finance Department staff
- Long-Term Land Use Planning staff & approving officer

6.1.2 Key External Partnerships

- Community (local residents, regional participants, and visitors)
- End-users of capital services

- Ratepayers and taxpayers
- Capital Regional District (CRD)
- Neighbouring municipalities

This identification of both internal and external partnerships ensures that all relevant parties are considered throughout the asset management planning process, allowing the District to create a balanced, inclusive, and well-informed plan.

7 Asset Management Risk and Decision-Making Approach

The District aims to use asset management as a tool for more effective decision-making that is based on risk. Effective risk and opportunity management is essential for the success of the Asset Management Program. According to ISO 31000, risk is defined as the "effect of uncertainty on objectives." The following table outlines the six-step risk management process that will support the District's Asset Management Strategy through a risk-based decision-making approach.

Table 4 *Risk Management Process*

	Risk Process	Description
1	Risk Context	The process of Scanning the context.
2	Risk Identification	The procedures by which the District finds and describes its risks within the context of the organization. This include a scan of the District’s internal and external parameters that must be considered when managing the District’s risk. Risks are arranged into the following two types of risk management: a. <u>Enterprise risk:</u> such as seismic events, pandemics, strikes, acts of war, dissatisfied partners, reputational damage, etc. b. <u>Asset risk:</u> such as equipment failure, warranty failure, deferred maintenance backlogs, vandalism, injuries, inclement weather, service interruptions, etc.
3	Risk Analysis	The procedures that the District uses to understand the nature, sources and causes of risks that have been identified. Here we focus on: a. Risk Equations b. Consequence matrix c. Likelihood matrix d. Causal chains (root causes, proximal causes, fishbone diagrams etc.)
4	Risk Evaluation	The procedures that the District uses to compare risk analysis results with its risk criteria in order to determine whether or not a specified level of risk is acceptable or tolerable to the District. Here the focus on things like: a. Risk appetite and tolerance b. Identification of critical assets c. Risk scoring systems and ranking schemes d. Risk matrix correlations (high probability – high impact; low probability – low impact)
5	Risk Treatment	The procedures the District uses to modify its risks by selecting one or more treatment and/or control options, such as: avoid the risk, reduce the risk, remove the source of the risk, and transfer the risk. Treatments are grouped into two broader categories:

Risk Process		Description
		a. <u>Modifying the likelihood</u> of the risk through measures such as: asset renewal, asset rehabilitation, standard operating procedures (SOPs), rigorous maintenance program, enhanced monitoring regime. b. <u>Modifying the consequences</u> of the risk through measures such as new redundant assets, contingency planning and staff training. Residual risk left over after treatment/control.
6	Risk Monitoring & Review	The procedures the District uses to supervise and continually check and critically observe the risk register and risk plan. Review activities are carried out to determine whether something is suitable, adequate and effective way of achieving objectives.

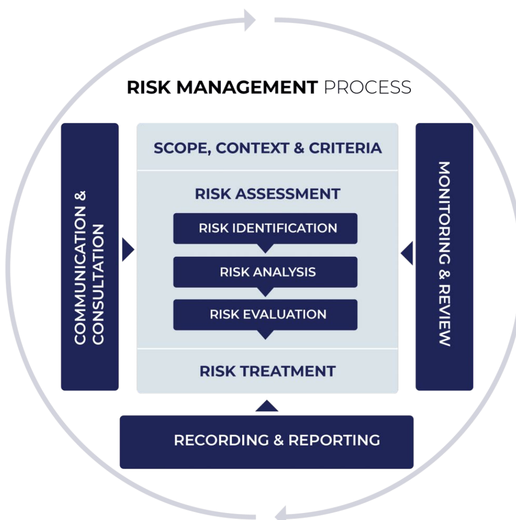

Figure 3 *Risk Management Process as per ISO 31000*

In simplest terms, the District recognizes that risk can be calculated as the product of the likelihood of an "event" occurring and the consequence to the District when it does happen. To this end, the following table provides an outline of the District's likelihood matrix, which represents one of the elements of District's overall risk equation.

Table 5 *Likelihood Matrix*

Likelihood		Score	Description
Almost Certain	≥ 90%	5	Very high probability that risk will occur in the next 36 months
Likely	≥ 70% to < 90%	4	High probability that risk will occur in the next 36 months
Possible	≥ 25% to < 70%	3	Moderate probability that risk will occur in the next 36 months
Unlikely	≥ 1% to < 25%	2	Low probability that risk will occur in the next 36 months
Rare	≤ 1%	1	Very low probability that risk will occur in the next 36 months

A consequence matrix represents the second key element of the risk equation. The following table includes a summary of the strategic, political and reputational consequences and corresponding severity band, with scores ranging from 1-5 points.

Table 6 *Consequences Matrix*

Consequence Category	1 Insignificant	2 Minor	3 Moderate	4 Severe	5 Catastrophic
Financial	Damages, losses (including 3rd party) or fines less than $10,000	Damages, losses (including 3rd party) or fines $10k to $100k	Damages, losses (including 3rd party) or fines $100k to $500k	Damages, losses (including 3rd party) or fines $500k to $1M	Damages, losses (including 3rd party) or fines greater than $1M
Health & Safety	No impact to health and safety	Minor injury or illness without lost time	Illness/injury resulting in lost time	Illness/injury resulting in permanent or long-term disability	Illness/injury resulting in fatality
Availability / Reliability	Small number of customers experiencing disruption / impact (less than 100 people or up to 2 hours)	Localized service disruption / impact (100 to 500 people or up to 1 day)	Significant localized disruption / impact (500 to 1,000 people or up to 1 week)	Major service disruption / impact (1,000 to 5,000 people or up to 2 weeks)	Organizational wide service disruption / impact (greater than 10,000 people or loss of services for longer than 2 weeks)
Legislation	No expected violations of regulations, Acts or bylaws	Potential verbal or written warnings/ notices	Compliance orders or notice of violations	Potential for charges to individuals or the Corporation	Numerous charges to individual or the Corporation or labelling as a repeat offender
Environment	Very negligible impact or can be restored within 1 week	Material damage / improvements of local importance. Minor, short term (within 1 month) very isolated damage / improvements	Significant short term (up to 2 months) local damage / improvements to the environment	Significant long term (up to 1 year) widespread damage / improvements to the environment. Some Provincial importance.	Major long term (greater than 1 year) or permanent widespread damage / improvements to the environment. Federal importance.

Consequence Category	1 Insignificant	2 Minor	3 Moderate	4 Severe	5 Catastrophic
		to the environment			

The risk bands in the preceding consequences matrix will need to be calibrated as the District develops its risk framework. Once the likelihood matrix and consequence matrix have been developed and calibrated by the District's subject matter experts in each service area, the resultant risk score are plotted on a risk matrix. The following figure includes an illustration of the 5-by-5 risk exposure matrix.

Likelihood					
5 - Almost Certain	Moderate	High	Extreme	Extreme	Extreme
4 - Likely	Moderate	Moderate	High	Extreme	Extreme
3 - Possible	Low	Moderate	Moderate	High	High
2 - Unlikely	Low	Low	Moderate	High	High
1 - Rare	Low	Low	Low	Moderate	Moderate
Impact	1 Insignificant	2 Minor	3 Moderate	4 Severe	5 Catastrophic

Figure 4 *Risk Exposure Matrix*

Early identification of both risks and opportunities is essential, and these elements are assessed regularly throughout the implementation process. The program team, along with partners, will identify the best strategies for mitigating risks and maximizing opportunities. This section outlines the high-level aspects related to the implementation of the Asset Management Strategy.

Table 7 Asset Management Risks & Opportunities

Event	Impact	Likelihood of Occurrence	Risk, Action and Mitigation
Staff turnover, retirements, people transitioning within Asset Management Team	Medium	Medium	In terms of turnover, clearly defined roles and change management can mitigate some scenarios; however, much of this risk must be accepted.

7.1 Documents to Support Decision Making

In addition to existing documentation used by leadership and Council, the following documents will support decision-making and the communication of risk and asset needs:

- Asset Management Plan

- Risk Assessment
- Risk Matrix

7.2 Asset Management Objectives and Performance Targets

The District's objectives are discussed in Section 4.2 as part of Council's Priorities 2022-2026, and further emphasized in the Guiding Principles section of the 2025 Asset Management Policy.

As part of the District's first set of AM initiatives, these objectives will be translated into Performance Targets within a Levels of Service Framework.

7.3 Levels of Service

The District aims to define performance metrics which are essential to effective asset management. These metrics, referred to as levels of service, provide a systematic way of justifying investments that are linked to maintaining or performing performance. They are also often aligned with corporate strategic objectives and Council Priorities.

The District's Levels of Service Framework will define a set of categories such as: Condition (Reliability), Sustainability, Efficiency, and Quality. For each of these categories several Customer Levels of Service (CLOS) and Technical Levels of Service (TLOS) are defined and measured. Identifying both CLOS and TLOS pertaining to each asset class would provide a clear line of sight to the District's strategic objectives and emphasize the role of the District's assets and respective departments in achieving some of these overarching goals. It also provides a framework for measuring current performance and defining target performance as a tool to justify current and future investment needs. This framework also ties to renewal and maintenance costs required to maintain or improve the existing levels of service.

8 Asset Management Framework

Understanding and applying core practices and processes within the District's Asset Management System will empower staff to manage assets and deliver services efficiently and effectively. Several process and practice models provide a strong foundation for the District's system. The ongoing development, implementation, and refinement of Asset Management practices are essential activities. As noted in **Section 2.1.1**, the District has adopted best practices aligned with the Asset Management for Sustainable Service Delivery: A BC Framework, which offers a systematic approach to sustainable service delivery and **Figure 5** provides an overview of that framework.

Figure 5 *Asset Management for Sustainable Service Delivery: A BC Framework*

The District's AM system is organized around the three core processes including Assess, Plan, and Implement.

i. **Assess:** In 2015, Council initiated the Asset Management Program. By 2018, staff had evaluated current practices and developed both the Asset Management Policy and Strategy, with an update in 2025. In 2025, the District conducted a baseline Asset Management Maturity Assessment to determine the current state and define target levels.

ii. **Plan:** The Asset Management Policy, created in 2018 and updated in 2021, outlined various program components. Long-term financial planning is integral, providing Council and the public with an overview of the required financial resources. Please see the following table for current status of asset management program components. By 2025, the District will have completed the Asset Management Roadmap based on the updated Strategy, which will guide

iii. **Implement:** By 2025, the District will have initiated department-level implementation plans to guide asset management work based on the Asset Management Policy and Strategy, along with the high-level roadmap. This work will culminate in a 20-year Capital Plan and Comprehensive Asset Management Plan.

Table *8 AM Core Processes and Objectives*

AM Core Processes	Current Practice or AM Objective	Reference / Responsibility
Assess		
Assess AM Practices	• Opus International Consultants (Canada) Limited, 2016 Asset Management Practice Assessment • Moore & Associates, Building Asset Management Plan, Municipal Buildings Analysis, July 2016	

	• Moore & Associates, Municipal Buildings Analysis, Options Analysis, July 2016 • Committee of the Whole Report, March 20, 2017 • Committee of the Whole Report, November 20, 2017	
Current State of Assets	• Opus International Consultants (Canada) Limited, 2016 Asset Management Practice Assessment • Sanitary and Storm Sewer Condition Assessment • Playground Inventory Assessment	
Plan		
AM Policy	• Asset Management Policy (Policy adopted by Council March 26, 2018)	
AM Strategy	• Asset Management Strategy (Strategy adopted by Council March 26, 2018)	
AM Plan	• Sustainable Infrastructure Replacement Plan On Cycle of renewal/development: • Pavement Management Plan • Water Master Plan • Pedestrian and Sidewalk Master Plan • Facilities Master Plan • Sewer Master Plan • Storm Master Plan • Parks, Recreation, and Culture Master Plan • Transportation Master Plan • Natural Assets Master Plan	
Long Term Financial Plan	Financial Plan 2024-2028 with a longer timeframe included within	
Implement		
AM Practices	Upcoming Enterprise Asset Management System Implementation	
Measure and Report	Upcoming	

Sustainable Infrastructure Replacement Plan

The District of Oak Bay has embarked on a comprehensive journey to ensure the sustainability of its infrastructure through the development of a Sustainable Infrastructure Replacement (SIR) plan. This plan is essential for maintaining the integrity and functionality of Oak Bay’s various assets, from parks and recreational facilities to transportation networks and natural resources. By implementing strategic asset management practices and leveraging upcoming Enterprise Asset Management System enhancements, the District aims to create a resilient and sustainable community infrastructure.

On September 13, 2021, Asset Management BC (AM BC) endorsed the District's process for developing the Sustainable Infrastructure Replacement (SIR) plan, a critical document for sustainable infrastructure funding across Oak Bay. AM BC highlighted that the SIR plan aligns with the principles outlined in the "Asset Management for Sustainable Service Delivery: A BC Framework." The endorsement emphasizes the importance of continuously updating the SIR plan to reflect changes in service levels, asset conditions, and new assets, ensuring the District's path toward financial and service sustainability. This recognition marks a significant milestone in Oak Bay's ongoing commitment to effective asset management and long-term community resilience.

9 Asset Management Improvement Initiatives

9.1 Key Improvement Initiatives

The Asset Management Policy outlines three main categories for Guiding Principles that are applied to the District’s practice and framework. These categories state that asset management practices should be:

- holistic, integrated and forward-looking
- sustainable and efficient
- focused on long-term community needs and continuous improvement

Based on the Guiding Principles and findings of the AM Maturity Assessment, the following initiatives have been developed to be implemented for greater support of the AM program. They are split into short-term (within one year), medium-term (1-3 years), and longer-term. These initiatives have been incorporated into the Asset Management Roadmap with more details on timelines, pre-requisites, and sub-tasks.

Short-term

- Asset Management Guidance Documents
- Department-level Implementation plans
- Baseline Assessment: Data Audit

Medium-term

- Infrastructure Asset Inventory/ Register
- Condition of Assets
- EAM Implementation
- Customer & Technical Levels of Service
- Master Plans
- Develop Financial Framework
- 20-Year Capital Plan and Long-Term Financial Plan
- State of Infrastructure Reports (aka SIRP)
- Define Asset Risks

Longer-Term

- Annual and Lifecycle Asset Costs
- Asset Management Plans
- Natural Asset Inventory/ Register

10 Asset Management Roles and Responsibilities

10.1 Organizational Governance Framework

A robust governance framework is crucial within municipal asset management as it ensures that there are clear policies, strategies, and structures in place to guide decision-making processes. This framework establishes accountability, transparency, and consistency in managing municipal assets. By defining roles, responsibilities, and procedures, a governance framework helps the District to effectively plan, finance, and maintain our assets over the long term, ensuring sustainable service delivery to the community. It also facilitates the alignment of asset management practices with the District's strategic objectives.

10.1.1 The AM Community of Practice

The Asset Management (AM) Community of Practice plays a pivotal role in overseeing the implementation and continuous improvement of the asset management program. Comprising key partners and experts, the Committee is responsible for defining future asset management policy and strategy, setting performance expectations, and ensuring alignment with the overall organizational goals. The AM Community of Practice also monitors the progress of the asset management initiatives, reviews and approves asset management plans, and allocates necessary staff and resources. By providing strategic direction and fostering collaboration among various departments, the Committee ensures that asset management activities are conducted efficiently and effectively, ultimately enhancing the municipality's ability to manage its assets responsibly.

10.1.2 Roles & responsibilities

The following roles are driven by direction from the Asset Management Policy with the goal of achieving greater integration of asset management within the District.

- **Council**
  - Adopt the AM Policy and Strategy.
  - Serve as custodians of the District's assets.
  - Own infrastructure/asset risk.
  - Approve the asset management program and its components, as required.
  - Commit and allocate resources to the asset management program, as required.
  - Approve asset management plans as delivered via the asset management program.
  - Approve proposed levels of service, infrastructure risk levels and cost standards.
  - Oversee governance of strategic and long-term financial aims.

- **CAO & Senior Management Team**
    - Provide strategic leadership and advice to Council regarding infrastructure asset management.
    - Continuously engage Council for changes to Levels of Service.
    - Lead the adoption and implementation of the AM Policy and allocate appropriate resources to meet asset management goals.
    - Identify key roles:
        - Asset Management Sponsor.
        - Manager of Asset Management and/or Asset Management Community of Practice.
    - Deliver on the Asset Management Program, including its component projects and deliverables.
    - Leverage the tools and resources needed to support the AM program
    - Ensure asset management outcomes support Council's strategic aims.
    - Report on the Asset Management Program and direct the development of Plans, Studies, and Assessments necessary for reporting.
    - Ensure community and partner views are incorporated into development of levels of service and infrastructure risk management.
- **All Managers and Staff**
    - Observe the requirements of the AM Policy and AM Strategy.
    - Execute against Asset Management Plans
    - Adopt the AM Strategy and Roadmap and align detailed departmental roadmaps.
    - Collect, maintain and refine the information necessary to support the AM program.
    - Prepare necessary data and inputs for Asset Management Plans and related documents.
    - Develop and identify the tools needed to collect and provide inputs.
    - Apply principles to day-to-day management of assets.

11 Continual Improvement, Monitoring and Innovation

Continual improvement is an essential part of asset management for the District of Oak Bay. It drives greater business efficiency and effectiveness by ensuring that processes and practices are regularly adapted to reflect changing conditions. This ensures that the Asset Management System consistently delivers its intended results.

The Asset Management Strategy, together with the Asset Management Roadmap, are dynamic documents designed to evolve as asset management practices advance within the District.

A formal review of the Asset Management System, including the Asset Management Policy and Strategy, will be carried out at least every five years. Should it be necessary, more frequent reviews will address emerging challenges identified through annual management assessment. These reviews will concentrate on:

i. Progress on actions from prior management reviews.
ii. Relevant changes in both external and internal operating conditions.
iii. Achievement of Asset Management objectives
iv. Performance of the Asset Management System, including progress and trends in improvement plans.
v. Opportunities for continuous enhancement
vi. Shifts in risk profiles and opportunities.
vii. Competency, skills, resources, and support availability.
viii. The condition and performance of assets.

The outcomes of these reviews will result in decisions and actions aimed at improving both the Asset Management System and related practices. These actions may include adjustments to the system's scope, policy, and objectives; refining decision-making criteria; revising performance standards; reallocating financial, human, and physical resources; and modifying controls, responsibilities, and authorities.

Any required adjustments or corrective measures identified during the reviews will be documented, and the relevant information will be communicated to the appropriate staff and partners. This ongoing process ensures that the District stays adaptable and continually improves its asset management practices to meet evolving needs and maintain sustainable service delivery.