



# Warehousing & Inventory 10-Year Capital Infrastructure Needs Assessment

*April 2026*

## 1. Service Overview

Warehouse & Inventory plays a critical role in enabling City services and external partners by delivering reliable, efficient, and cost-effective warehousing and inventory solutions, with a strong focus on safety, environmental sustainability, and lifecycle cost optimization. Warehouse & Inventory ensures effective inventory planning, inventory management, warehousing, logistics, and disposal of surplus assets to meet operational requirements and support long-term organizational resilience. Warehouse & Inventory also contributes to logistical support for emergency activations, civil events such as elections, and demobilization efforts. These services are strengthened through ongoing customer engagement, team collaboration, and a commitment to developing and retaining specialized expertise. By offering innovative, fit-for-purpose solutions, Warehouse & Inventory supports essential city functions, including waste collection, snow removal, water services, parks maintenance, police, fire and emergency response. Through innovation and strategic investment, Warehouse & Inventory is committed to delivering high-performance warehousing and inventory solutions that drive sustainability, efficiency, and reliability across city operations.

## 2. Strategic Alignment

Warehousing & Inventory's capital infrastructure needs are strategically aligned with several key Council and Corporate initiatives, supporting Calgary's long-term goals for sustainability, operational efficiency and service reliability. Below is a brief overview of the primary strategies that influence and are supported by these investments:

### 1. Council's Strategic Direction 2023 – 2026

Warehousing & Inventory aligns with Council's Strategic Direction 2023 – 2026, which prioritizes sustainability, financial responsibility and enhanced service delivery. By investing in lifecycle management, infrastructure upgrades, workforce development and advanced inventory technology, Warehousing & Inventory ensures operational excellence and cost efficiency, directly supporting Council's mandate to optimize City services.

Warehousing & Inventory's investments directly advance key strategic priorities, ensuring Calgary's warehousing and inventory remains innovative, cost-effective and aligned with service sustainability objectives.

## 3. Service Risks

Warehousing & Inventory's capital infrastructure needs plan is designed to address critical risks, close operational gaps and support service enhancements that will drive efficiency, sustainability and resilience.

## Service risks

1. **Aging facilities and infrastructure** require repair, renovation, and replacement. This leads to reduced availability of warehouse facilities as they go offline for repairs. These warehouses are required to deliver front-line services; however, limited availability of warehouse space reduces the ability to have critical items on-hand for emergencies. This poses a significant risk to maintaining target service levels for our internal customers (other Business Units) that provide front-line services.
2. The **quantity and physical size of inventory assets** is growing, impacting the ability to accommodate new inventory requests. Warehouses have finite storage capacity, layout constraints, and material-handling limits. As item quantities increase, space becomes constrained, forcing overflow storage, double-handling, or inefficient layouts.
3. **Distributed Portfolio Resulting in Inefficiencies:** W&I operations are currently spread across 30+ warehouse and yard sites, many of which evolved as temporary or stop-gap solutions. This fragmented footprint limits operational efficiency, creates inconsistent working conditions across locations, and increases risk exposure due to varying facility quality.
4. **Legacy technology** also poses a significant risk, contributing to slower transaction processing, increased data inaccuracies, and the increased need for manual workarounds.
5. **Asset Condition:** Extended use of assets beyond their useful life, workforce shortages, and aging infrastructure pose a significant risk to W&I's ability to deliver reliable and efficient services.
6. W&I supports the corporation through clothing, PPE, daily use items, items for assets, and critical spares. The greatest risk facing the corporation for Warehousing & Inventory is the **lack of consolidated data on assets** across the corporation and the critical inventory items they require. This is a manual exercise.
7. **Gaps in Safety, Security, and Compliance:** Existing warehouse facilities require upgrades to meet expected security, storage, and safety compliance standards, particularly as usage increases and inventory demands grow. Failure to complete these improvements poses risks related to occupational health and safety, loss prevention, and alignment with City policies.
8. **Limited Capacity to Support Growth Requirements:** Current warehouse assets do not have adequate built-in capacity to absorb forecasted growth from customer business units (e.g., Water, Transit, Fleet, Mobility, CPS/CFD). Constraints in available floor space and yard space limit W&I's ability to respond to demand without strategic enhancements or reconfiguration.

## Planned Service Enhancements

1. **Infrastructure upgrades for sustainable operations**
  - The proposed capital investment is intended to maximize the capacity of existing warehouse facilities through targeted enhancements that improve storage density, optimize floor layout, and support safer, more efficient material handling. These improvements will allow Warehouse & Inventory to better manage current space pressures while preparing for anticipated customer growth.
  - This investment will strengthen operational performance and support strategic service outcomes in the following ways:

- **Increase usable storage capacity** within the current warehouse footprint, reducing the need for offsite or overflow storage solutions.
- **Improve workflow efficiency and safety** by reducing congestion and streamlining material flow.
- **Enhance ability to meet customer growth projections**, ensuring reliable support for emerging inventory requirements.
- **Support achievement of future Customer Levels of Service (CLOS) commitments** through improved stability, predictability, and operational responsiveness.

## 2. Warehouse & Inventory systems improvement

- **Advancing IT and technology tools** will improve Warehouse and Inventory Management service delivery including forecasting, online ordering, automating replenishment, and digitizing the disposal of surplus assets. This investment will enable lot-level inventory management, which is a foundational capability for modern, risk-based warehousing operations. Managing inventory by lot allows the organization to:
  - Track expiration dates,
  - Enforce First-In, First-Out (FIFO) issuing,
  - Improve traceability for safety-critical and regulated items,
  - Without this capability, inventory is effectively managed at an aggregate level, which limits visibility into **age, condition, and suitability for use**, particularly for parts, materials, and supplies with shelf-life constraints.
- Digitizing surplus asset disposal will:
  - Improve tracking and controls, reducing loss and misappropriation risk.
  - Increase financial security vis electronic payments and itemized reconciliation.
  - Strengthen compliance and auditability with end-to-end documentation.

These capital requests are proactive investments in the resilience and performance of our warehousing and inventory network while we plan for future needs. By optimizing existing space and improving storage capability, Warehouse & Inventory will be better positioned to meet customer commitments, uphold policy expectations, and support long-term operational efficiency.

## 4. Service Objectives

### Customer commitments:

Warehouse & Inventory is committed to delivering reliable, transparent, and customer-focused service in alignment with policy and all supporting procedures. As an enabling service, we underpin essential City operations, supporting areas such as waste and recycling, snow and ice response,

water services, fleet maintenance, emergency response, and parks and open space. Enhancing the performance of warehouse facilities ensures these operational areas have timely access to the materials, equipment, and inventory needed to maintain established customer service levels.

As part of our service strategy, we are progressing to establish formal Customer Levels of Service (CLOS) that will define clear expectations, support performance accountability, and strengthen operational consistency across the warehousing network.

In the interim, Warehouse & Inventory uses established performance measures to monitor service delivery, ensure operational consistency, and meet customer expectations. There is also significant work underway to update Service Level Agreements (SLA) with our major customers. These measures help drive accountability and support continuous improvement across our warehousing network.

### **Operational Context**

Current warehousing sites are operating at or near maximum capacity, driven by increasing customer inventory volumes and expanding service needs. Space constraints are creating pressure on service delivery, workflow efficiency, and our ability to meet growing customer expectations. These limitations also increase operational risk, including congestion in active areas, reduced flexibility during seasonal or project-driven surges, and potential challenges in meeting future CLOS targets.

### **Performance Measures:**

**Availability:** Warehousing and Inventory measures availability using annual inventory turns, reflecting how often inventory is used and replenished. Higher turns show active inventory management, supporting frontline services while minimizing risks from obsolete stock.

**Performance Measure:** Target: Inventory turns = 1.7+; December 2025 actuals = 1.91

**Initiative:** collaborate with customers to improve stocking decisions, improve material planning, adhere to inventory policies and apply inventory accounting process

**Impact:** From a customer perspective, a turn value of 1.91 means inventory is cycling around nearly 2 times per year and indicates better availability of the right items when customers need them. This metric signals a stronger demand, leaner inventory levels, or both.

### **Asset Condition Targets**

Asset conditions for items within inventory are decreasing. Despite the warehouse facilities being owned under the Facility Management Service Line, the current condition of Warehouse & Inventory (W&I) assets reflects a mature, aging infrastructure portfolio that requires ongoing maintenance, targeted reinvestment, and minor capital enhancements to remain reliable and aligned with service delivery expectations.

Until a long-term solution is in place, W&I continues to make regular repairs and renovations to remain safe and functional.

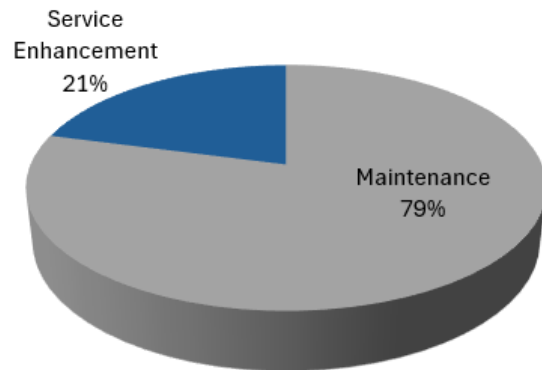
## 5. Previously Approved and Capital Infrastructure Needs

**Table 1: Previously Approved and Capital Infrastructure Needs (\$ millions)**

	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031-2035	Total
Previously approved	0.1	0.2	0.2	0.4	0.8	1.6	0.7	-	-	-	-	-	4.25
Capital Infrastructure Needs		-	-	-	-	-	-	3.2	3.2	3.2	3.2	6.6	19.4

A listing of Previously Approved Capital has been provided in **Appendix A** for 2026+. A listing of Capital Infrastructure Needs has been provided as **Appendix B**. Note that programs have been broken down into projects where possible.

**Figure 1: Summary of Proposed Capital Infrastructure Needs by Investment Driver**



**Table 2: Summary of Operating Cost of Capital for Capital Infrastructure Needs by Year (\$ millions)**

	2027	2028	2029	2030	2031-2035	Total 2026-2035
<b>Total</b>	0.06	0.06	0.06	0.06	0.30	0.54

# Appendix A: Previously Approved Capital

The values have been rounded to the nearest million for presentation purposes.

**Legend** (% of capital \$ per opportunity item)

1% ~ 10%	
11% ~ 25%	
25% +	

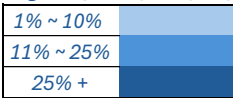
(\$millions)	Priority (H / M / L)	Total 2026-2035+	Legend													
			2026	2027	2028	2029	2030	2031	2032	2033	2034	2035+				
Inventory Systems Improvements	H	0														
Warehouse Facilities	H	1														
<b>Total Previously Approved Capital - Warehousing &amp; Inventory</b>		<b>1</b>														

# Appendix B: Capital Infrastructure Needs

The values presented reflect identified capital needs and have been rounded to the nearest million for presentation purposes. These capital needs have not received approved budget and will be considered for future business cycles.

All values are presented in 2025 dollars, with estimates prepared as of January 2026. Further refinements and adjustments are expected through the development of the 2027–2030 Budget and the 10-Year Capital Infrastructure Plan.

**Legend** (% of capital \$ per opportunity item)



Capital Infrastructure Needs (\$millions)	Total									
	2026-2035+	2027	2028	2029	2030	2031	2032	2033	2034	2035+
<b>Maintenance - Primary Driver</b>										
Warehouse Facilities	13									
<b>Service Enhancement - Primary Driver</b>										
Inventory System Improvements	7									
<b>Total Capital Infrastructure Needs - Warehousing &amp; Inventory</b>	<b>19</b>									