



# Transit 10-Year Capital Infrastructure Needs Assessment

*March 2026*

## 1. Service Overview

Calgary Transit provides public and specialized transit services that support daily mobility across the city. The system includes buses and light rail transit (LRT), vehicles, stations, track and guideway, traction power, signaling and communications, tunnels and bridges and operating and maintenance facilities. These assets operate as a single, integrated system where asset condition, capacity and design directly affect safety, reliability and customer experience.

The current replacement value of Transit assets is \$7.2 billion, reflecting a highly capital-intensive system designed to serve Calgarians over multiple generations. Assets range from mobile fleets with defined replacement cycles to fixed infrastructure embedded in the city that is difficult and costly to renew once failures occur.

Transit capital investment serves three core purposes:

- Sustain and renew existing assets so service remains safe, reliable and predictable;
- Support growth and increase capacity as Calgary's population expands and travel demand rises; and
- Deliver transformative investments that expand the transit network and how people move across the city.

Because transit infrastructure serves many users simultaneously, asset performance has system-wide impacts. Capital investment is therefore essential not only to managing risk and maintaining public confidence, but also to supporting population growth, improving capacity and accessibility and delivering transformative investments that strengthen Calgary's long-term transportation, economic vitality, equity and climate objectives.

## 2. Strategic Alignment

Transit Capital Infrastructure Assessment directly supports Council-approved plans and strategies that guide city growth, mobility and infrastructure stewardship.

- **Municipal Development Plan (MDP) and Calgary Transportation Plan (CTP):** Establish a long-term vision for compact growth supported by fast, frequent and reliable transit.
- **RouteAhead – Calgary's 30-Year Transit Strategy:** Defines the Primary Transit Network and customer levels of service. Capital investment supports fleet renewal, LRT infrastructure, maintenance facilities and system upgrades required to deliver fast and frequent service.

- **Corporate Asset Management Plan (CAMP):** Sets expectations for lifecycle stewardship, state-of-good-repair targets and risk-based prioritization. Transit Capital Infrastructure Assessment aligns with CAMP targets to maintain asset condition, reduce lifecycle risk and protect critical systems.
- **Climate Risk and Resilience Assessment:** Support mode shift, emissions reduction and climate resilience. Capital investment improves system reliability, enables electrification and strengthens infrastructure resilience to extreme weather.
- **Home is Here and the Greater Downtown Plan:** Depend on reliable, high-capacity transit to support housing affordability, access to employment and intensification in established areas.

### **Transformative Investments**

In addition to sustaining existing assets and supporting future growth, Transit capital investment also enables transformative changes to the network, connectivity and reliability. These investments include major LRT expansions such as the Green Line which expand transit network on key corridors and support long-term city-building objectives.

## **3. Service Risks**

### **Alignment Between Levels of Service and Asset Condition/State-of-good-repair (SOGR)**

Transit's asset base is aging and increasingly utilized. Recent findings from the CAMP show that:

- Approximately 86 per cent of Transit assets are currently in a state of good repair, down from 88 per cent in 2022, indicating a declining trend; and
- Technical state-of-good-repair targets for Transit asset classes are generally in the 90 to 100 per cent range, depending on asset type.

CAMP identifies notable performance gaps, with asset condition (state of good repair), preventive maintenance and service accessibility performing below target, highlighting the need for reinvestment to close these gaps.

If renewal does not keep pace with deterioration and demand, assets degrade beyond optimal intervention points. This increases maintenance effort, cost and reduces service reliability and service disruption

### **Failure of Critical Assets**

Transit has identified a number of assets where failure would result in safety incidents and high-impact service disruptions identified through assessments of the consequences and probability-of-failure. For these critical assets, the expectation is to maintain very high SOGR in the 90 – 100 per cent range to minimize the likelihood of failure.

Key critical assets include:

- In-Street LRT Track (Downtown / 7th Avenue) – highest overall risk score (Current vs target SOGR: 73% vs. 100%)
- Transit Garages, e.g. Spring Gardens and Stoney Transit Facility (STF) – CRV approximately \$520 million (Current vs target SOGR: 83% vs. 90+%)
- Overhead Catenary System (OCS) – CRV approximately \$127 million (Current vs target SOGR: 95% vs. 100%)

Additional high-criticality assets include turnout switches, tunnel drainage systems, LRT tunnels and LRT bridges – these assets are maintained at, or targeted to, achieve 100 per cent SOGR.

These assets are currently operating safely; however, their criticality reflects the scale of the network disruption and recovery effort that would occur if a failure were to happen. In many cases, there are no viable alternative or mitigation measures that would materially reduce the consequence of failure, **reinforcing the need for sustained investment aligned with reliability, safety and service expectation.**

#### **Capital Funding Trade-offs Between Maintenance, Growth and Transformation**

Transit requires ongoing capital investment to sustain, protect and evolve the network. Capital funding supports a range of priorities, including asset renewal, service improvement and major network expansion such as the Green Line.

Given the scale and complexity of the transit network, available funding must be allocated across competing priorities each year. This requires balancing investment between:

1. Maintaining existing assets in a state of good repair;
2. Supporting growth and increasing capacity; and
3. Advancing transformative investments, including the Green Line

When funding is constrained, advancing growth or transformative investments can require deferring renewal, increasing long-term system risk. Conversely, prioritizing renewal limits the pace at which growth and transformation can proceed. Without stable and predictable funding aligned to long-term infrastructure needs, these trade-offs intensify and future costs increase.

#### **Service Performance Does Not Keep Pace with Growth and Expectations**

The existing transit network and current service performance reveal capacity constraints that are already reaching critical bottlenecks. As demand increases, even minor incidents can result in noticeable service impacts such as delays, crowding and reduced reliability.

When future population growth and demographic changes are considered, these constraints become a greater concern, as the network may not be able to accommodate projected demand or adapt to climate-related pressures. Without investment to increase capacity, operational flexibility and resilience, service performance and customer experience continue to erode.

## 4. Service Objectives

### Objective 1 – Maintain and Improve Portfolio Asset Condition

Maintain assets in a condition that supports safe, reliable day-to-day service.

#### Targets and Measures

- Maintain portfolio asset condition by meeting CAMP technical state-of-good-repair targets by asset class.
- Increase the proportion of assets meeting 90–100 per cent technical state-of-good-repair targets.
- Improve preventive maintenance completion rates within set timelines.

### Objective 2 – Protect Assets Critical to Safety and Reliability

Prioritize renewal of assets with the highest consequence of failure.

#### Targets and Measures

- Reduce the proportion of critical assets in poor or very poor condition from current level of 14 per cent down to desired targets depending on the asset criticality (for example, OCS needs to be at 100 per cent SOGR), consistent with risk-based prioritization.
- Maintain the level of service and improve the reliability of critical assets, consistent with CAMP service target.
- Prioritize renewal of high-risk critical assets to limit network-wide service disruption.

### Objective 3 – Support a Growing City and Evolving Service Expectations

Use capital investment to improve reliability, capacity and accessibility and to support growth and transformative network investments.

#### Targets and Measures

- Support RouteAhead customer outcomes, including:
  - Reliability: improve from approximately 87 per cent toward 90 per cent by 2032.
  - Customer-reported safety (measured through customer surveys): improve from approximately 75 per cent toward 80 per cent.
- Align asset condition and capacity investments with service performance indicators such as system uptime (98–100 per cent target).

## 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	197	136	120	371	496	607	588	777	639	801	761	901	6,394
Capital Infrastructure Needs	-	-	-	-	-	-	-	489	546	667	821	7,886	10,409

A listing of previously approved investments has been provided in **Appendix A** for 2026+. A listing of capital infrastructure needs for 2027-2035 has been provided as **Appendix B**. Note that programs have been broken down into projects where possible.

Figure 1: Summary of Capital Infrastructure Needs by Investment Driver

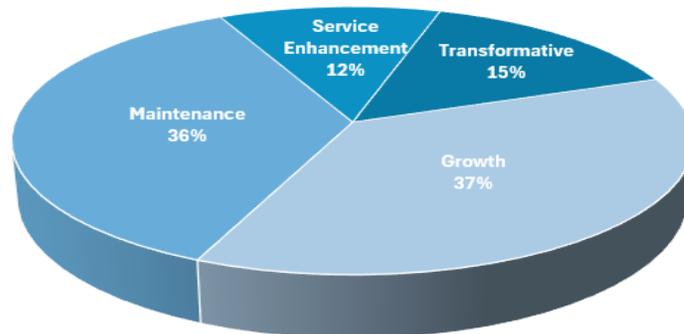


Table 2: Summary of Operating Cost of Capital for Capital Infrastructure Needs by Year (\$ millions)

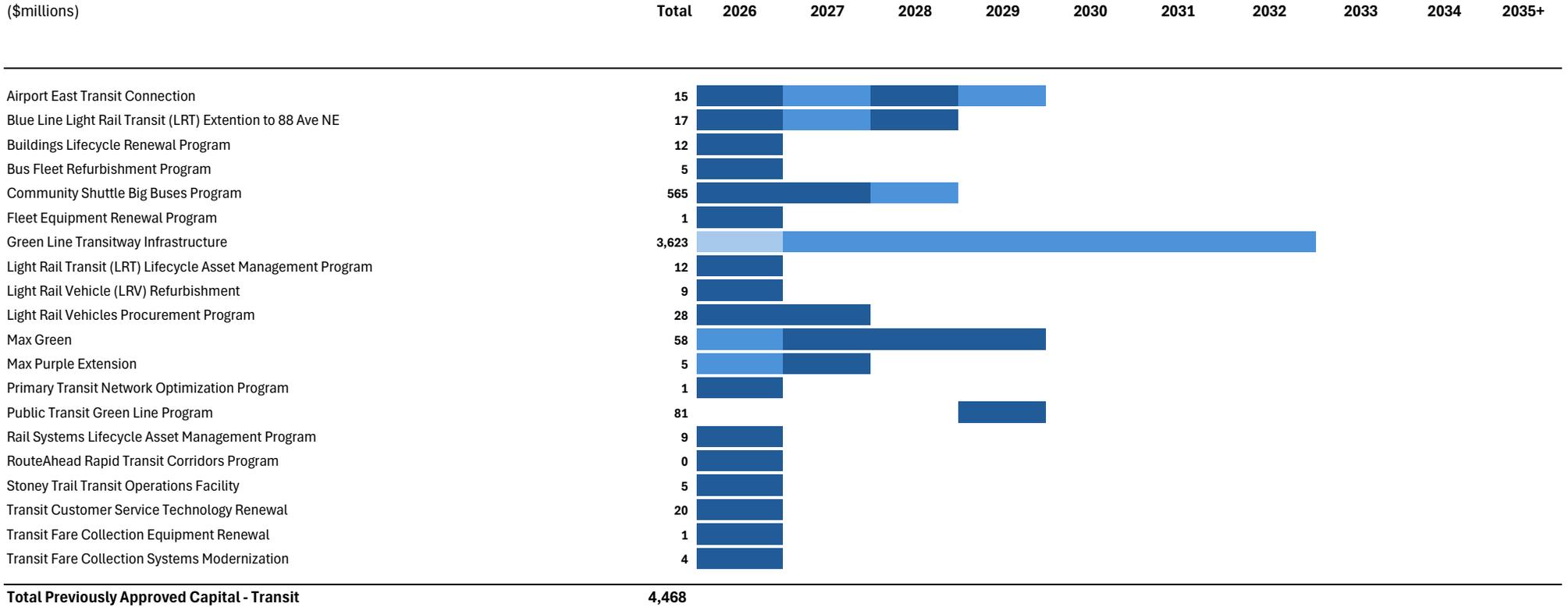
	2027	2028	2029	2030	2031-2035	Total 2026-2035
Total	18	19	44	54	415	549

## Appendix A: Previously Approved Capital

Legend (% of capital \$ per opportunity item)

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

**Appendix A: Approved Capital Projects & Programs**  
(\$millions)

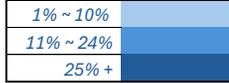


## Appendix B: Capital Infrastructure Needs

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.

The majority of the 10-year capital investments are foundational in nature reflecting the essential funding required to sustain current service levels, meet regulatory and safety obligations, and manage core operational risks. These investments establish the baseline level of service and define the essential capital required to maintain system reliability over time. 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)



Critical Assets in Poor / Very Poor Condition



### Appendix B: Capital Projects & Programs

(\$millions)

#### Maintenance - Primary Driver

	Priority (H / M / L)	Total	2027	2028	2029	2030	2031	2032	2033	2034	2035+
40-Foot Bus Replacement and Growth Program	H	324									
Access Calgary System Lifecycle Upgrades	H	16									
Calgary Transit Access Vehicle Renewal	H	20									
Compressed Natural Gas (CNG) Bus Mid-Life Powertrain Replacement	H	44									
Diesel Bus Powertrain Refurbishment Program	H	27									
Light Rail Transit (LRT) Infrastructure Lifecycle Upgrades	H	230									
Light Rail Vehicle Refurbishment & Bogie Overhaul	H	125									
Light Rail Vehicle Replacement – Series 5, 6, and 7	H	504									
Light Rail Vehicles Equipment & Tools	H	19									
Rail Systems Lifecycle Upgrades	H	329									
Spring Gardens Cash Processing Facility	H	9									
Transit Building Lifecycle Maintenance	H	460									
Transit Driver Seat Replacement Program	H	3									
Victoria Park Bus Garage Relocation / South Central Facility	H	765									
Articulated Bus Growth and Replacement Program	M	131									
Articulated Bus Refurbishment Program	M	6									
Bus Maintenance Tools and Equipment	M	18									
Fare Technology and Payment Systems Upgrade	M	90									
Fixed Route Bus Service Expansion	M	97									
Light Rail Vehicle (LRV) Customer Technology Lifecycle Upgrades	M	101									
Heritage Terminal Reconstruction	L	18									
Marlborough Terminal Reconstruction	L	18									
Rail Worker Safety Protection Equipment	L	3									
Saddletowne Terminal Expansion	L	2									
Transit Safety & Reliability Enhancements	L	20									
Transit Station Safety & Crime Prevention Through Environmental Design (CPTED) Improvements	L	13									
Transit System Accessibility Enhancements	L	13									
Transit Tech Lifecycle: Bus Systems	L	131									
Westbrook Terminal Reconstruction	L	18									

**Service Enhancement - Primary Driver**

52 Street East Bus Rapid Transit (BRT): Design & Construction (MAX 302)	H	167	
MAX Green Bus Rapid Transit (BRT) / North Central BRT / Max 301 North Improvements	H	500	
Operator Safety Shields Installation	H	15	
Functional Planning Studies Fund	M	80	
144 Ave North Bus Rapid Transit (BRT) (RouteAhead)	L	89	
162 Avenue SW Transitway	L	130	
Brentwood Bus Terminal Upgrades	L	7	
MAX Bus Rapid Transit (BRT) Infill Station Investments	L	40	
MAX Orange Line Station Enhancements	L	40	
MAX Purple Extension – Downtown to Bow River	L	110	
NW HUB: UCalgary & Foothills Hospital	L	49	
Shaganappi Bus Rapid Transit (BRT)	L	60	

**Growth - Primary Driver**

Blue Line Light Rail Transit (LRT) Extension: Saddletowne to 88 Ave NE	H	214	
Green Line Bus Fleet & Bus Bridge Service	H	70	
Haysboro Garage Expansion	H	10	
MAX Purple Transitway Extension Bus Rapid Transit (BRT): 52 St E to 84 St E	H	114	
RouteAhead Implementation Plan Bus Fleet Procurement	H	439	
Seton Transit Centre Construction	H	5	
Stoney Transit Facility – Public-Private Partnership (P3) Annual Payment	H	39	
Symons Valley Transit Centre Construction	H	10	
Blue Line Light Rail Transit (LRT) Extension (88 Ave to Country Hills Boulevard)	M	410	
Light Rail Vehicle Procurement - Growth	M	560	
MAX Teal Bus Rapid Transit (BRT) Extension (In-Street) to 68 St SE	M	15	
Red Line South Extension and Maintenance Storage Facility	M	1,420	
194 Avenue Bus Maintenance Storage Facility	L	600	
Hydrogen Bus Procurement Placeholder	L	-	
West Bow Bus Rapid Transit (BRT) / Route 305 West	L	82	

**Transformative - Primary Driver**

Airport Transit Connector: East Leg (Blue Line to Airport)	H	1,561	
Green Line Light Rail Transit (LRT) Downtown Extension	H	-	
Green Line Light Rail Transit (LRT) South and North Extensions	H	-	
Franklin Terminal Reconstruction	L	18	

**Total Capital Infrastructure Needs - Transit** **10,409**