# Information Technology 10-Year Capital Infrastructure Needs Assessment

*March 2026*

*Revision 1 – 03/13/2026*

# 1. Service Overview

IT Solutions & Support provides, manages and governs the technology, devices, data and infrastructure that power every aspect of municipal service delivery. The service strengthens the organization by:

- Safeguarding The City's digital infrastructure and ensuring secure access to the network.
- Equipping employees with the right technology to work efficiently.
- Enabling seamless collaboration through modern productivity tools.
- Advising business units on technology choices that advance operational goals and improve service to Calgarians.
- Upholding strong data governance through clear standards and practices.
- Supporting innovation by creating space for business units to explore and test emerging technologies.

# 2. Strategic Alignment

The IT Solutions & Support capital infrastructure needs are strategically aligned with several key Council and Corporate strategies, priorities and objectives. Below is a brief overview of the primary strategies that shape and are supported by these potential investments:

- **Council's Strategic Direction 2023-2026**: By renewing The City's digital infrastructure, IT capital investments advance Council's Strategic Direction's priorities founded on Economic, Social and Climate Resilience. Upgrades to data centres, networks, enterprise storage and fibre connectivity ensure a reliable, secure and scalable technology environment.
- **Municipal Development Plan:** Through initiatives like the Smart Calgary program, The City's Network of Things and The City-owned fibre network, IT enables real-time data collection and connectivity across municipal assets, utilities and services. These technologies allow for data-driven urban planning, infrastructure optimization and environmental monitoring, thereby advancing The Municipal Development Plan's objectives of building strong, well-connected communities and fostering innovation-driven economic growth.
- **Artificial Intelligence (AI) Strategy (2025)**: The proposed IT capital investments directly support The City's AI Strategy by providing the secure infrastructure, technology platforms and digital connectivity needed to deploy and scale AI solutions across the organization. These investments enable the responsible and ethical use of AI to enhance service delivery and increase operational efficiency through technologies such as AI-powered chatbots and automation tools.

- **Smart Calgary Strategy (2024)**: The Smart Calgary Strategy aims to transform The City into a connected, data-driven and people-centered organization, resulting in improved service delivery, supported economic growth and improved quality of life for Calgarians. The proposed IT capital investments provide the necessary digital infrastructure, connectivity and platforms that enable innovation and smart city services.
- **Enterprise Data Strategy (2025)**: The Enterprise Data Strategy (EDS) establishes The City's framework for treating data as a strategic asset, ensuring that information is accurate, accessible, secure and used responsibly to inform decisions and improve services. The proposed investments directly support this strategy by building and maintaining the digital infrastructure needed to manage and share high-quality, trusted data across The City.
- **Fibre Infrastructure Strategy (2015)**: The Fibre Infrastructure Strategy recognizes that reliable, high-speed connectivity is essential for Calgary's economic growth, service delivery and digital transformation. The proposed investments directly support this strategy by expanding and maintaining The City's fibre network which serves as the backbone for municipal operations, smart city technologies and cross-corporate data sharing.

## 3. Service Risks

- **Technological disruption:** As cyber threats increase, IT must ensure that critical infrastructure, hardware and software are maintained through regular lifecycle upgrades and patches. Rising hardware and software costs mean additional funding is required over the next 10 years to ensure that The City's technology environment remains secure. Without this funding, access to technology and/or service levels may need to be reduced and asset lifecycles may need to be further extended, increasing the risk of failure and cyber exposure.
- **Deferred lifecycle replacement:** Delaying replacement of computing hardware and data storage infrastructure increases operating and maintenance costs, higher risk of outages and downtime and negative impacts on business continuity and public-facing services.
- **Not funding IT projects and programs**: Not funding IT projects and programs increase operating costs, limits our ability to meet growing demands and reduces value of software assets. It also leads to higher security risks, inability to maintain systems, manage data growth and adopt new technology to maintain and/or improve delivery service to Calgarians. It also leads to negative impacts on IT service resiliency and disaster recovery infrastructure. Unfunded projects hinder The City's ability to follow through on IT's Risk Register actions.

- **Unfunded network infrastructure**: Unfunded network infrastructure investment prevents or delays business unit projects that depend on network connectivity. It leads to increased operating costs, reliance on external providers and outdated infrastructure. The City faces challenges in supporting network connectivity demands and managing data growth, impacting daily operations and financial reporting.

## 4. Service Objectives

The City's information technology asset classes collectively aim to deliver secure, reliable and scalable services that support uninterrupted operations across all departments. Core infrastructure such as data centre hardware and software, wireless communication systems, fibre networks, telecommunication services, network infrastructure and telematics platforms are maintained to extremely high availability targets — often above 99 per cent — with proactive maintenance and strong security practices. Enterprise systems, including enterprise software, development software, line-of-business applications, PeopleSoft, desktop computing and workgroup printing, focus on ensuring efficient, compliant and well-supported digital tools that meet operational and strategic needs. Across all asset groups, long-term condition targets emphasize keeping the vast majority of assets in good to very good condition, minimizing poor-condition assets and ensuring full functionality to support business continuity, scalability and future growth.

Information Technology currently manages $239.5M in critical assets. Of this amount, $8.9M (3.0%) has been assessed as being in *poor* or *very poor* condition, highlighting priority areas for reinvestment.

The $8.9M in critical assets requiring attention is concentrated within two key asset categories:

- Network Infrastructure: $3.1M
- Data Centre Hardware & Software: $5.8M

These two asset classes represent the primary sources of risk exposure within the portfolio.

IT is actively working toward a target of reducing assets in poor or very poor condition to less than 2%, with the long-term goal of having no critical assets in these condition categories.

A significant disruption to The City's IT infrastructure could negatively impact essential municipal services such as emergency response systems, traffic management and signal control, recreation and permit booking systems and online community facing services like property tax payments and 311 service requests. Such a disruption could compromise sensitive data, delay critical operations and undermine public trust, resulting in widespread community, financial and operational impacts.

Below are additional IT measures relevant to Calgarians. For a more comprehensive list of IT service objectives and targets, see the 2023–2026 IT Solutions & Support Plan and Budget.

- **Number of community business ideas supported through Living Labs:** 42 (November 2025) **Target** 130 (by end of 2026)
  Living Labs is an Information Technology Smart City program that supports innovation, research and development for businesses and academia by providing a real-life environment to test new products and ideas by enabling access to The City's digital, infrastructure and data assets.
- **Low powered end user computing devices as a percentage of overall devices (percentage):** 86 (January 2026) **Target** 60 (by end of 2026)
  With approximately 14,000 computing devices at The City, reducing power consumption contributes to climate resilience. IT, in partnership with its hardware vendors, works to standardize technology devices that have lower power consumption and configures device settings to reduce power.

# 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** | 30 | 33 | 39 | 42 | 47 | 49 | 32 | 2 | 0 | 0 | 0 | 0 | 274 |
| **Capital Infrastructure Needs** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 52 | 40 | 43 | 42 | 273 | 450 |

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**

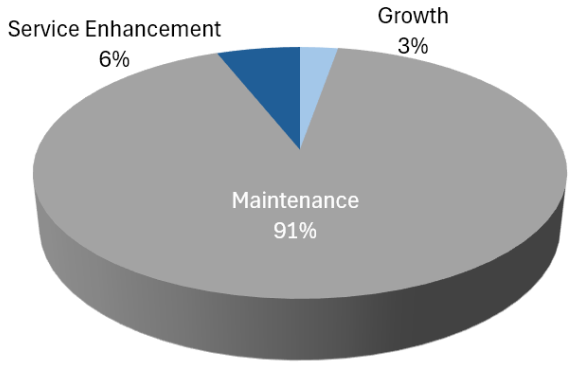
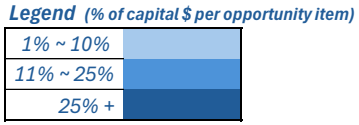



**Table 2: Summary of Operating Cost of Capital for Capital Infrastructure Needs by Year ($ millions)**

| | 2027 | 2028 | 2029 | 2030 | 2031-2035 | Total 2026-2035 |
|---|---|---|---|---|---|---|
| **Total** | 2 | 1 | 4 | 5 | 6 | 17 |

# Appendix A: Previously Approved Capital

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

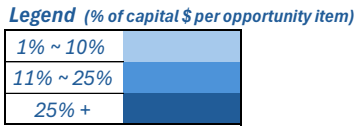



| ($millions) | Total 2026-2035+ | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035+ |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Business Intelligence | 1 | | | | | | | | | | |
| Calgary City Net | 2 | | | | | | | | | | |
| City Network of Things and Robotic Process Automation (RPA) | 1 | | | | | | | | | | |
| Client Access | 0 | | | | | | | | | | |
| Communications Infrastructure | 1 | | | | | | | | | | |
| Corporate Geographic Information System (GIS) Upgrades | 1 | | | | | | | | | | |
| Corporate Imagery Program | 2 | | | | | | | | | | |
| Data Centre Environmentals (Lifecycle Replacement) | 0 | | | | | | | | | | |
| Development Pool | 4 | | | | | | | | | | |
| Enterprise Information Management | 0 | | | | | | | | | | |
| Enterprise Servers | 1 | | | | | | | | | | |
| Enterprise Storage Units | 4 | | | | | | | | | | |
| Enterprise Support Systems | 3 | | | | | | | | | | |
| Fibre Optics | 2 | | | | | | | | | | |
| Lifecycle Replacement-Desktop | 5 | | | | | | | | | | |
| Location Data Modernization | 1 | | | | | | | | | | |
| Modernizing Commerce | 2 | | | | | | | | | | |
| Network Infrastructure | 0 | | | | | | | | | | |
| PeopleSoft Finance and Supply Chain Management (FSCM) | 0 | | | | | | | | | | |
| PeopleSoft Human Capital Management (HCM) | 1 | | | | | | | | | | |
| Service Resiliency and Disaster Recovery | 0 | | | | | | | | | | |
| Smart Calgary | 0 | | | | | | | | | | |
| Software Lifecycle Replacement | 2 | | | | | | | | | | |
| Total Previously Approved Capital - Information Technology | 34 | | | | | | | | | | |

# 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 and have been prioritized as High, reflecting the essential funding required to sustain current service levels 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.




| Capital Infrastructure Needs ($millions) | Total 2026-2035+ | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035+ |
|---|---|---|---|---|---|---|---|---|---|---|
| **Maintenance - Primary Driver** | | | | | | | | | | |
| Business Intelligence | 15 | | | | | | | | | |
| Calgary City Net | 49 | | | | | | | | | |
| Client Access | 15 | | | | | | | | | |
| Communications Infrastructure | 15 | | | | | | | | | |
| Corporate Geographic Information System (GIS) Upgrades | 24 | | | | | | | | | |
| Corporate Imagery Program | 17 | | | | | | | | | |
| Data Centre Environmentals (Lifecycle Replacement) | 8 | | | | | | | | | |
| Development Pool | 32 | | | | | | | | | |
| Enterprise Information Management | 6 | | | | | | | | | |
| Enterprise Servers | 12 | | | | | | | | | |
| Enterprise Storage Units | 24 | | | | | | | | | |
| Enterprise Support Systems | 5 | | | | | | | | | |
| Fibre Optics | 27 | | | | | | | | | |
| Lifecycle Replacement-Desktop | 39 | | | | | | | | | |
| Modernize City Online | 5 | | | | | | | | | |
| Modernize Open Data | 3 | | | | | | | | | |
| Network Infrastructure | 7 | | | | | | | | | |
| New Data Centre | 53 | | | | | | | | | |
| PeopleSoft Finance and Supply Chain Management (FSCM) | 7 | | | | | | | | | |
| PeopleSoft Human Capital Management (HCM) | 7 | | | | | | | | | |
| Service Resiliency and Disaster Recovery | 5 | | | | | | | | | |
| Software Lifecycle Replacement | 47 | | | | | | | | | |
| **Service Enhancement - Primary Driver** | | | | | | | | | | |
| Borehole Monitoring System | 1 | | | | | | | | | |
| City Network of Things and Robotic Process Automation (RPA) | 10 | | | | | | | | | |
| Corporate Data Governance Program | 8 | | | | | | | | | |

# Appendix B: Capital Infrastructure Needs

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|---|---|---|
| Smart Calgary | 11 |  |
| Total Capital Infrastructure Needs - Information Technology | 450 | |