

IT Solutions & Support

Led by: Director of Information Technology

Description

This service provides and manages the technology, devices, data, infrastructure, and governance that underpins the delivery of all technology solutions for The City. This service develops and maintains both enterprise and line of business applications and improves and automates business processes to enable City business units to deliver services to Calgarians as well as core internal services.

Value and benefits

IT Solutions and Support delivers technology that enables City employees to provide municipal services to all Calgarians. This includes architecting, managing, and supporting the technology behind every business and public facing interaction including 19,000 servers and computers, 1,900 software applications, 267 online services, 17,000 mobile devices (radios, modems, smartphones), 25 call centres, 2,700 connected vehicles, and 440 meeting spaces. A leader amongst Canadian municipalities, The City's 650 kilometers of fibre-optic infrastructure and award-winning sensor network promotes research and development, encourages economic diversity and resiliency, and provides connectivity to 910 sites. Leveraging technology improves The City's effectiveness, efficiency, and capacity to deliver and modernize services to Calgarians.

Customers

Direct customers are all City employees, Council and members of their staff, civic partners, and other municipalities. Indirect customers include Calgarians, businesses, external service providers, and post-secondary institutions.

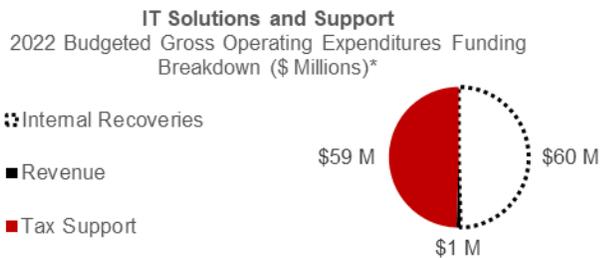
What we deliver

Business Systems & Consultation: Applications, tools, and standards to improve delivery of services to Calgarians.
Workforce Productivity: Collaboration tools and devices to perform business activities.
Infrastructure & Platforms: Connectivity and software to enable service delivery.
Technology Infrastructure for Future Economic Development: Leveraging technology to enhance community building.

Partners

Key partners of this service include Business Unit service owners; Collaboration, Analytics & Innovation; Customer Service & Communications; Law; Corporate Security; Finance; Human Resources; Supply; City Clerks; Facility Management; and external contracted service providers.

100%	staff with access to productivity tools
119,285	service desk tickets yearly
43 million	spam and malicious emails blocked yearly
31,471	network devices and sensors



* Gross operating budget may include internal recoveries that are also included in other services' gross operating cost.

Note: Internal recoveries is how The City accounts for the costs of goods or services between services

Key assets

Based on Information Technology's 2021 Asset Management Plan, key assets for this service include line of business applications, network and telecommunications infrastructure (eg. network/phone switches and cell towers), fibre optic cable, data centre hardware and software, enterprise software, desktop computing, and corporate data.

What we have heard & what we are watching

What we have heard

In the 2021 IT Client Satisfaction Survey, 91 per cent of respondents indicated they were satisfied overall, 89 per cent agreed that new IT systems have met their desired business objectives, and 88 per cent agreed IT offers devices and services that allow them to be productive in their daily tasks.

Surveys conducted when IT Service Desk tickets are closed reported 95.5 per cent satisfaction.

The 2021 Quality of Life and Citizen Satisfaction Survey indicated that 83 per cent of Calgarians are satisfied with The City of Calgary website with 82 per cent indicating it is important to them.

The 2021 Service Lines Research Review indicated 60 per cent of citizens prefer to interact with The City online and 70 per cent believe that technology can make a city better. The review indicated 64 per cent of citizens believe that using technology can improve citizens' relationship with The City.

What Council has directed

The IT Solutions and Support service supports all corporate services as well as all three pillars of Council's foundation for 2023-2026: Economic, Social, and Climate Resilience. The Council directed investment in fibre-optic infrastructure promotes economic diversification and supports Calgary's Economic Resilience. IT's investment in infrastructure supports Calgarian and employee safety by connecting cameras and help phones as well as providing systems that support community growth, development, accessibility, and inclusion, which serves to improve Calgary's Social Resilience. IT systems support innovative technology partnerships to help build, fund, and sustain resilient transportation networks. The use of energy-efficient technology devices and implementation of energy-saving initiatives support a healthy and green city, which serve to enhance Council's third pillar of Climate Resilience.

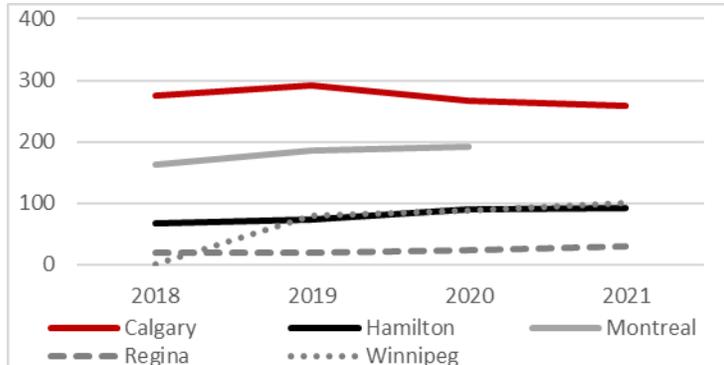
What we are watching

Technology security remains one of the top concerns for The City. Additional technology risks include business disruption due to system failure, and the ability to sustain the increasing pace of technology change within budget and resource limitations.

The technology industry's move to subscription-based licensing will require this service to modernize its funding mechanisms.

The Internet of Things is the network of devices, software, and sensors capable of connecting and exchanging data. Robotic Process Automation blends automation with artificial intelligence to allow systems to learn and make more complex decisions. These trends are present today and are expected to enhance municipal service delivery enabling more efficient service to Calgarians. Calgarians expect mobile on-demand personalized self-serve solutions to access municipal services. Emerging technologies will be monitored that have the potential to disrupt municipal services.

Number of Online Transactional Services



MBNCanada

Comparing our service

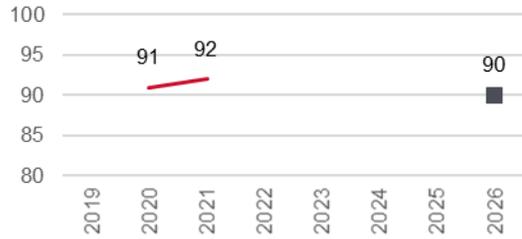
The number of online transactional services represents City services that can be completed through a web browser or mobile application, enabling Calgarians to access City services at anytime from anywhere. The City of Calgary has consistently been the national leader in this area, ranking first among municipalities participating in the Municipal Benchmarking Network Canada. The use of online services helps The City to stay competitive, streamlines processes, promotes innovation, and increases convenience for Calgarians.

Measuring performance & where we want to go

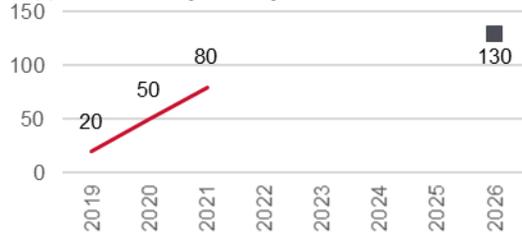
For Council Approval

— Actuals ■ Expected Future Performance

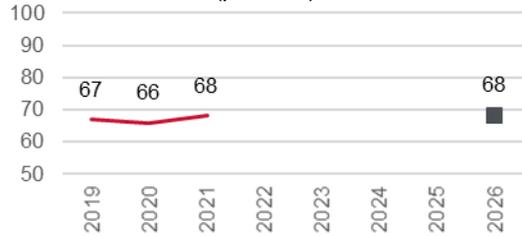
PM1: Overall Satisfaction with IT (per cent)



PM2: Number of Community Business Ideas Supported Through Living Labs



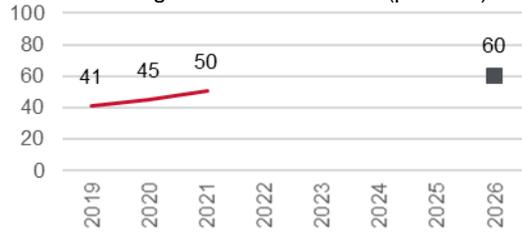
PM3: IT Service Desk Phone Calls with First Contact Resolution (per cent)



PM4: Number of Connections to Free Wi-Fi in Public Locations (millions)



PM5: Low Powered End User Computing Devices as a Percentage of Overall Devices (per cent)



Story behind the curve

For the past 8 years, IT has maintained a 90 percent or greater rating in overall client satisfaction. A moderate decline in client satisfaction was anticipated in the 2019-2022 cycle due to rationalized business software titles and reduced service levels for less critical IT functions. However, the survey results have shown otherwise, with the highest rating achieved in 2021 of 92 percent. Consistent with previous years, those who are satisfied with IT products and services say it is due to the quick/prompt services they received from IT, as well as having their technology issues resolved.

Living Labs is an Information Technology Smart City program that supports local business and academic research and development by providing a real-life environment to test new products and ideas using The City's digital, infrastructure, and data assets. The number of supported community business ideas has grown significantly since 2019, and it is expected to grow by approximately 10% each year. This initiative helps build Calgary's reputation as a city that works with industry and researchers to support their needs.

First call resolution is an industry standard measure for contact centre performance. High results indicate callers have their issue(s) fully addressed without delay or the need to have another team assigned to assist. The rate of first contact resolution continued to remain above 65 percent throughout the past three years, which saw an increase in calls related to telework due to COVID-19.

Public Wi-Fi is a program that provides free Wi-Fi service in select City facilities to any member of the public. In partnership between IT and The City's Wi-Fi provider, this service is available in 79 different City locations; including all City owned arenas, indoor pools, art centres, leisure centres, and LRT platforms. The number of connections dropped due to COVID-19, but is expected to gradually increase over the next four years. In addition, IT is working with City partners on a pilot initiative to provide free Wi-Fi to affordable housing units.

A key part of IT's strategy includes reducing the energy consumed by City employees' computing devices. On average, a desktop consumes four times the amount of power as a laptop or tablet. With over 14,000 computing devices at The City, taking steps to reduce power consumption results in a positive impact in support of Climate Resilience. IT, in partnership with its hardware vendor, continually works to standardize devices that have lower power consumption, as well as power saving features such as energy efficient power supplies.

What we plan to do

Result for 2023-2026

We will enable future focused, technology savvy, innovative, and modern municipal service delivery, with a mission to modernize skills, data management, processes, applications and infrastructure to deliver innovative, secure and cost-effective technology services.

How we are going to get there

Optimize technology platforms and applications by balancing business technology investment decisions with corporate solutions.

Seek efficiencies and ensure compliance in a constantly changing and growing technology landscape by brokering technology services and resources for The City.

Improve the availability of City services by building, maintaining and supporting secure and resilient technology infrastructure.

Manage information as a strategic asset by advancing the use, reliability and value of civic data through improved access and analysis.

Increase availability of online services to Calgarians by providing the technology and support for business units to add municipal services online.

Advance service delivery by exploring, identifying and evaluating emerging technologies.

Enable an agile and tech savvy workforce by attracting, developing and retaining people with the right skills for the future.

Promote climate resiliency in the delivery of technology solutions by investigating, deploying and supporting technologies that mitigate the impacts of climate change.

Promote local business and academic research by leveraging municipal assets for the testing and development of new products and services in a real-life environment.

Reduce digital barriers for all Calgarians by advocating for change across government levels and implementing pilot programs, as part of a digital equity strategy designed with community stakeholders.

Operating budget needed to achieve results

For Council Approval

Breakdown of net operating budget (\$000s)

	2023		2024		2025		2026	
	Base	One-time	Base	One-time	Base	One-time	Base	One-time
Previous Year's Net Budget	58,874		61,413		64,193		66,277	
Previously approved One-time budget		-		-		-		-
2022 One-time carry forward		-		-		-		-
Revenue Changes	-	-	-	-	-	-	-	-
Internal Recoveries Changes	-	-	-	-	-	-	-	-
Inflation	1,552	-	1,102	-	1,184	-	1,270	-
Operating Impact of Previously Approved Capital	-	-	-	-	-	-	-	-
Operating Impact of New Capital (Incremental)	-	-	-	-	-	-	-	-
Service Reductions	-	-	-	-	-	-	-	-
Service Increases	987	-	1,678	-	900	-	-	-
Transfers to/(from) reserves	-	-	-	-	-	-	-	-
Transfers to/(from) services	-	-	-	-	-	-	-	-
Total net budget*	61,413	-	64,193	-	66,277	-	67,547	-

* The previous year's One-Time Budget is not carried forward to the following year.

Total Operating Budget (\$000s) for Approval

	2022 Budget	2023			2024			2025			2026		
	At April 30	Base	One-Time	Total									
Expenditures	120,186	122,125	-	122,125	124,905	-	124,905	126,989	-	126,989	128,259	-	128,259
Recoveries	(59,605)	(59,605)	-	(59,605)	(59,605)	-	(59,605)	(59,605)	-	(59,605)	(59,605)	-	(59,605)
Revenue	(1,107)	(1,107)	-	(1,107)	(1,107)	-	(1,107)	(1,107)	-	(1,107)	(1,107)	-	(1,107)
Net	59,474	61,413	-	61,413	64,193	-	64,193	66,277	-	66,277	67,547	-	67,547
Base	58,874												
One-Time	600												

Note: Figures may not add up due to rounding.

Capital budget needed to deliver service

For Council Approval

Activity	Investment Name	2023 Request (\$000s)	2024 Request (\$000s)	2025 Request (\$000s)	2026 Request (\$000s)	2027+ Request (\$000s)	Total Request (\$000s)
Annual Investment Program(s)							
415990	PeopleSoft HCM	775	775	775	775	-	3,100
415970	PeopleSoft FSCM	100	300	400	300	-	1,100
415890	Enterprise Software Licensing	11,976	12,236	12,762	12,761	-	49,735
416999	City Network of Things and RPA	470	520	550	550	-	2,090
415810	Calgary City Net	2,800	2,600	2,200	1,950	-	9,550
415250	Enterprise Storage Units	2,456	3,450	943	3,776	-	10,626
415894	Service Resilience - Disaster Recovery	400	345	350	355	-	1,450
415200	Network Infrastructure	330	330	330	330	-	1,320
415999	Business Intelligence	300	250	500	250	-	1,300
415892	Client Access	1,318	994	994	137	-	3,442
415802	Enterprise Servers	1,700	2,200	2,500	650	-	7,050
415891	Software Lifecycle Replacement	2,200	2,200	1,800	1,400	-	7,600
415770	Communications Infrastructure	1,080	1,030	1,020	1,070	-	4,200
415806	Data Centre Environmentals	484	794	974	204	-	2,456
480300	Enterprise Info Management	-	50	100	175	-	325
415960	Enterprise Support Systems	125	125	125	125	-	500
418960	Fibre Optics	2,000	2,000	2,000	2,000	-	8,000
415803	Lifecycle Replace-Desktop	5,275	5,550	3,725	5,450	-	20,000
417570	Development Pool	500	3,500	3,500	3,500	-	11,000
Program(s)							
416995	Smart Calgary	2,220	670	1,220	220	-	4,330
Projects(s)							
Sub-Total (New Budget Requests)		36,509	39,919	36,768	35,978	-	149,174
Previously Approved Budget Remaining		3,000	-	-	-	-	3,000
Total Capital Investment		39,509	39,919	36,768	35,978	-	152,174

Explanation of capital budget requests

Annual Investment Program(s)

Activity 415990: PeopleSoft HCM

For essential investment to PeopleSoft HCM supporting critical human capital management, payroll, pension and benefits and workforce planning systems. This investment enables future focused, technology savvy, innovative, and modern municipal service delivery.

Funding From: Pay-As-You-Go (\$3,100 thousand)

Contributing Services: None

Operating Impact: None

Activity 415970: PeopleSoft FSCM

For essential investment to Peoplesoft FSCM to support supply and financial reporting, payable, receivables, contract, audit and service delivery. This investment enables future focused, technology savvy, innovative, and modern municipal service delivery.

Funding From: Pay-As-You-Go (\$1,100 thousand)

Contributing Services: None

Operating Impact: None

Activity 415890: Enterprise Software Licensing

For The City's contractual obligations for enterprise-wide software licenses. This investment enables future focused, technology savvy, innovative, and modern municipal service delivery.

Funding From: Pay-As-You-Go (\$41,735 thousand) Capital Reserves (\$8,000 thousand)

Contributing Services: None

Operating Impact: None

Activity 416999: City Network of Things and RPA

For lifecycle, maintenance, growth of The City's Internet of Things, robotic process automation, machine learning, artificial intelligence. This investment enables future focused, technology savvy, innovative, and modern municipal service delivery.

Funding From: Pay-As-You-Go (\$2,090 thousand)
Contributing Services: None
Operating Impact: None

Activity 415810: Calgary City Net

For the lifecycle, maintenance, and growth of The City's high-speed data network backbone, wireless, last mile access, and security infrastructure. This investment enables future focused, technology savvy, innovative, and modern municipal service delivery.

Funding From: Pay-As-You-Go (\$9,550 thousand)
Contributing Services: None
Operating Impact: None

Activity 415250: Enterprise Storage Units

For the lifecycle, maintenance, and growth of The City's data center data storage devices that store all City data used by applications and employees. This investment enables future focused, technology savvy, innovative, and modern municipal service delivery.

Funding From: Pay-As-You-Go (\$10,626 thousand)
Contributing Services: None
Operating Impact: None

Activity 415894: Service Resiliency - Disaster Recovery

For the lifecycle, maintenance, and growth of essential infrastructure and systems required for City service resiliency and disaster recovery. This investment enables future focused, technology savvy, innovative, and modern municipal service delivery.

Funding From: Pay-As-You-Go (\$1,450 thousand)
Contributing Services: None
Operating Impact: None

Activity 415200: Network Infrastructure

For the lifecycle, maintenance, and growth of critical network connectivity cabling and equipment in City buildings. This investment enables future focused, technology savvy, innovative, and modern municipal service delivery.

Funding From: Pay-As-You-Go (\$1,320 thousand)
Contributing Services: None
Operating Impact: None

Activity 415999: Business Intelligence

For the lifecycle, maintenance, and growth of The City's business intelligence infrastructure and systems. This investment enables future focused, technology savvy, innovative, and modern municipal service delivery.

Funding From: Pay-As-You-Go (\$1,300 thousand)
Contributing Services: None
Operating Impact: None

Activity 415892 : Client Access

For the lifecycle, maintenance, and growth of the infrastructure that supports a remote mobile workforce including virtual desktops. This investment enables future focused, technology savvy, innovative, and modern municipal service delivery.

Funding From: Pay-As-You-Go \$3,442 (thousand)
Contributing Services: None
Operating Impact: None

Activity 415802 : Enterprise Servers

For lifecycle, maintenance, and growth of The City's data center servers, approximately 400 physical servers hosting 5625 virtual servers. This investment enables future focused, technology savvy, innovative, and modern municipal service delivery.

Funding From: Pay-As-You-Go \$7,050 (thousand)
Contributing Services: None
Operating Impact: None

Activity 415891 : Software Lifecycle Replacement

For the lifecycle of essential software applications and supporting technologies that enhance critical business capabilities and services. This investment enables future focused, technology savvy, innovative, and modern municipal service delivery.

Funding From: Lifecycle Maintenance & Upgrade Reserve \$7,600 (thousand)

Contributing Services: None

Operating Impact: None

Activity 415770 : Communications Infrastructure

For the lifecycle, maintenance and growth of phones, contact centre applications upgrades, mobile device security, web conferencing and wireless. This investment enables future focused, technology savvy, innovative, and modern municipal service delivery.

Funding From: Pay-As-You-Go \$4,200 (thousand)

Contributing Services: None

Operating Impact: None

Activity 415806 : Data Centre Environmentals

For lifecycle, maintenance, and growth of environmental management systems that support critical data centres and other essential compute spaces. This investment enables future focused, technology savvy, innovative, and modern municipal service delivery.

Funding From: Lifecycle Maintenance & Upgrade Reserve \$2,456 (thousand)

Contributing Services: None

Operating Impact: None

Activity 480300 : Enterprise Info Management

For the lifecycle, maintenance and growth of enterprise records management tools and information management practices. This investment enables future focused, technology savvy, innovative, and modern municipal service delivery.

Funding From: Pay-As-You-Go \$325 (thousand)

Contributing Services: None

Operating Impact: None

Activity 415960 : Enterprise Support Systems

For the lifecycle, maintenance and growth of The City's enterprise support systems. This investment enables future focused, technology savvy, innovative, and modern municipal service delivery.

Funding From: Pay-As-You-Go \$500 (thousand)

Contributing Services: None

Operating Impact: None

Activity 418960 : Fibre Optics

For the continuation of the Council-approved Fibre Infrastructure Strategy. Fibre infrastructure connects all City services, buildings, and assets. This investment enables future focused, technology savvy, innovative, and modern municipal service delivery.

Funding From: Capital Reserves \$8,000 (thousand)

Contributing Services: None

Operating Impact: None

Activity 415803 : Lifecycle Replace-Desktop

For the lifecycle, maintenance, and growth of computing devices, infrastructure, and multifunction printers for The City's business units. This investment enables future focused, technology savvy, innovative, and modern municipal service delivery.

Funding From: Capital Reserves \$20,000 (thousand)

Contributing Services: None

Operating Impact: None

Activity 417570 : Development Pool

For the provision of technology solutions to enhance the delivery of all City services. This investment enables future focused, technology savvy, innovative, and modern municipal service delivery.

Funding From: Capital Reserves \$11,000 (thousand)

Contributing Services: None

Operating Impact: None

Program(s)

Activity 416995: Smart Calgary

Improve sustainability by providing technological resources and expertise, and collaborative environment to accelerate transformation of services. This investment enables future focused, technology savvy, innovative, and modern municipal service delivery.

Funding From: Capital Reserves (\$4,330 thousand)

Contributing Services: None

Operating Impact: None
