

# BUSINESS TECHNOLOGY STRATEGY

UPDATED MAY 2023

Edmonton



# TABLE OF CONTENTS

Message from the Mayor	1	Advancing the Way Ahead	7
Message from the City Manager	2	Drivers of Change	8
Executive Summary	3	Business Technology Strategic Principles and Pillars	10
Our Business Technology Strategy at a Glance	4	Reaching Council's Strategic Goals	32
What is Business Technology?	6		

*TO CONTINUE TO PROVIDE VALUE TO CITIZENS, THE CITY MUST BE A NIMBLE ORGANIZATION—CONTINUOUSLY EVALUATING AND EMBRACING THE ENDLESS POSSIBILITIES THAT ACCOMPANY CHANGE.*



## **MESSAGE FROM THE MAYOR**

The City continuously seeks opportunities to understand, harness and leverage technology's ever-expanding capabilities to improve quality of life for all Edmontonians.

Over the last few years, technology has played a bigger role than ever in our lives. From working remotely to learning to use online services in new ways, many have experienced a shift in how we use technology to connect with the world around us.

The City of Edmonton is a place where agile and secure technology deployment is a core consideration in program and service delivery. We prioritize innovation and adaptability, with a proactive approach to cybersecurity, and this approach allows us to continually embrace new technologies and developments in data.

As a digital city, we embrace new and innovative ways to deliver our programs and services to residents—where technology, innovation and collaboration create human-centred solutions. By taking a City-wide perspective to identify and implement opportunities for efficiencies, technology helps enable the corporation to shift toward an integrated data, information and technology management approach. This shift not only supports our corporate work, it also supports Edmonton's economic growth, allowing businesses to thrive, improving the quality of life of those we serve.



**AMARJEET SOHI**

MAYOR

Technology supports our efforts as a City Council while we work alongside other orders of government, non-profit organizations, businesses, academia and residents to create a better city for everyone. This is how the City will work to deliver maximum value for our programs and services, while providing an exceptional quality of life for all Edmontonians. I'm excited to see where the next few years will take our technologies and the improvements we can leverage from them.

Amarjeet Sohi  
Mayor

# MESSAGE FROM THE CITY MANAGER

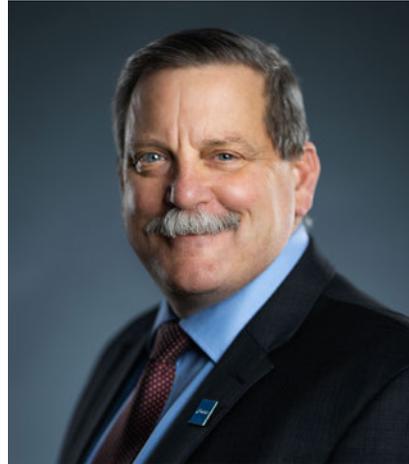
Edmonton is focused on responsible investing and innovating in technology. It has become a core component in almost every aspect of life, and technology is essential if we are to attract people and businesses to the City and live up to the expectations of Edmontonians.

Our City organization is committed to pursuing innovative opportunities and implementing positive change to improve the quality of life for Edmontonians. Business technologies support our work to deliver programs and services at the highest level, allow us to see the big picture, identify ways to improve and equip us to act on those opportunities.

From climate change technology initiatives such as increasing virtualization of the City's data servers to introducing digitized improvements to the City's permitting program—fostering an environment of innovation allows us to anticipate and enhance developing and disruptive technologies.

One of our City Plan's Big City Moves—to catalyze and converge—identifies the importance of positioning Edmonton to continually improve and build partnerships in a changing world. It's about bringing technology and people together to enable constant learning and growth, and supports our Business Technology Strategy's pillars of partnerships and innovation.

The City exists to serve the people who live and own businesses here. Through an Edmontonian focused strategic pillar, actively listening to them and consistently examining our decisions and options from their perspectives will give us



**ANDRE CORBOULD**

OMM, P.Eng., FCAE, ICD.D  
CITY MANAGER

.....

confidence that we are focused on the right things for Edmonton. Edmontonians want to be engaged in the network of our rapidly growing digital city. That's why through our open data systems, such as 311 and the citizen dashboard, Edmontonians can access relevant information and provide input regarding City services and planning. We strive to make our business technologies efficient, safe and accessible through integrated and usable information. Edmontonians expect robust, capable digital solutions and the City ensures our assets and information are protected by considering security in all technology design and delivery.

Our goal at the City of Edmonton is to create a better city for everyone. Our Business Technology Strategy update is one element of The City Plan, supporting our strategic goals and fostering partnerships throughout the community for technological and informational progress.

Technology developments, data collection and the use of analytics drive the City's improvements to programs and services.



# EXECUTIVE SUMMARY

## Expectations for cities around the world have changed, including Edmonton.

Modern municipalities are faced with a rapidly changing business environment, calls for more open and interactive government and ever increasing citizen demands. At the same time, the City of Edmonton (the City) is dealing with economic and political uncertainty as a result of inflation, reduced revenue, supply chain challenges, global conflict, and other factors that affect how far and fast we can go over the next four years. While technology is often seen as a cost-effective solution to challenges, technology still requires people, time and funding to advance it.

To meet these changing needs, the City needs to continue to build collaborative partnerships and manage expectations. The challenges it faces do not stand in isolation of one another, but are elements of a larger system of city building. In addition to strengthening internal collaboration, the City must foster strong, mutually-beneficial external partnerships.

The City has significant and valuable amounts of data, business solutions and diverse technologies. To better leverage these assets, it needs to increase internal and external data sharing, optimize processes, and deliver quality and secure service while managing costs effectively—all in partnership with its stakeholders.

Edmontonians not only expect robust and efficient digital solutions, but also that our assets and information are protected. Embedded within all our projects is attention to safe, reliable data and continuous improvement in ensuring our cybersecurity and digital environment are protected.

Business technology is enabling service, partnership and sustainable growth through the innovative use of information and technology. It recognizes not only the innovation found in information, but also the innovation that exists within larger ecosystems.

The Business Technology Strategy is Edmonton's strategic plan for meeting the technology expectations of today and the future. Technology investment governance aligns with and advances the goals outlined in the strategy, and supports the progress and achievement of Council's strategic vision through uncertain economic times. The implementation of the Business Technology Strategy has resulted in a more engaged and collaborative community where technology is a tool to understand and meet the needs and expectations of Edmontonians.

With a clear path to meet goals and the corresponding governance structure to ensure progress, this Strategy will help transform Edmonton and the region it occupies into a place that meets the expectations of the modern world.



# OUR BUSINESS TECHNOLOGY STRATEGY AT A GLANCE

Council's Strategic Plan

**DRIVERS OF CHANGE**

<b>ECONOMIC DEVELOPMENT AND GROWTH</b>	<b>STRENGTHENED PUBLIC SERVICE</b>
<b>FOCUSED INVESTMENTS</b>	<b>INFORMED LEADERSHIP</b>

**PRINCIPLES**

<p><b>ENHANCE EDMONTONIAN EXPERIENCE</b></p> <p>The City exists to serve the people who live and own businesses here. Actively listening to them and consistently examining our decisions and options from their perspectives will give us confidence that we are focused on the right things for Edmonton.</p>	<p><b>PROVIDE RELIABLE INFORMATION</b></p> <p>Information is a public asset. The City stewards this asset for the public good; sharing it transparently, using it for the benefit of all Edmontonians, and managing and protecting it responsibly. The integrity of our information is paramount.</p>
---	---

**STRATEGIC PILLARS**

<b>EDMONTONIAN FOCUSED</b>	<b>USABLE INFORMATION</b>
----------------------------	---------------------------

**SUPPORTING STRATEGIES**

<p>Focus business technology decisions on improving Edmontonians' experiences across the City</p> <p>Adopt business technology that allows Edmontonians to interact with the City how and when they want</p> <p>Use business technology to better understand and enhance the programs and services Edmontonians need</p> <p>Use information and community feedback to create a two-way dialogue on shaping Edmonton</p>	<p>Collect and share evidence that tells Edmonton's story and inspires citizens to get involved</p> <p>Share information that will help citizens and businesses make informed choices and decisions, and support a more vibrant Edmonton</p> <p>Use information to describe our progress to commitments and anticipate future needs</p> <p>Drive decision-making through relevant information that is easy to access, review and understand</p> <p>Educate and train staff on to how to steward high-quality information and best use it to drive decision-making</p>
---	---

## CONNECTEDMONTON

**CITIZEN EXPERIENCE EXPECTATIONS**

**ENVIRONMENTAL STEWARDSHIP**

**TRANSPARENT PROCESSES**

**ORGANIZATIONAL EFFICIENCY**

### PROMOTE COLLABORATION

The City develops partnerships to capitalize on the information and technological capabilities of Edmontonians, academic institutions, non-profit organizations, businesses and the community.

### TRANSFORM THROUGH INNOVATION

The City creates and fosters new approaches to business technology that support effective processes and improve what people experience when they interact with us. We embrace disruptive technology as an opportunity to forward our thinking and enable the positive transformation of Edmonton.

### THINK CITY-WIDE

Business technology provides the most value when delivered for the benefit of the entire City of Edmonton ecosystem. The City's business technology resources and assets belong to one City and will be used as such.

### PARTNERSHIPS

Recognize and develop the partnerships needed to advance the City's Business Technology Strategy

Use information to proactively identify where external partnerships will best support Edmontonians

Build and advance Edmonton's reputation as a digital city

### INNOVATION

Use information and technology to improve the quality and reach of City programs and services

Welcome and embrace disruptive technology to help Edmonton to achieve its vision

Adopt solutions that better integrate city business areas and improve people's experiences when they interact with the City

### INTEGRATED

Adopt a single, transparent City-wide approach to business technology investments and decision-making

Focus on business technology that supports and provides broad City value

Clearly define governance accountabilities for business technology City-wide

Use business technology to support talent management efforts and enable City staff to be their best

## WHAT IS BUSINESS TECHNOLOGY?

Progressive organizations around the world continually visualize themselves through innovative digital tools, systems and processes.

This allows these organizations to be more efficient and effective—serving and communicating with their stakeholders in new ways. Similarly, cities are facing increasing demands from citizens for more data and information delivered in new, innovative ways.

Business technology recognizes not only the innovation found in information but also the innovation that exists within larger ecosystems. The City recognizes the need to embrace new technology and use its information to make evidence-based decisions.

***BUSINESS  
TECHNOLOGY—  
ENABLING SERVICE,  
PARTNERSHIP AND  
GROWTH THROUGH  
THE INNOVATIVE USE  
OF INFORMATION  
AND TECHNOLOGY.***



# ADVANCING CONNECTEDMONTON: EDMONTON'S STRATEGIC PLAN

The Business Technology Strategy moves the City forward to better embrace innovative technologies and use data. This work is founded on City Council's vision as documented in **CONNECTEDMONTON: Edmonton's Strategic Plan**.

Forming the foundation of the City's work, **CONNECTEDMONTON** guides the City's continued commitment to enhance the quality of life for Edmontonians. It was developed in 2019 following extensive engagement with our stakeholders. By addressing our current challenges and identifying a clear plan to achieve the vision defined by **CONNECTEDMONTON**, the City can meet these high expectations, as well as effectively and efficiently deliver high-quality programs and services. Through the Business Technology Strategy, the City has the opportunity to define and govern the role business technology has in shaping our economy and the quality of life in Edmonton.

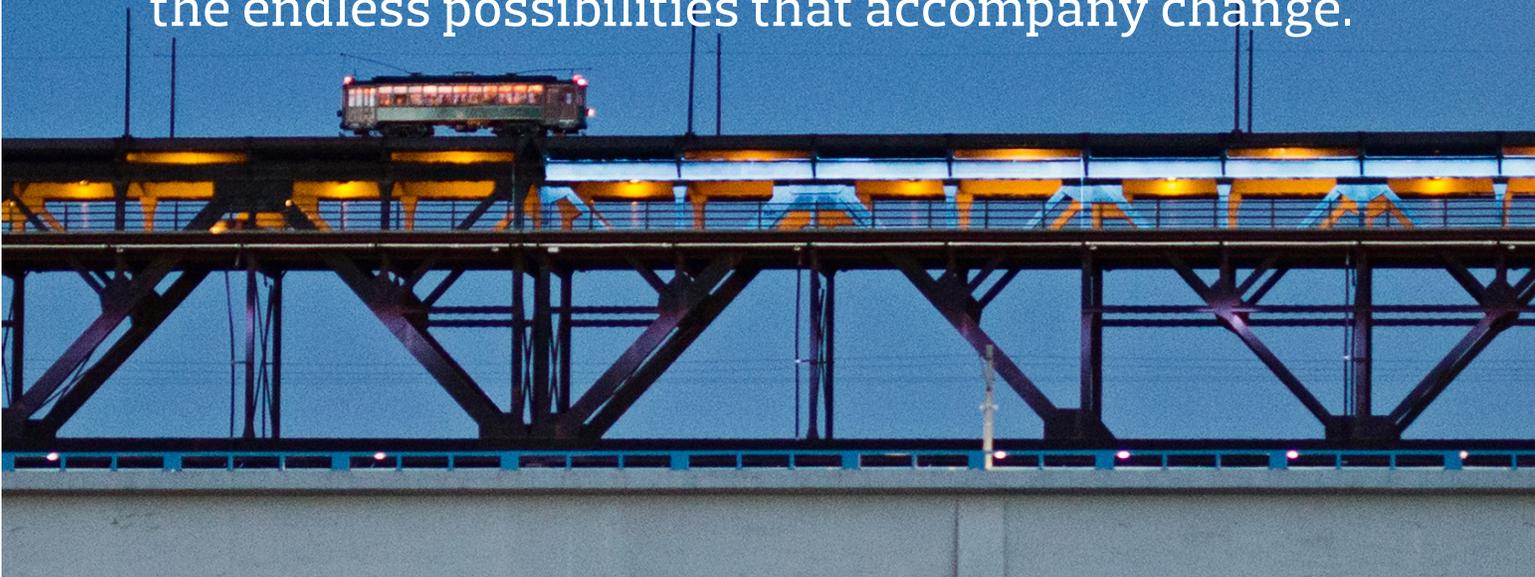


## **DRIVERS OF CHANGE**

The City of Edmonton delivers 70 distinct programs and services, including roads and public transit that move people; bylaws and fire rescue services to promote safety; parks, waste management and environmental services to keep our community clean and healthy; and social programs with leisure activities that improve quality of life and health.

Technology and information enable all of these programs and services as well as the employees who provide them.

**To continue to provide value to Edmontonians, the City must be a nimble organization, continuously evaluating the evolving landscape and embracing the endless possibilities that accompany change.**



**1****ECONOMIC DEVELOPMENT AND GROWTH**

We need to diversify and support the economy of not only Edmonton, but the surrounding region.

**2****FOCUSED INVESTMENTS**

We need to be thoughtful and focused on where and how we invest in technology— from our workforce to our infrastructure assets.

**3****STRENGTHENED PUBLIC SERVICE**

Our high-performing teams require robust and secure information and tools to increase collaboration and innovation.

**4****INFORMED LEADERSHIP**

We support Council in its role as a decision maker by providing the best information and advice possible.

**5****EDMONTONIAN EXPERIENCE EXPECTATIONS**

We create opportunities for diverse input and participation by inviting Edmontonians to play a larger role in shaping their community.

**6****TRANSPARENT PROCESS**

We are open, transparent and accountable. Our stakeholders have a clear understanding as to how and why decisions are made.

**7****ENVIRONMENTAL STEWARDSHIP**

We are advancing toward a low-carbon city with smart energy options and innovative energy delivery systems.

**8****ORGANIZATIONAL EFFICIENCY**

We ensure that our existing technologies are delivered in the most effective and efficient manner through process renewal and optimization.

In understanding and recognizing these eight drivers of change, the City will be flexible and adaptable in the implementation of the Business Technology Strategy and in meeting the evolving expectations of the Edmontonians it serves.

# BUSINESS TECHNOLOGY STRATEGIC PRINCIPLES AND PILLARS



The Business Technology Strategy's principles define what is essential for the City's success. The principles describe the beliefs and philosophy that guide what we do and why we do it. Our pillars set a clear path for the principles and focus on bringing together businesses and people to transform Edmonton into a community that is truly responsive to the wants and needs of those who work and live here.

**PRINCIPLES****STRATEGIC PILLARS****ENHANCE EDMONTONIAN EXPERIENCE**

The City exists to serve the people who live and own businesses here. Actively listening to them and consistently examining our decisions and options from their perspectives will give us confidence that we are focused on the right things for Edmonton.

**EDMONTONIAN  
FOCUSED****PROVIDE RELIABLE INFORMATION**

Information is a public asset. The City stewards this asset for the public good; sharing it transparently, using it for the benefit of all Edmontonians, and managing and protecting it responsibly. The integrity of our information is paramount.

**USABLE  
INFORMATION****PROMOTE COLLABORATION**

The City develops partnerships to capitalize on the information and technological capabilities of Edmontonians, academic institutions, non-profit organizations, businesses and the community.

**PARTNERSHIPS****TRANSFORM THROUGH INNOVATION**

The City creates and fosters new approaches to business technology that support effective processes and improve what people experience when they interact with us. We embrace disruptive technology as an opportunity to forward our thinking and enable the positive transformation of Edmonton.

**INNOVATION****THINK CITY-WIDE**

Business technology provides the most value when delivered for the benefit of the entire City of Edmonton ecosystem. The City's business technology resources and assets belong to one City and will be used as such.

**INTEGRATED**

## EDMONTONIAN FOCUSED

The City will drive Edmonton toward a more engaged and collaborative community, where business technology is a tool to understand the needs and expectations of Edmontonians.

Understanding what Edmontonians value is essential for Council to make critical decisions on behalf of a diverse community. To create rich opportunities for input and participation, the City must leverage data, information and technology to identify meaningful channels for all audiences, at times and places convenient to them. New opportunities for technology-based analysis will allow the City to unlock the insights from feedback and ideas—all to help sharpen thinking and deliver programs and services which are truly responsive to the public need.





## To do this work, we will:

Focus business technology decisions on improving Edmontonian experiences across the City

Adopt business technology that allows Edmontonians to interact with the City how and where they want

Use business technology to better understand and enhance the programs and services Edmontonians need

Use information and Edmontonians' feedback to create a two-way dialogue on shaping our City

## Success will be measured by:

Increased digital interaction with the City's programs and services

Streamline the delivery of personalized digital services

Enhanced program and service experiences through digital and online mediums

Consistent, integrated delivery of Edmontonian- and business-focused programs and services

Minimize the digital divide with Edmontonian-focused approaches to ensure availability and accessibility of online resources

# EXAMPLE INITIATIVES



## AUTOMATED HOME IMPROVEMENT PERMITS

Automated permit reviews for common types of home improvement projects result in qualifying permits being issued instantly. This reduces red tape by supporting construction, investment, and residential real estate transactions. The online system automatically reviews simple, lower-risk applications for compliance with the Zoning Bylaw and applicable Building Safety Code requirements. Over 750 permits annually benefit from the one day service, compared to a timeline of three to six weeks in peak summer months.

## DIGITAL ASSISTANT

Launched in early 2021, the Digital Assistant reduces call volumes to 311 and provides 24 hour service. The Digital Assistant provides natural and rich conversational experiences between customers and organizations, powered by artificial intelligence. It is currently used to support Waste Services and Edmonton Transit, with planned expansion to other City services.

## ARC CARD

Arc is the Edmonton region's electronic fare payment system. It includes an Arc card that can be tapped when entering and exiting buses and LRT in seven transit systems, including Beaumont, Edmonton, Fort Saskatchewan, Leduc, Spruce Grove, St. Albert, and Strathcona County. While paper tickets and passes are still available for riders, the "tap and go" fare payment system makes paying for transit as simple as buying a cup of coffee.





## DATA ETHICS

Digital technologies have enabled the capture and storage of ever greater volumes of data, while enhanced analysis and data science techniques have increased the opportunities to leverage that data in planning and decision-making processes. These vast amounts of data are being collected, used and processed at ever increasing speeds and, as data stewards, the City of Edmonton has an obligation to do so in a responsible manner. The application of data ethics helps ensure data is used responsibly and in the best interests of individuals, society and the environment. Through policy, awareness and training, the City of Edmonton is actively increasing employee understanding of the ethical considerations related to data-informed choices and decisions.

## ALBERTA.CA ACCOUNT

Streamlining the delivery of personalized digital services can improve resident access to and experience of City services. In collaboration with the Alberta.ca group at the Government of Alberta, the City is exploring the creation of citizen digital identities to validate and authenticate citizens accessing City services and improve user experience through a streamlined data solution.

An example is the Online Application Portal for the Leisure Access and Ride Transit programs, which enables an automated way to apply to City subsidized programs. It integrates with Alberta.ca to authenticate applicants and the Canadian Revenue Agency to authenticate income.

## USABLE INFORMATION



The City will continue to enable more strategic, community-based decision-making by providing data and information to all stakeholders and ensuring these stakeholders have the tools and knowledge to perform meaningful analysis.

Data and information will be treated as assets that can be collected, accessed, analyzed and shared globally. City employees will be trained and educated on the full potential of our information, how to steward and maintain high-quality information for wider sharing and how to use analytics to guide Edmonton's way forward. At the same time, expanding use of digital infrastructure is not without risk, and the City will adopt strategic and tactical technologies and services to protect its expanding digital services, infrastructure and data. With trustworthy information and a driving vision of "open by default," the City will be able to consistently describe the story of Edmonton and its progress toward Council's vision.



## To do this work, we will:

Collect and share evidence that tells Edmonton's story and inspires people to get involved

Share information that will help Edmontonians and businesses make informed choices and decisions, and support a more vibrant City

Use information to describe our progress toward commitments and anticipate future needs

Drive decision-making through relevant information that is easy to access, review and understand

Educate and train staff on how to steward high-quality information and best use it to drive decision-making

## Success will be measured by:

Transparent access to consistent, reliable and accurate near real-time data and information for Edmontonians, businesses and staff

Use of data and information to make decisions and measure results

Increased trust in available data and information

## EXAMPLE INITIATIVES



### PARKING STALL MONITORING

This pilot project uses stall-based sensors to accurately show where an available parking space is, enabling real-time enforcement capabilities and a variety of analytics. The pilot includes a dashboard with real-time status of the parking stalls in addition to historical data, stall utilization reports, analytics and time violation alerts. In the future, this technology could also be made available to everyday drivers looking for available parking.

### MULTI-FACTOR AUTHENTICATION

Unauthorized access to technology is among the top cyber security risks to any organization. It can compromise information, applications, and critical infrastructure.

To address the cyber risk of unauthorized access, the City implemented Multi-Factor Authentication for employees logging into the City network. The City enrolled over 15,000 users and achieved a 99.8% enrollment rate in one year.

### OPEN DATA

Increasing the transparency of municipal decision-making enhances trust between the City and our residents. By making data accessible and barrier-free, anyone can see and analyze the data used to make City decisions or create an app that makes Edmonton a more liveable place. Launched in 2010, the Open Data Portal has grown to include hundreds of datasets and visualizations for roadways maintenance, locations of schools, varieties of trees, municipal elections data, municipal census data, and much more. The City of Edmonton is a Canadian leader in open data having been recognized by PSD Citywide as a "Most Open City" for five consecutive years, and won multiple Canadian Open Data Awards since 2018, most recently in 2022.



## DATA GOVERNANCE

Data and information are strategic assets and a critical resource for the City of Edmonton. A culture of openness allows that data's full potential to be realized and drive innovation and excellence for both internal City staff and external organizations in business and academia. The City's Integrated Corporate Data Framework establishes a common corporate-wide guide to inform how these stakeholder and customer needs can be met in an integrated and consistent manner. Building the capacity to enable Edmontonians to interact with the City how they want and when they want, providing interactions that are seamless and focused on a positive service experience.

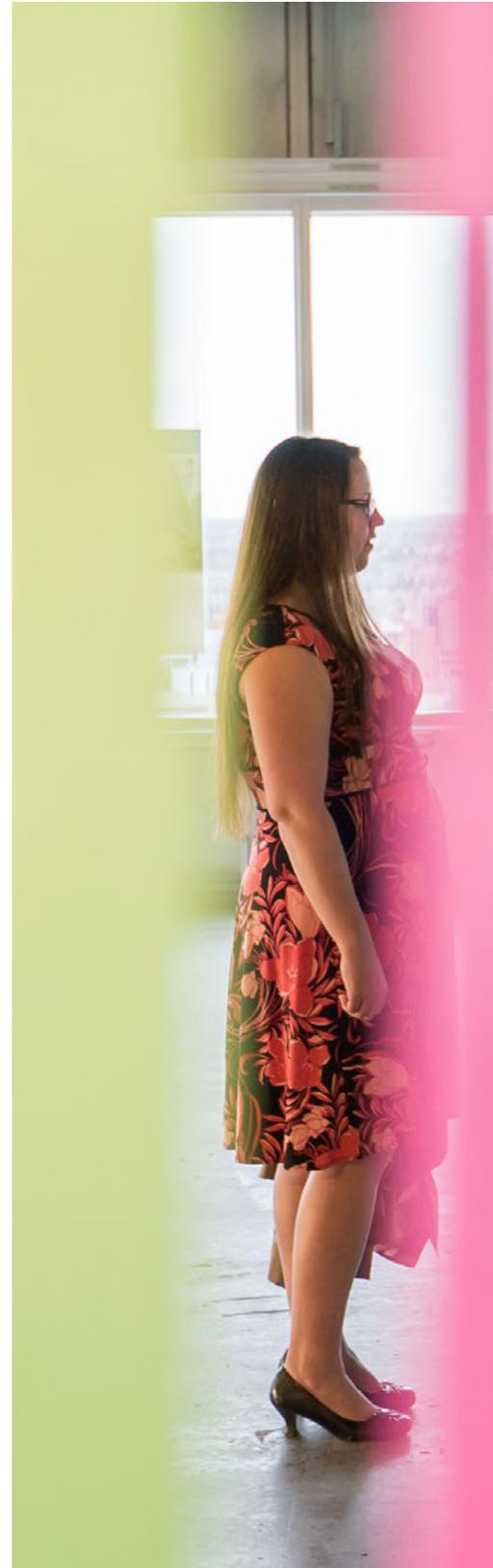
## GEOGRAPHIC INFORMATION SYSTEMS

Geographic Information System (GIS) technology enables many of the services the City offers to residents, businesses, and other external partners. The City has completed a transformation program that has modernized its GIS platform, services, and delivery model, setting a strong foundation to further enhance location intelligence capabilities within the organization. Increasing the use of advanced GIS technology improves business outcomes, processes, and employee effectiveness, allowing for greater understanding and insights impacting City service delivery improvements and data-informed decision making.

## **PARTNERSHIPS**

The City will drive growth and increase the reach of programs and services by encouraging strong, open and collaborative partnerships enabled by technology, data and information.

Insights from business technology will proactively identify previously unconsidered partnership opportunities. Open, high-quality information will build trust in the City's partnerships and align coordinated efforts. The City will continue to build and advance Edmonton's vision through collaboration with all orders of government, non-profit organizations, businesses, academia and the community.





## To do this work, we will:

Recognize and develop the partnerships needed to advance the City's Business Technology Strategy

Use information to proactively identify where external partnerships will best support Edmontonians

Consider scalability, sustainability and a strong return on investment to set Edmonton up for the future

## Success will be measured by:

Increased strategic partnerships

Increased stakeholder participation in realizing the information and technology vision for the City

Increased economic diversity through a stronger technology sector

PARTNERSHIPS

# EXAMPLE INITIATIVES



**AIR QUALITY SMART LIGHT**

The City of Edmonton is supporting local citizens, environmental groups and schools to monitor air quality using smart light bulbs. This initiative raises awareness of the Air Quality Health Index (AQHI) and Edmonton's air quality. The large light installation travels to various locations across the city to raise awareness about air quality.

The platform allows anyone to connect a Wi-Fi enabled light bulb to provincial air quality data, which updates every half hour.

**FIBRE OPTIC NETWORK**

The City of Edmonton owns and operates a large fibre optic network which it shares with partner organizations such as Edmonton Police Service, Edmonton Public Library and Edmonton Fire Rescue Services, reducing costs for all partners. Additionally, the City uses this network to extend connectivity to organizations like University of Alberta, Alberta Health Services, and EPCOR.

The City lays network fibre when construction is planned and the roadway is already dug up, eliminating future technology infrastructure costs. The investment in a City-owned fibre optic network sets Edmonton up for the future, resulting in scalability, sustainability, and a strong return on investment for decades.

**GRAND CHALLENGE**

The City of Edmonton and the University of Alberta are partnering to address complex community issues through the Grand Challenge program. In order to support the varied interactions that will move these large issues forward, the two organizations are building a formal collaboration program to support this work. This program will also support other research and development work across the city and the community.

**COMPUTER-AIDED DISPATCH**

In a collaborative effort, Fire Rescue Services, Edmonton Transit Service, and Corporate Security all dispatch emergency services using the same computer-aided dispatch (CAD) system. Over the past 25 years, CAD has evolved into an intuitive emergency response tool integrated with Alberta Health Services' real-time Emergency Management Systems. This integration provides citizens a more complete emergency response service, and the City is investigating further integration with other business areas that would benefit from CAD.

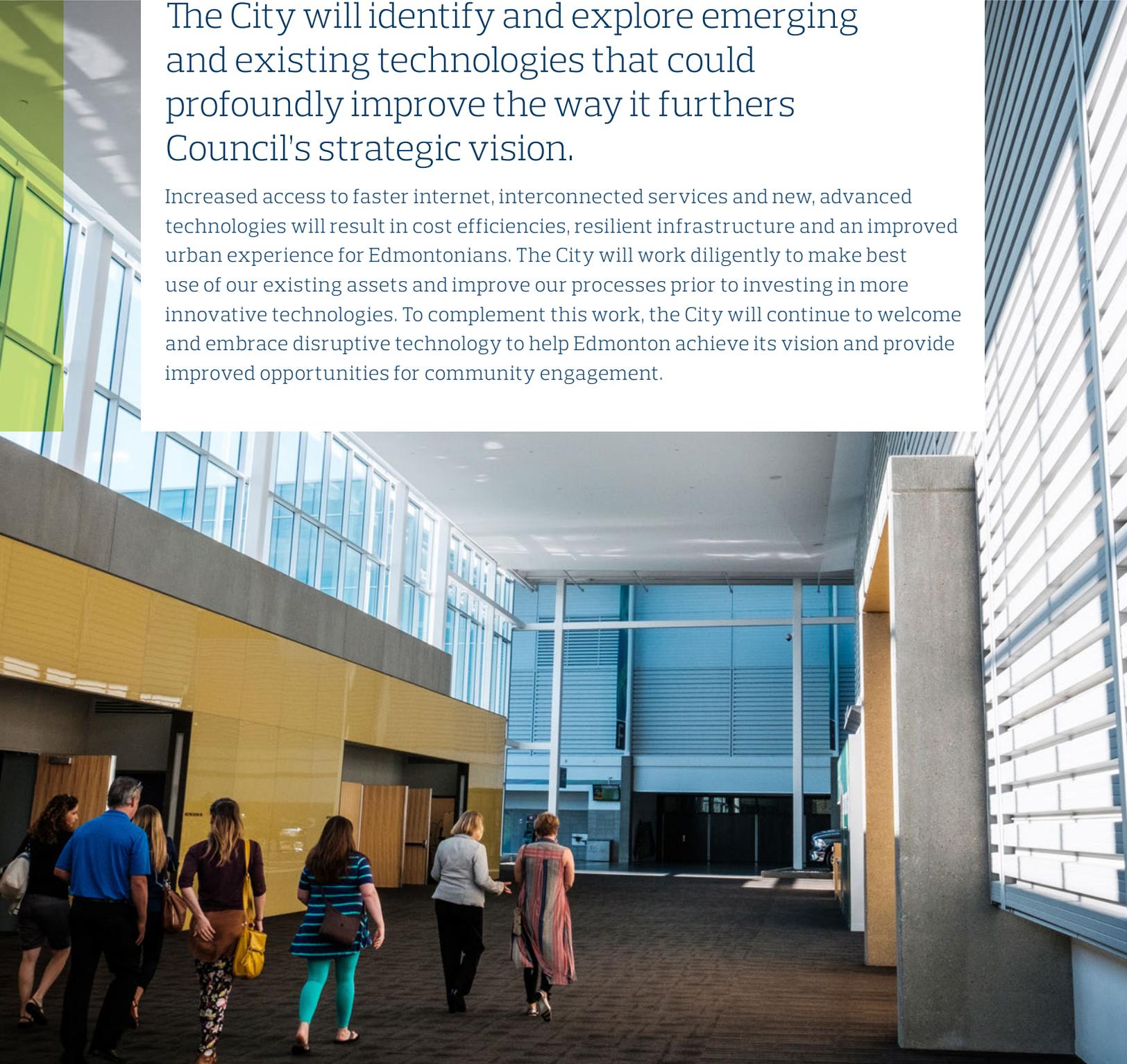
**EDUROAM**

The City launched Eduroam wireless network across more than 120 City facilities. Eduroam is a tool for universities, research institutes and schools that provides simple, easy and secure connectivity from thousands of wireless hotspots in over 100 countries. The platform allows any user from an Eduroam participating site to get safe and fast network access at any institution connected to Eduroam.

# INNOVATION

The City will identify and explore emerging and existing technologies that could profoundly improve the way it furthers Council's strategic vision.

Increased access to faster internet, interconnected services and new, advanced technologies will result in cost efficiencies, resilient infrastructure and an improved urban experience for Edmontonians. The City will work diligently to make best use of our existing assets and improve our processes prior to investing in more innovative technologies. To complement this work, the City will continue to welcome and embrace disruptive technology to help Edmonton achieve its vision and provide improved opportunities for community engagement.





## To do this work, we will:

---

Use information and technology to improve the quality and reach of City programs and services

---

Welcome and embrace disruptive technology to help Edmonton to achieve its vision

---

Adopt solutions that better integrate the organization and improve people's experiences when they interact with the City

---

## Success will be measured by:

---

Improved access to digital programs and services for citizens and businesses

---

Increased coordination and integration of programs and services

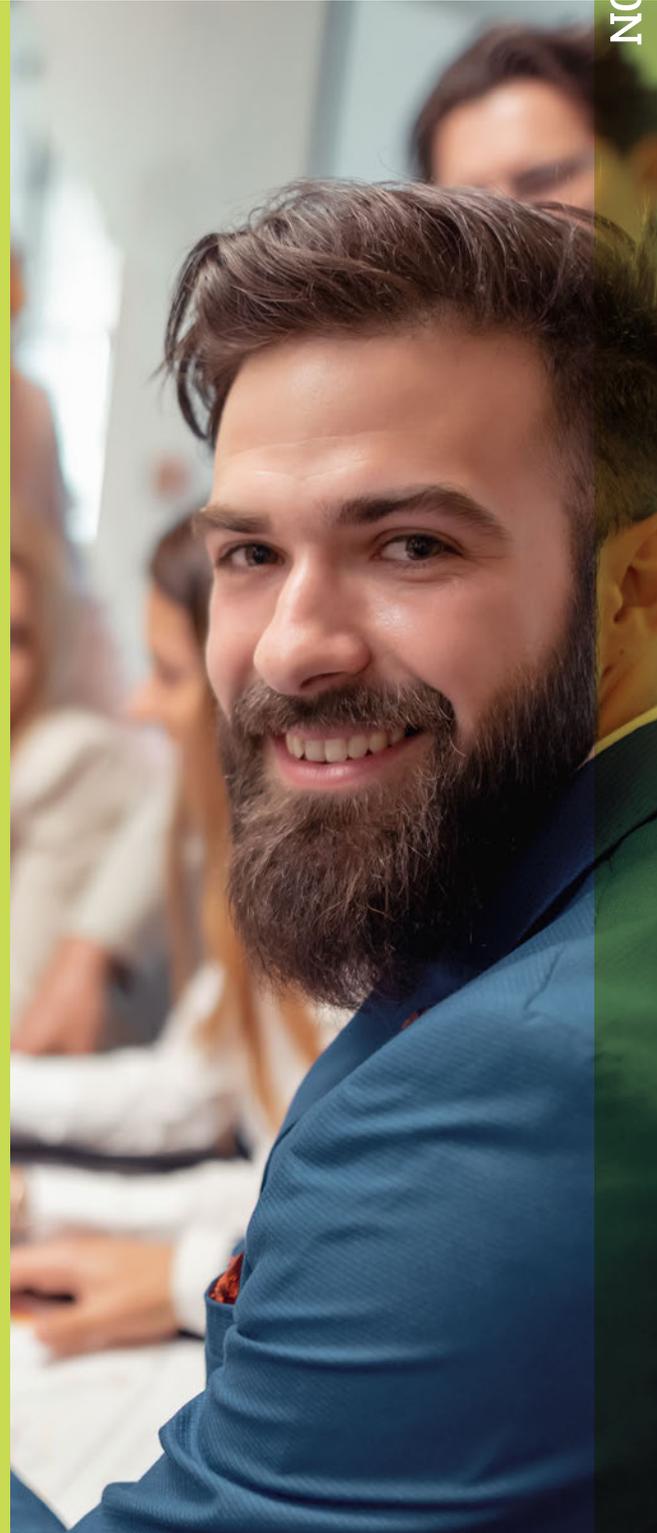
---

Reduced environmental footprint of the City's operations

---

More efficient and effective service provision

---





**INNOVATION**

# **EXAMPLE INITIATIVES**

## **DATA SCIENCE**

Data science, data storytelling, and the right architecture position the City to move from insights to action that addresses real-world problems faced by Edmontonians. These approaches result in applications like Lighthouse: a technology solution, built in partnership with the Anti-Defamation League, designed to deliver key intelligence to decision makers through the identification and tracking of hate symbols.

## **LOW CODE PLATFORM**

In 2022, after the Government of Alberta announced that municipalities can no longer use the provincial system for FOIP requests, the City piloted an agile, low code platform to build a replacement system. The solution was cost-efficient and built in only 5 weeks, and the success of this low code platform opens the City up to solving business technology problems with new tools in the future.



### **CLIMATE CHANGE TECHNOLOGY INITIATIVES**

The City has reduced CO2 and power consumption by increasing virtualization of the City's data servers. By converting physical data servers into virtual servers, the City has reduced the physical footprint and number of racks required for the City's data centre. This is more cost efficient and reduces greenhouse gas emissions at an estimated 12,891 tonnes per year.

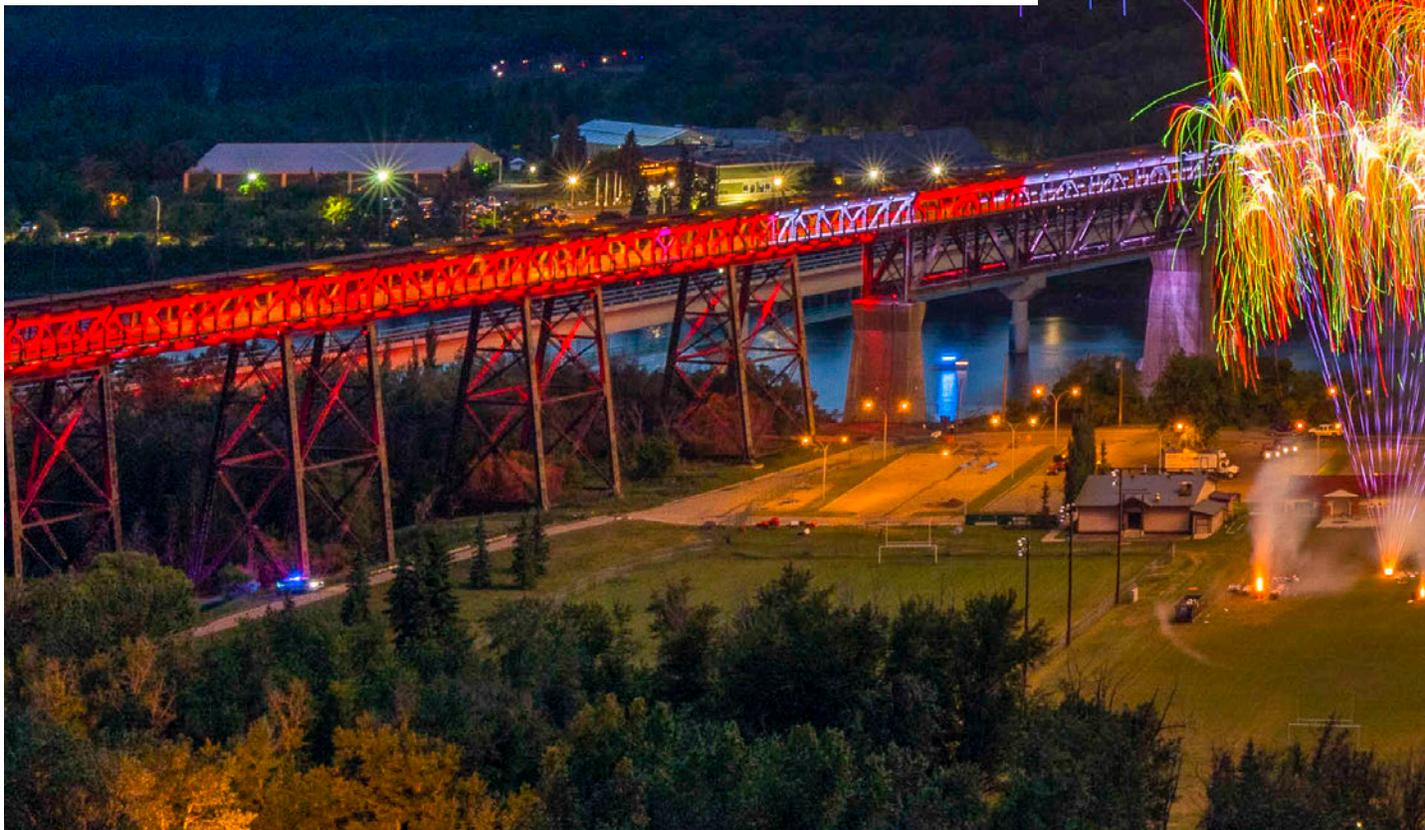
### **DEDICATED ACCESSIBLE TRANSIT SERVICE (DATS) UPGRADE**

DATS provides transit service for adults with a physical or cognitive impairment who are unable to use conventional transit. Upgrades to DATS technology have improved routing and communication for more efficient passenger pick-ups and drop-offs. DATS buses are now equipped with a tablet that is cost-effective, easy to replace and that uses Google Maps data. This provides a modernized and reliable experience for bus operators and a safe, door-to-door shared ride transit service for Edmontonians.

# INTEGRATED

The City uses an integrated and transparent approach to business technology decisions, anticipating the needs of the organization for decades to come.

Business technology enables every one of the City's diverse programs and services—from recruiting and developing high-performance teams to collecting environmental readings as the City addresses climate change. The City's investments will prioritize assets and solutions and provide City-wide value, supported by policies and procedures, making the best use of available people, resources and time.





## To do this work, we will:

Adopt a single, transparent City-wide approach to business technology investments and decision-making

Focus on business technology that supports and provides broad organizational value

Clearly define governance accountabilities for business technology City-wide

Use business technology to support talent management efforts and enable City staff to be their best

## Success will be measured by:

Reduced duplication of business technology assets and solutions

Greater returns on business technology investments

More efficient use of resources through simplified and streamlined business technology

## INTEGRATED

# EXAMPLE INITIATIVES

### REMOTE WORK

During the COVID-19 work from home orders, the City was prepared to act quickly and scale up virtual desktop access and remote connectivity, thus enabling employees to work from home. Continual improvements ensure City of Edmonton employees can connect to applications and intranet with a consistent look and feel from any device, anywhere, anytime. The hybrid work arrangement minimizes the City's impact on the environment and contributes to employee safety and well-being.

### NEXT GENERATION 9-1-1

In a collaborative effort, Fire Rescue Services and Edmonton Police Service are implementing Next Generation 9-1-1 services as directed by the Canadian Radio-television and Telecommunications Commission. This modernizes the City of Edmonton's 9-1-1 response capabilities to better meet citizen expectations and keep up with advances in internet and mobile technology.

### CLEAN ENERGY IMPROVEMENT PROGRAM (CEIP)

CEIP is one piece of the City's Energy Transition Strategy. It provides homeowners and organizations access to low-cost financing to make energy efficiency upgrades or add renewable energy installations to their properties, and is then repaid by the property owner through the owner's property taxes. To support the administration of a full-scaled program, the City is creating a purpose-built module into its existing TACS system to coordinate and integrate the processes of the multiple business areas involved in executing the program. By using TACS, the corporation is making efficient use of existing resources and reducing potential redundancies with its business technology assets and solutions.

### APPLICATION PORTAL

The Application Portal allows City of Edmonton employees to connect to applications and intranet with a consistent look and feel from any device, anywhere, anytime. The Portal enables the use of Alternate Work Strategies—a program that minimizes the City's impact on the environment and contributes to the revitalization and growth of downtown Edmonton.

### BUILDING A SOLID FOUNDATION

Reliable data for accurate reporting and informed decision making, along with streamlined business processes, are key to being responsible and prepared for the future.

The City is updating its aging core technology applications so that we are well positioned to responsibly and effectively manage our finances, information, assets and human resources. We will have the technology we need today and to provide future services to citizens.

### TAXATION, ASSESSMENT AND COLLECTION SYSTEM (TACS) TRANSFORMATION

The City is modernizing Taxation, Assessment and Collection System (TACS) – the system that is foundational to the corporation's property assessment, tax levy, and tax collection operations, as well as the City's overall financial sustainability.

TACS Transformation aims to create capacity for both the system and its users by increasing efficiencies, reducing complexities, and accommodating future flexibility. This will support the City in responding to Edmonton's constant growth and its continually evolving physical, social, and economic landscapes. It will also provide expanded digital customer services, making assessment and taxation information more accessible to both residential and non-residential property owners.





THE CITY WILL ACHIEVE ITS GOALS, DELIVER PROGRAMS AND SERVICES, AND PROVIDE AN EXCEPTIONAL QUALITY OF LIFE FOR EDMONTONIANS BY EMBRACING BOTH THE PERSPECTIVES OF A DIVERSE COMMUNITY AND THE OPPORTUNITIES PRESENTED BY TECHNOLOGICAL ADVANCES.



## **REACHING COUNCIL'S STRATEGIC GOALS**

The Business Technology Strategy describes a bold and ambitious vision for business technology for Edmonton. With dedication, hard work and leadership from across the City, the objectives of the Strategy are achievable.

To enable Edmonton to fully benefit from the opportunities, engagement, inclusion and innovation presented through business technology, the City will work to fully implement the supporting strategies highlighted in the Business Technology Strategy.



## NEXT STEPS

Assessing the degree to which the Business Technology Strategy supports the progress and achievement of Council's Strategic Goals articulated in CONNECTEDMONTON will be accomplished by:

- 1 Establishing a governance structure which reviews and prioritizes technology investments against the five pillars of the Business Technology Strategy.
- 2 Linking each outcome identified in the Business Technology Strategy to performance measures that already exist within the City. If a relevant measure does not currently exist for a business technology outcome, careful consideration will be given to define and implement a new measure to assess performance.
- 3 Ensuring each performance measure will also be linked back to a set of City Outcomes that assess the City's progress towards achieving Council's Strategic Goals.
- 4 Confirming a baseline for each measure that will be used to gauge future performance against a recorded current state.
- 5 Setting a target for each measure to define the level of performance aspired to by the City that will indicate achievement of our strategic business goals.
- 6 Identifying annual performance measure improvements to signal the intended incremental growth and provide focus for business technology resource and investment plans.
- 7 Reporting on and reviewing performance measures at regular intervals against targets to assess progress, confirm priorities or inform changes to ensure the City is best positioned to achieve our goals and advance Edmonton's vision.

Edmonton

BUSINESS TECHNOLOGY  
STRATEGY 2023

EDMONTON.CA

EDMONTON.CA

