

Service Business Plan

Service Name Information Technology

Service Lead Name Chad MacDonald

Service Lead Title Chief Information Officer

Service Description

An internal digital enablement service which provides professional expertise and reliable technology solutions in support of the delivery of services to citizens, businesses and visitors of the Municipality.

Strategic Alignment with Vision to Focus Plan

Delivering customer centric services with a focus on efficiency and technology transformation.

Service Goals

To enable and support effective and efficient City services using sustainable, reliable, modern, and secure technology solutions.

Current State

Customers & Their Expectations

This service is delivered to:

City staff, Council, boards and agencies.

IT Service customers expect:

- Technology tools that are up-to-date and keep pace with evolving needs
- Reliable and secure systems
- Timely response to issues and requests
- Timely and successful project implementation
- Knowledgeable staff
- Adequate training and communication
- Easy access to IT services
- Ability to access and use the technology they need.

Ongoing investment in information technology (IT) should deliver new capabilities, enable innovation and advance the strategic goals of the City. IT solutions should help improve service delivery, improve customer satisfaction and enable a more productive and engaged workforce.

Existing Service Delivery

IT Services provides professional consulting services by proactively assisting the business with technology solutions that meet business objectives. Business relationship management functions as an embedded business partner providing strategic advice and direction on leveraging technology to enhance the business.

IT Services manages a large portfolio of projects varying in size and degree of complexity. Corporate priorities are established by the Burlington Leadership Team and an annual IT project work plan is approved by the corporate IT Steering Committee (ITSC). Work plan adjustments are made throughout the year using a change management process which is managed by the ITSC. IT Services works with customers throughout the life of a project, defining needs, assisting with procurement, and often managing the implementation.

IT Services plans and manages large corporate initiatives delivering modernized technology and transformational change. Large corporate initiatives currently underway include the Enterprise Resource Planning (ERP) and the Enterprise Asset Management System (EAMS) projects.

IT services deliver desktop hardware and software support, business application management and support, security, training and general consulting. IT Services is also responsible for managing the City's data centres, network, internet access, email and telephone system.

IT Services manages the life cycle of all IT assets ensuring ongoing system reliability. IT Services coordinates major upgrades, applies fixes, responds to requests for improvements and provides general support to the user community.

The IT environment is extremely complex and consists of approximately 190 business applications that are delivered through a combination of vendor hosted services and internally delivered applications. IT Services manages contracts and relationships with the IT vendors who supply these systems. A core set of ten to twelve systems form the foundation of the City's critical business systems and serve the needs of multiple service areas. IT Services supports application integration to facilitate data transfer between business systems building the foundation of the enterprise architecture.

IT Services staff support more than 1,350 user IDs and over 3,900 devices (including PCs, phones, laptops, tablets and servers). IT Services manages all computer-related issues for the City through a centralized service desk and responds to approximately 15,000 incidents and requests each year.

	<p>IT Services staff support a complex technical environment, including enhanced secure remote access capabilities, supporting more than 800 hybrid and remote workers whose day to day tasks are increasingly reliant on technology.</p> <p>The City's computer network extends to 45 facilities throughout Burlington. A secure internet connection provides access to services outside the City's network.</p> <p>A comprehensive IT security program plans and implements policies and defenses against IT security threats and vulnerabilities. A risk management-based approach is taken, balancing business goals with IT security. Ongoing annual security training is provided to all staff with network access. Compliance and adherence to security training procedures is tracked and reported on.</p> <p>IT Services provides after-hours support for critical systems from 4:30 p.m. to 8:30 a.m. daily.</p>
Existing Customer Engagement Tools / Methods	<p>An automated ticketing tool is used to submit and track incidents and requests. An on-line portal is available for customer to submit and track requests.</p> <p>A Customer Satisfaction and Importance survey is conducted on an annual or biennial basis. IT Services uses the City's internal website to provide information including FAQ's to assist in the effective use of technology. Additional mandatory training and technology policy compliance is offered and tracked through the corporate online training platform (OTR).</p> <p>Staff strive to regularly engage customers outside of the day-to-day interactions to understand strategic IT needs, obtain feedback on IT Services, and share information related to projects and IT performance.</p> <p>Updates on project portfolio health are reported to the IT Steering Committee on a regular basis. The project portfolio dashboard is available on the internal website for viewing by all staff.</p>
Is this Service Provincially Legislated?	No
For this Service are there Approved Service Standards?	Yes Established service level objectives measure the ongoing effectiveness of the Information Technology service. These are set out later in this business plan.



Programs

IT Support Service	Manages IT assets throughout their life cycle, maintaining secure and reliable systems and infrastructure. Provides support for business applications, performs software upgrades and applies fixes. Provides general user support (help desk) and training.
IT Consulting Service	Establishes strategic plans and roadmaps for corporate technology, aligning capabilities to business needs. Helps customers determine how technology can be applied in the business to improve efficiency and effectiveness and to achieve strategic goals.
IT Solution Delivery	Provides project management and technical expertise during implementation of technology initiatives.

Recent Continuous Improvement Initiatives

The 5-year corporate IT strategy, established in 2016, continues to set a vision for information technology. It is used to guide the process of establishing key priorities on an annual basis. Several activities occurred in 2021 that support the strategic themes within the plan. Several of these are described below.

In 2021, the 3rd and final phase of the Business Intelligence (BI) program was completed and the program was transitioned to an ongoing operational program. Ongoing expansion of the tools to add additional datasets from key business systems continued along with the development of the appropriate data dashboards continues. In 2021 customer relationship management (CRM), capital budget monitoring and corporate IT project portfolio management dashboards were developed and put into use. As well, BI training and mentorship programs continued to assist City staff in using the BI tools and expanding data sets.

In continuing response to the COVID-19 pandemic, during 2021 IT Services delivered expanded virtual meeting capabilities helping staff work together and engage the community. Significant changes to the hearing and court room infrastructure at Halton Court Services to support remote hearings. Parking first attendance and preliminary hearings were also moved online during this timeframe. Enhanced WiFi was rolled out at Spencer Smith park for the benefit of citizens and staff. Preliminary changes to both meeting rooms and council chambers are being implemented to support a hybrid meeting environment.

Following on the development of a new security framework in 2019, further actions were taken to protect the City's information assets and improve our ability to proactively respond to cyber security threats. Initiatives completed in 2021 included implementing new corporate firewalls, rolling out multifactor authentication to everyone with a City account, new endpoint protection capabilities and the recruitment of an IT Security Analyst. The mandatory security awareness program continued in 2021 with content updated to reflect recent security threats. Infrastructure, application and cloud service provider risk assessments continued throughout the year to ensure the protection of City data regardless of where it is stored or processed.

In 2021 IT Services has assisted in researching technical solutions to support the changing workforce to hybrid structure. Participating on the hybrid workforce team, IT services have researched solutions to support the hybrid worker and continued to expand our technology architecture to support staff in this new environment. Significant expansion to our collaboration tools has occurred including soft phones, online appointment tools, and expanded use of our microsoft office tools.

The ERP (Enterprise Resource Planning) Program, launched in 2018 will implement a fully integrated and updated system to support payroll, human capital management, and financial management. 2021 focus for the ERP has been on the securing an implementation partner and starting the implementation of the ERP software.

The Enterprise Asset Management Program (EAMS) will deliver an updated software solution to support improved asset maintenance and asset planning processes for fleet and equipment, facilities, and linear assets. The focus in 2021 has been on the implementation of the software and training on its use, classification and refinement of the asset categories and the associated business processes to maintain them.

In partnership with business areas across the organization the IT Service assisted with the implementation of many technology projects including: enhancements to our database architecture, upgrades to our geographic information system, development and roll out of an enhanced repository of project management tools, ...

Emerging Opportunities and Anticipated Risks

Emerging Opportunities

The ERP Program is focused on procuring and implementing an integrated software solution that supports Financials, Human Capital Management, Payroll, Budgets, Forecasts, and Reporting. The goal of the ERP Program is to reduce the number of peripheral, siloed data systems and in doing so deliver a fully integrated, flexible, intuitive solution that will support new and/or improved ways of working and will deliver a measurable business impact.

The EAMS project will implement updated software to enable improved asset maintenance and planning across the organization. Mobile capabilities will provide front-line staff with immediate access to meaningful data improving their productivity. Mobility can improve response time in handling maintenance issues and customer service requests.

Digital transformation is a necessity to meet the expectations and needs of those we serve. Website modernization, the introduction of emerging digital services and the transformation of existing services will require the introduction of foundational technologies to improve customer service including the deployment of a new Customer Relationship Management (CRM) solution for tracking of issues and service requests. Data collected will be used to inform

decisions and continuously improve the customer experience. In addition, Customer identity and access management (CIAM) will allow for simplified access by customers and security of this information through a common online profile that can be used for all services seamlessly. New on-line services can make it easier and more convenient for residents and businesses to interact with the City. Many opportunities exist to introduce on-line self-service options as alternatives to in-person transactions and will reduce manual paper-based processes.

Information is a vital strategic asset for the City. Improved governance and information management practices will enable staff to leverage data as a valuable resource in the delivery of City services. This will be of critical importance as upgrades to the City's major business systems (ERP, EAMS) are completed. The ability to manage a single view of the customer (rather than maintain customer records in multiple systems) will make it easier for residents and businesses to interact with the City.

Increased adoption of the new Business Intelligence technology will deliver more effective performance reporting and analysis. Meaningful information will be more easily accessible by staff, eliminating labour-intensive and time-consuming processes now required for business analysis and reporting. The BI technology positions us well to deliver an on-line community dashboard providing meaningful measurements on how the organization is performing.

In addition to ERP, the consolidation of other enterprise business applications may reduce annual maintenance costs, provide added functionality, improve data management and employee productivity. Focus on strong enterprise architectural reviews of our existing environment will identify areas where improvements and consolidation can be made.

The City's GIS (Geographical Information System) is a valuable tool that allows staff to visualize and analyze data geographically to understand relationships, patterns, and trends. These capabilities are transforming the way organizations operate. GIS is used extensively at the City and is linked to many of our business systems. The City's GIS system has untapped potential and should be further leveraged to enhance service delivery and staff productivity.

Mobile technology provides the opportunity to consider alternative ways of working by giving staff the ability to access information at any time from anywhere. Mobile technology can help reduce the need for dedicated office space, streamline operations, and improve customer service. As part of the EAMS project roll out, field workers will be accessing and maintaining data real time in the field. Leveraging the functionalities that support document

sharing and phone capabilities within the City's on-line collaboration tool (Microsoft Teams) will further improve employee productivity and job satisfaction. New 5G networks will be leveraged to enhance the mobile and field worker experiences.

The on-going assessment and measurement of IT service delivery processes will identify opportunities to reduce the number of help desk calls and the time to respond to issues. Enhanced training opportunities will improve corporate technology skills, reduce security risk, and improve overall customer satisfaction.

In future there will be an increased focus on project performance with an effort to increase the project completion rate, improve project capacity planning, and address the growing backlog of projects.

Anticipated Risks

STAFF RESOURCES: There are significant staff resource constraints resulting from an increased demand for new and updated technology and the work required to sustain legacy systems. Additionally, a number of long-term IT Services staff will be eligible for retirement within a five-year time frame. Significant knowledge and experience could be lost in a short period of time. Further staff pressures are being exacerbated by increasing growth of end user technologies and applications impacting ongoing support while skill sets required to support are constantly changing.

TECHNOLOGY ARCHITECTURE: There are significant risks to our existing technology architecture due to the rapid expansion of the number of applications being supported and the mix cloud and on premise locations. An enterprise wide architecture needs to be developed and managed with a focus on reducing the portfolio of applications currently being managed and maximize the value of the remaining applications. The enterprise architecture also needs to more fully tie into the larger transformational projects currently underway to leverage the functionality provided within those solutions and unlock the potential for use in data driven decision making, other areas of business, efficiencies and value for money spent.

SECURITY: The City's data is a vital asset that needs to be adequately secured and protected. Security breaches are costly and affect an organization's integrity and customer trust. Security threats and unintended exposure of City data are further increased as the workforce becomes more mobile and more systems move to the cloud. Maintaining secure systems is a bigger challenge in a more complex IT world and requires ongoing diligence and attention.

BUSINESS CONTINUITY: Operating in a pandemic introduces risks to the stability of the ITS operating environment.

There is the increased potential for frequent service disruptions and sustained outages. Project timelines may also be at risk.

DATA GROWTH and ARCHITECTURE: The City's application portfolio has grown to approximately 150 business systems. Continued growth and absence of a formalized architecture and data management program could result in additional work to manage risk associated with system integration needs, data duplication, data quality, and application administration.

SYSTEM RELIABILITY AND COMPLEXITY: IT Services supports a large and complex technology infrastructure, which functions behind the scenes yet is critical to the delivery of City services. The time required to manage and maintain this infrastructure has grown significantly. Proactive maintenance activities are becoming more difficult to accommodate, increasing the risk of unexpected system outages.

PACE OF CHANGE & AGILITY: Technology continues to evolve at a rapid pace. Customers expect that new technologies will be available quickly. Replacement or adoption of a major system can take multiple years to implement and often involves complex procurement and lengthy contract negotiation processes. This limits our ability to keep all systems up to date. Life cycles are extended and, as a result, efficiencies and service improvements are not realized, and system reliability is at risk.

ADOPTION OF VENDOR HOSTED (CLOUD) SOLUTIONS: Vendor hosted/cloud solutions provide modernized technology and enable continuous improvement. However, these managed services require on-going effort to sustain and increase operating costs. Sharing data between hosted systems is frequently a requirement and can be time consuming and complex to implement and support. Vendor hosted services require on-going diligence in ensuring data is adequately protected and business continuity is addressed. Given the increasing operating costs associated with cloud-based services business cases must describe the business benefits and justify the full cost to sustain the solution.

TECHNOLOGY RENEWAL and LEGACY SYSTEMS: Technology growth has increased the budget requirement to maintain IT assets. The IT Asset Management plan estimates an average of \$2.4M annually to maintain existing IT assets. A capital budget program provides some funding for asset renewal and the acquisition of new technology, but budget shortfalls are common. Resource constraints coupled with long implementation cycles has required extending the life of antiquated systems that are difficult to manage and support. Ensuring reliable, up-to-date systems enables innovation and cost-effective service delivery improvements.

Enterprise Risk Considerations	Labour Market and Workforce - Retirement, Recruitment, Compensation, Skills Financial Sustainability - Budget, Limited Revenue Tools Technology - Cyber Security Disruptive Technology Pandemic and Continuity of Operations
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Service Initiatives	Target Completion
Acquire and implement a modernized and integrated system to support HR, Payroll, and Finance functions. (ERP program)	Mar 2023
Implement a modernized enterprise asset maintenance management system for linear assets (project phases 1 and 2).	Mar 2023
Implement a modernized enterprise asset maintenance management system for fleet, equipment, and facility assets (project phase 3 and 4).	Dec 2023
Engage consulting assistance to undertake a review of the existing IT architecture and strategies.	Dec 2022
Implement a framework for enabling enterprise data management including data architecture, data catalogs, data standards and overall governance of data and information.	Dec 2022
Review and update Service Desk processes including service request submission and inventory management. Enhance and grow on-line information and user training.	Dec 2022