Service Business Plan

City of Burlington

Service Name	Information Technology

Service Lead Name	Christine Swenor	**Service Lead Title**	Chief Information Officer

Service Description

An internal service to provide reliable technology solutions.

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, modernized, 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 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 150 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 the systems. A core set of six to 10 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 automated data transfer between business systems.

IT Services staff support more than 1,300 user IDs and over 3,000 devices (including PCs, phones, laptops and servers). IT Services manages all computer-related issues for the City through a centralized service desk and responds to approximately 14,000 incidents and requests each year.

The City's computer network extends to 43 facilities throughout Burlington. A secure internet connection provides access to services outside the City's network.

A comprehensive IT security program plans and implements policies and defenses against IT security threats and vulnerabilities.

IT Services provides after-hours support for critical systems from 4:30 p.m. to 8:30 a.m. daily.

| Existing Customer | An automated ticketing tool is used to submit and track incidents and requests. |

Engagement Tools / Methods	A Customer Satisfaction and Importance survey is conducted each year. IT Services uses the City's internal website to provide information and allow customers to submit requests online. 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. IT-TV service delivers on-line videos that answer frequently asked questions and demonstrate new technology. Updates on project portfolio health are reported to the IT Steering Committee on a regular basis.
Is this Service Provincially Legislated?	No N/A
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. A number of activities occurred in 2019 that support the strategic themes within the plan. Several of these are described below.

In 2019, Phase 2 of the Business Intelligence (BI) program was initiated and will result in data dashboards being developed for Transit, Finance, Parking and Roads, Parks, and Forestry departments. Data Integration skill sets were added to the core team to utilize new technologies and methods for extracting data from multiple sources and tranforming into meaningful information. Efforts in the area of master data management have also been initiated with data quality assessments and standards under development.

In partnership with business areas across the organization the IT Service assisted with the implementation of many technology projects in 2019 including: expansion of Fire Dispatch services to Halton Hills, Council Chambers renovation, Halton Court Services relocation, Fire Alternative Dispatch Centre, Customer Relationship Management (CRM) implementation, Transit scheduling software, and other business related IT

initiatives.

Following up on the results of the IT User Satisfaction survey in 2018, ITS management staff met with each department to review the results, seek clarification and to understand where efforts were best focused to meet the needs of the business customers.

In 2019, the first "21st Century Workforce" Showcase was held where ITS partnered with its business customers to demonstrate new technology being used by City staff. It was a well-received information sharing and educational opportunity for City staff.

With the goal of improving the City's IT security posture an information security framework was developed in 2019. The framework includes a short and long-term action plan that will further protect the City's information assets and improve our ability to respond to cyber security threats.

In 2019, a mandatory security awareness program was introduced to better educate and inform staff on cyber security and how to deal with staff targeted security threats.

Service Portal improvements included adding and improving intake forms to request equipment and services, providing more knowledge base tips and information to users, leveraging the announcements capabilities better to inform users of IT outages and activities and overall increasing user adoption of the Service Portal as the preferred channel for requesting service.

An accelerated desktop device refresh program was introduced in 2019 in an effort to update the number of desktop devices that were six years and older.

The ERP (Enterprise Resource Planning) Program was launched with funding and staff resources approved in 2018. In 2019, the team's efforts were focused on project planning and the development of a Request for Proposal to acquire a software solution for finance, payroll, and human capital management.

Environmental Considerations

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.

Introduction of modernized technologies to improve customer service including the deployment of a new Customer |

Relationship Management (CRM) solution for tracking of issues and service requests and the introduction of new on-line services to make it easier and more convenient for residents and businesses to interact with the City.

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.

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.

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.

Replacement of an antiquated Maintenance Management Systems with a modernized Enterprise Asset Management System will provide opportunities to streamline processes, better monitor and track maintenance activities on City owned assets, improve employee satisfaction and customer service.

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.

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.

Anticipated Risks	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. Maintaining secure systems is a bigger challenge in a

more complex IT world and requires ongoing diligence and attention.

DATA GROWTH and ARCHITECTURE: The City's application portfolio has grown to approximately150 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 SOLUTIONS: Vendor hosted solutions can help us to be more nimble. However, these externally managed services require staff time to sustain and increase operating costs. Sharing data between hosted systems is frequently a requirement to avoid manual data entry and data duplication. However, facilitating data sharing with hosted applications can be quite time consuming and complex to implement and support. Vendor-hosted services will continue to be a practical option but must be supported by a strong business case that include business benefits and 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.

STAFF RETIREMENTS: 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.

Enterprise Risk Considerations	Labour Market and Workforce - Retirement, Recruitment, Compensation, Skills Financial Sustainability - Budget, Limited Revenue Tools Technology - Cyber Security Disruptive Technology

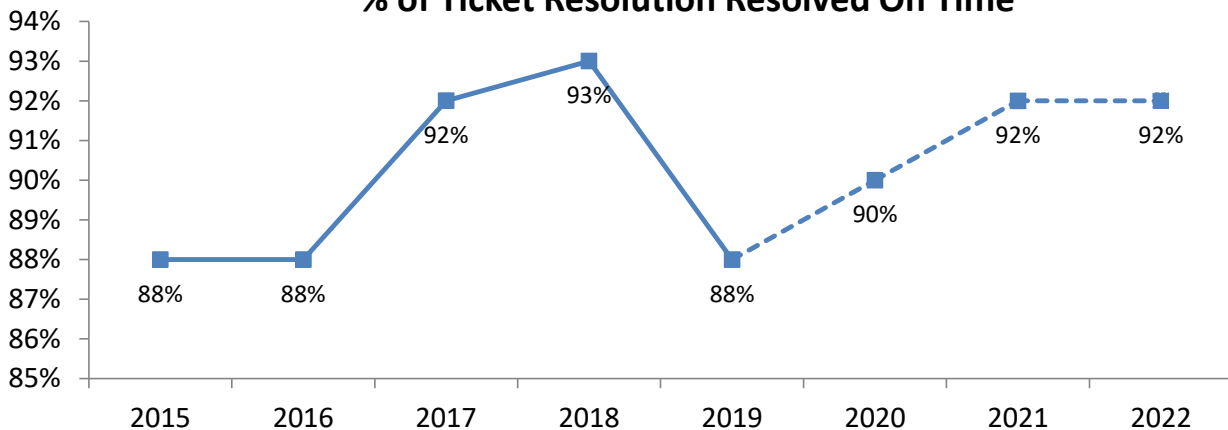| Service Initiatives	Target Completion
Acquire and implement a modernized and integrated system to support HR, Payroll, and Finance functions.	Dec 2023
Acquire and implement a modernized maintenance management system.	Dec 2020
Enhance the City's information security program through the implementation of an industry standard information security framework.	Dec 2020
Continue the deployment of a business intelligence reporting tool that delivers more effective performance reporting and analysis capabilities to City staff and reduces time-consuming manual processes. Includes deployment of an on-line community dashboard.	Dec 2020
Develop a corporate Information Management Strategy defining priorities and activities and addressing enterprise data management, data architecture, and overall governance of data and information.	Dec 2020
Complete an upgrade of the City's Permitting and Licensing software (AMANDA V7).	Jun 2020

MEASURING SUCCESS

How much did we do?

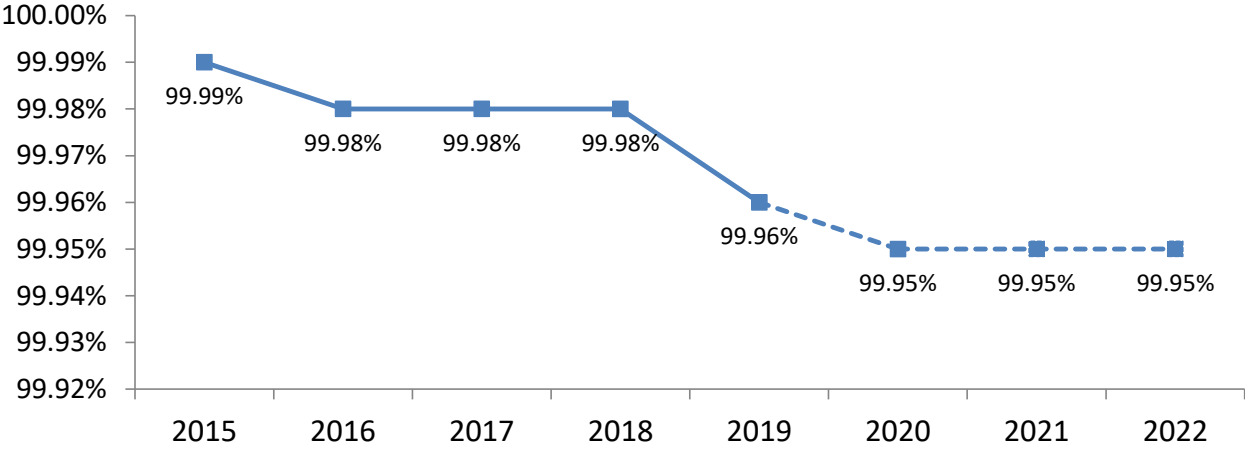| Performance Measurement	2015 Actual	2016 Actual	2017 Actual	2018 Actual	2019 Forecast	2020 Forecast	2021 Forecast	2022 Forecast
Number of service desk tickets received (incident and requests)	11,052	11,882	12,792	13,600	14,100	14,805	15,545	16,322
Number of devices supported	2,276	2,926	3,010	3,200	3,297	3,396	3,497	3,602

How well did we do it?

Performance Measurement	% of Ticket Resolution Resolved On Time
Story behind the data	The % of Tickets Resolved on Time refers to incidents and does not includes requests. Incidents are problems that are prioritized based on urgency and risk. The following service level objectives exist for incident resolution time: Critical - 4 business days, High - 1 business day, Medium - 2 business days, Low - 5 business days. Service levels measured as % of tickets resolved on time are projected to drop from 93% in 2018 to 88% in 2019. This drop is attributed to staff turn-over and a significant amount of priority project work that took capacity away from the help desk. With modernization of computer technology and standard office productivity software, users are experience a lot of change which is contributing to the increase in service desk tickets. We continue to focus on customer service and improving service desk processes to acheive our performance goals. Providing more training and tools to help users use their technology more effectively continues be a key focus area.

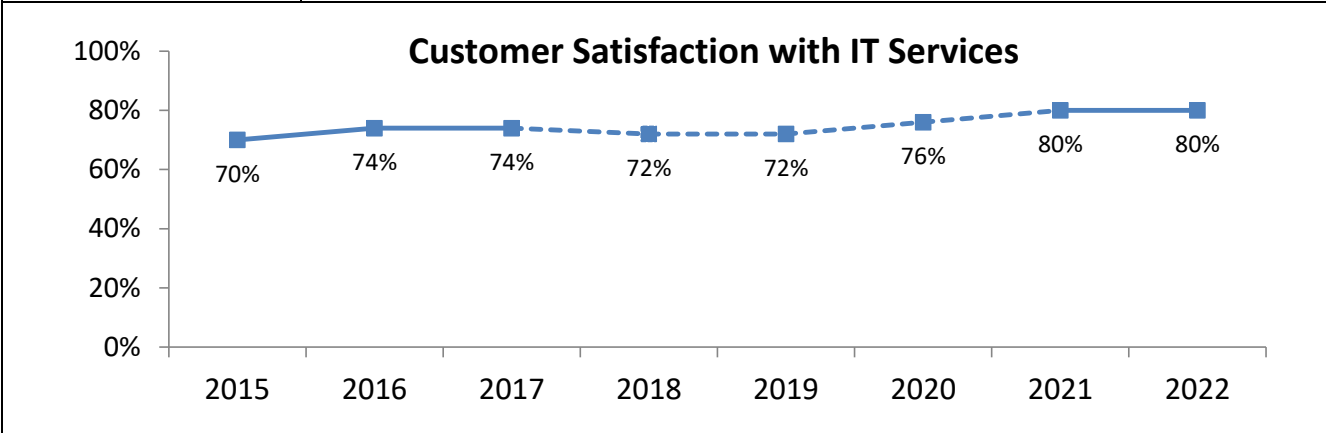**% of Ticket Resolution Resolved On Time**

Year	Value
2015	88%
2016	88%
2017	92%
2018	93%
2019	88%
2020	90%
2021	92%
2022	92%

Performance Measurement	Operational Time of Critical Systems
Story behind the data	The % uptime represents the amount of time business critical systems are available and does not include downtime that occurs as a result of scheduled maintenance. The percentage uptime for critical systems was 99.96% in 2019. The number of systems deemed critical increased in 2019. The forcasted up-time for 2019 is expected be nominally higher than projected however we do feel that increasing cyber threats and complexities around hybrid cloud computing will continue to factor into the uptime metrics and be limiting factor on the % that can be achieved. Strategies to minimize downtime of crtitical systems include more proactive system maintenance and monitoring, increased vendor accountability, security program improvements, enhanced system redundancy, and continued staff training.

% of Time Critical Systems Operational

Year	Value
2015	99.99%
2016	99.98%
2017	99.98%
2018	99.98%
2019	99.96%
2020	99.95%
2021	99.95%
2022	99.95%

Is anyone better off?

Performance Management	% customers satisfied with IT Services
Story behind the data	In partnership with InfoTech Research, a survey was issued in 2018 with IT Services receiving a customer satisfaction rating of 72%. We will continue to use the same benchmarking tool for 2019, however the survey has not yet been completed. With the new survey data being unavailable, the 2018 value has been carried forward. Numerous improvements have been made including accelerated computer replacements and technology modernization, continuing roll-out of Business Intelligence, increased WiFi availability and others. ITS will continue to identify opportunities for improvement from the business satisfaction surveys and build actions into our annual workplans to address these areas.
Where do we want to go?	The goal is to improve the overall satisfaction level to 80% by 2021. Continued work improving data analytic and reporting capabilities, maintaining up-to-date technology through improved life-cylce management practices, enhancing help desk services, helping the business achieve results, and delivering IT to support Council's strategic plan are key elements to achieving this goal.

Customer Satisfaction with IT Services

Year	2015	2016	2017	2018	2019	2020	2021	2022
	70%	74%	74%	72%	72%	76%	80%	80%

Performance Measurement	Backlog of Capital IT Projects
Story behind the data	With greater demands for technology to support City services the number of IT projects has increased over the last several years. A corporate IT Steering Committee approves an annual work plan ensuring projects that will deliver the most value to the organization are selected. The work plan approval process now also considers the staff time that is available to work on projects. Ensuring staff are not over-allocated has helped to decrease the project back log.
Where do we want to go?	The goal is to reduce the percentage of projects that are 3 years or older to less than 30%. In 2020, it is expected to drop below 30% and in 2021 to 20% as a number of projects are completed. The portfolio will maintain a number of large projects that will take multiple years to complete resulting in approximately 20% of projects being 3 years and older. A future performance measure in this category may focus on project execution, project outcomes, and benefits realized within the organization.

Backlog of Capital IT Projects