Business Plan: Information Technology Services (ITS)

How does this service contribute to the results identified in the City of London Strategic Plan?

A Sustainable Infrastructure	Fundamental to the effective delivery of services to our citizens, is a strong, modern, and efficient Information Technology (IT) infrastructure. Through investments in network, databases, data storage and system backup modernization, we are working to ensure City of London Service Areas have the foundation to best meet business demands.
A Caring Community	Almost all significant City of London processes are indelibly linked to a software application. We provide insight, guidance and support for hundreds of applications essential to the provision of public services to our citizens. These actions facilitate citizen access to services and support goals associated with citizen satisfaction.

Name the main activities done to provide this service:

Name The Activities Done To Provide This Service	How Much Did We Do? (optional)	Is The City Mandated To Provide This Service?	Can The Level Of Service Be Changed?
1. **Network Services** Configures, manages and provides support for all networking, video and voice related services and equipment. Monitors the network for connectivity, security and performance; taking appropriate actions based on received information.	• Responsible for the connectivity across 80 facilities and over 5,000 end user devices. • Manages a system of fiber optic cabling over 20km in length including 230 network switches and routers	No	Yes

Name The Activities Done To Provide This Service	How Much Did We Do? (optional)	Is The City Mandated To Provide This Service?	Can The Level Of Service Be Changed?
2. **Hardware Services** Provides fast and reliable customer support to City employees servicing desktop computers, laptops, tablets, printers and other technological hardware. This team also manages the ongoing computer leasing program and works closely with Service Areas to ensure hardware needs are met.	• Supports and provides direction on over 3,000 technological devices • As a Hewlett-Packard (HP) Self Maintainer, HP provides $5,000 for expert ITS staff to troubleshoot and maintain HP hardware	No	Yes
3. **Data Services** Databases are organized collections of data and are essential to almost all City of London services. The Data Services team is responsible for the management, support and planning of our databases in all environments.	• Provided system wide access to databases 99.9% of the time • Responsible for the management of over 400 databases	No	Yes
4. **Application Development** Custom software solutions developed by City of London employees are the primary contribution of the development team. The team also provides web server administration to the City and associated partners.	• Supports 515 distinct solutions and applications • Supports 23 websites and 7 web servers	No	Yes
5. **Business Applications** Responsible for the support and maintenance of third party applications primarily used by a single Service Area. This team works with partner businesses to analyze, review, secure, implement, maintain and support key applications. (i.e. FireCAD, CLASS, Sire, Cognos) Additionally, this area also designs and implements customized reporting solutions.	• Supports, analyzes and provides direction on over 40 applications • Working to reduce the average time to complete larger scale support tasks to under 5 days	No	Yes

Name The Activities Done To Provide This Service	How Much Did We Do? (optional)	Is The City Mandated To Provide This Service?	Can The Level Of Service Be Changed?
6. **Enterprise Applications** Responsible for the direction, support and maintenance of applications used across multiple businesses and Service Areas. This team works closely with users to ensure stable technical foundations for mission critical corporate systems. (i.e. JD Edwards, Kronos, Sharepoint, AMANDA)	• Provides key application support to over 500 users of enterprise applications • Applications supported are imperative to the operations of the City of London	No	Yes
7. **Core Systems** Manages and supports all core systems: servers, storage, backup, desktop operating systems, and others. Ensures that all City of London applications and technologies have a stable platform from which business can be transacted.	• Governs, maintains and is responsible for the recovery of 45 physical servers and 250 virtualized servers. Our 75% virtualization ratio exceeds industry standards • Manages and protects almost 400 terabytes of storage. Roughly 26 times the size of all the catalogued books in the U.S. Library of Congress.	No	Yes
8. **Messaging and Mobility** Responsible for the direction, support and maintenance of all messaging applications and mobility services. This team also manages the Microsoft Exchange servers; key to the delivery of email, calendar and other Outlook functions. Included in this functional area are the costs for all corporate mobile devices.	• Provides a secure and stable messaging environment to over 2,500 users • Provides administrative and technical support to over 1,600 mobile devices	No	Yes

Name The Activities Done To Provide This Service	How Much Did We Do? (optional)	Is The City Mandated To Provide This Service?	Can The Level Of Service Be Changed?
9. **Service Desk** The Service Desk is the first point of contact for all City of London employees to ITS. Key actions include the management of IT incidents, requests and problems. Customer service, solution identification and relationship building are key emphases of the Service Desk.	• Delivered a 97% customer satisfaction rate • Resolved over 15,000 incidents in 2013 • Provides principal support for over 200 business applications	No	Yes
10. **Operational Security and Compliance** This team enables users to conduct business securely by ensuring our systems, networks, data and other technological elements are secured from malicious actions. Additionally, the team undertakes risk identification, security assessments, remediation actions and educational campaigns as part of a comprehensive security approach.	• Blocks 2,400 verified malicious email attachments annually • Intercept 14 million potentially malicious spam emails annually	No	Yes
11. **Printing Services** The total cost for all printers, printing services, paper and associated elements across the Corporation are allocated within the ITS budget.	• Pages printed per month: 1.5 million • Number of devices managed: 300	No	Yes

What is the current state of this service?

In 2014, the organizational structure of Information Technology Services was altered to better align our functional units with the services we provide and the demands of our partner Service Areas. In the 'main activities done to provide this service' section of this overview, a snapshot of the key ITS functional units and selected key delivery elements have been identified. High level current objectives are focused on building systems and processes through which strategy can be translated to tactical action. The creation of representative functional unit operating plans with meaningful key performance indicators (KPIs) plays an integral role in this

translation. These KPIs are used to measure ITS progress and are directly linked to ITS overall strategy and the strategic results identified in the 2011 – 2014 City of London Strategic Plan.

To ensure a safe and stable computing environment, ITS has undertaken significant projects to upgrade physical technological infrastructure including servers, storage, security, database and network elements. These enhancements lay the foundation for technology supported efficiency and effectiveness projects led by partner Services Areas. At any time, ITS is involved in over 40 projects supporting and guiding Service Areas in how to best leverage technology and advancements to meet user demands. In 2014, this was best exemplified through corporation wide projects such as the records management modernization project and the adoption of a Customer Relationship Management system through the Service London initiative.

The scope of our municipal information technology environment is directly proportional to the breadth of services provided by the City of London. Given that the City of London provides over 100 distinct service offerings, a key challenge for ITS is managing user demand and expectations. In addition, broader technological trends such as mobility, software integration, data analytics, transparency, virtualization, business intelligence and cloud based solutions present exciting opportunities for ITS and partner Service Areas to realize gains both in efficiency and effectiveness.

Recent Achievements

- Upgraded database, server and storage infrastructure to ensure a stable computing environment
- Restructured ITS such that strategy is aligned with tactical actions
- Created a new ten year ITS capital plan to ensure the City's infrastructure and application needs are secure
- Reviewed and created a new operating budget directly aligned with the organizational structure resulting in no operating budget increase for 2015
- Assessed and redesigned the process by which ITS projects are accepted, managed and resourced resulting in improved project and resource management
- Commenced the content migration process associated with the records management project
- Completed the Windows 7 operating system upgrade
- Launched the new generation of our CityMap GIS web map at maps.london.ca
- london.ca received over 17 million visits in 2013
- Provided ongoing technological support in the planning and implementation of Ontario Works in the Community
- Developed and delivered the immigration portal website: immigration.london.ca

- Implemented MobileIron which allows for the secure use of our mobile devices
- As part of the Service London initiative, implemented a pilot Customer Relationship Management system to facilitate information availability and improve citizen service
- Replaced and updated the Ontario Works Cheque printers and contingency plan
- Provided significant technological support and actions for the delivery of the Municipal 2014 election

What has been done to manage the budget?

In 2014, full reviews of the operating and capital budgets were completed to ensure resources were aligned with service delivery, prudent long-term financial planning was occurring and opportunities for cost avoidance were realized. The results of comparing the 2015 ITS budget to Industry Benchmarks on two key metrics are as follows:

Metric	Industry Benchmark	2015 City of London ITS Budget
IT staff as a percentage of full time employees	4.3%	1.9%
IT spending as percentage of operating expense	3.8%	1.7%

It is important to note that the ITS budget contains numerous corporate costs linked to technological elements through which value is realized across our City:

Corporate Service / Cost	Total Value	Percentage of ITS budget
Corporate printing and paper	$1,100,000	7%
Software maintenance and support agreements	$2,600,000	16%
City of London telephone and mobile devices	$1,500,000	9%
City of London computers, laptops, monitors and other hardware	$2,000,000	13%

ITS has been actively managing its budget by implementing management lead initiatives aimed at creating efficiencies, avoiding costs and generating revenue. These include the following:

Efficiencies / Costs Avoided

Previous 3 Years

- 2014 review of the operating budget resulted in no change from the 2014 revised budget to the 2015 proposed budget
- With consideration of annual inflation, these actions resulted in a cost avoidance of approximately $320,000 for 2015
- Increases in contracts, agreements and those associated with inflation, have all been absorbed through reduction in other areas of the ITS budget
- Value based analysis and subsequent renegotiation of numerous third party vendor contracts

Revenue Generation / User Fee Increases

Previous 3 Years

- As an HP Self Maintainer, HP provides $5,000 for expert ITS staff to troubleshoot and maintain HP hardware
- Leveraging in-house development expertise has allowed for grants from other levels of government to be paid directly to the City of London for the delivery of applications

What is the future direction of this service?

What future initiatives can be contained within the maintain existing service level budget?

2015 Budget

- Continued review and rightsizing of service provision, budgets and financial plans
- Network Modernization Project - improve and maintain network connectivity across 80 facilities and 5000 end users
- Records Management Project - the new records management system will facilitate the sharing of information across the corporation, improving access to information and supporting more informed decision making
- Database infrastructure upgrade - reassessment, design and management actions ensure City of London databases are accessible, well-structured and serve to enable modern applications

- Enhancement of www.london.ca - improve support and usability for mobile devices
- GIS and CityMap revitalization program - to support and improve all mapping associated applications
- Application middleware upgrade - middleware connects software and applications serving to facilitate communication and integration. This upgrade will further support the connection of City of London applications
- Application lifecycle management and rationalization - ITS supports over 200 applications serving numerous service areas. This project seeks to rationalize the number of applications for the purpose of reducing software maintenance and support costs
- Customer Relationship Management (CRM) - post pilot phases of the CRM project will involve additional Service Areas and further the goals of information availability and improved citizen service
- Project Management - continued attention and analysis will be focused on improving the manner in which projects and resources are managed at ITS
- Creation of more appropriately defined functional areas based on services provided by ITS
- Further development, implementation and measurement of Key Performance Indicators at the service delivery level
- Review and analysis of functional units at the service provision level to determine opportunities for improvement and alternative service delivery methods
- Access and should analysis be favourable, implement new processes for managing and provisioning targeted areas of the mobility portfolio
- Through training, hiring and management actions, further develop software integration skills and expertise

2016-2018 Forecast

- Support the development of a Smart Cities master plan in collaboration with City of London Service Areas, community stakeholders and partners
- Work with stakeholders and partners to support implementation of online, mobile friendly government services
- Support sister Service Areas in the enhancement of the City of London's open data opportunities
- Security enhancements - upgrading of our Security Event and Incident Management application, firewall replacements and additional security improvement projects
- Application lifecycle management and rationalization - this project will further seek to rationalize the number of applications for the purpose of reducing software maintenance and support costs

- Cloud technologies - opportunities to reduce on premise dependencies will be reviewed with the intent of decreasing costs and risks through the leveraging of cloud offerings
- Client desktop application review - a thorough review of desktop applications will be undertaken to identify opportunities to maximize usability while managing costs
- Mobile and communications opportunities - this project will address how the City of London can best leverage existing and emerging mobile technologies to support service delivery
- Project Management - as part of continuous improvement and in response to expected changes in the environment, ITS is committed to ongoing project and resource management review and development
- Monitor, review and alter the organizational structure, associated KPIs and financial configuration installed in 2014 / 2015
- Undertake further cost-benefit analyses for the purpose of identifying opportunities associated with alternative program and service delivery
- Access and should analysis be favourable, implement new processes for managing and provisioning targeted areas of the hardware portfolio

What service adjustments do you plan to make?

2015 Budget

- Business Intelligence Tool - through more advanced analytics, the Business Intelligence tool will facilitate an environment which leverages data based inferences in problem solving and solution identification resulting in enhanced corporate wide decision making

2016-2018 Forecast

- Back-up Data Centre - The first part of this program will be for the City Administration to develop a Corporate Continuity and Disaster Recovery Plan that in time of critical infrastructure failure the City can continue to operate and support the many essential services it offers to our citizens. The second part of this program will be to find a suitable second Data Centre that will allow the City to actively failover infrastructure services when needed.

Key Performance Indicators

How Much?

Description of measure	2013	2014	2015	2016	2017	2018
1. Number of projects completed	31	40	45	45	50	50
2. Number of Customer Service Incidents Resolved	15,000	16,000	16,000	15,000	15,000	15,000
3. Number of Security Assessments performed	34	32	30	28	26	24
4. Number of Visits to Municipal Website per Capita (OMBI)	45	45	46	46	47	47

How Well?

Description of measure	2013	2014	2015	2016	2017	2018
5. System Availability	99.90%	99.92%	99.93%	99.94%	99.95%	99.95%
6. Average duration to commence support task (days)[1]	1.85	1.85	1.80	1.75	1.75	1.70
7. Average duration to complete support task (days)[1]	5.98	5.30	5.25	5.20	5.18	5.15
8. Percent of employee time on operational and support tasks	72%	71%	70%	68%	68%	68%
9. Number of ITS Full Time Equivalents (FTE) as a percent of Total Municipal FTE (OMBI)	1.9%	1.8%	1.8%	1.8%	1.8%	1.8%

Is Anyone Better Off?

Description of measure	2013	2014	2015	2016	2017	2018
10. Service Desk Customer Satisfaction Rate	97%	97%	97%	98%	98%	98%

[1] Average duration includes evenings and weekends in addition to regular working hours