MISSISSAUGA

Information Technology

2015–2018 Business Plan
& 2015 Budget

Table of Contents

This page left blank intentionally

Executive Summary of Information Technology

Mission: We are committed to providing our clients with innovative, reliable, responsive and secure solutions that align business, process and technology.

This service is provided by:

- The Information Technology (IT) Division completed a full service review and recently renewed its organizational structure. It is now comprised of six sections that focus on technology planning, service delivery, support and operations that enable City Services and drives efficiencies for City Operations.

Interesting facts about this service:

- The City provides many online services and information including 311 online service requests, items for purchase (i.e. Pet License, eSigns, Property Compliance Report and Tax Receipts) and many other services such as Online Library, Recreation and Transit which provides 4.5 million Transit trips annually;
- The City's website is accessed over 12.5 million times annually and accepts $8 million in online transactions;
- Our mobile workforce has over 2,600 field based devices and automation in all Buses, Fire Trucks, Snow Plows, and other City vehicles providing real time processing to improve City Services;
- "Wireless Mississauga" is free public access to Wi-Fi available at 76 City facilities such as Libraries, Community Centres, Marinas and Arenas;
- Information Technology facilitates the deployment of new business solutions and technologies to meet the needs of the city, citizens and business by providing technology enabled services, daily support and IT asset lifecycle replacement;
- The City's network is enhanced through the Public Sector Network (PSN) partnership with over 631 kilometres of high speed fibre connecting 95 City sites with 2,250 desktop computers, 750 laptops and tablets, 500 public access computers, 500 multi-function copiers and over 500 virtual and physical servers capable of accessing up to 230TB terabytes of stored data; and
- The IT Service Desk offers client support Monday to Friday 8:00 a.m. to 5:00 p.m. service desk coverage and provides on-call support 24 hours a day, seven days a week, 365 days a year.

Highlights of the Business Plan include:

- Through a series of IT efficiencies, the operating budget will be reduced meeting budget objectives for 2015. IT will continue to implement service review recommendations focussed on enabling services through technology; and
- Updating the IT Strategy to improve how City Services are provided and accessed On-line, in person or in the Community. Social media and mobile technology are key technology drivers.

Net Investment ($000's)	2015	2016	2017	2018
Operating	20,481	20,669	20,659	20,651
Capital	8,670	6,157	8,070	6,560

Existing Core Services

Vision, Mission, Service Delivery Model

Vision

To support the City's overall strategic pillars of move, connect, prosper, belong and green through our work in the IT plan's four strategies of Government, Business, Workplace and Infrastructure.

Mission

We are committed to providing our clients with innovative, reliable, responsive and secure solutions that align business, process and technology.

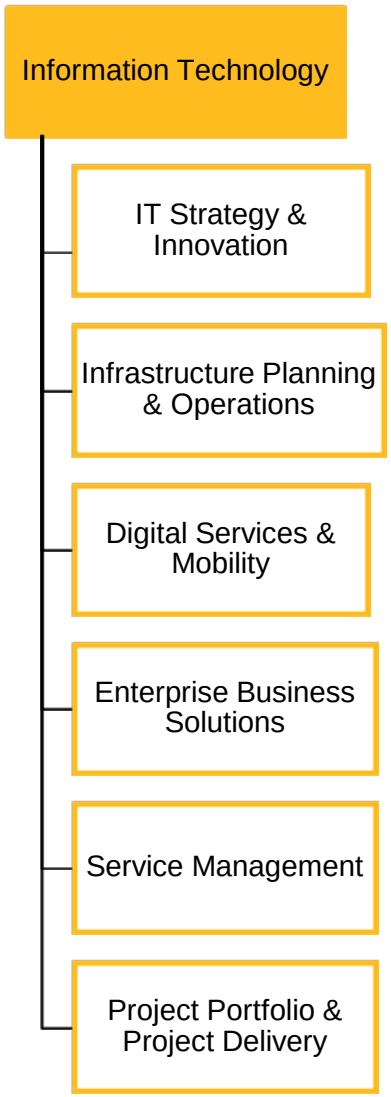
Service Delivery Model

The Information Technology (IT) service area operates out of Corporate Services and is responsible for the planning, development, maintenance and overall management of the City of Mississauga's technology infrastructure.

IT provides and supports the systems, applications, computers, networks, data, internet access, security and policies critical to the delivery of City services 24x7, 365 days a year.

Partnerships have been established to improve service, be efficient and cost effective. The Public Sector Network (PSN), VCOM Radio and Wireless Mississauga for Sheridan College are examples.

The IT Service was re-organized effective January 2014 to better align resources with providing service to the public, enhancing enterprise business solutions and ensuring that effective IT strategies and innovations enhance City services and operations.



Goals of Service

The City's IT Plan has four key areas of focus to ensure continued alignment with City strategic objectives and operational needs as defined through the Business Planning Process:

Government 2.0

A focus on open government, self-service and mobile apps to improve access and provide services more efficiently.

Workplace 2.0

A focus on collaboration and workforce mobility to be more efficient and responsive.

Business 2.0

A focus on asset inventory, asset management, financials and decision support to get the best return on investment.

Infrastructure 2.0

A focus on IT lifecycle replacement and security program to improve communications and secure our environment.

The key strategies and technology direction for the City are defined through the five year IT Strategic Plan. The strategic planning process includes City-wide technology strategies, a technology road map and action plan with measurable outcomes. In the updated plan, all City Service Areas will be reviewed as part of the process to develop specific technology roadmaps that align with service objectives and strategic priorities of the Corporation. Improving customer service and driving efficiencies in City operations is a foundational principle to the IT Strategy process.

Information Technology provides 24x7 services and support to ensure quality service for citizens and businesses while supporting City operations and service delivery. IT staff purchase, develop and support applications, plan and design infrastructure, perform hardware repair and deliver help desk support.

IT enables service delivery and public access in our City facilities, open spaces and through self-serve options. Examples of self-serve access include the City's website, Connect2Rec for recreation registration and Click'n'Ride for Transit.

IT maintains a City-wide Wi-Fi network that provides wireless connections for both the public and City operations. Through a recent partnership with Sheridan College, Wi-Fi access has been expanded significantly and includes secure connection for Sheridan students in our facilities as well. On average 5,500 users in public spaces use "Wireless Mississauga" daily and 500 of these are Sheridan students.

IT partners with external agencies on a Public Sector Network (PSN), a fibre optic network that provides connectivity between all City facilities for voice and data communications. The PSN significantly reduces the annual telecommunications cost for the City.

Looking Back

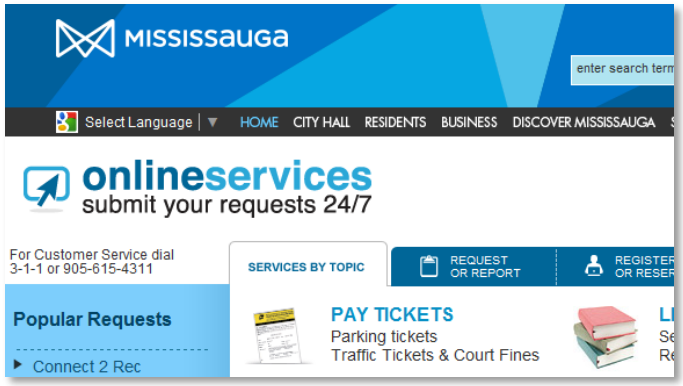
Technology has transformed and enabled the delivery of City services. The City's Strategic Plan, Master Plan and Business Plans are what drive the use of technology, making business more effective and efficient in its delivery of services to the citizens of Mississauga. The Information Technology division enables services, business solutions and provides a secure and reliable infrastructure to ensure business continuity and customer satisfaction.

Some recent successes related to new applications and infrastructure includes:

- The IT Plan 2.0 was established with four key strategies that frame how the City of Mississauga should invest in technology to sustain and improve service delivery:
  - Government 2.0;
  - Workplace 2.0;
  - Business 2.0; and
  - Infrastructure 2.0.
- Public access to online services, e-commerce and information continues to grow year over year.

Implementations and Replacements:

- 311 self-service portal for citizen inquires and requests;
- Citizen self-serve for Animal Licensing;
- Pubic video streaming of Council, committee meetings;
- Public Library system replaced;
- Library Self-Checkout RFID Project start-up;
- Provincial Offences Act (POA) ticket scanning;
- 2014 Election Poll Boundary Mapping (GIS);
- Workplace collaboration, electronic meetings and video conferencing;
- Enhance fibre connection at Garry W. Morden Centre;
- Lost Time Dashboard provided to Leadership Team;
- Mobile devices introduced to enable paperless meetings and efficiencies in accessing agenda, minutes and meeting materials;
- Central Agreement Tracking System (CATS);
- Automation of Facility Request Form;
- Liberty Court Recording system;
- SAP Accounts Payable Electronic Funds Transfer and Visa Payable Automation (VPA); and
- Online Film Permits.



Upgrades and Enhancements:

Maintaining the City's software applications and systems so that they remain supported and continue to meet the needs of the City is an important aspect of Information Technology's service. New features and enhancements add value and efficiencies as systems are maintained including newer features to enable collaboration and mobile access.

Information Technology and Materiel Management staff leveraged provincial purchasing contracts driving a savings of $165,000 annually for City use of cellular services (General Committee June 25, 2014).

The bundling of several major City wireless and network requirements combined with negotiations for a longer term contract resulted in saving $2 million in capital costs for the provision of wireless network, voice and data hardware and services to support Advanced Traffic Management, Field Worker Automation and Wireless Mississauga (General Committee June 25, 2014).

Other accomplishments this year were:

- Upgraded City phone system (VoIP and Call Centre);
- Marriage licensing system enhancements;
- VCOM radio upgrade (infrastructure and all but Transit radios);
- Network infrastructure upgrade;
- 450 virtual servers migrated to newer VMWare;
- HP Storage Area Network and backup systems;
- Active Directory upgrade and audit;
- Upgraded filters for secure web gateway, malware protection and data security;
- Upgraded Microsoft Office Suite (Office 2010, Outlook/Exchange);
- Windows 7 upgrade (from Windows XP);
- Tax system upgraded;
- Upgraded City website (www.mississauga.ca) to include mobile site capability;
- Upgraded Riskmaster system;
- Upgraded Freedom of Information (FOI) system;
- Upgraded Court Administration Management system (CAMS);
- Procurement Log system enhancements;
- Disclosure/Summons system enhancements;
- Prosecutors List system enhancements;
- ARC system enhancements; and
- MAX upgrade, Interface with SAP and other enhancements.

Emergency and Non-Emergency Radios

Awards:

2013 Corporate Award of Excellence (CAFÉ) Award - Bring Your Own Device.

2012 CAFE Award - Cultural Resource Mapping.

2012 CAFE Award – SharePoint/Lync Project.

2012 CAFE Award - Sheridan Partnership.

2012 Municipal Information Systems Association (MISA) Excellence in Municipal Systems Award - Cultural Resource Mapping.

Existing Service Levels, Trends, Benchmarks & Efficiencies

On average, IT staff spends 80 per cent of their time on day-to-day support (operations, support, asset lifecycle replacement, administration, enhancements, systems upgrades, and maintenance) of existing applications and systems with the remaining 20 per cent focused on delivering new projects for all Service Areas in the Corporation.

Existing Service Levels

- **Citizen Access to Online Services (7*24)**

  - www.mississauga.ca provides information, online services and payment for services all the time anywhere with many new mobile enabled services going online;
  - 12.5 million customers accessed City services in 2013, a 15 per cent increase; and
  - $8 million in online transactions.
- **Mobility and Location Services (Everywhere)**
  - In vehicle automation for all City buses, fire trucks, snow plows and other Works and Operations fleet; and
  - Mobile apps and responsive sites.
- **Digital and Video Streaming (Live!)**
  - Live video production and video streaming of City Council meetings, General Committee, Budget Committee and support for all other Council chamber public meetings or events.
- **Infrastructure and System Access (7*24*365)**
  - The network is comprised 631 kilometres of fibre connecting 95 sites including Libraries, Community Centres, Arena, Museums and Marinas as well as other critical infrastructure such as traffic signals, signs and building automation; and
  - IT infrastructure is designed with business continuity, redundancy and security to ensure City operations and services are supported 7*24*365 (system uptime was 99.99 per cent, including servers, applications, network, telecommunications and web).
- **Public Wireless Access (Free Access)**
  - Wireless Mississauga provides free Wi-Fi access to the public at all major City facilities including Libraries, Community Centres, Arenas and other public locations.

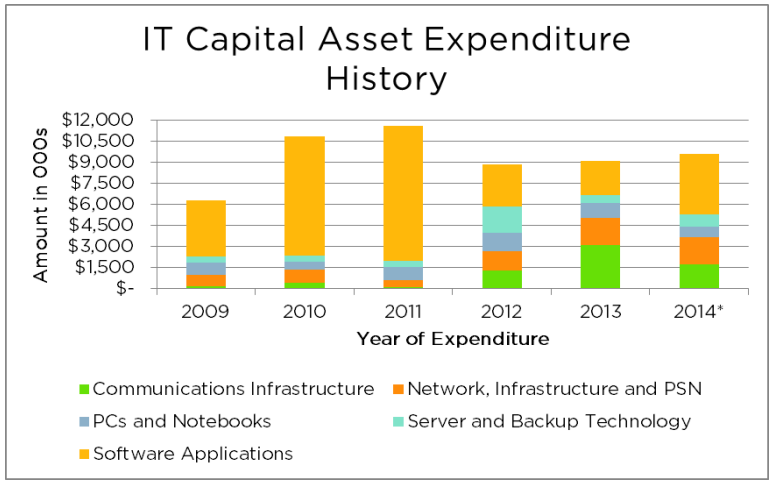
- **IT Service Management & Support (7*24*365)**
    - IT Help Desk by phone Monday to Friday 8:00 a.m. to 5:00 p.m.;
    - On Call Support 7*24*365 for approximately 600 business applications, 2,250 desktop computers, 750 laptop computers, 200 field based units, 500 public access computers, in vehicle automation for all City buses, fire trucks, snow plows and other Works and Operations fleet; and
    - Corporate IT Training Centre has three training rooms with a capacity of 36 per training session at the Garry W. Morden Training Centre.

- **IT Asset Lifecycle**

  A critical component of the IT capital budget is to ensure that technology is renewed in line with both industry and operational standards. The City has 95 sites connected by over 631 kilometres of fibre managed in partnership with the Public Sector Network (PSN). The technology required to provide City services is supported by a primary data centre and back up data centre located off site. All supporting technology such as network devices, servers and databases are updated based on a lifecycle program as follows:

    - Servers and storage area network - five years;
    - Desktop computers and laptops - four years; and
    - Minor and major software upgrades for all City business systems and software with minor upgrades - three years and major upgrades – seven to 10 years.

- IT standards are reviewed annually and reported to Council for standard software and hardware considering replacement or major changes every 10 years;



    - Expenditures include technology investments funded by other department budgets;
    - Software applications (2010-11) higher due to implementation and enhancements of the Transit Bus System and SAP System;
    - Communications infrastructure include radios, which were lifecycle replaced (2012-14);
    - Increasing network, infrastructure and PSN expenditures showcase the investment to make the internet more publically available and to roll out more field automation; and
    - As of December 31, 2013 - net book value for all IT assets was approximately $34.9 million, while replacement value was approximately $102.7 million.

Trends, Benchmarks & Efficiencies

Technology will continue to be a critical aspect of service planning and delivery that enables City services and drives efficiencies for City operations. Key trends include:

- Public: mobile services driven by the consumer – digital access to everything;
- Social Media: online engagement, two way communication and transparency;
- Workforce: mobile computing for our workforce - access and flexibility;
- Fleet: buses, fire trucks, snow plows – automated vehicle location (AVL) and location based services;
- Things: signals, signs, streetlights – machine to machine automation;
- Data: BIG data and OPEN data – analytics and business intelligence (BI);
- Internet: Bandwidth is KING – video makes up half of the bandwidth worldwide;
- Cloud: industry driven; storage an opportunity – shift from capital to operating;
- Wireless: Wi-Fi and cellular critical infrastructure – for public, staff and things;
- Always On: 7*24*365 – service access an expectation; and
- Rapid: must deliver mobile apps and services faster and smaller - bytes of service.

IT has a renewed focus on technologies and consumer driven trends that require support for a diverse and complex environment where products and services need to evolve and change quickly to meet the demands of customers - online, all the time, the way the customer chooses.

Library RFID Self Check-Out System

Engaging Our Customers

Information Technology provides both direct and indirect support to internal and external clients (staff, public, other agencies and business partners). Understanding what our clients need and aligning to their future plans and needs is critical to IT's success and client satisfaction.

Service Management provides direct customer service to staff by phone ext. 3222, by e-mail and on the intranet. Public customer support for eCommerce on eCity is also available by phone and email.

Vendor and industry research on technology best practices as well as benchmarking with peer municipalities across Canada and through participation in Municipal Information Systems Association (MISA) Professional Network activities is undertaken on a regular basis.

The following are ways in which IT is able to measure or obtain customer feedback and monitor service usage so that we can evolve our service delivery model to address changing needs and priorities:

- By analyzing customer interactions on the City website using Google Search Appliance Analytics, improvements and refinements can be made to provide better search results for customers and fewer clicks to popular services;
- Complete IT Service Desk post call survey to obtain customer feedback on timeliness, quality of service and confirmation that they got what they needed;
- IT Security Task Force Awareness subcommittee work and IT Security Awareness Survey to promote best practices and generate awareness for all City staff;
- Research and client consultation through the creation and action plans from the IT Plan 2.0, business planning and budget processes as well as participation in key corporate projects and committees;
- IT e3 Review which includes extensive stakeholder consultation and best practice benchmarking; and
- Network and Storage Area Network (SAN) Assessments which include client consultation and business needs assessment to better define business continuity requirements, service levels and network performance tuning.

Understanding our client's needs and aligning with their future plans is critical to IT's success

Opportunities and Challenges

The City's Business Plan identifies many opportunities and challenges in which technology is an enabler and a critical aspect of service delivery. The IT Plan aligns these opportunities and challenges with the four key IT strategies focussed on the citizen, our workforce, business solutions and critical IT infrastructure. Several process and governance opportunities have been identified and have been aligned to the IT service review recommendations currently being implemented. In addition, a 'Strengths, Weaknesses, Opportunities and Threats' (SWOT) analysis was conducted to help identify further areas of opportunities and challenges that Information Technology faces over the next few years.

Opportunities

Information Technology continues to focus on rationalizing the number of applications in use to support the delivery of City services by reviewing applications with similar functionality and consolidating them where possible. Consolidation of applications helps in maintaining current versions of applications, implementing new applications and supporting existing applications.

Some of the key opportunities identified are as follows:

- Mobility, access information from anywhere, any device, anytime;
- Partnerships with vendors and other agencies;
- New employee/generation is technology savvy;
- Cloud services, faster application development and hosted solutions;
- E-recycling of equipment in an environmentally responsible way with no or low cost;
- Retire legacy systems and use more enterprise applications;
- Expand use of cloud computing and external Application Service Providers (ASPs);
- Expand the City's wireless network infrastructure;
- Integrate new technologies such as Social Media into existing systems;
- Implement mobile applications, field computing, remote access, desktop virtualization, collaboration;
- Switch to alternative software and hardware products to reduce cost to deliver the same functionality;
- Do more with the solutions already in place and maximize product functionality; and
- Encourage innovation through learning and deploy new technologies to keep pace with changes in technology.

Challenges

Technology has become integral and essential in the delivery of all City services. Like any service, Information Technology needs to understand and balance planned and demand work making best use of the resources available, best practices and ensuring alignment with organizational priorities. This can be a challenging task with so many competing priorities.

Some of the key challenges identified are as follows:

- Assigning the appropriate resource and capacity to deliver on new initiatives while balancing the demand of day-to-day operations and support;
- The technology industry is shifting quickly to providing software as a service, hosted solutions and cloud based computing. The “as a service” model puts pressure on the operating budget, reduces some capital budget pressures and also introduces more contract and service management accountabilities within IT;
- Business requirements and system functional requirements can be very complex and require sufficient analysis to properly determine the right technology and solution; and
- Procuring technology is complex and time consuming requiring dedicated support from Purchasing and Legal.

To combat the challenges faced by the Corporation, Information Technology develops strategies based on the needs of the City while balancing the influence of industry trends. By benchmarking both public and private sector organizations, IT is able to develop strategies and solutions based on current and leading technologies as well as the best innovations being deployed in comparable organizations. Service area technology road maps will identify priority investments to improve customer service and drive efficiencies.

Mobility and Cloud Services

Implementing the Strategic Plan

The primary goal of Information Technology is to support the Corporation in meeting its service objectives through the use of technology in the delivery of City services in an efficient and cost effective manner.

Information Technology is currently developing an IT Master Plan through a consultative process of internal key stakeholders, industry leaders and key public and private sector benchmarks. The IT Master Plan will build on the success of the current IT strategy, IT Plan 2.0, which provides key strategies and areas of focus for a five year period. The consultative process includes industry leaders in consumer products providing key insights into how our customers will consume our services in the future.

The new way of developing and providing technology solutions will be aligned with the mobile customer with an appetite to access all of the City services on their mobile phone. Services will need to be provided with ease of access and simplicity in mind. City services will need to be rethought and redesigned, becoming more agile and nimble as this is what our citizens are used to - smaller, easily used mobile apps delivered faster and more often.

IT will also continue to provide sound technology and business solutions that meet the needs of all City services ensuring that existing investments in enterprise level business solutions such as SAP, Hansen, CLASS, MAX, Hastus and Microsoft SharePoint are leveraged where ever possible.

Services will be provided within clearly defined service levels that are agreed upon by clients to meet their business needs. IT will focus on training opportunities for all City staff in the use of new technologies and office productivity tools so that staff can be as proficient as possible and services can be delivered efficiently.

IT has fully adopted the best practices for project management as defined and supported by the Project Management Support Office (PMSO) ensuring transparency in project delivery.

Asset Lifecycle Management will be managed to ensure maximum value for the investment, balancing this with new opportunities for Cloud or hosted services.

IT will continue to drive and enable innovation through the use of technology across the Corporation, addressing future trends, opportunities, issues, and challenges.

"... It's about a renewal and modernization of Information Technology for the City of Mississauga..."

Turning strategy and plans into action demonstrates that technology enablement is a critical success factor to the delivery of City services. The following are key initiatives planned or underway:

- Citizen Mobile Applications (enabling easily completed transactions or inquiries on a mobile device);
- Communications Master Plan (enabling citizen engagement and 311 self-serve);
- Online Film Permits (providing self-serve access to request and make initial payment for a filming permit);
- New Active Guide (providing an advanced online recreation search tool that is also mobile enabled);
- Open Government and Open Data (assessing the opportunities to provide open access to data);
- Community Centre Field Automation of Asset Management (work orders, timesheet and inspections);
- Parks Field Automation of Asset Management (park pathways, major trail systems, pedestrian bridges, park amenities and furniture);
- Forestry Field Automation of Asset Management (work orders, timesheets, inspections and contracts);
- Enterprise Decision Support (key performance measures that align with strategic objectives and provide information to the front line program managers to inform decision-making);

- Wireless Network Expansion (continue the expansion of the City Wi-Fi network “Wireless Mississauga” in partnership with Sheridan College for public Wi-Fi access in all City facilities);
- VCOM Non-Emergency Radio Replacement (approximately 1,000 radios supporting operation in Transit, Security, Parks, Works and Enforcement);
- Network Design and Replacement (complete redesign of the City’s network including the network core, all hub and facility switches, network firewalls, security and all redundant networking requirements);
- Traffic Control Centre and Traffic Signal Network (replacement of current legacy traffic management system and connection of all City, Region and MTO signals to the City’s network); and
- IT Security Program (implement measures to meet Payment Card Industry requirements and implement a new corporate security management program).

Required Resources

Facilities & Equipment

Information Technology reduced its footprint this past year by removing its presence from 201 City Centre Drive. Now IT only occupies office space at City Hall, Central Library and the Gary W. Morden Centre. There is no significant growth in space requirements expected and any changes will be accommodated through workforce mobility over the next three years.

IT staff operate two state-of-the-art data centres and provide hardware, software and network support services throughout the City on a 24x7x365 basis.

External partnerships have been established for efficiencies (e.g. Public Sector Network, VCOM Radio and Wireless Mississauga for Sheridan College).

One of three IT Training Rooms at Garry W Morden Centre

Technology

The Information Technology Division supports the delivery of the technology investments put forward through the 2015-2018 Business Plan and Budget including the IT Capital program, which focuses on IT Asset Lifecycle Management. There are governing processes in place including an IT Committee with senior staff representation to ensure that the IT investment is aligned with the priorities of the City's overall business planning objectives.

The Information Technology Division supports many technologies and devices. The following is a list of key assets that make up the technology inventory:

- 2,250 desktop Computers;
- 750 laptop Computers;
- 200 field Devices (netbooks, tablets and tough books);
- 500 multi-function devices (copy/print/scan);
- 1,200 VCOM Non-emergency radios;
- 597 kilometers of fibre with 29,059 kilometers of strand fibre;
- 70 physical servers configured as 500 virtual servers;
- 92 City sites connected by fibre Public Sector Network (PSN);
- Open Wi-Fi access provided to the public at 76 City facilities as well as secure access to Sheridan College students in partnership with Sheridan College;
- A primary and secondary data centre capable of storing up to 230 Terabytes of data (including stored backed up offsite); and
- Two key enterprise resource systems SAP for financials and human capital/Hansen for corporate assets, preventative demand maintenance and 311 Call Centre service request.

Technology Used – Software

- Adobe Products;
- ATG - eCity (mississauga.ca);
- Building Automation System;
- Cemetery System;
- Chameleon - Animal Services;
- Cisco - Networking, Routers, Switches, Phones;
- Class - Registration, Bookings, Mem, Connect2Rec;
- Commvault – Backup;
- enRoute - Fire Dispatch, e911;
- ESS - Election System;
- Garival - Transit Farebox;
- GIRO/Hastus - Transit Planning, Scheduling, Operations, and Customer Information;
- HP - SAN and NAS storage;
- ICON - Courthouse System;
- Infor/Hansen - Asset Management;
- KBCity - 311 Knowledgebase;
- MAX – Planning and Building;
- McAfee - Virus and Malware;
- Microsoft - Windows, Office, SharePoint, Lync, SQL Server;
- Microstation - CAD/GIS;
- Oracle - Database, App Server;
- Partsmart - Parking Ticket Processing (Paytickets.ca);
- Riskmaster - Insurance Management;
- SAP - Financials, MM and HR;
- SirsiDynix - Library Catalogue;
- Trapeze - TransitMaster iBus/Smartbus System;
- TXM -Tax System (licensed to other municipalities);
- VMWare – Virtualization; and
- Workopolis - Job Postings.

Human Resources

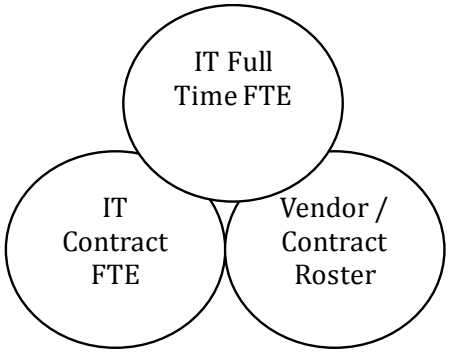
Proposed Full Time Equivalent Staffing Distribution by Program

Program	2014	2015	2016	2017	2018
IT Admin, Strategy & Innovation	7.5	12.0	12.0	15.2	7.0
IT Digital Services & Mobility	17.0	17.0	17.0	17.0	17.0
IT Enterprise Business Solutions	30.5	31.5	31.5	31.5	31.5
IT Infrastructure Planning & Operations	33.0	33.0	33.0	33.0	33.0
IT Project Portfolio and Delivery	44.0	44.0	44.0	44.0	44.0
IT Service Management	24.3	24.3	24.3	24.3	24.3
Total Service Distribution	**156.3**	**161.8**	**161.8**	**165.0**	**156.8**

Note: Numbers may not balance due to rounding.

Current staffing issues are focused around Information Technology's ability to assign the right resources to the priority initiatives while maintaining a level of capacity to deliver projects and maintain day-to-day operations.

A combination of permanent, part-time and contract staff is utilized so that resource demand to deliver on key projects can grow with that demand and be directly funded by the initiative. This resource model enables IT to meet the technology objectives approved through the Business Planning process by using specific initiative funding to add short term contract staff as well as Vendor/Contract Roster to bring in outside resources where required to provide specific expertise or resources for competing priorities.



2014 – 2015 Staffing Changes

Business Analyst - BR1326 Enterprise Decision Support Implementation (Contract Conversion)
Capital Funded FTE
IT Contract Manager
Business Analyst - Class System Replacement
Project Manager and 2 Application Developers - TXM Software Improvement Program
Project Lead - Mobility & Infrastructure Modernization Initiative

Proposed Operating & Capital Budgets

Operating

The following tables identify the budgeted and forecasted operating expenditures and revenues for 2014 to 2018, as well as 2013 actuals, by major program within the service area as well as by major expenditure and revenue category.

Proposed Budget by Program

Description	2013 Actuals ($000's)	2014 Budget ($000's)	2015 Proposed Budget ($000's)	2016 Forecast ($000's)	2017 Forecast ($000's)	2018 Forecast ($000's)
Expenditures to Deliver Current Services						
Information Technology Services	17,482	0	0	0	0	0
IT Admin, Strategy & Innovation	0	425	413	253	36	(181)
IT Digital Services & Mobility	0	2,541	2,549	2,579	2,608	2,638
IT Enterprise Business Solutions	0	4,424	4,534	4,695	4,748	4,801
IT Infrastructure Planning & Operations	0	5,944	6,225	6,264	6,302	6,340
IT Project Portfolio & Delivery	0	5,714	5,348	5,386	5,441	5,497
IT Service Management	0	2,106	1,943	1,965	1,995	2,025
Total Expenditures	**17,482**	**21,153**	**21,012**	**21,142**	**21,130**	**21,120**
Revenues	**(495)**	**(587)**	**(587)**	**(587)**	**(587)**	**(587)**
Transfers From Reserves and Reserve Funds	0	0	0	0	0	0
New Initiatives and New Revenues			56	113	115	118
Proposed Net Budget Including New Initiatives & New Revenues	**16,987**	**20,566**	**20,481**	**20,669**	**20,659**	**20,651**
Expenditures Budget - Changes by Year			(1%)	1%	(0%)	(0%)
Proposed Net Budget - Changes by Year			(0%)	1%	(0%)	(0%)

Note: Numbers may not balance due to rounding.

In 2013, the IT maintenance costs were budgeted in one IT Services budget. In 2014, the ongoing IT maintenance costs were allocated to each section within IT to better reflect where the costs are being managed. This demonstrates improved accountability achieved by the re-organization of IT Service, effective January 2014.

Summary of Proposed 2015 Budget

Description	2014 Approved Budget ($000's)	Maintain Current Service Levels	Efficiencies and Cost Savings	Annualized Prior Years Budget Decisions	Operating Impact of New Capital Projects	Proposed New Initiatives And Revenues	Special Purpose Levies	2015 Proposed Budget ($000's)	$ Change Over 2014	% Change Over 2014
Labour and Benefits	17,157	(20)	(10)	(0)	0	56	0	17,182	25	0%
Operational Costs	4,988	169	(215)	0	0	0	0	4,941	(46)	(1%)
Facility, IT and Support Costs	(992)	(63)	0	0	0	0	0	(1,056)	(63)	6%
Total Gross Expenditures	**21,153**	**85**	**(225)**	**(0)**	**0**	**56**	**0**	**21,068**	**(85)**	**(0%)**
Total Revenues	**(587)**	**0**	**0**	**0**	**0**	**0**	**0**	**(587)**	**0**	**0%**
Total Net Expenditure	**20,566**	**85**	**(225)**	**(0)**	**0**	**56**	**0**	**20,481**	**(85)**	**(0%)**

Note: Numbers may not balance due to rounding.

Summary of Proposed 2015 Budget and 2016-2018 Forecast

Description	2015 Proposed Budget ($000's)	2016 Forecast ($000's)	2017 Forecast ($000's)	2018 Forecast ($000's)
Labour and Benefits	17,182	17,492	17,751	18,013
Operational Costs	4,941	4,861	4,637	4,413
Facility, IT and Support Costs	(1,056)	(1,098)	(1,142)	(1,189)
Total Gross Expenditures	**21,068**	**21,256**	**21,246**	**21,237**
Total Revenues	**(587)**	**(587)**	**(587)**	**(587)**
Total Net Expenditure	**20,481**	**20,669**	**20,659**	**20,651**

Note: Numbers may not balance due to rounding.

Through efficiencies and marginal cost pressures, the IT operating budget is able to stay relatively flat. The new service structure will continue to drive operating efficiencies in capacity so that operating impacts are minimized.

Changes to Maintain Current Service Levels Including Prior Year's Budget Decisions

The following table identifies the changes in costs and revenues to maintain existing service levels, efficiencies and cost savings and the cost increases arising from prior year decisions.

Description	2015 Proposed Budget ($000's)	2016 Forecast ($000's)	2017 Forecast ($000's)	2018 Forecast ($000's)
Labour and Benefits	**(20)**	**252**	**256**	**260**
Operational Costs Increases				
Equipment maintenance and licenses - Net of allocations (Infor, VCOMM, Box, Desktop and Web GIS, other minor licenses)	106	103	(43)	(45)
Operational Costs Increases	**106**	**103**	**(43)**	**(45)**
Efficiencies and Cost Savings				
Equipment maintenance and licenses (Wide Area Network, Unix-HP, Microstation)	(99)	(57)	0	0
Professional services	(51)	0	0	0
Operating materials and office supplies	(30)	0	0	0
Staff development and Overtime	(30)	0	0	0
Mobile and phone devices	(15)	0	0	0
Future reductions	0	(168)	(225)	(225)
Efficiencies and Cost Savings	**(225)**	**(225)**	**(225)**	**(225)**

Note: Numbers may not balance due to rounding.

Changes to Maintain Current Service Levels Including Prior Year's Budget Decisions (Continued)

Description	2015 Proposed Budget ($000's)	2016 Forecast ($000's)	2017 Forecast ($000's)	2018 Forecast ($000's)
Operating Impact of New Capital Projects				
Operating Impact of New Capital Projects	**0**	**0**	**0**	**0**
Current Revenue Changes				
Current Revenue Changes	**0**	**0**	**0**	**0**
Annualized Prior Years Budget Decisions				
Annualized Prior Years Budget Decisions	**0**	**0**	**0**	**0**
Total Changes to Maintain Current Service Levels	**(140)**	**130**	**(12)**	**(11)**

Note: Numbers may not balance due to rounding.

There are currently no forecasted pressures or revenues as a result of Information Technology planned initiatives.

Proposed New Initiatives and New Revenues

This table presents the costs by budget request (BR#) for proposed new initiatives. Detailed descriptions of each budget request can be found on the pages following the table.

Description	BR #	2015 FTE Impact	2015 Proposed Budget ($000's)	2016 Forecast ($000's)	2017 Forecast ($000's)	2018 Forecast ($000's)	2015 to 2018 FTE Impact	2015 to 2018 Capital ($000's)
New Initiative								
SAP Enterprise Reporting (Decision Support System) - Contract Conversion to FTE	1326	0.5	56	113	115	118	0.5	0
Total New Initiative		**0.5**	**56**	**113**	**115**	**118**	**0.5**	**0**
Total		**0.5**	**56**	**113**	**115**	**118**	**0.5**	**0**

Note: Numbers may not balance due to rounding.

This is the conversion of a capital funded position that supports the development of Enterprise Decision Support and dashboards such as the Transit Fare Dashboard, Lost Time Reporting, Recreation Participation Dashboard and several others under development for key Service Areas.

Budget Request

Budget Request #: 1326

Proposed Initiative	Department	Service Area
SAP Enterprise Reporting (Decision Support System) - Contract Conversion to FTE	Corporate Services Department	Information Technology

Required Operating Investment

Impacts ($000s)	2015	2016	2017	2018
Gross Expenditures	55.8	113.2	115.5	117.8
Reserves & Reserve Funds	0.0	0.0	0.0	0.0
User Fees & Other Revenues	0.0	0.0	0.0	0.0
Tax Levy Requirements	55.8	113.2	115.5	117.8
* Net Change in $		57.5	2.3	2.3
FTEs	0.5	0.5	0.5	0.5

** Any net change that is negative, (in brackets), is a good thing. It means a reduction in expenditure or an increase in revenue.*

Required Capital Investment

Total Capital ($000s)	2014 & Prior	2015	2016	2017	2018 & Beyond
Expenditures	0.0	0.0	0.0	0.0	0.0

Why Staff Recommend this Initiative

This project has been proven to be successful, providing improved management information to the City. Four of the thirteen Service Area assessments are completed with projects underway for: Transit (Fare Media Types, Impact on Sales and Sales Trends), Recreation (Program Participation and Service Planning City-Wide, Line of Business and Facility), Land Development Services (Cost Recovery based on Planning Applications and Building Permit Applications) and Corporate Wide Attendance Management.

Budget Request #: 1326

Details of Service Change

The City-wide Enterprise Decision Support (EDS) program is built in collaboration with the City Strategy and Innovation Team to provide each Service Area with decision driven trending dashboards and measurement targets that includes clear governance and business processes, knowledge transfer, culture shift, clean consistent data and technology that quickly shows what is happening in the field. It is aligned to the Service Area vision, mission, goal, performance measurement and balanced scorecard with critical operational measures needed to make sound decisions. This will enable executives and front-line staff to make proactive decisions for tighter financial controls, resource allocation, business and service adjustments to meet the changes in our community and run City business effectively, efficiently and economically. This BR is to convert one position from contract to permanent to ensure this information can continue to be provided.

Gartner’s latest annual survey of 1,959 CIOs worldwide from all industries was conducted in the fourth quarter of 2012 and represents CIO budget plans reported at that time. "The top three Government technology priorities in 2013 have all changed since 2012, with business intelligence and analytics moving from number five to the top spot. By placing analytics and business intelligence at the top of the list, government CIOs are addressing government's need to proactively manage programs and services," Gartner noted.

Service Impact

The completion of the Attendance Management (Lost Time) dashboard clearly demonstrates that having the business processes, education of all supervisory staff, clean accurate data, trending dashboard, target measurement and email alerts to proactively manage attendance of the largest cost to the City is required. Without the Business Analyst to support the EDS program, the current IT developer will only be able to maintain what is implemented to date and make minor modifications. Decision making will continue as is by utilizing existing tools using data that is not clean and varies based on time, who, what, where and how data was gathered, giving an inconsistent picture as to “how are we doing?” and losing opportunities for automation and inability to achieve best practices for how we measure and act on key business information. Having a Business Analyst in place in 2015 will ensure that by 2016 the EDS processes, dashboards and measurement targets will be implemented for City-wide and Service Areas across departments and provide strategic balanced scorecards automated with publicly facing indicators to the citizens of Mississauga.

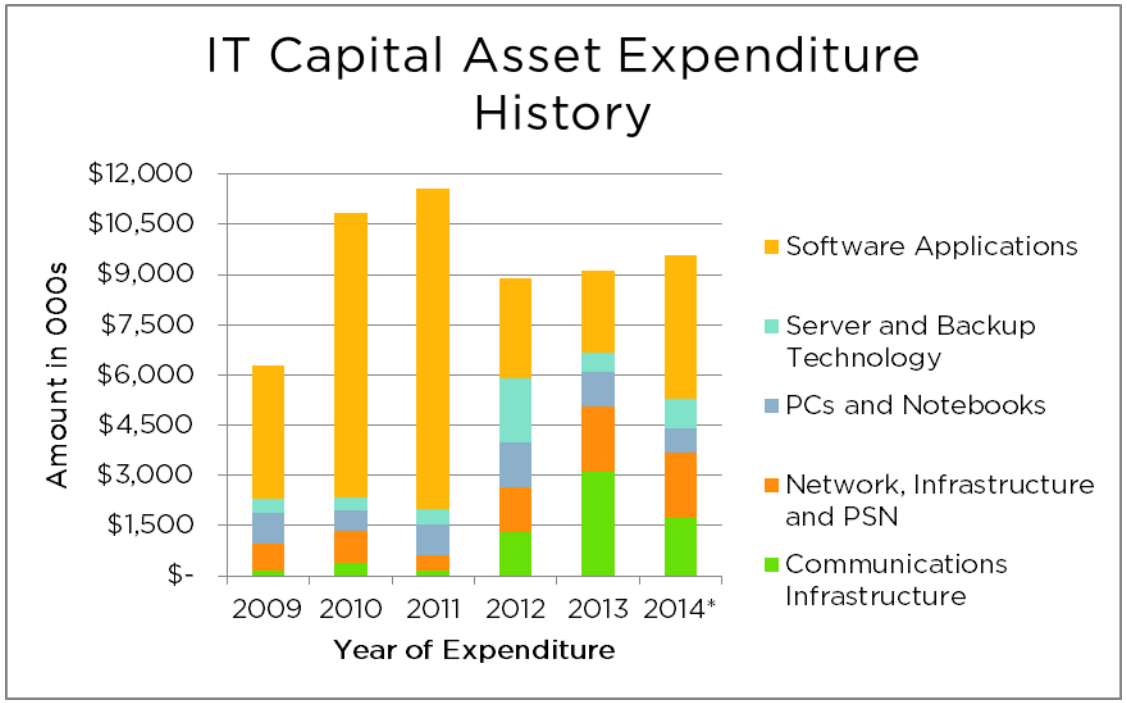
Capital

This section summarizes the forecast 10 year capital requirements for this service. The following table presents the forecast by major program. The next table summarizes the sources of financing for the capital forecast.

Proposed 2015-2024 Capital Budget by Program

Program Expenditures	2015 Proposed Budget ($000's)	2016 Forecast Budget ($000's)	2017 Forecast Budget ($000's)	2018 Forecast Budget ($000's)	2019-2024 Forecast Budget ($000's)	Total 2015-2024 ($000's)
Applications	3,778	3,427	2,312	3,055	9,573	22,145
Infrastructure	4,380	1,670	4,668	2,475	15,409	28,602
PC Replacement & Peripherals	512	1,060	1,090	1,030	6,720	10,412
Total	**8,670**	**6,157**	**8,070**	**6,560**	**31,702**	**61,159**

Note: Numbers may not balance due to rounding.



Spends include technology investments funded by other department budgets.

Highlights of the Proposed Capital Program Budget

The significant focus of the IT Capital Program Budget is asset lifecycle replacement and expansion of IT Infrastructure (Servers, Storage, Network and Wireless Access Points) with a total proposed IT Capital Budget of $8.67 million in 2015.

The following table highlights projects key lifecycle and state of good repair requirements proposed in the 2015 Capital Program Budget:

Program	Project	2015 Budget ($000's)
Network Infrastructure	• Fire Stn 119 Fibre Work to Property Line • Infrastructure Security-Upgrade-Enhance • Microsoft Lync Infrastructure • Network Access Switches Replacement & Expansion • Network Fibre & Wireless • Network Infrastructure Voice Systems • Phone Replacements • Server and Storage Lifecycle Replacement • Server Applications Upgrade and Expansion	3,930
Applications - Replacement/Enhancements	• CLASS Upgrade • Council Chambers Video System Upgrade • eCity and MiWay Mobile Site Upgrades • Fire System Upgrade • Mobility & Infrastructure Modernization • Oracle Upgrade Max, Tax Other 2015-2016 • SAP Legislative, Enhancement & Infrastructure • Sharepoint Upgrade N-1	2,971
Applications - New	• AV Video Editing Suite • eCity Analytics, Accessibity, Streaming • eCity Tools and Utilities • ePlans Integrated ePermitting Solution • GeoSpatial Master Plan and Implementation • HR Admin Processes & Forms Automation-BR 561 • PCI Compliance	939
Specialized IT Peripheral Equipment	Special IT Equip - Includes Public 2015	210
PC Replacement / Maintenance	PC/Notebook/Netbook Lifecycle 2015	200
AV Equipment	• Assistive Listening Systems • Conferencing, Smart Meeting Room Upgrade	150
Service Management	IT Service Management Program-2014-2015	150
Simplification	Flood Incident Response System	120
Grand Total		**8,670**

Proposed 2015-2024 Capital Budget by Funding Source

Funding	2015 Proposed Budget ($000's)	2016 Forecast ($000's)	2017 Forecast ($000's)	2018 Forecast ($000's)	2019-2024 Forecast ($000's)	Total 2015-2024 ($000's)
Tax	8,670	6,157	8,070	6,560	29,272	58,729
Debt	0	0	0	0	2,430	2,430
Total	**8,670**	**6,157**	**8,070**	**6,560**	**31,702**	**61,159**

Note: Numbers may not balance due to rounding.

Proposed 2015 Capital Budget Detail

Program: Applications

Project Number	Project Name	Gross Cost ($000's)	Recovery ($000's)	Net Cost ($000's)	Funding Source
CPBS00001	HR Admin Processes & Forms Automation-BR 561	67	0	67	Tax -Capital Reserve Fund
CPIT00156	eCity Tools and Utilities	50	0	50	Tax -Capital Reserve Fund
CPIT00189	CLASS Upgrade	116	0	116	Tax -Capital Reserve Fund
CPIT00225	Sharepoint Upgrade N-1	540	0	540	Tax -Capital Reserve Fund
CPIT00310	Oracle Upgrade Max, Tax Other 2015-2016	810	0	810	Tax -Capital Reserve Fund
CPIT004563	ePlans Integrated ePermitting Solution	65	0	65	Tax -Capital Reserve Fund
CPIT004573	PCI Compliance	455	0	455	Tax -Capital Reserve Fund
CPIT004574	Fire System Upgrade	325	0	325	Tax -Capital Reserve Fund
CPIT004575	Council Chambers Video System Upgrade	325	0	325	Tax -Capital Reserve Fund
CPIT004576	SAP Legislative, Enhancement & Infrastructure	60	0	60	Tax -Capital Reserve Fund
CPIT004583	Mobility & Infrastructure Modernization	220	0	220	Tax -Capital Reserve Fund
CPIT004587	eCity Analytics, Accessibity, Streaming	50	0	50	Tax -Capital Reserve Fund
CPIT004597	eCity and MiWay Mobile Site Upgrades	575	0	575	Tax -Capital Reserve Fund
CPIT004599	Flood Incident Response System	120	0	120	Tax -Capital Reserve Fund
Subtotal		**3,778**	**0**	**3,778**	

Note: Numbers may not balance due to rounding.

Program: Infrastructure

Project Number	Project Name	Gross Cost ($000's)	Recovery ($000's)	Net Cost ($000's)	Funding Source
CPIT00150	Network Infrastructure Voice Systems	160	0	160	Tax -Capital Reserve Fund
CPIT00155	Server and Storage Lifecycle Replacement	1,095	0	1,095	Tax -Capital Reserve Fund
CPIT00190	Phone Replacements-2014-15	230	0	230	Tax -Capital Reserve Fund
CPIT00231	Microsoft Lync Infrastructure	160	0	160	Tax -Capital Reserve Fund
CPIT00245	IT Service Management Program-2014-2015	150	0	150	Tax -Capital Reserve Fund
CPIT00256	Network Access Switches Replacement & Expansion 2014-15	800	0	800	Tax -Capital Reserve Fund
CPIT004230	GeoSpatial Master Plan and Implementation	200	0	200	Tax -Capital Reserve Fund
CPIT004572	Server Applications Upgrade	625	0	625	Tax -Capital Reserve Fund
CPIT004578	Infrastructure Security-Upgrade-Enhance	50	0	50	Tax -Capital Reserve Fund
CPIT004584	Conferencing, Smart Meeting Room Upgrade	100	0	100	Tax -Capital Reserve Fund
CPIT004588	Servers for GIS	20	0	20	Tax -Capital Reserve Fund
CPIT004616	Network Fibre & Wireless 2015-2018	665	0	665	Tax -Capital Reserve Fund
CPIT004620	Fire Stn 119 Fibre Work to Property Line	125	0	125	Tax -Capital Reserve Fund
Subtotal		**4,380**	**0**	**4,380**	

Note: Numbers may not balance due to rounding.

Program: PC Replacement & Peripherals

Project Number	Project Name	Gross Cost ($000's)	Recovery ($000's)	Net Cost ($000's)	Funding Source
CPIT00159	Special IT Equip - Includes Public 2015	210	0	210	Tax -Capital Reserve Fund
CPIT00209	PC/Notebook/Netbook Lifecycle 2015	200	0	200	Tax -Capital Reserve Fund
CPIT004579	Assistive Listening Systems	50	0	50	Tax -Capital Reserve Fund
CPIT004586	AV Video Editing Suite	52	0	52	Tax -Capital Reserve Fund
Subtotal		**512**	**0**	**512**	

Note: Numbers may not balance due to rounding.

Proposed 2016-2018 Capital Budget Detail

Sub-Program	2016 Forecast ($000's)	2017 Forecast ($000's)	2018 Forecast ($000's)
Applications			
IT Applications-Replacement/Enhancements	2,827	1,552	2,560
IT Applications-New	540	705	445
IT Portal	60	55	50
Subtotal	3,427	2,312	3,055

Sub-Program	2016 Forecast ($000's)	2017 Forecast ($000's)	2018 Forecast ($000's)
Infrastructure			
IT Network Infrastructure	1,670	4,668	2,475
IT Service Management	0	0	0
IT Server Expansion	0	0	0
Subtotal	1,670	4,668	2,475

Sub-Program	2016 Forecast ($000's)	2017 Forecast ($000's)	2018 Forecast ($000's)
PC Replacement & Peripherals			
IT PC/Notebook-Replacement/Maintenance	880	880	880
IT Specialized Equipment	180	210	150
IT Peripherals	0	0	0
Subtotal	1,060	1,090	1,030
Total Expenditures	**6,157**	**8,070**	**6,560**

Note: Numbers may not balance due to rounding.

Performance Measures

A Balanced Scorecard identifies and measures four key areas for an organization's performance: Financial; Customers; Employees; and Business Processes.

By paying attention to all four areas an organization can retain balance to its performance and know that it is moving towards the attainment of its goals.

About the Measures for Information Technology:

Financial Measures

Cost avoidance going to web self-services measures the cost difference between offering service on the web versus other channels.

Customer Measures

Percentage First Call Resolution Help Desk Calls measures the overall ability of the IT Help Desk to resolve help requests on first point of contact.

The Total Number of Help Desk Calls will measure the number of service requests by phone and email that are received that year.

Employee Measures

Corporate IT Training and Development Days measures the total number of "classroom" days that IT staff have completed.

Employee Job Satisfaction Value (IT Division) conducted in Engagement Survey (2012 value was 73.7 per cent). Job satisfaction is a key overall component of the bi-annual Employee Engagement Survey conducted by Metrics@Work.

Business Process Measures

City Website Unique Visits measures the volume of use by citizens and businesses on the City's website.

Online Recruiting via Workopolis measures the number of job postings listed for external offer.

Online Recruiting via Workopolis measures the average applications received per job.

Balanced Scorecard

Measures for Information Technology	2012 (Actual)	2013 (Actual)	2014 (Planned)	2015 (Planned)	2016 (Planned)	2017 (Planned)	2018 (Planned)
Financial:							
Cost Avoidance – Web Self Service	$3.08M	$3.83M	$5.08M	$6.73M	$8.92M	$11.82M	$15.6M
Customer:							
% First Call Resolution Help Desk Calls	38.8%	26.7%	45%	50%	50%	50%	50%
Total Help Desk Calls	24,140	31,092	28,500	28,500	28,500	28,500	28,500
Employees/Innovation:							
Corporate IT Training and Development Days	394	290	300	300	300	300	300
Employee Job Engagement (IT Division Rating)	73.7%	73.7%	75.0%	75.0%	75.0%	75.0%	75.0%
Internal Business Process:							
City Website Unique Visits	9.4M	10.9M	12.4M	13.9M	14.4M	15.9M	16.4M
Online Recruiting via Workopolis (Number of Jobs Posted)	263	229	250	250	250	250	250
Online Recruiting via Workopolis (average applications received per job)	195	159	175	175	175	175	175