

# Information Technology

## Annual Report

2012

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## Introduction

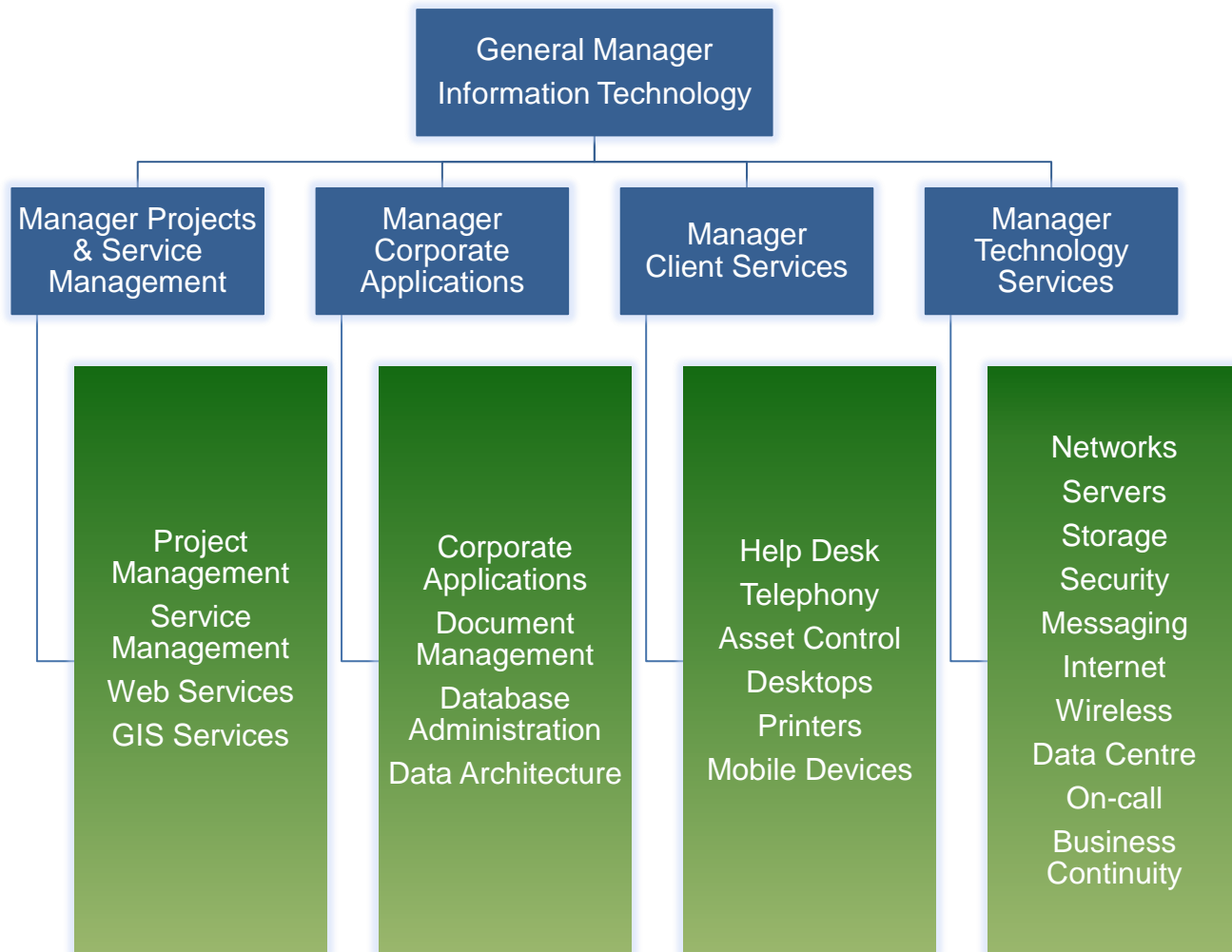
*“The City of Guelph Information Technology Department proactively facilitates corporate service excellence through the provision and planned evolution of technology and related support services.”*

### Mission Goals

- ✚ Provide reliable, secure, and easily accessible IT infrastructure to meet the business and service needs of the organization
- ✚ Plan, implement, and maintain the corporate desktop, IT Service Desk, printing and telephony infrastructure
- ✚ Support the applications that the corporation uses as a municipal services provider
- ✚ Develop and support IT Program, Project, and Service Management

### Organizational Structure

The following represents the organizational structure of the Information Technology Department effective September 25th, 2012.



### ***New Format***

This is the fourth annual report prepared by Information Technology which summarizes the accomplishments of four technology divisions; Projects & Service Management, Corporate Applications, Client Services, and Technology Services. This report compares performance metrics to industry standards and benchmarks.

### **Section 1: Key Initiative Summary**

A summary of the department's key initiatives throughout the year 2012. It expands on the "2012 Accomplishments" for the department as reported in the 2013 Operating Budget submission.

### **Section 2: The Information Technology Dashboard and Scorecard**

Visual and tabular interpretation of the data analysis, ratings, and targets.

### **Section 3: Performance Analysis**

This section provides further context, detail, and analysis regarding performance measures reported in the dashboard and scorecard. It will also look at external trends in Information Technology that are either having an impact or expected to impact the way we provide services in the coming years.

### **Section 4: 2013 and Beyond**

This section includes a brief overview of the Information Technology 2013 work plan including actions resulting from the analysis in Section 2.

## **Section 1: Key Initiative Summary for 2012**

### ***CTSP (Corporate Technology Strategic Plan)***

Developed and received Council approval for the first ever Corporate Technology Strategic Plan, that changes the model for Information Technology to business focused service delivery. The strategy includes recommendations for Open Government, IT governance, IT service standards and sustainability, easier access to City information, more opportunities for citizen engagement, and modernization of business systems.

### ***Joint Wireless Review Committee***

Completed a system design and business case to support wireless connectivity for City owned mobile devices throughout the City. This included a capital budget submission to implement the design over four years.

### ***Fire Station Computer Aided Dispatch***

Replaced the Fire CAD (Computer Aided Dispatch) system which extends functionality into emergency vehicles.

### ***Emergency Medical Services Wireless***

Provided wireless network access at all ambulance stations. This allows first responders to upload and download patient care information from within the ambulance bay.

### ***Mobile Device Usage Policy/Mobile Applications***

Created a Mobile Device Usage Policy for the City's fleet of cell phones, Blackberrys, and tablets. Developed mobile web apps with integrated QR (Quick Response) codes and social media. This improved service to Sleeman Centre guests and promoted land sales in Hanlon Creek Business Park.

### ***Corporate Email System Upgrade***

Upgraded the City's email platform for increased performance, larger mailboxes, and complete redundancy.

### ***Interactive Waste Collection Map***

Implemented revised external waste collection interactive maps to reflect new cart schedule for selected homes in 2013.

## Section 2: Information Technology Dashboard and Scorecard

### Information Technology Dashboard

As illustrated below by the Information Technology Dashboard, several KPIs (Key Performance Indicators) have been aligned into four categories to illustrate progress toward achieving the performance goals of the department. Items in the dashboard marked by **GREEN** indicate that the City of Guelph is reporting metrics that compare positively to benchmarks. **YELLOW** and **RED** indicate items that are not currently in line with benchmarks. PLUS and MINUS signs indicate the direction that these indicators are trending. For example, “Project Performance is currently yellow and performance is trending in a positive direction. The absence of a trend sign means there is no change in performance over the previous year.



IT Performance 2011



IT Performance 2012

### Information Technology Dashboard 2012

	2011	2012		2011	2012
<b><u>IT Governance</u></b>			<b><u>Service Delivery</u></b>		
Strategic Alignment	Yellow	Yellow +	Customer Satisfaction	Yellow	Yellow +
Business Value Delivery	Yellow	Yellow	Customer Partnership	Yellow	Yellow
Risk Management	Red	Red +	Business Process Support	Red	Red +
Resource Management	Red	Red +	Infrastructure Availability	Green	Green
Performance Measurement	Red	Red			
<b><u>IT Sustainability</u></b>			<b><u>IT Innovation &amp; Learning</u></b>		
Applications Management	Red	Red	Workforce Competency	Yellow	Yellow
Project Performance	Red -	Red +	Advanced Technology Use	Yellow	Yellow
Financial Performance	Yellow	Yellow +	Methodology Currency	Yellow	Yellow
Compliance	Red	Red	Employee Retention	Yellow +	Yellow +

Information Technology Scorecard

Value Creation

**Governance**

Measure	2012 Target	2012 Result	2013 Target
Strategic Alignment	Maturity Level 3	• Maintained Level 2 (IT is a solid utility), built executive awareness of our IT business key success factors by approval of the CTSP (Corporate Technology Strategic Plan)	Maturity Level 3
Business Value Delivery	Maturity Level 1	• Maintained Level 1, engagement of customers in identification of KPIs for both IT and business units will be completed in 2013	Maturity Level 2
Risk Management	Maturity Level 2	• Maintained Level 1, assigned responsibility of risk management, created risk register	Maturity Level 2
Resource Management	Maturity Level 2	• Maintained Level 1, reviewed recommendations from CTSP and requested FTEs to support business needs	Maturity Level 2
Performance Measurement	Maturity Level 2	• Maintained Level 1, merging of IT and business KPIs will be performed in 2013 as part of implementing CTSP	Maturity Level 2

**Service Delivery**

Measure	2012 Target	2012 Result	2013 Target
Customer Satisfaction	80%	• Approached target, 78% of support calls completed within target times, FCR (First Call Resolution) was 34%, completed customer satisfaction survey	80%
Customer Partnership	Maturity Level 2	• Maintained Level 1 (IT is a resource centre), partnership management will be addressed as part of the CTSP rollout	Maturity Level 2
Business Process Support	Maturity Level 2	• Maintained Level 1, improved process management for IT but not for the business, no BPM (Business Process Management) technologies	Maturity Level 2
Infrastructure Availability	99.9%	• Achieved availability of 98.98%, began monitoring at the server level in addition to the network	99.9%

**Sustainability**

Measure	2012 Target	2012 Result	2013 Target
Applications Management	Maturity Level 2	• Maintained Level 1, completed majority of attendance management and Guelph.ca upgrades in 2012	Maturity Level 2
Project Performance	30% completion	• Exceeded the target with a 66% completion rate of IT projects initiated in 2012 however overall performance is still not meeting industry standards	50% completion
Compliance	Maturity Level 2	• Maintained Level 1 (Functional), no IT Compliance Manager appointed, no IT compliance catalogue	Maturity Level 2

**IT Innovation & Learning**

Measure	2012 Target	2012 Result	2013 Target
Workforce Competency	Maturity Level 3	• Maintained Level 3 (Defined), identified skills gap to support business needs, no P-CMM (People Capability Maturity Model assessment performed	Maturity Level 3
Advanced Technology Use	Maturity Level 4	• Maintained Level 3, many new technologies were evaluated and piloted but not put into production	Maturity Level 4
Methodology Currency	100% compliance	• Limited progress on father implementation of ITIL, PMBOK, SDLC, COBIT, CMMI, or Six Sigma methodologies	100% compliance

Cost Control

**Business & Service Excellence**

Measure	2012 Target	2012 Result	2013 Target
Financial Performance Against other Cities	Match OMBI spending	• IT operating and capital spending as a percentage of total City budget was increased from 1.3% to 1.7% which is very close to OMBI figures	Match OMBI
Financial Performance Against IT Industry	Increase investment in IT resources	• Obtained approval for year 1 of CTSP which includes more IT staff and capital funds, however it is still only 50% of local government average spending	Continue to increase investment in IT
Employee Retention	5% turnover	• Did not meet target due to 10.7% turnover rate in IT	5% turnover

## Section 3: Detailed Analysis

### IT Governance

#### Strategic Alignment

This focus area was re-evaluated by the Gartner® ITScore Assessment tool that quantifies the maturity of the IT department as a service provider. IT remains classed as a “Utility Provider” which warrants the rating of 2 out of 5. The challenges in this group include poor integration of IT with the organization’s business goal setting and the business is not integrated with IT’s goal setting.

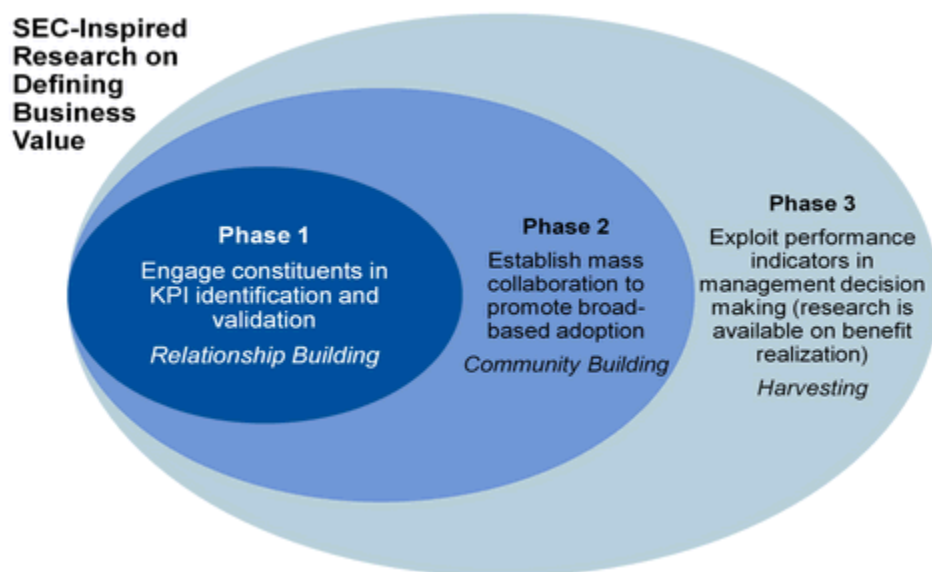
Recommendations to move to the higher level archetype group of “Process Optimizer” are as follows:

- Build IT executive-level awareness of your business key success factors
- Train IT management staff to understand and communicate IT value in business terms
- Set aside resources to research and recommend IT-enabled process enhancements
- Shift the IT Management roles from an operations focus to a business manager focus

#### Business Value Delivery

The IT Department remains in the early stages of monitoring and reporting its business value to the organization and therefore remains rated at Phase 1 of 3. The Gartner® Assessment tool for Business Value Delivery was used to determine IT’s level of maturity.

KPIs will be identified in the IT Governance pillar of the 2012 Corporate Technology Strategic Plan which will be addressed in 2013.



**Figure 1.** Three Phases of the Gartner and EBRC (Enhanced Business Reporting Consortium) KPI Initiative Source: Gartner (June 2011)

#### Risk Management

This was a key initiative identified by the CTSP in late 2012. A Risk Manager was appointed and several major focus areas were added to the Corporate Risk Register. There is a Corporate “Insurance and Risk Management Policy” which states that “It is the responsibility of each department to identify the potential perils, factors and types of risk to which their assets, program activities and interests are exposed;” There is no IT Risk Policy or processes in place to formally assess the risks associated with the business and IT. Therefore the rating for this focus area remains at Level 1. The 2012 IT Strategic Plan will address this gap and provide initiatives for moving to a higher level.



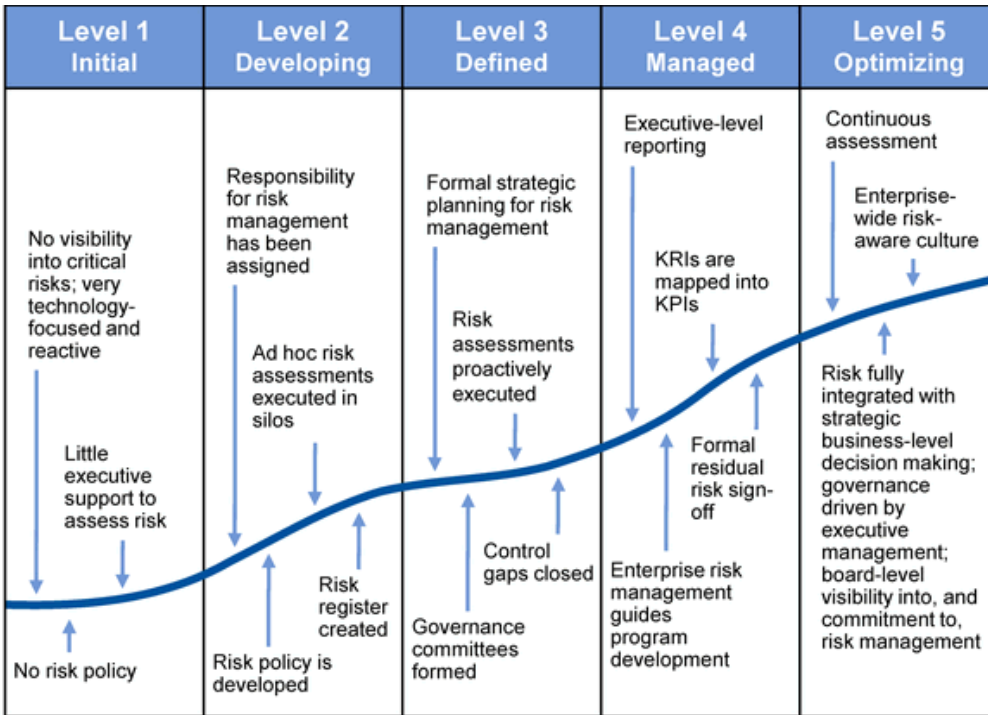
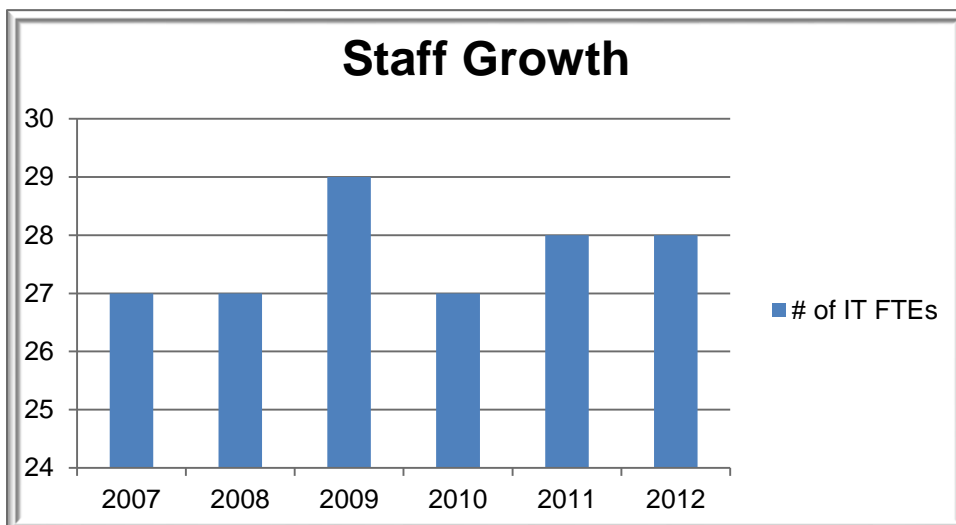


Figure 1. Overview of ITScore Maturity Levels for Risk Management

Source: Gartner (September 2010)

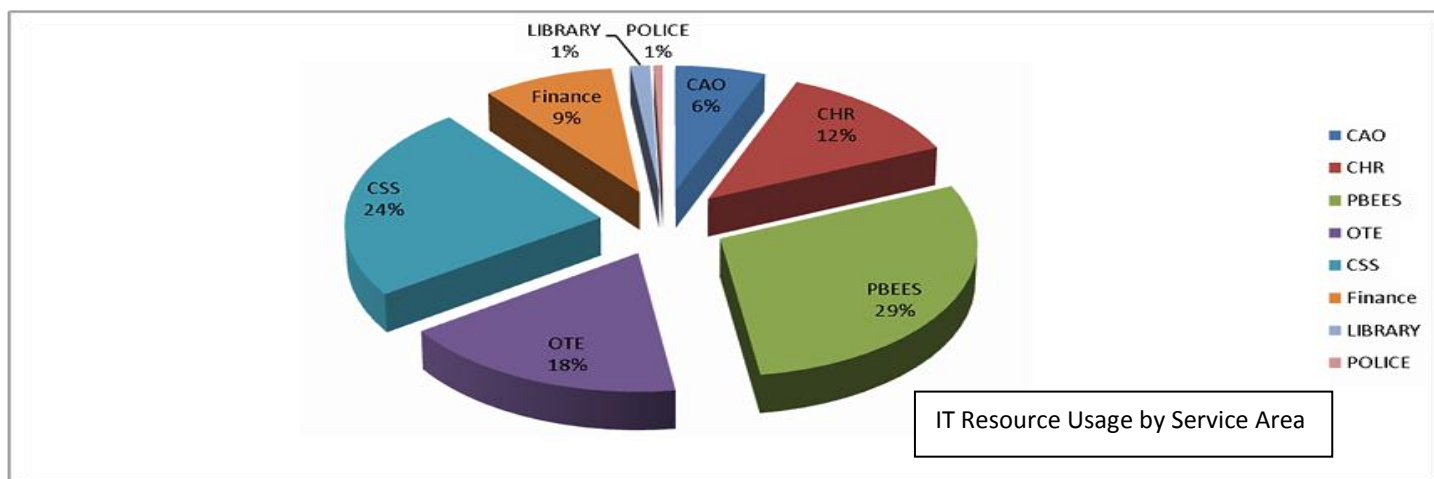
**Resource Management**

Staffing levels have remained static since 2007 despite the growth in services, infrastructure, and supported staff. Symptoms of this are high levels of overtime, a backlog of projects, and a focus on operational rather than strategic initiatives. The 2012 CTSP (Corporate Technology Strategic Plan) identified staffing deficiencies and Council approved an additional 4 FTEs in 2013, which will improve this indicator in next year’s report.



\*Growth of IT staff over last 6 years Source: Internal – IT Management

The next graph demonstrates the allocation of IT staff time on support calls by service area. In 2012 there was a more even distribution with PBEES remaining as the highest number of calls.



\*Source: Internal HEAT Incident Management System

### Performance Measurement

In 2012, the IT Department continued reporting metrics in a select few areas where reports and information were built into the systems. The IT Service Desk and Solarwinds® Infrastructure Availability provided basic performance indicators. In 2013, KPIs will be expanded to provide a more balanced measurement for IT as it relates to the business aspects of the organization.

### Service Delivery

#### Customer Satisfaction

This table breaks down assignments by division and indicates that IT is not meeting the industry standard of 85% resolved on time. Overall the departmental statistic of 77.65% warrants a rating in the middle (Yellow) range of the performance scale and is trending in a positive direction, which is a modest improvement over 2011.

Divisional Statistics for 2012	Assignments Resolved	Percentage Meeting Target (85%)
Client Services	7959	78.25%
Corporate Applications	1442	86.13%
Technology Services	2468	66%
Projects and Service Management	2429	82.5%
<b>Total for IT Department</b>	<b>14339</b>	<b>77.65%</b>

\*Source: Internal HEAT Incident Management System

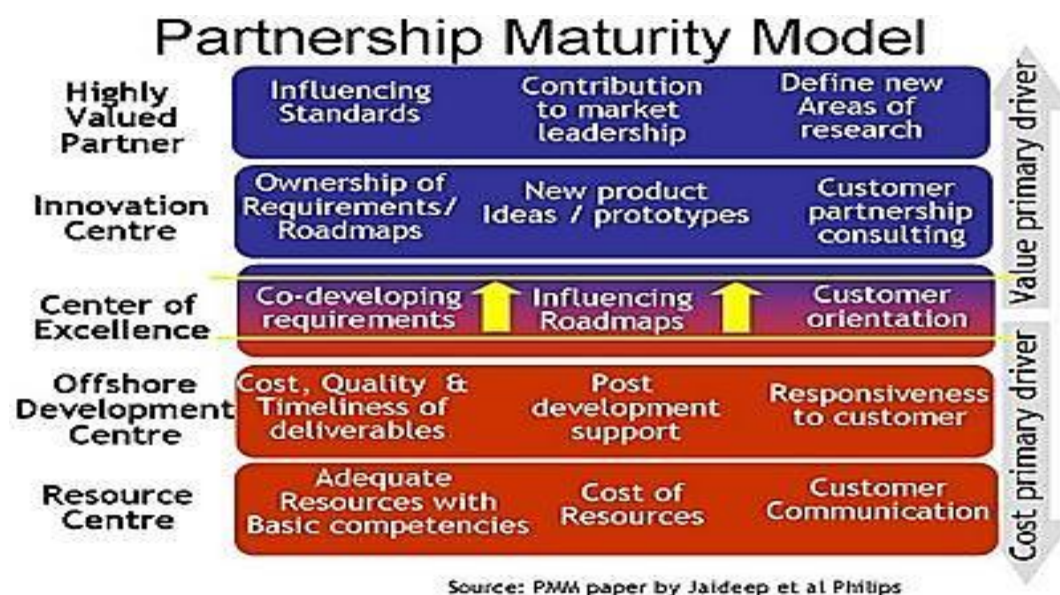
This table demonstrates the IT Service Desk dropped calls rate which means that performance exceeds the industry average of 10%; therefore it is rated at the higher (green) end of the performance scale. A new performance measurement was added in 2012 to report on FCR (First Call Resolution). This statistic identifies the percentage of Service Desk support calls that are solved on first contact with the client, usually via phone or email.

2499 Service Desk Statistics for 2012		
Total Issues Handled (phone calls, Emails)	Percentage of Calls Dropped (Target <10%)	FCR (First Call Resolution)
<b>12230</b>	<b>3.32%</b>	<b>33.78%</b>

\*Source: Internal HEAT Incident Management System

### Customer Partnership

The IT Department was rated at Level 2 using the PMM (Partnership Maturity Model) as a tool to determine its maturity in Customer Partnership. To move to Level 3 in 2012, IT must first develop a Customer Partnership Plan, which is inclusive of all relevant business units across the City. IT will partner with business leaders, using the IT governance model, to develop and implement strategies and plans, tools and services that enhance the efficiency and quality of service delivery, and improve the customer’s ability to access those services.



\*\*Partnership Maturity Model (PMM) was presented by Dr. Bob Hoekstra, then CEO of Philips Innovation Center

### Business Process Support

The IT Department moved from Phase 1 to Phase 2 of the Business Process Maturity model.

The primary motivation of Level 2 is to increase control over processes through automation of a broader set of activities, not just the routine or repetitive tasks. The lessons learned in Level 1 regarding efficiency gains from automation are strong motivators to free up human capital for higher added value activities through greater use of software automation to coordinate work.

Business Requirement Performance is a subset of Business Process Management. In 2012, IT PMO added the Business Request (BR) Process to its portfolio. One of the key objectives of the BR Process is that, it would help IT complete requirements faster which after IT PMO evaluation, equate to less than 48 hours of cumulative IT work. In 2012, IT completed 85% of the 14 BRs initiated the same year, resulting in a rating at the highest end (Green) of the performance scale. IT PMO plans to track the BR completion progress on a yearly basis, which will be reported annually.

Organizations wanting to make the move from Coordinated Process to Cross Boundary Managed Processes should be working on efforts that cross functional boundaries and identifying process owners that can balance process excellence with functional excellence needs.

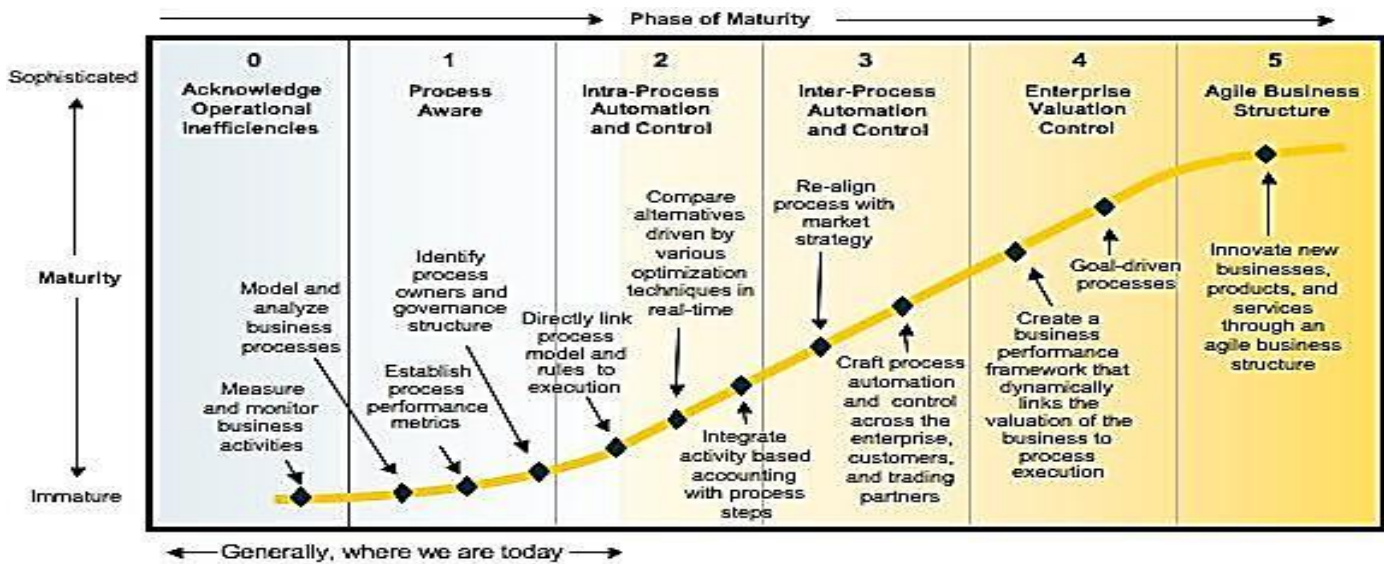
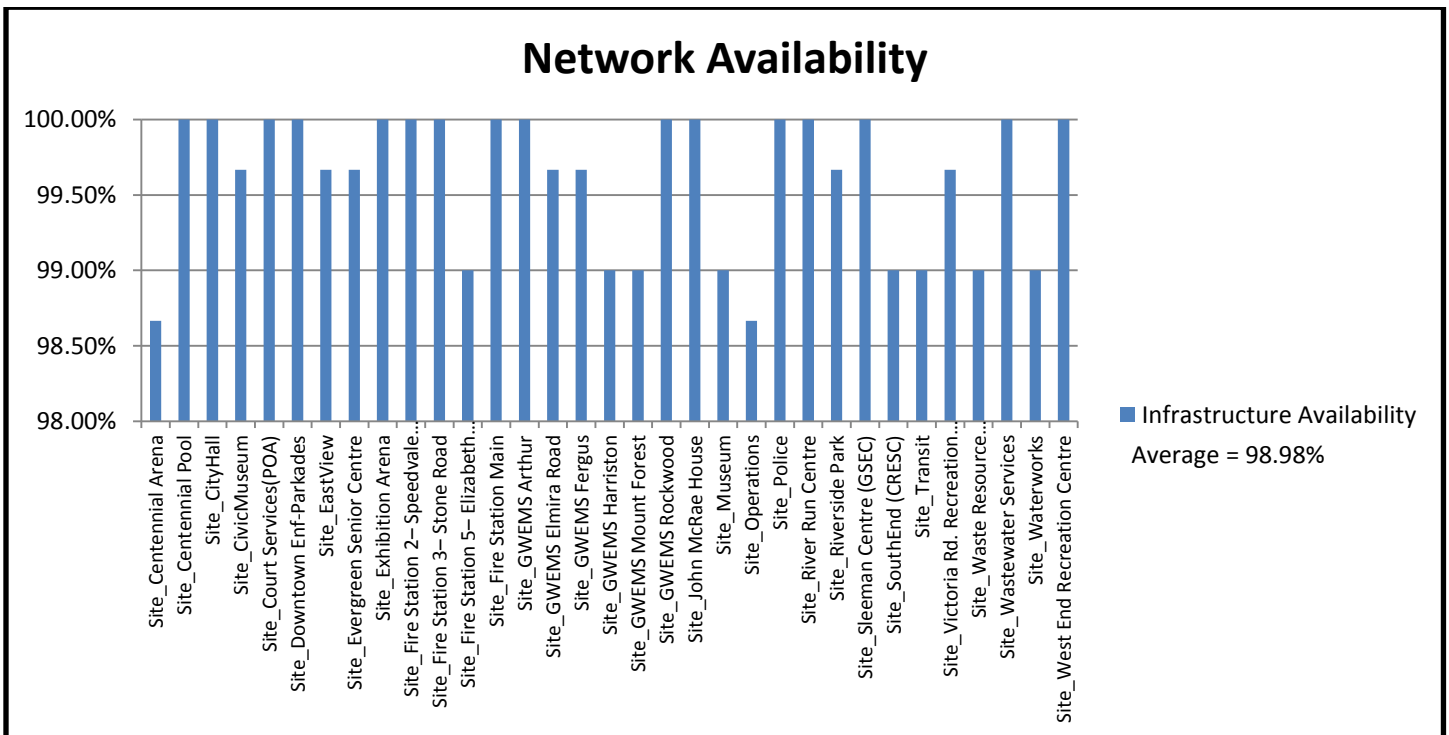


Figure 1. The six phases of BPM maturity Source: Gartner

**Infrastructure Availability**

In 2012 we split the infrastructure into two main categories, network and server to provide a more in depth view of the underlying infrastructure components.

Network Availability: The stability of the City’s network infrastructure decreased slightly in 2012. We approached our target for 2012 by achieving an average network uptime to 98.98% compared to 99.61% in 2011. There were issues with many outlying site offices where we rely on external network providers. Our City Hall uptime was 100%.



\*Source: Internal – Solarwinds Orion® Performance Monitor

Server Availability: This new sub-category demonstrates how well we manage our production servers. They are located at the City Hall and Clair Road data centres. Server availability average was 99%. Fault tolerant hardware, proactive monitoring, and sound data centre management were key to this success.

IT Sustainability

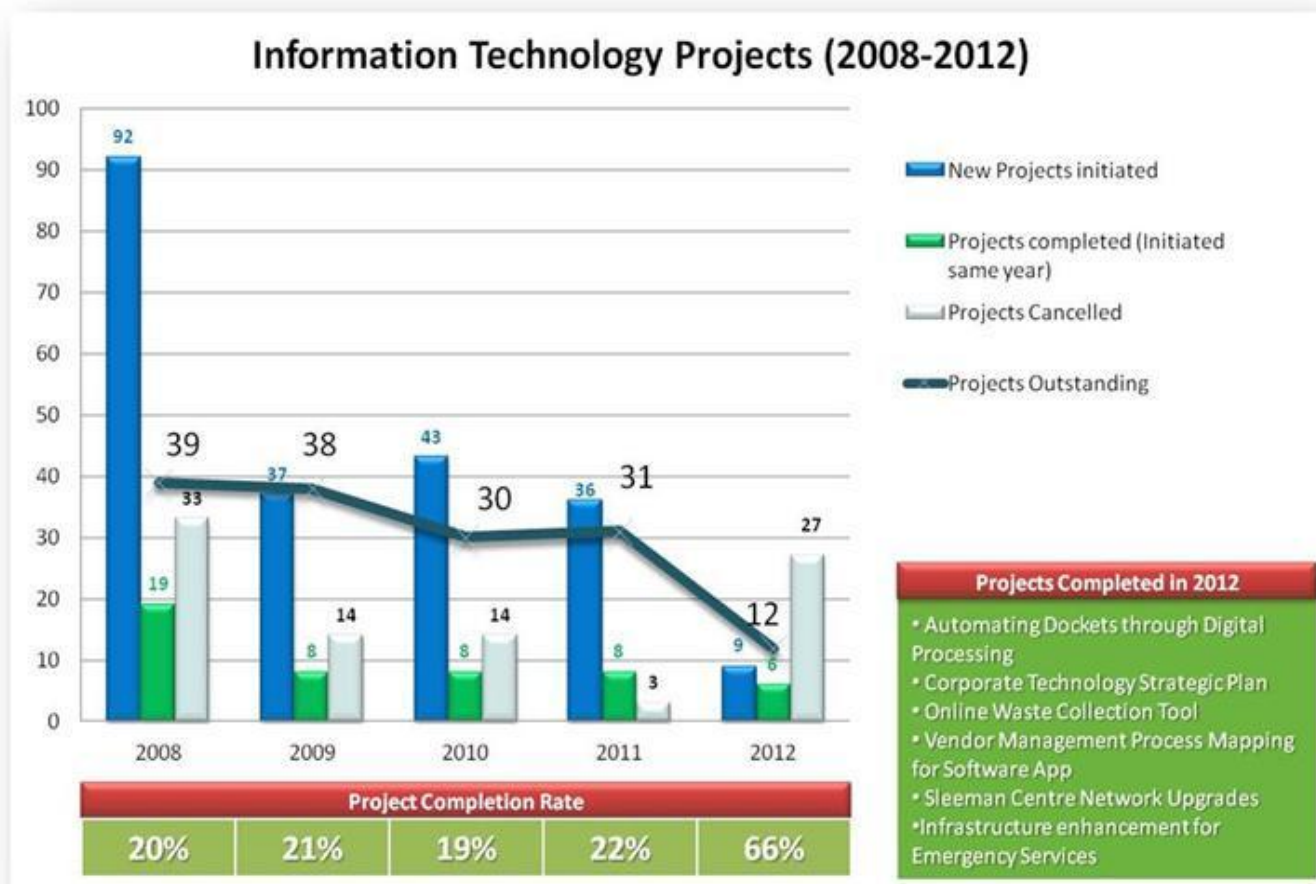
**Applications Management**

In 2012, there was limited progress made to improve this indicator. The CTSP (Corporate Technology Strategic Plan) did not get approval until December 2012, which was needed to proceed with reorganizing the Corporate Applications division. Upgrading of the Guelph.ca website and the Kronos Attendance Management system was not completed until early 2013.

**Project Performance**

In 2012, IT completed 66% of the projects it initiated resulting in a rating of red but trending in a positive direction. There was a substantial decrease in the number of outstanding projects compared to 2011, as 27 projects were cancelled. Most of the projects cancelled were not initiated with proper charters and many did not have a clear scope. IT began addressing this issue in late 2011 by designing and implementing a project prioritization process, followed by a stakeholder engagement model led by the IT PMO. The measures in 2011 and 2012 helped IT ensure that we use our resources where they are most needed.

The establishment of an IT Project Management Office (ITPMO) in early 2012 has been a success, as it has improved IT project performance by ensuring projects are following the internationally recognized Project Management Institute PMBOK® methodology.



\*Source: City of Guelph IT - Project Management Office



### Financial Performance

The City's IT cost per employee dropped slightly (2%) as compared to 2011. IT staff as a percentage of total City staff was at 1.9% compared to a Gartner average of 3.6% for local government. The 2012 Corporate Technology Strategic Plan will address IT funding and staffing levels to ensure both are aligned with other Ontario municipalities.

#### Operating and Capital Costs for IT Services per Staff Supported with Active IT Account (Single Tier)

Note 1: OMBI data for 2012 was not available at time of publishing

Year	2009	2010	2011	2012
<b>City's IT Cost per Municipal Staff Member Supported</b>	\$3,483.00	\$3,378.00	\$3,957.00	\$3481.00
<b>OMBI Median</b>	*\$3,601.00	*\$2,525.00	*\$3,367.00	n/a

\*Source: Ontario Municipal Benchmarking Initiative (OMBI) – 2011 Performance Benchmarking Report: IT Services

#### Operating and Capital Cost in IT Services as a Percentage of Municipal Operating and Capital Expenditures (Single Tier)

Note 2: OMBI data for 2012 was not available at time of publishing

Year	2009	2010	2011	2012
<b>City's Percentage of Investments in IT Services</b>	1.4%	1.2%	1.3%	1.7%
<b>OMBI Median</b>	*1.2%	*1.3%	*1.6%	n/a

\*Source: Ontario Municipal Benchmarking Initiative (OMBI) – 2011 Performance Benchmarking Report: IT Services

#### IT Spending (Gartner Reports)

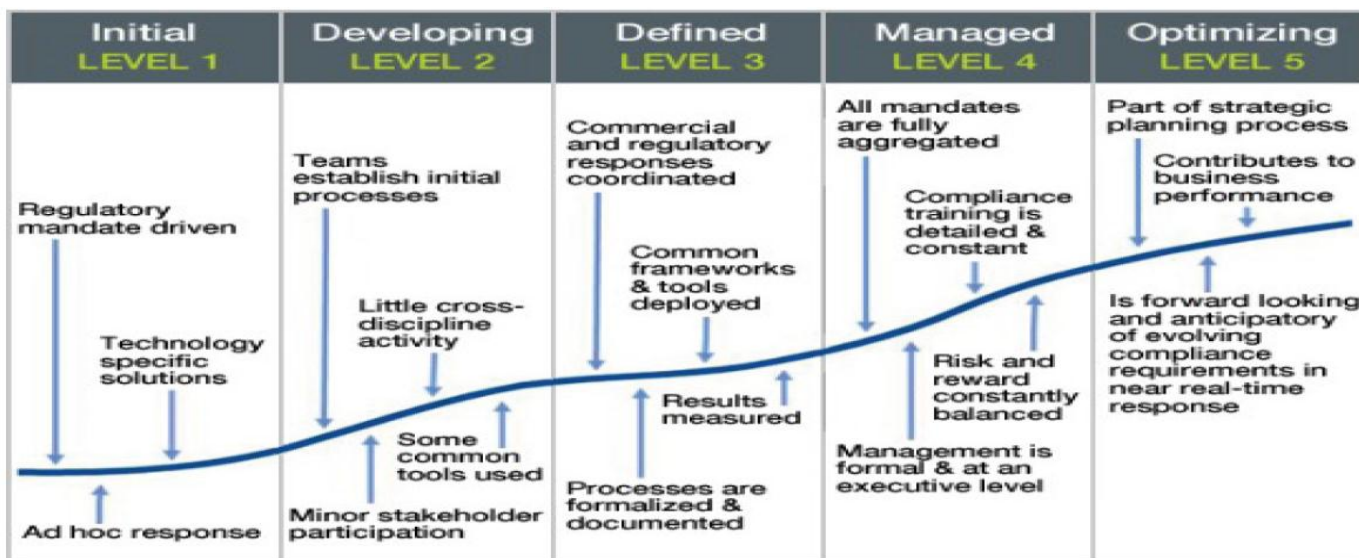
Indicator	North America All Industries	Local/State Gov.	City of Guelph	North America All Industries	Local/State Gov.	City of Guelph
Year	2011	2011	2011	2012	2012	2012
<b>IT Staff as % of Total Staff</b>	**5.7%	**3.5%	***2.2%	**5.7%	**3.60%	***1.9%
<b>IT Spending % Operating Budget</b>	**4.1%	**4.3%	***1.3%	**4.50%	**3.60%	***1.5%
<b>IT Spending per Employee</b>	**13,055	**12,350	***\$3507	**\$14,278	**\$7,060	***\$3481

\*\*Source: Gartner Report – IT Metrics: IT spending and Staffing Report 2012, published Q1 2013

\*\*\*Source: Internal Finance and Human Resources Departments

### Compliance

There was limited activity related to compliance in 2012 and our maturity remained at Level 2 (Developing). The characteristics for this level are reflected in the following graphic. The City passed all the external quarterly audits and the PCI-DSS SAQ (Payment Card Industry – Data Security Standard Self-Assessment Questionnaire) that were facilitated through Trustkeeper® Trustwave; a leading security and compliance management provider.



Maturity Model for Compliance

Source: Gartner (September 2010)

The Information Technology department will be forming a Technical Standards Group, led by the Manager of Technology Services, drawing on staff within IT (e.g. technical leads, IT managers). The group is responsible for identifying and recommending IT best practices and standards regarding:

- Data, Applications, Software, Hardware, Integration
- Develop integrated lifecycle plans to identify which work is non-discretionary
- Recommend standards and lifecycles forward for review/debate/challenge at IT Governance Committee
- Identify, review and document exceptions to standards
- Information Security (note a subcommittee that may include representatives from Legal, HR, Clerks and IT).

ITS Innovation and Learning

**Workforce Competency**

As noted in the CTSP there is a need for IT staff to increase their knowledge and skills in the applications they support. This will translate into more usable systems and a higher utilization of all the features in each major application. In 2013 IT will undertake this initiative by focusing on three key recommendations.

- Create a consolidated roles and responsibilities matrix for the IT Department
- Define the training needs for staff and management to meet those roles
- Budget accordingly to ensure staff receive adequate training to become enablers of the business needs

**Advanced Technology Use**

In 2012 IT continued piloting several new mobile computing technologies like tablets and advanced smartphones. All major platforms have been considered including Blackberry 10, Apple, Android, and Window 8. However there is a need to invest more time and resources looking at all these new technologies and how they can be used to best meet the business requirements of the corporation.

In 2013 there will be a review of Social Networking as a business and communications tool. Implementation will be in accordance with Executive directives and the security risks will require assessment and mitigation. There will also be an initiative to develop a Mobile Computing Strategy in 2013 with an ensuing pilot in 2014.

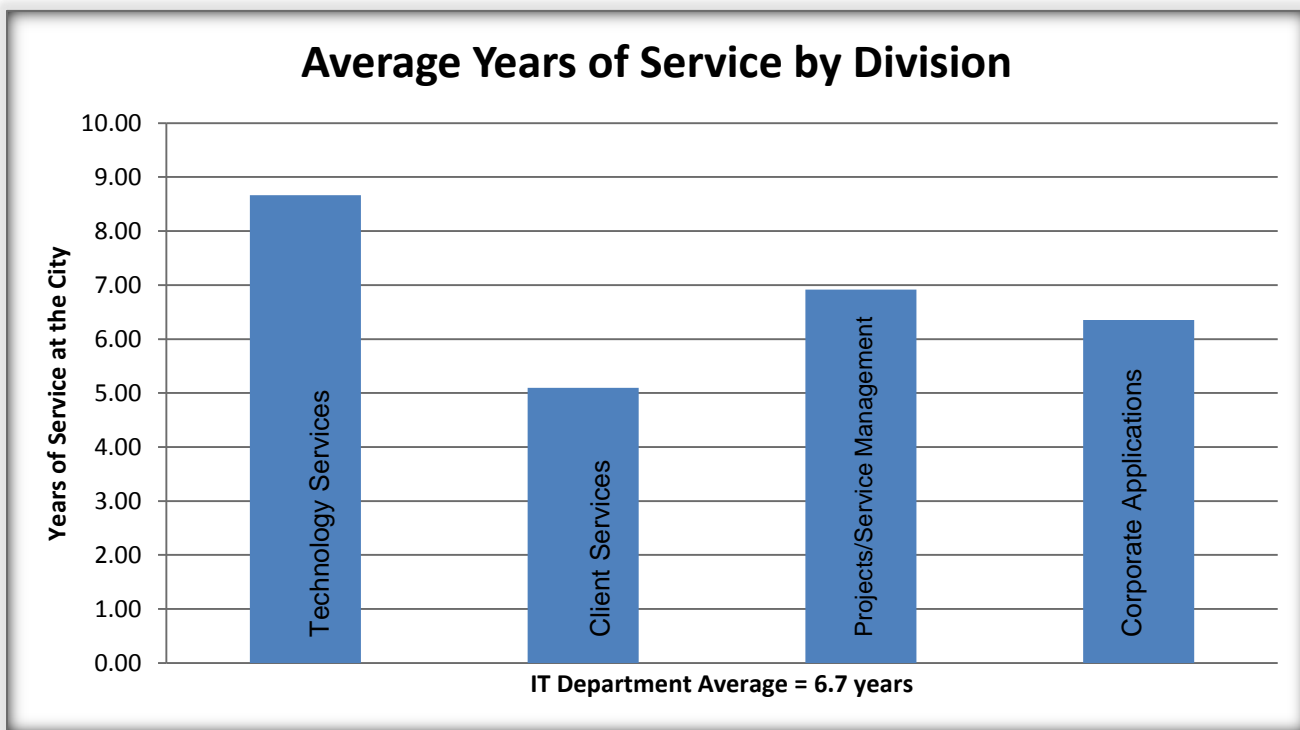
**Methodology Currency**

IT Management has identified six key methodologies that are critical to the success of the department. These include COBIT® for IT governance, ITIL® for service delivery, PMBoK® for project management, SDLC® (Systems Development Life Cycle) for applications management, CMMI® for IT workforce competency, and Six Sigma® for quality. 5 out of these 6 are at various stages of implementation.

In 2013 the IT Department will further integrate these methodologies into their respective areas. Adoption of COBIT®, a framework for IT Governance, will be introduced into the department with links to key staff in Finance.

**Employee Retention**

In 2012, the IT Department had 2 involuntary terminations and 1 resignation resulting in a turnover rate of 10.7%. This is higher than the Corporation’s turnover rate of 5%, and is rated the same as in 2011, (Yellow trending in a positive direction)



\*Source: Internal – IT Management

In 2013 the IT Department will continue to embrace three main areas that will enhance our ability to retain staff; Corporate Succession Planning, Alternative Work Arrangements, and empowerment of staff to make decisions.

**Divisional Analysis**

**Client Services Division ...where the customer meets IT**

**Mandate**

The Client Services Division’s mandate is to plan, implement, manage and maintain the corporate desktop, printing, telephone, and converged infrastructure to ensure that they meet the business needs of the corporation by:



- ❖ Providing Level 1, 2 and 3 technical support for all desktop, printing and telephony issues.
- ❖ Engineer and maintain the corporate distributed desktop architecture and mobile device fleet.
- ❖ Manage and maintain the corporate phone system.
- ❖ Providing a Technical Service Help Desk for the entire corporation.
- ❖ Implement convergence technologies involving access control, security camera systems, and building automation.

#### Key Accomplishments for 2012:

- ✓ 2499 Service Desk received and acted on more than requests 12,230 queries received over the phone and through email
- ✓ Resolved 7959 technical services assignments
- ✓ Replaced more than 225 computers to maintain equipment performance and reliability according to best practices for life cycle management
- ✓ Through the Joint Wireless Review Committee, created a business case for a \$1.6M project to replace the current Radio and AVL (Automatic Vehicle Location) system used in the City.
- ✓ Setup Backup Fire Dispatch Center at CRESC
- ✓ Increased functionality of the 911 dispatch system used by Fire by installing mobile data terminals in fire trucks and provided iPad's for fire inspectors to help improve response/inspection times.
- ✓ Installation of CCTV (Closed Circuit Television) system at Guelph Civic Museum and the new Transit terminal

### Technology Services Division....building and securing the IT infrastructure

#### Mandate

The Technology Services Division's mandate is to provide a reliable, secure, easily accessible, and high performance IT infrastructure to meet the business and service needs of the organization by:

- ❖ Designing quality network, server, and IT security systems that accommodate and protect the City's electronic information
- ❖ Deploying, maintaining, and replacing systems according to industry best practices for IT life cycle management
- ❖ Developing and implementing IT policies, procedures, and processes that safeguard the City's IT investments
- ❖ Supporting departmental and corporate technology initiatives through network integration and automation

#### Key Accomplishments in 2012

- ✓ Provided high-speed City owned fibre connections to the new Transit Terminal.
- ✓ Upgraded River Run wireless network to support wireless VoIP phones and public Internet access.
- ✓ Upgraded Sleeman Centre network to provide wireless access for Apple iPods running POS (Point of Sale) software.
- ✓ Upgraded Guelph Fire stations to provide wireless access for mobile data terminals and public Internet access.
- ✓ Upgraded Guelph EMS stations to provide wireless access for Patient Care application and public Internet access.
- ✓ Upgrade Solid Waste Resources with fibre connectivity to alarm panels to enhance monitoring and alerting.
- ✓ Virtualised 80% of servers in Internet facing environments to decrease recovery times.
- ✓ Increased overall server virtualization to greater than 50% to save power and cooling costs.
- ✓ Implemented Cisco Nexus virtual network switching into City Hall data centre to speed up server commissioning.
- ✓ Implemented TCP/IP Address Management to reduce and distribute administrative tasks.
- ✓ Prevented 800,000 SPAM messages from reaching user's email inboxes.
- ✓ Facilitated the transfer of 3.2 million messages that were external to the organization (received and sent)
- ✓ Managed a messaging system that transferred a total of 5.6 million messages (internal plus external).

## Corporate Applications Division....supporting the applications of the organization

### Mandate

The Corporate Applications Division is responsible for supporting the applications the corporation uses as a municipal services provider by:

- ❖ Providing application support for bookings, permits, licensing, on-line maps, and geospatial data
- ❖ Acting as a gateway between the City and external sources for geospatial, parcel, and ownership data
- ❖ Facilitate advisory groups, steering committees, and user groups in support of application governance

### Key Accomplishments in 2012

- ✓ Supported systems performed 171,040 point of sale transactions through the year
- ✓ There were 17,829 course registrations compiled within CLASS totalling 181,813 hours
- ✓ IT facilitated the processing of 2415 building permits, 2789 complaints, 47 site plans, 985 business license and 166 lottery applications
- ✓ IT facilitated 10,244 service requests, 27119 invoices, 18292 purchase orders, 11393 work orders, and 9,633 preventative maintenance requests in the Work Asset Management system
- ✓ IT submitted tracking of 546 new water meters in Amanda
- ✓ Continue to supply GIS structure/data for the Fire CAD and Parking Exemptions Systems
- ✓ Supported the Operations Forestry System for the maintenance of 10145 tree records, Road Patrol Database to track 2707 road defects and Signal System for the maintenance of 15772 sign records
- ✓ Performed over 2765 maintenance activities in the Geographic Information System
- ✓ Resolved 2400 support calls for all Corporate Applications (GIS, Amanda, Class)
- ✓ Supported the administration of 350 departmental datasets
- ✓ Obtained new full color 12cm Orthoimagery

## Projects and Services Management....bringing it all together

### Mandate

- ❖ **PMO** mandate is to develop and support project and program management which includes Governance, Financial, and Risk, Resource, Quality, and Scope management. The team is responsible for project prioritization, process improvement and strategic project planning with IT and city staff.
- ❖ **Business Systems** mandate is to develop and support JDE Financials, Kronos, and WAM users. The team is responsible for maintaining all business systems with IT and city staff.
- ❖ **Web Services** mandate is to develop and support [guelph.ca](http://guelph.ca) and social media properties such as Facebook, Twitter and YouTube. The work of the Web Services Team is to ensure appropriate use of social media and web technologies, and development of e-business strategies for leveraging organizational procedures and processes via the Internet/Intranet.

### Key Accomplishments in 2012

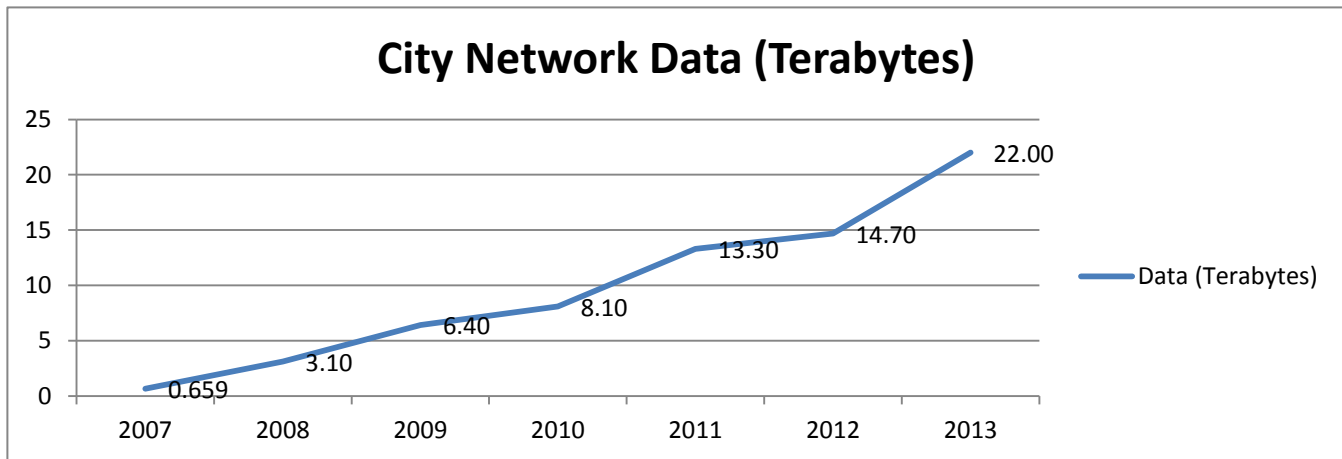
- ✓ Resource distribution for IT staff and projections ready for 2013 Q1 and Q2, which is used as key input for planning all projects including ITGC (Information Technology Governance Committee).
- ✓ Successful completion of year one to follow PMO processes, set to raise new (PR) Project Requests and BR (Business Requests). Success rate for BR is 85% in 2012 (BR process was introduced in 2012).
- ✓ PMO in progress to set up new processes (RCA (Risk Cost Analysis, lessons learned for every project closed, portfolio management using Eclipse) Process will be effective from Apr 1st, 2013.
- ✓ Projects and business requirements prioritized as per Prioritization Matrix set by PMO helps to plan resources and deliver on time. Priority score decides project/business request to work on.

- ✓ Eclipse PPM tool used to track all project and business requests. Plan to use Eclipse reports for Portfolio management to provide status to ITGC. Synergy to get best price and effective utilization of resources for projects that are similar and requested by different departments.
- ✓ JDE Business Unit Security – improved ERP financial business unit security model to align with current organization structure
- ✓ ePost Implementation – implemented electronic billing option for Guelph residents to receive Tax bills electronically
- ✓ Upgraded City of Guelph Tax software with property tax payments made through online banking
- ✓ Emergency contacts - provided an improved solution for retrieving staff contact information in emergency situations

## Trend Monitoring

IT has several trends that are tracked and reported through software utilities, the IT Help Desk system, IT Service Request Forms, and Project Management software. These are identified by an asterisk \* whereas other trends are obtained by abstract or intuitive means. Each trend will be analyzed and the infrastructure, services, processes, and financial impact will be addressed in the Corporate Technology Strategic Plan. The expected results will be to keep pace with the demands of the business by implementing solutions and process improvements in a timely manner.

- ❖ Networked data storage growth is rapidly increasing as indicated by the graph in the graph below. In 2012 we experience a 50% increase in raw network data growth.\*



Source: Internal Enterprise Backup System Report

- ❖ Mobile device support is steadily increasing as our fleet of Blackberrys, tablets, cell phones, and notebooks increases.\*
- ❖ Increased demand for BYOD (Bring Your Own Device) with access to email, calendars, and contacts.
- ❖ Gueph.ca website visits increased 18.5%, page views increased by 12.8% to 7.1 million, 324,000 visits from mobile devices up 177%\*
- ❖ City of Guelph Twitter followers have doubled, to over 15,000\*

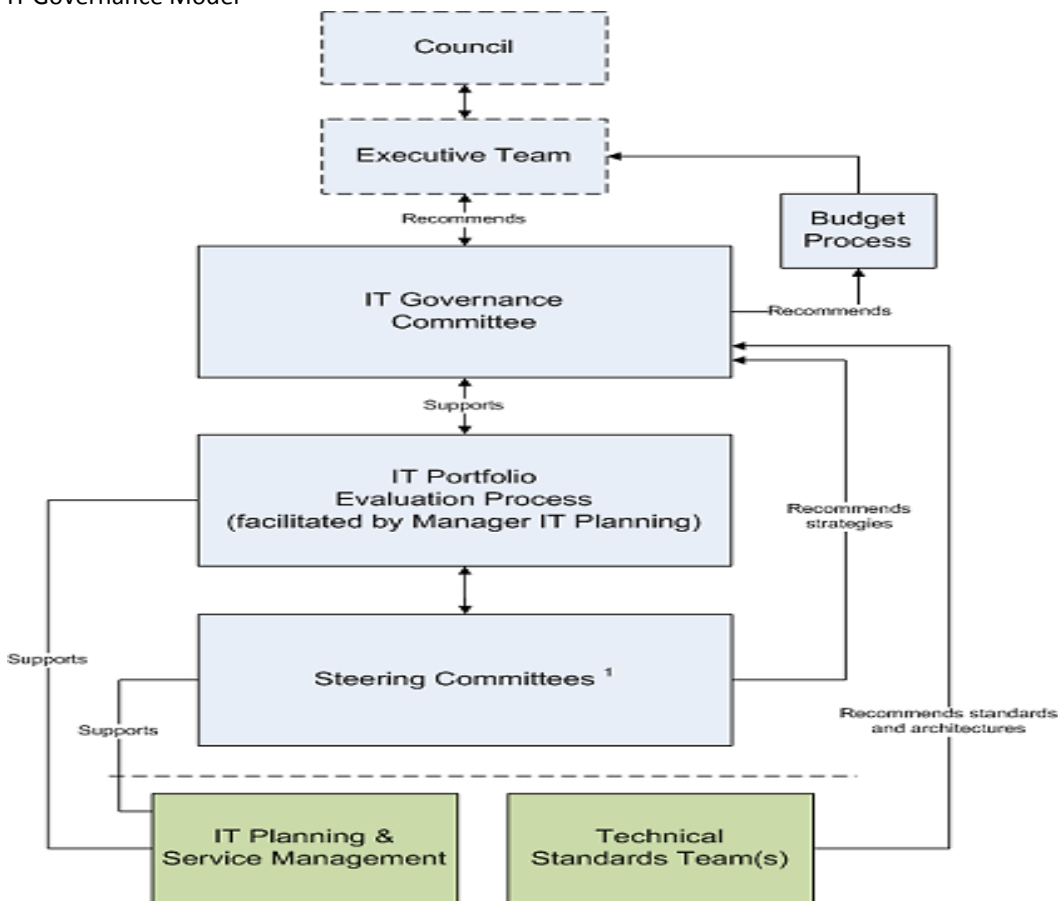
## Section 4: 2013 Looking Forward

### *CTSP (Corporate Technology Strategic Plan) – Setting our course in the best interest of the organization*

In 2013 we will see the roll-out of a detailed implementation plan that clearly shows timelines, costs, resources, requirements, impacts, and risks. It will also include clearly defined success criteria with the appropriate Key Performance Indicators, Key Goal indicators to be able to measure the success and progress against the plan. The first initiative will be to implement an IT Governance Framework whose roles include;

- ❖ Directs the implementation of the Corporate IT Strategy—coordinates departmental technology strategies.
- ❖ Provides oversight on major IT investments to ensure that they truly benefit the public and the City.
- ❖ Reviews and recommends policies and standards.
- ❖ Reviews business cases and prioritizes technology initiatives.
- ❖ Monitors service levels and service improvements.
- ❖ Tracks status of projects and removes roadblocks.
- ❖ Recommends the IT capital budget.
- ❖ Manages IT risk.

IT Governance Model



<sup>1</sup> Steering Committees for major corporate business systems such as Amanda, ERP, GIS, WAM, Web and also topic based working groups, such as Mobile Strategy or Information Management.

List of Deliverables from Corporate Technology Strategic Plan for 2013

- ✚ Establish IT Governance framework
- ✚ Re-tool and re-organize the IT department
- ✚ Enhance IT services like the Help Desk
- ✚ Initiate HR/Payroll and WAM renewal/replacement projects
- ✚ Implement Kronos Time and Attendance modules
- ✚ Develop plans for Information Management
- ✚ Create Open Government plan and strategy
- ✚ Develop a corporate strategy for mobile computing
- ✚ Create a data warehouse implementation plan
- ✚ Implement new collaboration tools like desktop sharing and video conferencing
- ✚ Develop GIS (Geographical Information System) implementation plan

***Change Management – A discipline for keeping the IT environment stable***

ITIL Change Management aims to control the lifecycle of all technology changes. The primary objective of is to enable beneficial changes to be made, with minimum disruption to IT service. IT plans to implement the first phase of change management in 2013.

The ITIL Change Control/Management process recognizes that reliability and business continuity are crucial for survival and success of the enterprise adding value by;

- ✓ Responding and prioritizing the change requests
- ✓ Executing the requests within agreed time-frames to meet the service level objectives and expectations
- ✓ Enabling the enterprise to meet regulatory, contractual and governance change-requirements
- ✓ Assessing the risks attached with the transition of services
- ✓ Monitoring changes through the service life cycle and tracking them down to the level of assets

***E-government – Putting municipal services on-line***

Using accurate information to make decisions continues to be a cornerstone in municipal services. The City of Guelph has a strategic advantage in leveraging its systems and solution footprint to develop e-government presence. This will allow business, residents and industry to utilize information in making decision on investment in Guelph, moving to Guelph as a resident or travelling to Guelph for University education. Recently, there have been a number of white papers and initiatives on e-government. The IT Department is keeping a pulse on these initiatives to understanding and conceptually develop e-government services using contemporary technology. The CTSP includes Open Government Data/e-Government as one of the four pillars its framework. However this is not contemplated until Phase II of the CTSP as Phase I is focused first on modernizing the City’s major business systems.

***Business Continuity Plan (BCP) – Defining risks and preparing for partial or complete service downtime***

The current BCP will be updated in 2013 to reflect the many changes our computing environment has undergone in the past years. The Annual IT Audit report makes the recommendation to ensure the business can withstand natural or man-made disasters. Business units will need to be involved to identify the importance and order in which services are brought back on line. This exercise is commonly referred to as BIA (Business Impact Assessment). The plan will then roll up to the Corporate Emergency Management Plan and is key as most City services depend on the restoration of IT infrastructure to be restored in a timely fashion before their continuity plan takes effect.

***Email and File Archiving – Moving obsolete emails out of our mailboxes and grooming the file system***

Email Archiving is the intelligent management of transitory data. Beginning in 2013, IT will implement a new system that will discard obsolete messages, attachments, and calendar items in our messaging system to a secondary storage system. IT will seek approval for a corporate policy on email data retention. The infrastructure will be implemented and then the parameters of the policy will be applied to our existing databases.

***Content Indexing and Search – Finding Information in a timely fashion***

The organization has a tremendous amount of information stored in our email and file systems. Our FOI (Freedom of Information), litigation, and compliance requests have been steadily increasing and our ability to find information remains inadequate. IT plans to implement the indexing of all email and file system information. An interface for conducting searches will be provided to key staff that will greatly reduce our turnaround time for locating and providing the information to the requestor. This will be integrated with our email/file archiving system which will allow us to place a “Legal Hold” on key emails and documents, preventing them from accidental deletion. This system can be further integrated with our future EDMS (Electronic Document Management System) to gain a holistic view into all data contained on our network.

***Cloud Computing – the use of computing resources that are delivered as a service over the Internet***

IT plans to make more use of Cloud technology in 2013. There are many business and technology requests that our Information Technology department simply cannot accommodate without a large financial investment and additional support staff. By accessing pre-built systems that are outside of our City network, we can provide a timelier turnaround for business solutions. Cloud solutions that will be implemented in 2013 include “Bulk Email” services to accommodate the Community Services Program Registration, Eclipse Project and Portfolio Management application, Survey services, and “Collaboration” services like SharePoint to enable easily accessible documentation for the Emergency Management and Business Continuity teams. More initiatives may be introduced after deeper review of the CTSP.

***Joint Wireless Phase 1 –***

As a part of the 2013 budget process, Council approved approximately \$1.6M in funding for Phase 1 recommendations of the Joint Wireless Review Committee. Phase 1 activities include installation of a new 2-Way radio as well as a new AVL and AVL Mapping software system. Some of the tasks will be to create a detailed technical design for these systems, writing an RFP to acquire equipment and software, acquiring radio licenses from Industry Canada, conducting critical design review with equipment vendors, and deployment of the solution. Phase 1 is scheduled for completion in 2014. The operating cost savings of \$101,900 per year will begin in 2015. From 2015-2024 these savings will be used to repay the Hydro reserve. Beginning in 2014 the yearly operating budget allocation can be reduced by \$101,900.