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INFORMATION TECHNOLOGY SERVICES ANNUAL REPORT - 2010

The Finance and Administration Committee recommends the adoption of the recommendation contained in the following report dated January 18, 2011, from the Commissioner of Finance.

1. RECOMMENDATION

It is recommended that this report be received for information.

2. PURPOSE

This report informs Regional Council about the Region's 2010 activities to sustain a secure, functional and reliable information technology infrastructure that facilitates the delivery of Regional services.

3. BACKGROUND

Regional service delivery relies on information technology. The Information Technology Services (ITS) branch works closely with the departments to support their efforts to provide effective public service and maintain efficient operations through the innovative use of the Region's information technology. Through on-going consultation with departments, a portfolio of corporate initiatives has been established. These initiatives are reviewed, prioritized and reported on as an update to the York Region Information Technology Strategic Plan. In addition to that update, this report provides the highlights of ITS's activities undertaken during 2010.

The role the ITS branch plays

ITS is responsible for the Region's data centers; the wired and wireless data and voice communication networks in Regional buildings and facilities as well as the external fibre links connecting these buildings; the data processing and data storage equipment; staff desktop, laptop and hand held devices; the Region's Internet and Intranet sites together with the software used on all of this equipment. As well, ITS staff collaborate with the Regional Clerk's Office, with Legal Services and with Audit Services to implement security mechanisms to protect Regional data and secure Regional computing facilities.

The role the departments play

Departments, working with ITS, identify opportunities to use information technology to enable faster, better and less expensive delivery of Regional services. Information technology support is provided through a complement of Business Support Analysts

assigned to departments to collaborate with departmental staff and to help implement local information technology projects that enhance departmental operations.

4. ANALYSIS AND OPTIONS

2010 was another year of steady progress in maintaining and improving the information technology within the Region. The ITS branch staff together with departments, worked on the areas of the Region's information technology infrastructure described below: Early in 2010 the staff of the ITS branch moved from the Administrative Centre because of space constraints. ITS offices are now located at the Town of Newmarket office building at 395 Mulock Drive.

In 2010 ITS implemented a number of operational improvements

A significant number of ITS staff are involved in carrying out many day-to-day operational activities. To highlight a few, during 2010 ITS was busy with:

Keeping technology policies up-to-date: at the beginning of 2010, ITS conducted a review and inventory of the IT Policies and Procedures. To protect the Region and provide guidance to staff, a number of policy update projects were launched. As a result, new security policies were applied. As well, a project examining the pros and cons of implementing social networking tools at the Region was conducted. Working with Corporate Communications, recommendations on implementing social media were made to the Senior Management Team.

Making the ITS purchasing process robust: working closely with Risk Management, Legal and Supply and Services, ITS revised its quotation and RFP templates. Processes are in place for vendors providing technology services to maintain proper insurance coverage and worker compensation board insurance appropriate to the services they provide.

Managing technology assets to provincial PSAB requirements: one of our focuses this year was to ensure we had the right resources to manage the large volume of assets managed by the ITS Branch. We have trained several ITS staff on how to comply with the provincial PSAB (Public Sector Accounting Board) asset valuation requirements.

Delivering technology training to support e-workers: ITS has equipped a class room at the Tannery and we provide information technology skills courses to Regional staff. The courses are offered through the Region's Corporate Learning Registration System and cover a variety of topics to improve staff productivity and efficiency including: Microsoft Word, Excel, and Access, Adobe Acrobat, Blackberry, Illustrator, InDesign and eDOCs. In 2010, 715 Regional staff attended technical skills development courses.

ITS also developed a Business Technology Program that provides Regional employees who are interested in increasing their technical knowledge, with the opportunity to work towards a proficiency certificate that is recognized within our organization. This

program has been customized to meet the needs of management and employees along with the requirements of Corporate Learning's Administrative Professional Certificate program. ITS works with the Corporate Learning branch to fulfill Regional information technology training needs as well as the information technology training needs of the Administrative Professional program.

A pilot of the Business Technology program was launched in May 2010 and has 57 employees enrolled with 28 moving forward towards their proficiency certificate.

As part of the program, staff assess their current technology skill level and are then provided with the resources to create a learning path that will increase their technology proficiency. Once a learning path is defined, employees are guided to the appropriate opportunities in order to reach their technical knowledge potential and proficiency certificate.

ITS FOCUSES ON KEEPING THE COMPUTING FACILITIES HEALTHY, RESPONSIVE AND COST EFFECTIVE

Arranging for wireless networking at better prices

During 2010, our cellular communications contracts with Bell, Rogers and Telus became eligible for renewal. ITS evaluated renewal options including the opportunity to invoke the "broader public sector" pricing available under provincial Vendor of Record (VOR) agreements. The provincial rates were "most favoured customer" rates and were significantly lower than what the Region was currently being charged. In December, ITS arranged for the renewal of cellular services contracts with Bell, Rogers and Telus at the more favourable provincial rates.

Equipping new staff – refreshing the technology used by existing staff

Since the Region no longer leases PC equipment, the length of time we keep desktop and laptop PCs has been extended to a minimum of 4 years. The volumes in the replacement program vary annually depending on the life and useful life remaining of the PC's and peripherals. Table 1 provides a summary of the deployments for 2010.

Table 1
Deployments

January – December 2010	
Desktop PC's	118
Laptops	125
Tablets	16
Monitors	237
Printers	110
Printer Accessories	16
Total Equipment Deployed	622

ITS service desk metrics

During 2010, the ITS Service Desk responded to over 22,000 service request calls. As illustrated in Table 2, this is an increase of 23% over the 2009 requests for service.

In analyzing call volume trends, the increase in calls seemed to be due to some minor issues that arose during the eDOCS software upgrades; to a few start-up issues associated with the Cisco IP phone roll outs and to a computer virus outbreak in April which was quickly contained.

Despite the increase in calls, ITS Business Support Analysts responded to all of these service requests. In 2011, ITS staff will review the trend to determine if there is a need to augment the ITS Service Desk staff during peak calling periods so that requests for ITS services and support can continue to be handled promptly.

Table 2
Service Calls Handled

Year	Calls Handled	Increase from Previous Year
2008	14,771	
2009	18,434	
2010	22,605	23%

Cutting costs – providing better data processing services

ITS staff continually look for opportunities to eliminate waste and reduce costs while maintaining a high quality service for the departments. During 2010, negotiations with our major vendors resulted in substantial cost savings in the on-going supply of essential technology equipment and technology services, including:

- Cost reductions for the monthly fees for fibre optic communications lines from Bell that connect Region sites to our data centres and further reductions for the associated Bell monitoring and management services fees.
- Cost reductions for the monthly Bell fees for communications lines that connect the telephone equipment at Regional sites to the Bell public telephone system.
- Cost reductions for cellular communications services from Bell, Rogers and Telus as mentioned above.
- Through negotiations with Microsoft, an Enterprise Agreement that allows the Region to upgrade to the latest Microsoft operating system – Windows 7 and to install the latest version of the Microsoft office software suite – Office 2010; Exchange 2010 and Office Communicator System (OCS) at the best rates we've seen in the marketplace. The new and upgraded software tools are expected to improve staff effectiveness through furthering employee self-service, automation of workflow and digital collaboration. Microsoft is offering staff the opportunity to

run a copy of the Microsoft Office 2010 software suite on their home computers for a nominal processing and shipping fee. Over 600 Region staff have already taken advantage of this opportunity.

In summary, during 2010, ITS staff negotiated agreements that provide operating budget savings in excess of \$700,000 annually for data and telephone communication lines from Bell. The Region's cellular communication agreements with Bell, Rogers and Telus were renewed under the Province of Ontario's contract thus achieving volume privacy discounts greater than we could have achieved on our own. These rate reductions will provide additional monthly cellular communication savings to Departments based on the level of cell phone and Blackberry use.

ITS implements superior information technologies for regional staff

ITS leads corporate technology projects that sustain and enhance the Region's computing infrastructure. During 2010 ITS continued a number of technology initiatives that were started in previous years. Prominent among these are the following:

Server based computing – boosting Citrix performance

Server based computing (Citrix) is a better, more secure way for mobile workers to access the Region's data processing environment. It is also a faster way to restore data processing should a disaster event occur. Citrix provides for quicker deployment of technology in response to a community emergency such as a pandemic and it is more energy efficient therefore contributing to the Region's green strategy.

The use of Citrix is growing at the Region and as a result some performance issues were experienced. These issues were resolved by moving all Citrix users to a new Citrix data processing environment. To prepare for a disaster event, ITS staff have added Citrix applications in the Disaster Recovery environment and have built a Citrix development environment to facilitate further Citrix system improvements. To improve Citrix network response time, seven Regional remote sites were upgraded from 10Mbps (megabytes per second) to 100Mbps network data transmission speed.

Enhancing telecommunications systems – the converged network

In 2010 we achieved a major milestone in the upgrade of the telecommunications system to Voice over Internet Protocol (VoIP). A dedicated project team successfully completed this project six months early with a final 1,000 phone implementation at a number of sites including the South Service Centre. As well, the eleven Regional call centres were converted to Cisco's Unified Call Centre Express (UCCx) call centre management software.

The York Region information technology strategic plan initiatives are moving forward

In 2010, a governance process was introduced to stream-line the development of the portfolio of corporate initiatives contained in the York Region Information Technology Strategy. This process involved a collaborative effort across the business units to provide corporate direction to the following priorities:

- o Asset Lifecycle Management
- o Customer Relationship Management
- o Business Intelligence
- o Mobile Computing
- o Enterprise Business Systems
- o Information Management
- o Portal (Internet based services)

In the Asset Lifecycle Management Program, the program completed a high-level strategy and project roadmap that will assist in guiding business and technology projects over the next 3 to 5 years. In addition, the Fleet Management System project completed roll outs to York Region Transit, Emergency Medical Services and York Regional Police.

The Business Intelligence Program completed Phase I development of a York Region Transit (YRT) Data Warehouse, and began a new project to develop a robust data repository for corporate financial and human resources information. The program also initiated pilot projects for YRT and for services to deploy the Microsoft business intelligence software to provide advanced reporting and dashboards.

The Enterprise Business Systems (EBS) program completed the roll out of a new corporate Learning Management System within the PeopleSoft Enterprise Resource Planning System, to administer employee training and development as well as certification tracking and licensing. A project to implement Position Management was initiated and will deploy enhanced position controls and organizational charting and workflow in 2011. A pilot deployment of PeopleSoft Project Costing was completed to support the department in the overall asset management and PSAB (Public Sector Accounting Board) reporting. The EBS program also initiated a high-level review of corporate processes to identify and prioritize enhancement projects to be executed in 2011.

The Information Management Program focused on the continued deployment of the Open Text eDOCS solution across the organization. In addition, two pilot projects in the areas of email management and archiving were initiated.

The Customer Relationship Management and Mobile Computing Programs were chartered and initial work was completed to define the scope of services to be delivered. These initiatives will begin in 2011.

The Joint Portal Program, with the Town of Markham is described in section 4.8.

Reducing risk by improving the Technology Disaster Recovery Plan

To support the Region's plans for disaster recovery, the ITS Business Impact Analysis (BIA) process has been integrated with the ITS change management process and the ITS application development lifecycle management processes. With this integration, a

business impact analysis for Regional data processing systems will now be performed on an ongoing basis as opposed to a “one time” exercise.

ITS staff have developed an Application Tracker tool to help automate the BIA processes. This automation helps assure consistency between the systems running in the Region’s data centres and the systems residing at the Disaster Recovery site. At this time, all critical corporate and departmental applications, with their respective Recovery Time Objectives/Recovery Point Objectives have been identified and organized to facilitate the systems replication process.

As an additional risk mitigation strategy, in 2010, ITS engaged a consultant to conduct an independent assessment of the ITS Disaster Recovery processes. This engagement involved interviews, questionnaires, and several meetings with departments to review the potential for threats and vulnerabilities to the information technology environment and the Region’s ability to recover from a disaster event.

As a result of this study, the ITS risk management group is finalizing a further risk mitigation action plan incorporating the consultant’s recommended controls and strategies. These further improvements are based on the ISO27000 information security management certification framework and will bring the overall risk exposure to below the minimum acceptable level established with the departments.

Updating the security plan to protect the region’s network and computing environment

The Region’s IT Security Plan has been updated and several of the milestones of the plan have been completed. Examples include: WEB vulnerability assessment, completion and implementation of the Intrusion Detection and Intrusion Prevention systems, content filtering systems upgrades, SPAM filtering implementation, detailed security infrastructure monitoring, and laptop encryption standards development and implementation to protect the privacy of Health data.

In cooperation with the Office of the Regional Clerk, ITS engaged Bell Canada to develop an information privacy strategy for the Region. The recommendations of the strategy were approved by the Senior Management Team.

In 2011, security projects include: updated active directory design for access and identity management, updated security policies recommendation, a Security Awareness Program, an Access and Identity Management solution, a wireless security strategy, Network Access Control (NAC) enhancements, a consolidated security scorecard, and additional incident response policies and procedures.

Building a York Telecom Network (YTN)

ITS continues to plan and implement a “Region owned” fibre network at selected locations to provide lower cost and higher speed network data transmission between Regional offices, eliminating some monthly charges from external suppliers.

The Newmarket “loop” design and construction tender was awarded in the second quarter of 2010 and construction is 75% complete to date. The design for a link to the York

Regional Police facility in Aurora is complete and network construction will start in 2011. The design for of a link to the new EMS building on Bales Drive is well underway with network construction planned to begin in 2011.

Augmenting the regional enterprise technology architecture

In 2010, the enterprise technology architecture plan was advanced through a network architecture assessment, a midrange computer platform analysis, the creation of business modelling architectural toolsets and the establishment of architecture standards for the development of WEB sites.

The joint portal – phased delivery

In 2009, York Region and the Town of Markham initiated Phase 0 of a Joint Portal Project. IBM was retained to develop the Portal Program Road Map, the technical infrastructure requirements, and the scope for Phase I functionality of the Portal Program. A Steering Committee was established along with a governance framework. A consultant was selected to develop and deliver the Phase I functionality for a launch of a York Region Employee Portal by the end of 2010, and Markham's Constituent Portal shortly afterwards. A multi-year portal infrastructure hosting arrangement was implemented to house the portal computing equipment.

Phase I was implemented in November 2010 with a partial launch of the Region's Employee Portal. The full launch will occur in late January 2011. During 2011, Phase II will enhance the Employee Portal and create a Constituent Portal for the Region.

Developing policies for Web 2.0 social media and social networking activities

York Region has been investigating social media since 2009. Working with Corporate Communications, we began our studies in September 2009 with a survey to gauge employee awareness and interest followed by enquiries to area municipalities concerning their plans for social networking.

A presentation of the findings was made to the CTRC (Corporate Technology Review Committee) in January 2010. From that meeting, a Community of Interest Group was established to work with a consultant to identify the pros and cons of implementing social media. The consulting firm, Non-Linear Creations' report in July 2010 identified the opportunities and threats associated with moving forward with social media along with a framework for Regional social media policies and guidelines. This report was presented to CTRC with a further presentation and workshop with CTRC in September where the findings were reviewed and next steps identified.

The final report and recommendations on social media were presented to Senior Management by Corporate Communications in December. Senior Management authorized the development of the draft social media policy to be presented at the March 2011 Senior Management Team meeting.

5. FINANCIAL IMPLICATIONS

There are no financial implications from this report. Operation and project activity impacts are reflected in the 2010 ITS departmental budgets in the amounts of \$17.7 million for operating and \$18.9 million for capital.

6. LOCAL MUNICIPAL IMPACT

Throughout 2010, ITS staff met on a regular basis through the I.T. Directors and Chief Information Officers' Forums with staff of the local municipalities to share information and ideas as well as to collaborate on projects.

7. CONCLUSION

There are numerous opportunities to invest in information technology. The ITS branch plays a key role in evaluating technology opportunities, implementing technologies needed by departments and approved by Council and in operating and maintaining the Region's information technology infrastructure for use by Regional staff and, in turn, to serve the residents of York Region.

For more information on this report, please contact Louis Shallal, Director, Information Technology Services (905) 830-4444 ext. 1752.

The Senior Management Group has reviewed this report.