



Information Technology Department 2011-2012 Annual Report

Technology

Web Development

City of Quincy
Welcome to the official City of Quincy. Basic web site and thanks for visiting! Our site provides citizens, businesses, and visitors easy access to a wealth of information and services.

IT - Working for the Future...

Systems Management

Information Security

*Prepared by:
Jim Murphy
Director of Information Technology*



Introduction

This past year was interesting as the Department of Information Technology continued to find innovative ways to continue moving forward with technology while lowering our overall costs.

Some areas the Department of Information Technology investigated in order to cut costs and while continuing to implement technology were: Desktop and Server Virtualization, Mobile Technology, renegotiating maintenance contracts, looking for lower cost technologies that still offer the security and reliability needed, creating our own in-house training seminars for employees, looking into software applications that will create employee efficiencies while providing a short payback period.

Background Information

The Department of Information Technology (DoIT) provides technology leadership for the City of Quincy, including governance, architecture, resources, and expertise in deploying modern information technologies to improve government efficiency.

DoIT is responsible for much of the technical infrastructure that makes city government run; telephones, radios, computer networks, desktop and server support, data center, web site, building and information security, INET and the municipal cable television channel.

DoIT consists of a Director, Senior Network Administrator, System/GIS Analyst, and two computer technicians.

DoIT supports all city entities including public safety, Utilities, Central Services and Quincy Municipal Airport. DoIT also supports all computer and network services for the Quincy Public Library. DoIT also assists in some of the computer technologies used by the Senior Center and Parochial Schools.



Fundamental Principles of Information Technology

In 1996, the City of Quincy recognized that Information Technology was serving an increasingly important role in the efficient and quality delivery of services to departments and citizens. Since that time, DoIT has developed and refined fundamental processes that help guide all Information Technology projects and processes.

1. Ultimate goal is to provide city employees, departments and citizens with timely, convenient access to appropriate information and services through the use of technology.
2. Business needs drive information technology solutions. Technology benefits of IT are leveraged to maximize the productivity of city employees and improve customer service.
3. Manage Information Technology as an investment
 - *Annually allocate funds sufficient to replace systems and equipment before their end-of-life.*
 - *Look for cost-effective approaches to improve “legacy systems”. This approach will help extend investments and system utility.*
 - *Re-evaluate technology yearly in order to provide the most efficient, cost-effective solution for the city’s environment.*
 - *Invest in education and training to ensure the technical staff understand and can apply current and future technologies.*
4. Ensure all technology solutions and policies adhere to federal, state and local security regulations and mandates. Some of these regulations include the Federal Information Security Management Act (FISMA), HIPPA, Privacy Act, Red Flag Rule, NIST security guidelines, Physical Security for all city facilities, and employee identify theft regulations. DoIT adheres to this basic information security guideline - ensure the confidentiality, integrity and availability of all electronic data.
5. Implement modern, but proven, technologies. DoIT will stay abreast of emerging trends through ongoing evaluations, seminars, and conferences. New technologies will be evaluated in order to test its business and cost benefits before adoption.
6. Provide a solid technology infrastructure as the fundamental building block of the City’s IT architecture to support reliability, performance and security of the City’s information assets. Manage and maintain the City’s network as an essential communications channel connecting people to information via modern server platforms and workstations.



-
7. Centralize all technology support within DoIT in order to reduce costs and eliminate the need for city departments to hire or duplicate technology support staff. This centralized approach enhances organization efficiency by eliminating potential for islands of information, promoting opportunity for data sharing between applications and departments, ensuring all technology solutions have the potential to be used and/or communicated between departments and solutions, and eliminate duplication of technology solutions and costs.

2011-2012 Highlights

OPERATIONS AND SUPPORT

Data Networks and Telephones Services

DoIT continues to support INET while looking at more cost effective solutions.

Under the city's franchise agreement, Comcast created a separate communications network that links all government and educational institutions together. Comcast spent \$475,000 to construct this separate network during their upgrades several years ago. The INET provides a secure, high-speed communication channel between the various institutions. The biggest benefit of the INET is the ability to provide free, high-speed Internet access to all public and private schools, including the Quincy Public Library, Quincy University, and the Senior Center.

While Comcast provides maintenance on the cable system, the city has continued to upgrade and expand the communication equipment in order to provide the best learning opportunities for our children. The INET has also allowed the Quincy Public Library and Senior Center to expand the various services offered to the residents of Quincy and Adams County.

This infrastructure also plays a critical role in public safety. The City of Quincy's Fire & Police Departments, Adams County Sheriff & EMS and Tri-Township Fire use this infrastructure to communicate with the Adams County 911 Center.

Over the past year, DoIT has investigated other possible solutions that would provide high speed communications between the various city facilities. By partnering with local providers, DoIT see limitless potential in communications which will help city departments operate more efficiently in their daily operations.



DoIT handles all telecommunications requests and support problems for the various City departments. Currently, the City of Quincy has five telephone systems, two PRIME telecommunication circuits, approx. 70 Centrex lines, 200+ Wireless devices, and pagers. Also, the city has numerous special circuits that help control the flow of water and sewer gates to data communications between departments.

Long Distance telephone charges have come along way since 2000 when we spent over \$7,000 to make calls. This past year we spent a little over \$1,300. The invention of email has definitely changed the way businesses and employees communicate.

Lastly, the cellular telephone business has changed drastically since 2002. The various providers have so many different options, plans, and equipment it makes anyone's head spin. As with other advances in technology, cell phones have become an intricate part of the job for our city employees. DoIT continues to work with Sprint to implement cost effective solutions which allow city employees access to more data and services while in the field.

Computing Services

On a daily basis, DoIT supports over 400 personal computers, 500 users, 10 network servers, an IBM AS/400 mini-mainframe, and 85 printers. DoIT also supports over 200 different software packages that are used by the various departments.

Over this past year, DoIT started the process of implementing desktop virtualization strategies in hopes to lower support costs and allow DoIT staff members to concentrate on implementing more cost saving strategies. While this project is still in the infancy stages, we have already noticed a decrease in support issues resulting in more time to identify potential efficiency opportunities throughout the city.

DoIT will continue to work on a Disaster Recovery plan relating to technology. Over the past couple of years, we have talked with our technology partners in order to put plans in place in case a natural disaster hits the City of Quincy. Our goal is to have a fully functional backup data center in the near future.

Outside of the daily assignments each DoIT staff member performs, the staff answered 3,000+ supports calls in 2011-2012. These supports calls can range from a 5 minute conversation on how to perform a task in Microsoft Word to a six month long project creating a new database application for various Departments.



This past year, the DoIT staff created training programs in order to help all city employees develop the skills necessary to work with products like Microsoft Office, Apple iPads, and HTE Financial & Utility Billing software.

Public Safety

DoIT continues to support and expand the Adams County Wireless Public Safety Infrastructure. This infrastructure is used by Quincy Police, Quincy Fire, Adams County 911, Adams County Sheriff, and Tri-Township Fire Department. Mainly, this infrastructure allows each of these agencies secure access to critical information and faster intra-governmental communications during a natural disaster, public safety event, or hazardous material spill.

We continue to work with QPD to expand the functionality and data officers can retrieve in their vehicles. This allows them to access critical data from each vehicle enabling them to spend more time on the streets of Quincy. The DoIT has help with implementing new technologies like voice recognition software, digital video cameras in the vehicles and many other department specific software packages.

For the Fire Department, we continue to look into ways to provide them with faster access to their fire reporting software and general data files. DoIT has also been working with QFD in order to provide more timely access to GIS data during emergency situations.

INFORMATION SECURITY

Information Security continues to be the number one issue for any Technology Department. Every conference or trade magazine always speaks about the dangers lurking around every corner of a computer system. With so many viruses, spyware, malware, and hackers trying to gain access to computer systems, it's no wonder why we hear about companies having personal data stolen daily. Our security software tracks over 400 security events a day. These events range from some one trying to gain access to city computer resources, to viruses to dangerous software trying to steal confidential data.

As in any industry, the biggest threat has always come from within an organization. The Criminal Justice Information Service (CJIS) Security Policy is very specific on how the City must handle security confidential information. The Information Technology Department applies these same principals to all city data to ensure the confidentiality, integrity and access of all city data. The city is also mandated to secure all personal information about our employees, like social security number, birth date, medical



information, drug testing information, personal records, etc. We are also mandated to secure information we obtain from our residents for Utility accounts, credit card payments, housing loan information, and bank accounts.

The Department of Justice and the Illinois State Police mandate certain guidelines we must follow in order to secure any access to criminal information obtained electronically or on paper. Each year the State of Illinois performs an audit in order to make sure we are properly securing our computer systems from intentional or accidental access to the FBI criminal information database. The Department of Justice continually issues new guidelines and requirements we must follow in order to have our computer systems connected to the criminal information database. We are consistently reviewing these guidelines and will take the necessary steps in order for us to pass our audit each year. Over the next year, DoIT staff will be investigating ways to adhere to the CJIS advance authentication mandate required for any individual seeking access to FBI or DOJ information.

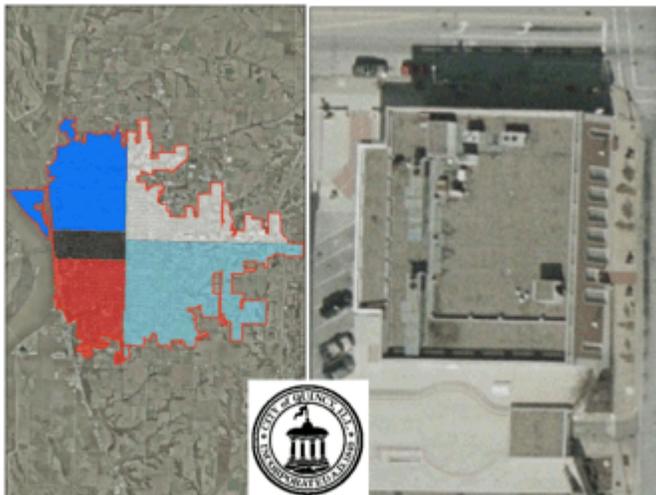
Each year, several new federal security guidelines have required the city to review information security policies and create new ones. For example, the DoIT worked with our Utilities Department to create a policy so we stayed in compliance with the Federal "Red Flag" identify theft regulation.

In conjunction with city administrators, we are reviewing several policies in order to protect the city from potential litigation concerning information security.

Other DoIT Services

GEOGRAPHIC INFORMATION SYSTEMS (GIS)

The DoIT has the responsibility of handling the daily GIS functions, while brainstorming ways to increase usage and functionality for all city departments.



Our goal over the past year was to start developing the GIS system into a fully functional system that will integrate various city database information in order to provide up to date information on city parcels, utilities, roads, buildings, crime statistics, city liens, infrastructure repairs, and much more.



DoIT has been very pleased with the progress that has been made this past year. DoIT continues to investigate ways to help city employees gain access to GIS data in field in hopes of saving city resources and labor hours. Over the next year, DoIT will be working with our GIS software vendor to create innovative ways of allowing city employees and the general public to gain access to the necessary GIS information by utilizing cloud technology.

COQHELP

The city's intranet web site provides city employees with up-to-date information and access to forms, city policies, health insurance information, etc. This web site will continue to grow and expand based on the suggestions from city employees.

QUINCYIL.GOV

DoIT continues to work with city departments in order to provide up-to-date city information for our residents and potential visitors. DoIT continues to tweak the city's web site in order to publish more information that helps keep our residents informed about city news like street closures, airline schedules, job openings, new residential programs, weather and much more.

QUINCY 15

DoIT continues to expand the information seen on Quincy 15. DoIT staff, working with city departments and specific community groups, provided more city information and governmental programming to our residents.

Quincy 15 is the government-access cable television channel for Quincy and is available to all Comcast Cable subscribers on channel 15. DoIT broadcasts various programming from local, state, and federal governments 24 hours a day. DoIT staff broadcast the weekly city council meetings live and rebroadcast the meetings every Tuesday and Wednesday. Every day channel 15 rebroadcasts State of Illinois legislative information provided by the Illinois Channel (www.illinoischannel.org).

Every year DoIT tapes and broadcasts the State of the City speech given by our Mayor. Quincy 15 presents informational videos relating to children safety, city commissions and special governmental events. When videos are not playing on Quincy 15, residents can keep up on the latest governmental news and information by watching the video Bulletin Board.



OUTSIDE ENTITIES

As mentioned earlier, DoIT supports the INET for numerous organizations. What you may not know, DoIT also supports email operations for the Senior Center. The Quincy Senior Center pays the City of Quincy a monthly user fee for email and Internet services provided by DoIT.

This cooperation has provided all of the organizations located within the Senior Center a low cost email solution, while providing DoIT with an extra source of revenue.

DoIT also provides the Quincy Public Library with complete technology services. DoIT staff provides all desktop support for the Library's staff and public. The Library has roughly 80 computers and 45 printers. The DoIT staff also helps the Library with their roughly 100 software packages. DoIT also provides all computer networking, email, Internet, and HTE Financial support.

Over the past year, the DoIT staff has worked with the Library on several major projects like upgrading the catalog system, revamping the online newspaper archiving system, upgrading public computer security software, and replacing numerous Library computer systems. Over the next year, the DoIT staff will be working with the Library on implementing new and existing technology under the Library's renovation project.

In 2011-2012, DoIT staff members billed \$15,000+ on Library related support issues and looks forward to continuing our relationship with these outside entities in order to provide them with lower cost solutions that benefit the residents of Quincy.

FINANCIAL

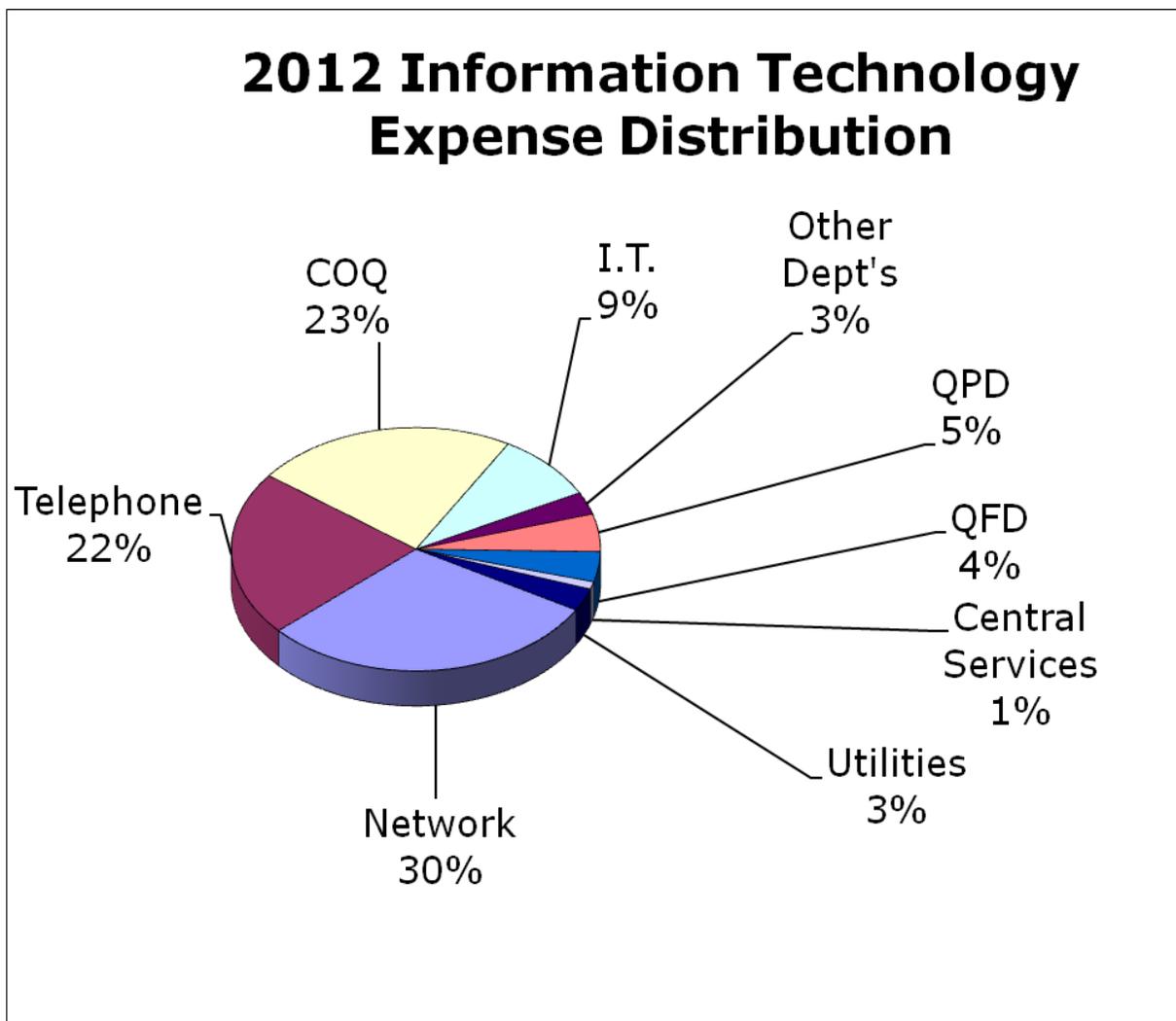
Over the past few years, DoIT has tried to implement technology solutions that actually bring value and/or benefit to the city. Over the past couple of years, DoIT has moved toward eliminating the burden for each department when it comes to technology repair and yearly maintenance. We have tried to absorb these expenses without increasing the budget.

For the fourth straight year, DoIT lowered their overall spending in order to help the city's financial situation. In 2011-2012, of the DoIT expenditures, only 9% of these expenses were actually used by DoIT. The other 91% of the expenses, directly or indirectly, benefit other city departments. These expenditures would include new desktops computers, hardware and software maintenance fee's, monthly AT&T communication fee's, long distance telephone charges, network equipment (for



example: hardware necessary to provide data storage for each department or provide secure email and Internet solutions), INET support, equipment necessary to connect each printer or computer to the network, provide building security resources to all city facilities, etc.

Below you will see a chart that outlines expense distributions. As you would expect the top three areas are telecommunication expenses, network operations, and technology solutions that are used by every department. The other expenses are technology products that are specially used by a department





CONCLUSION

As DoIT moves into another fiscal year, the group continues to provide the necessary support that city departments come to expect. Every day DoIT is asked to support new software, hardware, or solutions.

In 2012-2013, DoIT will continue to look for technology solutions that will add value and potentially lower costs, while providing our employees the necessary tools to do their jobs efficiently. In 2012-2013, DoIT plans to work with city departments to help them identify potential cost saving efficiencies regardless if the solution involves technology.