



WESTMINSTER

Staff Report

TO: The Mayor and Members of the City Council
DATE: March 20, 2013
SUBJECT: Briefing and Post-City Council Briefing Agenda for March 25, 2013
PREPARED BY: J. Brent McFall, City Manager

Please Note: Study Sessions and Post City Council briefings are open to the public, and individuals are welcome to attend and observe. However, these briefings are not intended to be interactive with the audience, as this time is set aside for City Council to receive information, make inquiries, and provide Staff with policy direction.

Looking ahead to Monday night's Briefing and Post-City Council meeting briefing, the following schedule has been prepared:

<i>A light dinner will be served in the Council Family Room</i>	5:00 P.M.
Boards & Commission Interview – Candidate #1	5:30 P.M.
Boards & Commission Interview – Candidate #2	5:40 P.M.
Boards & Commission Interview – Candidate #3	5:50 P.M.
2013 Business Legacy Reception	6:00 P.M.
Council Briefing <i>(The public is welcome to attend.)</i>	6:45 P.M.
POST BRIEFING <i>(The public is welcome to attend.)</i>	

PRESENTATIONS

None at this time.

CITY COUNCIL REPORTS

None at this time.

EXECUTIVE SESSION

1. Discussion of strategy and progress on negotiations related to the Westminster Urban Center Redevelopment and the possible sale, acquisition, trade or exchange of property interests, including future leases, and provide instructions to the Authority's negotiators as authorized by CRS 24-6-402 (4)(a) and 24-6-402(4)(e)

INFORMATION ONLY

1. Monthly Residential Development Report
2. Information Technology Department Strategic Plan 2013

Items may come up between now and Monday night. City Council will be apprised of any changes to the post-briefing schedule.

Respectfully submitted,

J. Brent McFall
City Manager



Information Only Staff Report
March 25, 2013



SUBJECT: Monthly Residential Development Report

PREPARED BY: Walter G. Patrick, Planner II

Summary Statement

This report is for City Council information only and requires no action by City Council.

- The following report updates 2013 residential development activity per subdivision (please see attachment) and compares 2013 year-to-date totals with 2012 year-to-date totals.
- The table below shows an overall decrease in new residential construction for 2013 year-to-date totals when compared to 2012 year-to-date totals (0 units in 2013 vs. 15 units in 2012).
- Residential development activity for the month of February 2013 versus February 2012 reflects a decrease in single-family detached (0 units in 2013 versus 7 units in 2012) and no change in single-family attached, multiple-family or senior housing (0 units in both years).

NEW RESIDENTIAL UNITS (2012 AND 2013)

UNIT TYPE	FEBRUARY		<u>% CHG.</u>	YEAR-TO-DATE		<u>% CHG.</u>
	2012	2013		2012	2013	
Single-Family Detached	7	0	-	15	0	-
Single-Family Attached	0	0	-	0	0	-
Multiple-Family	0	0	-	0	0	-
Senior Housing	0	0	-	0	0	-
TOTAL	7	0	-	15	0	-

Background Information

In February 2013, there were no Service Commitments issued for new housing units.

The column labeled “# Rem.” on the attached table shows the number of approved units remaining to be built in each subdivision.

Total numbers in this column increase as new residential projects (awarded Service Commitments in the new residential competitions), Legacy Ridge projects, build-out developments, etc., receive Official Development Plan (ODP) approval and are added to the list.

This report supports the City Council Strategic Plan goals of Strong Balanced Local Economy, Financially Sustainable City Government Providing Exceptional Services, Vibrant Neighborhoods in one Livable Community and Beautiful and Environmentally Sensitive City.

Respectfully submitted,

J. Brent McFall
City Manager

Attachment – Residential Development Report

ACTIVE RESIDENTIAL DEVELOPMENT

Single-Family Detached Projects:

Bradburn (120th & Tennyson)
 CedarBridge (111th & Bryant)
 Country Club Highlands (120th & Zuni)
 Countryside Vista (105th & Simms)
 Huntington Trails (144th & Huron)
 Hyland Village (96th & Sheridan)
 Legacy Ridge West (104th & Leg. Ridge Pky.)
 Lexington (140th & Huron)
 Tuscany Trails (95th & Westminster Blvd.)
 Savory Farm Estates (109th & Federal Blvd.)
 Shoenberg Farms (72nd & Sheridan)
 Various Infill
 Winters Property (111th & Wads. Blvd.)
 Winters Property South (110th & Wads. Blvd.)

SUBTOTAL

Jan-13	Feb-13	2012 YTD	2013 YTD	# Rem.*	2012 TOTAL
0	0	3	0	0	34
0	0	0	0	3	0
0	0	2	0	81	15
0	0	0	0	9	0
0	0	5	0	33	30
0	0	0	0	105	0
0	0	1	0	0	3
0	0	0	0	3	0
0	0	1	0	0	21
0	0	0	0	24	0
0	0	3	0	0	39
0	0	0	0	9	1
0	0	0	0	8	0
0	0	0	0	10	0
0	0	15	0	285	143

Single-Family Attached Projects:

Alpine Vista (88th & Lowell)
 Cottonwood Village (88th & Federal)
 East Bradburn (120th & Lowell)
 Eliot Street Duplexes (104th & Eliot)
 Hollypark (96th & Federal)
 Hyland Village (96th & Sheridan)
 Legacy Village (113th & Sheridan)
 South Westminster (East Bay)
 Shoenberg Farms
 Summit Pointe (W. of Zuni at 82nd Pl.)
 Sunstream (93rd & Lark Bunting)

SUBTOTAL

0	0	0	0	84	0
0	0	0	0	62	0
0	0	0	0	117	0
0	0	0	0	10	0
0	0	0	0	20	0
0	0	0	0	153	0
0	0	0	0	54	0
0	0	0	0	53	5
0	0	0	0	8	28
0	0	0	0	58	0
0	0	0	0	14	0
0	0	0	0	633	33

Multiple-Family Projects:

Bradburn (120th & Tennyson)
 Hyland Village (96th & Sheridan)
 Mountain Vista Village (87th & Yukon)
 Orchard Arbour Square
 Prospector's Point (87th & Decatur)
 South Westminster (East Bay)
 South Westminster (Harris Park Sites I-IV)

SUBTOTAL

0	0	0	0	233	0
0	0	0	0	54	0
0	0	0	0	144	0
0	0	0	0	244	0
0	0	0	0	24	0
0	0	0	0	28	0
0	0	0	0	6	0
0	0	0	0	733	0

Senior Housing Projects:

Crystal Lakes (San Marino)
 Legacy Ridge (112th & Federal)

SUBTOTAL

0	0	0	0	7	0
0	0	0	0	91	0
0	0	0	0	98	0

TOTAL (all housing types)

0 0 15 0 1749 176

* This column refers to the number of approved units remaining to be built in each subdivision.



W E S T M I N S T E R

Staff Report

Information Only Staff Report
March 25, 2013



SUBJECT: Information Technology Department Strategic Plan 2013

PREPARED BY: David Puntteney, Information Technology Director

Summary Statement

This report is for City Council information only and requires no action by City Council.

In January 2003, the Information Technology Department compiled a comprehensive strategic plan that helped the City succeed in the selection, implementation, management and advancement of technologies needed to assist Departments responsible for achieving City Council strategic goals. The IT strategic plan has been updated for 2013 and includes the following information:

- Trends in Information Technology
- Guiding Principles for the Information Technology Department
- Performance Measures
- Workload Indicators
- Technical Project Planning
- Technology Standards
- Information Technology Services
- Environmental Sensitivity and Sustainability
- System Security and Disaster Recovery
- Technology Acquisition
- Major Technology Projects Scheduled for 2013 – 2015
- Technology Awards and Recognitions
- Staffing Projections (subject to City Manager's Office review and City Council authorization)

A hard copy of the plan is attached to this staff report. Council members and others may also access an electronic version of this document on the City's web site at <http://www.ci.westminster.co.us/files/strategic.pdf>.

Background Information

Over the past 25 years, the Information Technology Department (previously Data Processing Division) has established technology plans and policies that have been instrumental in helping all City departments achieve City goals and objectives. In 2003, the Department established a formal strategic plan to provide Departments, City Council and others with a clear, comprehensive document to communicate the City's technology direction, priorities, standards and strategy.

The Information Technology Department updates the strategic plan on an annual basis to reflect changes in goals, objectives and technologies. The attached document is the updated IT Strategic Plan for the City. The IT Strategic Plan supports all of the City Council's Strategic Plan goals: Strong, Balanced Local Economy; Financially Sustainable City Government Providing Exceptional Services; Safe and Secure Community; Vibrant Neighborhoods in One Livable Community; and Beautiful and Environmentally Sensitive City.

Respectfully submitted,

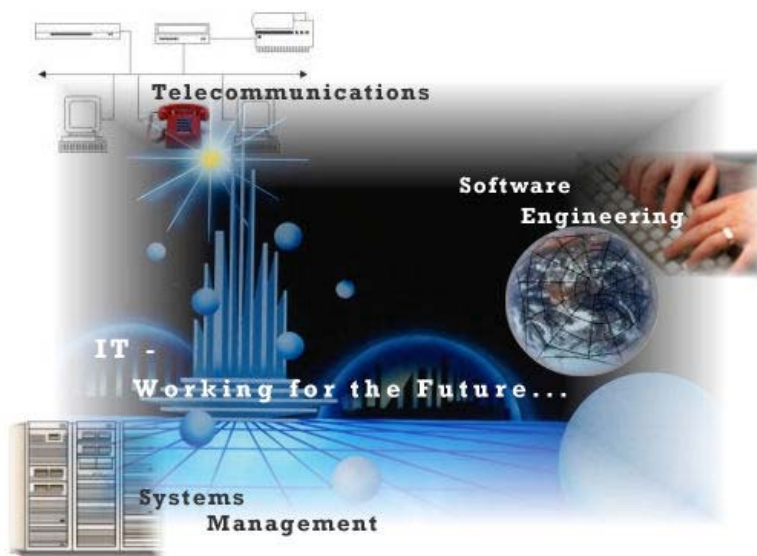
J. Brent McFall
City Manager

Attachment (City Council only)



WESTMINSTER
COLORADO

**Information Technology Department
Strategic Plan
March 2013**



*Prepared by:
David Puntteney
Information Technology Director*

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PLAN PURPOSE, BACKGROUND AND INTRODUCTION

The purpose of establishing a formal strategic plan for the City of Westminster Information Technology Department is to provide a clear, comprehensive document to effectively communicate the City's technology direction, priorities, strategy and policies. Furthermore, this plan serves to recognize and demonstrate the connection between the City's Mission Statement, City Council goals and Information Technology strategies.

The Information Technology Department successfully established tactical and strategic plans; standards and processes that have been instrumental in advancing the effective use of technology throughout the organization and helping Departments reach goals established to support City Council's Strategic Plan. Beginning in 2003, the Information Technology Department Strategic Plan was fully documented and published. Tactical plans have been established both within the department and in collaboration with user departments throughout the City. This strategic plan includes system upgrade and replacement strategies and schedules.

The Information Technology Department developed guiding principles for the department and has included those principles as part of this document. Performance measures and formal evaluation tools have been developed and implemented to help staff focus on guiding principles. These tools are also discussed within this strategic plan.

The success that the Information Technology Department has achieved since 1985 is closely coupled to the emphasis the department has placed on hiring, training and retaining the highest quality, dedicated technical staff. This plan includes discussion of the strategy that will continue to be used in hiring and retaining human resources.

Also included in this strategic plan are vital fundamentals such as technology acquisition and approval process, major system prioritizing and systems disaster recovery.

While this plan does not include tactical plans, it does include several attachments that highlight current technology standards, major three-year technology projects and five-year staffing projections. This plan, as well as the attachments, is reviewed and updated annually.

CITY OF WESTMINSTER INFORMATION TECHNOLOGY AWARDS AND RECOGNITIONS

The City of Westminster is honored to be recognized by respectable and knowledgeable organizations for the success the City has achieved in the planning, selection, deployment and support for innovative technologies used to enhance services and efficiencies within the City.

Digital Cities Survey Awards:

The Center for Digital Government conducts a nationwide annual survey of cities to examine how local governments are utilizing digital technology to better serve their citizens and streamline operations. The City of Westminster has placed in the top ten cities in the nation within the population category of 75,000-125,000 for the last nine out of ten years. Westminster's ranking for each year are:

2002 – 5 th place	2007 – 4 th place
2003 – 7 th place	2008 – 7 th place
2004 – 7 th place	2009 – 7 th place
2005 – 6 th place	2011 – 8 th place
2006 – 5 th place	2012 – 6 th place

Colorado Information Management Association “2007 IT Infrastructure”:

The Colorado Information Management Association (CIMA) conducts an awards program to recognize governmental agencies who have demonstrated significant accomplishments in several categories. In 2007, the City of Westminster was selected as the winner in the IT Infrastructure category, recognizing the City for its proactive efforts in technology risk assessment and security enhancements.

Colorado Information Management Association “2009 IT Team of the Year”:

In 2009, the City of Westminster's Information Technology Department was selected as the winner of the “2009 IT Team of the Year” by the Colorado Information Management Association. This award recognized the City for the innovative, low cost and secure strategy the City used to deploy and provide wireless services to employees, visitors, and contractors across 30 City facilities.

International City Managers Association (ICMA):

The City of Westminster participates in the ICMA performance measures program and reports annual results of performance measures in order to compare Westminster performance with other government agencies. In 2008, the ICMA highlighted the City of Westminster's Information Technology Department in their national “What Works” publication to share the City's success in IT Customer Service. ICMA reported that 90% of Westminster's IT Department customers reported receiving excellent services, as compared to a national average of 49%. Westminster IT customer satisfaction is measured on a monthly basis through customer surveys. Reasons for the City success include careful IT staff recruitment, monthly surveys; including survey results in employee recognition and appraisals, and reporting of results to City officials were included in the ICMA publication.

Internal Awards and Recognition:

The Information Technology Department has also been formally recognized by other departments within the City for outstanding commitment to service, teamwork and success of technology projects. Some of these awards and recognitions include:

Website Redevelopment Team
City Council audio broadcast project
Content Management selection and implementation project
Accela Automation Team
Court system implementation project
Computer Disaster Recovery/Business Continuity Team
Unified voice message system implementation project
Electronic Timesheet and Employee/Manager Self Service Implementation Team
Electronic Appraisal Team
ILeads/RMS/Computer Aided Dispatch Upgrade Team
Emergency Response Time Improvement Team
ERP (JD Edwards) System Upgrade and Enhancement Team
Zebra Mussel Team
2009/2010 Budget Team
Intergraph Project Team
GIS Upgrade Team
Fire Station Remodel Team
Westminster Sports Center Renovations Team
2009 Grant Administration Policy Project Team
Wireless Network Planning & Deployment Team
Code Enforcement Automation Process Team
Rerouting of 3200 Commercial Water Accounts
MSC Facility Renovation Project Team
Performance Measures Team
Development & Implementation of NEOGOV Integrated Recruitment Tracking Software
Electronic Pay Stub Team
Backup Replacement Evaluation and Implementation Team
System Wide SCADA Enhancements Project Team
2011/2012 Budget Team
Apply Yourself Recruitment Slide Show Team
Westminster Public Library Online Access Expansion Grant Team
Web Content Management System Technical Evaluation and Implementation Team
Westminster Mall Demolition
IT Service Center / IT Service Request System Team
City of Westminster Centennial Legacy Award Winner – Westminster Website
Full Court Enterprise System Upgrade
2012 Golf Expo Team
Accela Maintenance Management System Upgrade Team
Centralized Phone System Replacement Team
Fire Station 1 Broadband Enhancement Team
WPLin Touch Mobile Application Team
2012 Bank Conversion Team
Ambulance Billing and Collection Team

Commented [dp1]: Joyce, please update this with any 2012 awards.

CITY MISSION, STRATEGIC PLAN AND CITY COUNCIL GOALS

The Information Technology Department Strategic Plan is established with a clear understanding of the City Mission and strategic goals established by the City Council. Department Heads, City Manager, Assistant City Manager and City Council engage in an annual strategic planning session to review and update the organization's mission and goals. The results of that process are listed below and are included within this plan to use as a guide to align the Information Technology Strategic Plan with that of City Council and the City Executive Team.

Mission Statement:

We deliver exceptional value and quality of life through SPIRIT.

Strategic Plan

2013-2017

Goals and Objectives

STRONG, BALANCED LOCAL ECONOMY

- Maintain/expand healthy retail base, increasing sales tax receipts
- Attract new targeted businesses, focusing on primary employers and higher paying jobs
- Develop business-oriented mixed-use development in accordance with Comprehensive Land Use Plan
- Retain and expand current businesses
- Develop multi-modal transportation system that provides access to shopping and employment centers
- Develop a reputation as a great place for small and/or local business
- Revitalize Westminster Center Urban Reinvestment Area



FINANCIALLY SUSTAINABLE CITY GOVERNMENT PROVIDING EXCEPTIONAL SERVICES

- Invest in well-maintained and sustainable city infrastructure and facilities
- Secure and develop long-term water supply
- Focus on core city services and service levels as a mature city with adequate resources
- Maintain sufficient reserves: general fund, utilities funds and self insurance
- Maintain a value-driven organization through talent acquisition, retention, development and management
- Institutionalize the core services process in budgeting and decision making
- Maintain and enhance employee morale and confidence in City Council and management
- Invest in tools, training and technology to increase organization productivity and efficiency

SAFE AND SECURE COMMUNITY

- Citizens are safe anywhere in the City
- Public safety departments: well equipped and authorized staffing levels staffed with quality personnel
- Timely response to emergency calls
- Citizens taking responsibility for their own safety and well being
- Manage disaster mitigation, preparedness, response and recovery
- Maintain safe buildings and homes
- Protect residents, homes and buildings from flooding through an effective storm water management program



VIBRANT NEIGHBORHOODS IN ONE LIVABLE COMMUNITY

- Develop transit-oriented development around commuter rail stations
- Maintain and improve neighborhood infrastructure and housing
- Preserve and restore historic assets
- Have HOAs and residents taking responsibility for neighborhood private infrastructure
- Develop Westminster as a cultural arts community
- Have a range of quality homes for all stages of life (type, price) throughout the City
- Have strong community events and active civic engagement



BEAUTIFUL AND ENVIRONMENTALLY SENSITIVE CITY

- Have energy-efficient, environmentally sensitive city operations
- Reduce energy consumption citywide
- Increase and maintain greenspace (parks, open space, etc.) consistent with defined goals
- Preserve vistas and view corridors
- A convenient recycling program for residents and businesses with a high level of participation



INFORMATION TECHNOLOGY MISSION STATEMENT

In 1998, the City of Westminster recognized that Information Technology was serving an increasingly important role in the efficient and quality delivery of information and services to businesses and citizens. As a result, a change in the organization structure was made to further promote strategic technology planning to support organizational objectives and expanded technology use. Effective January 1999, the Data Processing Division (a division of the Finance Department) was repositioned as the Department of Information Technology reporting to the City Manager. This change successfully achieved a more strategic and balanced use of technology resources throughout all departments within the City and provided opportunity for the IT Director to participate in short and long-range planning with the City's Executive Team. The Information Technology Department Management Team established a new mission in 2007 that reads:

“Our job is to deliver exceptional value and quality of life through the deployment and support of innovative technologies and SPIRIT.”

This mission statement has been the foundation for performance measures and customer's service standards that are included within this plan.

GUIDING PRINCIPLES

Principle 1 – Sustained success in the use of any technology can only be achieved through the ability to hire, train and retain the most knowledgeable, dedicated technical staff.

Principle 2 – Customers are first priority, and will always be treated in a timely and professional manner.

Principle 3 – New technology acquisition will be completed through a standard process and will comply with established hardware and software standards developed by the IT Department.

Principle 4 – A standard replacement schedule and budget for hardware, software and network infrastructure will be maintained to prevent obsolescence and reduced organization efficiency.

Principle 5 – Emerging technologies are continually evaluated by the IT Department to identify opportunities to enhance delivery of core services, increase organizational efficiencies, decrease cost, and support new City Council priorities.

Principle 6 – Access to and availability of systems is crucial to providing services. The Department will monitor and report system availability as one of the core performance measurement goals.

Principle 7 – Customers will have an efficient method to submit technology service requests and have opportunity to provide formal feedback on services provided by the Information Technology Department.

Principle 8 – City Staff use IT resources in accordance with formally established policies.

Principle 9 – The City’s Executive Management Team will be consulted to review, discuss and agree on implementation priorities and schedule for new major systems, as needed, on an annual basis.

Principle 10 – Technology staff continually evaluate new and creative ways to use current and emerging technology to support organization goals and objectives.

Principle 11 – IT staff will assist departments in evaluating new software application requirements and options, and use off the shelf software solutions or cloud SAAS for major applications as opposed to developing custom software when such solutions meet the majority of the City’s functional, business fit and security requirements.

Principle 12 – Data integration and sharing throughout the organization is a key evaluation factor in selecting and developing applications.

Principle 13 – Systems support and application development are centralized within the Information Technology Department, eliminating the need for departments to hire or convert existing staff within departments into technology specific positions to support hardware or database applications. This centralized approach enhances organization efficiency by eliminating potential for islands of information, promoting opportunity for data sharing between applications and maintaining adequate depth of support for systems.

INFORMATION TECHNOLOGY DEPARTMENT CUSTOMERS

Until 1996, the Information Technology Department provided services for internal customers only. In March 1996, the City's customer base expanded rapidly as the City unveiled the Westminster City Web site. Businesses and citizens frequently choose and depend on the web site as an alternate avenue to gain access to information and services, as well as to become more involved in their local government.

Information Technology Department internal customers include:

City Council – responsible for serving as the legislative and governing body of the City. City Council appoints the City Manager, City Attorney, and Municipal Judge; adopts laws, ordinances, and resolutions instituting City policy; provides policy direction and guidance through adoption of a strategic plan; holds public meetings on a variety of community issues, meets with groups and businesses, and attends local, county, regional, state and national meetings on issues that have municipal impact.

City Manager's Office – responsible for supporting the Westminster City Council, helping them achieve the City's strategic goals through progressive management, effective communication, and creation and maintenance of a vital local economy.

City Attorney's Office - responsible for the general legal affairs of the City. This office provides legal representation and counsel, and prepares contracts, ordinances, and other legal documents. The office also prosecutes all City Code violations.

Community Development Department – responsible for planning, actively promoting and sustaining an attractive, high quality living and working environment, facilitating appropriate land use decisions, and ensuring that the community is safely built and well maintained.

Finance Department - responsible for the financial activities of the City, including administration of sales tax and all account functions such as payroll, accounts payable, accounts receivable and financial reporting. The Department also manages the City's debt issuance, investment portfolios and pension plans, procurement process, and utility billing operations.

Fire Department – responsible for timely emergency and response to all hazards and emergency medical calls. The Fire Department strives to ensure the safety of the Fire Department personnel, citizens, and visitors to the community through utilizing extensive firefighter training and by educating residents, business owners, and visitors on fire safety, health, fire prevention and emergency preparedness.

General Services Department - responsible for providing internal services and serving as a strategic partner with all City Departments in providing human resource services, City Clerk operations, municipal court operations, building operation and maintenance services and fleet management services for the City.

Parks, Recreation and Libraries Department - responsible for providing the physical, social and cultural needs of the community, including park services, library services, Standley Lake operational services, recreation facilities and programs, and design and development of new parks, open space and trails.

Police Department – responsible for enforcing all State laws and Westminster Municipal Ordinances through patrol operations, code enforcement activities, crime investigations and crime prevention. The Department also educates the community about drugs, traffic safety, graffiti and pet ownership.

Public Works and Utilities – responsible for maintaining and enhancing the safety and well-being of the community by providing exceptional water and wastewater service and maintaining the City’s extensive network of street infrastructure.

TRENDS IN INFORMATION TECHNOLOGY

The Director of Information Technology and staff monitor trends in the technology field and purchase, evaluate and implement new technologies that have potential to enhance services to internal or external customers or improve organization efficiency. This document does not describe all trends and emerging technologies, but does highlight several key trends that may provide opportunities to improve services and efficiency within the City of Westminster. Some of the major trends and advances being monitored within the Information Technology Department include:

- Expanding capabilities of web based technology

Advancing web technologies will continue to provide opportunity for the City to enhance delivery of information and services to residents, businesses, other government agencies, economic development prospects and visitors. Video, blogs, wikis, RSS feeds, social networking and other web based services will be expanded as deemed appropriate and beneficial for the City in meeting objectives. Emphasis will be placed on providing efficient mobile device access to City web information and services.

- Wireless Local Area Networks (WLAN)

Wireless network technology has helped the City to improve network performance and reliability between City facilities and eliminate most of the expense associated with leased data communication circuits. Information Technology expanded Wi-Fi access throughout Westminster to support mobile City employees and to enhance internal electronic communications. The Information Technology staff is continuing to monitor advances in Wi-Fi, Wi-Max and 700 MHZ network technology, which has the potential to blanket Westminster with broadband wireless services. The City is prepared to provide prompt response and appropriate right of way agreements when the private sector determines that there is a solid business case for mesh network deployment in Westminster.

- Hybrid Cloud Services and Computing

Cloud computing is a method to increase capacity or add capabilities on the fly without investing in new infrastructure, training new personnel or licensing new software. Cloud computing includes any subscription-based or pay-per-use service that, in real time over the Internet, extends IT's existing capabilities. It has the potential to change the way in which the Westminster Information Technology Department is structured and functions during the next five years.

Commented [dp2]: DAN, SCOTT, ART – anything new you think would be worthwhile to add to this section?

Cloud computing includes:

- **SaaS (Software as a Service)** delivers a single application through the browser to thousands of customers using a multitenant architecture. On the City side, it means no upfront investment in servers or software licensing; on the provider side, with just one app to maintain, costs for some apps may be lower compared to City hosting. The City will be implementing at least one additional SaaS application in 2012.
 - **Utility computing** provides virtual data centers that IT can access on demand. With the ability to provision servers in a matter of minutes, and the ability to distribute resources to workloads, this trend may potentially replace parts of the existing Westminster datacenter over the next 5 years.
 - **Web services** in the cloud offer interfaces that enable developers to exploit functionality over the Internet, rather than delivering full-blown applications, such as APIs offered by Google Maps, ADP payroll processing, the U.S. Postal Service, Bloomberg and even conventional credit card processing services.
 - **Platform as a service** – In the future, the City may build custom applications that run on the provider's infrastructure and are delivered to City employees via the Internet from the provider's servers.
 - **MSP (managed service providers)** such as a virus and spam scanning service for e-mail (Postini). Westminster uses managed service providers to a limited extent today.
 - **Hybrid Cloud computing** further leverages cloud capabilities by using services from multiple public and private clouds to improve agility and increase capability.
- Bring your own device (BYOD) and Mobile Device Management

Enterprises are experiencing surging demand to allow personal device access to corporate applications and data. Enterprise mobile device management of corporate and personal owned devices is becoming increasingly important to protect employees and corporate data. The City of Westminster has established minimal personal device access and management, and is currently assessing comprehensive mobile device management solutions for personal and City owned mobile devices.

- Flash/Solid State Memory Advances

Flash memory is not new, but it is moving up to a new tier in the storage echelon. Flash memory is a semiconductor memory device, familiar from its use in USB memory sticks and digital camera cards. It is much faster than rotating disk, but considerably more expensive, however this differential is shrinking. At the rate of price declines, the technology will enjoy more than a 100 percent compound annual growth rate during the next few years. As a result, this technology may become more strategic in City IT areas as it will offer a new layer of the storage hierarchy in servers and client computers that offer key advantages including reduced space requirements, energy efficiency, lower heat output, improved performance and ruggedness.

- Mobile Technology and Applications

A recent Gartner report shows that in 2013, mobile devices will pass PCs as the most common web access tool, and that by 2015 over 80% of all handsets in mature markets will be smart phones. Additionally HTML5 and the browser become a mainstream application developer environment. The City is monitoring these trends in terms of web application development strategies and priorities as well as application development for mobile applications. The City will also be assessing the benefits of establishing a future enterprise (private) mobile app store as may be needed for internal mobile apps.

- Application Virtualization and System Management Appliances

Application virtualization includes software technologies that improve portability, manageability and compatibility of applications by encapsulating them from the underlying operating system on which they are executed. A fully virtualized application is not installed in the traditional sense although it is still executed as if it were. While not new technologies, recent and developing advances in application virtualization and system management appliances may help the City to streamline deployment and management while reducing support costs associated with the more than 1,000 computers used for City operations.

- Software Defined Networks

Provides a new way to operate networks, in which control of the networks moves into an OS. It moves control from individual devices to a central controller and allows configuration of the network from one place.

- Internet of “Things”

A growing trend to incorporate radio and GPS capabilities in small inexpensive devices along with self-assembling mesh networks may create opportunities for City operations.

- IT Demands

Gartner research projects that enterprises will see server workload demand increases of 10%, network bandwidth demand increases of 35%, and storage capacity requirements will grow by 50%. The City of Westminster anticipates similar increases. The Information Technology Department is continuing to evaluate options and technologies to optimize capacity through virtualization, data deduplication, and cloud services.

PERFORMANCE MEASURES

CUSTOMER SERVICE PERFORMANCE MEASURE

In 1989, the Information Technology Department implemented an ongoing service evaluation system to provide all internal IT customers with the ability to provide specific project-related feedback on the quality of services received from department staff. This evaluation system has evolved to: 1) encourage customers to provide formal feedback on services received; 2) promote the guiding principle of outstanding customer service; 3) identify opportunities for continued improvement of IT delivered services by meeting with customers when service levels are rated average or below and; 4) to monitor trends in service levels. The Information Technology Department has enhanced the feedback process on several occasions and now uses an electronic form to collect and maintain user evaluations. Evaluations from customers are recorded and monthly reports are run to determine if customer service standards are met or exceeded.

Customers rate the department, after completion of service requests, on a scale of 1-5 with 1 representing POOR and 5 representing EXCELLENT in the categories of Technical Knowledge, Communication, Cooperation, Responsiveness and Overall Satisfaction with services. The department typically achieves ratings exceeding 4.6 overall in all categories. These high ratings are accomplished through IT staff's commitment to build personal relationships and to provide service in a timely, professional fashion. Follow-up with customers after completion of projects or resolution of problems is also a key component of the outstanding service provided by Information Technology. Individual and overall customer service evaluations will continue to be reviewed and monitored to ensure that the minimal performance standards of 4.1 are exceeded.

While the majority of customer ratings are excellent, the department occasionally receives ratings that are fair or poor. IT uses these opportunities to meet with customers to evaluate and improve service strategies and processes. These meetings were conducted on several occasions during 2012. This process has helped the department increase the overall ratings as shown in the historical trend graph below.

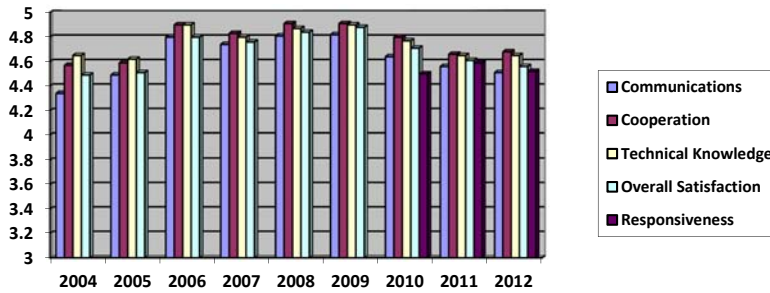
Relationship to Westminster Strategic Goals/Objectives:

- *Financially Sustainable City Government Providing Exceptional Services:*

The performance measure is crucial to those employees who depend on such exceptional technical services to successfully accomplish City strategic goals and objectives.

Historical Trend Data

Commented [dp3]: Joyce, please update the graphs and information below with current year real data.



SYSTEM AVAILABILITY PERFORMANCE MEASURE

The Information Technology Department supports numerous computer servers hosting applications for all City employees as well as external customers. The availability of networks and servers is crucial to these customers in accomplishing their goals and is a high priority for the Information Technology Department. The department has implemented several policies and procedures to help ensure maximum system availability for its customers. Performance standards measuring system availability were established in 1992 and continue to be monitored and reported on a quarterly basis. Developing, monitoring and reporting of system availability statistical data has been key to maintaining a focus on developing and supporting procedures to minimize down time.

System availability performance measure standards are as follows:

- Telephone and voice mail system availability – 99% uptime
- Windows based systems (Police/Fire Computer Aided Dispatch, Utility Billing, Sales Tax administration and collection, Recreation Point of Sale and Registration, Enterprise Resource Planning (ERP), Geographic Information (GIS), Office Automation, Finance) - 99%

The Information Technology Department always exceeds these performance standards and typically achieves system availability between 99.1% – 99.9%.

Relationship to Westminster Strategic Goals/Objectives:

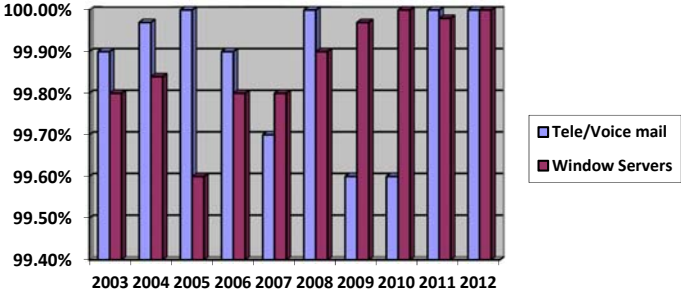
- *Safe and Secure Community: Timely response to emergency calls*

Through an ongoing commitment to high availability standards for all systems, including Public Safety/Computer Aided Dispatch systems, the City is better positioned to provide timely response for emergency calls.

- *Financially Sustainable City Government Providing Exceptional Services: Investing in tools, training and technology to increase organizational efficiencies and productivity*

- *Maintain sufficient reserves: general fund, utilities funds and self insurance*

When computer and phone systems are not available, employee productivity suffers and costs to provide services increase. Additionally, the ability to collect, record and track City revenues from Sales Tax and Utilities is difficult without availability of computer systems.



TECHNOLOGY STANDARDS

Technology standards are critical in order for the City to achieve high productivity in the use of technology and for the Information Technology Department to provide a high level of customer service with a reasonable level of technical support staff. The IT Department implemented technology standards in 1986 and updates those standards annually to adjust for new technologies, needs and strategies. Deviation from standards may be approved by the Information Technology Department to meet a selected vendor requirement or when a department's need clearly demonstrates that conformance to technology standards will negatively impact their goals. Policies and technology purchase approval processes have been established to ensure compliance with standards. Attachment A details the current year architecture, standards and security in the areas of server hardware, operating system software, database software, office productivity software and network hardware.

INFORMATION TECHNOLOGY DEPARTMENT SERVICES

The Information Technology Department is comprised of two divisions responsible for support of City technology. Attachment D provides more specific detail on current systems supported and the scope of division responsibilities. The divisions include:

Software & Web Engineering Team

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The Software & Web Engineering Team (SWET) provides technology solutions to customers within the City of Westminster to enhance their performance and productivity. Activities range from the simple task of directing an employee to appropriate tools, all the way through researching, developing, implementing and maintaining major applications. The Team is prepared with the technical expertise and tools to provide technological assistance to give Westminster an edge in delivering exceptional services to its citizens.

This Team works specifically on Web development (Internet and Intranet), major system applications (Utility Maintenance Management, Building Permit, Sales Tax, JDE EnterpriseOne ERP, Utility Billing, Police/Fire CAD, GIS, Police and Fire Records Management, Court Systems), and many stand alone databases. The Team also develops interfaces to enable data sharing between applications, provide single data entry points to reduce errors and save staff time. The Internet-based applications, developed by this Team, focus on empowering internal and external customers to complete transactions independently without employee interaction. The power of the Internet and the development of online solutions provide customers with the ability to access information and conduct business with the city 24 hours a day, 365 days a year.

Systems Management Team

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The Systems Management Team is responsible for the administration, security and data integrity of centralized Windows servers. These servers are home to applications that support the City's Emergency Services, Municipal Court, ERP, Document Management, Utilities, Library, Parks and Recreation, Community Development, Office Automation, Internet, Intranet and Geographic Information Systems. This Team also provides

installation, configuration and troubleshooting services for all personal computers at more than 30 City facilities. Furthermore, this Team provides hardware, software and consulting services for all departments on existing technologies and provides strategic direction for the acquisition and use of new technologies. This Team also operates a Service Center that provides troubleshooting services to departments for the efficient utilization of computerized systems.

As part of the Systems Management Team, the **Telecommunications / Networking Team** is responsible for managing all City-owned and leased voice and data communications equipment and networks within and between more than 30 City locations. This Team handles maintenance, upgrades, configuration and support of data communications and telephone hardware and software. Network monitoring and security, capacity planning and network expansion, including new City fiber networks, all fall under this Team's responsibilities.

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HUMAN RESOURCES FOR INFORMATION TECHNOLOGY

Successful technology staff recruitment, selection, training and retention are vital to advance the use of technology and achieve long-range strategic plans within the City of Westminster.

Recruitment of Technology Staff – The City of Westminster uses a recruitment and selection process for technology staff that includes application screening, comprehensive job-specific testing, experience verification and situational interview process that assist management in selecting the most qualified, best fit candidate for technology positions. Past employer references and full criminal background checks are completed and considered prior to extending an offer for a technical position. Newly hired technology staff is given specific 30, 60 and 90-day objectives to provide employee direction and serves as an assessment tool for management to determine additional training needs.

Training – Technology training helps employees to maintain and increase productivity and serves as a motivator and retention tool for those who strongly desire to advance their knowledge and skills. To the extent possible, on-line training provides a means to maximize training opportunities and reduce the expense associated with training. Full-time employees are required, at a minimum, to complete 10 hours of City general training and 30 hours of job-specific technical training per calendar year. Part-time employees complete a prorated amount of training. Furthermore, the Information Technology Department provides additional IT staff training and educational opportunities through technical conferences and job related college education reimbursement.

Retention – Low staff turnover reduces training expense, helps retain organization specific knowledge and helps the Information Technology Department maintain a high level of productivity and output. The Information Technology Department will provide an environment that promotes competitive wages and benefits, cross-training opportunities, professional growth, empowerment, recognition and teamwork. The department has strived for and achieved a non-retirement annual turnover rate of less than 5% per year for the last 24 years.

The five-year technology staff plan, showing additional positions that will be needed to maintain support for current systems and to support future growth and systems, may be viewed in Attachment C. Current organization staffing and structure is shown in Attachment E.

SYSTEM SECURITY

Increased reliance on computer technology to support mission critical services, along with an escalating risk of computer infiltration and corruption by outside individuals, has necessitated a heightened focus on securing computer resources. A broad, multi-facility network and Internet connectivity have amplified security risk. The Information Technology Department has been proactive in implementing multiple layers of protection for IT supported technologies. Without a comprehensive security plan and industry best practices in place, even the best systems can be compromised.

All City servers, located at City Hall, are physically secured in an environmentally controlled fire-suppression equipped computer room with controlled access. Access is limited to IT staff and a limited number of other employees who require access to the room to perform their jobs. Individual access cards are assigned and access date and time is recorded for each access. Video surveillance and environmental controls are also in place for protection.

Multiple security tools, practices and procedures have been implemented during the last several years to protect the systems against unauthorized access and viruses. Some of these include:

Security Patches – Security patches for operating systems, applications and databases are reviewed and installed on an ongoing and timely basis.

Third Party Patch Management – In 2011, the City purchased LANDesk Management Suite to help automate patch management for third party applications such as Adobe, Java, etc.

Security Policies - Complete user and technical security policies are reviewed, updated and distributed on an annual basis.

Principle of Least Privileged (POLP) – The City strives for best practices in the area of privileges and permissions. Users and technology staff are granted the minimal access rights needed to get their jobs done efficiently.

Cyber Security - Information Technology staff regularly reviews the US-CERT and SANS Internet Storm Center web sites and other resources to maintain current knowledge of cyber security alerts and product vulnerabilities. This information is used to fortify City systems against threats.

Firewalls - The City uses five firewalls to provide enterprise-class integrated network security services and to establish multi-layered defense for all City computer servers. The main firewall is placed between the internal network and the Internet. A second firewall is in place to secure a data line that allows the Police Department to access the Colorado Bureau of Investigations. The main firewall interacts with content filtering software. In 2009, a new firewall was installed to separate the City Enterprise Network from the SCADA network, which supports Public Works and Utilities services. This firewall prevents PC's and network devices on the SCADA network from connecting to

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Commented [HD8]: Do we want to state the we have video surveillance as well?

the internet. This security enhancement helps to reduce the risk of unauthorized access and control of the SCADA system.

Virtual Private Networking (VPN) – This VPN feature of the firewall allows a secure 168-bit encryption connection from the Internet to the City’s internal network, providing a secure method for IT technical staff to access internal resources. Users are challenged for a password by the firewall and by the internal servers. All access to systems is logged and reviewed.

Internet Content Filtering – The City uses an integrated comprehensive content filtering system to enhance security and support appropriate Internet use policies. The master database of restricted web sites is automatically updated daily.

Intrusion Prevention System - A feature-rich intrusion detection system is used to detect inappropriate, incorrect or anomalous external activity or internal misuse. The system is necessary to detect and stop potential intruders and to eliminate the exploit from use by future intruders.

Telephone System - All telephone systems are housed in locked rooms within each City facility and all maintenance ports are physically disconnected from the outside network. All maintenance is performed on site and access to outside trunks is restricted from callers outside of the system.

Virus Protection and Detection - The Information Technology Department has multiple levels of virus protection for internal systems. Electronic mail is initially screened and filtered for viruses through an outside service. Second, it is scanned through an anti-virus utility when it enters the City’s gateway. When the email is routed from the email gateway to the Microsoft Exchange Server mailboxes, it is again scanned with anti-virus software. At each workstation, locally installed anti-virus software scans local files and removable media for viruses. Virus definition files are automatically updated continuously on the server and workstations. The City also deploys file and web reputation cloud services to enhance protection and greatly reduce the time required to protect city computers against new virus threats.

Online Transaction Security for Citizens and Businesses – The City subscribes to Verisign’s service to guarantee on-line customers that the website legitimately runs under the auspices of the City of Westminster, and that all information sent to the site under an SSL session is encrypted, protecting against disclosure to third parties.

Wireless Data Encryption - All wireless networks are authorized and installed by Information Technology staff to ensure that the most recent and secure wireless network encryption standards are in place. AES, WPA2 and/or 802.1x for data encryption are required on wireless installations.

Port Security - Each data connection to the City’s network is protected with port security. This security allows only the workstation, assigned to the port, access to the network. All files are protected with NTFS security on the servers and workstations.

Virtual Local Area Networks - VLANs are used to increase network performance, improve manageability, ease network tuning and increase security.

Password Controls - City employee's access to the various software packages is controlled by the use of passwords and specific login menus that provide access only to the applications and services an employee is authorized to use.

Ongoing Security Reviews – Using tools such as Nessus and Microsoft's Baseline Security Analyzer, the City conducts ongoing internal and external security reviews to identify and correct any issues that may result in a security breach.

Annual Comprehensive Security Assessment – The City secures the expertise of an outside security firm bi-annually to assist in conducting internal and external system exploitation testing and to assist the City with fine-tuning security policies and fortifying systems.

Social Engineering Training and Annual Awareness Exercise – The City conducts annual social engineering training and awareness exercises to reduce the risk of successful social engineering attacks.

RSA Two Factor Authentication – RSA two factor authentication is deployed for all IT staff members to eliminate the risk of compromised administrator passwords.

Windows Security on PCs – Windows security features are used to prevent non-administration staff from installing new programs on desktop computers.

Local and Remote Access – Access control is established and maintained by the Information Technology Department. Remote access is provided only through secured, encrypted sessions, using one-time passwords to eliminate the potential risks associated with access by computers with Trojan keystroke loggers.

Email Spam Filtering – All email is screened for spam and viruses prior to delivery to the City network. Questionable mail is quarantined by the service.

Protection of Mobile Data – All laptop computers are deployed with full disk encryption to protect data from unauthorized access.

Automated Email Protection – The City has implemented an industry leading tool to enforce best practices in email content security. This tool provides for outbound content compliance, stopping viruses and other malware and ensuring that all inbound, outbound and internal email traffic complies with policy and external regulations.

Automated Email Archiving – In 2010, the City implemented a cloud based email archiving service. This service provides email archiving for inbound and outbound email as well as internal email for a retention period of three years.

Change Management – All changes to the domain and email environment are proactively tracked, audited and real-time alerts of configuration changes are sent to key staff.

Disaster Recovery/Business Continuity – The City has a dedicated warm facility for disaster recovery. Critical applications and virtual servers are replicated to this facility on a daily basis.

Commented [dp9]: Scott

As dependence on technology for service delivery and internal operations has expanded, so has the need for a comprehensive disaster recovery/business continuity plan. Recovery plans are fully documented and updated each year. Comprehensive testing is conducted annually. In 2003, uninterrupted power supplies, network hardware and servers were set up at a City-owned disaster recovery/business continuity site to provide for rapid recovery following a disaster or damage to the computer facility and equipment at City Hall. In 2007, the disaster recovery equipment and servers were relocated to a safer and more appropriate location providing the physical space, environmental controls and security needed for the future. Additional internet access is also provided to the disaster recovery data facility to provide redundant access for basic inbound and outbound web traffic. In 2012, the City constructed a new disaster recovery site at another City facility to expand data center size, enhance physical security, and provide for emergency generator power. The high speed connection between the City's data center and the disaster recovery data center allow for rapid recovery of critical system in the event of a disaster. Virtual copies of critical servers are copied to the disaster recovery data center and can be powered on to quickly restore access to systems. Applications available for rapid recovery at the new disaster recovery location include Sales Tax System, Utility Billing, Accela maintenance management, JDE ERP, and Courts JSI System.

TECHNOLOGY ACQUISITION PROCESS

The Information Technology Department provides consulting, advisory and project management services to assist departments in learning how technology can support their goals, and to assist them as they plan for and deploy new technology projects. In 2002, a technology budget form was created to be used by departments considering new technology projects. In 2008, that form was combined with the general capital improvement project budget request form which is used in all budget preparation packets. It requires departments, in collaboration with the Information Technology Department, to consider and document several important aspects of a proposed technical project including: project scope, business need/justification for the project, project team members, on-going user and technical staff support requirements, training requirements and cost.

In most situations, departments contact Information Technology staff prior to initiating any purchases of hardware or software that exceeds \$100 in cost. All purchase orders containing computer hardware, software or related technology are forwarded to the Information Technology Department for final review and approval. Compliance with standards and ease of integration with existing technology and data is achieved and enhanced through this approval process.

In 2000, the City established a lease purchase program and four year replacement schedule for all City personal computers. In 2004, the City converted to a "replacement fund" model where departments pay a fixed amount per computer and new or

replacement computers are purchased rather than leased. In 2009, the City modified and extended the desktop computer replacement schedule to five years in order to reduce costs and extend the useful life of assets.

NEW SYSTEMS STRATEGIC IMPLEMENTATION PLANNING AND PRIORITIZING

Prior to 2001, the Information Technology Department independently prioritized the order in which approved major new systems would be implemented. In 2001, a new process was established in which the City's Executive Management Team was gathered to serve as a Technology Advisory Group with the responsibility of establishing priority order for the implementation of new major systems. This group is consulted to assist the Information Technology Department in establishing priorities for new major system implementations on an as-needed basis.

DIGITAL DIVIDE AND OPPORTUNITIES

The City of Westminster participates in providing training, Internet access and computer hardware for citizens who may otherwise lack such opportunity. This is accomplished through several direct and indirect channels.

The City provides 29 desktops and 7 laptop public access computers with broadband internet access at the College Hill Library and Irving Street library. The computers are available to citizens and other library patrons during all normal hours of operation.

Commented [dp10]: Scott, check with Eric on this number and update if needed.

The City has also partnered with the local 7:10 Rotary Club to support the "Computers 4 Kids" (C4K) program. The purpose of this Rotary sponsored program is to refurbish and prepare used computer equipment for distribution to nonprofit agencies and eligible students for use in their homes or schools. Over the last eleven years, the City has contributed more than 1750 decommissioned desktop and laptop computers to the program for distribution to students in Westminster and surrounding communities.

Commented [dp11]: Scott, add the number of computers we donated last year to update this.

Additionally, the City of Westminster Parks, Recreation and Libraries Department offers free ongoing educational Internet and computer classes, taught in both English and Spanish. 2012 classes include: "Basic Computer Skills", "Just for Brand New Beginners", "What I Need to Know About My Computer", "Welcome to Windows", "Where Did that File Go", "Word Processing Made Simple", "Internet Essentials", "Organizing the Mess in Your Computer" and "Introduction to Facebook".

Citizens wishing to further advance their computer skills have access to convenient fee based classes available through the City of Westminster, Front Range Community College and local businesses.

ENVIRONMENTAL SENSITIVITY AND SUSTAINABILITY

The City of Westminster City Council has defined one of the City's goals as being a "Beautiful and Environmentally Sensitive City" that has energy efficient, environmentally sensitive City operations. The Information Technology Department has established the following specific objectives, standards and practices to support environmental sensitivity and sustainability.

Energy Conservation in Information Technology

Reducing energy requirements and carbon footprint

- Computer monitors used on networked PCs throughout the City are set to enter sleep mode after a period of 15 minutes. Additionally, the City is evaluating third party power save software tools and Microsoft Server 2007/Windows 7 power management options to further reduce energy usage.
- In 2009, the City replaced all CRT monitors with energy efficient LCD monitors to reduce energy consumption required for monitor operation by more than 50%. Since July 2009, all purchased LCD monitors are Energy Star 5 rated.
- During product evaluation, the City will use EPEAT (www.epeat.net) to assist in identifying and evaluating electronic products based on their environmental and energy star attributes.
- Through server virtualization technology, the City has reduced server energy requirements by 50% by reducing the number of physical servers from 82 to 43. The City will evaluate and identify future virtualization opportunities with the intent to further reduce the number of physical servers and maximize utilization of production servers.
- Since July 2009, all servers, desktops and laptops purchased by the City are Energy Star 5 rated.
- In 2010, the Information Technology re-evaluated environmental requirements for centralized servers, network and telecommunications equipment to determine if the central computer room temperature could be increased to reduce cooling costs. As a result of this study, the temperature was increased by two degrees resulting in energy savings.
- In 2011, the City further increased operating temperature in the computer room from 68 to 72 degrees in an effort to reduce energy consumption associated with cooling.
- In 2012, the City updated computer server purchase requirements to include "outside air" cooling capabilities. This will enable the City to reduce energy consumption by further increasing the operating temperature in the data center.

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Environmentally Sensitive Practices in Information Technology

Contained within the Westminster City Council strategic goal of “*Beautiful and Environmentally Sensitive City*” are two objectives supported by the Information Technology Department. Those objectives include; Have *energy-efficient, environmentally sensitive city operations*, and *Reduce energy consumption citywide*. Several current and future IT initiatives and activities supporting these objectives are listed below:

Increasing utilization of resources and reuse of equipment

- Consistent with the City Council strategic plan, and other initiatives such as those outlined by www.step-initiative.org, the City of Westminster implemented practices to extend the useful life of current computing equipment. Beginning in 2009, the City modified the desktop computer replacement schedule from four years to five years, extending the City use of computers by one additional year. When City desktop and laptop computers are decommissioned, all data is wiped using industry best practices and computers are donated to a local rotary club where they are refurbished and distributed to eligible students and non-profit agencies in the community to further extend the useful life of the computer.

Eliminating use of environmentally harmful agents in Information Technology

- The Information Technology Department previously used Halon gas containing chlorine, bromine and fluorine elements for fire suppression in the City’s central computer room. Studies have indicated that these elements are not broken down easily and have a harmful effect to the ozone layer. Supporting the City goal of being an environmentally sensitive City, the Halon system was replaced with Ansul Inergen, an environmentally-friendly, people-safe agent that boasts zero ozone depleting potential.

Implementing environmentally sound recycling practices for decommissioned electronics

- In support of environmental sensitivity, the City selects and uses only those recycling firms that meet or exceed the U.S. EPA standards for electronic recycling and comply with all State of Colorado and federal laws pertaining to electronic recycling and destruction of sensitive data.

Reducing printing costs and paper wastes

- In 2009, the City reduced printing costs and reduced paper consumption through eliminating unnecessary printing, providing more capacity for storage of electronic documents, and standardizing on duplex printing on capable printers throughout the City. Additionally, all new printers are required to support duplex printing and provide for shared use to reduce the number of standalone printers.
- Through the use of new technology (Apple iPad2s and software), the City implemented electronic council packets in 2011. This project reduced printing and paper waste by more than 49,000 pages per year.

In 2012 the City conducted a city-wide printer inventory project and identified opportunities to strategically reduce the number of standalone printers over the next several years. As a part of the project, the City implemented a managed print services agreement to monitor printer usage and reduce the cost of maintenance and consumables.

Future Initiatives

- Purchase and implement energy monitoring tools to track specific energy use for certain areas, including the City's primary data center. (2013) Replace existing Storage Area Network (SAN) equipment with new energy efficient equipment that takes advantage of inline de-duplication and file aging. (2013)
- Evaluate and purchase a more energy efficient Uninterrupted Power Supply (UPS) system for the central computer room. (2013)
- Upgrade the central computer room incorporating new energy efficient design such as the possible use of outside air for cooling to significantly reduce energy costs associated with A/C cooling. (2015)

Commented [dp13]: Scott – what happened with this?

INTER AND INTRADEPARTMENTAL TECHNOLOGY COMMITTEES AND TEAMS

Commented [dp14]: ART, SCOTT, and DAN – Add any new teams that you or your staff participate in.

Success in the use of technology and software applications requires more than an effective strategic for selection and deployment. Ongoing committees and teams have been established to insure that the City is using the technology securely, effectively and taking full advantage of application capabilities. Furthermore, these teams are instrumental in helping the Information Technology Department in planning for software application upgrades and establishing priorities.

Some of the committees and teams with Information Technology chair or participation include:

CIS Planning Team

This team meets on a monthly basis to discuss items affecting the operation or configuration of the software application, including billing issues, consumption, meter fees and City accounts. Furthermore, this team identifies and plans for upcoming changes that will impact the Utility CIS system and performs evaluation, testing and deployment of new software releases. Members include representatives from Information Technology, Public Works and Utilities and Community Development Departments.

AA Planning Team

This team meets on a monthly basis to discuss items affecting the operation or configuration of the building permit software application, integration with other major applications and evaluation and testing of new software releases. Members include representatives from Information Technology, Public Works and Utilities and Community Development Departments.

IT/Police/Fire (IPS) Planning Team

This team meets weekly/monthly to discuss application issues or problems that need to be addressed by Information Technology or the application vendor. This team is also responsible for defining application integration needs, evaluating new products and technology, evaluating and testing upgrades and revisions to the application software and working with other agencies using IPS to learn new ways to exploit the capabilities of the software. Members include representatives from Information Technology, Fire and Police Departments.

Change Management Team

This team meets on a monthly basis to discuss and test operating and application patches from vendors and to determine if those patches will have any negative impact or incompatibility with existing systems. After the evaluation period, this team schedules and deploys the patches and updates. The team is comprised of members from all of the divisions in the Information Technology Department.

The Network and Systems Security Team

This team meets on a quarterly basis to discuss and test internal and external security vulnerabilities by using various security tools like Nessus. If vulnerabilities are discovered, this team works with the responsible party to ensure the appropriate patches or upgrades are applied and tested. The team is comprised of members from the Systems and Telecommunication teams in the Information Technology Department.

JDE EnterpriseOne ERP Planning Committee

The Committee meets on a bi-weekly basis to discuss and plan for ERP system needs and upgrades, and works together to evaluate new application releases, implementation and testing of new releases and training for users. This committee is also responsible for identifying opportunities to enhance application usability and integration with other City applications. This committee is comprised of staff from Finance, General Services and Information Technology Departments.

Green Team

The Green Team was given the responsibilities of increasing employee awareness on how employees can implement environmentally sensitive practices in their daily activities, making recommendations on practices to reduce the impact of City operations on the environment, serving as a resource to City departments in their efforts to adopt more environmentally sound approaches to their operations, and educating the community on the City's current and new greening efforts. The eighteen-member Green Team is comprised of staff from every City department, including Information Technology.

Jefferson County Fiber Optic Network (J-FON)

J-FON is a high speed data network designed to connect various public safety and governmental entities, including public safety answering points ("PSAPs"), in an effort to improve communication, information sharing, and interoperability. This board is responsible for the direction and configuration of this network build out. The Board consists of several local municipalities.

Attachment A: Technology Architecture, Standards and Security

For security purposes, some specific hardware and configuration information is excluded from this document.

Data Networking and Transport Standards

LAN Switches - LAN devices will be intelligent network “switches” that are capable of 10/100/1000 Mbps speeds, with 1000Mbps uplinks. Each of these devices will have the port security enabled.

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City-wide Backbone - Switches are connected with gigabit speed Ethernet fiber. If fiber is not available, a category 5 Ethernet cable is used to deliver 100 mbps throughput. The primary backbone providing services between 24 City facilities is single mode fiber supporting gigabit speed. Remaining remote City facilities are connected to the network using leased T-1’s and City-owned encrypted wireless technology.

Wiring – All facilities are wired with plenum rated Category 5 cable. Computer room wiring was upgraded to Category 6 in 2005.

Telephone Services

The City has standardized on Avaya VoIP telephone systems. The size and mission of the facility to be served determine the make and model of these switches. Use of voice mail and auto attendants is also determined by the needs of the facility.

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The telephone system is continuously upgraded by timely upgrades of the main Avaya switch. The City uses Voice Over IP (VOIP) and has standardized on the Avaya solution for this technology.

Servers

The City has standardized on the Dell Power Edge line of servers for use throughout the City. This standard allows the Information Technology Department to carry an inventory of spare parts available for use in most of the servers, decreasing downtime following system failures. The Department also carries vendor maintenance contracts on servers hosting mission-critical applications to further reduce downtime. The standard operating system for servers is Windows 2008, 2008 R2 and 2012. The department installs standard anti-virus software on each server for protection and administration. Some servers require additional software such as Microsoft Office and application specific software. Servers are replaced on a four to five year replacement schedule. Funds for all server replacements are authorized by City Council and included in the Information Technology Department operating budget.

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Workstations

The City has standardized on the Dell line of tower desktops and laptop personal computers. The standard operating system is Microsoft Windows 7. The standard suite of office productivity tools is Microsoft Office 2013. Also, every PC installed within the City includes standard anti-virus software, Microsoft Internet Explorer 8.0 or 9.0, Adobe Acrobat Reader 10 and LANDesk Desktop Manager. Additional applications are installed

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as required for specific job-related requirements. Personal owned and unapproved software is not permitted on City workstations.

Handhelds

The City has standardized on the Apple iTouch, iPhone and iPad handhelds. The standard operating system for the iTouch, iPhone and iPad is iOS 6.1.

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Databases

The City has standardized on Microsoft SQL server 2005 and 2008 as the database for all new custom and purchased software applications if compatible. Oracle 9i, 10g and 11g will remain an alternate database when Microsoft SQL Server is not an option for off-the-shelf software applications. Support for legacy databases such as Universe, Informix or Microsoft Access databases will continue until applications using these databases are replaced. New applications are not developed in Universe, Informix or MS Access.

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Internet/Intranet

The City has standardized on the current version of Microsoft IIS as the Web server software and a combination of ActiveX, JavaScript, ASP and .NET for interactive applications and backend database access. The Information Technology Department installs and maintains web servers used to host all City information and services. DotNetNuke software is used to provide content contributors with the ability to update departmental information on the Internet, and will also be used for the Intranet in 2013.

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Application Development Tools

The City uses several tools for developing or supporting custom software applications and reports, including Microsoft Visual Basic, Universe Studio, VB Script, VB.Net, C#.net, JavaScript, SQL, Crystal Reports, SQL Reporting Services and other development tools as provided by application software vendors. Additional development languages or tools will only be introduced when one of the current standards is not suitable or available to develop or support a new application.

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System Hosting and Support

The Information Technology Department serves all departments by hosting, maintaining and supporting all 100% City owned computer servers and applications. Applications and services including Internet, Intranet, calendaring, email and automated payment services are centralized on IT supported servers. The Information Technology Department also assists City departments with the evaluation and selection of new or replacement software applications that will conform to established organization technology standards.

ATTACHMENT B: MAJOR PROJECTS – THREE YEARS

The Information Technology Department management team has developed a detailed work plan for each functional area. The major projects identified include:

Security Audit – Information Technology Staff will work with an outside vendor to conduct the annual comprehensive network and server security audit and implement changes to systems, policies and practices as required to further fortify City systems. This audit will be conducted during 2013.

Enterprise Resource Planning System Upgrade – The Information Technology Department received City Council budget approval for a three year CIP project involving upgrades and updates to the City’s JDE ERP system.

Document Management – The Information Technology Department will collaborate with customers and the General Services Department Records Administrator to research requirements and implement, as appropriate, integration between the City’s Laserfiche document imaging system and other major applications in the City (i.e. JDE, I-Leads, Courts, etc).

Mobile Computer Implementations – IT staff will continue deploying and supporting new mobile technologies based on the IOS platform in 2013, while continuing to evaluate and test new mobile devices, such as the Microsoft Surface tablets and Windows 8..

Major Application Upgrades – Several major software upgrades will be performed in 2013, including the upgrades to the Intranet and Accela maintenance management system. Additionally, the final modules for the City’s new fire reporting system, installed in 2011, will be fully implemented.

Storage Area Network (SAN) replacement – In 2013, the City will replace the SAN purchased in 2009 with a higher capacity, higher performing SAN.

Computer Room Fire Suppression – The City will be evaluating new technologies and replacing the Intergen fire suppression system installed in the City’s central computer facility at City Hall. This project is planned as part of the 2014 Capital Improvement Project program.

Uninterrupted Power Supply Replacement – The City will be evaluating new UPS technology and replacing the UPS for the central computer room to achieve higher reliability and greater energy efficiency. This project is planned as part of the 2013 Capital Improvement Project program.

City-Wide Wireless Network Upgrade – In 2013, the City will replace all wireless network access points throughout the City with more current technology. This project is planned as part of the Capital Improvement Project program.

Central Computer Room Refresh – The computer room, constructed in the City Hall building in 1988, will be updated to more current needs, while incorporating energy

Commented [dp23]: Art, Dan, Scott – Please update with projects you know are coming up 2013-2015.

Commented [dp24]: Art -

Commented [dp25]: Art – update this section

efficient design such as possible use of outside air for cooling. This project is planned as part of the 2015 Capital Improvement Project program.

Microsoft Office 2013 – In 2013, the City will upgrade all users from Microsoft Office 2003 and 2007 to Microsoft Office 2013. This project will involve updating more than 1000 City computers, and organizing training classes for users to learn about new features and become proficient in the use of the new version of Office.

Email System Evaluation – In 2013/2014, the Information Technology Department will conduct an assessment to determine the best platform and service for City email. Currently a Microsoft Exchange Environment, the City will compare and identify pros and cons of several solutions, including hosted cloud based Exchange services, cloud based alternatives such as Google Mail, and onsite upgrade of Exchange to Exchange 2013 or greater.

Commented [dp26]: Scott – anything you think we should add to this new item?

Core Data Switch Upgrade – In 2013, the City will upgrade the City’s core data switches to provide for increased capacity, performance and reliability.

CMMS (maintenance management system) – This project involves collaborating with the Public Works and Utilities Department and General Services Department in the evaluation, negotiation and selection of a maintenance management program with the goal of improving productivity, controlling operations and maintenance costs, maximizing asset uptime, preventing mistakes, being more proactive, assuring standards and procedure requirements, and avoiding liabilities.

ATTACHMENT C: ANTICIPATED FUTURE STAFFING NEEDS

During each budget preparation period, the Information Technology Department will prepare a comprehensive staffing assessment to determine future staff requirements to maintain current levels of support for existing systems and to support additional new systems and customers. Projections are based on historic trends as well as scheduled projects and upgrades. Some of the variables and trends used to project future staffing requirements include:

- Number of employees using IT supported technology
- Total PCs supported
- Scheduled PC and server replacements
- Number of desktop supported applications
- Total Windows accounts supported
- Number of network nodes supported
- Number of Internet connections provided
- Number of major software applications supported
- Number of Internet and Intranet pages, languages and applications supported
- Number of remote locations supported
- Number of Web based services and cloud computing used

Based on this model, the department will review existing staff levels, assignments and evaluate staffing needs for the next five years. Staff additions and reclassifications are subject to City Manager's Office review and City Council authorization.

ATTACHMENT D: SUPPORTED TECHNOLOGY ENVIRONMENT

Software and Web Engineering Team

Commented [dp27]: Art -

Web Development and Statistics

- Over 147,601 citizens, businesses and others visit the City's web site each month, representing more than 1,771,219 viewed pages and images (hits) monthly.
- City Web site job postings and applications, library and recreation pages, utility billing payment pages, and event calendar pages continue to be the most popular areas of the site.
- The Intranet (Employee Information Center) has over 34,571 visitor sessions per month.
- The most frequently accessed pages on the employee Intranet are Phone Listings, General Leave, IT Service Center, Jobs, Employee Information, classifieds, training, database applications, and the link to the Credit Union.
- The Web Software Engineers support over 6,123 pages, 1,972 associated programs, over 14,894 graphic images and 4,793 pdf's.
- The utility billing web pay interactive page gives applicants the ability to save a trip to City Hall and allows our employees better workflow with less interruption. An average of 7,889 customers per month use the electronic services offered through the Web and IVR system to pay on their utility billing account.
- Other interactive services offered on the City's Web site include: job applications, recreation class registration and payment, Access Westminster online crime report, report code violations, traffic complaint, park pavilion reservation, F. A. S. T. Filing (for businesses to file and pay sales tax returns online), GIS, Permits, Library services, Maps, Photo Galleries, Police Forms and Channel 8 scheduling providing online scheduling information.
- Parks, Recreation and Libraries Activity Guide, City Code, Council Agendas, Council Meetings Webcast, Public Meetings, Community Event Videos, Business Listings, Historic Westminster and other reference information are also available to users of the City's Internet site.

Major System Applications Supported by Software Engineers

- Some of the City's major IT Software Engineer supported applications include [content management system DotNetNuke](#), Intergraph Police web applications, CAD and RMS, [Alpine Fire Records System](#), JDE EnterpriseOne ERP, [Accela Automation Asset management](#), [Service Request and Permitting](#), [Justice Systems Court Administration](#), [Advanced Utility Billing](#), GIS and Sales Tax systems. Software Engineers are responsible for developing interfaces and custom modules to operate with these applications.

Stand Alone Applications Supported by Software Engineers

- The Interactive Voice Response system (IVR) allows citizens to call for information on utility bills from the City's Web site. Citizens can also pay their utility bills over the phone or over the Web. All calls and payments are tracked

for analysis using a Microsoft SQL database. An average of 39,627 calls and Web access is processed through this system every month. Approximately 7,889 monthly credit card transactions and E-Checks are settled.

- An internally developed Service Center application routes and tracks Information Technology (IT) Service Requests. All IT service requests are entered and tracked through this system. The Service Center System is capable of accepting email and Intranet generated requests also.
- Other developed databases include Recruit Database, Online Jobs Database, Technical Service Database, Victims Advocate Database, Fire Inspections, Emergency Medical Services, On-Line Code Enforcement Violation Reporting, Police Department Training Database, a Label Maker Database for the City Manager's Office, Citywide Training Registration, Environmental Services Tracking Programs, Law Library, Economic Development's One View Business Database, Citywide PC Inventory, Classifieds and various city surveys.

Both the IVR system and the City's Web site directly supports the mission of the IT Department by providing alternate, cost effective, innovative methods for citizens and businesses to access information and conduct business with the City.

Systems Management Team

Commented [dp28]: Scott -

This team's responsibilities include:

- Install, configure, administer, troubleshoot and provide security and data integrity for over 100 Windows servers and 1060 Windows computers and laptops in over 30 City facilities.
- Provide consulting services for all departments on existing technologies and strategic direction and project management services for the acquisition, implementation and use of new technologies.
- Administer 1141 Windows user accounts and 1216 Exchange email accounts.
- Maintain a warm site disaster recovery/business continuity facility.
- Support for wireless hardware and software used by the City's Public Safety departments for all mobile applications including Dispatch, Field Reporting, LPR (License Plate Reader) and AVL (Auto Vehicle Locator).
- Administration of the Lease/Purchase Program for the replacement of City personal computer hardware.
- Manage software compliance and licenses.
- Manage Systems security including virus protection, content screening and spam filtering.
- Provide an IT Service Center for all City employees who access any of the City's computerized systems.
- Support for mission-critical systems, 24 hours a day, 7 days a week, 365 days a year.
- Perform data backups and recovery services for all centralized systems.
- Track and handle an average support calls volume in excess of 1200 requests per month.

Major Self-Hosted Applications Supported by Systems Analysts

- Citywide email and scheduling system and SMTP gateway
- Police/Fire Computer Aided Dispatch, Records Management, Field Reporting and AVL
- JDE EnterpriseOne Financial, Payroll and Human Resources
- Court Case Management
- Parks & Recreation Point of Sale, Facility Scheduling, Inventory Management and Class Registration
- Geographic Information Systems
- Fleet Management System
- Interactive Voice Response System
- Building Permit and Inspection System
- Microsoft Office for office productivity
- Microsoft SQL Server, Oracle, Informix, Progress and Universe for various database applications
- Cash Receipt Systems
- Utility Maintenance Management
- Document Management
- Email content filtering system
- Citywide Anti-virus
- Automated deployment and assets management system
- Security Application

Telecommunications / Networking Team

Commented [dp29]: Dan

The telephone system consists of two large Avaya IP PBXs, four smaller standalone Avaya IP PBX systems, twenty-one Avaya Remote gateway systems, a Microsoft Unified Messaging and Auto Attendant System and a combination of a City-owned fiber optic and wireless systems and Qwest services at some remote sites. The telephone system currently has 1579 extensions and 715 Unified Messaging enabled mailboxes serving every department in the City. The wiring system transports both voice and data transmissions to all these users. All systems are very reliable with major downtime averaging less than one half day per year. The expansion, maintenance and repair of the systems are performed by the Telecommunications / Networking Team or contracted out to the private sector.

Westminster's LAN/WAN

The City of Westminster's computer network supports approximately 1902 nodes (devices). Of these 1902 nodes, there are 1168 networked personal computers. The Information Technology Department monitors the connection to the Internet to ensure good performance and secure connections. The City's networks are protected by a two tiered security check. All networked PCs have access to the Intranet.

The Local Area Network (LAN) at City Hall is a collapsed backbone design with a quality switch at the core. All of the City's servers are connected to this switch. The uplinks to the desktop switches, located in the telephone closets on various floors, are also connected to this core switch.

All of the devices at City Hall communicate at 100 megabits per second or more.

The City also has a Wide Area Network (WAN) to connect more than 30 City facility locations to the computers at City Hall. These facilities include the Westminster Public Safety Center (PSC), the Municipal Court and the Municipal Service Center (MSC) as well as all of the City's fire stations, recreation facilities, water treatment facilities and libraries. The core of the WAN consists of two Cisco 6509 backbone switches. Single-mode fiber-optic cable provides the connection between City Hall, the PSC and the MSC. Twenty-two additional buildings are also connected to City Hall through a single mode fiber optic cable system. Data speeds on the network are at gigabit rate. The network also supports the reclaimed water system, the SCADA water control system and traffic control system. The remainder of the facilities are connected to the computers at City Hall through City-owned wireless networks. All information from these sites passes through the wireless network at a rate up to 54 Mbps (megabits per second). One facility is served by a CenturyLink T-1 circuit.

Types of Cabling

Within buildings and to the desktop:

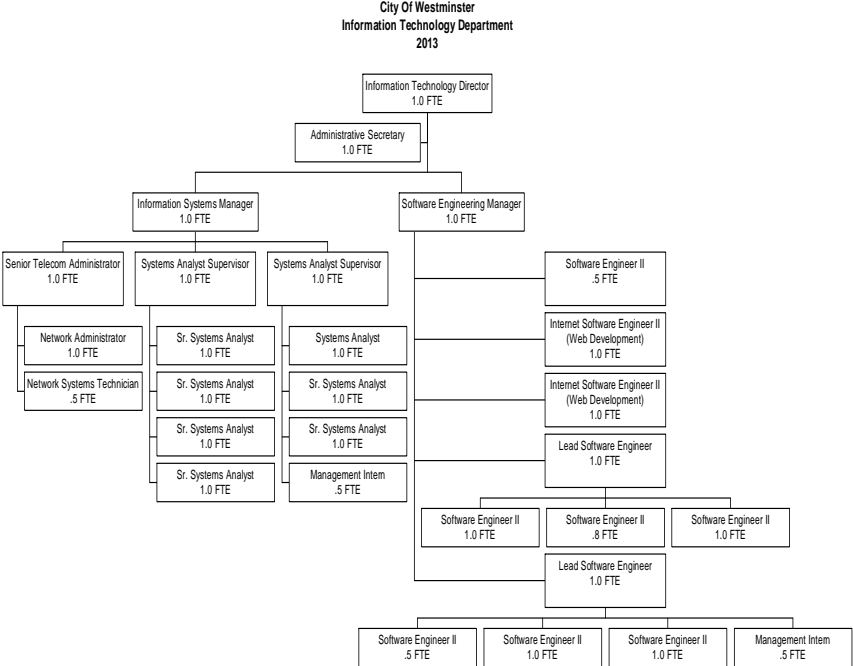
Category 5 Unshielded Twisted Pair (UTP) cable is used to connect the end-user devices to the network. The links between the equipment on each floor and computer room are comprised multi-mode fiber. Category 6 UTP cable is used to connect the City backbone switches with all centralized servers within the computer room at gigabit speeds.

Between buildings:

The connections between buildings are currently made using single mode fiber-optic cable, wireless or T-1 circuits. While the City owns the fiber-optic cabling between buildings and the wireless system, CenturyLink provides the T-1 circuits.

Attachment E: Information Technology Department Organization Chart

Commented [dp30]: Joyce



ATTACHMENT F: WORKLOAD INDICATORS AND RESOURCES

Commented [dp31]: Scott, Dan and Art, please update the 2013 column below.

The following table shows historical workload indicators for growth areas, staffing levels and annual operating budget for the prior three plus current year.

Indicator	2010	2011	2012	2013
Number of E-mail users supported	1,254	1,140	1215	1216
Number of PCs supported	1,036	1,029	1091	1060
Number of network nodes supported	1,637	1,395	1374	1902
Number of web pages and scripts supported	14,388	19,269	17,914	16,200
Annual approved operating budget	2,844,464	2,821,595	2,708,185	2,868,926
* Total Authorized IT Department FTEs	26.8	25.3	26.3	26.3

*includes IT Management Intern

**ATTACHMENT G: INFORMATION TECHNOLOGY DEPARTMENT
OPERATING BUDGET SUMMARY**

Budget Account Description	2013 Budget Amount
Regular Salaries	2,049,995
Regular Salaries – PST (Public Safety Tax)	77,162
Salaries Overtime	0
Salaries Temporary	2,000
Mileage Reimbursement	3,010
Meeting Expense	2,000
Career Development	35,300
Career Development Telecom	3,400
Professional Services	103,446
Professional Services Telecom	36,432
Professional Services PST	13,000
Fleet Rental Charges	4,934
Maintenance/Repair Equipment	163,614
Motor Fuel Charges	710
Maintenance/Repair Equipment Telecom	116,162
Postage	100
Telephone	22,517
PC Replacement Fee	27,046
Lease Payments to others	0
Supplies	28,800
Training & Reference Materials	4,000
Office Equipment	0
Computer Software/Hardware	145,300
Computer Software/Hardware Telecom	30,000
TOTAL	\$2,868,928