



Information Technology Strategic Plan
Revision 3.0

Prepared by
The
Information Technology Department

Revision History

Revision	Date	Reason for Revision	Updated by
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1. Executive Summary

In the last several years, the City of Pueblo has focused on implementing 21st century technology to improve its mainstream business processes. This focus has significantly improved the government services that are delivered to and required by our citizens and our community while optimizing tax revenue and reducing or eliminating costs. This focus has been advantageous under the current economic conditions. It is imperative that the City government continues to leverage technology investments to improve its services, but only after careful evaluation and analysis of our citizens and community's needs.

To ensure that our organization is successful in meeting the needs of our community, the Information Technology Department (I.T.) strategic plan focuses on strengthening our network services and infrastructure, improving our customer service for both internal and external customers, improving our support services to a level of excellence, optimizing internal and external partnership opportunities, facilitating innovation and promoting out-of-the-box thinking to capitalize upon our strengths, improve our weaknesses, and reduce costs. Above all, we are striving to implement IT solutions that are aligned with and meeting the City's overall mission and goals:

CITY OF PUEBLO MISSION STATEMENT

Pride in our community, its history, work ethic, and diverse culture.
United in our goals and mission for a strong and vibrant community.
Entrepreneurial spirit that fosters educational excellence and enhanced opportunities
Beautification, cleanliness, and amenities for a Proud City
Leadership with the utmost integrity, character, ethical standards, and honesty
Outstanding service toward an enhanced quality of life for our citizens

This strategic plan will outline the current and future direction of the City of Pueblo Information Technology Department including the technology direction, strategies, funding and management process requirements, and recommendations for the next three to 5 years.

2. Information Technology Department Overview

The mission of the Department of Information Technology is to assist and support other departments in finding better or more innovative methods of providing superior customer service to our community and our citizens by ensuring our services and technology solutions align with their departmental goals and mission.

To support our mission, we systematically and carefully evaluate, design, acquire, implement and support computer equipment and mobile devices, software applications, network and security equipment, radio and telephone communication services, and other technology solutions as required. There are several major technological advancements that have been implemented since the last revision IT Strategic Plan in 2006:

They include, but are not limited to:

- The implementation of new Public Safety software for both Police and Fire including the generation of e-tickets
- The implementation of an Automated Dispatch System utilized by the Fire Department to decrease response times by 1 minute
- The implementation of a new on-line applicant tracking system that automates much of application processes and on-line job application submittal
- The implementation of a new Sales Tax system including on-line sales tax and business license payments (on-line application scheduled for late 2009 Release)
- The completion of 31 miles of a City owned fiber network backbone including a redundant fiber loop
- The standardization of a "green" network infrastructure and quality of service approach for the City's converged network
- The upgrade of Microsoft Exchange to 2007 which positions the City for 2010 implementation of Microsoft Office Communication Server for true unified communications
- The implementation of Enterprise Blackberry Server

- The implementation of on-line ticket payments
- The implementation of an on-line Parks and Recreation system
- The standardization and in-house video production for government access channel programming
- A Public Safety mobile laptop support program
- The utilization of server virtualization technology
- The implementation of paperless Council Agendas
- The implementation of the 800 MHz Digital Trunked Radio System
- Centrally managed “Pushing out” of antivirus and operating system software patches and updates to all city PCs attached to the network.

As in all areas of the City, staffing in the I.T. department remains lean. Cost control and leveraging technology investments is vital to the I.T. departments strategic plan; therefore, we are continuing the trend of selective outsourcing and partnership building to assist in supporting the City employees and Citizen Requirements

3. Information Technology Strategic Focus

3.1. Personal Computer Applications - General office use

For office use, the City’s standard configuration is based on Microsoft Products. There are other non-Microsoft products that the City has standardized upon, but not generally in areas that Microsoft offers a good solution. Examples include publishing and antivirus software.

Recommendations:

- The City should continue to use Microsoft products in order to save in I.T. departmental support costs as well as ensure compatibility across products.

3.2. Public Sector Software - Other than Public Safety

The City’s primary non-public safety, public sector software applications are aging and are near or at the end of their product life relative to the needs of the City. These applications are extremely limited in functionality and reporting capability, and do not have the flexibility of newer software applications. Compared to more recently developed systems, these applications require excessive staff time to maintain and upgrade. The computer platform that these applications reside on has high annual support costs, is not very flexible and is expensive to upgrade. However it is extremely reliable, which has its merits.

Many City departments have moved away from these aging applications and have purchased stand-alone systems that specifically meet their needs. This, however, can and does create issues when these applications do not coexist as integrated applications. This sometimes causes duplicate data entry and requires extra budgeting for multiple support agreements, hardware and staff support time.

Recommendations:

- The City should promote the acquisition of a modern and a more functional integrated public sector software application to replace most standalone systems and the former system along with associated hardware.

3.3. Public Safety - Police

The City of Pueblo’s Police Department is in its second year of utilizing new Records Management and Computer Aided Dispatch systems. These systems use client-server application architecture as well as web server architecture. The Records Management System (RMS) collects and stores incident information gathered by law enforcement personnel in a centralized database for tracking cases and suspects. It can support multi-agency and multi-jurisdictional agencies and allows other City departments to stay connected, as well as other

cities, and counties. This functionality is currently utilized by the Pueblo County Sheriff's Department and the Pueblo District Attorney's office. The Computer-Aided Dispatch system (CAD) handles dispatching and tracking calls for law, fire and medical units.

The new system provides a mobile application that many of the law enforcement personnel use. This mobile application provides instantaneous information to an officer who is en-route or on-scene at an incident. For example, it provides, voiceless dispatch; status updates; car-to-CAD messaging; car-to-car messaging; and queries including local, state, and national warrant checks, stolen vehicle and property information, mug shots, and records management information. Application updates can be done through the wireless connection to the City's network. However, updating the application via this connection can be extremely slow and cumbersome. Many times officers must remove the mobile computers from their vehicles to hardwire into the network to perform the necessary updates or remove them from service until the updates are complete.

The PD's public safety system software vendor offers an Automatic Vehicle Locator or AVL system that would only provide AVL capabilities for first responders. The City would prefer a City wide AVL system solution.

Recommendations:

- The City should support the installation of strategically positioned wireless access points to provide faster download speeds for updating the Public Safety mobile application and expand the coverage throughout the City to connect to those points. Nortel has completed a study for the City of Pueblo for placement of these wireless access points.
- The City should promote the acquisition of a single citywide AVL solution instead of pursuing multiple solutions. However, if multiple solutions are required, the City should make sure that the solutions can successfully integrate with one another in the event of a disaster or all-hazards event.

3.4. Public Safety - Fire

The City of Pueblo's Fire Department is in the second year of utilizing a new Records Management system. This system is a complete and fully-integrated system comprised of three core modules; Incident Reporting, Life Safety, and Human Resource Management. There is a one-way interface between the Fire Department Records Management system and the CAD system eliminating the need for manual entry between the systems, and a direct interface to the LifePak defibrillator systems used by the department.

Currently, the Fire Department has standardized on Panasonic Ruggedized Toughbooks for their apparatuses. However, due to budget constraints, they have only purchased 4 of the 17 mobile computers required. This limitation prevents Fire personnel from fully implementing the mobile applications in the field.

The Fire Department will be implementing US Digital Designs Automated Alert System. Alerting modes include IP based dispatching and remote configuration connectivity, as well as built in support for Two-tone, DTMF, Single-tone, or Pager alerting.

The Fire Department also purchased preplan drawing software. However, due to training issues, they have been unable to use the software and currently maintain hardcopy drawings. Ruggedized PCs will allow them to access pre-plans and Hazmat information while in route to a call. Expansion of these PCs to provide wireless connectivity to the City's network is planned.

Recommendations:

- The City should promote the acquisition of 13 new toughbooks including mobile application licenses.
- The Fire Department should acquire the necessary training for the preplan software so that pre-plans can be converted from hardcopy to softcopy.
- The Fire Department should acquire and install wireless access points in all stations so that the mobile applications can automatically update the RMS system. This acquisition could benefit PD by providing the high-speed bandwidth and coverage area for their application updates.

3.5. Document Imaging

About 3 years ago, the City implemented a citywide imaging system. This system integrates well with all City applications regardless of platform or software source and provides accessibility to documents across all City Departments. This promotes a more efficient and productive environment while effectively managing and backing up vital business documents. The imaging application has been implemented in 98% of the City departments. Intranet/Internet access has not yet been implemented.

The City Clerk's office currently uses an outdated version of an imaging system that was designed for small organizations. It is running on aging hardware. This system works well for the Clerk's office, but does not facilitate the sharing and accessibility of documents across the organization.

The Clerk's office does utilize the citywide imaging system integrated with software from the same vendor for city council agenda production. This allows for departmental collaboration on agenda creation and management without the need for paper. Items are added to the agenda and supporting documentation is attached to the agenda via templates. All forms, staff reports and back-up materials can be attached to an agenda item using the imaging system.

Sales Tax has implemented a new Sales Tax collection system, but does not currently utilize a document imaging and management system. All returns, business licenses and associated documentation are currently kept in hardcopy and stored in large file cabinets. This method is not cost effective and provides no back up of documentation in the event of a disaster.

Recommendations:

- City Clerk's office should utilize the citywide imaging system and convert all legacy data to this system.
- Sales Tax should continue moving forward with full utilization of the Sales Tax system. Once this is complete, Sales Tax should interface the application with the citywide Document Imaging System.
- Complete the implementation of the imaging system in the remaining 2% of City departments
- Move forward with the browser based application for internal City departments and make documentation accessible by citizens via the Internet

3.6. Specialized applications

Just as the City has specialized departments, the City has requirements for several specialized applications. There are several engineering or transportation-related applications that are not "mainstream", but are nonetheless essential to City Staff. Currently, the I.T. Department installs such applications on an ad hoc basis, which does not allow for even cursory testing or comparison with similar products that may be a better fit for the user.

Recommendations:

- The City should devise and implement a formal procedure for evaluating and securing specialized software for inclusion within the City Standards. These procedures should include the end-user responsibilities for installing, testing and securing, and supporting such specialized software

3.7. Data Base Strategy

The City of Pueblo legacy application systems data resides mainly on iSeries DB2 for i databases. There are downsides to continuing use of the iSeries platforms due to the cost of ownership associated with the iSeries relative to other suitable platforms and systems that are available today. All recently implemented systems have Microsoft SQL Server backend databases. There are also several smaller in-house developed MS Access based applications that utilize a SQL Server databases for backend primary storage.

Recommendations:

- The City should continue migration to, and use of, application systems that utilize Microsoft SQL Server databases. SQL Server is a mainstream product that can facilitate data extraction, sharing and queries from other Microsoft as well as non-Microsoft software products.
- Unless there is a compelling business based reason, other databases should be avoided. This has been and should continue to be a requirement in any RFP or Bid request.

3.8. E-mail

The City has standardized on Microsoft products for e-mail services and client software. This is keeping with the “mainstream” approach for selecting and implementing PC-based software. There has been widespread acceptance of the e-mail and scheduling capability provided by Microsoft Products.

City employees are able to check their e-mail and calendars from any Internet connection (at home, on vacation, etc.). I.T. has installed and currently maintains VPN (virtual private network) access into the City’s network. City employees that do not carry Blackberries and wish to check their e-mail must request a VPN connection to the City’s network.

The I.T. department currently supports Blackberries as the mobile device providing e-mail and Internet functionality along with voice service.

The City plans to expand the communication ability of City Employees by implementing SharePoint. This will require a global upgrade to Office 2007 or later which is going to require significant resources and funding. Sharepoint will facilitate web meetings and automated workflow processing.

Recommendations:

- The City should continue to provide VPN access and/or Blackberries to those City employees requiring this functionality along with a proactive approach to lessen the chance of malware entering the network via this method.
- Move forward with resource and funding acquisition for SharePoint implementation.

3.9. Hardware and Infrastructure

3.9.1. IBM iSeries

The City has two IBM iSeries computers. One continues to run the City’s legacy application systems. The other is being retired, but still contains the archived Sungard H.T.E. Public Safety data. These computers are both at the end of their life cycle. Continued use will at some point dictate replacement with a current model of the iSeries platform which may not be cost effective compared to replacing both the application software and computer platform.

Recommendations:

- The City should replace application systems that run on IBM iSeries computers.
- The City should remove the IBM iSeries computers once all legacy data has been converted or archived.

3.9.2. Desktop computers

Mainstream vendor, with a five-year replacement cycle

3.9.3. Printing strategy

The I.T. Departmental standard for printers is:

- HP Lasers (networked)
- Minolta or Canon copiers

3.10. Network

The City's network is comprised of its own fiber optic cable and leased Qwest services. The fiber serves eight buildings located in and around the City Hall area. There is also fiber optic cable between the City and Pueblo County's Justice Center. Fiber Optic service between the downtown area, Fire Station #1, and Fire Department Administration was initiated in 2006, between Parks and Recreation and Fire Station #3 in 2008, between Airport and Wastewater Treatment Plant in 2009, and planned for the New Municipal Justice Center in 2010. Also in 2006, the City's outside plant was expanded through the grant of twenty-five miles of fiber ringing the City; in April of 2009 the first fibers of the outside plant were lit up.

A DS3 circuit to Qwest is the centerpiece of the leased services. Seventeen T-1 circuits are bundled within the DS3 (a DS-3 is the equivalent of up to 28 T-1 circuits). The T-1 circuits provide high-speed data service to City sites that are not currently accessible via the City's fiber optic cable plant. The DS3 is under a five-year contract entered into in April of 2008 and T-1 circuits which are not under contract.

3.10.1. Fiber Optic cable

The proximity of eight buildings in the vicinity of City Hall made installation of fiber optic cable between them an easy and cost-effective decision. This assures high-speed data communication and reliable telephone service amongst the vast majority of City users. The City owns all the rights-of-way necessary for this campus-like implementation. Additionally, the City has access to much existing underground conduit for specific City purposes. It also has the rights necessary to use utility poles throughout the City, as long as the use is for some clearly defined municipal services. The City has embarked on a project to install several miles of fiber using these resources. There is demand for net services that fiber can accommodate. The City's fiber backbone has expanded tremendously with over 31 miles of fiber in the ground. The City's fiber network topology has evolved from a "star" topology and has been positioned to provide a redundant and highly available "ring".

3.10.2. Telephone System

The City's centralized PBX system is a hybrid between traditional telephone services (called "TDM") and converged, network based phone service (Voice-over-IP or VoIP). Most of the sites were installed with TDM architecture, due to the poor quality of existing wiring and lack of VoIP requirements. However, VoIP offers greater flexibility and, in some cases, lower costs. Some of the smaller and remote City departments, i.e. fire stations, have not been put on the phone system. But as the City's fiber network continues to expand, these sites are prime candidates for VoIP service. In March of 2010, the new Pueblo Justice Center will open. This building will be the new home of the Pueblo Police, Municipal Court, and IT departments. Upon opening, the telephone system will provide VoIP service to telephone service to approximately 65% of the telephones in the City.

The City has implemented 311 services throughout the City, but it is not being fully marketed or fully utilized. The City also has an Automated Dialing Assistant (ADA) that has been implemented internally and externally through 311 and various departmental menus. It could be used by citizens to access any department or employee in the City, 24 hours a day (using voice message boxes available to all employees).

Recommendations:

- Fiber to be laid in advance of specific requirements, Qwest leased services as needed.

- If the demand for 311 services warrants growth, the City should be prepared to implement a centralized operator if and when demand warrants it, using its 311 capability for that purpose or for a non-emergency public safety telephone number.
- As fiber connectivity is expanded, continue to expand VoIP services and eliminate the number of leased lines required by remote departments or for the phone system as a whole

3.10.3. Data Network

As the City implements a converged solution, such as VoIP, the distinction between voice and data networks dissipates. The City's I.T. staff should look at every portion of the network in the City as a potential VoIP segment. Network segments should thus support Quality-of-Service (QoS) protocols. Part of the criteria for choosing our solution was to take advantage of comprehensive architecture. The phone system vendor will be able to provide continually improving converged solutions. This will allow the City's small I.T. staff the ability to build out the voice and data network with a well-designed architecture.

As with the new Building and expanded fiber network, the data and voice network will be implemented with SMLT (split multi-link trunking) and 1000E topology for voice and data back up and redundancy.

Recommendations:

- Continue building out and lighting up the fiber optic network. Particularly as leases from Qwest begin to expire, the City should begin lighting up the dark fiber links that are in place.
- As the City installs fiber in sites currently served by T-1 circuits, move those circuits to other sites that currently are not on the City's network at all. This is the proper course throughout the life of the City's five-year Qwest contract.
- As the City builds or moves to new locations, consider VoIP as the preferred option for flexibility and low cost.

3.10.4. Security

The City of Pueblo recognizes that its network, computing systems, and electronically stored information are critical assets that must be protected from the constantly evolving threat landscape. Information housed on City systems or flowing through City assets must be protected from unauthorized disclosure, theft, loss, destruction, and alteration. The effectiveness with which the City executes this charge has a significant impact on the delivery of City services and on the trust instilled in the users of City services. In addition to providing for the safe housing and transport of information assets, the City must maintain information assets availability; even during emergencies and times of crisis.

The goal of delivering information resources is paramount. In all cases, delivery of information resources must be sustainable. Sustainable delivery entails using secure practices and resources, stable platforms, insuring adequate training for Information Technology staff and City employees, maintaining cost efficiency, and insuring stable and secure network through maintaining best security practices.

Key Objectives

- Provide a comprehensive security policy framework – develop and maintain sound security policies, standards, guidelines
- Follow approved security policies, standards, guidelines and industry best practices
- Educate employees and technical staff of security pitfalls and best practices
- Procure and implementing the right equipment for information sharing and security tasks
- Insure enterprise-wide security monitoring of City systems for adverse information security events
- Insure ongoing vulnerability assessments and remediation of all information technology assets
- Mitigate known vulnerabilities when elimination is not feasible
- Promptly contain, remediate, and manage security incidents
- Insuring mission-critical services are available in the event of a crisis by developing and underpinning a business continuity program

- Insuring mission-critical services are available after a crisis by developing and underpinning a business recovery program
- Continuously assess the effectiveness of Information security controls
- Constantly investigate, evaluate, and adjust to the ever-evolving threat landscape

4. Internet and Intranet

4.1. Web site

Gartner, Inc., the worlds leading information technology research and advisory company, categorizes an agency's progress regarding e-Government into four phases:

- (1) Presence. Characterized by static content; informational only.
- (2) Interaction. E-mail enabled to allow communication, search engine or other tools imbedded to help users navigate amidst more voluminous information.
- (3) Transaction. Registration, form submission, and/or payments via the Web
- (4) Transformation. E-government solutions are considered as a facet of every organizational initiative.

4.2. Web site: www.pueblo.us

The City website (www.pueblo.us) provides city forms, a citizen complaint intake process, content managed by department utilizing an automated content management system. The Web site is Section 508 compliant. The City has implemented E-Government and E-Commerce initiatives that include paying parking tickets, Parks and Recreation program registration, online employment applications and applicant tracking, and as part of the new Sales Tax system, allow for online filing and payments. An index of services has already been added. The website is also in the planning stage of a complete redesign for 2010.

Recommendations:

- Leave the responsibility for managing all of the City's Web initiatives within the Information Technology department, to ensure that the City remains in Section 508 compliance and that there remains a single, unified Web look and feel for visitors to the City's website.
- Continue with the strategy of making departments responsible for the currency and quality of the material they choose to publish on the City's website.
- Pursue opportunities to implement online services.

4.3. Web site Architecture

The City website has historically been outsourced. Until recently, this has been a very economical arrangement since City staff members do not have to support a Web server or the accompanying software. Recent and anticipated changes in the City website have triggered a change in philosophy regarding outsourced hosting. As a result of I.T. research and analysis, there are sound reasons that the City should move toward hosting its own website while adding functionality and services to the site.

Recommendations:

- Migrate from an externally hosted website. Maintain adequate staffing and resources to host the website internally.

5. Radio System

The City of Pueblo has recently deployed a new 700/800 MHz Digital Trunked Radio System (DTRS) that is connected to the State of Colorado DTRS for interoperability communications. The Backbone is now in place; Police and Fire department are operating on the new system and radios have been purchased for Public Works and transit, which will complete the radio system change out. Installation of the final batch of radios will begin in November 2009.

The new DTRS will allow

- City radio users will be able to communicate with each other almost anywhere in the State of Colorado
- City radio users will be able to communicate with other public safety responders in the region, such as the Pueblo County Sheriff's Office on common Mutual Aid Channels (MACs)
- Responders from other regions of the state will be able to communicate with Pueblo first responders and others if they are in the Pueblo area due to an event or request for assistance.
- Automatic Vehicle Location (AVL) will be available soon and the data could be transmitted through the DTRS.

Recommendations:

- Continue to replace T-1 connectivity to the towers with City fiber connectivity
- Incorporate AVL data over the Radio System so that air cards are not needed
- Increase data traffic to eliminate the use of commercial air cards
- Continue to provide better network back up for established sites and expand system to accommodate new areas development

6. Customer Service and Support

The I.T. Department currently consists of 16 regular employees. Local college interns and temporary employees are sometimes utilized for short duration and special projects assisting regular employees.

I.T. support could be viewed as 4 major areas as follows:

Technical Support

- PC Hardware installation and repair
- PC Software installation and support

Help Desk

- Networks – Fiber and copper network infrastructure
- File and Application Server support
- Security and Business Continuation – Firewalls, anti-virus protection, access monitoring
- Telephone system support – analog, digital and VoIP

Application Systems Support

- 3rd party application software and hardware systems support
- GIS development, application integration and support
- Web site development and operation
- In-house application development and ongoing enhancements/maintenance
- Imaging system support

Radio Communications

- Mobile and base radio communications installation and repair

Project Management

- Project identification used to determine the organizational technological needs of the City
- Management of project implementation, quality standards and budget control

6.1. Employee Staffing Levels

Most City I.T. employees occasionally cross over into other areas of expertise, some more often than others. One of the FTEs normally supporting Networks and Servers routinely supports the Citywide imaging system, which falls under Application Systems Support. This happens often and the many scenarios of crossover are too numerous to go into detail.

6.1.1. Technical Support

- I.T. has 6.5 FTE's assigned in this area. This group supports over 400 desktop computers, 100 notebook computers, 35 servers and numerous miscellaneous peripheral devices and provides Help Desk support.
- Desktop and notebook computers require rebuilding or replacement depending on the severity of the failure. Standard supported software is generally 'ghosted' to load a new PC or a PC that has had its hard drive contents compromised. Ghosting allows I.T. to return PCs to the customers in less time than loading individual software packages and applying subsequent patches and upgrades. It also allows I.T. to maintain software standards that have been set.
- The Help Desk (1/2 FTE) provides first level contact with internal customers experiencing technical issues. Many problems are resolved at this level. Those that cannot be resolved are referred to technicians via a Work Order. I.T. utilizes an automated work order system to assign technicians and track the progress of the Work Order from entry to completion.
- 1 FTE in this area is responsible for implementing security policies, protecting computers from malicious cyberspace attacks by keeping antivirus and firewalls up-to-date, and actively monitoring unauthorized attempts to access the City's network. This person is also responsible for setting up authorized access to the City's network from other agencies and internal customers needing remote access to the network.
- 2 FTEs assigned to this area are responsible for expanding and maintaining the electronic network infrastructure, software and associated servers. This includes installation and maintenance of traditional and optical fiber data transmission lines. The servers include those that support the Public Safety system data and software applications, general and application specific shared folders and email. 1 of the FTEs has the responsibility of maintaining the citywide email application.

6.1.2. Application Systems Support

I.T. has 6.25 FTE's assigned in this area. These FTEs generally specialize in areas of support such in-house database systems development, GIS system development and support, Web services development, and 3rd party application system acquisition and ongoing support. 1/2 FTE is allocated to maintaining and upgrading the IBM iSeries platforms and operating systems.

6.1.3. Radio Communication Systems

I.T. has 3 FTEs assigned to Radio Communication Systems. These FTEs are responsible for installing and maintaining the City's mobile radios and associated centralized equipment, antennas and towers that are used by Public Safety and Public Works departments.

6.1.4. Project Management

I.T. currently has 1.5 FTEs assigned to project management for City technology projects.

6.1.5. I.T. Administration

I.T. currently has 1 FTE for overall management of the department and that is the Director.

All areas of I.T. are understaffed and training has been limited even prior to the current recession and subsequent budget restrictions. The number of customers utilizing technology continues to grow with more sophistication and higher expectation levels.

Recommendations:

- Invest in I.T. resources to sustain and improve upon the excellent customer service that is expected from internal customers.
- Continue to enforce Hardware and Software standards that will allow limited I.T. resources to perform tasks in an efficient and effective manner as possible.
- Expand the area of Internet based services in order to reduce manpower requirements for Public Services than can be offered via the Internet.

7. GIS Strategic Plan

I.T. GIS services are managed within the I.T. department. All base data is available within the ESRI ArcSDE® geodatabase which is house by the Pueblo County GIS department. The City and County of Pueblo utilizes a consolidate database and system so that data is consistent an available to both entities. In addition both entities pay for updated aerial photography every 3-year, but are responsible for the cost of their own software licensing.

The City GIS coordinator manages and supports the GIS application, 3rd party GIS based/integrated applications, provides training, and creates or assists with the creation of maps for Public Safety, Community development, City administration and other City departments as necessary.

This area is greatly understaffed, but utilizes temporary personnel, as budget allows, assisting with workload.

Recommendations:

- The City should add at least 1, if not 2, additional FTEs to this area as soon as budget allows.
- The City should continue with partnering arrangement of GIS resources with Pueblo County

8. Plan Revision

This plan should be reviewed and updated biannually. The City's Information Technology Department should coordinate the process of gathering new requirements and proposing new recommendations, based on the input solicited from the user community.