

## INFORMATION TECHNOLOGY

### Service Description

All residents of the City of Eugene experience Information Technology (IT) services when they report a crime, check out a library book, stop at a traffic signal, purchase Hult Center tickets, register for a recreation class, or use virtually any City service. All City services use technology to increase their efficiency and effectiveness. The public is increasingly accessing City information and services over the Internet. IT staff support the complex network of information and communication systems that underpin these applications, thus enabling the City to better serve the public.

The work of IT staff involves five key service processes:

- **Network Infrastructure:** Providing computers in offices and vehicles, workstations, printers, servers, telephones and the secure and reliable network that links them together in 51 City facilities throughout the community.
- **E-government:** Providing a reliable and secure Internet and Intranet platforms for the City departments to deliver information, services and e-commerce to the public and departments.
- **Automated Business Systems:** Working with City departments to design, implement (develop or purchase), maintain, and upgrade automated business systems and personal computer software.
- **Telecommunications Program Management:** Administration of a comprehensive City ordinance governing public rights of way licensing, dedicated taxation, and oversight of City telecommunications technology projects. Related consumer and legislative advocacy.
- **Document Production and Distribution:** Managing multi-function devices (copy, scan, print, and fax) located in departments, providing in-house publishing services, consulting about external publishing, and in-house and US mail services.

IT staff support the needs of about 1550 staff that use over 1,500 personal computers (including 400 mobile computers) to access 200 automated business systems. The service staff comprises 54.0 FTE.

### Historic Perspective

- 1965 City of Eugene joined local partners to establish the Regional Information System (RIS) and to purchase a mainframe computer.
- 1984 Personal computer work station introduced.
- 1985 City/County consortium acquires first shared telephone system.
- 1995 Council Committee on Automation calls for creation of City Web site.
- 1997 Comprehensive Telecommunications Ordinance adopted by City Council.

- 1999 First major Internet-based system for patron use - Library System
- 2000 Y2K planning and remediation efforts result in no service disruption.
- 2002 Eugene prevails in telecommunications lawsuits, funding for community projects begins.
- 2003 Mobile computers deployed in Police and Fire and EMS vehicles.
- 2005 Launch of City of Eugene Internet Portal.
- 2007 Free public WiFi made available at many City facilities.
- 2008 Formation of IT Technical Response Unit to support emergency management.

### Citizen Involvement

As IT technologies become an indispensable part of the national fabric, ISD continues to serve the public interest in IT services through a variety of citizen participation programs and projects. The Budget Committee regularly reviews the IT Budget and Service Profile. In July 2006, ISD launched a year-long public engagement process to seek public input on improvements of the portal site. Using a variety of techniques such as surveys, stakeholders input, public workshops, panel meetings etc., the project successfully prioritized and implemented the recommendations made by the public. ISD staff serves in the Neighborhood Empowerment committee to ensure the City's neighborhood leaders have adequate technical support and access to critical information.

### Customer Input

Direct customers of IT Services include:

- City departments, work groups, and individual employees
- Department IT Steering Committees
- Eugene elected officials
- The public (via Internet)
- Other public agencies

IT staff periodically identify customer needs, expectations and satisfaction using surveys and focus groups. The most recent comprehensive survey was in 2007. All major business software is designed with customers on project teams. IT staff meet regularly with steering committees from each department and the IT management team meets annually with each department management team to review goals and accomplishments. An annual workplan is developed with extensive input from City departments. Informal input is solicited in a variety of formats from customer groups. IT staff monitor use on the City's Internet site to determine what areas are of most interest to the public. The City Internet site enables users to e-mail suggestions and comments to City staff in a number of program areas.

## **Mission**

We use our professional expertise, in partnership with our customers, to provide and improve public services through the strategic use of Information Technology.

## **Outcomes**

- Increase the efficiency and effectiveness of City departments and improve the quality of their services.
- Provide secure public access to City services and information through the use of technology.
- Improve access, usability and integrity of information for City staff, elected and appointed officials, and other agencies.
- Strengthen communication and collaboration between City staff, officials, and the public through computer, telephone, and document technology.
- Use technology to facilitate environmentally sound and sustainable practices.
- Protect the public's interests by ensuring that telecommunications providers adhere to City telecommunications program policies and rules.

## **Operating Principles**

- We work for the customer.
- We have integrity.
- We are professional.
- We produce quality products and services.
- We look for innovative solutions.
- We are stewards of the City's technology infrastructure including secure hardware, software, and data.
- We value diversity and team work.
- We plan strategically with our customers and work from our plans.

## **Current Operating Environment**

### **Web Technologies**

Within City departments and the community there is a growing emphasis on the use of web technologies as a means to increase efficiencies of providing services. To meet the growing demands for sharing public information, collaborating on community efforts and City projects, and making financial transactions for all City services convenient for citizens ISD will need to improve and implement new web technologies to meet the growing demands. Application development is shifting towards web based solutions. Streaming video and audio are increasingly becoming standard forms of media delivered from Internet sites, and web based video conferencing may soon become an important communication tool used by City staff and the community.

## **IT Staffing**

Workload has increasingly become an issue as the demands for technology have increased and staffing levels have decreased. In some service areas there is no backup. Acquiring the skills necessary to support rapidly changing technology is an increasing challenge. ISD's training budget does not adequately address this reality and the current atmosphere of budget tightening has eliminated our ability to maintain enough training funds to keep skills in line with technology. While the current labor market would seem to favor employers, there are very few qualified applicants for our technical positions as they become open. We have responded by creating entry-level classifications for technical positions. While this strategy has been successful, it increases our training costs and has a temporary negative effect on our service level.

## **Resource Constraints**

The budget for IT services is not keeping pace with demand. Departments look to technology as a means to promote efficiency and to offset gaps created by reduced budgets. This has become more difficult to accomplish as budget cuts have resulted in the loss of IT positions. IT is also unable to provide the 24/7 support coverage requested by several departments. The City makes extensive use of vendor-provided software and this brings with it mandatory increases in annual contracts for support that exceed budget adjustments. Telecom funding for new projects has been significantly reduced to help pay for AIRS redevelopment and Telecom funding does not provide for ongoing support.

## **Collaboration Tools**

As the Internet matures as an indispensable two-way communication channel for information sharing and eCommerce, Web 2.0 or social networking is fast becoming a leading technology for collaborating among disparate groups of users. Wikis, blogs, discussion forums, YouTube, Facebook, virtual meetings etc. are becoming the standard collaboration toolset in Cyberspace. These collaboration tools are designed to facilitate multi-way communication, and to provide a set of methods for stakeholders to participate in problem resolutions without time and location constraints. The collaboration technology should capture the development efforts of innovative ideas and solutions from many participants and organized them into a structured content environment. In response, ISD will be introducing Microsoft Office SharePoint Server as the collaboration platform for both internal and external facing websites. Once the platform is in place, City staff can quickly build collaboration websites with minimal IT assistance.

## **Regional Partnerships**

Eugene has a long history of using regional partnerships in technology to improve services and lower costs. Examples include the AIRS public safety system and the shared Geographic Information System. A major new statewide initiative, e-Permitting – will involve several RIS agencies. At the same time we need to recognize that differences in priorities, policies and finances can make cooperative projects very difficult. In addition the ability to share critical information - such as public safety data - brings an additional level of complexity and cost to our network operations.

## **Work Planning and Project Management**

Strategic planning and effective project management are key competencies for IT staff. Effective planning requires that each department maintain an IT plan that addresses their technology needs in priority order. IT staff incorporate departmental and regional technology plans into a rolling two-year work plan for IT. Proper execution of the IT plan requires the extensive use of project management tools and techniques. The most effective IT organizations have a Project Management Office (PMO) to coordinate projects and maintain the project management process. Lacking the funding for a PMO, many of the project management duties fall to ISD's technical staff. The emergence of project management as a primary duty diverts technical staff from their more traditional duties and expertise.

## **Technology Infrastructure**

The City's strong technology infrastructure provides employees with the information and technology required for successfully achieving the City's strategic goals and objectives. This technology infrastructure is constantly changing and will affect City resource requirements. Some of the challenges include: Ongoing equipment replacement funding for PCs, servers, and other IT components; increasing information storage requirements (data, photos, video, etc.); new technology initiatives such as wireless, mobile devices, virtualization and document management; and improving web-based collaborative technologies.

Changing business needs drive IT requirements and these new technologies will require funding as well as training for IT staff and other City staff.

## **Digital Asset Management**

With the advancement of the digital medium and the Internet, a proliferation of digital assets is growing throughout the City. Digital assets such as video, pictures, audio, scanned documents, and other rich media contents are being created, retrieved, and modified on a regular basis. These important assets should be catalogued, organized, stored, and distributed in a secure and easily searchable manner by an enterprise digital asset management system. Such system should also promote the reuse and re-purpose of these assets, support

a configurable workflow, enforce digital rights and automate legal retention and disposal of these assets. Without such a system in place, the management of digital assets can quickly become chaotic, overwhelming and fraught with duplication of assets.

## **Telecommunications Program Management**

Municipalities utilize their authority over commercial use of the public rights of way and their taxation authority within a myriad of restrictive federal laws and regulations enacted since the mid 1990's. The operational landscape remains unstable and litigious between telecommunications providers as well as between providers and municipalities. By 2004, Eugene itself prevailed in four lengthy lawsuits over its municipal code amendments; however, two additional challenges were initiated in 2007. Although post-litigation collection of fee and tax arrears has been successful in Eugene, program policy and implementation instability and volatility have become the constant; that is likely to continue for the next few years should litigation, State and Congressional pre-emption attempts, and FCC rulings continue to threaten City authority and financial stability.

## **Performance Measures**

### **Core Processes**

#### Provide Infrastructure for Network and Communication Services

- Percentage of telephone MACs (Moves and Changes) completed within service level agreement.
- Percentage of desktop repair calls resolved within 24 hours.
- Percentage of new hardware requests completed within service level agreement.

#### Provide Secure and Reliable E-Government Platform

- Number of visitors per month.
- Number of page views per month.
- Number of e-commerce business systems.

#### Provide Automated Business Systems

- Percentage of Help Desk calls resolved within 4 hours.
- Percentage of Help Desk calls resolved during initial call.
- Number of Help Desk contacts (calls and e-mails).

#### Provide Telecommunications Code Enforcement

- Percentage of registered providers who are current with fee and/or tax requirements.
- Percentage of consumer complaints resolved, or referred to appropriate state or federal agency.

#### Provide Document Production and Distribution Services

- Amount of paper purchased.
- Percentage of applicable bulk US mail that qualifies for CASS-certified discount.

## **Total System**

### Effectiveness

- Percentage of surveyed customers satisfied or very satisfied with IT business systems and support.

### Efficiency

- Percentage of hardware (24hr) and software (4hr) calls resolved within time frame.
- Ratio of IT staff to jurisdiction-wide staff.

### Financial

- Total ISD expenditures per FTE jurisdiction-wide.

### Customer Satisfaction

- Percentage of surveyed customers satisfied or very satisfied with general IT services.

**Strategy 1: Provide leadership for the use of Internet technologies to provide services to the public.**

Objectives: Increase Internet sales volume by 20% per year.

Increase the number of visits to the City web site by 20% per year.

#### Work Activities:

- Implement new collaboration tools.
- Implement additional transaction (e-commerce) systems.
- Identify and initiate partnership opportunities to create other e-commerce applications.

**Strategy 2: Align IT resources with our customers' key strategic service needs.**

Objectives: 100% of department steering committees submit annual IT plans.

100% of departments have an active IT steering committee.

#### Work Activities:

- Assist departments with strategic planning and accurate estimation of project duration and cost.
- Work with department steering committees to develop annual IT plan that is realistic and aligned with departmental priorities.
- Publish and maintain standardized department work plan documents.
- Meet regularly with department steering committees.

- Update department steering committees on relevant ISD initiatives and facilitate 2-way communication between the steering committees and ISD management.
- Meet with Executive Management to periodically review and revamp department steering committees.

**Strategy 3: Improve the delivery of quality business systems through the use of effective project management techniques.**

Objective: 100% of projects have a Project Charter (plan).

80% of IT projects are completed on time.

#### Work Activities:

- Develop a project charter template based on the industry standard Project Management Body of Knowledge (PMBOK) guidelines.
- Assist departments in the formulation of the project chart inputs.
- Publish the each project charter to a project workspace SharePoint site.
- Develop a process for managing project scope and integrated change control.
- Incorporate a plan for resource (ISD and departmental) management into each project management plan.
- Implement tools and techniques for the management of project execution.
- Implement an administrative project closure procedure.

**Strategy 4: Provide leadership in sustainable use of technology.**

Objectives: Reduce the volume of paper usage. Reduce the amount of paper purchased each year.

Minimize number of print devices for greatest efficiency. Reduce the ratio of printers: staff each year.

Reduce energy use. Increase the percentage of devices (computers, monitors, printers) that are Energy Star and/or EPEAT rated.

#### Work Activities:

- Configure print devices to duplex print, train staff to reuse single sided printed paper and to use digital drafts.

- Increase use of online forms and digital reports. Increase use of document scanning and management systems, such as Laserfiche.
- Paperless time entry and payroll advises.
- Analyze work group print production needs to reduce number of printers by consolidating printing function into a Multi-function Device (MFD).

- Train users to use the convenience features with their MFD.
- Purchase Energy Star compliant and EPEAT rated equipment.
- Reduce number of servers with virtualization technology.
- Implement video conferencing.

