

City of Royal Oak
Information Systems Department

Report to Service Delivery Committee

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Prepared by: Scott L Newman
Manager of Information Systems

City of Royal Oak Information Systems

Brief History

Where we were:

The City's computer system has changed over the years. In 1985 the City had a mainframe system w/ a 65mb hard drive, 16k of memory, 9 terminals and the application systems were mostly a function of Finance. During the next 10 years, a more powerful mainframe had been installed. Emphasis was placed on computerization of applications outside of finance. Applications were developed to be integrated to share information with each other and across departmental boundaries. These mainframe applications were customized systems, written in Cobol by in-house programmers. Systems like the Land Management system, integrated assessing, tax, building inspection, code enforcement, permits, voting records, and dog licenses, etc. providing automated and streamlined business processes. The City installed their 1st Local Area Network (LAN) of 27 pc's with a novel file server. DOS versions of Wordperfect, Lotus, dbaseIII were the desktop applications. Productivity started going up; we were becoming more efficient. Within six months, we purchased another 30 pc's.

The early 1990's were hard on Royal Oak. The budgets were tight. Capital improvements to the computer system were minimal, although we were able to make headway with application programming. By 1994 our computer equipment had seen its useful life being extended. We fixed and repaired when and where it was necessary. We were finding it difficult to communicate with other agencies. Microsoft had become the industry standard and as budgets allowed, we started moving in that direction as well. We implemented new technology in key areas of the City. The Library had become fully automated, and the Engineering department implemented their Computer Aided Drafting (CAD) system.

The City, realizing that we needed overall improvements in technology, contracted with Plante & Moran Consulting to assembled a 5-year technology plan. The plan included development of technical standards, implementation of client/server technology (no more mainframe) over a wide area network with a new cabling & switch infrastructure, a new telecommunications system, a modern windows environment with MS Office desktop software, implementation of Document Imaging, an integrated packaged municipal application system called GEMS was purchased (Finance, G/L, A/P, A/R, purchasing, payroll, H/R, Water Billing, and Work Order modules). Those applications that didn't have a module in the GEMS package were either converted to MS-Access applications or another solution was implemented. The Assessing and Tax applications were ported to the Oakland County System. The 44th District Court had always been connected to the statewide JIS networked system. The state's QVF (Qualified Voter File) system was implemented in the City Clerk's Office. The Police and more recently, the Fire records Management System are on-line with Oakland County's Clemis and Sunpro applications.

Where we are today, is provided in this report to the Service Delivery Committee.

Report to Service Delivery Committee
City of Royal Oak Information Systems
Table of Contents:

PURPOSE 4

FUNCTIONS..... 4

STRUCTURE 5

NETWORKING..... 13

STAFF COMPUTERS 14

SERVERS 14

TELEPHONE SYSTEM..... 15

BUDGET 15

PROJECTS 15

OAKLAND COUNTY 16

INTERNET..... 17

APPLICATION SOFTWARE LIST 18

APPLICATION INTERFACES 19

SERVICE DETAIL MATRIX 21

Information Systems

Purpose: Oversees the installation, operation, and maintenance of the city's electronic communications systems, including telephones, cellular telephones, computer hardware, software, cabling, e-mail, and websites. Provides support services to all departments to assist them in providing automated services to other departments and the public, including computerized voting systems, applications for employment and for advisory boards and committees, graphic information systems (GIS), personnel and payroll systems, etc. The department is responsible for representing the City on the following advisory committees: Wireless Oakland Committee and the Intergovernmental Cable Communication Authority (ICCA).

Functions: The Information Systems department functions and services work in conjunction to maintain the integrity and security of the information and applications contained on the City's computer System. An overview is as follows:

Software Support/Help Desk - Provides supporting services to end-users on an as needed basis. This function does the following:

- Provides basic, intermediate and advanced levels of on-site support and trouble-shooting to end-users.
- Support of computer operating systems, application specific software, and standard integrated office products (deployment, installation, version upgrades).
- Maintaining and updating current levels of virus protection, security software updates and email filtering for security/virus risks.
- Coordinates checkout and use of training, laptop, projector, and other computer equipment.
- Provides various levels of maintenance of the City's data and telecommunications systems software applications pertaining to switch management, call processing, voice-mail and e-mail, etc.
- Enforces the City's Information Systems policies and communicates these policies to the end-users.
- Directs and coordinates challenging problems to third party vendors.

Hardware/Network Support - Provides hardware and network support services to keep the data center operational and support to end-users on an as needed basis. These functions are accomplished by providing the following:

- Support of servers; Primary domain controllers, backup domain controllers, Gems application server, database application server, document mgt. server, and web servers (Internet & Intranet).
- Support of standard computer workstations, data manipulation and transfer for installation and/or moves, and providing connectivity to network, Intranet, Internet, oaknet, etc.
- Managing network access (security, passwords, remote access), group and individual access.
- Managing network printers, keyboards, mice and other peripherals (installs, moves, upgrades)
- Manages network connectivity (voice/data T1's, network routing & switches, cable/network infrastructure, etc.)
- Directs undeterminable hardware failures and problems to third party vendors.

Data and Document Management - Carry out day-to-day maintenance functions for the data files, application databases, and documents created and updated by the City's various departments. This is accomplished by:

- Maintaining day-to-day data/document archives utilizing DLT tape backup and other media for servers and other critical applications.
- Providing support services to end-users in archive building and retrieving.
- Ensuring the integrity and security of the data/documents.

Telecommunication Support - Provides hardware & software support for the NEC telephone system, trouble shooting/diagnostics, and telephone support to end-users on an as needed basis. This is accomplished by:

- Monitoring day-to-day voice/data line circuits and switches for citywide voice/data network at all locations.
- Providing support to end-users for voice services (telephone, fax and voice-mail, etc.) and related activity.
- Installing additional drops, (cabling), moves and changes of locations and/or features.
- Trouble-shooting various phone services.
- Replacement/repair of failed devices.
- Programming of special features on phone switch.

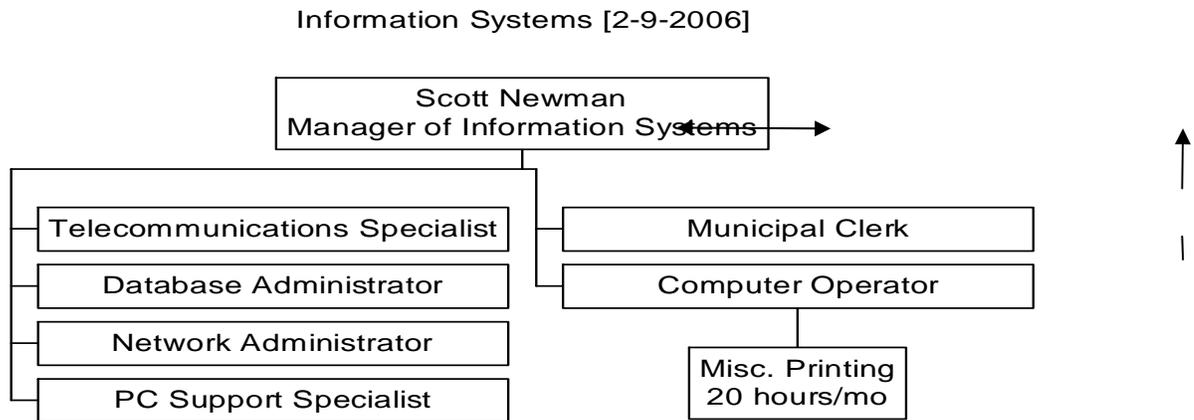
Project Management - Responsibilities include the detail planning and execution of Information System special projects.

- Planning and executing projects when approved by the City Commission and appropriate funding is available.
- Management of third-party vendors in planning and implementation of projects when appropriate.
- Search and research opportunities to improve the quality of IS services and indirectly, overall City services, and ensuring cost effective solutions are implemented.

Specialized Application Development and Support - Development and support of applications not typically supported by the integrated municipal package called GEMS.

- Application development and support of specific departmental and citywide applications using standard database development tools.
- Documentation, training, and support to end-users.
- Integration and custom extensions to the City wide integrated system when appropriate.
- Develop, maintain, and operate the employee Intranet, the City web site, and access to the Internet.

Structure:



The 2004-2005 budget and staffing level does not include a part-time PC Technician, part-time data-entry clerk, and Full-time project management contract position. The department is staffed as follows, (1) management position, (4) professional/technical positions and (1) clerical position and an employee from the print shop (approx. 20 hours/mo.) prints the water bills and Dog License renewal cards. The following shows current staffing level and the level before the budget cuts:

year	FTE	Managers	Pro / Tech	Contract	Clerical	Part-time
2000	8	1	4	1	1	2
2004	6	1	4	0	1	0
2006	6	1	4	0	1	0

The department job classifications are listed as follows:

Management Positions: Manager of Information Systems

Professional / Technical Positions: Database Administrator/Analyst, LAN/WAN Network Administrator, Telecommunications Specialist, PC Support Specialist

Clerical Positions: Municipal Clerk

MANAGER OF INFORMATION SYSTEMS

GENERAL STATEMENT OF DUTIES: A **Manager of Information Systems** performs responsible administrative and organizational work involved in the operation of the Data Processing Department. A **Manager of Information Systems** performs responsible fiscal work requiring the application of both initiative and independent judgment. The employee schedules, assigns and supervises a number of professional, technical and clerical employees employed in Data Processing. Work is performed under the general supervision of the Director of Finance, but the employee is expected to develop his/her own work methods and demonstrate resourcefulness and versatility. Performance is appraised on the basis of results achieved.

ESSENTIAL DUTIES AND RESPONSIBILITIES: A **Manager of Information Systems** may be called upon to do any or all of the following: (These examples do not include all of the tasks which the employee may be expected to perform.)

- Perform both administrative and technical duties required to develop necessary plans, systems and programs to develop a complete data processing operation.
- Formulate, install and supervise data processing system applications and procedures for the various municipal functions.
- Select, train and assign the employees engaged in the data processing activity.
- Advise and make recommendations for the acquisition of both equipment and software.
- Supervise the design of systems for the various applications of administrative functions.
- Supervise the preparation of flow charts and block diagrams.
- Supervise the development of computer programs.
- Develop and maintain the manual of data processing methods and performance standards.
- Supervise the employees assigned to assist the department.
- Perform other work as required.

QUALIFICATIONS FOR EMPLOYMENT:

- Full technical knowledge of the latest principals and practices of the data processing field with the ability to direct the installation and development of municipal applications and systems.
- Ability to analyze the organization and functions of municipal government as well as modern office administration and procedures.
- Initiative and resourcefulness in directing the work to assure maximum utilization of equipment and personnel.
- Ability to assemble data and utilize application programs for accurate records and reports.
- Ability to work effectively with vendors, other departments, City officials and the general public.
- Ability to analyze and resolve complex data processing problems.
- Ability to organize and supervise the work of subordinate employees.
- Ability to communicate effectively.

A **Manager of Information Systems**, upon application, shall have the following training and experience:

- Graduation from a recognized college or university with specialization in Public or Business Administration, Accounting, Computer Science or related field.
- A minimum of five (5) years experience in data processing, including considerable experience in supervision, design, programming and operation.
- Applicants shall have at least one (1) year experience programming COBOL.

DATABASE ADMINISTRATOR

General Statement of Duties: A Database Administrator performs a variety of technical and professional assignments of varying difficulty pertaining to the core business system applications as implemented by the City of Royal Oak. This position reports directly to the Manager of Information Systems. Duties will usually consist of routine database application development, support, backup and recovery, and trouble shooting performed in accordance with departmental rules and regulations. The work may involve specific instructions given by the department head when specific problems arise, although the Database Administrator is required to exercise independent discretion when faced with critical conditions.

Essential Duties and Responsibilities:

The following is intended to indicate the types of duties and responsibilities requested of the employee assigned this title. It is not intended to be all-inclusive or limiting as to the specific duties and responsibilities that may be required.

- Responsible for maintaining the physical database design; create and modify database objects (stored procedures, views and triggers); implement database changes; create database conversion routines for new database changes; and manage/revise/recover procedures.
- Responsible for performing business process/problem analysis, defining technical solutions, testing, site implementations and documentation using Oracle and/or MS SQL Server, and the set-up and administration of databases.
- Lead key database related efforts; maintain SCI application upgrades, patches, Powerclient installations and ODBC interface setup; work with SCI support to resolve database problems.
- Write database scripts and work with others in meeting functional specifications.
- Responsible for database integrity and backup/recovery.
- Write test plans and conduct testing per test plans.
- Work to improve work processes.
- Provide support for resolving application user specific questions.
- Responsible, along with network administrators, for coordinating web (internet/intranet) development, design, and implementation, utilizing PHP and MYSQL.
- Provide backup support to policy procedures regarding security issues.
- Provide overall backup support to network administration issues.
- Perform other work and duties as required.

Qualifications for Employment:

- Strong working knowledge of data modeling/relational database design, interpretation and navigation of logical database, program version control and change management.
- Knowledge and understanding of client/server design, relational database theory, process/data modeling, and database programming skills.
- Knowledge of ORACLE, SQL, IIS, NT, Power Client, ODBC, MS-ACCESS and Visual-Basic.
- Knowledge of Windows NT administration, CASE methodology and IIS/APACHE/PHP/MYSQL desirable.
- In depth knowledge of performance tuning, optimization, sizing and back up recovery of ORACLE databases.
- Ability to create database triggers, stored procedures and views.
- Ability to handle multiple complex components concurrently without loss of effectiveness.
- Ability to work harmoniously and effectively in a team environment; demonstrated leadership ability.
- Skill in resolving complex problems.
- Good oral and written communication skills.

A Database Administrator upon application should have the following training and experience:

Graduation from a recognized college or university with a Bachelor's degree specializing in Computer Information Systems, Computer Science, Computer Engineering or a directly related field. A minimum of three years of experience with SQL relational databases, which has resulted in the knowledge, abilities and skills described above.

Note: For pay purposes, the classification of Database Administrator is divided into three levels: I, II, and III. Placement and promotion within these levels is dependent upon the level of experience, training, qualifications, responsibility, job performance and length of service.

NETWORK ADMINISTRATOR

General Statement of Duties: A Network Administrator performs a variety of technical and professional assignments of varying difficulty pertaining to the overall core business system environment as implemented by the City of Royal Oak. This position reports directly to the Manager of Information Systems. Duties will usually consist of routine administration and support of computer networking, client/server technology, and the related hardware and software encompassing the entire computer infrastructure in accordance with departmental rules and regulations. The work may involve specific instructions given by the department head when specific problems arise, although the Network Administrator is required to exercise some independent discretion when faced with critical conditions.

Essential Duties and Responsibilities:

The following is intended to indicate the types of duties and responsibilities requested of the employee assigned this title. It is not intended to be all-inclusive or limiting as to the specific duties and responsibilities that may be required.

- Responsible for administration and installation of Windows workstation and server software in a multiple server LAN/WAN environment.
- Responsible for data conversion requirements regarding import/export of data exchange between the city and external organizations such as Federal, State, County, banks, insurance companies, etc.
- Provides expert technical assistance concerning all levels of network related problems in a multiple server 10/100mb switched ethernet environment.
- Responsible for Email administration of all user accounts which interfaces with MS Outlook.
- Responsible for creating users, user groups, profiles, and security, server management and domain management.
- Responsible for adhering to and enforcing the City's Computer User and Security Policy throughout the City and working with the City's internal audit control for updating the policy.
- Responsible for desktop support of all purchased and installed software for all users at all locations.
- Administer, coordinate and implement custom report writing with specialization in Access, Excel, Delphi, VBA, etc. Coordinate complex solutions with the Database Administrator in order to be consistent with integrated solutions and/or developments already in progress.
- Work to improve work processes.
- Implement and oversee issues regarding new and/or termination requests for computer access.
- Cooperative responsibility for web (internet/intranet) development, design, and implementation.
- Implement updates and changes to MS Office software releases.
- Review any potential software security issues that arise on a daily basis.
- Provide overall backup support of municipal application software and operational system software including implementation of software update releases and database administration.
- Monitor and review web activity logs daily.
- Report on traffic analysis and statistics regarding bandwidth use on all switches and routers.
- Responsible for all aspects of Web connectivity. Administration of MS-Proxy server, IIS, and the Firewall.
- Perform other work and duties as required.

Qualifications for Employment:

- Knowledge of Windows NT Administration, MS Office, Ethernet and TCP/IP.
- Knowledge of equipment and software configuration, installation and trouble-shooting.
- Knowledge of unix server and software configuration and administration desirable.
- Knowledge of security issues in a multiple server Lan/Wan environment.
- Ability to program in Visual Basic, Delphi, C++ and to design Visio charts and layouts; CGI and Perl Scripting ability a plus.
- Ability to handle multiple complex assignments concurrently without loss of effectiveness.
- Ability to work harmoniously and effectively in a team environment; demonstrated leadership abilities.
- Skill in resolving complex problems.
- Good oral and written communication skills.

A Network Administrator, upon application should have the following training and experience:

Graduation from a recognized college or university with a Bachelor's degree specializing in Computer Information Systems, Computer Science, Computer Engineering or a directly related field.

A minimum of four years of network administration experience, which has resulted in the knowledge, abilities and skills described above.

Note: For pay purposes, the classification of Network Administrator divided into three levels: I, II and III. Placement and promotion within these levels is dependent upon the level of experience, training, qualifications, responsibility, job performance and length of service.

Telecommunications Specialist

GENERAL STATEMENT OF DUTIES: A Telecommunications Specialist performs a variety of technical and professional assignments of varying difficulty pertaining to the PBX and LAN/WAN systems and switching technology. This position reports directly to the Manager of Information Systems. Duties will usually consist of routine telecommunications tasks and trouble shooting performed in accordance with departmental rules and regulations. The work may involve specific instructions given by the department head when specific problems arise, although the Telecommunications Specialist is required to exercise independent discretion when faced with critical conditions.

ESSENTIAL DUTIES AND RESPONSIBILITIES:

The following is intended to indicate the types of duties and responsibilities requested of the employee assigned this title. It is not intended to be an exhaustive list of all the duties and responsibilities that may be required.

- Responsible for all voice communications in a multi-office PBX network with multiple fiber and T-1 connected remote sites.
- Responsible for all data communications connecting the remote sites.
- Responsible for performing business process/problem analysis, defining technical solutions, testing and troubleshooting, coordinating repair/replacement service, site changes and administration of the PBX and optimization of the network design.
- Maintain, renew and negotiate contracts for service and support, including rates and tariffs analysis, local and long distance carriers, and all telecommunication related services for the City of Royal Oak.
- Install, configure and troubleshoot digital and analog telephones, mobile system phones, voice mail security systems, faxes, copiers, modems, etc.
- Responsible for internal configuration of all MAC updates (moves, ads, and changes). This is a daily requirement.
- Insure that all appropriate redundancy plans and equipment are tested on a regular basis.
- Work to improve work processes and prepare presentations, reports, and project management activities.
- Provide support and training for resolving telecommunication related user specific questions.
- Coordinates activities with telecommunication vendors regarding PBX, ACD, Voice Mail, Auto Attendant, high speed data communications, T-1's (voice and data) and ISDN's (voice and data).
- Provide backup support to policy procedures regarding data and phone issues.
- Provide overall backup support to network administration issues.
- Provide backup support and work related to web development and interface issues regarding multi-departmental internet and intranet web projects.
- Provide systems testing reports, call reporting statistics, departmental calling detail reports on demand.
- Perform remote diagnostics, performance and traffic analysis on all voice and data switches at all locations.
- Perform other work and duties as required.

QUALIFICATIONS FOR EMPLOYMENT:

- Proficiency in all areas of voice communication, including PBX, key system design, Uniform Dialing, ISDN Primary Rate Interface circuits and configuration of multiple networked locations.
- Knowledge of Windows NT OS and telecommunication software.
- Knowledge of telephony system configuration, voice over IP, ISDN Basic Rate Interface - based applications and video conferencing.
- Knowledge of AIMWORX, AVT, Intelli Center, Baypoint, NT, Hyper Terminal, ODBC, MS-ACCESS, Visual Basic, and Bay Network (Nortel) switches and routers.
- Project management, implementation and technical assessment capability.
- Ability to handle multiple complex assignments concurrently without loss of effectiveness.
- Ability to provide comprehensive analysis of billing reports.
- Ability to work harmoniously and effectively in a team environment; demonstrated leadership abilities.
- Skill in analyzing telecommunications equipment problems.

- Good oral and written communication skills.

A Telecommunication Specialist, upon application should have the following training and experience:

Graduation from a recognized college or university with a Bachelor's degree, specializing in telecommunications systems and voice technology, or a directly related field; and a minimum of 3 years of experience in the telecommunications field, specializing in voice technology.

Licenses: Must have a valid motor vehicle operator's permit with good driving record, as travel is required to and from remote building locations.

Note: For pay purposes, the classification of Telecommunications Specialist is divided into three levels: I, II, III. Placement and promotion within these levels is dependent upon the level of experience, training, qualifications, responsibility, job performance and length of service.

PC SUPPORT SPECIALIST

General Statement of Duties: A PC Support Specialist performs a variety of technical and professional assignments of varying difficulty pertaining to the core business system applications as implemented by the City of Royal Oak. This position reports directly to the Manager of Information Systems. Duties will usually consist of routine installation of computer hardware and software, support, configuration and upgrades of installed hardware and software, backup and recovery, and trouble shooting performed in accordance with departmental rules and regulations. The work may involve specific instructions given by the department head when specific problems arise, although the PC Support Specialist is required to exercise some independent discretion when faced with critical conditions.

Essential Duties and Responsibilities:

The following is intended to indicate the types of duties and responsibilities requested of the employee assigned this title. It is not intended to be all-inclusive or limiting as to the specific duties and responsibilities that may be required.

- Responsible for specializing in installation, configuration and upgrading of all types of computer hardware and software.
- Responsible for keeping a detailed inventory of all computer related equipment and software that is leased, owned and operated by the City of Royal Oak. It is the obligation of this position to keep and protect the City from any and all copyright laws and software license agreements.
- Responsible for trouble shooting equipment failures on printers, scanners, computers, network switches, hubs, faxes, etc. and to coordinate with service repair vendors to fix and/or replace equipment when appropriate.
- Responsible for determining the life expectancy of equipment and evaluating cost justification for repair/upgrade/replacement of equipment owned/leased by the City.
- Responsible for updating and maintaining computer virus scanning software on all servers and client workstations and resolving computer virus related infections.
- Responsible for adhering to and enforcing the City's Computer User and Security Policy throughout the City.
- Required to obtain software and hardware quotes from suppliers. Coordinate any purchases requiring bid quotes, as determined by the City's purchasing policy, with the department supervisor.
- Work to improve work processes.
- Provide support for resolving and coordinating with Network Administrator(s) all requests for new and/or termination requests for computer access, e-mail accounts, internet access, etc.
- Cooperative responsibility for web (internet/intranet) development, design, and implementation.
- Provide backup support to updates and changes to policy procedures regarding security issues.
- Provide overall backup support to network administration issues.
- Use cloning software for image creation and restoring damaged computer configurations.
- Carry and transport computer workstations, printers, etc. to and from different building locations.
- Responsible for maintaining and documenting procedural steps for all software installations and updates.
- Perform other work and duties as required.

Qualifications for Employment:

- Knowledge of equipment and software configuration, installation and trouble shooting.
- Knowledge and understanding of Windows NT and MS Office products.
- Knowledge of security issues in a multiple server LAN/Wan environment.

- Skill in equipment repair and in the use of CAT5, Cabling, Windows NT, Drive Image Professional, MS Excel, MS Access and MS Word.
- Ability to handle multiple complex assignments concurrently without loss of effectiveness.
- Ability to work harmoniously and effectively in a team environment; demonstrated leadership ability.
- Physical ability to carry and transport computer workstations, printers, etc. to and from different building locations.
- Skill in resolving complex problems.
- Good oral and written communication skills.

A PC Support Specialist, upon application, should have the following training and experience:

Graduation from a recognized college or university with a Bachelor's degree specializing in Computer Information Systems, Computer Science, Computer Engineering or a directly related field. A minimum of 4 years of directly related experience, which has resulted in the knowledge, abilities and skills described above.

Note: For pay purposes, the classification of PC Support Specialist is divided into three levels: I, II, and III. Placement and promotion within these levels is dependent upon the level of experience, training, qualifications, responsibility, job performance and length of service.

MUNICIPAL CLERK I-II

GENERAL STATEMENT OF DUTIES: A Municipal Clerk may be assigned to any department of the City or Public Library to perform a wide variety of clerical, record-keeping and public contact duties. Duties may involve frequent or continuous public contacts, in person and via phone, fax and computer, and the operation of modern office equipment, including personal computers. Positions require the ability to quickly and accurately input information onto a computer keyboard, to utilize word and data processing software, and to learn other software applicable to the department assigned. Specific instructions are given at the beginning of the work and on new assignments, but after employees become familiar with procedures, they usually work independently on regular assignments. Supervision is received from a department or division head or other higher level employee.

TYPICAL EXAMPLES OF WORK: A Municipal Clerk may be called upon to do any or all of the following: (These examples do not include all of the tasks that the employee may be expected to perform.)

- Operate personal computers, data input terminals, typewriters, calculators, FAX machines, copiers and other office appliances.
- Input / type records, reports, letters, requisitions, work orders, specifications, bills, purchase orders, vouchers, licenses, permits, certificates, agendas, circulars, receipts, memoranda and various forms of statistical and financial data.
- Assist the public by answering inquiries, explaining procedures and forms, issuing licenses and permits, registering voters, issuing certificates, circulating library materials, scheduling appointments, making appropriate referrals and /or otherwise providing information.
- Assist the public in person and/or via phone, FAX, computer or mail; compose correspondence.
- Organize, post, update, proofread, sort, copy, distribute, index or file manual and computerized records and reports.
- Collect and receipt checks and currency received for taxes, special assessments, water bills, permits, licenses, fees and other charges; prepare daily reports of cash received; prepare deposit statements.
- Assist in the preparation of tax and assessment rolls and property descriptions.
- Segregate, post, reconcile and balance accounts, time, equipment and material records; breakdown cost information from departmental work orders.
- Prepare bookkeeping entries and post receipts and disbursements.
- Gather, tabulate, compute and / or proofread statistical and financial data.
- Inventory and requisition supplies; maintain inventory control records.
- Perform related work as assigned.

QUALIFICATIONS FOR EMPLOYMENT:

- Knowledge of modern office practices and procedures.
- Working knowledge of word processing, spreadsheet and data base software; and the ability to learn additional software applicable to the department assigned.
- Some knowledge of basic bookkeeping, if assigned to applicable departments.
- Ability to communicate effectively, both orally and in writing.
- Ability to establish and maintain harmonious working relations with other employees and the public.
- Ability to use good business English, spell and make arithmetic calculations quickly and accurately.
- Ability to maintain records and prepare reports efficiently and accurately.
- Ability to efficiently organize and maintain filing systems, both manual and computerized.
- Ability to learn assigned tasks readily, adhere to prescribed routines, and to follow oral and written directions.
- Ability to reach, bend, handle stress, stand or sit for long periods, and to understand and respond to in-person and phone inquiries.
- Skill in the operation of a personal computer, typewriter, copier, FAX and other modern office appliances.

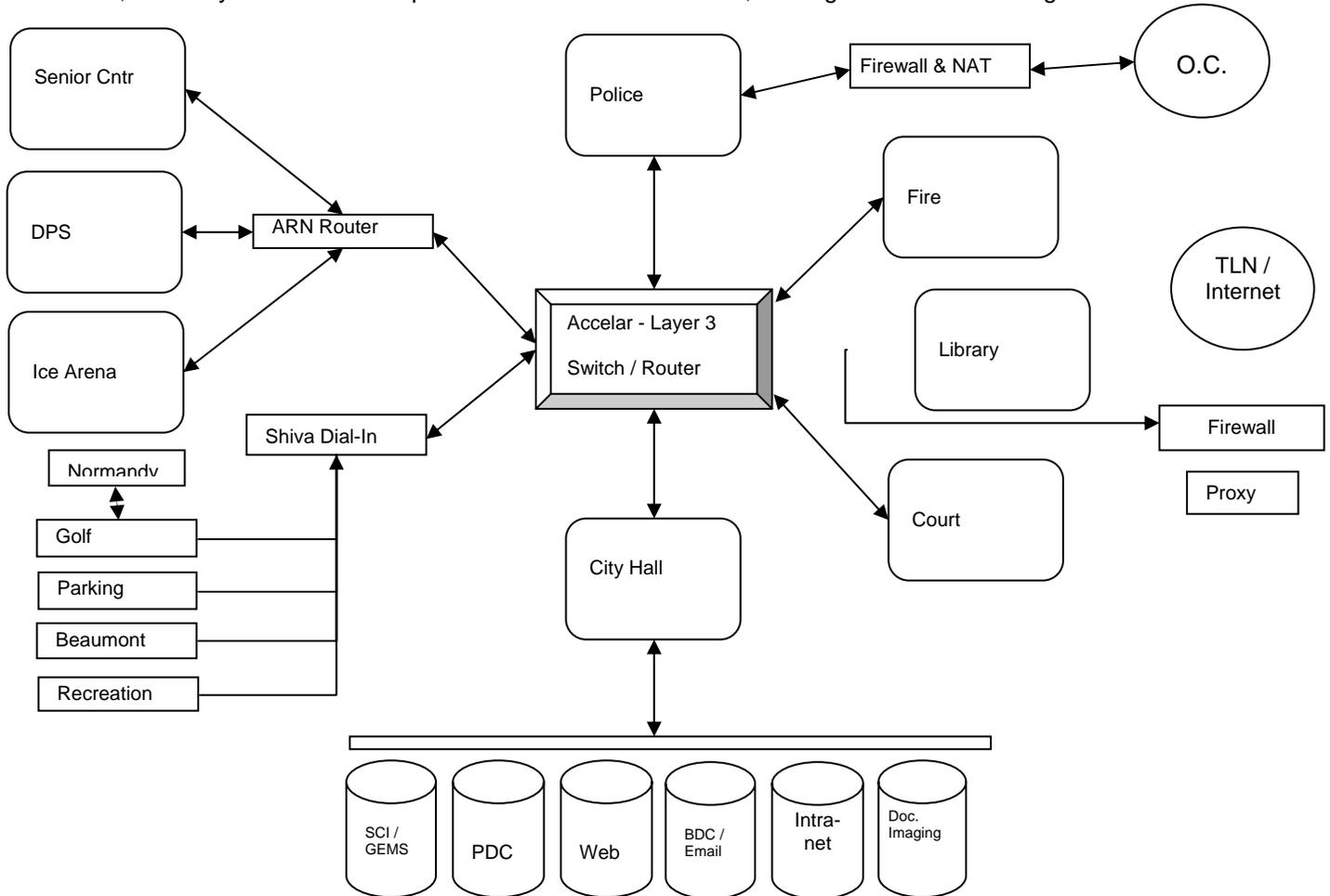
A **Municipal Clerk**, upon application, shall have the following:

Level I - Graduation from high school or equivalent including or supplemented by course work, training, or experience which results in the above stated knowledge, abilities and skills. A minimum of 40 words per minute keyboarding ability is required.

Level II - Employees are eligible for promotion to Municipal Clerk II after a minimum of 30 months of experience as a Municipal Clerk I.

Networking

The following diagram illustrates the basic data network infrastructure and connectivity for the City's wide area network. Eight buildings connect to the City's network with 357 pc's, 146 printers, 21 fax machines, 12 digital cameras, 13 scanners, and 387 digital phones. The Police, Fire, Library and Court connect via Fiber. The Senior Center, DPS, and Ice Arena connect via T1's. Other remote sites that connect via dial-up are the Golf Course, Parking structure, Beaumont (Building Inspection) and Recreation (Salter Center). The Salter Center and the Royal Oak golf course each have their own network and Normandy connects to the Royal Oak course through a secured vpn connection for their point-of-sale operation. The Library also has a public network separate from the City's network and connects directly to The Library Network (TLN). TLN is a consortium of 60 or so libraries in Oakland, Macomb, and Wayne counties and provides the on-line circulation, catalog and records management software.



Royal Oak Network Diagram 2006

Each building is a managed switched ethernet environment utilizing Cat-5 cabling and 10mb and 10/100mb switches. A majority of the infrastructure cabling and switching equipment was installed in 1998. The 44th District Court was cabled in late 2000 and is Cat5e with all 10/100mb switches. As part of the equipment replacement plan (four to five year life cycle), we will begin replacing the oldest 10mb switches to 100mb switches, one of the two firewalls will be upgraded and one additional firewall will be added to the library side of the TLN internet connection. Some assessment and focus on the management and ability to monitor traffic on the network is being studied.

Staff Computers

In 1998, the City standardized on computer equipment and software purchases as part of a 5-year technology plan. Dell Computers, Windows NT, and Microsoft Office 97 became the standards. The city also made significant investment in hardware and software. The follows shows equipment and software history over the past 10 years:

<u>Year</u>	<u>PC's</u>	<u>Printers</u>	<u>Mainframe/Server</u>	<u>Additional Comments</u>
1995	65	45	1 - Unisys A4FS MF	19 terminals; WordPerfect, Lotus123, dBaseIII+
2000	250	130	6 - Servers - Win NT	Office 97 -Word, Excel, Access
2004	357	146	9 - Servers	Office 97, Office XP, Office 2003

The City also instituted a 5-year equipment replacement plan. The actual life-cycle of computers is 3 to 4 years, but the City has been able to extend that to 5 years due in part, to equipment standardization, reliability, and serviceability. Microsoft also has an end-of-Life cycle on their products. Microsoft Office 97 product support ended January 16, 2004, and Windows NT product support has also ended. The following show the current numbers of equipment and where we are in respect to operating systems:

Win 98	Win-NT	Win 2000	Win XP	Linux
26	145	101	79	6

Some areas in the City have high-performance equipment requirements. The City Engineering department has 5 CAD stations that use the MicroStation software for designing their projects. The City Planning department uses ARCVIEW and ArcInfo products from ESRI, Inc. for their GIS applications.

Other areas of specialized technology include the following:

- Water Service uses hand-held meter reading devices to read water meters (since 1986).
- Traffic Enforcement uses hand-held devices for issuing parking tickets (since early 1990's)
- The Clerk's office uses an Electronic Voting Tabulation System (1997)
- Set up Internet training center at Library for public training classes. (2000)
- New digital PBX telephone system provides new features and saves money.(2000)
- The 44th District Court and the Royal Oak Police station use a video arraignment system. (2001)
- The City Clerk's Office implements a full scale Document Imaging System. (2001)

Servers

The City maintains 9 servers to support financial and business critical operations, email, general office and administrative document storage, network file and print activity, domain security, limited GIS functions, document imaging, intranet and internet web services. The Royal Oak library has a server for their own private network and general file storage. The Royal Oak golf course has a server for their Golf Course management and Point-of-sale operation. The DPS also has their own server for general business operations. Network authentication is still handled by a Windows-NT domain controllers. The Golf Course, is running Windows 2000 server Small Business Edition and a .

The Gems server has been upgraded to a windows 2003 advanced server and is the first of the aging servers to be replaced. It runs the Financial applications: General ledger, accounts payable, accounts receivable, fixed assets, work orders, purchasing, regular & retirement payroll, water billing, human resources, fleet maintenance, etc. It was the City's oldest server. The City's main file storage was increased by adding a Network Access Server, which will be followed by and upgrade to the email server and at the same time separating it from GIS and print applications to increase performance. The City' web server is in need of replacement as well as implementing a strategic development in the internet application offerings. The Document imaging server was upgraded to run the windows 2000 server software and migrated to a sql database format. The biggest reasons for replacement are age, capacity, and application/vendor support. Product releases and software upgrade often necessitate new equipment. Document imaging and digitization, and automation are areas requiring large amount of storage and high demand for accessibility.

Telephone System

The new telephone system was installed in September 2000 brings us long term cost savings of \$80,000/year (compared to the old centrex system). Business improvements of call quality, voice mail for all employees, conference calling, call accounting, caller ID and many more features. The voice network is similar if not identical to the data network as it also shares the fiber between the Library, Court and Fire Station and connectivity to the DPS, Senior Center and Ice Arena, and Salter Center.

The NEC 2400 PBX serves a 1,000 block of DID numbers over three PRI's and supports 387 digital handsets over the network with NEC 2000 systems at each remote location. With digital calling, voice mail, and fax capabilities, communication with the City has never been better.

Budget

Information Systems is responsible for project planning and budget preparation for upgrades and projects for all computer equipment and software purchases. Information Systems works with departments for any special projects.

Budget	2004/2005	2005/2006
Hardware	286,200	123,000
Software	31,000	28,000
Contract Services and Licensing	169,670	174,720
Parts & Repair	7,800	8,800
Depreciation of Equipment	300,000	320,000
Retained Earnings	108,150	65,000
Training	9,000	13,000

Implementation of Governmental Accounting Standards Board (GASB) Statements 34 & 35, require local governments to meet additional financial reporting requirements. In summary, one of the elements of the standards is to see the cost of providing services to its citizenry. Some funding requirements are linked to adherence to the GASB34 reporting. With additional pressure to provide costing at detailed levels of service, it becomes important to provide a system that is able to track these costs at every level of activity.

Budgeting for projects becomes as important as tracking the projects.

Information Systems Projects

Current Projects:

- Oakland County BS&A Land File Software: piloting, testing and conversion (July 2004-...).
- GEMS application Server (Payroll, Finance, Water Billing) conversion and upgrade (September 2004-October 2004).
- Linux Server updates; Web, Database, and test application database server. (September 2004-December 2006).
- Email Server and remote mail software Upgrade (March 2006)
- Email usage, management, and retention guidelines development and training (Ongoing).
- Document Imaging applications; Finance – A/P, Building – Permits, etc. (March 2006 – December 2006)
- Business License Application Development (June - May 2006).
- PMGC-Performance Mgt. Guidelines Committee database application development (Ongoing).
- Library - Phase II; replacement of 22 public computers, firewall, etc (August 2004-October 2004).
- Library – Phase III; Renovation Project; adding additional public workstations and wireless access (ongoing).

- Online (Internet) payments of tax bills and water bills (Ongoing).
- Cash Drawer Software and Hardware replacement for Treasurer, Clerk, and Recreation. (June - December 2005).
- Windows Security Updates and Virus Engine updates (Ongoing).

Miscellaneous Projects:

- Server & Computer Replacement program: Hardware and Software (upgrade all servers and workstations to Windows 2000/XP, as Microsoft no longer supports WinNT).
- Delinquent Water Processing (January - March 2005).
- Board of Review (January - April 2005).
- G.I.S. - Commitment of resources.
- Document Imaging (Ongoing Implementation).
- Asset / Computer Inventory Control application development (Ongoing).

Recently Completed Projects:

- Golf Course application Hardware and Software project (December 2003-July 2004).
- Library - Phase I: replacement of 22 staff and 6 public computers, Ethernet switch, and cabling (January 2004-April 2004).
- Local, toll and long distance telephone service contract. (December 2003 - June 2004).
- State Judicial Network Project - Installation and configuration of 29 new computers at the 44th District Court (August 2004).
- Email upgrade: Spam filtering features (July/August 2004).
- Fire Station 4 Computer Cabling and telephone installation and Improvements: (May - August 2004).

Oakland County

The City also connects to Oakland County through a NAT'd firewall. The Police, Fire, Court, Treasurer's Office and Assessing departments utilize the following computerized applications:

- Clemis (Court & Law Enforcement Mgt Information Systems),
- Sunpro Fire Records Management,
- Tax and delinquent tax rolls,
- Assessing software applications: Land, Equal, Master Appraisal, and Digipics ,
- Access Oakland (On-line Internet Applications), and
- Coming soon: OakVideo - It's a Countywide video arraignment and document transfer system).

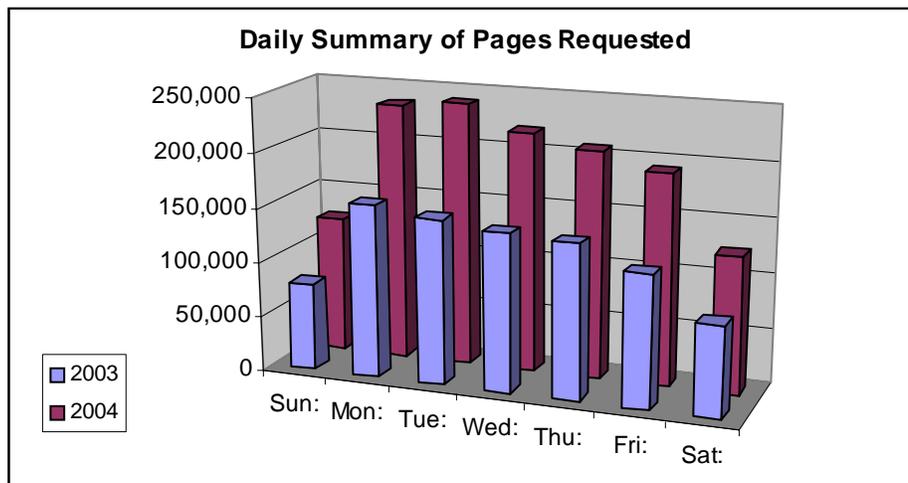
Oakland County does a good job at centralizing and consolidating applications that can be used throughout the county. The City of Royal Oak does receive money for the records accessed through the county's @ccess-Oakland program. Many Realtors and Businesses have subscription services to access the County's system and a portion of the revenue generated comes back to us because we are the maintainers of the database. The initial year was it was only available for a partial year

Year	Fee Recovery
2001 (initial)	900
2002-2003	2,500
2003-2004	4,000

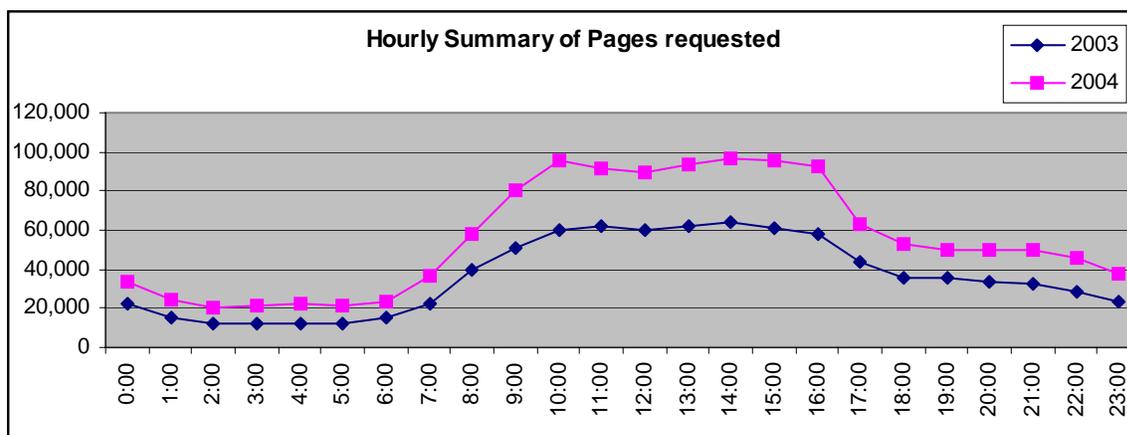
Internet

The City's Internet provider is TLN (The Library Network). The Royal Oak Public Library has long been connected to the Internet and the City offices essentially piggyback off their connection and have done so since 1999. This agreement allows the City and the Library to share the cost. City office Internet activity passes through a firewall with proxied connections for increased security and protection.

The City's web server, (Pentium III, 128mb RAM and 10gb hard drive) is a linux-based server, which provides a tremendous amount of information to the community. The addition of the "e-Packet" in December 2001 has been very successful and well received. The City of Royal Oak ranked in the top 20 municipal web sites in the State of Michigan in March 2002. The study was conducted by Cyber-State.org who evaluated 171 municipal web sites using a standard Website Attribute Evaluation System. In Oakland County, Royal Oak ranked third behind Troy and Oak Park. In 2003 the web site has had a face lift utilizing custom style sheets and has become more user friendly and very professional looking. Future improvements to the web site will include on-line payments of tax bills and water bills and more on-line forms. The daily activity on the City's Web site has increased over the previous year, as indicated in the following chart:



The web site statistics also indicate that the website is a service that is utilized 24 hours a day, 7 days a week. The following chart shows that web site activity before 8:00 am and after 5:00 pm is an important resource.



Application Software			
System	Vendor	Platform	Deployment
Financial System	SCI/Gems	NT Server/Oracle	CH3
Payroll	SCI/Gems	NT Server/Oracle	CH3
Utility Billing	SCI/Gems	NT Server/Oracle	CH3
Work Orders/Fleet	SCI/Gems	NT Server/Oracle	CH3
Tax	Oakland County	IBM Mainframe	thru Oaknet
Business Licenses	SCI/Gems	NT Server/Oracle	CH3
Business Licenses	Internal	Access 97	City Clerk PCs
Permits & Inspections	Internal	Access 97	P&I PCs
Code Enforcement	Internal	Access 97	Code Enf. PCs
Single & Multiple Rentals	Internal	Access 97	P&I PCs
Assessing	Oakland County	IBM Mainframe	thru Oaknet
Birth & Death	Internal	Access 97	City Clerk PCs
QVF Voter Records	State of Michigan	PC	City Clerk PCs
Jury Selection	Jury Software	PC	Court Clerk PCs
Probation Case Mgt	State of Michigan	AS/400	Court Clerk
Court Bond Maint	State of Michigan	AS/401	Court Clerk
Water Service Loc	Internal	Excel 97	DPS laptop
Dog License System	Internal	Access 97	City Clerk PCs
Recreation Classes	Internal	PC	Recreation PCs
Rehab Housing Loans	Internal	Access 97	Housing PCs
Board of Review	Internal	Access 97	Assessing PCs
Special Assessments	Internal	Php/MySql	Treasurer PCs
Sidewalk Invoices	Internal	Php/MySql	Treasurer PCs
False Alarm Records	Internal	Access 97	Police PCs
Police(CID)	Internal	Access 97	11/1/99
Police(PPO)	Internal	Access 97	11/1/99
Police(SHIFT)	Internal	Access 97	Police PCs
Police(DAILY ACTIVITY)	Internal	Access 97	Police PCs
Police(SERGEANTS)	Internal	Access 97	Police PCs
Traffic Violations	Internal	Access 97	8/1/99
VinEdit	N.I.C.B.	PC	8/1/99
Trakker Loan Servicing	Multi-Financial Services	PC	Treas/Fin
Traffic Counter	PAT America	PC	6/1/99
Tree Database	Davey Tree	PC	8/1/99
Autocite	Enforcement Technology	PC	Police Traffic PCs
SIRS	State of Michigan	PC	Recreation PCs
Golf course POS	Symth Systems	PC	Golf Course PCs
Housing HDS	HUD	PC	Housing PCs
Opac	Opac Testing	PC	HR PCs
Water View	Cartegraph	PC	DPS PCs
Homestead	Internal	Access 97	Assessing PCs
Public Hearing Notices	Internal	Access 97	IS PCs
Boards&Commissions	Internal	Access 97	Clerk PCs
SecureCheck	Accuprint	PC	Finance
MicroStation CAD	Bentley	PC	Engineering
GEMS - Election Tabulation	Global Voting	PC	Clerk PC
ArcView GIS v3.2	ESRI	PC	Planning
Westlaw	Westlaw	PC / Internet	Attorney
Time Matters	LexisNexis	PC	Attorney
DeepFreeze & WinSelect	Hyper Technologies	PC	Library PCs
CyberPatrol	Surf Control, Inc	PC	Library Youth PCs
SIRSI	SIRSI	PC	Library
Cash Drawers	Vision Bus. Solutions	PC	Treas/Clerk/Rec

Laserfiche – Doc. Imaging	DSS	PC	Clerk
Public Web Site	Internal	html	I.S.
Intranet	Internal	html	I.S.
Iemail - E-mail, AV, spam	Ipswitch	Server CH2	City/I.S.
McAfee - Anti-virus	Network Associates	PC's & Servers	City/I.S.
F-Secure - Library Anti-Virus	F-Secure	PC's	Library
Symantec - Court Anti-Virus	Symantec	PC's	Court
Interfaces			
System	Vendor	Platform	Deployment
Oakland County			
OakNet		Fiber Network	PD/Fire/Court/CVT
@ccess Oakland		Internet	Assessing/Treas
CLEMIS admin			Police
CLEMIS terminals			Police/Fire
3174 1R controller	Deimplemented - 2003		Police
Gun Registration			Police
Mugshot PC			Police
Video Arraignment	I-Comm		Police
Police Fingerprint			Police
Police Mugshot/Livescan			Police
Fire Records Mgt System	Sunpro		Fire
State of Michigan			
LEIN (records)			Police/Court
LEIN (dispatch)			Police
SOS - License Plate LU		Internet Browser	Code Enforcement
Locator - Lost Child Alert Tech Resource Pgm	NCMEC	PC-Internet	Police
PEBSCO			I.S.
ICMA			I.S.
Social Security Administration			I.S.
Blue Cross/Blue Shield	dial up		H.R.
Delta Dental	dial up		H.R.
Payroll Deposits - Fifth Third Bank	MACHA		I.S.
911 System	SBC/County		Police/Fire
Credit Card Processing	Fifth Third Bank	Card Swipe	Clerk/Treas/Rec
Credit Cards - Golf	Shift4/Nova	Integrated swipe	Golf Courses
IRS			
Shiva - (Remote office connects)			
Recreation-Salter Center			
Beaumont Construction/Inspection			
Parking Structure			
Golf Course			
TLN	The Library Network	T1-Line	Library
Autocite Ticket Transfer to JIS	Internal	PC	Court
JIS	Judicial Info Systems	As-400/56k line	Court
PBX Aimworx	All-Tronics/NEC	PC	I.S.
Openworx	All-Tronics/NEC	PC	I.S.
Matworx	All-Tronics/NEC	PC	I.S.
AVT - voicemail	All-Tronics/NEC	PC	I.S.

Information Systems Services Matrix

Services	Required	Vital / Expendable	Service / Description	Numbers / Volume	Revenue
Network Connection		Vital	<p>Connectivity to the City's network is provided at the following locations: City Hall, Police, 44th District Court, Royal Oak Public Library, Fire Station #1, Department of Public Service, Senior Center, and Ice Arena. Remote connectivity is provided to the parking structure, Salter Center, Golf Course.</p> <p>Info Systems is responsible for configuring network connections, and selecting equipment (computers & printers, etc. that function properly on the City's network.)</p>	357 current computer connections (8/31/2004)	N/A
Local Area Network Services		Vital	Info Systems provides efficient configuration and is responsible for management of Local Area Networks (LAN's), remote host connectivity to Oakland County via gateway router with Network address translation, and trouble shooting		N/A
WAN connectivity		Vital	Wide Area Network (WAN) services include maintenance and configuration of network switches, routers and firewalls to insure compatibility, upgrades of equipment to meet capacity requirements, and installation of all DSU/CSU, cabling/fiber connectivity used for data and voice communication to all buildings. Monitor batteries in UPS units for power levels.		N/A
Email Service		Vital	Email has become an integral part of communication and is available to all departments internally and to the internet. The Info Systems department maintains all user accounts and mail delivery systems. Email accounts are also provided to some volunteer organizations in the community. The info systems department also maintains user conformity to the City's email policy, which each user of the system agrees to and signs.		N/A

Internet Connectivity		Vital	<p>The City provides user access to internet connectivity for work related use. TLN (The Library Network) provides the T1 to the Royal Oak Library and an agreement is in place for City use and sharing of the cost of the T1 (since 1999).</p> <p>Firewalls are managed by the Info Systems department and configured for internet traffic both inbound and outbound. TCP/IP/UDP port configuration is maintained for special use by some agencies and in those cases security implications have been considered and reviewed by I.S. and the agency implied.</p>		N/A
Hardware Problems <ul style="list-style-type: none"> • Trouble Shooting • Repair • Replacement/Loaner 		Vital	<p>Hardware problem. Info Systems will identify the problem and provide a solution. If replacement parts are needed they will be installed as soon as possible. If repair requires addition/al downtime, or parts need to be ordered, a loaner will be provided whenever possible.</p> <p>Maintaining spare equipment (small parts inventory) and removal and salvage of parts from disposable equipment for use of repairing older equipment.</p>	Potential problems: 357 PCs 146 printers 21 fax 12 cameras 13 scanners 387 phones 9 servers 9 tape drives 20 switches 5 routers Actual Hardware: 100-200	N/A
Hardware Installation and upgrades		Vital	Part of the 5-year equipment replacement program. Installation of new PC's <ul style="list-style-type: none"> ▪ General setup, application of critical Microsoft security updates ▪ Install necessary printers and drivers ▪ Install specialized software, office software ▪ Recover necessary data from each user profile on old computer ▪ Install anti-virus protection software and apply other security enhancements Install/Upgrades <ul style="list-style-type: none"> ▪ Printers, memory, CD drives, scanners, and other peripheral devices, as required. 	50-100 new PC's / yr 5-10 new/replacement printers/yr 10-20 various other upgrades	

Network Users - Add/change/delete		Vital	<p>New User:</p> <ul style="list-style-type: none"> ▪ Add user to Domain ▪ Add User to PC (Windows 2K/XP) ▪ Create Personal settings using other department member as model. ▪ Set up and personalize E-mail on PC. <p>Previous User:</p> <ul style="list-style-type: none"> ▪ Add user to PC ▪ Save Personal profile settings, E-mail items, & preferences from prior PC. ▪ Transfer Personal items to new PC. ▪ Build new E-mail, recover old e-mail items ▪ Add necessary departmental items to PC. 	30-75 each year	N/A
Software Support • installation	Policy	Vital	<p>Information Systems installs all software on all City owned equipment. This insures protection from any computer virus, copyright infringement, software compatibility, and adherence to software standards and cost control.</p> <p>Software installs sometimes arise from hardware problems (hard drive failures, file corruption, etc.)</p>		N/A
Software Support • Help Desk Calls • Calls for general information		Vital	<p>Calls for service vary in degree of severity and type. The call taker records and determines the type of call, (User/Employee, city commissioner, outside vendor, etc) the severity of the call, assigns a tech to transfer the call to for follow-up. If a tech is not immediately available, then one is assigned for a callback. The call taker may also provide support immediately.</p> <p>Many help desk calls are in person/walk-ins.</p> <p>We get a lot of calls from the general public because the phone book lists us as "Information Systems". The frequency of these calls varies depending on city activities and community activities. (leaf pickup, tax day)</p>	<p>Avg. 4,500 calls/year</p> <p>Avg. 4,600 callbacks/yr</p> <p>Approx. 300-1000 / yr.</p> <p>Approx. 500 / yr.</p>	N/A
Software Support • Operating Systems		Vital	Information Systems supports multiple operating systems, Win98 (mostly laptops), Win NT, Win 2000, Win XP, and Linux.	Approx. 1,000 - 5,000 calls a year	N/A

<p>Software Support</p> <ul style="list-style-type: none"> Application Specific Software - Microsoft Office products 		Vital	<p>Information Systems supports multiple application specific software ranging in multiple degrees of difficulty depending on the type of end-user whether they are a beginning level, intermediate level or advance level user. Different versions of MS-Office have different options.</p> <p>Depending on the level of complexity of the call, the amount of time spent with this type of support ranges anywhere from 1 minute to 1 hour to 8 hours (sometimes the call turns into a project).</p>	Approx. 1,000 - 5,000 calls a year	N/A
<p>Software Support</p> <ul style="list-style-type: none"> Licensed Software use 		Vital	<p>Periodically, Information Systems will conduct a software audit of all computers throughout the City to determine that only valid, licensed software is installed. This protects the City of Royal Oak from any violation of software copyrights.</p>	Annually	N/A
<p>Software Support</p> <ul style="list-style-type: none"> Virus protection & Security Spyware protection Spam filtering 		Vital	<p>Info systems maintains both server-based and workstation-based protection for the network from both "virus-type" malware (viruses, trojans, worms, etc.), and other software hazards (spyware, adware, web browser hijackers, etc.). These can propagate via email, activated web page links, and even through system software ports without any user action at all (some can only be stopped by firewall). Recently upgraded UCE (unsolicited commercial e-mail) (i.e., "spam") filtering, catching several hundred such e-mails weekly.</p>	<p>1 email-server-based anti-virus package</p> <p>1 email-server-based spam-filtering package</p> <p>workstation-based anti-virus packages on all workstations</p> <p>anti-spyware programs on many workstations</p> <p>Approx. 250 calls/year</p>	N/A
Backups		Vital	<p>Each Network Server is backed up daily. Full Backups are performed on all business critical servers and incremental backups are performed on the others.</p> <p>Backups are crucial for Database recovery and disaster control. Backups are rotated off site for disaster recovery. Monthly backups are performed on four servers and then stored at the off-site facility in the 44th District Court where they are rotated out after 1 to 2</p>	<p>8 Network Servers. 6 on site – 2 off site.</p> <p>Four week sets of Daily backups for 6 on site servers.</p> <p>Monthly backups stored off site for four key</p>	N/A

			years. Approx. 180 tapes in library.	Network servers.	
File Restores		Vital	File restores from tape backup range from individual file restores for users who have lost a file or folder to restoring whole drives due to hardware or software Failures. Most restores that are done can be performed In a matter of minutes due to improved technology and better cataloging of data. Typically files can be restored from daily backups from four weeks back or from a monthly backup 1 - 2 yrs.	File Restores are of a random nature and occur when needed.	N/A
Data Storage and Transfer Management		Vital	Monitor network traffic and storage space usage; work with users on alternatives to network storage where advisable (for example, for some large graphic files); work with users on best methods for necessary transfers of business data to and from outside parties. Monitoring of firewall logs and removal of archival.	Check on a daily basis	N/A
Network Security		Vital	Administer logon security (accounts, passwords), administer (and also guide and assist users with) data security (user group memberships, access permissions to folders and files for employees and groups and sub-groups thereof). Also coordinate with The Library Network (TLN) on network security for workstations at Royal Oak Public Library on an ongoing basis, and with Oakland County Information Technology when security concerns arise with our connection to Oaknet.	Approx. 150 calls/year	N/A
Data Entry <ul style="list-style-type: none"> • Water bill payments • Sidewalk invoice payments • Accounts payable invoices • Bond refunds • Inventory A/C/D • Treasurer's Report 		Vital	Enter / Edit / Post payments to accounts, balance control totals, error correction and validation. Add / Change / Delete computer inventory records	Water - 100,000/yr Sw- 2,000 to 3,000/yr A/P - 5,200 to 7,800/yr BR - 100 to 2,000 / yr Inv - 100 to 200 / yr Daily posting to Gems	N/A

<p>Public Hearing Letters -Also included in this category are Sidewalk improvement construction notices, cost estimate notices, and final invoice letters</p>	<p>Ordinance</p>	<p>Vital</p>	<p>Requests from the City Clerk's office, Engineering, Attorney's Office and others, for Public Hearing Notices, lists, and / or mailing labels.</p> <ul style="list-style-type: none"> • Extract names & addresses from GIS database within the requested buffer zone footage (i.e. 300-ft from subject property). • Generate list of names & addresses • Generate mail merge letters / labels for property & mailing addresses. 	<p>10-30 public hearings per year for 200-1,000 properties each. 2,000-4,000 Sidewalk properties / year</p>	<p>N/A</p>
<p>Supplemental Software Application Development For Specific Tasks</p>		<p>Vital</p>	<p>Info Systems also develops applications for specialized tasks aside from those handled by GEMS (the integrated financial, H/R and utility billing packages). These include database applications for assessing board of review and various applications for building, engineering, police, city clerk, and housing rehab. These databases are maintained by Info Systems as well. (A more detailed list is in the application software list)</p>		<p>N/A</p>

Telecommunication Services

Services	Required	Vital / Expendable	Service / Description	Numbers / Volume	Revenue
General		Vital	Local dial tone is provided by McLeodUSA to the NEC 2400 PBX through three PRI's for all inbound and outbound calls. The telephone network is interconnected via fiber (police, court, library, fire station 1) and T1 (DPS, Senior Center, Ice Arena) connections and OPX lines to the Salter Center. Monitoring of day-to-day voice/data line circuits, switches, csu/dsu, and other associated equipment to make sure it is functioning properly.	387 digital sets 200 analog lines 1,000 DID numbers 153 Misc SBC Voice and Data circuits	N/A
Telephone Features		Vital	Info Systems provides phone sets to all departments. Features on all telephones include callerID, speaker phone, conference calling, transfer, 4 digit dialing to departments, save & redial, speed dialing, voice mail, recorded announcements, music on hold. Monthly call detail reporting and special call detail reporting on demand	387 digital sets 200 analog lines 1,000 did numbers	N/A
Telephone Equipment and Features Services		Vital	Providing support to end-users for voice services (telephone, fax, voice mail, etc) and related activity such as additional phones/locations, moves, changes, disconnects, reconnects, training, repairs, wiring, etc. Programming of special features on phone switch for user functionality (ring tone, line appearances, etc.) Provide support community voicemail boxes (DDA, Royal Oak Baseball League, Royal Oak Jaycees) Software backups	These are performed on an as needed basis. Approx. 100-200 adds/moves/changes per quarter.	N/A
Telecommunications facilities management for renovations and new construction		Vital	Design and implement cable structure and phone room layout for new construction and renovated areas.	Courthouse, Fire Stations 1,2,3,&4, Library, Salter Center, City Hall	N/A

Trouble Shooting switch and/or Network		Vital	Provides service of reported equipment and/or network failures by self-repair and/or reporting of service to third party vendor for repair.	While switch equipment failures are minimal they do occur and are usually major in scale. (i.e. Water damage to circuits) After hours support when needed	N/A
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City's Web site

Services	Required	Vital / Expendable	Service / Description	Numbers / Volume	Revenue
General		Vital	A wide range of information can be obtained through the City's Web site http://www.ci.royal-oak.mi.us With over 1,200 pages available on the site, and over 139,000 distinct internet users accessing the site, there is a great deal of activity. The City's web site is a vital resource to the community.	1,200 + pages	N/A
Email Contacts & City Services List		Vital	E-mail contacts for City Commissioners, department heads, and some key employees are provided. A complete city services list in alphabetic order is available with contact and telephone number and in many cases a link to more detailed information on the web site.		N/A
e-Packet availability		Vital	The addition of the City Commission "e-Packet" in December 2001 has been very successful and well received. The e-packet is an electronic version of the items on the City Commission Meeting agenda. Residents can now read and see what the commissioners read. It provides another level of communication that is readily available.		N/A

Forms & Applications		Vital	Many forms and applications are available for download (building permit applications, job applications, boards and committees applications, police complaints, code enforcement complaints, recreation class registration forms, street banner request, block party request, Acorn Foundation donation form, absentee voter application, Animal shelter Volunteer application form, and more.)		N/A
On-line Meeting Minutes & Agendas		Vital	Many of the City's Board and Committee have meeting agendas and/or meeting minutes available on the site: Acorn Foundation, Animal Shelter Committee, Building Code Board of Appeals, Citizens Advisory Committee, City Commission, Downtown Development Authority, Farmers Market Committee, LCC - Liquor Control Committee, Parks & Rec Advisory Board, Plan Commission, Senior Citizens Advisory Committee, Solid Waste Advisory Board, Traffic Committee, Woodward Dream Cruise Committee, & ZBA.		N/A
City ordinances available online.		Vital	Some of the City's ordinances are on-line and available. The City has contracted with General Code to provide a completely codified ordinance document. Provisioning for providing the complete set will be forthcoming.		N/A
Maps are available on-line.		Vital	Maps to City facilities, Voting Precincts, Refuse pick-up, Leaf-pickup, code enforcement areas, downtown parking, zoning district maps, etc.		N/A
Parks and facilities information		Vital	Parks and facilities information, addresses, and operating hours at each park are listed. These pages are going through some revisions to make them more informative.		N/A
Police auctions items and schedules are available.		Vital	Police Auto Auctions are posted several times throughout the year and include the full list of autos that will be sold.	4-6 / year.	N/A
Recreation Class Listing		Vital	Each Quarter, the site lists the full class schedule and program descriptions. A registration form is provided for ease of use.	11 - 15 pages / quarter	N/A

Senior Center Newsletter		Vital	Monthly newsletter is published each month for the two senior/community	14 pages / month	N/A
Public Information requests or Concerns		Vital	Many requests for information or action come through the City's web site. Those that come to the web administrator either get an immediate answer or the request is forwarded to the appropriate department.	1 - 25 / week (addressed to web administrator)	N/A
Community Survey		Vital	Community survey allows residents to view their opinion of Quality of Life in Royal Oak and concern about city services.	1-25 week	N/A
Animal Shelter Pet List		Vital	The Animal Shelter employees take pictures of the pets at the shelter and write descriptions of the animals for placement on the internet. This provides another resource for exposure.	Varies each day/week	N/A
Web page updates & requests		Vital	Many updates are performed daily other are periodic. Here's a list of regulars: Animal shelter, meeting calendar, Senior Center times newsletter, available downtown properties, WROK program schedule, City commission agendas, minutes and "e-Packet", special announcements, library pages from the library, farmers market pages from Brendan Weyhrun, other on-line meeting agendas (dda, pc, zba, etc.), current events, services listing index, job postings, nature society,	Daily, weekly, monthly, and annual updates are processed.	N/A