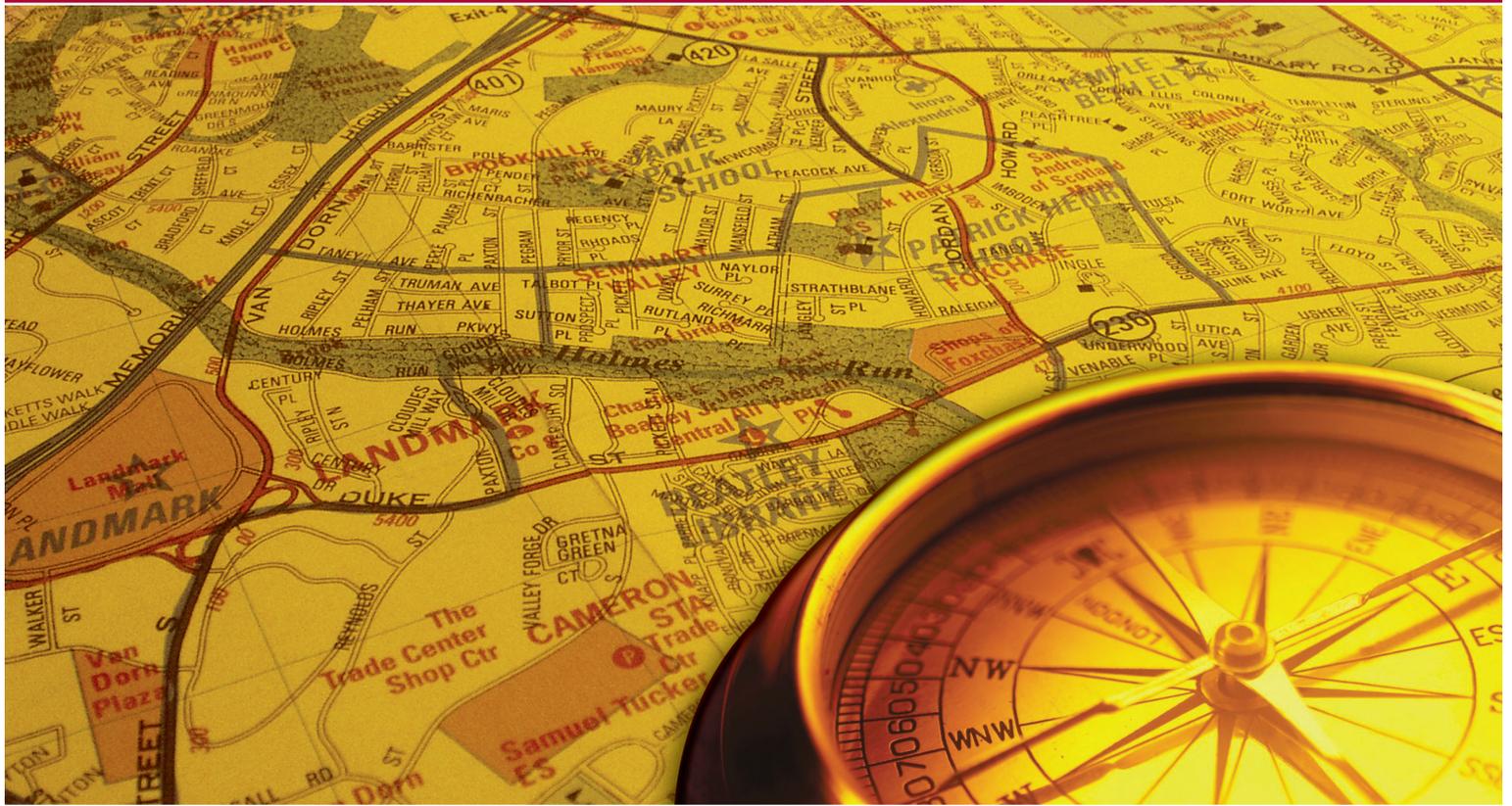
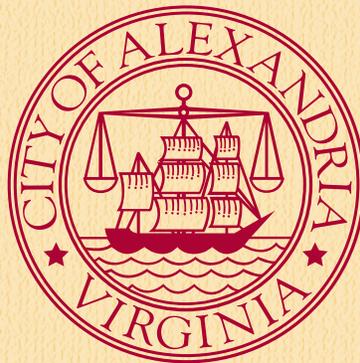


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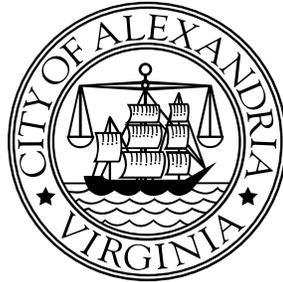
# INFORMATION TECHNOLOGY PLAN



FY 2008 ❖ *Approved*







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## ALEXANDRIA TECHNOLOGY AWARDS

### DIGITAL CITIES SURVEY AWARD

Alexandria's e-government initiatives were ranked first in the nation for cities of its size, according to an annual study by the National League of Cities, the Center for Digital Government, and *Government Technology* magazine. The study focused on how well city governments have deployed information technology resources to deliver services to customers.



The "Digital Cities Survey" recognized Alexandria's cutting-edge web site at alexandriava.gov. The survey noted the availability of City Council webcasts; electronic forms and calendars, online payment of taxes, tickets, and fees; emergency preparedness information, interactive job applications, and free public wireless Internet access. The City was also cited for its extensive use of technology in law enforcement; comprehensive strategic planning and project management; information technology standards and protocols; geographic information systems; and citywide data network.

The City tied with Madison, Wisconsin, for first place in the 125,000 to 249,000 population range, topping such large cities as Richmond, Virginia, and Salt Lake City, Utah, for the honor. Alexandria rose from fourth place in 2005, and was the only city in Northern Virginia or Maryland recognized in any population category.

### EXCELLENCE IN PUBLIC/PRIVATE PARTNERSHIPS AWARD

The U.S. Conference of Mayors honored the City of Alexandria and Comcast with its 2006 Excellence in Public/Private Partnerships Award. The award recognizes the long-term joint development of the City's Institutional Network, or "I-Net", as well as the innovative interconnection with the Arlington County government I-Net which was accomplished in 2005. Alexandria and Comcast received one of only two such awards given nationally. The I-Net, begun in 1994, is a citywide fiber optic backbone that provides a variety of data, voice, and video communications capabilities to city government facilities, libraries, recreation centers, and public schools. The network – the first its kind in Virginia – now connects nearly 100 municipal and school facilities and has proven to be essential by providing direct high-speed connectivity that does not rely on the Internet.



The I-Net supports the city's enterprise electronic mail, calendaring, and database systems, provides employees with access to internal application servers and the Internet, provides a backup link for the City's E-911 system, and is the primary link between the police and fire communications centers for the Computer Aided Dispatch system. The I-Net also provides in-classroom video services in the public schools, which are used for communication between school sites and for distance learning and videoconferencing.



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## INFORMATION TECHNOLOGY PLAN PREFACE

The City of Alexandria's Information Technology Plan is the framework within which the City's annual information technology work is conducted. As the City's business needs and the technology environment changes, so too does the focus of the IT Plan. This approved FY 2008 - FY 2013 IT Plan reflects:

- Funding in FY 2008 of \$3.6 million in City funds and \$0.7 million in outside funds;
- funding over a six-year period of \$22.8 million in City funds, and \$3.9 million in outside funds;
- replacement in the next two years of the City's Payroll/Human Resources system, including both software and hardware, to ensure continued operation and new functionality for this important enterprise system;
- funding for accelerated document imaging projects in the City's land development area (Planning and Zoning, Code Enforcement and T&ES) for staff and others to easily access land use information;
- multi-year replacement of the City's telephony systems and conversion to Voice Over Internet Protocol (VoIP) technology;
- protecting the City's critical information technology infrastructure through planning for emergency preparedness and disaster recovery;
- continued progress in implementing new technologies in the areas of wireless data transmissions and information management, AVL/GPS technologies, as well as future expansion of e-government services and continuous improvement to the City's web site;
- development and implementation of new maintenance management systems in T&ES and other City departments;
- upgrading the City's accounting, budgeting, and purchasing systems at some point in the next two years;
- replacing 800 MHz radios in FY 2010 or later in order to maintain interoperability with other jurisdictions;
- replacing software when no longer supported by the vendor, such as in the Department of Human Services (FY 2008), and Libraries (FY 2009); and
- promoting the application of project management processes for information technology projects to help complete projects on time, at or under budget and at a high quality.

The approved FY 2008 - 2013 IT Plan reflects the first year of the two-year detailed IT Plan that was prepared in support of the City's biennial CIP planning process.

These elements and projects will be key this year to the improvements to City services that are the foundation of all that the Information Technology Plan supports.



## **INFORMATION TECHNOLOGY GOALS AND PRINCIPLES**

The City's goals and principles for the application and management of information technology (IT) provide the framework for managing and delivering key IT services to support the City's business.

### **CITY TECHNOLOGY GOALS**

The City's goals for the use of IT are to:

- Provide residents, businesses and City staff convenient electronic access to information and related services;
- deliver timely and effective responses to customer requirements;
- guarantee a reliable computer infrastructure, including data communications;
- effectively manage the City's information and technology assets;
- ensure reliable connections between State government data services and systems and City systems to facilitate City and State operations;
- partner with appropriate government entities, non-profit organizations and private firms in providing the most effective and efficient delivery of City government information services;
- seek, where practical, to implement joint IT projects with the City government, the Alexandria Library and the Alexandria City Public Schools (ACPS); and
- ensure the reliable delivery of telephone and voice messaging services, and to appropriately take advantage of the convergence of voice and data services through digital technologies.

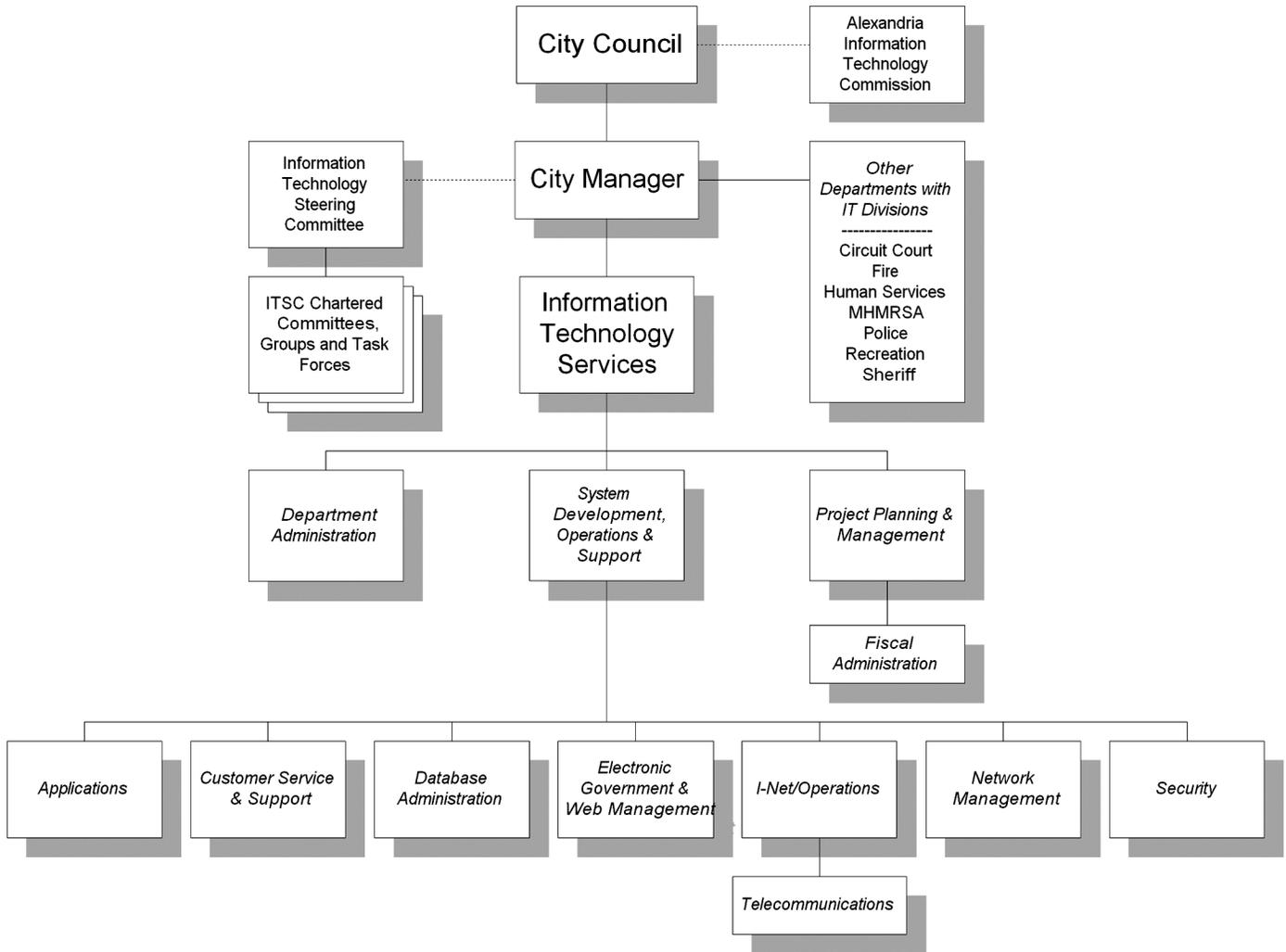
### **GOALS OF THE INFORMATION TECHNOLOGY SERVICES DEPARTMENT**

The goals of the City's Information Technology Services Department (ITS) are:

- To provide information technology services to City departments that are reliable, credible and accessible in a timely manner, and to assess satisfaction with this service on an ongoing basis;
- to ensure that the City's IT human resources are appropriately managed and trained;
- to provide timely response to requests for service;
- to improve City management and operational capabilities through the use of information systems by providing City management and legislative leadership with reliable, well-informed information about the cost-effective application of technology to the City's business processes;

- to safeguard the City's physical computer system hardware and to safeguard access to the City's electronically stored data; and
- to exercise good stewardship in the development of information technology systems projects through the application of industry standard project management policies and practices.

## ORGANIZATION OF CITY INFORMATION TECHNOLOGY RESOURCES



### ALEXANDRIA INFORMATION TECHNOLOGY COMMISSION

The Commission, established by City Council in 1997 through Ordinance 3953, is an advisory group to the City government. The Commission’s purpose is to make recommendations to and advise the City government in the formulation and implementation of information and telecommunications policy, and promote resident participation in the formulation of such policy. The Commission also annually reviews the City Manager’s proposed Information Technology Plan.

## **INFORMATION TECHNOLOGIES STEERING COMMITTEE AND STRATEGIC PRINCIPLES**

The Information Technologies Steering Committee (ITSC), composed of representatives from the City's top-level management and user agencies, was established in 1987 to advise the City Manager on the planning and prioritization of City information technology systems and services, and to coordinate all major computer hardware and software acquisitions. The ITSC's recommendations for the replacement and upgrading of the City's information technology infrastructure have been guided by the following Strategic Principles:

- Give priority to addressing urgent public safety and public health needs; meeting legal requirements; maintaining vital financial processes; exploiting available non-City resources for funding; and attaining quantifiable returns on investment;
- use outside contractors to meet applications and maintenance needs where appropriate;
- continue to exploit new technology to deliver services cost effectively and improve public access to City services and information;
- reduce the need for training and facilitate rapid deployment of new systems by striving to employ integrated user interfaces for computer applications; and
- where possible, encourage the purchase of commercial-off-the-shelf (COTS) software for new business applications, with minimal customization.

## **CHARTERED COMMITTEES, GROUPS, AND TASK FORCES OF THE ITSC**

To more broadly engage City staff in the planning and implementation of IT initiatives, the ITSC created a number of interdepartmental groups through a chartering process. The charter requires each group to meet regularly, take and distribute notes, in many cases prepare budget submissions for their areas of responsibility and monitor appropriation expenditures that are within their charter. A full list of these groups and further details on each group is included below.

### Alexandria Justice Information System (AJIS) Steering Committee

The AJIS Steering Committee advises in regard to policy and direction for the users of the Alexandria Justice Information System (AJIS). In addition, it provides general oversight of AJIS; receives recommendations from the AJIS Coordinator and sets overall goals; periodically evaluates progress; meets biannually or when called by AJIS Steering Committee Chairperson; appoints subcommittees; delegates powers as needed; approves AJIS budget requests, and makes recommendations to the City regarding AJIS budgetary and policy matters.

### Document Imaging and Management Group

The purpose of the Document Imaging and Management Group is to provide guidance in implementing the various departmental document imaging projects throughout the City. The group defines project priorities among departments requesting imaging projects, and works to ensure that the best practices regarding data availability and security are followed.

### GIS Steering Committee

The Geographic Information Systems Steering Committee (GISSC) is responsible for supporting and fostering successful GIS implementation throughout the City. The GISSC will develop and recommend plans, policies and budget initiatives to the ITSC and will work to ensure that individual department actions with respect to GIS are consistent with the City's overall goals for GIS. The GISSC is chaired by the City's GIS Manager.

### Human Resources Steering Committee

The Human Resources Steering Committee (HRSC) manages and supports decision making regarding the City's human resources systems (payroll, personnel and related systems). The committee develops plans, policies and budget initiatives for the City's HR systems, and makes recommendations on these issues to the ITSC. The HRISC also works to foster education and coordination inside and outside the City on human resources systems issues. The HRISC is comprised of representatives of the Personnel Services, Finance, OMB, ITS and several of the City's larger departments and agencies, and is chaired by the representative of the Personnel Services department.

### Information Technology Security Subcommittee

The IT Security Subcommittee (ITSS) was formed at the request of the Information Technology Steering Committee (ITSC) and is intended to operate as a subcommittee of the ITSC to support information technology security decision making throughout the City. The ITSS is an advisory group to the ITSC. The goal of the ITSS is to foster IT security throughout the City government. To accomplish this goal, the ITSS will develop plans, policies and budget initiatives. The ITSS will guide City-wide IT security policy development and facilitate education and coordination inside and outside of the City on security issues. It is chaired by the City's IT Security Officer.

### Public Safety Systems Committee

The Public Safety Systems Committee (PSSC) is an outgrowth of the CAD/RMS Committee. The goal of the PSSC is to work to coordinate and integrate public safety systems, and to serve as a forum for the sharing of plans, activities and expertise between Alexandria public safety agencies. The Chair of this committee rotates annually between the Police and Fire departments.

### Radio Committee

The Radio Committee (RC) supports all City radio and public safety wireless systems operations, enhancements and initiatives. The goal of the RC is to continue the successful operation and upgrade of the City's trunked radio system and to facilitate the smooth implementation of new radio and public safety wireless technologies. Members include representatives of the Police and Fire departments, the Office of the Sheriff, ITS and T&ES (representing all other non-public safety City users). The committee is chaired by the City's radio manager.

### Permitting Committee

The Permitting Committee's (PC) focus is on improving existing business processes through maximizing the functionality provided by the City's permitting application; developing standards for business processes; continuing to document and discuss system problems; and communicating and planning for new releases. The Permitting Committee is presently chaired by the Director of Code Enforcement.

### Recreation Systems Committee

The Recreation Systems Committee (RSC) focuses on maximizing the benefits of the recreation services system (RSS) through expanding its usage. The RSC is chaired by the Director, Recreation Parks and Cultural Activities.

### Telecommunications Committee

The Telecommunications Committee (TC) works to guide the acquisition of the City's telephone services and equipment. The role of the TC is to provide policy recommendations, promote new technologies and their integration with other City technologies, and to provide advice on appropriate inter-relationships of telephone systems technology with other communications systems and devices. It is chaired by staff from the Information Technology Services Department.

## **INFORMATION TECHNOLOGY SERVICES DEPARTMENT**

The ITS department is responsible for the operation of the City's information technology services, including IT infrastructure in the City. The City's ITS organization must provide ongoing support for client/server and web application processing in a sophisticated and secure network environment, replace legacy systems with new enterprise-wide applications designed to operate in this environment, and provide an effective, flexible, responsive and secure structure to manage change and address the City's enterprise-wide information needs. The ITS department includes the following groups that provide these services:

### Administration

This group includes office management, billing, meeting and schedule coordination, simple purchase management, reception, training administration and personnel processing.

### Project Planning and Management

Responsible for planning, management and assessment of internal and external IT projects. This group includes:

- *Finance Administration* — Includes complex purchase management, budgeting, financial management and telecommunications billing.

### System Development, Operations and Support

Responsible for design, development, operation, maintenance, security and support of the City's infrastructure, applications and communications capabilities. This group includes:

- *Applications Management* — Includes the management, maintenance and development of enterprise applications and dedicated business systems.
- *Customer Service and Support* — Includes Help Desk and equipment deployment services.
- *Electronic Government* — Includes the development of web-based applications, management of the City's web site and intranet and support of their technical architecture, as well as electronic publishing.
- *Enterprise Data* — Includes database administration. Responsible for enterprise-wide data standardization, integration and information exchange.
- *Network Management* — Responsible for e-mail system and enterprise server system management and connectivity.
- *Security* — Responsible for the assessment, formulation and implementation of enterprise-wide IT security policies.
- *I-Net/Operations* — Includes Institutional Network (I-Net) management, network operations center, and construction, moves and relocation coordination. This group includes:
  - *Telecommunications Systems Management* — This function is responsible for telecommunications system planning and day-to-day operations.

## **INFORMATION TECHNOLOGY SERVICES - POLICY AND REVIEW COMMITTEE**

While each functional area of ITS has a specific area of responsibility, ITS staff from each division work cooperatively to ensure cross-divisional coordination on important projects. The ITS Policy and Review Committee supports enterprise technology planning and technology policy formulation and assessment in its meetings. The committee, composed of ITS management and division chiefs, is responsible for the following:

- Support and planning for initiatives identified in the Information Technology Plan;
- formulation and review of IT policies, including security;
- review and approval of conformance to enterprise-wide standards for integration and information exchange; and
- oversight of project performance, schedule conformance, staffing and cost.

## **OTHER DEPARTMENTS WITH IT DIVISIONS OR IT STAFF SUPPORT**

In addition to ITS, there are seven City departments and agencies that have a division which also provides information technology services. These services are coordinated with ITS staff.

- *Circuit Court* — The Alexandria Justice Information System (AJIS) Coordinator, with a staff of 5, manages IT services for the Courthouse and for customers of the AJIS system. Services provided includes support for over 250 computer workstations and over 500 users.
- *Fire* — The department's 5 IT staff coordinate with the ITS department staff to support the Fire and EMS Operations, Fire and EMS records management, Code Enforcement building permits system, Emergency Management, Fire/EMS Training, Fire Maintenance and Fire computer aided dispatch system and other Fire-specific computer systems. Fire IT staff support over 150 computer workstations and nearly 100 mobile computers. A departmental IT Director position was added to the Fire Department in FY 2005.
- *Human Services* — The Department of Human Services (DHS) IT Coordinator, with a staff of 4, manages IT services for the DHS Mt. Vernon Avenue facility, the JobLink employment center, the Community Digital Divide Initiative, the Mentor Home, the Adult Day Services Center, the CAC (Center for Alexandria's Children) and for other departments that use DHS systems such as MHMRSA. The DHS IT Coordinator acts as a liaison with the Virginia Department of Aging, Virginia Naturalization and Immigration Services, The Northern Virginia Regional Commission, and the Virginia Department of Social Services with regard to their information systems operations and installation. DHS staff manage over 350 computer workstations used by staff and residents.
- *Mental Health/Mental Retardation/Substance Abuse* — The MH/MR/SA Department's Research and Evaluation Director and 5 full time staff manage IT services for the department. One programmer develops and maintains department-specific applications and creates ad hoc management reports. Two staff manage the specialized electronic clinical records software and database and 2 staff manage the IT network and hardware services the numerous department locations including the Mental Health Center on St. Asaph Street, Substance Abuse on Mill Road, Vocational Services on Colvin Street, the West-End Club House on King Street, the Child Advocacy Center on Beauregard Street, the Alexandria Detention Center, and over 25 other residential sites and Schools. These staff manage approximately 400 computer workstations and laptops, a Citrix farm, departmental file and database servers and a hot backup site providing services to staff spread across the City at 40 separate locations.
- *Police Department* — The Technology Services Division manages the Department's IT services, Emergency Communications (911), Citywide Radio Communications, Crime Analysis, and the Federal CommTech liaison project. Major systems include the City's computer aided dispatching (CAD) system, the Police records management system (CRIMES), and the 800MHZ radio infrastructure. The Police LAN, over 200 desktop computers, over 300 mobile computers, the City's Radio System, Crime Analysis, and primary public safety communications services are supported by 12 professional IT staff, 5 sworn officers, and 28 Emergency Communications Technicians.
- *Recreation* — The Information Technology Division of the Department of Recreation, Parks and Cultural Activities supports its internal IT work through 2 full-time positions, one part time position and a portion of a third full-time position. These positions in addition

to providing first line support for all of the City's recreation facilities and for recreation administration, research, plan and implement technology enhancements. The Recreation IT staff deploy, manage, and maintain over 150 computer workstations at 15 different sites. They also provide network and telecommunications support, server administration, management for recreation systems, troubleshooting e-mail, web site development and maintenance, e-commerce development, management and support, IT system training and technical support for the department's staff as well as for the public accessible computers at six remote sites.

- *Alexandria Sheriff's Office* — The Technology and Information Management Section (TIM) within the Office of the Sheriff has a staff of 4. The team leads IT initiatives related to the Office of the Sheriff, coordinates activities with the City's ITS department, and works with other City agencies, local government, and state agencies on such initiatives. Major systems supported by TIM include: the Public Safety Center Security System, which manages all access to, from and within the Public Safety Center and its perimeter; the Alexandria Justice Information System (AJIS) for booking, jail management, criminal and traffic case information; the Livescan System, which captures and downloads scanned finger and palm prints directly to the State and Regional database; the Local Inmate Data System (LIDS) which captures and reports real time inmate status to state and federal governments; and the Video Arraignment System, that allows prisoners to appear via video before a judge for arraignment. TIM administers first level help desk support and training for standard City applications for 215 users utilizing 113 workstations, various printers (networked and local), and other computer peripherals.



# INFORMATION TECHNOLOGY INITIATIVES

## ELECTRONIC GOVERNMENT

As electronic media have become popular and useful as a means of providing services, the City of Alexandria's Electronic Government (E-Government) project is providing better customer service in the delivery of government services and information. As electronic technology continues to evolve, so do the methods to develop e-government services to take advantage of these technologies to produce efficiencies in traditional business practices.

E-Government services (also known as e-services) within the City of Alexandria are provided through a variety of electronic methods to City constituent groups (residents, employees, visitors, businesses and other governmental entities) to improve traditional interactions with the City. "On-line, not in-line" has been used to explain the essence of what is meant by e-government.

Most people tend to think of e-government as strictly web-based services, but other technologies are being used to provide e-government services. As the City's web presence grew, so did the recognition of the 'digital divide,' i.e., that these conveniences were only available to those who had computer skills and access to the Internet. A conscious decision was made to begin offering e-government services through a variety of electronic methods to help ensure that few individuals remain on the other side of the digital divide. These methods include the Internet, interactive voice response (telephone) systems, computer kiosks, wireless services and electronic mail.

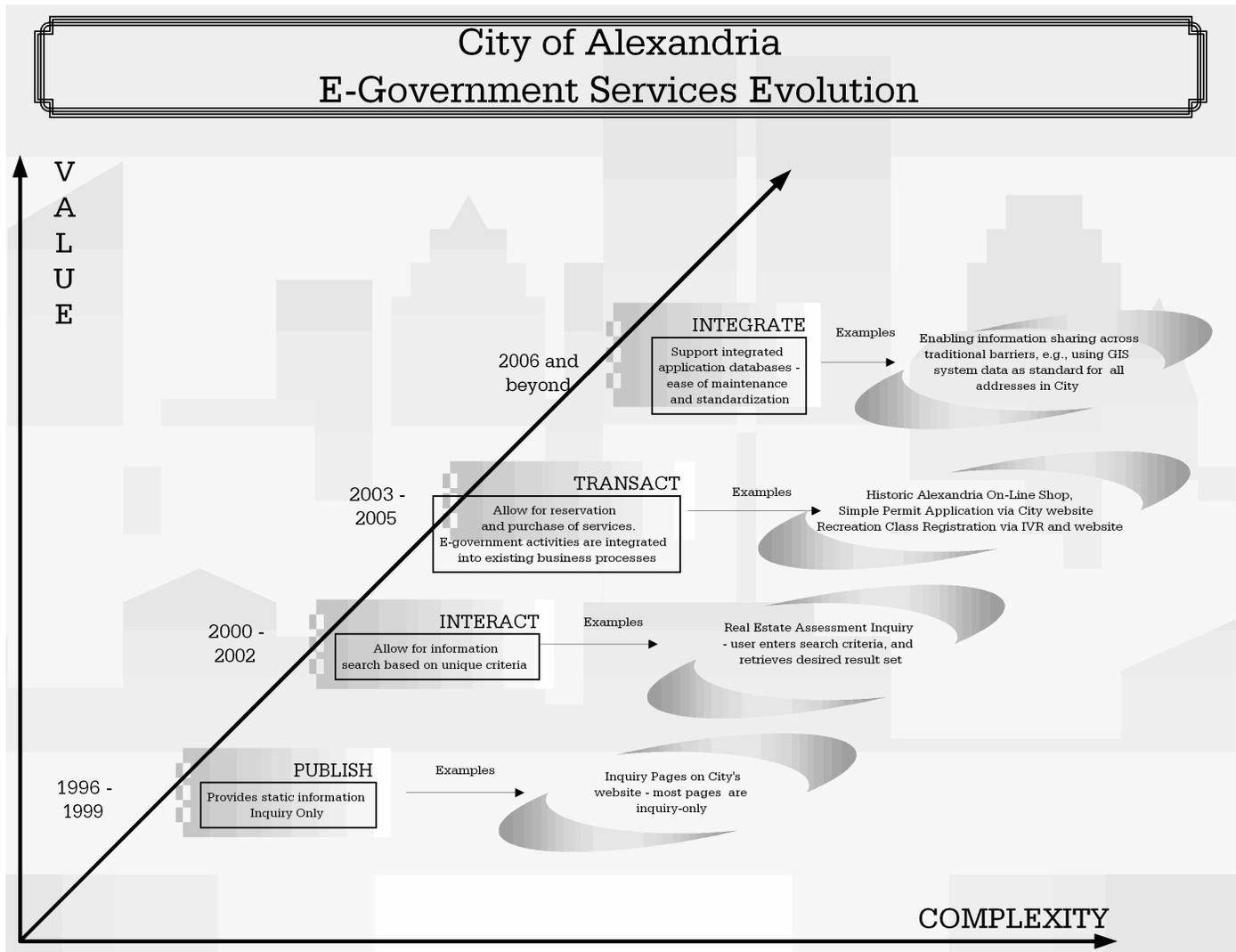
### E-Government Guiding Principles

The City of Alexandria's e-government services guiding principles are used to develop new services. Prospective e-government initiatives are reviewed for conformance to the principles to ensure that services are developed that are consistent with the needs of our customers, are economical to deploy and maintain, are secure and have value. The guiding principles state that new e-government services:

- Must ensure privacy and security;
- should be simple to manage;
- should avoid stand-alone solutions that do not integrate with the City's e-government structure;
- should be customer-focused (resident, business, visitor, employee, other government);
- should be functionally organized;
- should focus on value;
- should use available methods to bridge the digital divide; and
- should be accessible to users with a variety of physical, technical, and language needs.

Most e-government services are offered through the City's web site. As the figure below shows, the web site will continue to evolve to incorporate and accommodate a greater level of constituent interaction.

Please see the 'Web Site Enhancements' project on page 37 for additional information regarding the City's web site and the 'Electronic Government' project on page 39 for information regarding the City's planned e-government initiatives.



## SECURITY INITIATIVES

The City, like all organizations connected to the Internet, faces an evolving array of information security threats, which include viruses and various methods of hacking. Hackers now use "blended" attacks that are very effective at circumventing traditional perimeter security devices such as firewalls. In response, the City has created a full-time Information Technology Security Manager within the ITS department who is responsible for formulation, implementation, and assessment of enterprise-wide security policy. The IT Security Manager

works with the Information Technology Security Subcommittee (ITSS) to monitor and direct the activities of the information security program.

The widespread use of firewalls on Internet connections as protection against unauthorized intrusion has encouraged hackers to seek methods to circumvent them, with many successes. It is now widely accepted by information security professionals that a firewall alone is insufficient protection for a computer network. The City's information security program function is to proactively identify, assess and recommend solutions for the City's IT vulnerabilities. Evaluating the role of new security technologies and methodologies to better protect the City's data and information technology infrastructure is another major component of this program. Finally, the IT Security Manager is responsible for developing and updating policies and procedures that will assist City employees with their efforts to make Alexandria's information more secure. Implementing new security technologies, policies, and methodologies is a continual process.

## **ITS DEPARTMENT PERFORMANCE**

ITS has continued to seek more effective methods of determining how well City IT service is being delivered. For the past six fiscal years ITS has asked George Mason University's [GMU] Institute of Public Policy to assist with measuring the performance of ITS as that service is viewed by departmental and agency customers. ITS was the first City department to incorporate a customer evaluation into its continuous improvement goal. GMU has conducted five electronic surveys, asking all City government staff members that have City e-mail accounts to rate ITS performance. The surveys include two kinds of questions: (a) those which sought a response on a five point scale - with 'one' being unsatisfactory and 'five' being very satisfied, and (b) open-ended questions in which the respondent has an opportunity to make statements. All materials are treated confidentially by GMU staff so that ITS staff do not know individual responses, helping to encourage respondents to be candid in their answers. After each survey, GMU staff individually contacts those departmental staff who indicated specific problems or concerns so that GMU staff can better understand the nature of the problem and the respondents have an opportunity to make statements in confidence that they may have been reluctant to commit to writing.

In the first year the survey covered the Help Desk, Computer Training functions and general ITS issues. In the second year of the survey, questions regarding the performance of Network Services, E-mail and Lotus Notes services, CityNet and Applications services and Electronic Publishing Office services were covered. In the third year the survey was conducted, questions on Web Team services and the Telecommunications function were added (the Telecommunications function was transferred from the General Services Department to ITS in FY 2003). In FY 2005, questions on the Database Administration and the Information Technology Project Office were added. In FY 2006, questions were added to measure satisfaction with e-Government and Network Management services. Questions regarding the Electronic Publishing Office are included in the new e-Government category, as this office no longer strictly performs electronic publishing duties.

Where categories of questions were asked in all years, every attempt was made to keep the text of the question substantially unchanged so that a more accurate measure of year-to-year change could be evaluated. It is the City's intention to continue to conduct these surveys, building on the accumulation of data to develop a much clearer picture of the performance of ITS in delivering services in the context of each fiscal year's opportunities and constraints. In each year approximately 450 usable responses were received, representing approximately a 30 percent response rate, which is considered to be very high.

On a five-point scale, the mid-point, three, is considered by the survey profession, to be a "natural indifference" point; i.e. if the respondent does NOT have a strong opinion, then they will tend to choose the mid-point. This means that if, on average, a service is rated below three, there is a problem with its delivery, while if the average is above three, then customers are generally satisfied. This is, however, not to say that when customers are generally satisfied that improvements aren't warranted or changes should not be considered, only that the service, from the customer's point of view across the organization, is meeting expectations.

- In FY 2005 the overall average response to 83 questions in 13 categories was 4.0.
- In FY 2006 the overall average response to 87 questions in 13 categories was 4.0.
- No category was rated below the natural indifference point.

The following table describes these findings in additional detail: These differences are within the 5 percent margin of error for the study.

Category	Average Response	
	FY 2005	FY 2006
1 Help Desk	4.19	4.17
2 Computer Training	4.06	4.13
3 General Issues with ITS	3.88	3.90
4 Network Services	3.98	4.22
5 E-mail Services	3.95	3.95
6 Lotus Notes Services	4.08	4.14
7 CityNet (Intranet Services)	3.76	3.88
8 Applications	3.83	3.98
9 Electronic Publishing Office	4.55	N/A
10 Telecommunications Services	3.92	3.87
11 Web Team Services	3.87	N/A
12 Database Administration Services	4.01	4.07
13 IT Project Office	4.02	3.80
14 E-Government	N/A	4.30
15 Network Management	N/A	4.00

## **VOICE OVER IP (VOIP)**

Voice Over IP, or VoIP for short, allows telephone users to make telephone calls using a computer network over a data network like the City's I-Net or the Internet. VoIP converts the voice signal from a telephone into a digital signal that travels over the data network then converts it back at the other end so users can speak to anyone with a regular phone number. Most services using VoIP allow the caller to call anyone who has a telephone number - including local, long distance, mobile, and international numbers. Also, while some services only work over the user's computer or a special VoIP phone, other services allow for the use of a traditional phone through an adaptor.

The FY 2008 - FY 2013 IT Plan includes funds for the City to begin implementing VoIP. There are compelling technical and business reasons for the City to pursue this new technology now. Voice Over IP is a relatively new but established technology. VoIP has become better and cheaper to implement, and the City stands to reap greater benefits by pursuing this new technology now, rather than continuing to fund the support of the older, outdated telephone infrastructure.

## **WIRELESS ALEXANDRIA**

### Phase I

The City's "Wireless Alexandria" service, which went live in April 2005, allows any user with a wireless device to access the Internet at no charge. The service was the Washington, DC, region's first free, outdoor, wireless Internet zone, and still one of very few of its kind in the United States. The current outdoor coverage area is centered along the main downtown corridor and includes outdoor dining, Market Square, and the City Marina and Potomac River waterfront. Depending on building locations and other conditions, coverage is available for some distance around that corridor in each direction. Wireless Alexandria is also available at all Alexandria public libraries.

The goals of the Wireless Alexandria pilot project were to provide a convenient public service to users, stimulate economic development and tourism by drawing people to Alexandria, promote the image of Alexandria as a high-tech community, and test the feasibility of using wireless devices for municipal operations. This "win-win" situation gave the government the rare opportunity to let the public use the same equipment City staff tested for municipal use.

The pilot service was optimized for outdoor use and uses 802.11b/g mesh routers. Although some indoor users may be able to connect to the system, the service is not intended to compete with commercially available Internet service and should not replace existing home or business Internet access. The pilot project was narrowly tailored to serve a unique outdoor area of the City, and has virtually no impact on commercial Internet service providers.

## Phase II

At the conclusion of the pilot project in mid-2006, staff determined that a citywide wireless network would benefit the government as well as residents, businesses, and visitors. Such a network would aid municipal operations and regional collaboration by making the City's Institutional Network available to workstations and devices in the field. This would primarily benefit public safety personnel, public transit providers, field inspectors, and public works crews, by providing real-time access to existing City data, voice, and video services.

After researching municipal wireless projects in other cities, staff recommended that the City pursue a model in which the government minimizes its cost and risk, and refrains from competing against the private sector.

In late 2006, following an extensive and competitive bidding and negotiation process, City Council awarded a franchise to EarthLink, Inc., to build and operate a citywide wireless network. Under the agreement, EarthLink will build and maintain the network at the company's own expense, with no taxpayer funding or City financial involvement. To recoup its investment, EarthLink will sell wireless services to homes and businesses, using small, pole-mounted devices throughout the City. In exchange for the right to mount equipment on public property, EarthLink will provide a variety of public benefits, estimated to be worth more than \$13 million over the eight-year term of the franchise agreement.

Although other cities have experimented with wireless hotspots and limited coverage areas, Alexandria will be one of relatively few jurisdictions with complete wireless coverage. Among the localities that do have citywide networks, many involve taxpayer funding, unpredictable advertising revenue, or limited community benefits. Alexandria's innovative network model, in which the public receives significant benefits without any government funding, is believed to be the first of its kind in Virginia and the Washington, D.C. region, and among the first in the nation.

The availability of wireless Internet will also benefit consumers, by stimulating additional price and service competition in the market. Still, the project is not a joint venture or partnership, the franchise is not exclusive, and the City government is not a service provider. EarthLink will operate an open network, meaning that other providers may purchase wholesale accounts to resell to their customers.

In addition to an estimated \$2.7 million savings to taxpayers over the cost of a government-funded network for municipal applications, the franchise agreement includes the following:

- Accounts for Government Use — EarthLink will provide free and discounted wireless Internet accounts for use by City field workers such as Code Enforcement inspectors and housing inspectors, as well as accounts for "smart" devices such as traffic cameras and parking meters.
- Accounts for Student Use — EarthLink will provide free access to 2,700 laptops currently issued to Alexandria City Public Schools (ACPS) ninth grade center and high school students, in order for them to access the Schools' existing network 24 hours per day. This

will give home Internet access to students who may not otherwise have such access, and will allow students to access other ACPS network resources such as homework dropboxes and printers. ACPS will continue to filter student Internet access, to reduce the availability of inappropriate content.

- **Digital Inclusion Accounts** — EarthLink will offer a fixed price of \$9.95 per month, for the term of the franchise, to up to 2,700 low-income residents (approximately four percent of Alexandria households). This represents a discount of more than half off EarthLink's current projected retail rate. Eligible residents will be qualified under guidelines to be determined by the City, and the City may partner with community non-profit organizations to assist in distributing these accounts and providing low-cost computers and computer training to complement the Internet access.
- **Free Public Internet Access Areas** — EarthLink will provide free public Internet access in approximately two dozen locations, which are expected to include the entire Potomac River waterfront and adjacent parks, the King Street corridor from Callahan Drive to the waterfront, the Mt. Vernon Avenue corridor between Hume Avenue and E. Braddock Road, and all Alexandria Metrorail, Amtrak, and VRE stations. The additional areas will consist of major parks located throughout the City, and Landmark Mall.
- **Fees and Rent** — EarthLink will pay the City an annual share of its retail access revenues, and a monthly rental fee for each City-owned pole or building rooftop used.

Construction of the network is expected to be completed in Fall 2007. Detailed information is posted at [www.wirelessalexandria.com](http://www.wirelessalexandria.com).

## **DIGITAL DIVIDE/DIGITAL OPPORTUNITIES**

Not every resident has access to the Internet or other electronic data services from their home, nor is equally skilled in using these technologies. The City continues to develop opportunities for those residents to participate in the digital economy and digital community, thus bridging the 'digital divide.' These include:

### Wireless, High-Speed and Dial Up Internet Access

- The Department of Human Services JobLink Community Digital Divide Initiative was developed to bridge the digital divide, specifically to help under-served communities gain low or no cost access to computers, the Internet, and on-line training. JobLink serves as the hub of an on-line learning program, and is increasing its ability to broadcast interactive learning and real-time training activities on a wide range of subjects. Visit [www.cddi.us](http://www.cddi.us) for more information.

### Public and Private Sector Sponsored Facilities

- The Alexandria libraries have become a primary local resource in helping to bridge the gap in the digital divide. The libraries now have 57 Internet public access terminals, including one in Spanish in each branch, which are in use all day every day on a first-come, first-served basis. Due to high demand, Internet-only terminals are limited to two hours per day per patron use. In addition, wireless Internet access has been recently implemented at all Alexandria libraries. All branches have WiFi access to the Internet.
- The Alexandria libraries provide access to more than 30 electronic reference works, databases of searchable articles from thousands of periodicals, downloadable books and audiotapes, and holdings of the Alexandria libraries and 30,000 other libraries in more than 100 countries. Printouts are available for a nominal fee per page. Library card holders are able check their own records and to access, search, and download information from on-line databases 24 hours a day through the Library's web site.

### Education and Training

- The Alexandria libraries also provide computer terminals at all branch libraries with word processing software available for public use, and instruction on using the Internet.
- The Burke Branch library has a computer lab with 14 public access computers. Instruction on accessing and using the Internet is offered as well as other computer training courses.
- *JobLink* has developed partnerships with 25 local, public and private agencies to form the Community Digital Divide Consortium (CDDC). These partnerships allow *JobLink* to increase its ability to: (1) assist in closing the technology gap by developing computer and information literacy; (2) expand its outreach and service delivery; and (3) fulfill and exceed its short-term and long-term workforce development requirements. The long-range plan is to build additional training courses into this network as well as to expand service and support to other regional, national and international workforce programs.

## INFRASTRUCTURE PROFILE

The following table presents basic information about the City's information infrastructure.

Indicator	FY 2005	FY 2006	FY 2007	FY 2008
Number of Computer Workstations	2,200	2,350	2,500	2,500
Number of Nodes Connected to the Institutional Network (I-Net)				
Government	50	54	56	58
Libraries	4	4	4	4
Schools	22	22	22	22
Number of E-mail Accounts <sup>1</sup>	2,300	2,450	2,600	2,700

- <sup>1</sup> The count includes both accounts assigned directly to staff members and accounts that are assigned to a computer workstation. The latter are typically used in locations where several employees share a computer workstation or are for special network devices such as network servers.



## CHANGES TO THE IT PLAN FROM THE PRIOR YEAR

The FY 2008 to FY 2013 Information Technology Capital Improvement Plan (IT/CIP) total of \$22.8 million continues the City’s Information Technology agenda. The IT/CIP total of \$22.8 million in City funding compares with \$18 million in City funding in the FY 2007 to FY 2012 Information Technology Capital Improvement Plan. This represents an increase of \$4.8 million, primarily attributable to the inclusion of \$3.6 million for 800 MHz radio replacements needed as early as 2010, and increases for several major system replacements, including the City’s Payroll, Financial Accounting and Purchasing systems, and the implementation of Voice Over IP (VOIP) telephony throughout the City.

The City approved funding for the FY 2008 to FY 2013 IT Plan is as follows:

	<b>City Share</b>	<b>Outside Revenues</b>	<b>Total</b>
<b>FY 2008</b>	\$3,597,500	\$665,000	\$4,262,500
<b>FY 2009</b>	\$6,344,725	\$665,000	\$7,009,725
<b>FY 2010</b>	\$6,220,625	\$665,000	\$6,885,625
<b>FY 2011</b>	\$2,007,000	\$665,000	\$2,672,000
<b>FY 2012</b>	\$2,233,500	\$665,000	\$2,898,500
<b>FY 2013</b>	\$2,408,500	\$665,000	\$3,073,500
<b>Total</b>	<u>\$22,811,850</u>	<u>\$3,990,000</u>	<u>\$26,801,850</u>

The approved FY 2008 to FY 2013 IT Plan includes projects that will continue to strengthen the City’s IT infrastructure. On-going maintenance and improvements to the City’s local area networks (LANs) and wide area network (WAN) ensure the continued integrity and availability of these essential components of the City’s infrastructure.

Continued funding for system development projects allows the City to take advantage of emerging technologies, capitalize on investments already made, ensure compliance with federal and state mandates, and provide for improvements to existing processes and systems to increase efficiencies.

### NEW PROJECTS FOR FY 2008 - FY 2013

- *Automatic Vehicle Locator (AVL) for Non-Public Safety* — This project will provide funds to outfit non-public safety City vehicles (such as snow plows and DASH buses) with “automatic vehicle locator” global positioning satellite units that will allow staff the ability to show the location of the vehicle on a GIS-enabled City map. (An amount of \$200,000 is included in FY 2009 for this project.)

- *Sheriff Mobile Digital Video System* — This project provides funds to put video cameras in the Sheriff's vans used to transport prisoners. The cameras provide a method to investigate inmate allegations of abuse, as well as establish responsibility when the vans are vandalized during prisoner transport. An amount of \$72,000 is included in FY 2009 for this project.
- *Sheriff Laptops* — This project provides funds (\$15,000) for the acquisition of laptops to be used in Sheriff's Office training initiatives.

## EXISTING PROJECT HIGHLIGHTS

- *Document Management and Imaging Infrastructure* — \$690,375 is included for this project in FY 2008, as an accelerated funding amount to address a variety of departmental imaging needs. Land development documents, including SUP's, site plans and building plans in Planning and Zoning, Code Enforcement and Transportation and Environmental Services are being imaged in order to ease issues with routing and approvals. Other imaging initiatives will ease the burden of storing and accessing paper documents in the Personnel and Finance Departments.
- *Revenue Collection Management System* — This project will fund the acquisition of a modern revenue collection management system that is anticipated to pay for itself due to increased delinquent tax collections. \$150,000 is included in FY 2008 for this project.
- *Sheriff Accreditation Training System* — \$75,000 will provide the Sheriff's Department with funds to acquire a computer-based training system that will allow Sheriff's Deputies to take training at their job site, saving the City overtime costs.
- *Telephony* — Monies are included in this project to fund the City's acquisition and implementation of Voice Over IP (VOIP) telephony. VOIP is a proven technology that is becoming the standard for telecommunications.
- *Wireless Initiatives* — Funds are included to expand the City's ability to take advantage of the proposed Wireless Network being implemented by Earthlink.
- *EMS Records Management* — Funds in the amount of \$40,000 are included in FY 2008 to purchase an additional module for the EMS system that will collect preplan and hazard information for emergency responders.

FY 2008 funding requests for a number of projects were deferred to FY 2009 to reflect a more realistic schedule of when the funds will actually be needed for the project. These include:

- *Payroll/Personnel Systems* — Funds in the amount of \$1,000,000 are included in FY 2009 to provide some means to proceed with the acquisition of a new system that will replace the City's legacy system. The eventual cost of this system replacement is not known until specifications are completed, proposals received, and a contract negotiated.
- *Real Estate Accounts Receivable System Replacement* — This project has been renamed 'Real Estate Assessment System' to better reflect its focus. Funds for this project total

\$25,000 in FY 2008, down from the original FY 2008 request of \$475,000. Monies for the Real Estate Accounts Receivable application are budgeted in the 'Business Tax and Real Estate Accounts Receivable System' project in FY 2009.

- *Financial Accounting and Asset Management System* — Funding in the amount of \$60,000 scheduled for FY 2008 has been moved to FY 2009<sup>1</sup>.
- *Purchasing System Replacement* — Funding in the amount of \$100,000 scheduled for FY 2008 has been moved to FY 2009<sup>1</sup>.
- *OMB Systems* — Funding in the amount of \$75,000 scheduled for FY 2008 has been moved to FY 2009<sup>1</sup>.
- *Permit Processing* — Funding in the amount of \$120,000 scheduled for FY 2008 has been moved to FY 2009.
- *Geographic Information Systems (GIS)* — Funding in the amount of \$90,000 scheduled for FY 2008 has been moved to FY 2009.
- *E-mail Services* — Funding in the amount of \$250,000 scheduled for FY 2008 has been moved to FY 2009.

<sup>1</sup> *System procurements would be consolidated*

For some projects, only portions of the original funds were deferred to FY 2009. These projects include:

- *Telephony* — The original FY 2008 request of \$464,530 has been reduced to \$375,000, to reflect the revised schedule and costs of Voice Over IP (VoIP).

Lastly, some projects were able to forgo their original FY 2008 request, due to the availability of prior year funds. These projects include:

- *Web Site Enhancements* — Funding in the amount of \$125,000 in FY 2008 has been eliminated.
- *Electronic Government* — Funding in the amount of \$200,000 in FY 2008 has been eliminated.
- *Intranet* — Funding in the amount of \$10,000 in FY 2008 has been eliminated.

## **PROJECTS THAT HAVE BEEN CLOSED**

### System Development Projects:

- *Archives Records Management System Upgrade* — This system has been implemented, and will be live in the spring of 2007.
- *Cash Register Software Upgrade* — The software has been ordered and will be implemented by June 2007.

- *E-911 System Replacement* — This project is currently underway. Final acceptance is anticipated by spring 2007.
- *Help Desk System Upgrade* — This project has been completed.
- *Emergency Operations Center (EOC) Upgrades* — This project has been completed.
- *Disaster Recovery Hot Site* — The goals of this project will be addressed through the City's operating budget.

## **PROJECTS ORGANIZATION**

Information Technology projects are organized into two broad categories:

Systems Development Projects, project 015-015, which is sub-divided as follows:

- Public Access Development
- Document Management Systems
- Financial Systems
- Geographic Information Systems
- Public Safety Systems
- Recreation Systems
- Other Systems

Infrastructure Projects, project 015-014, which is sub-divided as follows:

- Local Area Network (LAN) infrastructure
- Wide Area Network (WAN) infrastructure
- Enterprise Services

A summary of these projects and costs is shown on page 29, with operating budget impacts on page 33.

## PROJECT PRIORITIES IN THE IT PLAN

Each project in the IT Plan has been assigned a rating to reflect its overall priority to assist with decision-making and resource allocation. Each project has been assigned one of three ratings - essential, very desirable, or desirable - or a designation that the project is currently unrated.

Generally, the highest rating of “essential” has been applied to projects that are either:

- Required to address an urgent health or safety hazard;
- needed to meet legal requirements or State or federal mandates;
- essential to the success of other projects or a larger program in progress;
- cannot be deferred without the loss of substantial non-City funding; or
- required for economic growth and development.

Other projects have been rated as “very desirable” or “desirable” depending upon the extent and degree of benefit provided. Generally, projects that maintain or improve a current system’s functionality are assigned priority over new projects that provide new system capabilities.

In addition, each project in the Information Technology Plan is linked with the City’s Strategic Plan element that most closely represents what the project is supporting.



## SUMMARY TOTALS

The following table summarizes spending on Information Technology for FY 2008 to FY 2013. Detailed descriptions follow the summary.

**Information Technology  
Capital Improvement Plan For FY 2008 to FY 2013  
21-Jun-07**

CIP Project ID (1)	Project Title (2)	Net Totals (3)	Net Balances Prior Year (4)	FY 2008 (5)	FY 2009 (6)	FY 2010 (7)	FY 2011 (8)	FY 2012 (9)	FY 2013 (10)
<b>1 TOTAL Net Costs - All Information Technology CIP Projects</b>									
2		27,135,160	4,323,310	3,597,500	6,344,725	6,220,625	2,007,000	2,233,500	2,408,500
<b>3 015-015 Systems Development</b>									
4		17,878,785	3,204,310	1,944,375	4,282,600	5,068,500	962,000	1,123,500	1,293,500
5	015-015-1A Public Access Development	2,617,840	992,840	0	325,000	325,000	325,000	325,000	325,000
6	015-015-10 Web Site Enhancements		567,340	0	125,000	125,000	125,000	125,000	125,000
7	015-015-4 Electronic Government		425,500	0	200,000	200,000	200,000	200,000	200,000
8	015-015-30 Public Access to Land Records		0	0	0	0	0	0	0
9									
10	015-015-1 Document Management Systems	2,206,875	16,500	715,375	400,000	325,000	250,000	250,000	250,000
11	015-015-1-3 MHMRS Medical Records Management		16,500	25,000	25,000	25,000	0	0	0
12	015-015-21 Document Management and Imaging Infrastructure		0	690,375	375,000	300,000	250,000	250,000	250,000
13									
14	015-015-2 Financial and Human Resource Systems	3,184,980	574,980	175,000	2,435,000	0	0	0	0
15	015-015-2-3 Real Estate Assessment System		25,000	25,000	0	0	0	0	0
16	015-015-2-4 OMB Systems		0	0	75,000	0	0	0	0
17	015-015-2-5 Payroll/Personnel System		400,000	0	1,000,000	TBD	0	0	0
18	015-015-7A Remote Time and Attendance		0	0	0	0	0	0	0
19	015-015-2-8 Financial Accounting and Asset Management System		100,000	0	560,000	TBD	TBD	TBD	TBD
20	015-015-46 Revenue Collection Mgt. System		0	150,000	0	0	0	0	0
21	015-015-47 Business Tax and Real Estate Accounts Receivable System		49,980	0	200,000	0	0	0	0
22	015-015-48 Purchasing System Replacement		0	0	600,000	TBD	TBD	TBD	TBD
23	015-015-49 Personal Property Tax System		0	0	0	0	0	0	0
24									
25	015-015-3 Geographic Information Systems	1,502,100	662,100	0	380,000	190,000	90,000	90,000	90,000
26	015-015-3-3 GIS Development		187,600	0	180,000	90,000	90,000	90,000	90,000
27	015-015-3-4 Highway Video Program		474,500	0	0	0	0	0	0
28	015-015-3-5 AVL for Non-Public Safety		0	0	200,000	100,000	0	0	0
29									
30	015-015-4 Public Safety Systems	6,971,390	297,290	749,000	452,600	4,193,500	262,000	423,500	593,500
31	015-015-4-1 Public Safety Radio System Replacement		50,000	50,000	50,000	3,650,000	50,000	50,000	50,000
32	015-015-36 A/JIS Enhancements		0	246,000	198,000	205,000	212,000	220,000	235,000
33	015-015-4-3 Police/Fire Computer Aided Dispatch (CAD)/RMS Project		247,290	275,000	132,600	338,500	0	153,500	308,500
34	015-015-34 Interoperability Strategies for Public Safety		0	0	0	0	0	0	0
35	015-015-39 EMS Records Management System		0	40,000	0	0	0	0	0
36	015-015-51 Sheriff Accreditation Training System		0	75,000	0	0	0	0	0
37	015-015-53 Sheriff Network Connectivity Conversion		0	48,000	0	0	0	0	0
38	015-015-54 Sheriff Laptops		0	15,000	0	0	0	0	0
39	015-015-55 Sheriff Mobile Video System		0	0	72,000	0	0	0	0

**Information Technology  
Capital Improvement Plan For FY 2008 to FY 2013  
21-Jun-07**

CIP Project ID (1)	Project Title (2)	Net Totals (3)	Net Balances Prior Year (4)									
			FY 2008 (5)	FY 2009 (6)	FY 2010 (7)	FY 2011 (8)	FY 2012 (9)	FY 2013 (10)				
40	<b>Recreation Systems</b>	<b>75,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	
41	015-015-5-2 Recreation Systems	75,000	0	0	0	0	0	0	0	0	0	
42												
43	<b>015-015-5</b>	<b>585,600</b>	<b>305,000</b>	<b>290,000</b>	<b>35,000</b>							
44	015-015-5-1 Permit Processing	430,600	0	120,000	TBD							
45	015-015-28 Intranet	105,000	0	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	
46	015-015-29 TES Infrastructure Management and Maintenance System	0	0	0	0	0	0	0	0	0	0	
47	015-015-31 MHIRSA HIPAA Data Security Compliance	0	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	
48	015-015-41 IT Project Management	50,000	0	0	0	0	0	0	0	0	0	
49	015-015-42 DHS Payment System Replacement	0	280,000	0	0	0	0	0	0	0	0	
50	015-015-43 Library Automated Catalog Upgrade	0	0	135,000	0	0	0	0	0	0	0	
51												
52	<b>015-014 Infrastructure Projects</b>	<b>9,256,375</b>	<b>1,119,000</b>	<b>2,062,125</b>	<b>1,152,125</b>	<b>1,152,125</b>	<b>1,045,000</b>	<b>1,110,000</b>	<b>1,110,000</b>	<b>1,115,000</b>	<b>1,115,000</b>	
53												
54	<b>015-014-1</b>	<b>160,000</b>	<b>1,028,125</b>	<b>922,125</b>	<b>657,125</b>	<b>657,125</b>	<b>620,000</b>	<b>565,000</b>	<b>565,000</b>	<b>570,000</b>	<b>570,000</b>	
55	015-014-1 Local Area Network (LAN) Services	0	75,000	75,000	75,000	75,000	75,000	75,000	75,000	75,000	75,000	
56	015-014-1-2 LAN Backbone Capacity	0	50,000	50,000	50,000	25,000	25,000	25,000	25,000	25,000	25,000	
57	015-014-1-3 Individual Building LAN Development	50,000	25,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	
58	015-014-1-4 Upgrade Network Operating System	110,000	50,000	200,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	
59	015-014-1-5 Upgrade Work Station Operating Systems	0	578,125	482,125	492,125	465,000	400,000	400,000	400,000	400,000	400,000	
60	015-014-1-6 Network Infrastructure Hardware Upgrades/ Replacement	0	250,000	100,000	0	0	0	0	0	0	0	
61	015-014-1-7 Storage Area Network	0	0	0	0	0	0	0	0	0	0	
62	<b>015-014-2</b>	<b>517,000</b>	<b>505,000</b>	<b>720,000</b>	<b>425,000</b>	<b>425,000</b>	<b>250,000</b>	<b>275,000</b>	<b>275,000</b>	<b>275,000</b>	<b>275,000</b>	
63	015-014-2 Wide Area Network (WAN) Services	0	0	0	0	0	0	0	0	0	0	
64	015-014-6 Institutional Network Development	246,000	375,000	590,000	285,000	285,000	135,000	200,000	200,000	200,000	200,000	
65	015-014-8 Telephony Integration	75,000	40,000	40,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	
66	015-014-3 Security	3,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	
67	015-014-15 Application Deployment Management	193,000	65,000	65,000	65,000	65,000	40,000	40,000	40,000	40,000	40,000	
68	015-014-13 Database Infrastructure	0	0	0	0	0	0	0	0	0	0	
69	<b>015-016</b>	<b>442,000</b>	<b>120,000</b>	<b>420,000</b>	<b>70,000</b>	<b>70,000</b>	<b>175,000</b>	<b>270,000</b>	<b>270,000</b>	<b>270,000</b>	<b>270,000</b>	
70	015-016-1 Enterprise Services	392,000	0	350,000	0	105,000	200,000	200,000	200,000	200,000	200,000	
71	015-016-2 E-mail Services	50,000	70,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	
72	015-016-3 Wireless Initiatives (Information Utility)	0	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	
73	015-016-3 Desktop Productivity Environment	0	0	0	0	0	0	0	0	0	0	

- The cable television franchise agreement with AT&T/Comcast provides for Comcast to provide the City a base payment of approximately \$665,000 per year, if the City provides matching funds which the City plans to provide.



## **OPERATING BUDGET IMPACTS**

The following table summarizes the estimated impacts of the costs of operating current IT systems as well as the operating costs of implementation of relevant projects included in the FY 2008 - FY 2013 Information Technology Plan of the City's operating budget.

**Information Technology  
Capital Improvement Plan For FY 2008 to FY 2013 - Estimated Operating Impacts  
21-Jun-07**

CIP Project ID (1)	Project Title (2)	Six Year Totals (3)						FY 2013 (10)
		FY 2008 (5)	FY 2009 (6)	FY 2010 (7)	FY 2011 (8)	FY 2012 (9)		
<b>1 TOTAL Operating Costs - All Information Technology CIP Projects</b>		<b>16,012,070</b>	<b>2,084,550</b>	<b>2,470,258</b>	<b>2,699,812</b>	<b>2,806,605</b>	<b>2,917,669</b>	<b>3,033,176</b>
<b>2 015-005 Systems Development</b>		<b>12,119,307</b>	<b>1,846,950</b>	<b>2,055,628</b>	<b>2,136,653</b>	<b>2,220,919</b>	<b>2,308,556</b>	
3	015-015-1A Public Access Development	88,000	91,520	95,181	98,988	102,948	107,065	
4	015-015-10 Web Site Enhancements	65,000	67,600	70,304	73,116	76,041	79,082	
5	015-015-4 Electronic Government	20,000	20,800	21,632	22,497	23,397	24,333	
6	015-015-30 Public Access to Land Records	3,000	3,120	3,245	3,375	3,510	3,650	
7	015-005-1 Document Management Systems	71,300	72,152	75,038	78,040	81,161	84,408	
8	015-015-1-3 MH/MRSA Medical Records Management	21,300	22,152	23,038	23,960	24,918	25,915	
9	015-015-21 Document Management and Imaging Infrastructure	50,000	50,000	52,000	54,080	56,243	58,493	
<b>10 Financial Systems</b>		<b>406,000</b>	<b>465,540</b>	<b>618,962</b>	<b>642,520</b>	<b>667,021</b>	<b>692,502</b>	
11	015-015-2-3 Real Estate Assessment and Accounts Receivable System Replacement	30,000	30,000	30,000	30,000	30,000	30,000	
12	015-015-2-4 OMB Systems	18,000	18,720	19,469	20,248	21,057	21,900	
13	015-015-2-5 Payroll/Personnel System	75,000	100,000	150,000	156,000	162,240	168,730	
14	015-015-7A Remote Time and Attendance	38,000	39,520	41,101	42,745	44,455	46,233	
15	015-015-2-8 Financial Accounting and Asset Management System	140,000	145,600	151,424	157,481	163,780	170,331	
16	015-015-46 Revenue Collection Mgt. System	0	22,500	23,400	24,336	25,309	26,322	
17	015-015-47 Business Tax Accounts Receivable System	30,000	31,200	32,448	33,746	35,096	36,500	
18	015-015-48 Purchasing System Replacement	0	0	90,000	93,600	97,344	101,238	
19	015-015-49 Personal Property Tax System	75,000	78,000	81,120	84,365	87,739	91,249	
<b>20 Geographic Information Systems</b>		<b>0</b>	<b>169,776</b>	<b>176,567</b>	<b>183,630</b>	<b>190,975</b>	<b>198,614</b>	
21	015-015-3-3 GIS Development	134,400	139,776	145,367	151,182	157,229	163,518	
22	015-015-3-4 Highway Video Program	TBD	TBD	TBD	TBD	TBD	TBD	
23	015-015-3-5 AVL for Non-Public Safety	0	30,000	31,200	32,448	33,746	35,096	
<b>21 Public Safety Systems</b>		<b>4,989,890</b>	<b>785,882</b>	<b>817,317</b>	<b>850,010</b>	<b>884,010</b>	<b>919,371</b>	
24	015-015-4-1 Public Safety Radio System Replacement	498,000	517,920	538,637	560,182	582,590	605,893	
25	015-015-3-6 AJIS Enhancements	125,000	130,000	135,200	140,608	146,232	152,082	
26	015-015-4-3 Police/Fire Computer Aided Dispatch (CAD)/RMS Project	75,000	78,000	81,120	84,365	87,739	91,249	
27	015-015-3-4 Interoperability Strategies for Public Safety	0	0	0	0	0	0	
28	015-015-3-9 EMS Records Management System	34,000	35,360	36,774	38,245	39,775	41,366	
29	015-015-5-1 Sheriff Accreditation Training System	0	11,250	11,700	12,168	12,655	13,161	
30	015-015-5-3 Sheriff Network Connectivity Conversion	-1,200	-1,248	-1,298	-1,350	-1,404	-1,460	
31	015-015-5-4 Sheriff Laptops	2,500	2,600	2,704	2,812	2,925	3,042	
32	015-015-5-5 Sheriff Mobile Video System	0	12,000	12,480	12,979	13,498	14,038	

**Information Technology  
Capital Improvement Plan For FY 2008 to FY 2013 - Estimated Operating Impacts  
21-Jun-07**

CIP Project ID	Project Title	Six Year Totals						FY 2012 (9)	FY 2013 (10)
		(1)	(2)	(3)	(4)	(5)	(6)		
40	015-015-5	Recreation Systems	6,000	6,240	6,490	6,749	7,019	7,300	
41	015-015-5-2	Recreation Systems	6,000	6,240	6,490	6,749	7,019	7,300	
42									
43	015-005-5	Other Systems	246,000	255,840	266,074	276,717	287,785	299,297	
44	015-015-5-1	Permit Processing	160,000	166,400	173,056	179,978	187,177	194,664	
45	015-015-28	Intranet	15,000	15,600	16,224	16,873	17,548	18,250	
46	015-015-29	TES Infrastructure Management and Maintenance System	11,250	11,700	12,168	12,655	13,161	13,687	
47	015-015-31	MHMRSA HIPAA Data Security Compliance	5,000	5,200	5,408	5,624	5,849	6,083	
48	015-015-41	IT Project Management	4,500	4,680	4,867	5,062	5,264	5,475	
49	015-015-42	DHS Payment System Replacement	30,000	31,200	32,448	33,746	35,096	36,500	
50	015-015-43	Library Automated Catalog Upgrade	20,250	21,060	21,902	22,778	23,690	24,637	
51									
52	015-004	Infrastructure Projects	533,950	623,308	644,184	669,952	696,750	724,620	
53									
54	015-004-1	Local Area Network (LAN) Services	42,750	44,460	42,182	43,870	45,624	47,449	
55	015-014-1	LAN Backbone Capacity	11,250	11,700	12,168	12,655	13,161	13,687	
56	015-014-1-2	Individual Building LAN Development	7,500	7,800	4,056	4,218	4,387	4,562	
57	015-014-1-3	Upgrade Network Operating System	5,000	5,200	5,408	5,624	5,849	6,083	
58	015-014-1-4	Upgrade Work Station Operating Systems	7,500	7,800	8,112	8,436	8,774	9,125	
59	015-014-1-5	Network Infrastructure Hardware Upgrades/ Replacement	6,500	6,760	7,030	7,312	7,604	7,908	
60	015-014-14	Storage Area Network	5,000	5,200	5,408	5,624	5,849	6,083	
61									
62	015-004-2	Wide Area Network (WAN) Services	462,500	549,000	570,960	593,798	617,550	642,252	
63	015-014-6	Institutional Network Development	350,000	364,000	378,560	393,702	409,450	425,829	
64	015-014-8	Telephony Integration	50,000	120,000	124,800	129,792	134,984	140,383	
65	015-014-3	Security	50,000	52,000	54,080	56,243	58,493	60,833	
66	015-014-15	Application Deployment Management	7,500	7,800	8,112	8,436	8,774	9,125	
67	015-014-13	Database Infrastructure	5,000	5,200	5,408	5,624	5,849	6,083	
68									
69	015-016	Enterprise Services	28,700	29,848	31,042	32,284	33,575	34,918	
70	015-016-1	E-mail Services	25,000	26,000	27,040	28,122	29,246	30,416	
71	015-016-2	Wireless Initiatives (Information Utility)	2,500	2,600	2,704	2,812	2,925	3,042	
72	015-016-3	Desktop Productivity Environment	1,200	1,248	1,298	1,350	1,404	1,460	



## SYSTEM DEVELOPMENT PROJECTS

This CIP project category includes development of computer application systems in finance, geographic information and public safety for departments and agencies, the development of automated document management services, and the development of the City’s radio communications network for both public safety and operating government agencies.

### PUBLIC ACCESS DEVELOPMENT

	Prior Year							Totals
	Unallocated	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	
Web Site Enhancements	567,340	0	125,000	125,000	125,000	125,000	125,000	1,192,340
Electronic Government	425,500	0	200,000	200,000	200,000	200,000	200,000	1,425,500
Public Access to Land Records	0	0	0	0	0	0	0	0
<b>Totals</b>	<b>992,840</b>	<b>0</b>	<b>325,000</b>	<b>325,000</b>	<b>325,000</b>	<b>325,000</b>	<b>325,000</b>	<b>2,617,840</b>

#### **Web Site Enhancements**

(015-015-10) Priority: Very Desirable

This project includes enhancements to, and applications for, the City of Alexandria’s public web site at [alexandriava.gov](http://alexandriava.gov) and related sites.

**Relationship to  
City’s Strategic Plan**

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“Always looking to the future and for ways to get better.”

Monies in this project fund the ongoing development and evolution of departmental pages on the City’s web site. Additional web site enhancements and applications are evaluated on a regular basis with input from the Commission on Information Technology, the Information Technologies Steering Committee, and the Alexandria Communicators.

Over the next year, web site enhancements will include:

- *Accessibility and Language* — The City’s home page is compliant with federal ADA guidelines to assist web users with disabilities. All departmental and new development content is compliant with these guidelines. The City continues to work to add more web content in Spanish and other languages.
- *Content Management System* — With the City’s new content management system (CMS) and site design, more routine web updates will be made by department staff. This will permit the E-Government Team to shift their work focus to complex web work and new application development, as well as integrating new site features with the CMS.
- *Customer Relationship Manager* — The City will investigate the acquisition and will implement an enterprise system to receive and track requests for service, online

correspondence, and other customer relationship information. This system could promote more efficient and consistent responses to requests, provide for additional accountability, and make better use of IT infrastructure.

- *Geographic Information System (GIS)* — Using the web map viewer as a foundation, the E-Government Team will continue to work with Planning & Zoning's GIS Office to integrate GIS data and other web content.
- *New Media* — The goal of e-government is to bring government to the customer, using technology to improve convenience and efficiency. This requires government to adapt to the technologies being used by customers, which increasingly include new media. For example, news headlines from the City's home page at [alexandriava.gov](http://alexandriava.gov) are also published in the Really Simple Syndication (RSS) format, which allows users to subscribe to the content with an aggregator (reader client). A key benefit of RSS for the City is that other web sites, such as neighborhood associations or local businesses, can incorporate City content automatically. This helps the City reach larger audiences with important information. Future applications of RSS will include content such as job listings, requests for proposals, and calendars of events. The City is a local government pioneer in using podcasting (the use of RSS to deliver audio files) to reach new audiences, and now produces seven podcast shows. Throughout FY 2007-2008, the City will look for more new media opportunities to reach more customers.
- *Online Payments* — The City's eChecks service has processed more than \$10 million in payments since 2004. The E-Government Team will continue to work with the Finance Department to expand the availability of online payment methods, including credit cards and e-checks, with an emphasis on improving customer convenience, reducing fees, and creating internal efficiencies.
- *Online Permitting* — The E-Government Team will work with the Department of Planning and Zoning and the Code Enforcement Bureau to allow customers to apply for, pay for, and check the status of building, planning, and zoning permits.

These are just a few of the many potential uses which will require resources in 2007-2008. The public's reliance on the web site and the increasing use by staff of the Internet for work purposes continues to place a load on both equipment and telecommunications capacity. Residents increasingly come to depend on the web site as their "electronic City Hall."

Project Benefit:

This project provides enhanced services to the public by making information about the City government available 24 hours a day. In addition, the City's web site provides the platform for delivering certain kinds of City services in a more cost-effective and convenient manner.

Operating Budget Impact:

Maintenance costs for the City's web site are approximately \$65,000 per year.

**Change In Project From Prior Fiscal Years:**

Sufficient prior-year funds remain such that no funds are requested for this project for FY 2008. Funding of \$125,000 per year has been extended for remaining years through FY 2013, to reflect the ongoing work supported in this category.

**Electronic Government**

(015-015-4) Priority: Very Desirable

**Relationship to  
City's Strategic Plan**

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“Ensure City services are responsive to the changing needs of our community.”

The City of Alexandria's E-Government project has been developed to aid in the identification of goals and associated monetary requirements to expand and develop e-government initiatives within the City. Electronic media are becoming increasingly popular and useful as a means of communication and providing services. As technology continues to evolve, so do the methods to develop e-government services to take advantage of these technologies to produce efficiencies in traditional business practices, providing better customer service in the delivery of government services and information.

E-Government services within the City of Alexandria are provided through a variety of electronic methods to City constituent groups (residents, employees, visitors, businesses and other governmental entities) to improve traditional interactions with the City. Many of the projects within the six-year Information Technology Plan, while perhaps not purely e-government projects, contain e-government elements and funding. The following chart shows the e-government initiatives being funded in the projects included in this plan.

<b>E-Government Initiatives within the FY 2008 - 2013 IT Plan</b>		
<b>Project Name</b>	<b>Initiative</b>	<b>FY 2008 Funding</b>
Public Access to Land Records, page 40	To provide access to the Alexandria Circuit Court land records and related documents on the Internet.	\$0; this project is underwritten by the State
Online Payments(see Web Site Enhancements project, page 37)	To expand and improve online services to allow customers to research and pay taxes, tickets, fees, and other payments with e-checks and credit cards.	\$30,000 in prior year project funds will be used to improve this service
Alexandria Justice Information System Enhancements, page 62	To develop enhancements to the system.	\$246,000, a portion of which will be used for E-Government
Permitting Systems, page 73	To maintain telephone and provide online inspection scheduling, and provide mobile access to the application.	There are sufficient prior-year resources in this project to address this need.
Intranet (CityNet), page 75	To provide access to employees to a variety of City-specific data. In the future, to provide access to some applications.	\$0, there are sufficient prior year resources to address this need.

Please refer to the specifics on each project in this plan for additional information. Please refer to the overall funding on page 29 for information on the FY 2008 - 2013 six-year funding for each of these projects.

**Project Benefit:**

Prospective new e-government initiatives are reviewed for conformance to the City's e-government strategic principles (see E-Government Guiding Principles, page 13) to ensure that services are developed that are consistent with the needs of our customers, are economical to deploy and maintain, are secure and have value.

**Operating Budget Impact:**

Maintenance costs for E-Government are approximately \$20,000 per year.

**Change in Project from Prior Fiscal Years:**

Sufficient prior-year funds remain such that no funds are requested for this project for FY 2008. Funding of \$200,000 per year has been extended for remaining years through FY 2013, to reflect the increasing work supported in this category.

**Public Access to Land Records**

(015-015-30) Priority: Very Desirable

The purpose of this project is to make available the Alexandria Circuit Court land records and related documents on the Internet. The following table shows the land records and indexes and their status with regard to conversion to a format accessible through the Internet.

**Relationship to  
City's Strategic Plan**

"Residents have convenient access to City government and services."

<b>Date of Records</b>	<b>Status</b>
Land Records from 1930 - 1993	Conversion to Internet readable format complete.
Land Records from October 1993 - October 1999	Conversion to Internet readable format complete.
Land Records from October 1999 - present and future	Conversion to Internet readable format complete.
Indexes from 1930 - 1991	Conversion to Internet readable format complete.
Indexes from 1992 - present	Currently available on RMS.
Indexes from 1992 - present and future	Linked to images of actual recorded documents.

All the above records and indexes have been converted to a format compatible with web browser access with imaging. The records and indexes will be placed on a separate public access server isolated from the daily operating Records Management System (RMS). The City will provide links from the Clerk of Court page on the City's web site to access the land records data. In FY 2002, land records from 1970 through 1999 were converted to digital TIFF format, the format used by the State Supreme Court. The indexes have been converted. In FY 2005, the indexes from 1930 to 1969 were converted to a format used by the Supreme Court for

incorporation into RMS at a future date. The images from 1985 - 1999 have been linked to the RMS indexes.

The Virginia General Assembly initiated a project to automate and create remote access to the Commonwealth's land records by funding through the Technology Trust Fund (TTF) (administered by the State Compensation Board and the Council on Information Management). The Clerk of Circuit Court is the official custodian of these records.

The initial phase in which the records were converted from CD and microfilm to a format accessible through the Internet and has been accomplished. Circuit Court and Supreme Court staff are performing the second phase of the work, to link the indexes to scanned images. After these initial phases there will be ongoing conversion of records and uploading data plus any normal system maintenance.

This project is a part of the initiative to provide public access to Office of the Clerk of Court's public records. See page 62 for additional information regarding this initiative and the provision of access to records maintained in the Alexandria Justice Information System (AJIS).

The Clerk of Courts has contracted with the State Supreme Court to provide Internet access to these documents. It is anticipated that this service will be funded by the Clerk's technology surcharge of \$5 for every document filed with this office.

Project Benefit:

This project will make the land records of the City of Alexandria electronically available to other City agencies and paid subscribers. As paper records age, they become more fragile and handling hastens their deterioration. Also, as more of these records are put into digital format, access becomes limited to the number of PC's that can be accommodated in the space of the Clerk's Office record room. Remote access provides access to essential land records 24 hours a day, gives other City agencies immediate access to the official land records in their own offices, protects the original records from additional handling, and gives access to title attorneys and real estate personnel who subscribe to more efficiently serve residents involved in real estate transactions in the City of Alexandria.

Operating Budget Impact:

Maintenance costs for this project are estimated at \$3,000 annually.

Change In Project From Prior Fiscal Years:

The Clerk's office intends on meeting the July 1, 2007 State-mandated deadline for making these records Internet-available.



## DOCUMENT MANAGEMENT SYSTEMS

	Prior Year							Totals
	Unallocated	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	
MHM RSA Medical Records Management	16,500	25,000	25,000	25,000	0	0	0	91,500
Document Management and Imaging Infrastructure	0	690,375	375,000	300,000	250,000	250,000	250,000	2,115,375
<b>Totals</b>	<b>16,500</b>	<b>715,375</b>	<b>400,000</b>	<b>325,000</b>	<b>250,000</b>	<b>250,000</b>	<b>250,000</b>	<b>2,206,875</b>

### MH/MR/SA Medical Records Management System

(015-015-1-3) Priority: Very Desirable

**Relationship to City's Strategic Plan**

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"Ensure City services are responsive to the changing needs of our community."

In 1998, the Department of Mental Health, Mental Retardation and Substance Abuse purchased a client-server based comprehensive client database, assessment and treatment planning system (Anasazi). With the department serving approximately 4,500 individuals each year, Anasazi provides a comprehensive data management and billing system to handle all client and third party billing, including managed care, as well as department, City, State and Federal reporting requirements. Additionally, the Anasazi software offers a fully integrated automated client medical records system that provides for one clinical record per client that satisfies both managed care and national accreditation standards.

During FY 2006, the department continued making progress toward having an integrated paperless electronic medical record. Anasazi on-screen forms were redesigned and administrative policies were re-written to eliminate the requirement for maintaining paper-based forms where possible. The Mental Health Vocational and Residential site staff now use the Assessment and Treatment planning modules of Anasazi for day-to-day consumer care.

Plans for Anasazi include implementing secure broadband wireless access to Anasazi for roaming clinicians, permitting electronic signatures for both clinicians and consumers, and document scanning and the ability to associate the scanned documents with the consumer's medical record.

#### Project Benefit:

The medical records system has eased State reporting requirements by providing 'one button' State reports, and helped ensure continued licensure and other regulatory compliance. The system enhancements will help ensure compliance with the changes in Federal and State regulations, and will enhance the security and reliability of our medical records database. They will also greatly aid our migration to a paperless medical record as well as facilitate Medicaid reimbursement.

Operating Budget Impact:

Operating costs for this project are approximately \$21,300 per year.

Change In Project From Prior Fiscal Years:

Funding for this project has been extended to FY 2013.

**Document Management and Imaging Infrastructure**

(015-015-21) Priority: Very Desirable

A number of City departments and agencies continue to express a need for electronic storage and retrieval of documents through a Document Management and Imaging System. The implementation of a Document Management and Imaging System will improve customer service by providing retrievable and recoverable information, improvements to staff productivity by allowing faster retrieval of electronic documents (versus the current process of trying to locate hard copy documents), improve security, and improve file management over current methods utilized. The Document Management and Imaging System will not only provide a more efficient and reliable information filing system, but will also allow redefinition of some of the more cumbersome work processes in the City.

**Relationship to  
City's Strategic Plan**

"Always looking to the future and for ways to get better."

Funding for this project in FY 2008 is \$690,375, which includes over \$300,000 for imaging of land development documents, including building site plans, special use permits, as-builts, plot plans and site plan revisions, with the goal of imaging pertinent information relating to a particular address or project. This initiative is in phase II within the Planning and Zoning, Transportation and Environmental Services departments and the Code Enforcement division of the Fire Dept. This also represents an acceleration in funding as these land use and building records are among the most important and frequently used in the City. Therefore, acceleration of the completion of this project will have tremendous staff, resident, and business user impact and benefit.

Other initiatives funded in FY 2008 include: the Personnel Department's project to image personnel records; the Finance Department's project to image business tax records for which existing storage options have exceeded capacity; and the Office of Housing's project to image housing case files for homeownership loans and home rehabilitation loans; the Real Estate Assessment Office's project to image appraisal, zoning records, past ownership and correspondence information; and the Sheriff Department's project to image inmate classification files. As historical files are imaged, this will free up space in City offices that can be used for better purposes.

<b>FY 2008 Imaging Initiatives</b>			
<b>Departments</b>	<b>To Be Imaged</b>	<b>Business Area</b>	<b>Type of Imaged Records</b>
Planning, T&ES, Code Enforcement	Building site plans and plan revisions, special use permits, as-builts, plot plans	Land Development	Existing records (in file cabinets) and day-forward
Finance Revenue	Business Tax Records	Financial Administration	Existing records (in file cabinets) and day-forward
Office of Housing	Housing case files on homeownership loans and home rehabilitation loans	Housing Administration	Existing records (in file cabinets) and day-forward
Office of Real Estate Assessments	Incoming correspondence, appraisal, zoning records, past ownership, older real estate records	Real Estate Administration	Existing records (in file cabinets) and day-forward
Sheriff's Office	Inmate classification and alternative program files (State mandate for record retention)	Public Safety Administration	Day-forward only
Personnel Department	Personnel files (State mandate for record retention)	Personnel Administration	Existing records (in file cabinets) and day-forward

Project Benefit:

The Document Imaging project will provide convenient access to information and related services to residents, businesses and City staff, as well as promote data integration, improve security, and reduce paper storage requirements.

The Imaging Steering Subcommittee of the ITSC works to coordinate the prioritization, scheduling and completion of these projects and ensures there is adequate funding in the project for each requesting department's imaging initiative.

Operating Budget Impact:

Operating costs for this project are approximately \$50,000 per year.

Change In Project From Prior Fiscal Years:

A total of \$690,375 is included in FY 2008 funding to provide additional monies for departmental imaging projects. The requirement for funding in this project is expected to decrease as the backlog of older paper documents are imaged, and the majority of future needs concern “day-forward” scanning.

## FINANCIAL SYSTEMS

	Prior Year							Totals
	Unallocated	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	
Real Estate Assessment System	25,000	25,000	0	0	0	0	0	50,000
OMB Systems	0	0	75,000	0	0	0	0	75,000
Payroll/Personnel System								
> Payroll Personnel Study	400,000	0	1,000,000	0	0	0	0	1,400,000
> Conversion Activities	0	0	0	0	0	0	0	0
> System Replacement	0	0	0	0	0	0	0	0
<b>Totals</b>	<b>400,000</b>	<b>0</b>	<b>1,000,000</b>	<b>TBD</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1,400,000</b>
Remote Time and Attendance	0	0	0	0	0	0	0	0
Financial Accounting and Asset Management System	100,000	0	560,000	TBD	TBD	TBD	TBD	660,000
Revenue Collection Mgt. System	0	150,000	0	0	0	0	0	150,000
Business Tax and Real Estate Accounts Receivable System	49,980	0	200,000	0	0	0	0	249,980
Purchasing System Replacement	0	0	600,000	TBD	TBD	TBD	TBD	600,000
Personal Property Tax System	0	0	0	0	0	0	0	0
<b>Totals</b>	<b>574,980</b>	<b>175,000</b>	<b>2,435,000</b>	<b>TBD</b>	<b>TBD</b>	<b>TBD</b>	<b>TBD</b>	<b>3,184,980</b>

### Real Estate Assessment System Replacement

(015-015-2-3) Priority: Essential

This project (formerly Real Estate Assessment and Accounts Receivable System Replacement) funded the replacement of the City’s legacy mass appraisal system with a modern system to provide for greater functionality and a more robust operating environment. The City awarded a contract to Colorado Custom Ware for their ‘RealWare’ assessment and appraisal application. The implementation of the RealWare application has been completed. Real Estate staff are working to ensure, through analysis over a full assessment cycle, that the costing models employed in the new system are consistent with the costing models in the old system. Accurate costing of properties is key to supporting accurate and uniform property assessments.

**Relationship to City’s Strategic Plan**

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“Achieve and maintain a high level of community satisfaction with City services.”

The Real Estate Accounts Receivable system replacement is now budgeted in the 'Business Tax and Real Estate Accounts Receivable System' project planned for FY 2009 at a cost of \$200,000.

Project Benefit:

This project will enhance staff productivity through improved processing speed, precise and accurate data to allow for additional tools for analysis in determining property valuations. System operation will be greatly improved and data available to the public will be more detailed in nature. New reporting tools will provide staff with the ability to be more responsive to requests for information. FY 2007 and FY 2008 will see the implementation of the pictometry project which will greatly enhance the property data in the real estate assessments database.

Operating Budget Impact:

Operating costs for this project are approximately \$30,000 per year.

Change In Project From Prior Fiscal Years:

Funds in the amount of \$25,000 are included in FY 2008 to fund the acquisition of pictometry services that will enhance the City's ability to track changes to City properties.

**OMB Systems**

(015-015-2-4) Priority: Very Desirable

This project supports ongoing improvements and modifications in the City's budget systems. In 2000, the City replaced an older DOS-based budget preparation system with Performance Budgeting, a module from the City's General Ledger accounting system. The City's vendor is expected to introduce a web-based version of the software that the City anticipates implementing when this becomes available. An amount of \$75,000 is included in FY 2009 for the web version of this product.

**Relationship to  
City's Strategic Plan**

"Improve community understanding of all aspects of City government: services, finances, processes and decisions."

Project Benefit:

This project improves productivity through the upgrade and maintenance of the City's budget preparation system, used by every City department, that simplifies departmental budget submissions. The system also provides improvements to the personnel services cost analysis system, reducing staff effort in analyzing personnel costs and improving the accuracy of the systems' products.

Operating Budget Impact:

The maintenance costs of the Performance Budget system are estimated to be \$20,000 annually.

Change in Project from Prior Fiscal Years:

Monies budgeted in FY 2009 are for a web-based replacement product when this may become available from the current Performance Budgeting vendor. The monies had been in FY 2008, but were moved out a year to reflect the more probable vendor project timeline.

**Payroll/Personnel System**

(015-015-2-5) Priority: Very Desirable

<p><b>Relationship to City's Strategic Plan</b></p> <hr/> <p>“Deliver services in the most cost- effective manner.”</p>
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The City's payroll system currently is a 1984 mainframe system that does not adequately incorporate many human resources capabilities, such as applicant tracking, position control or benefits administration. The City needs a fully integrated, client-server or web-based system to better manage our human resources which are by far the City's largest expenditure.

The City currently contracts with Arlington County to use the County's mainframe computer to run the City's payroll system. Arlington has notified the City that its conversion to a server-based ERP system will mean that Alexandria needs to move its payroll system from Arlington's mainframe. As a result, the City's current payroll system is planned to be converted to a server-based system which will be located in the City's ITS Network Operations Center (NOC).

This conversion only addresses the requirement to move from the Arlington mainframe. It will result in a savings in mainframe rental as well as needed dependence on outside contractors. The conversion does not provide the City with much-needed additional functionality. It is for this reason that the City has undertaken a thorough review of its payroll and human resources business processes to develop clear, concise system requirements that will be used to acquire a new payroll and human resources application. It is anticipated that the requirements will be finalized in February 2007, and an RFP issued for a new system by mid-2007.

To improve the capture of time and attendance, work began in FY 2001 to phase in an automated Remote Time and Attendance system (Kronos). This system works in concert with the existing Payroll/Personnel system.

Project Benefit:

This project will enhance productivity through more effective, secure and reliable distribution of payroll and personnel data to staff, through the automation of processes that are currently manual. In addition, the implementation of position control as part of a new system will ensure that budgeted positions are appropriately requisitioned and filled.

Operating Budget Impact:

Current operating budget impact for this system is approximately \$75,000 per year. This is anticipated to increase when the City acquires a new system.

Change In Project From Prior Fiscal Years:

Monies in this project in FY 2008 have been reprogrammed to FY 2009.

**Financial Accounting and Asset Management System**

(015-015-2-8) Priority: Desirable

This project provides for ongoing version maintenance, upgrades and eventual replacement of the City's general ledger and asset management and reporting system. The existing system from Tier Technologies, was placed in production in the fourth quarter of FY 1998, replacing the City's 15 year-old mainframe general ledger accounting system. In its current version and platform, the system is nearing the end of its useful lifecycle from both a technical and functional standpoint. Although the current system includes technology that provides departments and agencies with additional flexibility in managing, accessing and controlling financial information, it is not integrated with the City's current purchasing system and relies heavily on batch interfaces with other systems. Replacement of the general ledger, budgeting and asset management system has been rescheduled from FY 2010 to FY 2009 to coincide with replacement of the purchasing system, as well as waiting to determine if the promised upgrades of the Tier Technologies system will meet the City's future needs. Beginning in FY 2007, Finance staff anticipates beginning a review of the current accounting system in the context of available new technology and the City's other planned changes for the purchasing system and the human resources/ payroll system.

**Relationship to  
City's Strategic Plan**

"Improve community understanding of all aspects of City government: services, finances, processes and decisions."

Project Benefit:

This project funds the City's centralized accounting system which is used throughout the City.

Operating Budget Impact:

Annual maintenance for the general ledger accounting system, which includes the fixed assets module, is approximately \$140,000 per year.

Change In Project From Prior Fiscal Years:

Funds budgeted in FY 2008 in the amount of \$60,000 were moved to FY 2009 to reflect the availability of prior year funds.

**Revenue Collection Management System**

(015-015-46) Priority: Desirable

<p><b>Relationship to City’s Strategic Plan</b></p> <hr/> <p>“Deliver services in the most cost- effective manner.”</p>
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The Finance Department is seeking to increase delinquent tax revenue collections by implementing a commercial-off-the shelf (COTS)-based integrated revenue collection system that would better assist staff managing the collection of delinquent accounts. This system, which would be similar to what private collection agencies use, would age the tax accounts receivable function, assign the appropriate collection staff, monitor the staff’s collection efforts, and automatically generate delinquent notice letters. The Finance Department’s Revenue Division is currently collecting receivables without an automated collection system. Most accounts are maintained manually. Some databases and spreadsheets, which lack full collection functionality, are also used. The Revenue Division does have a small database application to track audits, field activity and bankruptcies, but all lack an interface to other City financial information systems.

**Project Benefit:**

With the implementation of an integrated revenue collection system, the ability to target revenue across multiple tax systems would enhance the City’s ability to collect delinquent accounts and to manage a taxpayer’s delinquencies. A revenue collection management system would streamline and increase the efficiency of the delinquent tax collection process. The cost of this system is likely to be recouped by increased delivered tax collections within twelve months of its installation.

**Operating Budget Impact:**

Annual maintenance of this product is anticipated to cost approximately \$22,500.

**Change in Project From Prior Fiscal Years:**

This project is being funded in FY 2008.

**Business Tax and Real Estate Accounts Receivable**

(015-015-47) Priority: Very Desirable

<p><b>Relationship to City’s Strategic Plan</b></p> <hr/> <p>“City government that is...efficient and community-oriented.”</p>
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This project provides funding to complete the implementation of the City’s business tax accounts receivable software. This new software will replace an outdated system. The enhancements to the Business Tax system will be beneficial to both taxpayers and staff by automating the recording of tax returns, assessments, billing and the collection of payments. The completed project will reduce waiting time for citizens and business applicants appearing in person while tax accounts are created, edited and assessed for immediate payment at the Treasury window.

**Project Benefit:**

Improved efficiency through a new user application interface will ensure a more suitable and reliable system environment. The new system will eliminate the need to manually key tax returns received in bulk through the bank lockbox. It is also envisioned that the enhancements will be more suited to web integration, as well as interface with other City systems.

**Operating Budget Impact:**

The estimated operating budget impact for the new system is approximately \$30,000 per year.

**Change in Project from Prior Fiscal Years:**

This project's title has changed to incorporate the Real Estate Accounts Receivable project as well. Funding provided in this project will be used to address both the Business Tax System and Real Estate Tax Systems' receivables component.

**Purchasing System Replacement**

(015-015-48) Priority: Desirable

This project provides for replacement of the City's current purchasing system. The current system is not integrated with the present general ledger accounting system, which is also scheduled for replacement in FY 2009. The lack of integration with the accounting system perpetuates the need for maintaining a parallel, manual system for the preparation, approval and tracking of departmental purchase orders. This creates inefficiencies as Agency Purchase Orders / Purchase Requisitions are prepared and approved manually, while the purchase order data is then manually and independently entered in both the accounting and purchasing systems. Vendors are paid through the accounting system and the vendor balances in the purchasing system are not updated through any kind of automated interface.

**Relationship to  
City's Strategic Plan**

"Deliver services  
in the most cost-  
effective manner."

In order to improve the quality and timeliness of critical financial information, the existing purchasing system is scheduled for replacement in FY 2009 after initial research and requirements have been defined in FY 2008.

**Project Benefit:**

A fully functional purchasing system, incorporating all of the work flow and real time data interface features required, will provide significant internal efficiencies by eliminating duplicated effort. It is envisioned that the new system will provide a high level of functionality to vendors with respect to e-procurement via an Internet interface, as well as the ability to automate electronic payments to vendors, and a reduction of manual check processing and delivery.

Operating Budget Impact:

It is estimated that approximately \$45,000 may be required for annual maintenance beginning in FY 2010 although there may be economies of scale if the system is fully integrated with the new accounting system.

Change In Project From Prior Fiscal Years:

There are no changes in this project from the prior fiscal year.

**Personal Property Tax System Replacement**

(015-015-49) Priority: Desirable

This project provides for enhancement of the personal property tax system. The City’s personal property tax system exists on an older development platform which should be updated to reduce staff hours required to support the application.

<p><b>Relationship to City’s Strategic Plan</b></p> <hr/> <p>“Ensure City services are responsive to changing needs.”</p>
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Project Benefit:

Redeveloping the current system will provide the means for achieving other efficiencies through the use of real time interfaces and will result in a reduction of manual work and batch processes. Functionality to allow citizens to be able to view and update their tax account data in real time via the City’s web site will be pursued as part of this upgrade. This will redirect a considerable staff effort currently spent doing data entry to reviewing and editing data and collecting taxes.

Operating Budget Impact:

There is no significant impact on operating costs other than internal costs for support which are likely to be less than or equal to current levels.

Change In Project From Prior Fiscal Years:

There are adequate prior year funds available in this project, so no funding is provided in FY 2008.



## GEOGRAPHIC INFORMATION SYSTEMS

	Prior Year							Totals
	Unallocated	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	
AVL for Non-Public Safety	0	0	200,000	100,000	0	0	0	300,000
GIS Development	187,600	0	180,000	90,000	90,000	90,000	90,000	727,600
Highway Video Program								
Expenditure Totals	474,500	0	0	0	0	0	0	474,500
Less: Revenue Totals	0	0	0	0	0	0	0	0
Net City Cost	474,500	0	0	0	0	0	0	474,500
<b>Totals</b>	<b>662,100</b>	<b>0</b>	<b>380,000</b>	<b>190,000</b>	<b>90,000</b>	<b>90,000</b>	<b>90,000</b>	<b>1,502,100</b>

### **AVL for Non-Public Safety**

(015-015-3-5) Priority: Desirable

This project will fund the acquisition and implementation of “automatic vehicle locator” global positioning satellite (GPS) devices to be installed on City vehicles used for non-public safety purposes to track the location of the vehicles in real-time via a GIS map. Police and Fire are already planning to implement GPS/AVL technology. Initially this project’s funds will be used to take advantage of this technology to track snow plows in real-time on City maps as they perform their work on routes throughout the City, and to provide for the tracking of DASH buses as they complete their routes. In subsequent years, it is anticipated that this project will fund GPS devices on City school buses and other City fleet vehicles.

**Relationship to  
City’s Strategic Plan**

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“City government  
that is...efficient and  
community-oriented.”

#### Project Benefit:

This project will increase efficiency by providing the precise location of specific non-public safety vehicles throughout the City.

#### Operating Budget Impact:

It is anticipated that the operating budget impacts for the depreciation and maintenance on the GPS devices will cost approximately \$20,000 per year.

#### Change in Project From Prior Fiscal Year:

This is a new project in FY 2008. This project will be initiated using reallocated prior year monies from the CAD/RMS project in order to move it forward at a faster pace. Funds for this project have been included in FY 2009 in the amount of \$200,000.

**GIS Development**

(015-015-3-3) Priority: Very Desirable

Continued success of the Geographic Information System (GIS) is focused in three areas: data development and maintenance, application development and support, and geospatial analysis. These project areas are equally important to the success of Alexandria's enterprise GIS (geospatial analysis, although a critical function of the GIS, is generally handled by staff and therefore has no impact on the capital budget).

**Relationship to  
City's Strategic Plan**

"Always looking to the future and for ways to get better."

**GIS Data/Layer Development and Maintenance**

The capital request for layer development for this project is sufficient to complete the layers currently listed as priorities in the capital plan (Appendix C, page 111). The funding will allow new critical layers to continue to be added to the system over time. Layer priority is determined by the GIS Steering Committee based on both need and the development status of supporting data.

As of January 2007, the City is waiting to take possession of an aerial photo project, the majority of which was funded by the State. The major benefit of having participated in this project for Alexandria will be the creation of a new digital terrain model (DTM). A DTM is the backbone of a GIS, which determines its spatial accuracy, and can cost up to \$100,000 for a City the size of Alexandria. Although the exact savings to the City will not be known until the final deliverables have been received and evaluated (scheduled for mid -February 2007), they are expected to be significant.

Major new vector-based data updates will be limited in FY 2008. A full planimetric update will follow the orthophoto delivery. Additionally, a comprehensive overhaul of update and maintenance methods, with a significant increase in the number of topology rules maintained, will be undertaken (topologies refer to the rules governing the relationship between geographic features and are necessary to ensure data integrity, given the size and complexity of the City's GIS database). This major overhaul of the GIS database is necessary to ensure the accuracy and integrity of the now very complex GIS database and support more complex geospatial analysis.

**Hardware/Software/Training**

The GIS Division is anticipating replacing its plotter by late FY 2007. The current plotter is now over six years old, and is subject to frequent breakdowns.

The City currently maintains 19 GIS product licenses, plus extensions. These shared licenses support most of the City's GIS user community. Five licenses are ArcINFO and are used primarily by GIS Division staff. Two ArcEditor licenses are shared among the few non-GIS staff users who create edits in the enterprise database. Twelve licenses are ArcView and are shared throughout the City's GIS user community. Extensions maintained by GIS include 3D Analyst, Tracking Analyst, Spatial Analyst, and Stereo Analyst.

During FY 2007, GIS continued to focus on increasing awareness and use of GIS throughout the City. During this time the training class “Introduction to ArcExplorer” has continued to be taught, however, Web-based GIS is slowly supplanting use of this application. Both methods are available and widely used throughout the City. During FY 2007, the number of mid-level users accessing the much more powerful ArcView client has increased only slightly as staff turnover now keeps pace with the number of new users requesting training. The GIS division has now trained approximately 50 users Citywide since the inception of the training class series in March 2004. ArcView classes are now taught three times annually.

Updates to the class materials to reflect both upgrades in software and changes to how GIS data and services are maintained and distributed were required and were completed in FY 2007.

In FY 2007, many more users were introduced to GIS through intuitive ArcIMS applications now being deployed. As the GIS is distributed and used more extensively throughout the City, this is quickly becoming the best method to bring targeted GIS benefits to end users. In FY 2007 the Parcel Viewer was rewritten to address several usability issues identified with the first release; additionally, it was updated to draw from the new Real Ware export model. Other applications completed in FY 2007 include the Development Viewer. This is the first application to use a non-GIS application to manage the Geography on the map. The status and development overlays are controlled by Development Planners through the PermitPlan Interface. Finally, the Power Out Viewer was deployed as well.

GIS is currently working closely with Police to develop what is currently being called the “SRS Viewer”. This viewer will expand on some of the successes in automating the mapping of records from the Police Records Management System, which was completed earlier in FY 2007. The SRS Viewer application will extend that data and many prepackaged analytical functions to a select group of officers. Map-based crime analysis is a high priority for the new Police Chief and this application shall be completed in late FY 2007.

FY 2008 will see the implementation of an even more sophisticated ArcServer. ArcServer will allow for the packaging of many targeted geoprocesses to answer location-based questions in real time. The first application to be developed will be a Planning application tentatively called “Land Analyzer”; this application will let the user specify what kind of information they would like to receive about a parcel and will return a custom-generated report and maps. This application will be especially useful to planners who can often have many regulatory boundaries influencing what decisions can be made regarding a parcel of land.

Although many applications are currently in development, the Steering Committee will be pressed in FY 2008 to identify further efficiencies to be gained through GIS applications that serve the public in a more direct and accessible manner. Identifying and creating a plan for implementation will be a significant objective in FY 2008.

**Project Benefit:**

Geographic Information Systems enhance productivity by providing a tie between seemingly disparate data. GIS enables numerous departments to share resources and reduce research, analysis, and data collection burdens. It serves as a data warehouse for many of the City's critical layers such as roads, buildings, and parcels. It creates a centralized responsibility for the maintenance and dissemination of these layers. GIS simultaneously updates map data City-wide and ensures all City agencies have access to identical spatial data. City staff and the public are provided with quick access to consistent answers City-wide. GIS enables staff to provide City Council, various boards and commissions, and the public with accurate maps, which help synthesize significant amounts of information about geographically related issues such as zoning, demographics, routing, and infrastructure. Finally, and perhaps most significantly, GIS provides unique solutions to complex spatial problems, which would otherwise be cost- or time-prohibitive to undertake.

**Operating Budget Impact:**

The Department of Planning and Zoning is responsible for management of the GIS Division. A staff of six (one Division Chief, two Programmer Analyst IIs, two Customer Support Engineer IIIs, and one Planning Technician) are currently responsible for implementing the enterprise GIS function as well as supporting the GIS needs of Planning and Zoning. Staff time is evenly split between these two functions. An ITS Database Administrator supports the back-end databases and facilitates access to other enterprise data sources.

**Change in Project From Prior Fiscal Year:**

Funds budgeted in FY 2008 in the amount of \$90,000 were moved to FY 2009 to reflect the availability of prior year funds.

**Highway Video Program**

(015-015-3-4) Priority: Very Desirable

This project seeks to improve traffic management and emergency response time by providing live video traffic conditions. Live video images will enable staff to identify and manage non-reoccurring traffic congestion and help "first responders" route essential resources to incidents. This project will use a multi-pronged approach with several City departments playing key roles in the implementation of the goals. The Department of Transportation and Environmental Services will take the lead role of administering and managing the project. The Information Technology Services Department will help coordinate integration issues onto the City's IT network. And the Police Department will help coordinate integrating this project with the Emergency Communications Center.

**Relationship to  
City's Strategic Plan**

"Always looking to the  
future and for ways  
to get better."

In FY 2006, \$441,000 in City funding was provided for the Highway Video Program/Intelligent Transportation System project to provide the required match for federal funding. In FY 2007, an additional \$433,500 was provided to match the federal grant funds being provided for

this initiative. Non-City funding for this project is being administered through the Virginia Department of Transportation (VDOT). This past year, City staff has been actively coordinating with VDOT staff to identify the necessary steps, issues, and solutions to move this project forward. There are limitations on funding, as well as procurement requirements. The funding for this project comes from several sources, with each funding source having specific requirements. For example, the federal earmark portion of the funding cannot be used for construction and can only be used for engineering work. Also, there are certain Disadvantaged Business Enterprise requirements that need to be met on the procurement end of the project. Staff hopes to have these issues resolved by the close of FY 2007. Project kickoff is planned for FY 2008. Staff turnover both at the City and VDOT has delayed progress on this project.

Project Benefit:

This project is anticipated to provide benefits to many community stakeholders. By providing the capability to identify traffic problems in real-time, the City can centrally adjust traffic signal operations to clear the resulting congestion, as well as to optimize routing for emergency response units.

Operating Budget Impact:

This is unclear at this time. The communication medium will be fiber optics, with the exploration of other technologies (i.e. - wireless) to address concerns with construction.

Change in Project from Prior Fiscal Year:

There is no change to this project from the prior fiscal year.



**PUBLIC SAFETY SYSTEMS**

	Prior Year							Totals
	Unallocated	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	
Public Safety Radio System Replacement								
Expenditure Totals	50,000	50,000	50,000	3,650,000	50,000	50,000	50,000	3,950,000
Less: Federal Byrne Grant	0	0	0	0	0	0	0	0
Net City Cost	50,000	50,000	50,000	3,650,000	50,000	50,000	50,000	3,950,000
Alexandria Justice Information System (AJIS) Enhancements								
	0	246,000	198,000	205,000	212,000	220,000	235,000	1,316,000
Police/Fire Computer Aided Dispatch (CAD)/RMS Project								
	247,290	275,000	132,600	338,500	0	153,500	308,500	1,455,390
Interoperability Strategies for Public Safety								
Expenditure Totals	0	0	0	0	0	0	0	0
Less: Revenue Totals	0	0	0	0	0	0	0	0
Net City Cost	0	0	0	0	0	0	0	0
EMS Records Management System								
	0	40,000	0	0	0	0	0	40,000
Sheriff Accreditation Training System								
	0	75,000	0	0	0	0	0	75,000
Sheriff Network Connectivity Conversion								
	0	48,000	0	0	0	0	0	48,000
Sheriff Laptops								
	0	15,000	0	0	0	0	0	15,000
Sheriff Mobile Video System								
	0	0	72,000	0	0	0	0	72,000
<b>Totals</b>	<b>297,290</b>	<b>749,000</b>	<b>452,600</b>	<b>4,193,500</b>	<b>262,000</b>	<b>423,500</b>	<b>593,500</b>	<b>6,971,390</b>

**Radio System Replacement**

(015-015-4-1) Priority: Essential

This is a continuation of a project begun in FY 1997 to upgrade the City’s 800 MHz shared radio system. Funding in FY 1999 provided for the phased replacement of obsolete mobile and portable radios utilized by City agencies, provided a backup conventional radio system and increased the capacity of the City’s shared primary trunked radio system.

**Relationship to City’s Strategic Plan**

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“People feel safe and secure throughout the community.”

The majority of this project has been completed. Radio system completion and final acceptance took place in December 2006.

In FY 2010, \$3.6 million is included for radio replacements. This will enable the City to maintain interoperability with other jurisdictions. There are more than 1,700 subscriber radios operating

on the City of Alexandria trunked radio system. The city's radio system is used by multiple jurisdictions within the National Capital Region and federal and state agencies. In addition, the City's subscriber radios also have the capability to interoperate with other state/local/federal agencies and have the national interoperability channels.

Project Benefit:

The replacement radio system will enhance productivity and provide better quality service by:

- Providing better system coverage within 2 miles of City limits;
- reducing the number of busy signals officers receive when attempting to communicate with the emergency communications center or respective base stations;
- improving the clarity of transmissions through the use of modern technology; and
- facilitating mutual aid operations with Airport Authority Police and Fire, and Arlington and Fairfax counties, who are also implementing technologically compatible radio systems.

Operating Budget Impact:

The annual cost of maintenance for the replaced system is estimated at \$498,000.

Change In Project From Prior Fiscal Years:

In FY 2010, \$3.6 million has been budgeted to purchase new radios so the City will be in a position to take full advantage of the national interoperability channels, as well as to maintain current interoperability capacity.

**Alexandria Justice Information System (AJIS) Enhancements**

(015-015-36) Priority: Very Desirable

As envisioned, modifications continue to be made to the Alexandria Justice Information System (AJIS). Two AJIS interfaces were built for the Sheriff's Office this past year. The first interface is between AJIS and the Detention Center's telephone system. AJIS now supplies a PIN number to each inmate booked. The inmate must use his/her PIN before making any calls. These calls are recorded by the Securis phone system and can now be linked to a specific inmate. The second interface is between AJIS and a metropolitan-wide system, called LInX (Law Enforcement Information Exchange). This project is currently in a test-phase. Once it is in production, data will be extracted nightly from AJIS and inserted into the centralized database that can be accessed by most regional jurisdictions and will be used to greatly expand information gathering for criminal investigations, especially for crimes that occur across jurisdictional boundaries. Additionally, AJIS was recently expanded to incorporate Restitution Payments allowing the Commonwealth's Attorney's Office to avoid time-consuming, double-entry of restitution cases.

**Relationship to  
City's Strategic Plan**

"People feel safe and secure throughout the community."

AJIS's ColdFusion software has been upgraded. The new software provides load-balancing between the new servers to spread user access evenly. This will help make the user experience more reliable and help prevent slowdowns due to heavy user load.

Currently being developed is an interface to the VINE (Victim Information and Notification Everyday) system. This will allow victims to be notified by a state-wide system when an inmate is released from the Alexandria Detention Center. Discussions are currently being conducted regarding an AJIS interface for a second, metropolitan-wide system called LiveScan, which is to be implemented at the Detention Center, Police Department (CSI) and possibly the Courthouse. LiveScan incorporates digital fingerprinting and future facial recognition to quickly identify persons in addition to the information the detainee provides. We are continuing to work on providing the community with AJIS access via the Internet. The general public will have limited access to AJIS data, providing 24/7 access allowing information gathering by the public without having to physically visit the Courthouse.

AJIS will continue to require modifications based on changes to federal, state and local statutory requirements. This funding is also needed for the upgrades required by the variety of software used by AJIS. This is necessary to ensure that AJIS continues to perform at the highest capacity.

Project Benefit:

On-going enhancements to the Alexandria Justice Information System will protect the City's investment by ensuring that the system will continue to grow to meet changing statutory and technological requirements.

Operating Budget Impact:

Operating budget impacts for the AJIS system are approximately \$125,000 annually.

Change In Project From Prior Fiscal Years:

Monies in this project will be used to fund several initiatives for the Sheriff's Department in FY 2008. In addition, project funds were increased to reflect inflationary increases in the cost of the required consultant support.

**Police/Fire Computer Aided Dispatch (CAD)/Records Management System (RMS) Replacement**

(015-015-4-3) Priority: Essential

This project provides for the phased replacement of the hardware for the City's mission-critical Police and Fire computer aided dispatch and records management systems. The replacements are:

- The CAD PC-based equipment will require replacement in FY 2008, FY 2010, and FY 2012. Specifically, there are 20 workstations (13 Police, 7 Fire) with PC equipment. This

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equipment should ideally be replaced at least every two years as it is in operation 24 hours a day, seven days a week, is rarely turned off and serves critical public safety needs.

- The CAD servers, which support the essential functions of the CAD (2 Police, 2 Fire, 1 shared) and mapping server, should be replaced every 3 years. These are a critical component of the CAD system.
- The replacement of the two IBM AS/400 mini-computers should ideally occur every three years due to normal life cycle expectancy under a 24 x 7 operation. Monitors are replaced every 3 years.

Automatic Vehicle Locator (AVL) devices have been tested in anticipation of implementation. AVL will provide the Police and Fire Departments with the ability to constantly monitor the location of vehicles to improve the management of field resources and to increase safety. By the end of FY 2007, we anticipate equipping one-half of our vehicle fleet (approximately 100 units) with GPS receivers and associated software to transmit information to headquarters and to display the vehicle on a map.

Planned initiatives for FY 2008 include:

- The purchase of PowerPhone software. This program provides total response computer aided call handling. It is installed as a front end to the CAD system and provides a single set of protocols that ask questions for each call type. It rates answers and suggests a priority. It includes pre-arrival advice for Fire calls and also recommends resources to send to each incident. It has a built in quality improvement system with objective performance measurement tools. All the data this system collects is automatically entered into the CAD system once the call taker hits the enter button.
- The purchase of LG Address software. This software provides integrated administration of address records for both CAD and mapping through an interactive map interface.

The Records Management Systems, housed on the AS/400, provide the base for almost all data collected by Police and Fire staff.

#### Operating Budget Impact:

The estimated operating budget impact for this project is \$75,000 per year.

#### Change in Project From Prior Fiscal Years:

An increase of \$26,000 in FY 2009 and FY 2012 to cover increased CAD hardware replacement expenses.

**Interoperability Strategies for Public Safety (CommTech Project)**

(015-015-34) Priority: Essential

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“Residents have a high level of satisfaction with City services.”

The Alexandria Police Department has been in partnership with the National Institute of Justice's CommTech Program (formerly AGILE - Advanced Generation of Interoperability for Law Enforcement) as an operational test bed since March 1999. The project's focus is to test public safety interoperability solutions (hardware/software) and improve issues regarding connectivity among data and radio systems of neighboring public safety agencies with overlapping or adjacent jurisdictions. Technology has improved drastically since the inception of the program and as a result, interoperability has become less challenging in regards to technology but much more challenging in regards to governance structures. The Alexandria Police personnel assigned to the project have become experts in advising other agencies on governance and other operational agreement structures.

The Alexandria Police Department has continued to serve as the public safety communications interoperability host for most of the public safety agencies in the National Capital Region. The Alexandria Police Department has achieved interoperability with up to 22 different public safety agencies, including the Montgomery County, Maryland State Police, Prince William County Police Department, Pentagon Force Protection Agency and the United States Department of State.

This project continues to serve as a national model for interoperability communications technology needs. Documentation regarding the technical evaluation, initial lessons learned and the Gateway Subsystem installation documentation can be found on the CommTech web site at [www.ojp.usdoj.gov/nij/topics/commtech](http://www.ojp.usdoj.gov/nij/topics/commtech). In the future, the CommTech Program will focus on standards for interoperability communications nationwide through affiliation with groups such as the International Association of Chiefs of Police - Communications and Technology Committee, which has international implications; the Department of Homeland Security SAFECOM Program and locally, the Metropolitan Washington Council of Governments (COG). Data sharing among law enforcement agencies and voice over internet protocol (VOIP) are two key targets of development for this project, as well as the standardization that will be expected in these areas.

**Project Benefit:**

The project has focused its efforts towards outreach and technical support for public safety agencies across the United States following the incidents of September 11, 2001. Locally, the program focuses on any interoperability issues impacting the region. Locally these agencies include the Arlington County Emergency Communications Center; the District of Columbia Public Safety Communications Center and the Prince William County Police Department. In addition, the CommTech Program is often contacted to lead communications efforts for large interoperability events such as presidential inaugurations, large special events in the District of Columbia such as the dedication of national monuments and social events.

In addition to working on audio interoperability solutions, the CommTech Program is also working on data interoperability projects, such as CapWIN and evolving data sharing projects emerging in the National Capital Region.

Operating Budget Impact:

There is no cost to the City for this project.

Change in Project From Prior Fiscal Years:

There is no change to this project from the prior fiscal year. The CommTech Program provides all funding for training and travel costs. There are no City costs associated with this project.

**Emergency Medical Services Records Management System**

(015-015-39) Priority: Essential

The City uses a commercial system to gather data regarding emergency medical services responses to medical emergencies. The data in this system is used to provide a hard copy report to hospitals on the patient status when a patient is left at a hospital. The data is transferred to the Fire/EMS Records Management System and then a data transfer is made to the City's ambulance billing agency for the calculation of the appropriate ambulance billing charges. This system was successfully upgraded in FY 2006. In FY 2008, funds in the amount of \$40,000 are budgeted to purchase and implement a module to collect preplan and hazard information for emergency responders. The goal will be to tie this information to CAD and Code Enforcement for integrated life safety reporting.

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and secure through  
the community."

Project Benefit:

The new system provides the EMS staff the capability to gather accurate patient data which results in better information conveyed to hospitals on patient status. In addition, the information is used for ambulance billing charges, enabling more accurate and timely billing and follow up.

Operating Budget Impact:

The ongoing operating budget impact is approximately \$34,000 per year.

Change in Project from Prior Fiscal Years:

There are no changes in this project from the prior fiscal year.

**Sheriff Accreditation Training System**

(015-015-51) Priority: Desirable

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“Always looking to the future and for ways to get better.”

The Department of Criminal Justice Services (DCJS) requires all deputy sheriffs to receive 40 hours of mandatory training in law enforcement, corrections and/or court security every two years. In addition, the American Correctional Association and Commission on Accreditation for Law Enforcement Agencies requires all deputy sheriffs and select civilian staff to receive 40 hours of training each year. Currently, the City's yearly staff training is completed at various criminal justice academies in the Northern Virginia area. Deputy sheriffs are required to leave the City of Alexandria and their assigned Office of Sheriff locations (Detention Center, Courthouse) to complete this mandatory training. Overtime is required to ensure minimum staffing at the various Office of Sheriff locations while staff participate in off-site required training. This project requests funding for an in-house computer based training program that will allow deputy sheriffs and civilian staff to participate in training during the normal duty hours.

Project Benefit:

The computer-based training will be interactive and document the staff person participating, dates, time start and time end, and testing process. Allowing deputy sheriffs to take computer-based training classes to meet annual training requirements will eliminate the need to have the deputies off-site and away from their duty stations, and thus eliminate the current requirement to back-fill to ensure minimum staffing requirements as well as reduce overtime costs. Appropriate videos, training aids, web-based programs (ACA, LETN, AJA, IACP, NSA) would be utilized to provide as much training for Office of Sheriff staff to meet the requirements of accreditation and DCJS.

Operating Budget Impact:

Annual maintenance costs for this project are expected to be about \$11,250.

Change in Project from Prior Fiscal Year:

The estimated cost of this proposed project is \$75,000, currently included in FY 2008.

**Sheriff Network Connectivity Conversion**

(015-015-53) Priority: Desirable

**Relationship to  
City's Strategic Plan**

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“Deliver services in the most cost-effective manner.”

Currently, PC workstations within the Alexandria Detention Center are connected to the City's I-Net via fiber optic cable (fiber). With constant and increasing changes in network technologies and capabilities, the Office of Sheriff finds itself at a financial disadvantage keeping up with such technological advances. The fiber optic wiring costs the Office more because we have to purchase expensive fiber-specific network hardware in addition to the City-provided network solutions. For example, when adding necessary peripherals to the network, such as printers and switches,

it costs the Office additional budgetary resources because fiber optic transceivers have to be purchased in order convert the fiber signal to a digital signal. Transceivers cost an average of \$300 per unit. A network fiber card must be purchased for every workstation at an approximate cost of \$150 per card.

This project proposes replacing the current fiber optic cabling with CAT-5 network cabling. Standard CAT-5 cabling decreases the cost of connecting to the network by an average cost of \$225 per drop.

Project Benefit:

Using standard CAT-5 network cabling will allow the Office of the Sheriff to use the available networking capabilities already installed on purchased PC workstations and other network peripherals without the added cost of fiber to digital transceivers.

Operating Budget Impact:

This project should reduce the operating budget impact of maintaining fiber optic cable in the Alexandria Detention Center.

Change in Project from Prior Fiscal Year:

Funds in the amount of \$48,000 are included in FY 2008 for this project.

**Sheriff Laptops**

(015-015-54) Priority: Desired

The Sheriff's Office requires laptop computers to further its innovative approaches for completing in-house training for 215 staff. Required training includes new employee training, mandated in-service training, AJIS and training for other software applications utilized. Laptops will be purchased with these funds, to facilitate ease in sharing PC assets among users.

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City's Strategic Plan**

"Deliver services  
in the most cost-  
effective manner."

Project Benefit:

By providing laptop computers for training purposes the Sheriff's Office will be better equipped to provide training to staff on duty and off-duty, thus decreasing the amount of time staff are required to be away from their duty post assignments.

Operating Budget Impact:

The estimated operating budget impact for this project is \$2,500 per year.

Change in Project from Prior Fiscal Year:

This is a new project in FY 2008.

**Sheriff Mobile Digital Video System**

(015-015-55) Priority: Desired

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Mobile digital video cameras will be installed in Sheriff’s Office vehicles normally used to transport prisoners. The mobile digital video system will record audio and video of prisoners being transported in the rear of the vehicle and will also be capable of recording vehicle frontal view events such as traffic stops, pursuits, emergency events, hazardous conditions, and high threat evictions. The video monitoring of prisoners is extremely important and will enhance deputy sheriff safety and aid in the investigation of potential complaints from prisoners, citizens and staff.

Project Benefit:

Prisoners occasionally complain about unprofessional conduct by deputy sheriffs or have claimed to be injured during transports. In addition, prisoners have caused damage to transport vehicles during transport. The mobile digital video system will record activities during prisoner transports.

Operating Budget Impact:

The estimated operating budget impact for this project is \$12,000 per year.

Change in Project from Prior Fiscal Year:

This is a new project in FY 2008. Funds for this project have been included in FY 2009 in the amount of \$72,000.



## RECREATION SYSTEMS

	Prior Year							Totals
	Unallocated	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	
Recreation Systems	75,000	0	0	0	0	0	0	75,000
<b>Totals</b>	<b>75,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>75,000</b>

### Recreation Systems

(015-015-5-2) Priority: Desirable

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City's Strategic Plan**

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"Residents have convenient access to City government and services."

This project provides for the development and installation of automated systems within the Department of Recreation, Parks and Cultural Activities. The department began addressing administrative and resident services issues through the better application of technology in FY 2001. During FY 2001-2002 software application modules for facility and activity reservations, point-of-sale management and financial tracking were put in place at Chinquapin Park Recreation Center, which generates over \$1 million in revenue annually. Park and facility maintenance automation modules were installed to improve time management and maintenance tracking for over 800 park acres. All full-time recreational facilities were connected to the City's I-Net in FY 2003. Currently, all recreation centers have installed the Pass Management, Activity Registration and Facility Reservation modules of the system and are connected with the department's main administrative office for real-time tracking of on-site customers.

In August 2006, the telephone registration module, which allows residents to register and pay for recreational activities electronically using a telephone, became operational. Over \$10,000 in activity registrations were taken in the first 24 hours after implementation. The PDATrac module of the Recreational System was also put into operation in 2006. Park Personnel are now able to update and create work orders, make inspections and log personnel hours and equipment hours in the field. The City Marina is now in the process of reviewing wireless connections for use in completing slip rentals and reservations through the Rental and Facility Modules.

The Web Registration module, which will allow the public to register for activities, recreation classes and camps from the City's website, is now being developed for implementation. A prototype of this module shall be available for testing by spring 2007. Finally, integrated recreation software packages and associated hardware upgrades are expected to continue through the fiscal year.

#### Project Benefit:

This project provides an improved quality of service through the identification of the usage of recreation centers and the types of services that are best suited to the residents who make use of those centers. The planned use of this system will provide the capability for residents

to register and pay for recreation classes and activities electronically, either on the telephone or over the Internet. This integrated system improves work productivity by providing better information gathering and coordination of work functions within the department.

Operating Budget Impact:

The combined annual maintenance fee on these systems is \$9,750. The annual maintenance fee includes telephone support during business hours and upgrades to the software at no additional charge.

Change in Project from Prior Fiscal Years:

There is no change in this project from the prior fiscal year.

**OTHER SYSTEMS**

	Prior Year							Totals
	Unallocated	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	
Permit Processing	430,600	0	120,000	TBD	TBD	TBD	TBD	550,600
MHMRSA HIPAA Data Security Compliance	0	25,000	25,000	25,000	25,000	25,000	25,000	150,000
Intranet	105,000	0	10,000	10,000	10,000	10,000	10,000	155,000
TES Infrastructure Management and Maintenance System	0	0	0	0	0	0	0	0
IT Project Management	50,000	0	0	0	0	0	0	50,000
DHS Payment System Replacement	0	280,000	0	0	0	0	0	280,000
Library Automated Catalog Upgrade	0	0	135,000	0	0	0	0	135,000
<b>Totals</b>	<b>585,600</b>	<b>305,000</b>	<b>290,000</b>	<b>35,000</b>	<b>35,000</b>	<b>35,000</b>	<b>35,000</b>	<b>1,320,600</b>

**Permit Processing**

(015-015-5-1) Priority: Essential

This project provides for the continued development of the City’s various building-related permit systems, the most important of which is Permit\*Plan, which supports the administration of the City’s land development process.

The permit process includes the administration of the fire prevention permits, Volume II complaint tracking (for complaints regarding existing structures), civil penalties ticket tracking, fire inspections performed by the Fire Department, residential rental program inspections, tenant/landlord complaints, Planning and Zoning complaints, T&ES permits, occupancy certificates and other construction related permits, such as building, mechanical, electrical and plumbing.

Members of the City’s Permitting Committee work with staff from the various departments to identify on-going system needs to address current and planned business practices.

Internet access to the City’s permitting system is now available on the City’s web site. At present, site visitors may check the status of applied for permits and obtain inspection status by knowing project number, address or by permit number. Citizens and construction contractors have requested an increase in the services of the site to enable users to apply and pay for permits and schedule inspections from the City’s web site. These needs are being addressed by the City’s e-Government manager in the context of improvements to the Code Enforcement website.

**Relationship to City’s Strategic Plan**

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“Residents have convenient access to City government and services.”

Staff recently went into production with a long-planned improvement to the City's permitting environment by implementing "Code Mobility," that allows field inspectors access to the City's permitting application while in the field. This project increases efficiency by eliminating the need for inspectors to enter field data twice (once in the field, and again in the office), and by having updated information on inspection status available to the public at nearly real-time.

Project Benefit:

This project enhances productivity for City staff in Code Enforcement, Planning and Zoning, Transportation and Environmental Services, Health, Archaeology and Recreation by reducing the time to transmit permit requests among the departments that must review them. The system enables better customer service by enabling staff to answer inquiries about the status of permit applications quickly and accurately. In addition, the Integrated Voice Response (IVR) system allows contractors, residents and customers to use telephone automation to schedule inspections, get inspection results, have applications faxed and get general information regarding when permits are required, which frees up staff to do other tasks.

Operating Budget Impact:

Annual operating budget costs for current system maintenance and costs of the mobility project are approximately \$160,000 per year.

Change in Project From Prior Fiscal Years:

Funding in the amount of \$120,000 scheduled for FY 2008 has been moved to FY 2009, as sufficient prior year funds are available in this project.

**MHM RSA HIPAA Data Security**

(015-015-31) Priority: Essential

The Health Insurance Portability Accountability Act of 1996 (HIPAA) was enacted by Congress and signed into law to regulate and standardize information exchanges and establish standards for the privacy and security of individually identifiable health insurance information. HIPAA impacts all functions, processes and systems that store, handle, or generate health information.

The act is complex and the regulations by design leave the procedural implementation decisions open to interpretation. The scope of this project includes a self-assessment of current business functions and their impact on HIPAA regulations and compliance issues. MH/MR/SA staff are familiar with the Security Rules and the department has a voting member on the Virginia Community Services Boards' (VACSB) HIPAA Security Subcommittee. This subcommittee developed a Risk Analysis Tool. MH/MR/SA is using this tool to assess risk and implement appropriate measures to mitigate these risks. In FY 2006, the department established a hot-backup site at 4480 King Street. In early FY 2007, the backup site was successfully fail-over tested. In FY 2007, the department established biometric log-ins for

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"Ensure City services  
are responsive to  
changing needs."

all WAN-connected MH/MR/SA staff to log-in to the City’s network. Lastly, the department automated the process of backing up to the redundant file servers in 15-minute increments.

Project Benefit:

This project provides funding to ensure City compliance with HIPAA regulations.

Operating Budget Impact:

The estimated operating budget impact for this project is \$5,000 per year.

Change In Project From Prior Fiscal Years:

Funding for this project continues through FY 2013 in the amount of \$25,000.

**Intranet**

(015-015-28) Priority: Very Desirable

An intranet is the application of Internet technologies over an organization’s internal network, allowing City employees to share data and more easily access services. The information that is provided through an intranet is available only to an organization’s employees and allows for the display of documents, submission of information using electronic forms and enhanced employee collaboration. An intranet resides on an organization’s existing network and is usually protected from the outside world by a firewall. The City of Alexandria’s intranet is called CityNet.

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“Always looking to the future and for ways to get better.”

This project enables staff to continue developing the City’s intranet infrastructure, content, and applications.

Project Benefit:

An intranet allows the City government to:

- Distribute information quickly to all City government employees who have network connections or other authorized access.
- Take advantage of browser/client technology to reduce the cost and effort of making client/server applications available to appropriate City staff. (See the Application Deployment Management project for additional information, page 90).
- Allow departments to electronically distribute information solely to their own staff without having to make this information available to all City staff.

Operating Budget Impact:

The estimated operating budget impact for this project is \$15,000 per year.

Change In Project From Prior Years:

This project is able to forego funding in FY 2008 due to an availability of prior year resources.

**TES Infrastructure Management and Maintenance System**

(015-015-29) Priority: Essential

Transportation and Environmental Services (T&ES) Operations (Maintenance and Solid Waste Divisions) uses semi-automated processes for work input and control of the City's municipal physical public works assets. These systems log work to be accomplished and completed work, but no entry is made into a history file. If management wants to see the amount and type of work that has taken place over a period of time on a specific asset element (for example, the 8-inch sanitary sewer main connecting East Bellefonte Ave with the Commonwealth Connector), a manual records search has to be done. The City is now in the process of developing requirements for this system and will be looking for applicability of this system to other departments such as General Services, Recreation, Parks, and Cultural Activities, and Mental Health.

**Relationship to  
City's Strategic Plan**

"There is a strong partnership between City government and the community."

The system to be implemented would have the capability to assist in the infrastructure maintenance activities of other divisions in T&ES. A preferred system would include the following elements, and will be interfaced with the City's GIS system for mapping, and the City's accounting and budgetary systems for cost data.

The system will provide information on work management to include labor, material and equipment usage and costs for:

- Labor records
- Material inventory
- Work orders and projects
- Equipment used on projects
- Labor assigned to projects
- Work requests

Once populated with the correct information, it is envisioned that the system will provide information on asset management to include inventory quantities, condition and value of the following:

- Traffic signs and signals
- Storm and sanitary sewers
- Fire Hydrants
- Pavement
- Paving
- Curbs and Gutters
- Sidewalks
- Markings
- Street lights
- Solid waste receptacles
- Recycling drop-off centers

Project Benefit:

This project enhances productivity by eliminating unnecessary manual data entry, accumulating more accurate maintenance data and creating a database of infrastructure items and activities. The residents and the City benefit because of the enhanced ability to respond to resident complaints about City infrastructure in a more timely and accurate fashion.

Operating Budget Impact:

The annual operating budget impact is estimated at approximately 15 percent of the current year software cost, or \$11,250.

Change In Project From Prior Fiscal Years:

There are no changes in this project from the prior fiscal year.

**Information Technology Project Management**

(015-015-41) Priority: Very Desirable

The City has worked hard to communicate the necessity for excellent project management with respect to the IT Plan projects that are included in this document. To that end, the Information Technology Project Office within the ITS department serves as a City-wide resource for project management assistance. The Project Office provides formal project management services, including consultation services, as well as less formal assistance to help City staff plan, initiate, execute, control and close their information technology projects.

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This project provides funding for contract project management staff where no obvious departmental resource exists to fulfill this role. In addition, monies in this project will be used to purchase additional software licenses for the City's enterprise project management software application for departmental staff who desire to use this web-based application.

Project Benefit:

This project provides funding to expand the City's use of professional project management services, which will improve communications and project success.

Operating Budget Impact:

The City currently pays approximately \$5,000 annually for maintenance for the enterprise project management software application.

Change in Project from Prior Fiscal Years:

There is no change in this project from the prior fiscal year.

**DHS Payment System Replacement**

(015-015-42) Priority: Desirable

The Human Services department is requesting funding to upgrade to a web-based version of its payment and case management system. The current system is used by Human Services, MHMRSA, Alexandria City Health Department, Alexandria City Schools and Court Services personnel for service-related cases.

The system vendor has notified DHS that continued support would only be performed with payment of an hourly programming fee. In FY 2007, DHS issued a 'Request for Information' (RFI) to obtain additional information about products in the marketplace.

**Project Benefit:**

The new desired version of the software will provide a more flexible, cost-effective and portable software solution for staff. The solution should include improvements in overall access, security, reporting and screen design, and will also allow access by staff not connected to the City's network.

**Operating Budget Impact:**

The estimated operating budget impact for this project is \$30,000 per year.

**Change in Project From Prior Fiscal Years:**

The full system replacement cost of \$280,000 is included in FY 2008.

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City's Strategic Plan**

"Ensure City services are responsive to changing needs."

**Library Automated Catalog Upgrade**

(015-015-43) Priority: Very Desired

In FY 2005 the Alexandria Library replaced its integrated automated library system with the Horizon/Dynix automated catalog system. Implementing a new system improved the library patron's access to the library's collection, its on-line reference resources and other special services such as remote reserving and renewing of material, delivery to the homebound, and movement of materials between and among branches upon request.

The system's vendor recently released a schedule of required upgrades to the system. This project provides funds to acquire necessary hardware, software and services to complete the upgrade.

**Project Benefit:**

Implementing required updates protects the City's investment in its applications by ensuring continued product support and user access to new product functionality.

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"Achieve and maintain a high level of community satisfaction with City services."

Operating Budget Impact:

The estimated operating budget impact for this project is \$20,250 per year.

Change in Project from Prior Fiscal Year:

Funds in the amount of \$135,000 are included in FY 2009 for the upgrade.



## LOCAL AREA NETWORK (LAN) DEVELOPMENT

	Prior Year							Totals
	Unallocated	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	
LAN Backbone Capacity	0	75,000	75,000	75,000	75,000	75,000	75,000	450,000
Individual Building LAN Development	0	50,000	50,000	25,000	25,000	25,000	25,000	200,000
Upgrade Network Operating System	50,000	25,000	15,000	15,000	15,000	15,000	20,000	155,000
Upgrade Work Station Operating Systems	110,000	50,000	200,000	50,000	50,000	50,000	50,000	560,000
Network Infrastructure Hardware Upgrades/ Replacement	0	578,125	482,125	492,125	455,000	400,000	400,000	2,807,375
Storage Area Network	0	250,000	100,000	0	0	0	0	350,000
<b>Totals</b>	<b>160,000</b>	<b>1,028,125</b>	<b>922,125</b>	<b>657,125</b>	<b>620,000</b>	<b>565,000</b>	<b>570,000</b>	<b>4,522,375</b>

### **Increase the Capacity of the LAN Backbone**

(015-014-1-1) Priority: Essential

A LAN backbone is the set of electronic components (electronic ethernet or ATM switches, routers, cables, concentrators and hubs) and software that connect multiple LAN servers within a single building to one another. In City Hall the LAN backbone also connects to the City's Wide Area Network (WAN), and includes high-speed WAN services the City's Institutional Network (I-Net), and virtual private network (VPN) services.

**Relationship to City's Strategic Plan**

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“Always looking to the future and for ways to get better.”

A backbone's capacity is a key factor constraining data transmission speed. At present the backbone for a typical City building transmits data using ethernet communication protocols with 1 gigabit of data per second. With the continued deployment of document storage and retrieval services, as well as the increased data traffic that is being introduced by the development of the Geographic Information System, the Alexandria Justice Information System, the Police and Fire Computer Aided Dispatch Systems and the other Public Safety systems and the large deployment of Lotus Notes e-mail, the backbone capacity is needed in many City facilities.

#### **Project Benefit:**

This project continues to fund improvements to staff productivity by increasing the speed with which data are delivered to users of the City's computer networks. By providing equipment upgrades to the network backbones, it is possible to provide better quality service to computer users by significantly reducing the time spent waiting for network responses for data. The

upgrades also enable a much wider exchange of graphical images and other items such as maps and video that demand high-bandwidth.

Operating Budget Impact:

The estimated operating budget impact for this project is \$11,250 per year.

Change In Project From Prior Fiscal Years:

Funding for this project has been increased by \$25,000 in FY 2008, and has been extended to FY 2013 in the amount of \$75,000.

**Individual Building LAN Development**

(015-014-1-2) Priority: Very Desirable

The project includes installation of, or upgrades to, local area networks (LANs) located in many City government buildings. Monies will fund the acquisition of the LAN infrastructure components (ethernet switches, punch-down blocks, cabling, etc.) needed for relocation of staff as they move to new office space (Information Technology Services staff, Transportation and Environmental Services staff, etc.). These new components will be connected to the I-Net switches at each site, and additional LAN infrastructure equipment will be installed where necessary. These upgrades or new connections will provide at least 1 gbps switched ethernet connections. As the I-Net is deployed further and the specific needs of each building are clearly identified, costs will be updated accordingly.

**Relationship to  
City's Strategic Plan**

“Quality development...  
consistent with  
Alexandria's vision.”

Project Benefit:

LANs can provide better quality service for staff by improving access to data and by making new functions available that can improve the quality of customer service.

Operating Budget Impact:

The estimated operating budget impact for this project is \$7,500 per year.

Change In Project From Prior Fiscal Years:

Funds in the amount of \$50,000 are included in this project in FY 2008. Funding for this project has been extended to FY 2013 in the amount of \$25,000.

**Upgrade Network Operating System**

(015-014-1-3) Priority: Essential

This project provides for software upgrades and replacements for the City's enterprise network infrastructure, as well as associated tools for network management and desktop administration. The City maintains scripting software and other tools to both simplify network management and reduce the time necessary to perform administrative tasks.

**Relationship to City's Strategic Plan**  
"Deliver services in the most cost-effective manner."

As new hardware is brought into the network, it is often necessary to purchase additional software licenses and occasionally to upgrade enterprise software. In FY 2007, Windows 2003 Standard Edition is replacing Microsoft Windows 2000 Advanced Server as the City standard. Other initiatives to be pursued in this area include acquisition of a security tool to verify permission levels and tools to monitor the complete network environment from software to electrical power to provide real-time notification to engineers in the event of an actual or potential device failure.

This project is implemented in conjunction with the Network Infrastructure Hardware Upgrades/Replacement project; see page 84.

**Project Benefit:**

This project enhances productivity by enabling ITS staff to reduce time spent managing and monitoring the City's network services and allows City network engineers to maintain expertise and fluency in the latest operating systems and tools.

**Operating Budget Impact:**

The estimated operating budget impact for this project is \$5,000 per year.

**Change In Project From Prior Fiscal Years:**

There is no change in this project from the prior fiscal year.

**Upgrade Workstation Operating Systems**

(015-014-1-4) Priority: Essential

This project provides funds to upgrade the operating system on City computer workstations with an appropriate version of Windows. This project also provides for additional workstation memory and larger capacity hard drives as necessary. These upgrades are required to support the next generation of City e-mail messaging, financial, public safety, GIS, human resource, maintenance management and other applications.

**Relationship to City's Strategic Plan**  
"Deliver services in the most cost-effective manner."

The City replaces desktops and workstations on a five-year cycle and as these are replaced the operating system is typically upgraded. However, this funding is for those computer workstations that are not in need of physical replacement, but still require the upgrade of the operating system to allow a new or upgraded application to run. This project also provides for the labor costs of installing the new operating systems.

The current desktop operating system standard is Windows 2000 and Windows XP. All new workstations are deployed with Windows XP.

Microsoft maintains a 10-year minimum support cycle for their product line. On June 30, 2005, the Windows 2000 product family transitioned from mainstream support to its extended support phase. Microsoft will continue extended support for Windows 2000 through July 13, 2010. With release of Microsoft's next generation operating system, Windows Vista, mainstream support for Windows XP is scheduled to end two years after the release date of Vista and extended support is scheduled to end five years after the release date.\*

\*This information is subject to change. Microsoft has not released official dates for the Windows XP support life cycle. Customers are guaranteed this support timeline at a minimum.

Project Benefit:

This project enhances productivity for city computer users who require functions that are available in new workstation operating system versions that enable them to run new applications.

Operating Budget Impact:

The estimated operating budget impact for this project is \$7,500 per year.

Change In Project From Prior Fiscal Years:

Funding for this project in FY 2008 is \$50,000. In anticipation of impact of Windows Vista, funding for FY 2009 has been increased to \$200,000. After FY 2009, funding will be extended through FY 2013 in the amount of \$50,000.

**Network Infrastructure Hardware Upgrades/Replacement**

(015-014-1-5) Priority: Essential

This project provides for the phased replacement of the hardware and software required to operate the City's computer network services in a safe and reliable manner. This project also provides funds for consulting services needed to properly plan and execute the scheduled network infrastructure upgrades.

**Relationship to  
City's Strategic Plan**

"Ensure City services  
are responsive to  
changing needs."

The table in Appendix A on page 97, identifies the units that are scheduled to be replaced each year and, where consolidation of file servers is planned, when and how that consolidation is to occur.

Project Benefit:

This project funds the purchase of hardware and software for the phased replacement of servers in accordance with the Appendix A schedule and the purchase of new servers needed to continue to provide the system reliability and availability that is expected. It also includes the administration software and desktop licenses required to manage the network from these replaced servers.

In FY 2006, this project funded the replacement of ten network printers and 70 file servers, and provided for an independent evaluation and guidance with critical enterprise projects such as enterprise data storage, application data clustering and DNS and DHCP (Domain Name Services and Dynamic Host Configuration Protocol) migration.

Future initiatives for this project include additional replacement and consolidation of legacy file servers and network printers, further refinement of the City’s data storage and backup procedures (this project is implemented in conjunction with the Storage Area Network project, see page 85), and implementation of virtual machines, which will allow multiple applications to reside on a single server.

Operating Budget Impact:

New and replacement servers are acquired with four year on-site maintenance warranty service, allowing annual maintenance costs for network equipment to be held to a minimum. The estimated operating budget impact for this project is \$6,500 per year.

Change In Project From Prior Fiscal Years:

There is no change in this project from the prior fiscal year.

**Storage Area Network**

(015-014-14) Priority: Very Desirable

A Storage Area Network (SAN) is a high-speed network, similar to a Local Area Network (LAN), that connects disk subsystems directly to servers or clients. SANs relieve network congestion and bypass distance limitations imposed by traditional Small Computer Storage Interface (SCSI) connections. They provide more rapid access to data and provide improved resiliency for backup and archiving of data.

**Relationship to City’s Strategic Plan**  
“Always looking to the future and for ways to get better.”

With constant growth in the amount of data requiring storage, the demand for additional network storage capabilities continues to rise. Further development of the City’s SAN is superior to other storage alternatives for several important reasons. A SAN has its own

network, so data traffic is independent of existing networks. Also, a SAN supports multiple servers with greater speed and reliability. To meet the growing needs of data backup and protection, additional drives are being added and upgraded software for data backup will provide enhanced management and administration capability. This project will also fund the replacement of the City's legacy tape library backup device.

Project Benefit:

SANs provide for more secure storage of data and protect against data loss through a variety of technologies such as disk units that can be exchanged without having to turn the SAN off (hot-swappable) and the ability to automatically switch servers in the event of failure. The City continues to add capacity to the City's SAN to accommodate additional servers as necessary. An amount of \$250,000 is included in FY 2008 for this project.

Operating Budget Impact:

The estimated operating budget impact for this project is \$5,000 per year.

Change In Project From Prior Fiscal Year:

There is no change to this project from the prior fiscal year.

## WIDE AREA NETWORK (WAN) DEVELOPMENT

	Prior Year							Totals
	Unallocated	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	
Institutional Network Development								
Expenditure Totals	0	665,000	665,000	665,000	665,000	665,000	665,000	3,990,000
Less: Revenue Totals	0	-665,000	-665,000	-665,000	-665,000	-665,000	-665,000	-3,990,000
Net City Cost	0	0	0	0	0	0	0	0
Telephony Integration	246,000	375,000	590,000	285,000	135,000	200,000	200,000	2,031,000
Security	75,000	40,000	40,000	50,000	50,000	50,000	50,000	355,000
Application Deployment Management	3,000	25,000	25,000	25,000	25,000	25,000	25,000	153,000
Database Infrastructure	193,000	65,000	65,000	65,000	40,000	0	0	428,000
<b>Totals</b>	<b>517,000</b>	<b>505,000</b>	<b>720,000</b>	<b>425,000</b>	<b>250,000</b>	<b>275,000</b>	<b>275,000</b>	<b>2,967,000</b>

### **Institutional Network (I-Net) Development**

(015-014-2-1) Priority: Essential

**Relationship to City's Strategic Plan**

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"Achieve and maintain a high level of satisfaction with City services."

Funding for this project is provided by Comcast Cable Communications capital grant monies required to be provided under the City's cable franchise agreement with Comcast. This sustains the continued activation of the fiber optic network called the City's Institutional Network (I-Net). In FY 2006 and early FY 2007, more facilities were added and some of the data communication links between major City, School, and Library facilities were updated to provide improved speed and service.

#### Project Benefit:

This project has enhanced productivity by providing direct high-speed connectivity among City government offices and by allowing several City schools (ACPS) to have video services to connect classrooms. This project enables the City to deliver scalable data, audio and video communications to the ACPS, the libraries and the City government as those services are needed and warranted.

#### Operating Budget Impact:

I-Net maintenance costs vary depending on whether the site is a primary site (connected directly to the Comcast provided fiber) or a secondary site that is connected downstream from a primary site. This is because the downstream sites have less equipment to maintain. Assuming maintenance, repair and engineering, the cost estimate for a primary site is \$3,500/yr. and for a secondary site is \$2,500/yr.

In FY 2005 the City contracted with a private firm to upgrade all of the I-Net switches from ATM to Ethernet coarsewave (which is the next generation of this technology) to improve

throughput and to increase the longevity of the I-Net. This upgrade was completed for the Schools in June 2006, and will be completed for the City in spring 2007.

Change In Project From Prior Fiscal Years:

There is no change in City funding for this project from the prior fiscal year.

**Telephony**

(015-014-8) Priority: Very Desirable

**Relationship to  
City's Strategic Plan**

"Deliver services  
in the most cost-  
effective manner."

This project funds the City's telephone and telecommunications infrastructure, including switches and telephone handsets. The project has been modified to reflect the City's plan to move forward in implementing Voice Over Internet Protocol, or VoIP. VoIP is the most obvious example of the convergence of telephone and computer services, in which the Internet or LAN/WAN is used to carry voice communication. The Telephony project includes funds for the City to begin implementing VoIP in FY 2008. There are some compelling technical and business reasons for the City to pursue this new technology now. Voice Over IP is a relatively new but established technology. VoIP has become better and cheaper to implement, and the City stands to reap greater benefits by pursuing this new technology now rather than continuing to fund the support of the older telephone infrastructure, which is no longer being sold or supported.

Project Benefit:

VoIP can operate on an existing data network, such as the City's Institutional Network (I-Net). Using the City's I-Net to support VoIP will allow the City to decrease the leased services currently provided by Verizon. In addition, implementing VoIP allows for the City's voice and data infrastructure to be combined into one system, with only one system to manage and maintain.

Other benefits will be more obvious to City staff. Staff will have their own direct-dialed phone number (eliminating the City's current use of extensions), with the use of four or five-digit-dialing enabled within the network. VoIP will also provide the capability for the City to have a centralized voice mail system, with a wide range of advanced calling features available throughout the network. VoIP also has call accounting and centralized call tracking features that will enable the City to be more responsive to citizen needs during high demand cycles such as tax collections.

Operating Budget Impact:

The operating and maintenance costs of telephone switches and voice mail units are not included in the ITS budget. Therefore, City departments and agencies work with the City's telecommunication coordinator to develop operating and maintenance budgets for telephone switches, phone sets, wireless phones, and pagers.

Change In Project From Prior Fiscal Years:

Funding for this project has changed to reflect the costs of implementing voice over IP in the City.

**Security**

(015-014-3) Priority: Essential

<p><b>Relationship to City's Strategic Plan</b></p> <hr/> <p>“People feel safe and secure through the community.”</p>
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This project encompasses functions related to assuring the security of data on devices such as computers, servers, networking equipment, wireless and telephone switching equipment. The goal of this project is to minimize the risk of unauthorized access, loss or destruction of City data.

This project provides the funding to implement the recommendations of the thorough security assessment of the City's information systems that was completed in 2003. The Security project provides resources to enhance protection of the City's network from unauthorized access through external connections such as connections to other jurisdictions and to the Internet. Additionally, this project provides funds to protect against unauthorized communications between devices located on the City's network.

Security project funds provide for the acquisition, replacement, configuration, and enhancement of computer network security devices and software including: firewalls, virtual private networks (VPN), intrusion detection systems (IDS), intrusion prevention systems (IPS), proxy servers, logging servers, authentication devices, and anti-virus and anti-spyware software (AV). Taken together, these technologies control and monitor electronic access to the City's network. These tools ensure that data communications are authorized and protected from eavesdropping, interference, or manipulation.

There are multiple parts to this project:

- ITS will have to purchase additional security awareness training software to train and certify all City employees, contractors, temporary staff and other users who have access to the City IT systems
- ITS anticipates needing additional hardware and software to protect City IT systems and services from increasing sophisticated threats. These requirements include: firewall appliances (hardware and software) ware); intrusion detection / intrusion prevention appliances and a centralized log server to correlate and analyze event notices generated by the City's security.
- Successful implementation of these initiatives requires extensive documentation of the new systems as implemented, as well as the new responsibilities for the ITS staff maintaining these systems and responding to security incidents. IT security consultants will assist the ITS Security Manager develop documentation and best practices.

- This project anticipates the purchase of a vulnerability scanning appliance in FY 2007 which will be used by contractors to perform annual analysis of the ever changing state of security on the City's computers.
- As needed, this project includes the purchase of expert services to test the efficiency and effectiveness of these devices and their configuration as they are implemented.

Project Benefit:

This project enhances productivity and ensures the City's quality of service by eliminating potential system intrusions that may disrupt network operations, damage system and data files and otherwise compromise the integrity of the City's networked environment.

Operating Budget Impact:

The estimated operating budget impact for this project is \$50,000 per year.

Change In Project From Prior Fiscal Years:

Funding in the amount of \$50,000 for this project is extended through FY 2013.

**Application Deployment Management**

(015-014-15) Priority: Very Desirable

The City has a number of application systems employing client/server technology. Client/server technology is designed so that much of the work done by the application system is performed by the server, and very little is performed at the client workstation. This requires that each computer workstation that uses an application system of this type have a special piece of software loaded on it and also requires that for each change in the release of the application, that someone go to the workstation and install the special piece of software - a time consuming task. Client services can also be delivered through a web browser using a class of software called terminal servers, of which Citrix Metaframe and Microsoft Terminal Server are the leading products in this class. This technology allows City employees to access the full range of their applications via the internet and will also help support the City's three primary remote access initiatives:

**Relationship to  
City's Strategic Plan**

"Deliver services  
in the most cost-  
effective manner."

- *Mobile Workforce* — Provides the ability for City field workers to efficiently access City applications and network resources from the field despite very slow network connections.
- *Application Deployment* — Deploy complex and expensive applications with heavy client configurations, and managing and updating the software without needing to access each user's workstation.
- *Virtual Workforce* — Provide the ability for City employees to work from locations other than their desktop. This supports the City's telecommuting initiatives by enabling staff to access and applications remotely.

Project Benefit:

This project lowers software administration costs by reducing the number of hours required to install software applications on individual PC’s, and will provide remote network and application access.

This project also allows the City to publish applications to the Citrix “farm,” reducing the number of applications that need to be installed on client workstations. For some applications, this also reduces the number of licenses that the City is required to purchase. In addition, less staff time is required to upgrade applications and client workstations.

Operating Budget Impact:

The estimated operating budget impact for this project is \$7,500 per year.

Change In Project From Prior Fiscal Years:

There are no changes to this project from the prior fiscal year.

**Database Infrastructure Development**

(015-014-13) Priority: Very Desirable

The City currently possesses a number of database software products, as well as some older technology data access methods, that provide for the storage of key financial, personnel, and public safety data. These operational data systems - General Ledger, Purchasing, Payroll, Permitting, Real Estates and Tax systems - generally do a good job of capturing and storing detailed transactional data. But they were designed to deliver specific products and to answer specific questions, and are not always able to deliver information in an efficient and timely manner. These operational data contain unique data structures, different formats, are different from each other, with often only a single person within the City who understands their content. This project involves the codification of rules, processes, and data elements contained in these key operational data. The project also consolidates this data into an information infrastructure that will support rapid analysis, simplified reporting and provide access and consistency to the data throughout the City.

**Relationship to City’s Strategic Plan**  
“Deliver services in the most cost-effective manner.”

Project Benefit:

This project enhances productivity by providing for a standard reference to all data elements that are in various City electronic databases. It provides for the consolidation and coordination of information (such as addresses) across numerous databases without regard for the nuances of each database’s environment or construction. The project provides better quality service by improving the timeliness and accuracy of staff interaction with residents who request information or services through many of the City’s applications, including Permitting, GIS, Real Estate Assessments, Recreation Department and other City applications. These efforts will enhance and support the City’s E-Gov and Web-enabled application initiatives by providing analytical processing, special data querying tools, and most importantly by preparing data into

consistent, meaningful, reliable, and reporting-ready formats. As this information infrastructure matures, it will support increased accountability within City agencies, performance management, trend analysis, streamlined data integration efforts, and it will position the City to take full advantage of evolving intranet, extranet, and Internet technologies.

Operating Budget Impact:

The estimated operating budget impact for this project is \$5,000 per year.

Change In Project From Prior Fiscal Years:

There is no change in this project from the prior fiscal year.

### ENTERPRISE SERVICES

	Prior Year							Totals
	Unallocated	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	
E-mail Services	392,000	0	350,000	0	105,000	200,000	200,000	1,247,000
Wireless Initiatives (Information Utility)	50,000	70,000	20,000	20,000	20,000	20,000	20,000	220,000
Desktop Productivity Environment	0	50,000	50,000	50,000	50,000	50,000	50,000	300,000
<b>Totals</b>	<b>442,000</b>	<b>120,000</b>	<b>420,000</b>	<b>70,000</b>	<b>175,000</b>	<b>270,000</b>	<b>270,000</b>	<b>1,767,000</b>

**E-mail Systems Development**

(015-016-1)      Priority: Very Desirable

**Relationship to  
City's Strategic Plan**

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“Deliver services  
in the most cost-  
effective manner.”

This project provides funds to improve and evolve the City's e-mail services. The City currently uses IBM's Lotus Notes as the software package used to provide electronic mail (e-mail) services to City employees, and Lotus Domino to provide servers with a multi-platform foundation for collaboration and e-business, as well as supporting the e-mail infrastructure.

Required e-mail message storage space has increased dramatically as employees continue to rely on this critical business tool. An archiving solution will be needed to allow employees to retrieve archived messages and reduce the demand for space on the active Notes database. The City is investigating several e-mail archiving solutions at this time.

Access to e-mail is also provided by Blackberry handheld devices. The Notes team configured 155 devices for various City staff, and upgraded the Blackberry server and hardware infrastructure.

iNotes is a web-based browser- accessible e-mail application that provides City emergency staff the ability to access their City e-mail from any Internet connection. INotes has been deployed to the Patrol Division of the Police Department, the Office of Sheriff, and all Fire Department employees. Additionally, Lotus Notes will soon become the primary e-mail system for Library staff. Additionally, as unsolicited email becomes more sophisticated, the City's filtering architecture will need further improvements and upgrades.

As the use of e-mail and related services is expanded throughout the City, consulting services for administration and development will be required. Monies in the amount of \$50,000 in FY 2007 are included to address this need.

**Project Benefit:**

This project provides funds to implement important e-mail initiatives that improve productivity by improving access to essential information, improving the speed and reliability of services, and taking advantage of emerging technologies.

**Operating Budget Impact:**

The estimated operating budget impact for this project is \$25,000 per year.

**Change in Project from Prior Fiscal Years:**

Funds budgeted in FY 2008 in the amount of \$250,000 were moved to FY 2009 to reflect the availability of prior year funds.

**Wireless Information Utility**

(015-016-2) Priority: Desirable

This project provides funding for various wireless initiatives in the City, to benefit both the general public and City employees. Wireless technologies and applications are becoming commonplace across the United States and throughout the world. This technology trend is a direct response to the changing economic landscape, where the world is becoming increasingly information-based. Consequently, workers and consumers are demanding easy access to information - any time, any place, anywhere.

**Relationship to  
City's Strategic Plan**

“Convenient...  
opportunities are  
available serving  
residents of the urban  
village and attracting  
others to come there.”

In late 2006, following an extensive and competitive bidding and negotiation process, City Council awarded a franchise to EarthLink, Inc., to build and operate a citywide wireless network. Under the agreement, EarthLink will build and maintain the network at the company's own expense, with no taxpayer funding or City financial involvement. To recoup its investment, EarthLink will sell wireless services to homes and businesses, using small, pole-mounted devices throughout the City.

In addition to an estimated \$2.7 million savings to taxpayers over the cost of a government-funded network for municipal applications, the franchise agreement includes accounts for government use. EarthLink will provide free and discounted wireless Internet accounts for use by City field workers such as Code Enforcement personnel and housing inspectors, as well as accounts for “smart” devices such as traffic cameras and parking meters.

Construction of the network is expected to be complete in Fall 2007. Detailed information is posted at [www.wirelessalexandria.com](http://www.wirelessalexandria.com).

Although the City will have significant free use of the EarthLink network, funds will be needed to develop applications to use with the network, and to purchase equipment for use in the field. Monies for specific initiatives are included in different IT Plan projects, as shown in the

table below. Monies for this project are for planning and implementing a wireless infrastructure to support on-going initiatives.

Project Benefit:

With the wireless infrastructure project, the City is establishing a wireless framework to meet anticipated additional municipal demands for these services.

Operating Budget Impact:

The operating budget impact for this project will include equipment depreciation costs for any City equipment purchased to take advantage of this network. At this time, these amounts are unknown.

Change In Project From Prior Fiscal Years:

This project is funded in the amount of \$70,000 to provide funds to enable the City to take full advantage of the planned wireless network.

**Desktop Productivity Environment**

(015-016-3) Priority: Desirable

<p><b>Relationship to City's Strategic Plan</b></p> <hr/> <p>“Ensure City services are responsive to changing needs.”</p>
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In FY 2007, the City converted its desktop productivity software standard from Corel Suite 9 to Microsoft Office (Word, Excel, PowerPoint). The initial Microsoft migration funding accounted for the installation of Microsoft Office on computers with only Corel Suite 9 loaded. In FY 2007, the City installed over 1,000 licenses of Microsoft Office 2003 to replace its outdated Corel WordPerfect Office suite. A version of Microsoft Office is now installed on every primary desktop computer. After a reconciliation of licenses owned by the City, the City has an estimated 700 licenses predating Office version 2003. These 700 licenses will eventually need to be upgraded to align with Microsoft's product support schedule. Microsoft's mainstream support for Office 2000 ended on June 30, 2004. The Office 2000 extended support period will last from July 1, 2004 through July 14, 2009. Microsoft ended mainstream for Office XP on July 11, 2006. The extended support period for Office XP will last from July 12, 2006 through July 12, 2011. In order to maintain a viable desktop productivity environment, the City must budget for software upgrades to ensure all Microsoft Office suites are upgraded before the end of their extended support periods.

Project Benefit:

The purchase of the most recent MS Office license will ensure the City is not utilizing software beyond its extended support lifecycle. It will help ensure the desktop environment is prepared to meet the demand of new technologies.

Operating Budget Impact:

This project would help ensure departments have a viable Microsoft Office product installed; therefore there would be limited operating budget impact.

Change in Project From Prior Fiscal Year:

There is \$50,000 budgeted each year from FY 2008 through FY 2013 to upgrade the remaining 700 licenses predating MS Office 2003.

## APPENDIX A

### FILE SERVER AND NETWORK COMPONENT REPLACEMENT

See description of server types on page 101.

KEY H = Heavy Duty Server S = Standard Server W = Web Server

Department / Function / Type of Server		FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
1	Courts / File & Print Services			S			
2	DHS / File & Print Services.	S				S	
3	ITS File Services for City Hall			S			
4	ITS Test Finance / Performance Accounting and Asset Management.			S			
5	ITS Production Finance / Payroll DBMS				H		
6	Fire/ Code Production Permit Processing application.	H				H	
7	Fire / Fire Computer Aided Dispatching (CAD)			W			
8	General Services / Motor Equipment Division.			S			
9	DHS Harmony application server.		S				S
10	DHS Intranet Server.				S		
11	DHS Aging Information System.				W		
12	DHS JobLink Program / File & Print Services.		S				
13	Sheriff / ACJS server.			S			S
14	ITS Domain Controller			W			
15	ITS Domain Controller			W			
16	ITS Domain Controller.				W		
17	ITS Domain Controller				W		
18	ITS / Lotus Notes Training.		W				W
19	ITS / Technical Services			S			
20	ITS / Backup server			S			
21	ITS Notes Mail				S		
22	ITS Notes Applications				S		
23	ITS Domino Fax Server.			W			
24	ITS Intranet Server.		S				S
25	ITS Internet Domino Web Server.		S				S
26	ITS City Hall Remote Access Server-1.		W				W
27	ITS City Hall Remote Access Server-2.		W				W
28	MHM RSA Notes Mail Server.			S			

Department / Function / Type of Server		FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
29	ITS / Lotus Notes Hub server.				S	S	
30	ITS / Service-on-Demand. Foreview I-Net Management				W		
31	ITS / Foundation. Foreview I-Net Management server.				W		
32	MHM RSA Anasazi				H		
33	MHM RSA. Medical Records Backup.				W		
34	MHM RSA/NT 4, Dell Optiplex 150. It stays on its own network of 4 computers. It is not connected to the City's network. It controls a methadone ispending pump.				W		
35	MHM RSA / Redundant Failover.			H			
36	Police / File & Print Services.	S				S	
37	Police / Applications.			S			
38	Police Firewall.	W				W	
39	Police Windows 2000 message switch for mobile computers			S			
40	Police Web Server				S		
41	Recreation File & Print Services.				S		
42	CJIS / Mugshot.		S				S
43	AJIS / Courthouse/ Justice Agencies Applications		S				S
44	CJIS / HIDTA Drug Testing.	W				W	
45	Library / Firewall.	W				W	
46	Finance / Treasury				W		
47	T&ES database server applications. Clustered Traffic database server.	S				S	
48	T&ES database server applications. Clustered Traffic database server.	S				S	
49	ITS Primary City Internet (web) server			S			
50	ITS High availability failover City Internet (web) server				S		
51	ITS Secure web server for site management and secure				W		
52	ITS List Service provider for internet						
53	ITS Cluster monitor, statistics and mirror for web system server				W		
54	Animal Shelter server for database, file and print services.			S			
55	Fire Admin server for file and print services					S	
56	ITS Logging Server		S				S
57	DBA Test Server - GIS		S				S
58	ITS File and Print services for CMO, OMB and City Attorney			S			
59	ITS E-Mail Archive Server				W	H	
60	ITS E-Mail Server					S	
61	ITS E-Mail Gateway Server				S		
62	ITS E-Mail Gateway Server		S				S

Department / Function / Type of Server		FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
63	ITS Blackberry Server			S			
64	Kronos Web Server			S			
65	DASH File and Print Services Server				S		
66	ITS Print Server for City Departments				W		
67	ITS Anti-Virus Server			W			
68	ITS Anti-Virus Server			W			
69	ITS Clustered Domino Web Mail Servers		H				H
70	ITS Clustered Domino Web Mail Server		H				H
71	ITS Clustered Domino Web Mail Server		H				H
72	ITS Clustered Domino Web Mail Server		H				H
73	ITS Clustered Spam Server		W				W
74	ITS Clustered Spam Server		W				W
75	ITS Citrix server.			S			
76	ITS Citrix server			S			
77	ITS Software Update Server		W				W
78	ITS Project Management Server		W				W
79	ITS FTP Server		W				W
80	GIS, ArcIMS, ERDAS server		S				
81	ITS Applications Server for City Applications Server			S			
82	Mail Server 4				H		
83	Mail Server 2	H				H	
84	MH Domain Controller				W		
85	MH Domain Controller				W		
86	Courts Domain Controller 1				W		
87	Courts Domain Controller 2				W		
88	GIS Database				H		
89	ITS Domain Controller				W		
90	ITS Domain Controller				W		
91	ITS Domain Controller				W		
92	ITS Domain Controller				W		
93	ITS Domain Controller				W		
94	ITS Domain Controller				W		
95	ITS Domain Controller				W		
96	ITS Citrix Training Server			S			
97	ITS Citrix Training Server Cluster			S			

Department / Function / Type of Server		FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
98	Recreation Apps Server				W		
99	Recreation Web Server				W		
100	GIS File Server				S		
101	ITS LaserFiche Imaging Apps Server				H		
102	ITS LaserFiche Imaging Web Server				H		
103	Personnel Systems Server				H		
104	Personnel Systems Server Failover				H		
105	Fire EMS Database Server				S		
106	Fire EMS Web Server				W		
107	Fire Equipment Inventory Server				S		
108	Fire Payroll Server		W				W
109	ITS Backup Media Server			S			
110	Office of Historic Alexandria Image Server				S		
111	Code Enforcement Mobility Server			W			
112	Fire EOC File Server						
113	Kronos Apps Server			S			
114	Kronos Apps Server			S			
115	Kronos Web Server			W			
116	Fire WebEOC			W			
117	Fire WebEOC			S			
118	Fire WebEOC Cluster			S			
119	Fire RSAN Employee Notification			S			
120	Fire RSAN Employee Notification Cluster			S			
121	Fire RSAN Citizen Notification			S			
122	Fire RSAN Citizen Notification Cluster			S			
123	AJIS Public Server				S		
124	AJIS Test Server				S		
125	MHM RSA Citrix Server				S		
126	MHM RSA Citrix Server				S		
127	AJIS HOT Back up				S		
128	AJIS Server			S			
129	AJIS Server Cluster				S		
130	MHM RSA SQL Server				S		
131	Public Safety AVL Server			S			
	<b>TOTAL</b>	9	23	41	54	13	22

## SERVER SPECIFICATIONS

	Web Server	Standard Duty	Heavy Duty
NOS Supplied	None		
Number of Processors	1	2	4
Total Memory	4 GB RAM	4 GB RAM	8 GB RAM
Remote Access Card	Yes	Yes	Yes
Disk Drives	73GB/15,000 RPM	146GB/15,000 RPM	146GB/15,000 RPM
RAID Level	1	5	5
Dual Controllers	Embedded	Embedded	Embedded
Total Drives	2	4-6	6+
External Storage	None	None	None
Backup	Tape Library	Tape Library	Tape Library
Monitor	None	None	None
Keyboard/Mouse	None	None	None
Service Level	4 Hour Response (24x7)		



## APPENDIX B

### STATE INFORMATION SYSTEMS USED BY CITY DEPARTMENTS & AGENCIES

The City and the State exchange a variety of data. The first table identifies the kinds of State data services that are used by City departments and agencies, and the approximate number of connections for each system. The second table shows the approximate number of users within Finance, Human Services, Health, and Public Safety and Justice agencies.

<b>Estimated Number of City Staff Connections to State Data Services</b>									
City Dept. or Agency	Dept. of Correct. — DEC Net	Dept. of Juvenile Justice — Case Mgmt.	Dept. of Motor Vehicles — DMV	VITA* — Virginia Voter Registr. System	VITA — Compstn. Board, SOC & Income Tax	VITA — State Internet Services	State DSS — Case Mgmt.		
1	Adult Probation and Parole	25							
2	Circuit Court				1				
3	Commonwealth Attorney								
4	Juvenile Court Services	27							
5	Juvenile Court								
6	Finance		30		15				
7	Fire								
8	General District Court								
9	Health								
10	Human Services		1			1	1		
11	MHM RSA Administration								
12	Registrar of Voters			10					
13	Police		1						
14	Sheriff		1		1				
	Total	25	27	33	10	17	1	1	
	Sub Total	114	Table is continued on the next page						

\* VITA is the State's Virginia Information Technologies Agency.

Estimated Number of City Staff Connections to State Data Services (continued)							
City Dept. or Agency	State Health — Patient Mgmt., WIC, Medicaid	State Mental Health — POMS	State Police — Virginia Crime Info. Network	State Police — Live Scan	State Police — Local Inmate Date System	Supreme Court — Case & Finance Mgmt.	
1	Adult Probation and Parole						
2	Circuit Court						
3	Commonwealth Attorney		1				
4	Juvenile Court Services					8	
5	Juvenile Court					27	
6	Finance						
7	Fire						
8	General District Court					32	
9	Health	110					
10	Human Services						
11	MHMRSA Administration						
12	Registrar of Voters						
13	Police		1	1			
14	Sheriff		2	1	1		
	Total	110	0	4	2	1	67
	Sub Total	184					
	TOTAL	294					

The following tables list the State data services in which the City participates:

**STATE SYSTEMS USED BY THE FINANCE DEPARTMENT**

<b>Acronym/Title</b>	<b>Owner</b>	<b>Direct Connect?</b>	<b>Use</b>	<b>Users</b>	<b>Avg. No. Users</b>
CARS / Commonwealth Accounting and Reporting System	Virginia Dept. of Accounts	Yes	Initiate Personal Property Tax Reduction Act (PPTRA) requests.	Finance Treasury	2
CompBoard	Virginia State Compensation Board	Yes	File and track compensation board budgets.	Finance Administration	3
DMV	Virginia Dept. of Motor Vehicles	Yes	Verify information related to personal property tax.	Finance Revenue, Finance Treasury	30
SCC	Virginia State Corporation Commission	Yes	Verify filings of articles of incorporation.	Finance Revenue	5
STARS	Virginia Dept. of Taxation	Yes	Assist with State income tax questions. Verify State sales tax distributions and assure City tax compliance.	Finance Accounting, Finance Revenue, Finance Treasury	30

**STATE SYSTEMS USED BY THE CITY'S DEPARTMENT OF HUMAN SERVICES**

<b>Acronym/Title</b>	<b>Owner</b>	<b>Direct Connect?</b>	<b>Use</b>	<b>Users</b>	<b>Avg. No. Users</b>
ADAPT	Virginia Dept. of Social Services	Yes	Tanf/VIEW (Temporary Assistance Needy Families/ Virginia Incentive Employment not Welfare) and food stamp eligibility determination.	DHS Eligibility and Service related staff	125
DMV	Virginia Dept. of Motor Vehicles	Yes	Eligibility verifications.	DHS Eligibility and Service related staff	125
ESPAS	Virginia Dept. of Social Services	Yes	Tracks employment service activity.	DHS and JobLink staff	125
FSET / Food Stamp Employment and Training	Virginia Dept. of Social Services	Yes	Food Stamp services.	DHS Eligibility staff	4
LASER	Virginia Dept. of Social Services	Yes	Financial Administrative Services.	DHS Finance staff	5
LETS	Virginia Dept. of Social Services	Yes	Personnel System.	DHS Personnel staff	4
Medicaid	Virginia Dept. of Medical Assistance	Yes	Enrollment of Medicaid eligible.	DHS Eligibility and Service staff	125
OASIS	Virginia Dept. of Social Services	Yes	Tracks services to clients.	DHS Service and related staff	75
SVES / State Verification Exchange System		Yes	Eligibility verifications.	DHS Eligibility and Service related staff	125
VACIS	Virginia Dept. of Social Services	Yes	Eligibility verifications.	DHS Eligibility and Service related staff	125
VEC	Virginia Employment Commission	Yes	Eligibility and wage verification.	DHS Eligibility and Service related staff	125

**STATE SYSTEMS USED BY HEALTH SERVICES**

<b>Acronym/Title</b>	<b>Owner</b>	<b>Direct Connect?</b>	<b>Use</b>	<b>Users</b>	<b>Avg. No. Users</b>
CARS	Virginia Dept. of Mental Health, Mental Retardation and Substance Abuse Services	No	Report on number of clients serviced, demographics, amount of services provided, and costs.	MHMRSA	5
Patient Management	Virginia Dept. of Health	Yes		Health	110
SCADS	Virginia Dept. of Mental Health, Mental Retardation and Substance Abuse Services	Yes	Extracts program admission and discharge information on Substance Abuse consumers.	MHMRSA	3
WIC / Women, Infants and Children	Virginia Dept. of Health	Yes		Health	110

**STATE SYSTEMS USED BY PUBLIC SAFETY & THE JUSTICE SYSTEM**

<b>Acronym/Title</b>	<b>Owner</b>	<b>Direct Connect?</b>	<b>Use</b>	<b>Users</b>	<b>Avg. No. Users</b>
Case Management	Dept. of Juvenile Justice	Yes	Case management for juvenile offenders.	Juvenile Court Services Unit	10-12
CIMS / Client Information Mgmt. System	Dept. of Criminal Justice Services	Yes	Victim-Witness Program.	Commonwealth Attorney	6
CMS / State Case Mgmt. System	State Supreme Court	Yes	Circuit Court - Calculate interest on payments to court cases. General District Court - Look up dispositions and court cases on GDC cases.	Clerk of Circuit Ct. General District Ct. Common. Atty. J&DR Court	2 14 7 9
DMV	Virginia Dept. of Motor Vehicles	Yes		Police	300
FMS	State Supreme Court	Yes	Financial management. Used to receive and account for all fees and collections by the Clerk of the Circuit Court.	Clerk of Circuit Ct. J&DR Court General District Ct.	20 3 13
KEA	Dept. of Corrections	Yes	General information from Dept. of Corrections	Adult Probation and Parole	25
LIDS / Local Inmate Data System	State Compensation Board	Yes	Track expenses for reimbursement from State as well as SSN and DOB research.	Sheriff	12
LiveScan	State Police	Yes	Fingerprint identification.	Police Sheriff	10 16
RMS / Records Mgmt. System	State Supreme Court	No	Primary index for land records. Maintains an index of all Alexandria land records recorded after 10/20/1999.	Public Clerk of Circuit Ct.	Varied 5
State Compensation Board	Virginia Dept. of Information Tech.	Yes	Accounting for personnel and office expenses as approved by the State.	Clerk of Circuit Ct. Sheriff	3 1
VCAIS	Commonwealth Attorney's Assoc.	Yes	Case management.	Commonwealth Attorney	5
VCIN / Virginia Crime Information Network	State Police	Yes	Run criminal histories and driving records.	Police Sheriff Common. Atty.	250 29 1

**STATE SYSTEMS USED BY OTHER DEPARTMENTS OR AGENCIES**

Acronym/Title	Owner	Direct Connect?	Use	Users	Avg. No. Users
Virginia Voter Registration System	Virginia Dept. of Information Tech.	Yes	Registrar.		10



## APPENDIX C

### GEOGRAPHIC INFORMATION SYSTEMS (GIS) LAYER DEVELOPMENT

The following list shows the completed layers and the layer development priorities which were identified for inclusion in the GIS for the FY 2004 - FY 2009 IT Plan. This year, the layer list has been consolidated to reflect logical groupings of geographic data as opposed to the detailed structure of layers which have been listed in the past (i.e. lakes, streams-polygon, streams-centerline, shoreline now just listed as hydrography). As a result the list appears shorter but has actually just been reorganized.

Completed layers are those that can be currently accessed by users on the GIS server. Priorities are those which have the highest priority for development during FY 2007.

As the GIS continues to mature production influences such as the development of supporting data, new priority City projects or the willingness of a department to assist in the development or use of a layer, will drive future layers priorities. Layer priorities are reviewed on an on-going basis.

Theme		Layer
<b>COMPLETED LAYERS</b>		
1	Addresses	Address Points
2	Base map	Aerial Photos (1995, 1998, 2000, 2001)
3	Boundary	Alexandria City Limits
4	Recreation	Bike Trails
5	Buildings	Building Footprints (2D)
6	Buildings	Buildings Footprints (3D)
7	Census	Census Block Groups 1990
8	Census	Census Block Groups 2000
9	Census	Census Blocks 1990
10	Census	Census Blocks 2000
11	Census	Census Tracts 1990
12	Census	Census Tracts 2000
13	Planning	Central Business District
14	Code Enforcement	Code Enforcement Target Areas
15	Base Elevation	Contours (2ft Interval)
16	Human Services	Day Care Centers
17	Finance	Enterprise Zone
18	Misc	Fences & Walls
19	Fire	Fire Boxes
20	Hydrography	Hydrography (Streams, Lakes, Ponds)

Theme		Layer
<b>COMPLETED LAYERS (continued)</b>		
21	Planning	King Street Transit District
22	Transit	Metro (Rail Lines & Stops)
23	Buildings	Misc Structures (Decks, Patios, Canopies)
24	Planning	Old and Historic /Parker-Gray Districts
25	Misc	Parking Lot & Driveways
26	Recreation	Parks
27	Police	Police Beats
28	Police	Police Reporting Districts
29	Voter Registration	Polling Places
30	School	Public Schools
31	Transportation	Rail Roads
32	Recreation	Recreation Centers
33	Recreation	Recreational Amenities
34	Boundary	Regional Boundary
35	Transportation	Road Centerlines
36	Transportation	Road Edges
37	School	School Board Districts
38	Transportation	Sidewalk / Crosswalk
39	Planning	Small Area Plans
40	Base Elevation	Spot Elevations
41	Parcels	Tax Parcels
42	Traffic	Traffic Control Devices
43	Voter Registration	Virginia House Districts
44	Voter Registration	Virginia Senate Districts
45	Voter Registration	Voting Precincts
46	Planning	Zoning
47	Planning	Zoning Parking Districts
48	Planning	Proffers
49	ITS	INET Sites
50	Transportation	Residential Parking Districts
51	Environmental	Resource Protection Areas
52	Finance	Business Licenses
53	Fire	Fire Hydrants
54	Census	Population Profiles
55	Survey	Bench Marks
56	Transit	Bus Stops
57	Historic Alexandria	1938 Aerial (raster)

Theme		Layer
<b>FY 2007 PRIORITY LAYERS</b>		
1	Planning	Land Use
2	Address	Unit Numbers (Condominium /Apartment /office suites, etc) Expected to continue into FY2008
3	GIS Core	Public Facilities
4	Planning	Zoning Height District
5	Environmental	Soils

Theme		Layer
<b>FY 2008 PRIORITY LAYERS</b>		
1	Address	Unit numbers continued from FY2007
2	Aerial Photography	A new City owned flight will be delivered conforming to City Specs
3	Planimetric Update	All planimetric data (roads, buildings, sidewalks etc. will be updated from the delivered photography)
4	Legal Lots	Integration of Legal Lot line with assessment parcel base
5	Plat	Continuation of the Plat scan project, will extend the database from 1970 to 1940

**COMPLETED ARC IMS (WEB-BASED GIS APPLICATIONS)**

<b>Application</b>	<b>Department</b>	<b>Layers</b>	<b>Purpose</b>
Planning Viewer  (Intranet Only)	Planning & Zoning	Businesses Licenses, Historic Districts, Small Area Plan, Zoning, Metrorail Stations, Road Centerlines, Railroad Tracks, Address Points, Buildings, Curbs, Parcels, Historic Easements, Enterprise Zone, Central Business District, City Boundary, Imagery (2004, 2001)	Tool for assisting Planners in making informed decisions. Facilitates quick access to numerous layers of data about property locations relative to items such as zoning or historic districts. It enables visualization of what is on the ground. It also provides access to the City's address and parcel base.
Residential Parking Viewer  (Intranet Only)	Finance	Active Parking Permits, Address Points, Parcels, Buildings, Streets, Residential Parking Zone Exemptions, Residential Parking Zones	Tool for assisting Finance with the issuance of parking permits. Provides quick access to information about which properties are in the "Residential Parking Districts" and which are not. It identifies locations where permits have been issued and highlights areas within a particular zone which may not be eligible for a parking permit.
Parcel Viewer  (Intranet / Internet)  Rewritten FY 2007	Real Estate	Small Area Plan, Zoning, Address Points, Metrorail Stations, Streets, Metrorail Tracks, Railroads, Buildings, Parcels, Imagery	Tool for providing staff and the public with information about property values and property locations. Allows users to search for properties by a variety of identifiers (map number, address and databank). Highlights properties and provides quick access to assessment information. Also allows the user to easily search neighboring properties using the map interface.
I-Net Viewer  (Intranet Only)	Information Technology	I-Net Locations, I-Net Buildings, City Boundary, Address Points, Parcels, Streets, Imagery	Tool to display the City's I-Net. Shows all networked buildings, their names and addresses. Buildings are color coded by the ring on which they are connected.
Refuse Service Viewer  (Intranet Only)	Transportation & Environmental Services	Collection Zones, Refuse Service, Streets, Buildings	Tool to display the City's refuse collection service schedule. Shows overview of collection zones by day and identifies each address as receiving or not receiving service.
PowerOut  (Intranet Secure)	City Manager's Office	Streets, Imagery, Transformers	Tool to map and archive transformers reported as being out of service by Virginia Power. This site is only accessible via a user name and password and is currently only accessed by the CMO.
Development Internet	Planning and Zoning	Streets, Imagery, Planning Initiative Areas	Tool to track current development projects, give information to the public about the project, and show a visual correlation between planning and development.
SRS Viewer (to be released Feb 2007)  (Intranet Secure)	Police Department	Geocoded Police records, Police Beats, Generated Density Grids, Streets, Imagery	This analytical tool allows selected officers to look at many different types of police-collected data in customizable formats to identify trends/patterns either within specific beats or across the City.





[WWW.ALEXANDRIAVA.GOV](http://WWW.ALEXANDRIAVA.GOV)