

## **Department of Information Technology**

### **► Agency Mission**

The mission of the Department of Information Technology (DIT) is to provide citizens, the business community, and County workers with timely, convenient access to appropriate County information and services through the use of technology. DIT supports, manages, and coordinates all aspects of information technology to provide quality services to County customers and assists in the improvement of service delivery to County citizens through the deployment and use of technology in agencies. Services are provided through proven, best practices management techniques and application of County policies and procedures. The work of DIT is performed by County staff, in both direct execution and project management roles. Staff is augmented by contractors to accomplish projects or for peak support activities. Funding for DIT activities is included in the General Fund, and in Fund 505, Technology Infrastructure Services, which includes data center operations, the enterprise data communications network, radio center services, and 9-1-1 communications. DIT also manages Fund 104, Information Technology, which supports major projects including those with countywide strategic importance, such as infrastructure and application system modernization.

### **► Trends/Issues**

#### **Key Accomplishments**

Since 1997, DIT has made tremendous strides in updating the County's overall IT assets, including development of an enterprise technology architecture; developing an award winning Website and Geographic Information System (GIS); developing standards; implementing an enterprise-wide office productivity system of e-mail, calendar, workflow, and office suite products; modernizing the County's network communications infrastructure providing improved connectivity and through-put to County agencies at the various sites; delivering an integrated land development and records imaging systems; implementing customer relationship management technology in key areas such as legislation, constituent, and consumer complaints; making all systems Y2K compliant; migrating to more efficient and cost effective data center equipment; and tripling the number of County users connected to technology. The agency has also distinguished the County as a leader in e-government practices. Some highlights of the past year include:

- Implemented major enhancements in the e-government initiatives using public access technologies, the Internet, Kiosk, and Interactive Voice Response (IVR). This included: a major re-design of the County's website to facilitate easier navigation; software changes to accommodate the provisions of the Personal Property Tax Relief Act (PPTRA); an Internet customer service application whereby taxpayers can report address changes or the move-out or sale of a vehicle; the addition of 4 automated information Kiosks; and the implementation of a Web-based system which enabled citizens to pay tax bills electronically and submit inquiries for permits, plan reviews, and inspections scheduling.
- Replaced the Virginia Uniform Welfare Reporting System with Harmony, a new client benefits and payments system.
- Implemented modifications to the County's PRISM payroll system to accommodate Pay for Performance.

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- Developed an IT architecture model for Fairfax County, including updating enterprise-wide IT standards, enhancing IT project request guidelines, and establishing a comprehensive application inventory.
- Implemented enterprise GIS data on-line over the Internet and the Infoweb.
- Completed the migration of Microsoft Exchange Electronic Mail, and PC and LAN based office productivity systems to over 8,000 desktops.
- Installed a positive identification system for Public Safety, which included a mug shot subsystem and links to regional, state and national public safety agencies.
- Installed tracking systems for Board of Supervisors' constituent correspondence, state legislation, and consumer affairs' information.

### **Future Initiatives**

Fairfax County continues to operate in an automated information-processing environment, which includes the mainframe as well as distributed/client-server and PC/Network-based platforms. The major initiatives include maximizing the use of this versatile environment, both by citizens through public access technologies, and by County staff using improved automated business processes. In addition, use of public access technologies and the Internet is expanding; therefore, information protection concerns need to address the potential vulnerability associated with corporate and agency servers, local and wide area networks, and Internet applications. To deal effectively with these issues, DIT initiatives for the next fiscal year will:

- Implement e-government redesign and Web enable prioritized business transactions via the Web, IVR, and Kiosk public access platforms.
- Start the e-permitting initiative and design integrated voice, data, and wireless communication systems for the land development and permits process.
- Finalize the planning for the constituent call center.
- Enhance overall IT infrastructure capacity in line with IT initiatives and technology usage.
- Enhance the County's information protection and security. More vigorous focus will be applied to the development and implementation of countywide computer security measures and identify required infrastructure changes essential to the use of WEB and e-government business strategies. This includes additional security expertise for both the Local Area Network (LAN) and Wide Area Network (WAN), and proactive monitoring network activities to identify potential security lapses.
- Administer a level of LAN server and application support services to meet customer requests for server, application, and desktop support.
- Bridge the County government's "digital divide" between those who have access to the Internet and those who do not by providing various tools for County staff to access information.
- Upgrade countywide MS Windows, Exchange, and Office products to enable departments to take advantage of available features and properties, and provide user support for the applications which were recently distributed to over 8,000 desktops.

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- Increase the use of enterprise-level technologies by County agencies including GIS, the Internet, Workflow applications, Imaging, and Data Mining.
- Convert the Human Services agencies to NT platform, the County standard.

### **Trends/Challenges**

DIT must be in position to be highly responsive to the evolving needs of County agencies, and the demands of a tech savvy population and business community who want fast and convenient service. In addition, the County has a diverse cultural community that needs the same level of interface into County information systems and automated services as the English proficient population. This translates into needing a level of language options available in our public access technologies, which would contribute to the effectiveness and efficiency of agency programs that serve the public.

Now, more than ever before, technology is a target of legislation on the Federal and State levels. New legislation and mandates will create requirements and standards for deployment of technology, particularly around privacy and security of data, client records, and information. The Health Information Protection and Accountability Act of 1996 (HIPAA) is one of those that place specific requirements on automated databases and transmission. Initially intended to target the health care and insurance industries, the legislation affects all entities that maintain such records. This is expected to have significant impact on the County in several agencies that maintain medical information including the Health Department, Community Services Board, Juvenile Courts, Fire and Rescue, and the Sheriff's Office. The legislation is specific on information formats, security, and, communications and electronic data exchange standards that must be implemented if electronic means are used in these programs.

Other challenges DIT face result from legislation that impacts the technology industry, which in turn impacts the market and products. There are trends in the way the market sells its products and services that will make budgeting for IT even more of a challenge. For example, the office products and database software markets (Microsoft and Oracle as example), are moving to annual license payment structures, similar to the way the mainframe software pricing was done in the past. Also, organizations have to account for the number of systems, servers, PC's, and/or simultaneous users in the IT environment, and license accordingly. Some jurisdictions have been surprised recently by audits being conducted by the software giants, and some have been fined by the United States government for having unlicensed software installed on machines. One organization in Virginia had to pay \$600,000 in such fines. Fortunately DIT maintains an adequate inventory of licenses to keep up with versions of software.

DIT must also be able to quickly provide infrastructure capacity to address other trends and County business opportunities. Tele-work is an example of one of these. Commercial sector studies show that this is a very attractive and highly effective option for the workplace. An appropriate IT plan for telecommuting will provide secured communications into County systems, an 'extra-net', provide a device (PC, laptop, PDA, or other), and support. These are currently being investigated.

Digital 'signature/authentication' is a growing technical trend. The County has participated with the Commonwealth on a pilot with DMV. The pilot was successful, however the technology is young and evolving. It is the future for transmitting formal documents and transactions between business entities and jurisdictions. DIT is continuing to work on appropriate application of digital authentication with several County agencies.

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Wireless communications is another technology that the County is working on to accommodate increased productivity, especially for field service workers. Today, inspectors are using wireless devices to access systems and enter data on the spot.

DIT must be especially vigilant of the explosion of change in technology and establishing technology refresh cycles that are cost effective and smart, i.e. choosing the right approaches and products that will deliver good value, are supportable, and can be seamlessly enhanced over time. The technology industry is currently in a high state of rapid change - making decisions about what to implement and how to manage the vast variety has become more of an art, less a science. Selecting vendors has also become more of a challenge, especially as businesses buy out other businesses and change their product portfolio's accordingly. So far, the County has made wise choices about products and standards and is in a solid position with its technology portfolio.

DIT is further challenged in attracting and retaining skilled IT workers, particularly in this high tech region. Even though recent market instability has provided a larger pool of job applicants this is likely to be a short-lived trend. Skills needed in IT are changing also. In addition to technical skills, more analytical, business and managerial skills are needed too. We must look at employment standards and non-traditional strategies for compensation so that we can compete in the job market for the best-qualified applicants.

As more County services are made accessible through 24/7 e-government strategies, DIT will have to determine a resource structure to provide 24/7 system support and maintenance. A number of strategies that include a variety of sourcing and equipment configuration options are being pursued. As well, agencies that rely on these systems will need additional training capacity if they are to leverage all the benefits from the systems they use. There are likely to be additional costs associated with going from business day system availability to 24/7 reliability which must be addressed if the power of e-government is to have integrity and credibility.

In summary, management practices have to be nimble, decision processes fast, technologies deployed to be flexible and user-friendly, systems kept 'healthy' and vital, and support levels must be adequate. All these must be optimized for the County to continue to be considered a best-practice organization and maximize the returns on IT investments.

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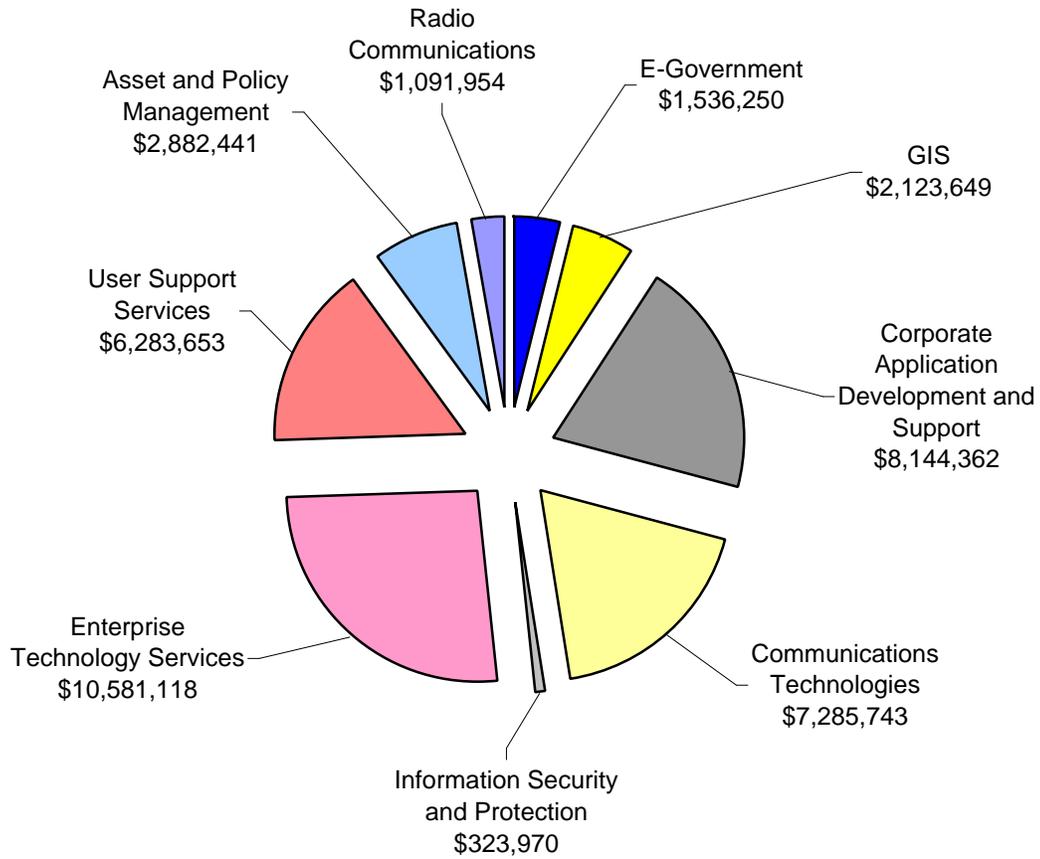
**Summary of All Agency CAPS**

<b>CAPS Number</b>	<b>CAPS Title</b>	<b>CAPS Net Cost</b>	<b>CAPS Number of Positions/SYE</b>
70-01	E-Government	\$1,536,250	16/16
70-02	Geographic Information Systems (GIS)	\$2,057,199	20/20
70-03	Corporate Application Development and Support	\$8,144,362	98/98
70-04	Communications Technologies	\$7,285,743	25/25
70-05	Information Security and Protection	\$323,970	5/5
70-06	Enterprise Technology Services	(\$3,281,880)	58/58
70-07	User Support Services	\$770,853	23/23
70-08	Asset and Policy Management	\$2,882,441	25/25
70-09	Radio Communications	\$300,357	15/15
<b>TOTAL Agency</b>		<b>\$20,019,295</b>	<b>285/285</b>

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Total FY 2002 Adopted Budget Expenditures = \$40,253,140

Total FY 2002 Adopted Budget Net Cost = \$20,019,295