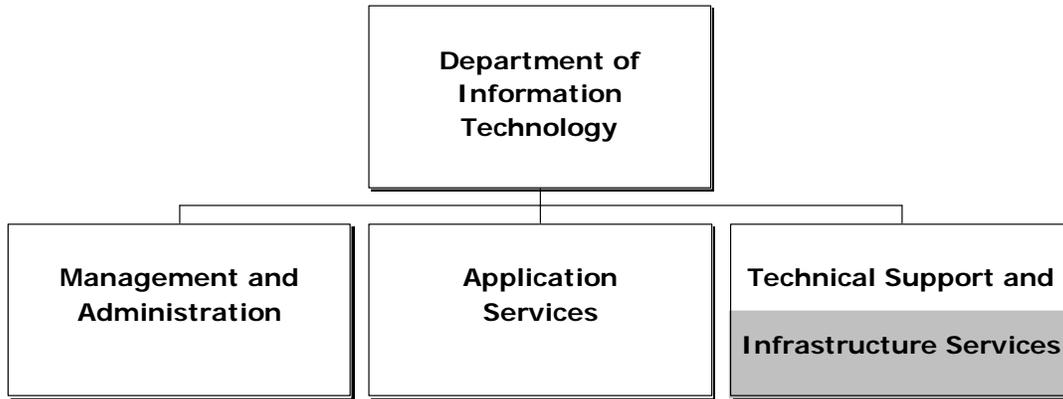


Department of Information Technology



- Department of Information Technology, General Fund. All staffing and operating support for the Department of Information Technology is found in Volume 1, Legislative-Executive/Central Services.
- Fund 60030, Technology Infrastructure Services. All staffing and operating support for the Infrastructure Services is found in Volume 2, Fund 60030.

Mission

To deliver and support an innovative technology environment to strengthen the public service commitment of Fairfax County.

AGENCY DASHBOARD			
Key Data	FY 2012	FY 2013	FY 2014
1. Fairfax County Web Site Use - Number of users visiting/conducting business	15,946,087	17,911,663	19,252,748
2. GIS Mapping Public Use Transactions (includes GIS Data Warehouse queries, PDF maps served, and Virtual Fairfax 3-D map sessions)	2,666,016	3,415,359	4,330,139
3. Public Mobile Applications	9	13	17
4. Data Storage (By Terabytes)	4,200	4,487	4,889
5. Mobile Devices (includes Blackberries, other smart phones, mobile computers used by Fire & Rescue EMTs, County Inspectors, etc.)	6,567	6,702	8,790
6. IT Security (includes: blocked web transactions with malware, email with malware attachments, and malware on system end points)	6,472,161	7,841,131	7,173,155

Department of Information Technology

Focus

The Department of Information Technology (DIT) is a central technology provisioning agency that designs, manages, and implements all aspects of information technology solutions and supporting infrastructure that enable County agencies to deliver information and services. In that role, DIT is responsible for overall IT policy, governance, and enforcement for the deployment and use of Countywide IT assets and resources. DIT also performs application development and integration and provides IT project management oversight for technical execution of agencies' major/core business applications. Goals for County technology include that solutions leverage IT investments across the enterprise, ensure the integrity of the County's information systems and data, and enable secure access to County information and services. The DIT General Fund budget provides for staff and service resources based on technology specialty subject matter expertise, including systems analysts and software developers that support revenue systems (tax); corporate systems; human services agencies; land development, public works and zoning; public safety/judicial administration; Library; Park Authority; Facilities Management, and others. DIT is also responsible for the multi-channel e-Government program, a specialized courtroom technology group, countywide telecommunications, data networks and radio systems, and the countywide information security program. DIT fosters an environment that harnesses new information, communication and social technologies in order to empower the public services of tomorrow.

Despite staff, service, and resource reductions over the last several years, DIT continues to manage growth in demand for County agencies' needs through prudent resource planning, use of selected sourcing opportunities and investment in IT support automation tools. DIT strives to accommodate agencies' needs as they implement their strategic plans, automate business processes and introduce new technology capabilities. In addition, DIT implemented enterprise-wide programs such as mobile device management, enhanced internet capabilities such as social/new media, enhanced wireless infrastructure, and

Geographic Information Systems (GIS). DIT also supports major business transformation and cross agency initiatives such as the Tri-Court Courtroom Technology collaborative, land based system processes, inspections, code enforcement, FOCUS, and public safety interoperability.

DIT continues to strengthen the County's information security and disaster recovery posture which protect the County's technology assets, business operations, and data from rapidly advancing cyber-attacks and IT disaster events. DIT also has a major emergency support function in its role to support the County Emergency Operations Center during natural and other disaster situations. The demands of the regional collaborative work continue to grow, and with this expansion it is especially important to leverage IT resources and assets. Often times, Fairfax County is the lead jurisdiction for technical design and implementation of regional capabilities that support public safety and homeland security critical infrastructure and applications which are deemed best practices. The work of DIT is primarily

The Department of Information Technology supports the following County Vision Elements:



Maintaining Safe and Caring Communities



Creating a Culture of Engagement



Connecting People and Places



Building Livable Spaces



Exercising Corporate Stewardship



Practicing Environmental Stewardship

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performed by County staff in direct execution, project management and asset management roles. DIT utilizes private sector expertise to augment the overall capacity to develop and implement projects, and to support operational activities, and competitive contracts are used for major project efforts and commercial solutions. In addition to the General Fund, other components of the IT enterprise functions are supported by funding in other DIT funds:

- Fund 60030, Technology Infrastructure Services, includes data center operations, enterprise automated productivity tools and email, the enterprise data communications network, the countywide desktop PC replacement program, servers, data storage, radio communications network and Radio Center services. The County has been recognized for successful IT infrastructure and power management projects that decreased the County's carbon footprint, achieved enterprise-wide IT efficiencies and cost savings.
- Fund 60020, Document Services, which supports the Print Shop and the Multi-Functional Digital Device (MFDD) program. The MFDD solution incorporates copying, printing, faxing and scanning via the County's network throughout the County government, providing flexibility and document printing and digitizing efficiencies. The Print Shop provides digital printing, offset printing and bindery services to the County and Fairfax County Public Schools. In FY 2012, DIT implemented a strategy that consolidated Print Shop and Data Center output operations, improving operations, coverage, utilization of staff and reduced cost.
- Fund 10040, Information Technology, supports technology-related programs that provide benefits to agencies, citizens and employees and optimize enterprise-wide resources. Projects include e-Government and GIS initiatives; County agencies' business modernization and inter-agency applications in financial systems, land development, Human Services and Public Safety business areas, and enterprise technology infrastructure modernization projects in communications; document management, and server platform consolidation/virtualization and 'cloud' technologies.

DIT also manages significant technology programs in other funds, including supporting technology for Fund 40090, E-911; capital construction for technology infrastructure tasks in Fund 30010, General Construction and Contributions; and the fiber institutional network (I-Net) in Fund 40030, Cable Communications, that serves over 400 County and school sites.

DIT continually seeks to find the appropriate balance between a stewardship role in leveraging County technology investments and a strategic role in pursuing and embracing opportunities to innovate and strengthen technology use that will result in high value County services and optimized cost. In fulfilling its mission, DIT builds partnerships with internal and external stakeholders. DIT uses a strategic planning process and a collaborative business and technical execution model to ultimately provide the County with the best available return on investment that facilitates the ability to meet County growth and demand for services economically. The results are manifest in modernizing processes for County operations, greater efficiencies and effectiveness in service delivery, improved opportunities for data sharing and decision making, embracing new internet based capabilities and mobile apps for public access to information and services, transparency, and improved utility and security of County technology and information assets.

Strategically, DIT employs a broad strategy that uses technology and policy to enable cohesive public access to information and services through the use of contemporary web-based and communication solutions. The e-Government program, recognized as a national model, is a multi-channel solution that

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includes the County's website, Interactive Voice Response (IVR) system, mobile access solutions, emergency alerts via text messaging, Customer Relationship Management (CRM) initiatives and broadcast cable television. The County embraced social media in its e-Government program, utilizing podcasts, RSS newsfeeds, moderated discussion sessions, and County presence on YouTube, Facebook and Twitter and others as e-Government tools to interact with all audiences. Social media platforms are employed to expand and redefine interactive communication and information dissemination efforts. The e-Government program also delivers mobile apps for its '*Government in the Palm of Your Hands*' initiative. The County expanded government-to-citizen transparency through leadership and collaboration with the Office of Public Affairs in the adoption of capabilities and initiatives that enhance customer experience that will continue in FY 2016 and beyond.

Another key technology platform is Geospatial Information Systems (GIS). Over 25 County agencies, including Public Safety agencies, Land Development Services and the Health Department use GIS in their operations. The GIS portfolio includes "Virtual Fairfax", a 3D visualization tool, with zoom in capability for County buildings and terrains with links to County land information systems and Northern Virginia Regional Routable Centerline Project in collaboration with five other Northern Virginia jurisdictions, recognized by the Commonwealth as a best practice.

Another strategic emphasis for the County's technology program is internal and regional interoperability for communications and secure data sharing. The County has a significant leadership role in developing the architecture and standards that are being adopted through the National Capital Region in regional geospatial map views, situational awareness and data and communications interoperability. This architecture is a foundation for the County's technology strategy to create a process that ties together agency-based independent applications and enables them to share data.

In ensuring the integrity and viability of the County's technology assets, DIT executes the County's security policy through strategies that build a secure technology infrastructure with security architecture and processes. The objectives of the information security program are to ensure confidentiality of information, integrity of data, systems and operations, technical compliance for the Federal Health Insurance Portability and Accountability Act (HIPAA), Payment Card Industry (PCI), and other privacy mandates, and to ensure the availability and security of the County's networks, systems and data. Security architecture uses 'defense-in-depth' designed to provide protection for all levels of County information processing resources and includes application of industry best practices for overall risk reduction. Over the years, the County's security program has been nationally recognized as a best practice and based on vigilant enforcement and implementation of modern security tools, breaches or wide-scale vulnerabilities have been kept below appreciable levels.

The County's overall technology programs continue to be recognized with many honors for innovation and contribution to excellence in public service, and are routinely referenced in the industry as best practice examples, to include WEB, mobile apps, IT Security, government cloud, green initiatives and 'cloud'. Fairfax County, for the twelfth consecutive year is rated as one of the top five digital Counties in the United States for jurisdictions with populations over 500,000 in the Digital Counties Survey. In 2014 Fairfax received awards in the "IT as an Efficiency Driver - Government to Citizen" category for "Paying Taxes using your Smartphone Mobile Applications, and Tax Bill QR Codes" and the "Cross-Boundary Collaboration" category for "National Capital Region Identity and Access Management Service (IAMS)" from the Commonwealth of Virginia Information Technology Symposium (COVITS). Fairfax County also received two National Association of Counties (NACo) 2014 Achievement Awards in the category of - Information Technology innovation: "Emergency Damages Assessment Tracking" and "Next Generation Security Program."

Department of Information Technology

Budget and Staff Resources

Category	FY 2014 Actual	FY 2015 Adopted	FY 2015 Revised	FY 2016 Advertised
FUNDING				
Expenditures:				
Personnel Services	\$21,097,606	\$22,508,802	\$22,508,802	\$22,941,800
Operating Expenses	15,887,701	15,767,304	19,276,916	15,059,484
Subtotal	\$36,985,307	\$38,276,106	\$41,785,718	\$38,001,284
Less:				
Recovered Costs	(\$6,275,190)	(\$6,791,873)	(\$6,791,873)	(\$6,791,873)
Total Expenditures	\$30,710,117	\$31,484,233	\$34,993,845	\$31,209,411
Income:				
Map Sales and Miscellaneous Revenue	\$34,148	\$23,088	\$23,088	\$23,088
Total Income	\$34,148	\$23,088	\$23,088	\$23,088
NET COST TO THE COUNTY	\$30,675,969	\$31,461,145	\$34,970,757	\$31,186,323
AUTHORIZED POSITIONS/FULL-TIME EQUIVALENT (FTE)				
Regular	252 / 252	252 / 252	252 / 252	250 / 250

FY 2016 Funding Adjustments

The following funding adjustments from the FY 2015 Adopted Budget Plan are necessary to support the FY 2016 program.

- ◆ **Employee Compensation** **\$598,589**
 An increase of \$598,589 in Personnel Services includes \$189,072 for a 0.84 percent market rate adjustment (MRA) for all employees and \$409,517 for performance-based and longevity increases for non-uniformed merit employees, both effective July 2015.
- ◆ **Compensation-Related Chargebacks** **\$239,280**
 An increase of \$239,280 in Operating Expenses covers compensation-related adjustments for information technology staff supporting Fund 60020, Document Services and Fund 60030, Technology Infrastructure Services that are being charged through this agency.

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◆ **Reductions**

(\$1,112,691)

A decrease of \$1,112,691 and 2/2.0 FTE positions reflects reductions utilized to balance the FY 2016 budget. The following table provides details on the specific reductions:

Title	Impact	Posn	FTE	Reduction
Reduction of Telecommunication Services	A decrease of \$335,000, or 2.1 percent of the FY 2015 Operating budget of \$15,767,304, is possible by reducing the number of SIP trunk circuits by approximately 60 percent while transitioning to a new primary carrier. This reduction is possible as the agency now utilizes SIP trunk circuits which allow all telephone lines to be installed at two core locations. Legacy telephone lines were dedicated to each location which resulted in circuits being under-utilized. This reduction may result in citizens receiving a busy signal on high volume days, such as Election Day or the week tax payments are due, but the number of calls resulting in a busy signal is anticipated to be below three percent.	0	0.0	\$335,000
Reduction of Telecommunication Services	A decrease of \$250,000, or 1.6 percent of the FY 2015 Operating budget of \$15,767,304, is possible as part of transitioning the County's legacy based dedicated in-bound phone numbers to a new provider. This reduction is the result of better pricing as the previous carrier charged the County \$1 per in-bound phone number, while the new provider will charge \$0.15.	0	0.0	\$250,000
Reduction in Telecommunication Maintenance	A decrease of \$170,000, or 1.1 percent of the FY 2015 Operating budget of \$15,767,304, will require the agency to eliminate the legacy telephone system maintenance and repair service that supports fifty County sites. This may increase response times to repair phone system outages as the contract is utilized for approximately 100 maintenance/repair calls annually. However, this impact will be mitigated by the agency utilizing in-house staff that is certified to maintain and repair phone systems.	0	0.0	\$170,000

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Title	Impact	Posn	FTE	Reduction
Eliminate Two Positions from the FOCUS Support Division	A decrease of \$165,591 and 2/2.0 FTE of the 12 positions in the FOCUS Support Division, will reduce the agency's base FOCUS application maintenance and support which will increase project timelines and delay the development of reports for core and user agencies. This impact is somewhat mitigated as the full capability of FOCUS continues to be developed. In addition, the agency continues to train and develop staff to maintain and operate the system more efficiently.	2	2.0	\$165,591
Reduce Hardware Maintenance	A decrease of \$100,000 is associated with a review of centrally managed or budgeted accounts conducted as part of the Mission Savings process in Fall 2014. This targeted reduction will reduce hardware maintenance for network gear supporting the Government Center.	0	0.0	\$100,000
Eliminate Teleconferencing System Maintenance	A decrease of \$50,000 is associated with a review of centrally managed or budgeted accounts conducted as part of the Mission Savings process in Fall 2014. This reduction will impact system maintenance associated with the current teleconferencing system. Ultimately the current system will be retired and new technology will be utilized in future years to accommodate teleconferencing requirements at a reduced cost.	0	0.0	\$50,000
Eliminate Vacant Desktop Telephones	A decrease of \$40,000 is associated with a review of centrally managed or budgeted accounts conducted as part of the Mission Savings process in Fall 2014. This reduction will begin a multi-year process to reduce the number of desktop telephones, a common theme brought forward by employees. As a result, the agency will remove approximately 800 telephones from vacant desktops throughout the County.	0	0.0	\$40,000

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Title	Impact	Posn	FTE	Reduction
Reduce Printing and Copying Supplies	This reduction is associated with a countywide policy decision being implemented to reduce the volume of printing and copying documents over a multi-year period. This was a common and recurring theme brought forward by employees as part of the Mission Savings process in Fall 2014. Agencies are being directed to review internal printing policies and reduce the use of individual desktop printers by utilizing the Multi-Functional Devices (MFDs) available throughout County buildings. In addition, agencies are being directed to reduce paper and toner consumption by only printing documents when necessary and by printing materials double-sided whenever possible.	0	0.0	\$2,100

Changes to FY 2015 Adopted Budget Plan

The following funding adjustments reflect all approved changes in the FY 2015 Revised Budget Plan since passage of the FY 2015 Adopted Budget Plan. Included are all adjustments made as part of the FY 2014 Carryover Review, and all other approved changes through December 31, 2014.

◆ **Carryover Adjustments**

\$3,509,612

As part of the FY 2014 Carryover Review, the Board of Supervisors approved encumbered funding of \$3,459,612 primarily for maintaining and operating the County's technology programs. In addition, unencumbered funding of \$50,000 was approved as part of the Incentive Reinvestment Initiative that allowed agencies to identify savings and efficiencies in FY 2014 and retain a portion to reinvest in employees.

Cost Centers

The General Fund supports three Department of Information Technology cost centers; Management and Administration, Application Services, and Technical Support and Infrastructure Services.

Department of Information Technology

Management and Administration

The Management and Administration cost center manages the operations of the Department of Information Technology to ensure that all technology programs are run in a safe and efficient manner.

Category	FY 2014 Actual	FY 2015 Adopted	FY 2015 Revised	FY 2016 Advertised
EXPENDITURES				
Total Expenditures	\$11,925,052	\$14,567,230	\$15,532,078	\$14,913,163

AUTHORIZED POSITIONS/FULL-TIME EQUIVALENT (FTE)

Regular	59 / 59	59 / 59	59 / 59	59 / 59
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<u>Policy, Planning & Administration</u>	<u>E-Government & Enterprise Architecture</u>	<u>IT Security Office</u>
1 Director of Information Technology	1 Data Analyst III	1 IT Security Program Director
2 Deputy Directors	1 Data Analyst II	1 Info. Security Analyst IV
2 Info. Tech. Program Directors I	1 Info. Tech. Program Director I	2 Info. Security Analysts III
2 Financial Specialists III	1 Info. Tech. Program Manager I	3 Info. Security Analysts II
2 Financial Specialists II	1 Internet/Intranet Architect IV	1 Info. Security Analyst I
2 Management Analysts IV	3 Internet/Intranet Architects III	1 Network/Telecom. Analyst IV
1 Management Analyst I	5 Internet/Intranet Architects II	
2 Business Analysts I	5 IT Systems Architects	<u>Courtroom Technology</u>
1 Human Resources Generalist II	1 Network/Telecom. Analyst IV	1 Courts IT Program Director
2 Administrative Assistants V	1 Programmer Analyst IV	1 Network/Telecom. Analyst IV
3 Administrative Assistants IV	1 Programmer Analyst III	1 Network/Telecom. Analyst I
3 Administrative Assistants III	1 Programmer Analyst II	1 IT Systems Architect
		1 Programmer Analyst III

TOTAL POSITIONS

59 Positions / 59.0 FTE

Application Services

The Application Services cost center provides for the design, implementation and maintenance of information systems for all County business areas, including GIS.

Category	FY 2014 Actual	FY 2015 Adopted	FY 2015 Revised	FY 2016 Advertised
EXPENDITURES				
Total Expenditures	\$10,425,729	\$6,926,488	\$6,980,534	\$6,914,843

AUTHORIZED POSITIONS/FULL-TIME EQUIVALENT (FTE)

Regular	112 / 112	112 / 112	112 / 112	110 / 110
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<u>Business Systems</u>	<u>Geographic Information Services</u>	<u>Enterprise Services</u>
2 Info. Tech. Program Managers II	2 Info. Tech. Program Managers II	1 Info. Tech. Program Director III
1 Info. Tech. Program Manager I	4 Geo. Info. Spatial Analysts IV	2 Info. Tech. Program Directors II
2 Business Analysts IV	5 Geo. Info. Spatial Analysts III	2 Info. Tech. Program Managers II
5 Programmer Analysts IV	5 Geo. Info. Spatial Analysts II	5 Programmer Analysts IV
22 Programmer Analysts III (-1)	3 Geo. Info. Spatial Analysts I	19 Programmer Analysts III
6 Programmer Analysts II (-1)	2 Geo. Info. Sys. Technicians	6 Programmer Analysts II
14 IT Systems Architects	1 Network/Telecom. Analyst III	
1 Business Analyst II		

TOTAL POSITIONS

110 Positions (-2) / 110.0 FTE (-2.0)

(-) Denotes Position Abolished due to Budget Reductions

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Technical Support and Infrastructure Services

The Technical Support and Infrastructure Services cost center functions include management of the County's enterprise-wide network and local area network (LAN) environments, server and data storage platforms, database administration, telephone systems and the Data Center. It also includes the Technical Support Center ("help desk"). This cost center also provides operational and contingency services for telecommunication support to the Department of Public Safety Communications' 911 Call Center.

Category	FY 2014 Actual	FY 2015 Adopted	FY 2015 Revised	FY 2016 Advertised
EXPENDITURES				
Total Expenditures	\$8,359,336	\$9,990,515	\$12,481,233	\$9,381,405
AUTHORIZED POSITIONS/FULL-TIME EQUIVALENT (FTE)				
Regular	81 / 81	81 / 81	81 / 81	81 / 81

<u>Platform Technology</u>		<u>Database Management</u>		<u>Desktop Support</u>	
1	IT Program Director II	3	Database Administrators III	1	Network/Telecom. Analyst IV
2	Info. Tech. Program Managers II	2	Database Administrators II	4	Network/Telecom. Analysts III
3	Network/Telecom. Analysts IV			6	Network/Telecom. Analysts I
8	Network/Telecom. Analysts III		<u>PSTOC</u>	3	Info. Tech. Technicians III
11	Network/Telecom. Analysts II	1	Network/Telecom. Analyst IV	1	Info. Tech. Technician II
1	Business Analyst IV	2	Network/Telecom. Analysts III	17	Enterprise IT Technicians
		1	Network/Telecom. Analyst II	2	Info. Tech. Program Managers II
<u>Telecommunications/Voice</u>					
2	Info. Tech. Program Managers II				
2	Network/Telecom. Analysts IV				
2	Network/Telecom. Analysts III				
6	Network/Telecom. Analysts II				
TOTAL POSITIONS					
81 Positions / 81.0 FTE					

Key Performance Measures

Indicator	Prior Year Actuals			Current Estimate FY 2015
	FY 2012 Actual	FY 2013 Actual	FY 2014 Estimate/Actual	
Management and Administration				
Percent risk of unauthorized network perimeter access including network security breaches and inbound network worm attacks	2.00%	2.00%	2.00% / 2.00%	2.00%
Application Services				
Percent change in GIS service encounters	18.72%	28.11%	11.13% / 26.78%	5.00%
Percent of revenue collected on applicable E-Government platforms	6.00%	8.00%	9.00% / 9.00%	10.00%
Technical Support and Infrastructure Services				
Business days to fulfill service requests from initial call to completion of request for: Non-critical requests	4	4	4 / 3	4

Department of Information Technology

Indicator	Prior Year Actuals			Current Estimate
	FY 2012 Actual	FY 2013 Actual	FY 2014 Estimate/Actual	FY 2015
Technical Support and Infrastructure Services				
Business days to fulfill service requests from initial call to completion of request for: Critical requests	2	2	2 / 1	2
Business days to fulfill service requests from initial call to completion of request for: Emergency requests	1	1	1 / 1	1
Percent of calls closed within 72 hours	56%	86%	86% / 86%	86%
Percent of first-contact problem resolution	84%	95%	95% / 95%	95%

A complete list of performance measures can be viewed at www.fairfaxcounty.gov/dmb/fy2016/advertised/pm/70.pdf

Performance Measurement Results

A key program within the Management and Administration Cost Center is IT Security policy and compliance. All County IT systems are attached and accessed through the network, with strict policies and controls to safeguard County IT resources from threats and unauthorized access. As with all major organizations, the County IT systems receive millions of security threats per day. Only the most serious threats are fully investigated by the Information Security team. The threats reported on a daily basis increase as new technology is better able to identify these threats. Additionally, malicious activities are projected to increase with the advent of social media and email growth. DIT successfully identified and stopped all major security threats during FY 2014.

The County is a leader in the use of GIS technologies with the most gigabytes in the GIS database among large jurisdictions and other Virginia localities according to International City/County Management Association (ICMA) benchmarks. The introduction of additional GIS applications and tools as well as changes to the calculation methodology to fully capture service encounters resulted in significant increases during FY 2012 through FY 2014. This trend is anticipated to continue as additional GIS data is now available through enhanced applications such as the Virtual Fairfax tool. Service encounters consist of counter sales, internal work requests, GIS projects, zoning cases, right of way projects, parcel related work, server connections, and spatial database usage.

The Technical Support Center Help Desk (IT Service Desk) requests for service decreased in FY 2014, with much of this decrease attributed to a lower volume of service calls in support of FOCUS now that users have become familiar with the new system. Strengthened enterprise-wide management and image control processes have allowed the agency to continue to resolve end-user workstation requests quickly. Customer satisfaction generally continues to be strong due to internal quality control measures and remote resolution capabilities. Efforts in FY 2015 will focus on enhanced remote resolution, new mobile devices/apps, and IT Service desk system-workflow services to streamline routine processes.