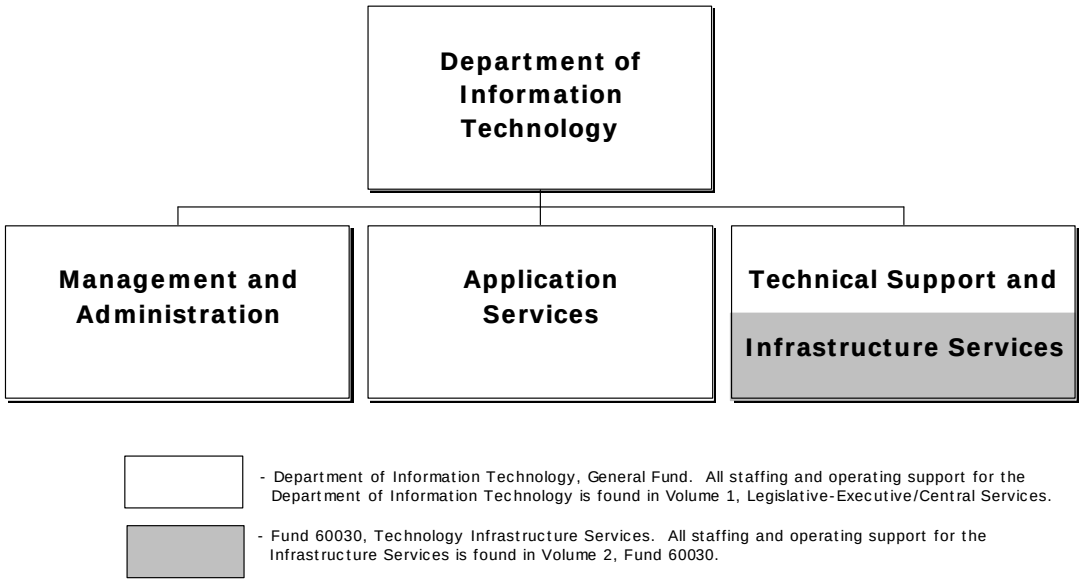
Department of Information Technology



Mission

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

AGENCY DASHBOARD			
Key Data	FY 2011	FY 2012	FY 2013
1. Fairfax County Web Site Use - Number of users visiting/conducting business	10,258,239	15,946,087	17,911,663
2. GIS Mapping Public Use Transactions (includes GIS Data Warehouse queries, PDF maps served, and Virtual Fairfax 3-D map sessions)	2,245,573	2,666,016	3,415,359
3. Public Mobile Applications	6	9	13
4. Data Storage (By Terabytes)	3,800	4,200	4,487
5. Mobile Devices (includes Blackberries, other smart phones, mobile computers used by Fire & Rescue EMTs, County Inspectors, etc.)	4,936	6,567	6,702
6. IT Security (includes: blocked web transactions with malware, email with malware attachments, and malware on system end points)	5,081,204	6,472,161	7,841,131

Focus

The Department of Information Technology (DIT) designs, manages, and implements all aspects of information technology solutions and supporting infrastructure that enable County agencies to effectively and efficiently deliver information and services to citizens and the community. DIT is responsible for IT policy, governance, and enforcement for the deployment and use of County IT assets and resources, IT project management and IT applications support and infrastructure operations. Goals for 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 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 careful resource planning, use of selected sourcing opportunities and the investment in IT support automation tools. DIT has accommodated agencies needs as they implement their strategic plans, automate business processes and introduce new technology capabilities. In addition, DIT has initiated enterprise-wide programs such as mobile device management, enhanced internet capabilities such as 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 systems processes, inspections 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 response to 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 which are deemed best practices.

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***

In addition to the General Fund, other components of the IT enterprise functions are supported by funding in other DIT cost centers. Fund 60030, Technology Infrastructure Services, includes data center operations, enterprise automated productivity tools and e-mail, the enterprise data communications

network, the countywide desktop PC replacement program, servers, data storage, radio communications network and Radio Center services. DIT also has full responsibility and reporting for 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.

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.

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. 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.

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 strategic 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. The work of DIT is primarily 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.

DIT's long standing commitment to provide quality customer service through the effective use of technology is manifested in service enhancements for the public with a broad strategy that uses technology, policy and processes for comprehensive, cohesive and easy public access to information and services for over 50 County agencies and the public through the use of contemporary web-based and communications solutions. The e-Government program, recognized as a national model, is a multi-channel solution that 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 reach 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 the use of technology that will continue in FY 2015 and beyond.

Over 25 County agencies, including those in the Public Safety area, use GIS in their operations. County staff can access GIS directly via professional GIS tools and web applications, while the public has access to a range of applications that integrate GIS as part of 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 is designed to provide protection for all levels for 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 ninth consecutive year, is one of the top five digital counties in the United States for jurisdictions with populations over 500,000 in the Digital Counties Survey. In 2013 Fairfax received a finalist award in the "Innovative Use of Technology in Local Government" category from the Commonwealth of Virginia Information Technology Symposium (COVITS) for its Emergency Data Gathering Repository (EDGR) initiative in collaboration with DIT's Public Safety Branch, the GIS and Mapping Branch, the Office of Emergency Management, and multiple County facility stakeholders. The technology programs are an underpinning for the operations of all County agencies and a driver for productivity, efficiency, and open government goals which enable the government to perform services under fiscal challenges and embrace future opportunities.

Budget and Staff Resources

Category	FY 2013 Actual	FY 2014 Adopted	FY 2014 Revised	FY 2015 Advertised
FUNDING				
Expenditures:				
Personnel Services	$20,493,983	$21,907,940	$22,122,140	$22,289,719
Operating Expenses	14,888,133	15,040,431	18,960,914	15,774,931
Subtotal	$35,382,116	$36,948,371	$41,083,054	$38,064,650
Less:				
Recovered Costs	($6,536,641)	($6,791,873)	($6,791,873)	($6,791,873)
Total Expenditures	$28,845,475	$30,156,498	$34,291,181	$31,272,777
Income:				
Map Sales and Miscellaneous Revenue	$22,153	$23,088	$23,088	$23,088
Total Income	$22,153	$23,088	$23,088	$23,088
NET COST TO THE COUNTY	$28,823,322	$30,133,410	$34,268,093	$31,249,689
AUTHORIZED POSITIONS/FULL-TIME EQUIVALENT (FTE)				
Regular	252 / 252	252 / 252	252 / 252	252 / 252

FY 2015 Funding Adjustments

The following funding adjustments from the FY 2014 Adopted Budget Plan are necessary to support the FY 2015 program.

- **Employee Compensation** **$381,779**
  An increase of $381,779 in Personnel Services reflects funding for a 1.29 percent market rate adjustment for all employees in FY 2015, effective July 2014. This total also covers compensation-related adjustments for information technology staff supporting Funds 60020, Document Services and Fund 60030, Technology Infrastructure Services, that are being charged through to this agency.

- **Disaster Recovery** **$650,000**
  An increase of $650,000 is required in FY 2015 for the multi-year disaster recovery (DR) plan. This funding will allow the agency to finalize efforts to transition from the current mainframe DR process to a solution and remote site that has the required experience, knowledge, and technical requirements. Having and exercising an off-site system recovery capability is an industry best practice, and internal and external audit requirement. This funding will provide DR capability for over thirty enterprise applications and tools, such as the County's e-mail and antivirus tool and over fifty agency applications such as the courts scheduling system and the HIPAA system used by the Health Department. This funding will provide hot-site replicated system including all hardware, software builds, network, facilities, monitoring and administration, dedicated commercial high-speed network connection to the remote site DR data center facility, and application and system recovery within 24 hours.

- **PC Replacement** **$84,500**
  An increase of $84,500 is included for PC replacement charges to reflect both updated inventory counts and revised costs, primarily associated with licenses and software requirements, following the review of the PC Replacement Program conducted in FY 2014.

Changes to FY 2014 Adopted Budget Plan

The following funding adjustments reflect all approved changes in the FY 2014 Revised Budget Plan since passage of the FY 2014 Adopted Budget Plan. Included are all adjustments made as part of the FY 2013 Carryover Review, and all other approved changes through December 31, 2013:

- **Carryover Adjustments** **$4,134,683**
  As part of the *FY 2013 Carryover Review*, the Board of Supervisors approved funding of $4,134,683, including $280,997 for a one-time compensation adjustment of $850 for merit employees paid in November 2013 and $3,203,686 in encumbered funding in Operating Expenses. In addition, an increase of $650,000 was for the multi-year disaster recovery (DR) plan. This funding will allow the agency to transition from the current mainframe DR process to a solution and remote site that has the required experience, knowledge, and technical requirements.

Cost Centers

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

Management and Administration

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

Category	FY 2013 Actual	FY 2014 Adopted	FY 2014 Revised	FY 2015 Advertised
EXPENDITURES				
Total Expenditures	$10,900,530	$13,568,058	$15,277,014	$14,499,252
AUTHORIZED POSITIONS/FULL-TIME EQUIVALENT (FTE)				
Regular	58 / 58	58 / 58	59 / 59	59 / 59

Policy, Planning & Administration

1	Director of Information Technology
2	Deputy Directors
2	Info. Tech. Program Directors I
1	Financial Specialist IV
2	Financial Specialists III
2	Financial Specialists II
1	Management Analyst IV
1	Management Analyst I
1	Business Analyst I
1	Human Resources Generalist II
2	Administrative Assistants V
3	Administrative Assistants IV
3	Administrative Assistants III

Courtroom Technology

1	Courts IT Program Director
1	Network/Telecom. Analyst I
1	Programmer Analyst III
1	IT Systems Architect
1	Network/Telecom. Analyst IV

E-Government

1	Data Analyst III
1	Data Analyst II
1	Info. Tech. Program Director II
1	Info. Tech. Program Manager I
3	Internet/Intranet Architects III
5	Internet/Intranet Architects II
1	Internet/Intranet Architect IV
5	IT Systems Architects
1	Network/Telecom. Analyst IV
2	Programmer Analysts II
1	Programmer Analyst III
1	Programmer Analyst IV

IT Security Office

1	IT Security Program Director
3	Info. Security Analysts II
2	Info. Security Analysts III
1	Info. Security Analyst IV
1	Info. Security Analyst I
1	Network/Telecom. Analyst IV

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 2013 Actual	FY 2014 Adopted	FY 2014 Revised	FY 2015 Advertised
EXPENDITURES				
Total Expenditures	$10,385,302	$6,797,023	$6,913,528	$6,869,953
AUTHORIZED POSITIONS/FULL-TIME EQUIVALENT (FTE)				
Regular	114 / 114	114 / 114	113 / 113	113 / 113

	Business Systems		Geographic Information Services		Enterprise Services
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	4	Geo. Info. Spatial Analysts III	2	Info. Tech. Program Managers II
6	Programmer Analysts IV	6	Geo. Info. Spatial Analysts II	5	Programmer Analysts IV
23	Programmer Analysts III	1	Geo. Info. Spatial Analyst I	19	Programmer Analysts III
7	Programmer Analysts II	4	Geo. Info. Sys. Technicians	6	Programmer Analysts II
14	IT Systems Architects	1	Network/Telecom. Analyst III		
1	Business Analyst II				

TOTAL POSITIONS
113 Positions / 113.0 FTE

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 2013 Actual	FY 2014 Adopted	FY 2014 Revised	FY 2015 Advertised
EXPENDITURES				
Total Expenditures	$7,559,643	$9,791,417	$12,100,639	$9,903,572
AUTHORIZED POSITIONS/FULL-TIME EQUIVALENT (FTE)				
Regular	80 / 80	80 / 80	80 / 80	80 / 80

Platform Technology
1 IT Program Director II
2 Info. Tech. Program Managers II
3 Network/Telecom. Analysts IV
8 Network/Telecom. Analysts III
11 Network/Telecom. Analysts II
1 Business Analyst IV

Telecommunications/Voice
2 Info. Tech. Program Managers II
2 Network/Telecom. Analysts IV
2 Network/Telecom. Analysts III
6 Network/Telecom. Analysts II

Database Management
3 Database Administrators III
2 Database Administrators II

PSTOC
1 Network/Telecom. Analyst IV
2 Network/Telecom. Analysts III
1 Network/Telecom. Analyst II

Desktop Support
1 Network/Telecom. Analyst IV
4 Network/Telecom. Analysts III
6 Network/Telecom. Analysts I
3 Info. Tech. Technicians III
1 Info. Tech. Technician II
17 Enterprise IT Technicians
1 Info. Tech. Program Manager II

TOTAL POSITIONS
80 Positions / 80.0 FTE

Key Performance Measures

Indicator	Prior Year Actuals FY 2011 Actual	FY 2012 Actual	FY 2013 Estimate/Actual	Current Estimate FY 2014	Future Estimate FY 2015
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%	2.00%
Application Services					
Percent change in GIS service encounters	15.08%	18.72%	12.53%/28.11%	11.13%	11.13%
Percent of revenue collected on applicable E-Government platforms	3.46%	6.00%	6.00%/8.00%	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	4/4	4	4
Business days to fulfill service requests from initial call to completion of request for: Critical requests	2	2	2/2	2	2
Business days to fulfill service requests from initial call to completion of request for: Emergency requests	1	1	1/1	1	1
Percent of calls closed within 72 hours	75%	56%	60%/86%	86%	86%
Percent of first-contact problem resolution	68%	84%	85%/95%	95%	95%

A complete list of performance measures can be viewed at www.fairfaxcounty.gov/dmb/fy2015/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 2013.

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 in FY 2012 and FY 2013. 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 expansion of GIS applications and tools is reflected in the percent change in GIS service encounters.

The Technical Support Center Help Desk (IT Service Desk) requests for service increased in FY 2013, with much of this increase resulting from the provision of additional services in support of FOCUS. FOCUS Help for end users is captured through the DIT IT Service Desk system, and triaged with the FOCUS Business agencies. Since go-live, FOCUS calls are trending to a normal expected volume. When new features are introduced, there is a temporary peak until users become familiar within. Additional time and effort for first and second tier resolution is required for responding to the more complex inquiries for new complex applications. Strengthened enterprise-wide management and image control processes have reduced the time required for resolving end-user workstation requests. The agency is hopeful that newly adopted management strategies will help to manage and decrease the time needed to resolve such user requests in future years. Customer satisfaction generally continues to be strong due to internal quality control measures and remote resolution capabilities. Efforts in FY 2014 and FY 2015 will focus on enhanced remote resolution and IT Service desk system-workflow services to streamline routine processes.