

INFORMATION TECHNOLOGY

Description

The Department of Information Technology is responsible for serving all computer-oriented information processing needs of County agencies. This includes information and office automation equipment selection, application development and/or software selection assistance, ongoing hardware and software maintenance, and data and telecommunications network development and support. The computer center now operates twelve hours a day, five days a week. Major areas of service include Finance, Community Development /Operations Agencies, Human Resources, and all Public Safety agencies. IT provides a help desk to provide assistance to agency personnel on any computer related problems.

The Department also administers and maintains the County's telecommunications infrastructure including telephone systems, mobile devices, and the voice and data plant. In addition, the Department is responsible for the maintenance and support of the Emergency E-911 system for Public Safety and the management of the County's Geographic Information System (GIS).

Objectives

- To assist County agencies in increasing efficiency and effectiveness through the use of advanced technological tools for administrative and field operations.
 - To provide application development and/or software selection services.
 - To maintain operational efficiency through the use of state-of-the-art equipment and software.
 - To administer the Department's information technology resources in a manner that best serves the County's operational and customer service needs.
 - To maintain the highest level of proficiency of staff in all areas of technical support.
 - To host and support various enterprise applications, including email and Internet connections, to all County agencies.
 - To monitor, maintain, and upgrade the County's local and wide area network (LAN/WAN) as efficiently and effectively as possible.
- To provide enterprise server based computer capabilities to County agencies.

Annual Fiscal Plan

<u>Description</u>	<u>FY13 Actual</u>	<u>FY14 Original</u>	<u>FY15 Approved</u>	<u>Change 14 to 15</u>
Personnel	\$ 8,220,464	\$ 8,753,389	\$ 8,704,561	(0.6%)
Operation	2,688,352	3,519,984	3,461,449	(1.7%)
Capital	256,734	463,680	522,215	12.6%
Total	<u>\$ 11,165,550</u>	<u>\$ 12,737,053</u>	<u>\$ 12,688,225</u>	<u>(0.4%)</u>

Personnel Complement	89	88	88	0
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Performance Measures

	FY13	FY14	FY15	Change 14 to 15
Workload Measures				
Website Visits	2,155,914	2,153,538	2,261,359	107,821
Website Unique Visitors	1,075,919	1,097,999	1,105,109	7,110
Website Page Views	6,486,961	6,437,452	6,487,133	49,681

- To manage GIS technology to enhance coordination of Community Development services among County departments.
- To provide the County with an efficient and dependable telecommunications network.

run with virtually no outage. In 2014, there are plans to move at least two of the sixteen Oracle database instances to VMWare. Other Oracle database instances will be moved as the physical servers are retired due to maintenance contracts. The goal of Information Technology is to continue to virtualize servers where practical.

Budget Highlights

The Department of Information Technology's (IT) FY2014-15 budget totals \$12,688,225, which represents an overall decrease of \$48,828 or 0.4 percent from the previous approved budget. This reduction is driven solely by the personnel component and reflects several positions which were vacated during the year. It is important to note that although this component experienced an overall reduction, the personnel budget reflects a mid-year performance based raise for Information Technology's employees as well as rising VRS and VRS life expenditures.

In FY2013-14, Information Technology finished upgrading the County's data network infrastructure at all sites. This upgrade included new routing and switching gear, as well as a complete overhaul of the IP addressing schema. This will better prepare the County for VoIP and other deployments. Also upgraded during the past fiscal year were the redundant Internet connections, which were both increased to 200 Mb each. As a part of the Internet bandwidth upgrade, the Internet-edge routers and firewalls were also replaced. This will not only allow the County to accommodate this Internet bandwidth increase, but will also allow for more flexibility in Internet bandwidth increases in the future. Complete removal of ATM circuits was completed over the past fiscal year by migrating those connections to various other connections, including microwave, TLS, and DSL. This migration resulted in significant cost savings.

The operating component is forecasted at a total cost of \$3,461,449 for the FY2014-15 budget. The capital component is forecasted to increase by \$58,535 or 12.6 percent from the previous fiscal year in order to cover anticipated capital expenditures. This portion of the budget, totaling \$522,215, allows for the purchase of new and replacement computer equipment as well as replacement telecommunications equipment needed for the department.

Information Technology continues to look at alternative storage and backup technologies. This review includes both on premise and cloud solutions. Changes in this overall strategy should occur before the end of FY2014-15.

During FY2014-15, the Department of Information Technology will continue to expand its virtual server environment. Currently IT has approximately 214 virtual servers running on seventeen physical servers. The County has 149 physical servers. In keeping with IT's movement toward the use of VMWare, the Database Team has virtualized approximately 90% of the 183 SQL Server databases. Forty of these databases are running in the AlwaysOn SQL Server high availability environment, which allows them to

The Police Team made significant enhancements to all browser-based inquiry systems by adding functionality and updating to the latest version of Microsoft.Net. Staff converted all reports to SQL Server Report Services saving a significant maintenance cost. Another significant migration was from SQL Server 2005 to SQL Server 2012. There are now over twenty different Police databases running on this latest version of SQL Server.

Information Technology (cont'd)

The new Web Team made progress in standardizing the County's web site and set forth plans for a complete redesign of the site and the site's management. A working group of staff from various Departments has begun plans to change the site from a difficult to use Department-centric site to an easily navigated services centric site. IT envisions the County site becoming a portal for most citizen services and a means to increase the volume and quality of information citizens require.

IT continued development work in Oracle Application Express, replacing legacy departmental Access Database systems, including two systems for DPW with mobile wireless laptop connectivity and GIS integration: the Standing Water and Mosquito Tracking system (SWIS) and the MS4 Infrastructure Inventory Management System (STRM). Additional Apex development included the BIDS system for managing Boards and Commissions appointments and the mPhone system providing a web-enabled Mobile Phone directory for the Manager's office.

The Cad 24x7 system received numerous enhancements during the past year. Foremost among these were software changes implemented to support a new Emergency Fire Dispatch protocol (EFD), which allows for a variety of response levels for structure fire calls based upon both the hazard classification of the property involved and the circumstances of the particular call. Other changes included a new mobile map for Police and Fire; an

enhanced unit recommendations feature that includes the capability to automatically recommend specialty teams such as the Technical Rescue Team; a revised Emergency Medical Dispatch protocol, which provides an integrated triage process for each EMS call; and an enhanced notifications system, that will be implemented in the first quarter of 2014 and use email and text messages to advise other County departments when they are needed to respond to CAD related incidents.

The GIS Office implemented a new Henrico County web map for both public and internal use. Accessible from the County's home page, this map is intended to work on desktop, tablets and smart phones. The GIS Office also collaborated with DPW and IT PMT5 to provide a Standing Water Initiative mobile application that allows DPW users to survey, edit, and record both GIS and tabular data in the field. This replaces an antiquated paper form system that has been in use for years.

IT continues to review various disaster recovery scenarios and associated technologies. These include on-site, off-site, and cloud related scenarios.

IT worked with the Sheriff's Office to implement a new medical services delivery system called HealthSecure. IT PMT4 also implemented a new public facing website for the Sheriff's Office which provides a portal for viewing information about current inmates of the Henrico County Jail system.