

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 operates 24 hours a day, 7 days a week. Major areas of service include Education, Finance, Public Utilities, General Services, Human Resources, and all Public Safety agencies. A Customer Service Center, with help desk and work station support services, is available to provide assistance to agency personnel on computer related problems.

The Department also administers and maintains the County's telecommunications infrastructure including telephone systems, cell phones, pagers, and the voice and data plant. In addition, the Department is responsible for the maintenance of the Emergency E-911 system for Public Safety.

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>FY08 Actual</u>	<u>FY09 Original</u>	<u>FY10 Approved</u>	<u>Change 09 to 10</u>
Personnel	\$ 7,954,667	\$ 8,562,368	\$ 8,477,200	(1.0%)
Operation	3,385,405	4,582,135	4,310,173	(5.9%)
Capital	1,133,292	552,915	552,915	0.0%
Total	\$ 12,473,364	\$ 13,697,418	\$ 13,340,288	(2.6%)
 Personnel Complement*	 90	 90	 89	 (1)

*One existing IT position was removed from the complement and transferred to General Services during FY2008-09.

Information Technology (cont'd)

Performance Measures

	FY08	FY09	FY10	Change 09 to 10
Workload Measures				
Henrico Internet Pages Accessed	14,117,704	15,740,591	17,523,600	1,783,009
Henrico Internet Number of Visits	2,459,795	2,854,623	2,362,270	(492,353)
Efficiency Measures				
Central Computer Average Uptime	99.80%	99.80%	99.80%	0.00%

- To provide the County with an efficient and dependable communications network.

Budget Highlights

The Department of Information Technology's (IT) FY2009-10 approved budget is \$13,340,288, which represents a decrease of \$357,130 or 2.6 percent over the previous approved budget. It is important to note that during FY2007-08, the management of the County's phone system as well as the maintenance of the E-911 and reverse E-911 systems were shifted from General Services to Information Technology.

The personnel component decreased by a net difference of \$85,168 or 1.0 percent from the previous approved fiscal year. The personnel component decreased primarily as a result of the transfer of a Communications System Manager position to General Services during FY2008-09. These adjustments were partially offset by the increase in forecasted health care expenditures.

Although the personnel component is a driver of the decrease, operating expenditures played an important role as well. The operating component is forecasted to decrease by \$271,962 or 5.9 percent from the previous approved budget. This decrease reflects the reduction of maintenance service contracts on computers; the County-wide adjustment in technology replacement; and the movement of operating expenses associated with the position which was transferred to General Services.

The capital component is forecasted to remain flat at \$552,915. This portion of the budget allows for the purchase of new and replacement computer equipment as well as replacement telecommunications equipment.

The ongoing development and maintenance of the County's Information Systems, IT infrastructure and telecommunication networks will continue to be the primary focus of the Department of Information Technology (IT) during the next fiscal year. At present, IT is responsible for over 160 servers that support over 100 computer applications and the telecommunications infrastructure of land line and wireless communication devices.

On the data side, the County's Wide Area Network (WAN) connects over sixty Henrico County remote locations to the central Administration building's data center through a combination of County owned and third party leased lines.

In the telecommunications environment, there are over seventy County locations, served by five networked switches at the main campuses, and sixty-six smaller remote telephone switches serving Recreation Centers, Libraries, Fire Stations, Mental and Public Health centers. IT supports over 6,000 telephone ports throughout the County. During an average month, the County's telephone systems handle over 400,000 calls excluding intra-building calls.

Part of the networked services includes Internet operations. IT uses two separate Internet Service Providers (ISPs), Network Virginia and Level3, to provide the County General Government agencies - minus Public Library - Internet service. The Network Virginia (NetVa) line is a 45mb leased service provided by a combination of Verizon and Sprint. The Level3 line is a 50mb service. The two separate providers help insure continued Internet service should one of the two lines fail. At present, the County uses about 34 percent of total available bandwidth on a daily basis. It must be noted that

Information Technology (cont'd)

this does not include the Henrico Public Library System, which has its own Internet service provider.

It is anticipated that Internet usage and demands on the County for Internet related services will continue to grow. In a recent USA Today poll, it was reported that 216 million Americans, or 71% of the United States' total population, regularly used the Internet and:

- 76 percent of Americans 18 to 49 years old are regular Internet users,
- 58 percent of Americans age 50 to 64 are regular Internet users, and
- 60 percent of Americans who use the Internet are interested in using e-government for conducting activities such as filing a change of address, responding to a jury summons, renewing a driver's license, or obtaining a birth certificate or marriage license.

During the past fiscal year, the County's Internet site went through a comprehensive redesign which resulted in enhanced functionality and ease of use for Henrico citizens. This is an ongoing, evolutionary process that will continue into the next fiscal year as the department continues to focus on future e-commerce initiatives as part of the County's Internet offerings.

The single most used application by County employees is email. IT began an effort during the last fiscal year to upgrade the County's email solution. When completed, this will consist of new hardware and software to bring the County in line with the latest Microsoft technology solutions for this product. The effort is scheduled to conclude in the first half of FY2009-10.

IT continues to focus on protecting the County against unwanted or malicious attempts to access data through the Internet and email. All email coming into Henrico County is screened prior to delivery and nearly 60 percent of the correspondence is routinely blocked because it is unsolicited advertising or inappropriate subject matter. Internet traffic is also monitored and screened to better insure that only appropriate sites are accessed by County employees.

One of the top priorities for the fiscal year will be the replacement of the 911 emergency response application which is approximately five years old. The replacement effort was begun during the last fiscal year and will result in a new telecommunications and software solution for receiving 911 calls.

IT continues to review new technology as a means to streamline efficiency and lower operational costs. A large percentage of the 160 plus servers supported by IT are applications that require very little processing power - one to five percent - of the total available "horsepower" on each box.

VMWare (Virtual Machine Software) is software that runs on a single large "host" server that allows for the creation of a number of virtual servers. Each virtual server is dedicated to its specific application but shares the overall processing power of the "host" server.

This solution will consolidate the total number of servers in IT which will reduce the overall administrative overhead and backup/restoration time. Additionally, it is a move toward a "green" computer room and will reduce IT's total energy requirements for day to day operations and cooling.