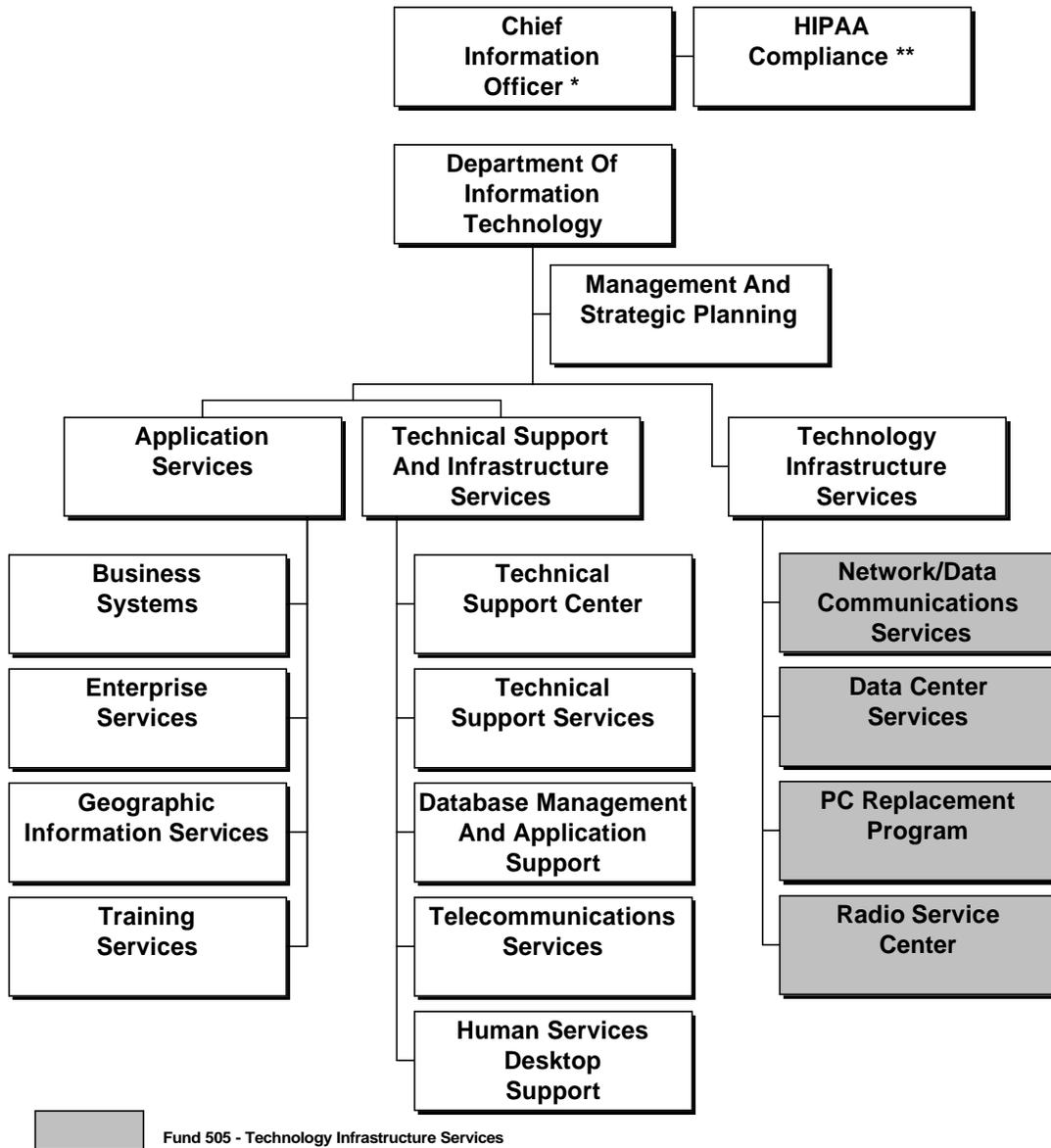


DEPARTMENT OF INFORMATION TECHNOLOGY FUND 505, TECHNOLOGY INFRASTRUCTURE SERVICES



* The Chief Information Officer has responsibility for strategic direction and oversight of this agency; and, for budget purposes, that position and associated funding are also reflected within the Department of Information Technology within the General Fund.

** As mandated by federal regulation, Fairfax County has a HIPAA Compliance function, which reports directly to the CIO.

FUND 505

TECHNOLOGY INFRASTRUCTURE SERVICES

Agency Position Summary

Fund 001:	237	Regular Positions (28T),(-8)	/	237.0	Regular Staff Years (28.0T), (-8.0)
Fund 505:	69	Regular Positions (-1)	/	69.0	Regular Staff Years (-1.0)
	306	Total Positions (28T), (-9)		306.0	Total Staff Years (28.0T), (-9.0)

Position Detail Information

MANAGEMENT AND STRATEGIC PLANNING

Management, Administration & Planning

1	Chief Information Officer
1	Director of Information Technology
0	Info. Tech. Program Director II (-1)
1	Info. Tech. Program Director I (-2)
1	Info. Tech. Program Manager I
1	HIPAA Compliance Manager
1	Fiscal Administrator
1	Business Analyst III
1	Accountant II
2	Management Analysts II
1	Management Analyst I
2	Administrative Assistants V
2	Administrative Assistants IV
4	Administrative Assistants III
1	Administrative Assistant II
1	Administrative Assistant I
1	Info. Security Manager
1	Info. Security Analyst III
1	Info. Security Analyst II
1	Info. Security Analyst I (-1)
25	Positions (-4)
25.0	Staff Years (-4.0)

APPLICATION SERVICES

Business Systems

1	Info. Tech. Program Director II
1	Info. Tech. Program Director I (1T)
3	Info. Tech. Program Managers II
1	Management Analyst IV
1	Network/Telecom. Analyst II
18	Programmer Analysts IV (1T)
25	Programmer Analysts III (8T)
18	Programmer Analysts II (3T)
68	Positions (13T)
68.0	Staff Years (13.0T)

APPLICATION SERVICES (CON'T)

Enterprise Services

1	Info. Tech. Program Director II
0	Info. Tech. Program Director I (-1)
3	Info. Tech. Program Managers II
1	Internet/Intranet Architect IV
3	Internet/Intranet Architects III
4	Internet/Intranet Architects II
9	Programmer Analysts IV
12	Programmer Analysts III
11	Programmer Analysts II
1	Programmer Analyst I
45	Positions (-1)
45.0	Staff Years (-1.0)

Geographic Information Services

1	Info. Tech. Program Manager II
1	Network/Telecom. Analyst III
1	Geo. Info. Spatial Analyst IV
2	Geo. Info. Spatial Analysts III
5	Geo. Info. Spatial Analysts II
1	Geo. Info. Spatial Analyst I
1	Engineer III
1	Geo. Info. Sys. Tech. Supervisor
7	Geo. Info. Sys. Technicians
20	Positions
20.0	Staff Years

Training Services

1	Info. Tech. Program Manager I
1	Business Analyst III (-1)
4	Business Analysts II (-1)
6	Positions (-2)
6.0	Staff Years (-2.0)

FUND 505

TECHNOLOGY INFRASTRUCTURE SERVICES

TECHNICAL SUPPORT AND INFRASTRUCTURE SERVICES

Technical Support Center

1	Info. Tech. Program Manager I
5	Info. Tech. Technicians III
1	Info. Tech. Educator III
3	Network/Telecom Analysts II
<u>2</u>	Info. Tech. Technicians II
12	Positions
12.0	Staff Years

Technical Support Services

1	Info. Tech. Program Manager II
1	Network/Telecom. Analyst IV
4	Network/Telecom. Analysts III
10	Network/Telecom. Analysts II
<u>5</u>	Info. Tech. Technicians II
21	Positions
21.0	Staff Years

Database Management & Application Support

1	Info. Tech. Program Manager I
3	Database Administrators III
3	Database Administrators II
0	Inventory Management Supervisor (-1)
1	Data Analyst III
<u>1</u>	Data Analyst II
9	Positions (-1)
9.0	Staff Years (-1.0)

Telecommunications Services

1	Info. Tech. Program Manager II
3	Network/Telecom. Analysts IV
3	Network/Telecom. Analysts III
4	Network/Telecom. Analysts II
2	Info. Tech. Technicians III
<u>3</u>	Info. Tech. Technicians II
16	Positions
16.0	Staff Years

Human Services Desktop Support

1	Network/Telecom. Analyst IV (1T)
6	Network/Telecom. Analysts III (6T)
3	Network/Telecom. Analysts I (3T)
1	Programmer Analyst I (1T)
1	Internet/Intranet Architect III (1T)
<u>3</u>	Info. Tech. Technicians II (3T)
15	Positons (15T)
15.0	Staff Years (15.0T)

TECHNOLOGY INFRASTRUCTURE SERVICES

Network/Data Communication Services

1	<i>Info. Tech. Program Director I</i>
1	<i>Info. Tech. Program Manager I</i>
2	<i>Network/Telecom Analysts IV</i>
10	<i>Network/Telecom Analysts III</i>
4	<i>Network/Telecom Analysts II</i>
<u>1</u>	<i>Network/Telecom Analyst I</i>
19	<i>Positions</i>
19.0	<i>Staff Years</i>

Data Center Services

1	<i>Info. Tech. Program Director II</i>
2	<i>Info. Tech. Program Managers II</i>
4	<i>Systems Programmers III</i>
5	<i>Systems Programmers II</i>
3	<i>Systems Programmers I (-1)</i>
2	<i>Programmer Analysts III</i>
1	<i>Programmer Analyst II</i>
1	<i>Programmer Analyst I</i>
8	<i>IT Technicians III</i>
9	<i>IT Technicians II</i>
<u>2</u>	<i>IT Technicians I</i>
38	<i>Positions (-1)</i>
38.0	<i>Staff Years (-1.0)</i>

Radio Center Services

1	<i>Network/Telecom Analyst IV</i>
2	<i>Network/Telecom Analysts III</i>
1	<i>Communications Engineer</i>
3	<i>Communications Technicians</i>
1	<i>Electronic Equipment Supervisor</i>
2	<i>Electronic Equipment Technicians II</i>
1	<i>Assistant Buyer</i>
<u>1</u>	<i>Administrative Assistant III</i>
12	<i>Positions</i>
12.0	<i>Staff Years</i>

(-) Denotes Abolished Position
(T) Denotes Transferred Position

Positions in italics are supported by Fund 505

FUND 505 TECHNOLOGY INFRASTRUCTURE SERVICES

Agency Mission

To provide the underlying technology required to assist County agencies in providing effective support to the citizens.

Agency Summary					
Category	FY 2002 Actual	FY 2003 Adopted Budget Plan	FY 2003 Revised Budget Plan	FY 2004 Advertised Budget Plan	FY 2004 Adopted Budget Plan
Authorized Positions/Staff Years					
Regular	70/ 70	70/ 70	70/ 70	69/ 69	69/ 69
Expenditures:					
Personnel Services	\$5,025,405	\$5,225,099	\$5,225,099	\$5,351,605	\$5,320,526
Operating Expenses	11,346,693	13,331,139	14,986,289	16,250,069	16,250,069
Capital Equipment	1,179,110	1,220,098	1,774,304	1,079,098	1,079,098
Total Expenditures	\$17,551,208	\$19,776,336	\$21,985,692	\$22,680,772	\$22,649,693

Board of Supervisors' Adjustments

The following funding adjustments reflect all changes to the FY 2004 Advertised Budget Plan, as approved by the Board of Supervisors on April 28, 2003:

- ◆ A decrease of \$31,079 in expenditures and revenue from County agencies reflects reduced funding for the Pay for Performance program. Based on the approved 25 percent reduction, the FY 2004 program will result in reductions in the increases employees will receive based on their performance rating, capping employees to a maximum of 5.25 percent. This adjustment leaves in place the Pay for Performance program in preparation for system redesign for FY 2005.
- ◆ A decrease of \$920,267 in PC Replacement Program revenue is a result of a further reduction in the annual amount collected per PC, from \$500 to \$400.

The following funding adjustments reflect all approved changes to the FY 2003 Revised Budget Plan from January 1, 2003 through April 21, 2003. Included are all adjustments made as part of the FY 2003 Third Quarter Review:

- ◆ An increase of \$663,057, completely offset with an appropriation from fund balance, to purchase additional Windows 2000 Licenses resulting in enhanced desktop management capabilities and to replace a mainframe printer that has reached the end of its useful life.

FUND 505

TECHNOLOGY INFRASTRUCTURE SERVICES

County Executive Proposed FY 2004 Advertised Budget Plan

Purpose

The Department of Information Technology (DIT) coordinates all aspects of information technology for the County and plays an enabling role in advancing the strategic value of technology to transform work processes and provide quality services to customers. Funding for DIT activities is included in the General Fund and in two Funds that DIT manages. Fund 505, Technology Infrastructure Services, includes technology activities performed for County agencies, such as Data Center operations, enterprise data communications network, Radio Center services, and E-911 communications. Fund 104, Information Technology, funds major information technology projects including those with countywide strategic importance, such as infrastructure and application system modernization initiatives.

All Fund 505 costs are recovered from its customers, and expenditures are primarily driven by customers' requests for information technology (i.e., public safety radio system maintenance, enhanced telecommunications services, and, use of the data center infrastructure utility like system processing and data storage requirements, required software maintenance and licenses, etc.).

Technology Infrastructure Services provides intra-governmental services including the operation and maintenance of the County computer center 24 hours a day, seven days per week, maintaining the County data and radio communication networks, and providing integrated communication service to all County agencies and other government customers. In FY 2004, surcharge of less than one percent will be added to Infrastructure Charges to rebuild reserves for the future replacement and upgrade of enterprise servers (mainframe and other platforms) computer equipment.

DIT also manages a PC replacement fund in Fund 505, ensuring funding is available for future PC replacements to remain consistent with the advancements in technology. For each PC replaced, an amount of \$600 has been collected per year over a period of four years, based on the estimated life cycle and future replacement cost. However, in FY 2004, based on an initial review of the PC Replacement program by County staff it is recommended that the annual amount collected per PC be reduced to \$500. This step is the beginning of a larger, comprehensive review of the program, both in terms of funding and operation. Industry experts continue to stress the validity and essential nature of the County's refresh cycle at the desktop.

DIT is responsible for coordinating radio repair and engineering support to County agencies and the Fairfax County Public School system. In FY 2004, DIT will maintain 217 base stations, 8,466 portable radios, and mobile units utilizing both County employees and contracts with outside vendors. Operational maintenance of the radio network is of primary importance to the County public safety agencies, public works agencies, Fairfax County Public Schools, and other County agencies.

Key Accomplishments

- ◆ Implemented Virtual Private Network (VPN) technology to enhance secure remote processing. VPN technology allows authorized users to access the enterprise resources regardless of their location via the Internet.
- ◆ Upgraded the cable within the Government Center campus to the industry standard of Category 5E. This upgrade allows users to benefit from the increased data transfer speed capabilities of new hardware and software applications.
- ◆ Provided expanded telephone services and enhanced maintenance of critical communications requirements by replacing telephone systems at 25 sites and installing full telephone systems at 4 new County sites.
- ◆ Performed full engineering planning and design and implemented voice telecommunications services in the new South County building for major moves of Human Services and DPWES staff.

FUND 505

TECHNOLOGY INFRASTRUCTURE SERVICES

- ◆ Completed Phase II of the Wide Area Network (WAN) upgrade to increase network bandwidth capacity and speed of the enterprise network at 73 field sites and provide redundant data paths to facilitate increase system availability and reliability consistent with data communications requirements of distributed systems.
- ◆ Purchased, configured, and installed over 1,700 PC's under the PC Replacement Program reducing the total number of PC running outdated software and operating systems.
- ◆ Implemented a more robust firewall technology and provided additional perimeter security to the enterprise network.
- ◆ Implemented software and hardware monitoring agents on critical applications servers that provide the capability for data center staff to efficiently monitor and execute jobs on multiple platforms.
- ◆ Implemented the first phase of a Storage Area Network (SAN) solution to consolidate enterprise data storage on one platform to insure critical systems backup and restore capability plus provide dynamic space reallocation as business needs require.

FY 2004 Initiatives

- ◆ Complete the second phase redesign the County's data network to improve redundancy, capacity, security, and flexibility to meet the needs of new applications.
- ◆ Implement a new enterprise wide security architecture that will take advantage of recent technology upgrade and monitoring capability.
- ◆ Conduct a review of the PC Replacement Program to maximize County resources, while ensuring the ability to keep pace with the changing IT environment.
- ◆ Continue the enterprise operation center modernization effort to improve operational effectiveness and optimize a failsafe environment.
- ◆ Implement a full network monitoring and management initiative to accurately reflect the network's health and proactively respond to network issues before impacting County users. Continue to improve redundancy and flexibility to meet the County's Business Continuity Requirements.
- ◆ Complete the implementation of the Multi-phase Network Security Perimeter to include a multiple firewall strategy to protect corporate data and to meet Health Insurance Portability and Accountability Act (HIPAA) and other privacy and security concerns.
- ◆ Implement several wireless initiatives to include point-to-point wireless networks as backup circuits for both the Government Center and Massey Campuses.

FY 2004 Budget Reductions

As part of the FY 2004 Advertised Budget Plan, reductions totaling \$105,368 and 1/1.0 SYE positions are proposed by the County Executive for this agency. These reductions include:

- ◆ Reduction of \$60,536 and 1/1.0 SYE System Programmer I position resulting in delays and disruptions as other staff absorb the function of evaluating, implementing and maintaining software packages to ensure they meet specifications, function properly, and are installed so that disruption to service is minimized.
- ◆ Reduction of \$44,832 in vendor contracts resulting in a reprioritization of activities planned for FY 2004.

FUND 505

TECHNOLOGY INFRASTRUCTURE SERVICES

Funding Adjustments

The following funding adjustments from the FY 2003 Revised Budget Plan are necessary to support the FY 2004 program:

- ◆ A net increase in Personnel Services of \$126,506, including an increase of \$187,042 associated with salary adjustments necessary to support the County's compensation program, and a decrease of \$60,536 and 1/1.0 SYE associated with the County Executive's proposed reductions.
- ◆ A net increase of \$1,678,453 in Operating Expenses primarily due to an increase of \$1,244,067 in funding for purchasing PCs due to be replaced under program; \$158,484 for server maintenance; \$101,940 for equipment maintenance; \$445,592 for increased telecommunication requirements to support new applications and redundancy in the system; and \$700,000 for the third year of a five year Enterprise Network program, partially offset with a decrease of \$1,240,477 in one-time carryover and \$44,832 in vendor contracts associated with the County Executive's proposed reductions.
- ◆ Capital Equipment funding totals \$1,079,098 including \$404,000 for upgrades to the mainframe funded through the Computer Equipment Replacement Fund (CERF), including additional capacity and upgrades to the operating system software, \$400,000 for replacement servers and \$275,098 for replacement equipment as part of a multi-year Enterprise Network equipment replacement program.

The following funding adjustments reflect all approved changes to the FY 2003 Revised Budget Plan since passage of the FY 2003 Adopted Budget Plan. Included are all adjustments made as part of the FY 2002 Carryover Review and all other approved changes through December 31, 2002:

- ◆ As part of the *FY 2002 Carryover Review*, an increase of \$1,546,299 in encumbered carryover, including \$1,240,477 in Operating Expenses and \$305,822 in Capital Equipment.

Performance Measures

Objectives

- ◆ To maintain the number of business days to fulfill Telecommunications service requests for non-critical requests at a standard of 4 days.
- ◆ To maintain the number of business days to fulfill Telecommunications service requests for critical requests at a standard of two days.
- ◆ To maintain the number of business days to fulfill Telecommunications service requests for emergencies within the same day.
- ◆ To ensure that 70 percent of LAN/PC workstation calls to Technical Support Services are closed within 72 hours.
- ◆ To improve the resolution rate for the average first-call problem for the Technical Support Center (TSC), DIT Help Desk by one percentage point from 91 percent to 92 percent.

FUND 505

TECHNOLOGY INFRASTRUCTURE SERVICES

Indicator	Prior Year Actuals			Current Estimate	Future Estimate
	FY 2000 Actual	FY 2001 Actual	FY 2002 Estimate/Actual	FY 2003	FY 2004
Output:					
Responses to call for repairs (voice)	5,230	5,335	6,560 / 5,356	6,785	7,124
Moves, adds, or changes (voice and data) (1)	7,463	8,265	8,500 / 8,435	7,650	7,325
Calls resolved	12,454	17,503	18,378 / 21,769	19,500	18,750
Help desk calls (data)	2,345	2,265	1,835 / NA	1,625	NA
Customer requests for service fulfilled by Technical Support Center (TSC)	36,873	38,869	41,000 / 54,259	43,050	42,500
Efficiency:					
Cost per call	\$109	\$120	\$125 / \$125	\$110	\$105
Average number of hours annually spent per staff member to resolve calls	1,407	1,407	1,407 / 1,407	1,407	1,407
Customer requests for service per TSC staff member	4,097	3,886	4,100 / 4,933	4,305	3,864
Service Quality:					
Customer satisfaction with telecommunication services	NA	84.0%	88.0% / 88.0%	95.0%	95.0%
Percent of customers reporting satisfaction with resolution of LAN/PC workstation calls (2)	NA	91%	91% / 91%	75%	80%
Percent satisfaction of County employees with support from Technical Support Center	86%	84%	87% / 88%	90%	90%
Outcome:					
Business days to fulfill service requests from initial call to completion of request for non-critical requests	15	14	10 / 4	4	4
Business days to fulfill service requests from initial call to completion of request for critical calls	7	6	5 / 2	2	2
Business days to fulfill service requests from initial call to completion of request for emergency calls	3	3	2 / 3	1	1
Percent of calls closed within 72 hours	100%	57%	65% / 68%	70%	70%
Percent of first-contact problem resolution	69%	60%	65% / 89%	91%	92%

(1) The implementation of Voice over IP in FY 2003 will reduce moves, adds, or changes in the future, thereby reducing overall calls for assistance.

(2) A decrease in satisfaction is anticipated in FY 2003 because of a scheduled Architecture Refresh program which will result in increased support requirements.

FUND 505 TECHNOLOGY INFRASTRUCTURE SERVICES

FUND STATEMENT

Fund Type G50, Internal Service Funds

Fund 505, Technology Infrastructure Services

	FY 2002 Actual	FY 2003 Adopted Budget Plan	FY 2003 Revised Budget Plan	FY 2004 Advertised Budget Plan	FY 2004 Adopted Budget Plan
Beginning Balance	\$8,991,875	\$8,326,154	\$11,265,982	\$9,555,671	\$8,892,614
Revenue:					
Radio Services Charges	\$500,441	\$821,674	\$821,674	\$842,799	\$842,799
PC Replacement Charges	5,519,800	5,152,800	5,152,800	4,592,533	3,672,266
DIT Infrastructure Charges					
County Agencies and Funds	12,436,081	12,211,367	12,211,367	13,574,594	13,543,515
Fairfax County Public Schools	1,140,457	1,206,758	1,206,758	1,562,586	1,562,586
Outside Customers	228,536	219,725	219,725	178,594	178,594
Subtotal DIT Infrastructure Charges	<u>\$13,805,074</u>	<u>\$13,637,850</u>	<u>\$13,637,850</u>	<u>\$15,315,774</u>	<u>\$15,284,695</u>
Total Revenue	<u>\$19,825,315</u>	<u>\$19,612,324</u>	<u>\$19,612,324</u>	<u>\$20,751,106</u>	<u>\$19,799,760</u>
Total Available	\$28,817,190	\$27,938,478	\$30,878,306	\$30,306,777	\$28,692,374
Expenditures:					
Personnel Services	\$4,691,545	\$4,759,571	\$4,759,571	\$4,869,923	\$4,838,844
Operating Expenses	8,030,555	9,523,026	10,118,447	11,016,201	11,016,201
Capital Equipment	371,459	675,098	929,768	675,098	675,098
Computer Equipment					
Replacement Expenditures	3,525,843	4,273,641	4,981,181	5,715,550	5,715,550
Capacity Upgrade to Mainframe Computer	931,806	545,000	1,196,725	404,000	404,000
Total Expenditures ¹	<u>\$17,551,208</u>	<u>\$19,776,336</u>	<u>\$21,985,692</u>	<u>\$22,680,772</u>	<u>\$22,649,693</u>
Total Disbursements	\$17,551,208	\$19,776,336	\$21,985,692	\$22,680,772	\$22,649,693
Ending Balance	\$11,265,982	\$8,162,142	\$8,892,614	\$7,626,005	\$6,042,681
Infrastructure Replacement Reserve (CERF) ²	\$3,011,201	\$299,788	\$355,037	\$196,763	\$196,763
PC Replacement Reserve ³	8,254,781	7,862,354	8,537,577	7,429,242	5,845,918
Unreserved Balance	\$0	\$0	\$0	\$0	\$0

¹ In order to account for revenues and expenditures in the proper fiscal year, an audit adjustment in the amount of \$103,624 has been reflected as an increase to FY 2002 expenditures to reflect accrued compensated absences to the actual amount owed in FY 2002. The audit adjustment has been included in the FY 2002 Comprehensive Annual Financial Report (CAFR).

² A surcharge of less than one percent is applied to Infrastructure Charges to build long-term reserves for scheduled replacement of mainframe computer and network assets. The funds are held in this computer equipment replacement fund (CERF).

³ The balance in the PC Replacement Reserve fluctuates annually based on scheduled PC replacements which are on a four-year replacement cycle.