

Information Technology

The Information Technology Department manages four separate funds, all of which are presented in this section, that provide all of the technology services county-wide including infrastructure, program development, support and maintenance, data systems, and geographic information systems. Information Technology is responsible for three divisions: Administration and Strategic Planning, Software Development and IT Operations, which includes Telecommunications. The new REET Electronic Technology Fund has also been placed in this section as it is technology related and the IT Department will have shared oversight of the activities in this account.

Major Accomplishments in 2007

Activity during 2007 in the **Auditor’s Maintenance & Operations Fund** involved two major projects. For the Auditor’s Office the “Tech Refresh Project” replaced existing servers used for Anthem, IPAM, e-Recording, and Automated Indexing and migrated application and data to new Dell hardware. The project began June 18th and was completed December 26th. Information Technology staff assisted the Assessor/Treasurer’s Office with the “Imaging and Electronic Document Management System” project, nicknamed “DocMan”. The project was fully implemented June 4th and as of December 6th, per the Assessor/Treasurer’s office, over one million pages of tax documents have been successfully scanned into the System.

Geographic Information Systems (GIS) delivered services to local engineering/development companies by developing the Critical Areas web site in which reports of a parcel’s potential environmental impacts and regional subscription services to CountyView Web are made available to companies. GIS developed a QuickView version for the City of Puyallup, and the PALS QuickView system was modified for the transportation impact fee calculations. GIS created the Half Dollar Properties web site for the land sale and upgraded the Parks and Survey Monument web sites. GIS analysis projects were completed for: District Court facility siting, the Food Bank relocation, a publicly available traffic volume map and evacuation planning for vulnerable populations. New GIS database development included: redesign of the parcel database, GPSing fire hydrants for Puyallup Fire and East Pierce Fire, quality control was completed on the two foot contour database and the first phase of the parcel site address project was completed. To accommodate growth, the GIS data storage system was increased by 100% to 21 terabytes. GIS support and training included: 60 public requests for GIS data, training over 300 staff, surpassing the 100 class mark for CountyView Web training, providing over 1,400 hours subscriber support, and updating the 9-11 centers map databases quarterly. Most importantly, GIS provided on-site EOC software/GIS support for: the Foss and McIlvaigh school shootings, the reverse 9-11 callout system, the three day wind storm and the five day flood event where GIS coordinated helicopter flights to map the high water and damage. On the new technology front, GIS integrated an advanced GPS web-based asset location system with the County’s enterprise GIS.

In 2007 **IT Operations** spent considerable effort improving security at the County. IT Ops instigated the creation of and chaired the County’s Lenel Core Team which guided and oversaw the implementation of new enterprise standard Lenel security systems at seven buildings. The first 100 network cameras for Lenel are operating over our IP network, with several hundred more queued up to be installed. We coordinated the bi-annual vulnerability assessment and are now addressing the identified issues and in particular a need to increase security at our Data Centers. Elsewhere in the security arena we implemented new firewall technology and kicked off a “Secure IT” project to expand use of best practices to protect us from internal security threats. IT Ops led the project management efforts of working with Emergency Management to build a second data center at the new, hardened EOC. We filled two positions this year dedicated to the on-going management of our expanded and more complex IT equipment facilities and continued on our path of improving layouts, organization, security and hardiness of County IT equipment rooms to better model industry best practices.

Section Contents	
Auditor’s Maintenance & Operations Fund.....	227
Geographic Information System Fund.....	229
Information Technology Fund.....	233
REET Electronic Technology Fund	237

Partnering with **Software Development** we implemented a fault tolerant virtual server complex to speed up server deployment and decrease server hardware costs. We completed a major upgrade of the IBM operating system and supported deployment of the new Assessor/Treasurer DOCMAN system. With consultants, we analyzed storage area network (SAN) solutions and whether the County should migrate to a Microsoft platform for email, file storage, and software distribution. The SAN advice was to move ahead so we implemented phase one of our SAN vision by providing shared storage for the VM server complex; the migration advice was to remain with the current Novell platform but review again in a couple years. We streamlined the PC deployment process taking advantage of our new Denali contract to roll out PCs more efficiently with less hassle. IT Ops partnered with Software Development to combine and automate our Incident Management System. We worked with a graphics artist to improve the look and feel of our web applications to help users be more productive. We initiated more conversations about the need for email archiving and search tools as part of an increasing workload related to supporting external requirements for access to contents from the email system. We continued our efforts towards the Greening of IT, looking for ways to decrease the carbon footprint of IT here in Pierce County government. We evaluated and purchased a new contact center solution product to assist call centers throughout our organization. On the R&D side, we continued to test Microsoft Vista, Z/OS DB2 Version 8 and Sybase 15 for rollout in 2008. We also began working with the GIS division and their open source web mapping project, began a year-long test of IP Telephony, and chose a new enterprise backup solution.

Software Development continues to put a high priority on training so that it can produce modern systems of high quality. The entire division attended estimating techniques training taught by an industry expert and a majority of the division attended "Object Oriented Analysis and Design". Software Development continues to increase its development of web-based applications and its utilization of open source software. Software Development worked on 117 projects in 2007. The following are some highlights: Sexual Assault Restraining Order Kiosks where deployed simplifying the process for victims of providing information required by the courts. The first release of legislation management software was delivered to the Pierce County Council. The primary goals of this web-based project are to streamline the process that begins with an initial proposal and ends with a new ordinance or resolution, and make as much information as possible available to citizens. The County's HR systems were integrated with the Lenel physical security system that was installed in several buildings. A new consolidated, web-based system named MyIT was rolled out. The system is used to track service requests, incident responses, projects, and equipment for IT Operations and Software Development. Public Works and Utilities was the only Washington county to receive accreditation from the American Public Works Association. Among the seven best practices cited were three systems developed by Software Development. New versions of PALS+ were released. PALS staff now calculates commercial TIF fees, merge customer records, and move data associated with segregated parcels. Users of the PALS web application can now modify addresses and request and pay for a CARLS report. A web-based Project Status Report system was created for Public Works supervisors. Software Development assisted the Assessor/Treasurer's office in the design, development, and deployment of a standalone electronic document management package (Stellent IBPM) dubbed DocMan. The search and retrieval systems for the Executive's scanned resolutions and ordinance documents was added to the County's public web site. The HR letters generated for applicants and new hires in Application Notification Tracking were significantly enhanced. Web-based journal entries (TC 90's) were added to DOLFIN system. Numerous improvements were added to Utilities' web-based Sewer Billing system. The HP 3000 data entry system for the mainframe was replaced by a new PC-based system. Human Services' Regional Support Network (RSN) system was enhanced to meet Washington State's new requirements. The employee payroll check and pay stub printing system was moved from the mainframe to a PC-based system.

The Administration & Strategic Planning team provided support for a wide variety of projects including but not limited to data collection for succession planning and recruitment, creation of a study group to investigate digital retention and archiving issues, creation of a new process and guidelines for review of new information technology projects, departmental strategic information technology planning, facilities and space issues, safety issues, IT research and advisory services, emergency preparedness, business continuity planning, and department status reporting. We were members of the Pacific Northwest Digital Government Summit Advisory Board and participated in a successful conference at the Tacoma Convention Center.

Information Technology

DEPARTMENT BUDGETS

Department Name	2007 Budget	2008 Budget	Absolute Change	Percent Change
Auditor's Maint & Oper Fund	\$ 1,577,540	\$ 1,493,790	\$ (83,750)	(5.3) %
GIS Fund	3,652,190	4,286,870	634,680	17.4
Information Technology Fund	18,732,200	19,614,040	881,840	4.7
REET Electronic Technology Fund	211,700	300,000	88,300	41.7
Total Information Services	\$ 24,173,630	\$ 25,694,700	\$ 1,521,070	6.3 %

Auditor's Maintenance & Operations Fund

Special Revenue Fund

Departmental Summary:

The Auditor's Maintenance and Operation Fund receives a portion of a surcharge on each document recorded by the County Auditor. According to state law, half of the surcharge is retained by the County to be used for the ongoing preservation of historical documents. The other half is remitted to the State of Washington Centennial Document Preservation and Modernization Fund. A portion of the state's share is returned to each county to be used for the installation and maintenance of an improved system for copying, preserving, and indexing documents recorded by the County.

Budget Highlights:

The 2008 Auditor's Maintenance and Operations Fund (also known as the Imaging Fund) provides for the following major items:

Proposed Budget -

- a) Auditors Staff (one new Clerical Aide, two Existing Aides transferred from the General Fund, two Recording Technicians currently budgeted in this fund);
- b) A new ITS 3 to support County-wide policies/procedures/system development and coordination;
- c) Redaction Software Services (Auditor's Office);
- d) Conversion to Digital Records (Auditor's Office);
- e) Annual Hardware/Software System Maintenance Contracts (Auditor's Office);
- f) IT Software (redaction and internet programs);
- g) PALS Files recording project (initial phase \$50,000); and
- h) A Public Works Electronic Records Management System Project (\$560,000).

FUNDING SOURCES						
	2005	2006	2007	2008	Absolute	Percent
	Actual	Actual	Budget	Budget	Change	Change
Est Use of Begin Fund Balance	\$ —	\$ —	\$ 677,540	\$ 593,790	\$ (83,750)	(12.4) %
Intergovernmental Revenue	174,304	295,224	300,000	300,000	—	—
Charges for Services	499,513	664,447	600,000	600,000	—	—
Miscellaneous Revenue	—	20	—	—	—	—
Other Financing Sources	220,000	—	—	—	—	—
Total	\$ 893,817	\$ 959,691	\$ 1,577,540	\$ 1,493,790	\$ (83,750)	(5.3) %

Auditor's Maintenance & Operations Fund

EXPENDITURES						
	2005	2006	2007	2008	Absolute	Percent
	Actual	Actual	Budget	Budget	Change	Change
Salaries & Wages	\$ 20,127	\$ 68,069	\$ 73,870	\$ 307,360	\$ 233,490	316.1 %
Personnel Benefits	7,153	24,485	35,540	120,290	84,750	238.5
Supplies	31,597	86,817	126,160	41,820	(84,340)	(66.9)
Other Services & Charges	394,289	561,826	853,860	1,024,320	170,460	20.0
Capital Outlays	—	5,295	488,110	—	(488,110)	(100.0)
Total	\$ 453,166	\$ 746,492	\$ 1,577,540	\$ 1,493,790	\$ (83,750)	(5.3) %

STAFFING SUMMARY						
	2003	2004	2005	2006	2007	2008
	FTE	FTE	FTE	FTE	FTE	FTE
Information Tech Spec	—	—	—	—	—	1.00
Recording/Licensing Technician	—	—	—	2.00	2.00	1.70
Clerical Aide	—	—	—	—	—	3.00
Office Assistant	0.50	0.50	0.50	0.50	—	—
Total	0.50	0.50	0.50	2.50	2.00	5.70

Geographic Information System Fund

Special Revenue Fund

Departmental Summary:

Pierce County uses geographic information to perform a variety of activities related to property assessment, planning, public works, voter registration, health and emergency services, and numerous other tasks. The information is both graphic (maps) and non-graphic (manual and automated tabular files). The GIS project is funded to provide staff, hardware, software, and support resources to client departments who utilize GIS services and are participating in development of the system.

Budget Highlights:

The 2008 GIS budget includes the following items of note:

- a) Normal inflationary increases for staff any other operating expenses;
- b) County-wide software acquisition, system maintenance support, and server rentals;
- c) The purchase of software and equipment for a countywide AVL;
- d) An additional ITS position in place of an existing consulting contract;
- e) Building Trends Analysis software and data development to analyze county growth trends; and
- f) Two new office assistant positions to work on the Address Verification Project.

Performance Measures

- | | |
|---|--|
| <p>1) GIS will evaluate alternative licensing and funding approaches for the development and procurement of an updated countywide orthophotography dataset. GIS will survey county departments on their imagery needs and match needs with state-of-the-art</p> | <p>orthophotography products. The optimal product will supply accurate imagery and enable new image uses at a lower cost. GIS will perform the management, procurement, quality control and implementation of the dataset by 12/31/08. (Goals C, E, H)</p> |
|---|--|

FUNDING SOURCES												
	2005		2006		2007		2008					
	Actual		Actual		Budget		Budget					
							Absolute Change					
							Percent Change					
Est Use of Begin Fund Balance	\$	—	\$	—	\$	362,690	\$	975,720	\$	613,030	169.0	%
Intergovernmental Revenue		76,500		13,697		7,500		7,500		—	—	
Charges for Services		226,077		431,410		291,000		323,000		32,000	11.0	
Miscellaneous Revenue		143,169		314,722		200,000		100,000		(100,000)	(50.0)	
Other Financing Sources		2,284,390		2,222,099		2,791,000		2,880,650		89,650	3.2	
Total	\$	2,730,136	\$	2,981,928	\$	3,652,190	\$	4,286,870	\$	634,680	17.4	%

Geographic Information System Fund

PROGRAM EXPENDITURES

	2007 FTE	2008 FTE	2007 Budget	2008 Budget	Absolute Change	Percent Change
Administration	2.30	2.30	\$ 915,380	\$ 953,250	\$ 37,870	4.1 %
Pierce Responder	1.00	1.00	123,840	149,270	25,430	20.5
Database Development	16.70	19.70	2,535,970	2,769,770	233,800	9.2
Orthophotography/Contours	—	—	77,000	414,580	337,580	438.4
Total	20.00	23.00	\$ 3,652,190	\$ 4,286,870	\$ 634,680	17.4 %

STAFFING SUMMARY

	2003 FTE	2004 FTE	2005 FTE	2006 FTE	2007 FTE	2008 FTE
GIS Manager	1.00	1.00	1.00	1.00	1.00	1.00
Information Tech Spec	10.00	12.00	12.00	13.00	14.00	15.00
GIS Technician	5.00	4.00	4.00	5.00	5.00	5.00
GIS Project Coordinator	1.00	—	—	—	—	—
Office Assistant	—	—	—	—	—	2.00
Total	17.00	17.00	17.00	19.00	20.00	23.00

WORKLOAD SERVICE DATA

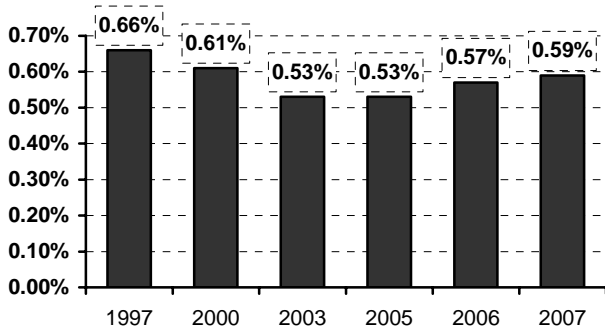
	Unit of Measure	2003 Actual	2004 Actual	2005 Actual	2006 Actual	2007 Estimate	2008 Estimate
GIS Data Storage	Gigabytes	650	3,000	6,000	9,000	12,000	17,000
CountyView Users ¹	Persons	500	700	700	790	800	900
Application Development	Hours	15,520	13,728	12,800	10,618	11,468	13,598
Support/Training	Hours	4,320	10,400	10,400	9,035	6,969	7974
Database Construction/Maint/Mgt	Hours	15,520	11,440	10,520	12,799	18,593	17,868
Data Requests Processed ²	Number	140	153	190	214	150	70
Subscribers	Persons	—	—	75	90	155	200

¹New technology acquired in 2004 (IBM Blades).

²Companies will sign up to directly access CountyView Web as subscribers

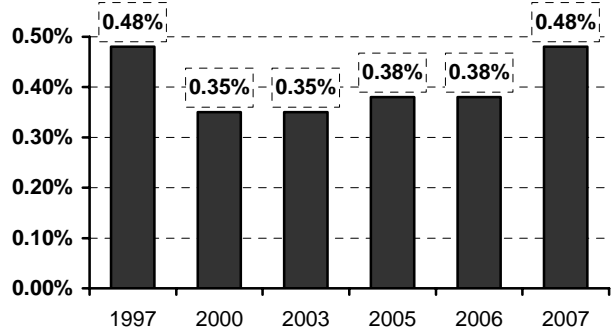
BUDGET RATIOS

Percent of Total County Employees



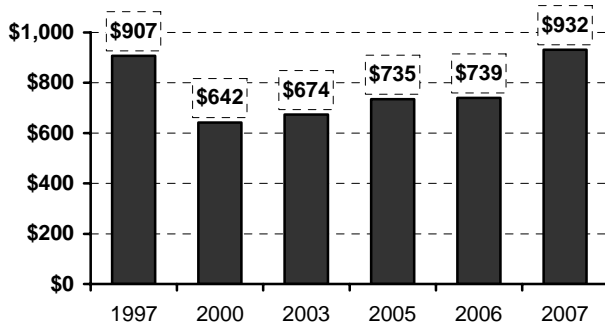
❖ From 1997 to 2007 GIS employees as a percent of all County regular employees decreased 10%. The ten year average is 0.57%.

Percent of Total County Expenditures



❖ From 1997 to 2007 GIS expenditures, excluding Orthophotography/Contours costs, as a percent of all County expenditures was unchanged. The ten year average is 0.39%.

Expenditures per County Employee



❖ From 1997 to 2007 GIS expenditures per County regular employee increased 3% after adjusting for inflation. The ten year average is \$731.

Geographic Information System Fund

Information Technology Fund

Internal Service Fund

The Information Technology Department delivers solution-oriented information technology services that empower and support our customers in the accomplishment of their missions.

Departmental Summary:

Administration and Strategic Planning facilitates the development of the County's information technology plans, provides fiscal and administrative support and services to the department and performs special projects.

Software Development writes, acquires, modifies, tests and implements new or modified application systems.

IT Operations manages and maintains both the County's centralized and distributed computing environments including all client computers, all servers, the data and voice networks, external connectivity, messaging systems, infrastructure security, multiple data centers, a Service Desk Call Center, voice communications, and support for a wide variety of applications.

Budget Highlights:

The Information Technology Fund budget for fiscal 2008 is 4.7% above the prior year's level. This budget reflects the following items:

- a) Inflationary increases for existing staff and services;
- b) Infrastructure software and hardware expenses necessary to support or enhance the county systems; and
- c) The addition of three Information Technology Specialist positions for 1) strategic planning efforts and 2) outsourced staff for the Auditor's and Sewer Utility departments projects.

Performance Measures

- 1) By the end of 2008, we will establish Data Center 2, a secure and disaster resistant data center facility, within the County's hardened Emergency Operations Center (EOC). This will improve the County's ability to continue business operations during service disruptions including a disaster or major emergency by enabling 50% of the major County business systems to continue to operate if the main Data Center 1 becomes inoperable. (Goals E, G, H, J, K, L)
- 2) Migrate to a centralized, fault-tolerant messaging infrastructure that will partially meet the County's business continuity electronic communication needs as outlined in the Continuity of Operations Plans. The enhancement will result in 8,000 additional hours of email availability over the course of a year. (Goals H, K, L)
- 3) Deploy Windows Vista as an additional supported operating system by 4th quarter 2008 using current staffing levels. (Goal H)
- 4) Improve the efficiency of County business operations by deploying additional on-line processing capabilities via the Pierce County Internet site for County business functions (LINX, PALS Online, and Online Jobs) and increasing the number of 2008 site visits by 15% over 2007. (Goals E, H)
- 5) The Information Technology Department Director will conduct interviews with all county departments by year end to gather customer feedback on service and efficiency levels, and projected trends/services either planned within their departments, or desired through ITD. (Goals E, H)

Information Technology Fund

FUNDING SOURCES						
	2005	2006	2007	2008	Absolute	Percent
	Actual	Actual	Budget	Budget	Change	Change
Est Use of Begin Fund Balance	\$ —	\$ —	\$ 394,980	\$ 322,410	\$ (72,570)	(18.4) %
Charges for Services	15,302,579	16,373,086	18,262,830	19,291,630	1,028,800	5.6
Miscellaneous Revenue	2,395	15,123	—	—	—	—
Other Financing Sources	143,663	192,740	74,390	—	(74,390)	(100.0)
Total	\$ 15,448,637	\$ 16,580,949	\$ 18,732,200	\$ 19,614,040	\$ 881,840	4.7 %

PROGRAM EXPENDITURES						
	2007	2008	2007	2008	Absolute	Percent
	FTE	FTE	Budget	Budget	Change	Change
Information Tech Acq Pgm	0.15	0.15	536,590	419,890	(116,700)	(21.7) %
Admin/Special Projects	17.48	18.48	2,408,470	2,357,470	(51,000)	(2.1)
Telecommunications	6.60	6.60	1,763,550	1,638,430	(125,120)	(7.1)
PC Lifecycle	0.29	0.29	343,270	362,950	19,680	5.7
IT Operations	56.98	58.98	6,796,450	7,277,430	480,980	7.1
Software Development	34.00	34.00	4,606,990	4,714,040	107,050	2.3
Enterprise Infrastructure	—	—	2,276,880	2,843,830	566,950	24.9
Total	115.50	118.50	\$ 18,732,200	\$ 19,614,040	\$ 881,840	4.7 %

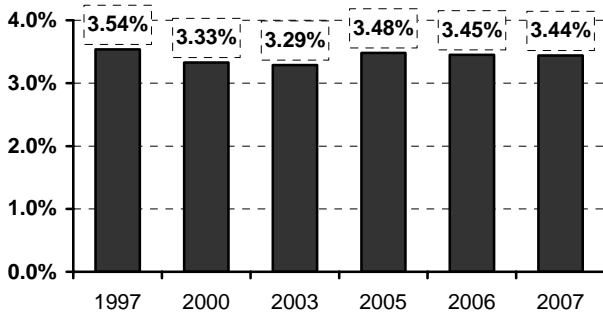
WORKLOAD SERVICE DATA						
	Unit of Measure	2003 Actual	2004 Actual	2005 Actual	2006 Actual	2007 Estimate
Software Development Time	Hours	56,494	51,570	50,241	52,579	54,538
IT Operations Billable Time	Hours	35,479	36,427	38,920	37,857	37,345
Users of Pierce County Systems	Number	3,546	3,600	3,644	3,693	3,743
Personal Computers Supported	Number	4,529	4,535	4,860	4,999	5,015
Personal Computers Purchased	Number	753	1,025	1,043	992	900
DASD Storage	Gigabytes	3,150	19,925	25,133	35,200	48,369
Service Desk Calls	Number	8,677	11,462	11,499	12,051	13,100
Telecommunications Wrk Orders	Number	281	308	289	283	300

Information Technology Fund

STAFFING SUMMARY						
	2003 FTE	2004 FTE	2005 FTE	2006 FTE	2007 FTE	2008 FTE
Dir – Information Technology	1.00	1.00	1.00	1.00	1.00	1.00
Communication Supv — IT	1.00	1.00	1.00	1.00	1.00	1.00
Information Tech Spec	70.00	77.00	79.00	85.00	88.00	91.00
Admin/Strategic Plng Mgr	1.00	1.00	1.00	1.00	1.00	1.00
PC & Network Services Mgr	1.00	1.00	1.00	1.00	1.00	1.00
Software Development Mgr	1.00	1.00	1.00	1.00	1.00	1.00
Fiscal Services Manager	1.00	1.00	1.00	1.00	1.00	1.00
Production Services Mgr	1.00	1.00	1.00	1.00	1.00	1.00
Help Desk Specialist	2.00	3.00	3.00	3.00	2.00	2.00
Operator/Network Tech	7.00	5.00	5.00	5.00	5.00	5.00
Telecomm Network Spec	1.00	1.00	1.00	1.00	2.00	2.00
Telecommunications Coord	2.00	2.00	2.00	2.00	2.00	2.00
Supervisory Admin Asst	—	—	—	—	1.00	1.00
Information Tech Trainee	1.00	2.00	1.00	3.00	3.00	3.00
Administrative Aide	2.00	2.00	2.00	1.00	1.00	1.00
Accounting Assistant	1.00	2.00	2.00	2.00	2.00	2.00
Data Entry Tech	2.00	2.00	2.00	0.50	0.50	0.50
Office Assistant	3.00	3.00	3.00	2.00	2.00	2.00
Telecommunications Tech	1.00	1.00	1.00	1.00	—	—
Administrative Assistant	1.00	1.00	1.00	1.00	—	—
Permit/Dev Counter Tech	1.00	1.00	1.00	—	—	—
Operations Supervisor	1.00	1.00	1.00	1.00	—	—
Total	102.00	110.00	111.00	114.50	115.50	118.50

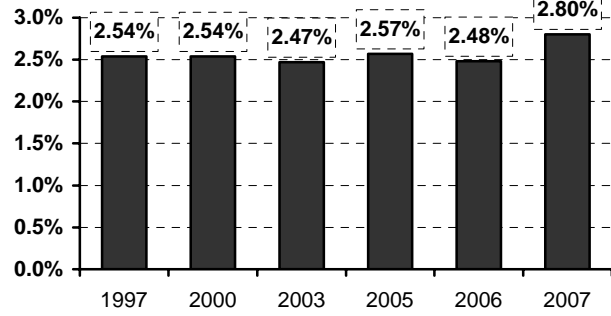
BUDGET RATIOS

Percent of Total County Employees



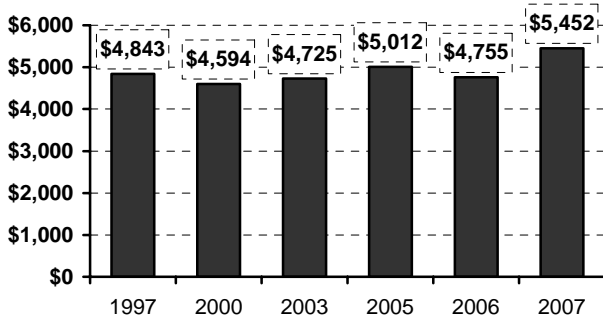
❖ From 1997 to 2007 Information Services Department employees as a percent of all County employees decreased 3%. The ten year average is 3.4%.

Percent of Total County Expenditures



❖ From 1997 to 2007 Information Services Department expenditures as a percent of total County expenditures increased 11%. The ten year average is 2.58%.

Expenditure per County Employee



❖ From 1997 to 2007 Information Services Department expenditures per County employee increased 13% after adjusting for inflation. The ten year average is \$4,850.

REET Electronic Technology Fund

Special Revenue Fund

Departmental Summary:

New State legislation enacted a \$5 recording filing fee increase (effective July 1, 2005) to provide funds to develop automated systems that allow counties to send real estate excise tax affidavit data electronically to the state.

Budget Highlights:

The 2008 budget allocates \$300,000 to accomplish the purpose for which the new fee was enacted, which will likely mean a significant software modification to our current REET excise tax module.

FUNDING SOURCES

	2005 Actual	2006 Actual	2007 Budget	2008 Budget	Absolute Change	Percent Change
Est Use of Begin Fund Balance	\$ —	\$ —	\$ 101,700	\$ 230,000	\$ 128,300	126.2 %
Taxes	33,262	30,905	—	—	—	—
Intergovernmental Revenue	22,869	76,288	110,000	70,000	(40,000)	(36.4)
Total	\$ 56,131	\$ 107,193	\$ 211,700	\$ 300,000	\$ 88,300	41.7 %

EXPENDITURES

	2005 Actual	2006 Actual	2007 Budget	2008 Budget	Absolute Change	Percent Change
Other Services & Charges	\$ —	\$ —	\$ 211,700	\$ 300,000	\$ 88,300	41.7 %
Total	\$ —	\$ —	\$ 211,700	\$ 300,000	\$ 88,300	41.7 %

