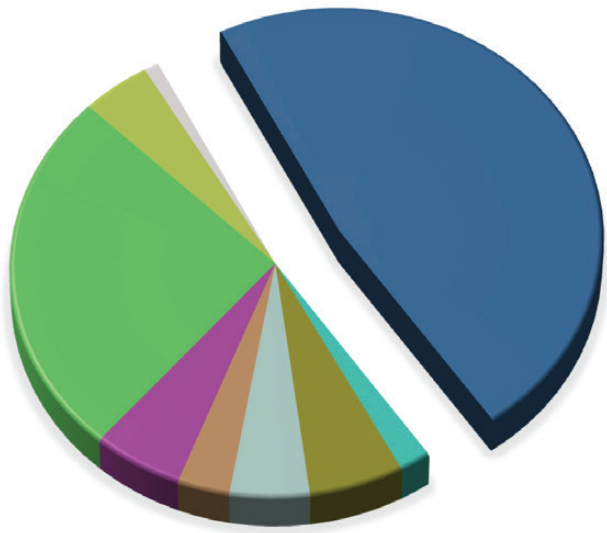


Information Technology

Mission Statement

The mission of the Department of Information Technology is to direct the strategy, delivery, and management of Prince William County government technology with an unwavering commitment to information technology excellence, efficiency, and value for our government, and the residents, businesses, and visitors of Prince William County.



General Government Expenditure Budget:
\$83,788,209

Expenditure Budget:
\$40,059,446



47.8% of General Government

Programs:

- Leadership, Management & Security: \$2,219,848
- Communications & Infrastructure: \$15,632,365
- Geographical Information Systems: \$2,567,600
- Business Applications Support: \$11,881,932
- Customer Services & Business Group: \$7,757,702

Mandates

The County operates under a mandate to protect all personal information of citizens retained in County files and to support the E-911 system. The Department of Information Technology provides these services.

The Board of County Supervisors has enacted additional local mandates for which the Department of Information Technology is responsible.

State Code: [2.2](#) (Administration of systems including personal information; Internet privacy policy; exceptions), [Chapter 15.1](#) (Wireless Communications Infrastructure)

County Code: [Chapter 24](#) (Streets)

Information Technology



Expenditure and Revenue Summary

Expenditure by Program	FY16 Actuals	FY17 Actuals	FY18 Actuals	FY19 Adopted	FY20 Adopted	% Change Budget FY19/ Budget FY20
Leadership, Management & Security	\$3,017,662	\$3,066,492	\$2,357,411	\$2,347,749	\$2,219,848	(5.45%)
Communications & Infrastructure	\$8,042,464	\$6,519,248	\$7,432,289	\$7,707,135	\$15,632,365	102.83%
Geographic Information System	\$1,879,112	\$2,225,906	\$2,260,172	\$2,449,113	\$2,567,600	4.84%
Business Applications Support	\$8,223,547	\$12,408,492	\$9,952,746	\$11,811,381	\$11,881,932	0.60%
Customer Services & Business Group	\$5,337,373	\$6,076,832	\$7,623,574	\$7,497,550	\$7,757,702	3.47%
Total Expenditures	\$26,500,158	\$30,296,970	\$29,626,192	\$31,812,928	\$40,059,446	25.92%

Expenditure by Classification

Salaries and Benefits	\$10,793,795	\$11,241,381	\$10,608,215	\$10,502,275	\$11,598,743	10.44%
Contractual Services	\$11,797,908	\$14,139,778	\$11,661,267	\$15,901,101	\$15,233,736	(4.20%)
Internal Services	\$99,013	\$87,719	\$86,454	\$23,702	\$23,702	0.00%
Purchase of Goods & Services	\$2,713,078	\$3,763,470	\$6,078,272	\$4,275,138	\$4,273,416	(0.04%)
Capital Outlay	\$169,255	\$0	\$0	\$1,092,962	\$1,092,962	0.00%
Leases & Rentals	\$11,886	\$12,313	\$49,308	\$17,750	\$17,750	0.00%
Reserves & Contingencies	\$0	\$0	\$0	\$0	(\$180,862)	-
Depreciation	\$915,222	\$1,052,309	\$1,142,675	\$0	\$0	-
Transfers Out	\$0	\$0	\$0	\$0	\$8,000,000	-
Total Expenditures	\$26,500,158	\$30,296,970	\$29,626,192	\$31,812,928	\$40,059,446	25.92%

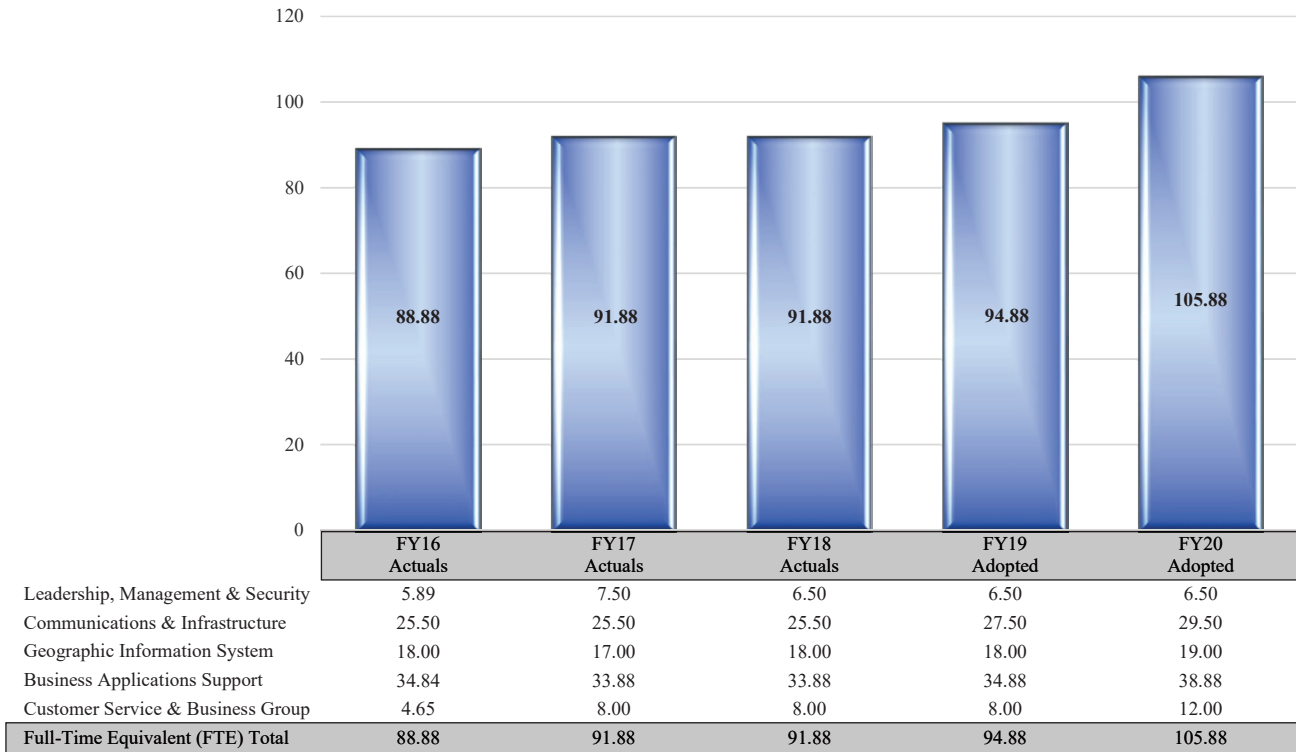
Funding Sources

Use of Money & Property	\$161,352	\$162,376	\$172,666	\$183,826	\$183,826	0.00%
Miscellaneous Revenue	(\$99,277)	\$9,235	\$1,605,899	\$0	\$0	-
Non-Revenue Receipts	\$41	\$0	\$0	\$0	\$0	-
Charges for Services	\$28,386,659	\$29,051,185	\$30,732,030	\$31,227,831	\$31,474,349	0.79%
Transfers In	\$242,178	\$726,749	\$467,146	\$401,271	\$401,271	-
Total Designated Funding Sources	\$28,690,954	\$29,949,545	\$32,977,741	\$31,812,928	\$32,059,446	0.77%
(Contribution to)/Use of Fund Balance	(\$2,190,796)	\$151,711	(\$3,417,424)	\$0	\$8,000,000	-
Net General Tax Support	\$0	\$195,714	\$65,875	\$0	\$0	-
Net General Tax Support	0.00%	0.65%	0.22%	0.00%	0.00%	

Information Technology



Staff History by Program



Future Outlook

Cloud First – Cloud services and solutions have transformed the information technology (IT) industry over the past ten years and have become preferred solutions for forward-thinking governments. The advent of cloud services offers the County more opportunity to apply the latest technologies to serve the County, citizens, and business partners with minimal amounts of time and capital investment. Cloud services also offer many built-in mobility and disaster readiness options that could be cumbersome and costly to build locally. The existence of many cloud vendor facilities in Prince William County (PWC) makes it easier to integrate new trends in the industry to the County’s benefit.

Mobile Devices – Mobile devices provide opportunities for County staff to provide real time information while away from their desks, transact business offsite, and maintain contact while on the move.

Cyber Security – Security efforts remain critical as County technology investments require constant security protection. Local governments face a challenging task of protecting their infrastructure, and data against attacks. Local governments are meeting this challenge by focusing efforts on technology, teamwork, employee training, and insuring against losses. Designing enterprise communications to meet these demands is an ongoing commitment.

Innovative Technologies – Recent innovations in the technology industry include fiber and 5G infrastructure and the Internet of Things. The support and development of high-speed connectivity provide opportunities within many industries, including security, law enforcement, medical, marketing, transportation, environmental, etc. The Department of Information Technology (DoIT) is pursuing technology modernization efforts to capitalize on industry best practices, and to deliver platforms for innovation.

Information Technology

General Overview

- A. **Information Technology Modernization** – In FY19, the Board of County Supervisors approved [BOCS Resolution 19-117](#) authorizing the addition of 10 FTEs to address high risk findings as recommended in the [PWC Information Technology Governance Assessment](#). Contractual services funding, previously used for contract staffing, was shifted to fund the addition of eight internal staff positions. The remaining two positions, one Systems Developer III and one Systems Developer II, will be charged to the Human Capital Management (HCM) system project in FY20 and will transition to general fund support in FY21 as part of ongoing HCM operating costs already programmed in the five-year plan. These 2 FTEs were previously included in the Proposed FY2020 Budget as a supplemental request.

Budget Initiatives

A. Budget Initiatives

1. Transfer from DoIT Internal Service Fund Balance to Technology Infrastructure Capital Project – Communications and Infrastructure

Expenditure	\$8,000,000	General Fund Impact	\$0
Use of Fund Balance (Internal Services)	\$8,000,000	FTE Positions	0.00

a. **Description** – This initiative transfers \$8 million of fund balance from DoIT internal service funds to fund the Technology Infrastructure Capital project. This project will support and update the modernization of the County’s technology infrastructure. Improvements will focus on the modernization of four key areas of the network infrastructure: Internet Core, Security Infrastructure, Data Center Infrastructure, and Enterprise Network, which includes the Local Area Network (LAN) and Wide Area Network (WAN).

b. **Service Level Impacts** – Accurate and timely delivery of government services, increased efficiency, enhanced customer service, increased security of the network infrastructure, and data, addition of security layers at main and co-location facilities. Please refer to the Technology Infrastructure capital project for further details on the project.

2. Avenity Tax Portal – Business Applications Support

Expenditure	\$35,400	General Fund Impact	\$35,400
Revenue	\$35,400	FTE Positions	0.00

a. **Description** – This initiative is related to increased maintenance cost of the Avenity Tax Portal as well as the addition of functionality to the application.

b. **Service Level Impacts** – Improved stability, functionality, and support of the application.

Information Technology

3. Geographic Information System (GIS) Analyst I for Next Generation (NG911) Support – GIS

Expenditure	\$54,132	General Fund Impact	\$54,132
Revenue	\$0	FTE Positions	1.00

- a. Description** – This initiative adds 1 FTE, a GIS Analyst I, to provide ongoing support for the NG911 initiative. This position will provide support during the migration from a legacy, circuit-based switch to a regional, Internet Protocol based 911 system, which supports voice, text, and video data. In Virginia, the current-based 911 system is a collection of nine independent networks that are not connected. A primary goal of NG911 is to ensure calls and information received in one locality can be transferred to any surrounding locality, even if it is not within the state. NG911 also provides increased capabilities to manage data from a variety of platforms.
- b. Service Level Impacts** – Validate and verify accuracy of the 911 caller location data. Please refer to the NG911 initiative located under the Public Safety Communications section for additional details on the initiative.

Program Summary

Leadership, Management & Security

The Leadership, Management & Security Program provides leadership to all DoIT divisions for the successful deployment of IT solutions throughout the County Enterprise. The program also provides guidance and support for Cyber Security, Disaster Recovery, and IT strategic planning initiatives.

Key Measures	FY16 Actuals	FY17 Actuals	FY18 Actuals	FY19 Adopted	FY20 Adopted
Customer satisfaction level for all DoIT services	94%	94%	95%	96%	95%
TIP projects reviewed and scored quarterly (%)	-	-	-	90%	90%
Disaster recovery exercises meeting system restoration time objectives (%)	100%	90%	90%	90%	-

Program Activities & Workload Measures (Dollar amounts expressed in thousands)	FY16 Actuals	FY17 Actuals	FY18 Actuals	FY19 Adopted	FY20 Adopted
Executive Management IT	\$1,356	\$1,462	\$685	\$617	\$624
IT policies reviewed	-	-	-	75%	75%
Cyber Security & IT Policy Group	\$1,466	\$1,395	\$1,520	\$1,574	\$1,435
Security incidents	0	0	0	0	-
Secure mobile endpoints*	-	-	-	-	6,000
Workforce completing Annual Cyber Awareness Course	-	-	-	-	98%
Disaster Recovery Group	\$195	\$210	\$151	\$156	\$161
Disaster recovery exercises meeting system restoration time objectives (count)**	-	-	-	-	2

*This number represents the number of devices (laptops, tablets and cellphones) that are safely and securely connecting to the County's infrastructure.

**This number reflects how many exercises occurred during the fiscal year.

Information Technology

Communications & Infrastructure Division (CID)

CID designs, develops, operates, and maintains wide-area and local area data networks, voice networks, telecommunications, and computing infrastructure, storage and virtual services, Cloud services, email and collaboration, security operations, Public Safety Communications, and a host of critical County infrastructure. The work performed in CID represents both foundational and strategic enablement of countywide operations.

Key Measures	FY16 Actuals	FY17 Actuals	FY18 Actuals	FY19 Adopted	FY20 Adopted
Communications and infrastructure network availability	100%	100%	99%	100%	99%
Customer satisfaction level with CID services	97%	81%	95%	95%	95%

Program Activities & Workload Measures (Dollar amounts expressed in thousands)	FY16 Actuals	FY17 Actuals	FY18 Actuals	FY19 Adopted	FY20 Adopted
Radio Communications	\$2,475	\$1,491	\$1,605	\$1,896	\$1,869
Radio communications completed work requests	1,006	919	1,147	1,000	1,000
Public safety radio repairs completed within 8 business hours	91%	82%	96%	95%	95%
Network Communications	\$3,462	\$3,376	\$3,700	\$3,780	\$3,680
Network communications completed work requests	2,690	1,386	3,453	2,500	2,500
Voice and data service calls completed within 8 business hours	87%	86%	93%	90%	90%
County buildings/public facilities with Wi-Fi hotspots	-	-	-	75%	75%
Technology Hosting Centers	\$1,060	\$838	\$1,077	\$1,103	\$1,154
Technology hosting center completed work requests	2,297	756	2,146	2,000	2,000
Capital Replacement Plan	\$1,045	\$816	\$1,051	\$928	\$8,928

Geographic Information System Division

The GIS Division manages and maintains the County's geospatial information system and serves as the official resource for geographic data about the County's population, demographic data and geospatial services to the public and County agencies.

Key Measures	FY16 Actuals	FY17 Actuals	FY18 Actuals	FY19 Adopted	FY20 Adopted
Customer satisfaction level for GIS services	100%	100%	99%	95%	95%
Property address projects completed on time	100%	99%	99%	95%	95%

Information Technology

Program Activities & Workload Measures (Dollar amounts expressed in thousands)	FY16 Actuals	FY17 Actuals	FY18 Actuals	FY19 Adopted	FY20 Adopted
GIS Data Services	\$1,250	\$1,246	\$1,294	\$1,108	\$1,448
Cadastral data projects completed	403	295	327	300	325
Cadastral data projects updated within 15 business days	61%	91%	85%	85%	85%
GIS Technical Solutions	\$629	\$861	\$845	\$862	\$883
County Mapper hits	194,714	204,613	203,810	190,000	190,000
GIS improvements	-	-	20	20	20
Demographic website hits	-	-	13,001	8,500	8,500
Demographic data requests completed on time	-	-	86%	90%	90%
GIS Updates	\$0	\$119	\$124	\$206	\$206
Number of GIS update project purchased	-	-	1	1	1
GIS Customer and Addressing	\$0	\$0	\$0	\$272	\$30
Property address projects completed	426	420	416	350	400
Number of addresses assigned	-	-	2,614	1,500	2,000
Number of address validations processed	-	-	2,620	1,800	2,000

Business Applications Support Division (BASD)

BASD delivers applications and business solutions to optimize County business processes, government operations, and maintenance of critical government systems. BASD provides application services for all County departments in support of strategic business objectives through dedicated program areas for all Development Services, Public Safety, Human Services, and General Government agencies. Services include application development and operations, business intelligence, database administration, web operations, business process improvement, application specific training, and special projects.

Key Measures	FY16 Actuals	FY17 Actuals	FY18 Actuals	FY19 Adopted	FY20 Adopted
Customer satisfaction with BASD services	97%	95%	98%	92%	98%
Incident requests completed within 2 business days	-	87%	88%	90%	90%
Customer contact regarding change requests within 3 business days	-	90%	92%	90%	92%
New mobile applications available	-	-	-	75%	75%
New solutions delivered from cloud platforms	-	-	-	75%	75%

Information Technology

Program Activities & Workload Measures (Dollar amounts expressed in thousands)	FY16 Actuals	FY17 Actuals	FY18 Actuals	FY19 Adopted	FY20 Adopted
Public Safety Applications Support (PSAS)	\$2,009	\$4,649	\$3,575	\$5,023	\$4,925
System improvements	145	120	120	150	120
Community Development Applications Support (CDAS)	\$1,760	\$1,820	\$2,051	\$2,123	\$2,085
CDAS work requests completed	693	1,543	601	850	750
Parks & Recreation work requests completed	-	-	4,047	2,100	2,500
General Government Applications Support (CGAS)	\$2,974	\$4,354	\$2,835	\$2,952	\$3,176
GGAS work requests completed	2,715	2,497	2,600	2,000	2,400
Human Services Applications Support (HSAS)	\$366	\$384	\$437	\$520	\$523
HSAS work requests completed	141	116	60	150	120
Web Solutions and Services	\$1,114	\$1,201	\$1,055	\$1,193	\$1,173
Web solutions work requests completed	532	504	376	500	500
Databases maintained	-	-	-	300	300
Database work request completed	-	-	-	350	350
Planned database availability	-	-	-	80%	80%

Customer Service & Business Group Division

Provide seat management and business related services to the department and the County enterprise, such as, project management oversight of the Technology Improvement Plan (TIP); change management administration; quality control reviews and monitoring of IT projects; independent verification and validation; and customer advocacy.

Key Measures	FY16 Actuals	FY17 Actuals	FY18 Actuals	FY19 Adopted	FY20 Adopted
Customer satisfaction level with seat management services	97%	97%	98%	95%	95%
New technology projects managed using PMI standards	-	-	-	50%	50%
Customer satisfaction with project management oversight	-	-	-	-	95%

Program Activities & Workload Measures (Dollar amounts expressed in thousands)	FY16 Actuals	FY17 Actuals	FY18 Actuals	FY19 Adopted	FY20 Adopted
IT Business Group	\$475	\$531	\$619	\$605	\$985
Procurements and reimbursements processed	735	3,001	3,047	1,500	2,000
Payments processed	1,785	8,253	7,852	5,000	5,000
Human Resource transactions processed	2,266	2,214	2,031	2,100	2,100
DoIT ISF inventory maintenance tickets	1,553	1,676	3,805	1,200	1,500
Physical inventory of department assets	1	1	1	1	1
Customer and Technology Advocate	\$4,818	\$5,523	\$7,002	\$6,814	\$6,694
Work tickets processed	25,842	31,436	34,082	23,000	25,000
Project Management/Independent Validation and Verification Group	\$44	\$20	\$2	\$79	\$79
Projects upon which independent validation and verification is performed	14%	8%	0%	30%	30%