

Fund 10040

Information Technology

Mission

Fund 10040, Information Technology (IT), supports the County's strategic IT investments in major technology projects that improve access to County services, promote government operational efficiencies and effectiveness, enhance customer service, and increase performance and security capabilities. These investments include automation for County agencies, requirements aligned with countywide strategic importance, enterprise technology infrastructure, and enterprise-level or inter-agency corporate systems.

Focus

Fund 10040 was established in FY 1995 to strengthen centralized management of available resources by consolidating major IT projects in one fund. A General Fund transfer, revenue from the State Technology Trust Fund and other internal revenue funds, and interest earnings are sources for investment in IT projects.

The County's technological improvement strategy has two key elements. The first is to redesign business processes and apply technology to achieve improvements in service quality and efficiencies for agencies. The second is to provide an adequate technology infrastructure that supports County technology solutions. The County's long-term commitment to providing quality customer service through the effective use of technology is manifested in service enhancements, additional transparency, expedited response to citizen inquiries, improved operational efficiencies, better information for management decisions, and increased performance capabilities.

The Senior Information Technology Steering Committee, which is composed of the County Executive, Deputy County Executives, the Chief Financial Officer, the Chief Technology Officer and other senior County managers, adopted five IT priorities which guide the direction of Fund 10040. They include:

- ◆ **Mandated Requirements:** Provide support for requirements enacted by the federal government, Commonwealth of Virginia, Board of Supervisors, or those that are Court ordered or resulting from changes to County regulations.
- ◆ **Completion of Prior Investments:** Provide support for multi-year lease purchases and to implement a project phase or to complete a planned project.
- ◆ **Enhanced County Security:** Provide support for homeland security, physical security, information security and privacy requirements.
- ◆ **Improved Services and Efficiency:** Promote consolidated business practices; support more efficient government; optimize management and use of County assets and data; enhance systems to meet the expectations and needs of citizens; and promote service that can be provided through the Internet/e-government. This includes corporate and strategic initiatives that add demonstrable value to a broad sector of government or to the County as a whole, which also provide productivity benefits and/or effectively manages the County's information and knowledge assets.

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- ◆ **Maintaining a Current and Supportable Technology Infrastructure:** Focus on technology infrastructure modernizations which upgrade, extend or enhance the overall architecture or major County infrastructure components, including hardware and software and its environment. Ensure that citizens, businesses and County employees have appropriate access to information and services. This also includes cyber security protective measure solutions.

In accordance with the FY 2018 Budget Guidelines, agencies submitted project funding requests that met one or more of the five Senior IT strategic priorities. Project funding requests also needed to include tangible project outcomes; clear project start and completion dates; anticipated implementation and budget plans over the next five years including subsequent fiscal year(s) impact on enterprise-wide infrastructure, maintenance and support; linkage to agency strategic and business goals; and that the project would be completed and maintained without additional staff. FY 2018 funding requests for existing projects were limited to projects requiring additional support to meet existing contractual obligations, to complete a planned phase of the project and where appropriate progress against existing project plans had occurred. The process was designed to facilitate the development of a solid business and technical case for IT project requests and to update the business and technical status of continuing projects.

A Project Review Team, consisting of business and technical staff from the Department of Information Technology (DIT) and the Department of Management and Budget (DMB), reviewed all submissions. The project review included identification of projects that provide opportunities for improvement; those that help sustain the performance and reliability of the County technology infrastructure; and those poised to take advantage of technological advancements.

Projects were reviewed from both a business and technical perspective. On the business side, consideration included whether project implementation would benefit citizens and public engagement, County government operational requirements, or both. Benefits of the projects were weighed against the cost and several risk factors including potential related expenses with an unknown cost, changes in scope necessitated by new business drivers, technological relevance, operational transformation needs, project schedule viability and the impact of not funding or otherwise delaying the project. This review was conducted with a multi-year planning horizon in order to plan for both current and future technology needs.

On the technical side, factors examined included identifying infrastructure modernizations which upgrade, extend or enhance the overall architecture or major County infrastructure components, including hardware and software, with consideration given to the organizational experience with the proposed hardware, software and resource support. In addition, consideration was given to the availability of human resources both in DIT and the sponsoring agency to manage the business requirements, scope and schedule commitments.

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FY 2018 Initiatives

In FY 2018, funding of \$7.17 million, which includes a General Fund transfer of \$4.77 million, a transfer of \$2.30 million from Fund 40030, Cable Communications, and interest income of \$0.10 million, is provided for initiatives that meet one or multiple priorities established by the Senior Information Technology Steering Committee. These initiatives include a mix of projects that provide benefits for both citizens and employees and that adequately balance new and continuing initiatives with the need for securing and strengthening the County’s technology infrastructure. Funded projects will support initiatives in general County services, public safety, human services and enterprise technology security and infrastructure. Although many initiatives meet more than one of the technology priorities, for narrative purposes below, projects have been grouped into only one priority area.

Priority	FY 2018 Adopted Funding
Completion of Prior Investments	\$2.05 million
Enhanced County Security	\$0.50 million
Improved Services and Efficiency	\$2.62 million
Maintaining a Current and Supportable Technology Infrastructure	<u>\$2.00 million</u>
TOTAL	\$7.17 million

Completion of Prior Investments - \$2.05 million

The County’s IT program focuses on using technology as an essential tool to enable cost-effective delivery of services, and continues to stress the need to build reliable, supportable projects for these services in a timely manner. Many projects funded can be completed within that fiscal year, while others are multi-phase projects that require more than one year of funding.

FY 2018 funding of \$130,740 is included to continue support for the County’s planned ongoing maintenance of essential Geographic Information System (GIS) data. Oblique imagery and planimetric data layers make up many of the key GIS layers utilized to create maps used by several County agencies including: Police, Fire and Rescue, Office of Emergency Management, Public Safety Communications, Transportation, Housing and Community Development, Public Works and Environmental Services, Planning and Zoning, Health, Tax Administration, and others. These key data-sets are used in all of the County’s web applications that incorporate maps, and in nearly all of the County’s public safety vehicles through the Computer Aided Design (CAD)/911 system.

FY 2018 funding of \$428,500 is included to support the Customer Relationship Management (CRM) project for development of a unified user approach for handling citizens’ service requests, case management, and issue tracking. CRM is a foundational technology that supports the County’s strategic goal of improving the quality and efficiency of responses to citizen requests/issues by integrating current stovepipe applications, implementing on-line 24/7 access strategies, integrating social media tools and techniques to enhance the overall customer experience, and manage service requests via a single user enterprise-wide interface tool.

FY 2018 funding of \$300,000 is included for the next phase of the Interactive Voice Response (IVR) Project. This multiphase initiative will migrate agencies that use IVR systems to a new and more modern platform that enables interactive text to speech applications and can build voice/phone applications for self service

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automation. The new IVR platform enables more efficient payment, information processing, management of citizen requests and inquiries, and provides opportunities to improve business processes.

FY 2018 funding of \$690,000 is included to continue upgrading high technology courtrooms in Fairfax County's Courthouse to an all new digital platform necessary to meet current industry standards. Starting in 2008, through a dedicated Courtroom Technology Project, the Courtroom Technology Management System (CTMS) began being implemented and is now operational in 18 courtrooms at the Fairfax County Courthouse. The system enables evidence presentation in courtrooms through a centralized, integrated audio/video network of microphones, monitors, assistive listening devices and flat screen displays. With significant changes in technology, a multiphase plan is underway to replace obsolete analog hardware with digital components and retrofit CTMS in the 18 existing courtrooms.

FY 2018 funding of \$500,000 is included to complete the final phase of the Facilities Maintenance Management System, an integrated facilities and grounds management system utilized by the Facilities Management Department and Fairfax County Park Authority. The project is in the final phase of upgrading the system to the latest software to fully leverage functionality and implement a mobile application to provide field staff real-time work order processing and access to the system from anywhere in the County.

Enhanced County Security- \$0.50 million

Providing funding for critical security requirements of enterprise-wide IT systems is a long-standing cornerstone of the County's IT policy.

FY 2018 funding of \$500,000 is included for the Cyber Security Enhancement Initiative which supports strategic and tactical initiatives to safeguard the County's IT assets as well as regulatory compliance activities. IT security continues to be a fundamental component of the County's enterprise architecture and strategy. The IT security architecture and practices fuse best practice principles with a hardware and software infrastructure supported by policies, plans and procedures. This project provides for IT security system requirements, replacements and upgrades, service consultation expenses, and future security product and service acquisitions to protect the confidentiality, integrity and availability of County systems and information.

Improved Services and Efficiency – \$2.62 million

The following projects provide for improved service and efficiency in provision of services to the residents and the business community in Fairfax County. The included projects support the County's e-government and public access programs, transparency and initiatives that improve County processes resulting in enhanced efficiencies and service delivery.

FY 2018 funding of \$300,000 is included for the Tactical Initiatives Project. The County's technology strategy is designed to stay responsive in an environment of rapid change with finite resources. This funding will allow DIT to address unforeseen IT demands due to changes to agencies business processes, non-IT initiatives which have an unexpected IT impact, state/federal mandates and new regulations, and other system upgrades and/or integration priorities.

FY 2018 funding of \$725,000 is included to provide the necessary support required to meet the increasing demand for County web, e-government and e-transaction services as well as improved navigation, web content synchronization, mobile applications, social media integration, transparency, support of the

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County's intranet (FairfaxNet) and continued compliance with Americans with Disabilities Act (ADA) requirements. A key initiative currently underway is the County's Website Reconstruction Project which includes the implementation of a new enterprise Web Content Management System, refining the current site's information architecture, and redesigning the entire website with a more modern design and improved functionality.

FY 2018 funding of \$1,000,000 is included to support the Integrated Human Services Technology Project. This multi-year strategic initiative will support the design, development and deployment of a Human Services IT architecture supporting the Human Services Integrative Model; including a system-wide vision, shared commitment, shared decision-making, and accountability for outcomes across all Fairfax County Human Services agencies. A holistic approach to addressing needs along the spectrum of crisis to self-sufficiency to sustainability, as well as strong communication, coordination and collaboration components are key factors. The data collected within the human services system helps shape policy within the County and those policies shape future action. The use of technology is important to ensure these policies and actions are based on robust, meaningful data. A Human Services IT Roadmap was developed through a collaborative effort and approved in FY 2017.

FY 2018 funding of \$600,000 is included to continue support for the Human Services Integrated Electronic Health Record Project. The goal of this multi-phase project is the acquisition and deployment of an electronic health record system for the Health Department, Department of Family Services, and the Community Services Board. Each of these agencies provides distinct health care services and have unique documentation needs. This project will optimize the potential value of leveraging a common information technology solution with the requisite configuration flexibility to enable these agencies and other health care providers to more effectively collaborate and coordinate the management of health care services for residents.

Further, it should be noted that in lieu of funding in the FY 2018 Adopted Budget Plan, additional funding of \$1,400,000 is anticipated to be included in the *FY 2017 Carryover Review* to continue to support requirements of the Planning Land Use System (PLUS) Project. This project is a major strategic investment to replace and consolidate of a number of legacy and disparate land use systems that support zoning and development plan review, building permit/license issuance, code enforcement, inspection, and cashiering activities with an integrated adaptable enterprise solution, and on-going implementation and integration of electronic e-plans review capabilities.

Maintaining a Current and Supportable Technology Infrastructure – \$2.00 million

In an ever evolving technology and communications environment, maintaining current and supportable technology architecture is a challenge that must be continually addressed to ensure performance, operability, security and integrity of business operations and information. The County's technological improvement strategy strives to balance business needs that require technology investments with the desire to adopt contemporary but relevant and supportable technology industry trends, as well as the ability to leverage existing infrastructure. Funded projects support the goal of updating and strengthening the technology foundation where practical, and ensure that residents, the business community, and County staff have appropriate and reliable access to information and services.

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FY 2018 funding of \$1,696,000 is included for strategic infrastructure and expert services supporting complex multi-phase enterprise-wide business transformation IT systems for County general services, enterprise technology, security and infrastructure, and corporate systems including the County's ERP and related business systems. This funding supports necessary integration of business application and infrastructure systems components to meet the County's IT architecture and interoperability goals in alignment with County enterprise technology plans to enhance opportunities for County and Fairfax County Public Schools (FCPS) shared cost and operational efficiency goals.

FY 2018 funding of \$100,000 is included to support the growing need for internal County users to access County systems remotely. This project supports telework capabilities, disaster recovery, and increasing reliance of agency mobile workers on wireless solutions. Enterprise-wide standardized access control methodology enables secure identity authentication for authorized access to County networks, data, and systems. This project supports secure access from remote locations and provides improved security, reporting, and data analysis.

FY 2018 funding of \$200,000 is included to provide for on-going information technology training and certification in recognition of the challenges associated with maintaining skills at the pace of technological changes and to ensure that the rate of change in information technology does not out-pace the County's ability to maintain proficiency. As the County's workforce becomes increasingly dependent on information technology, training support has become more essential.

Changes to FY 2017 Adopted Budget Plan

The following funding adjustments reflect all approved changes in the FY 2017 Revised Budget Plan since passage of the FY 2017 Adopted Budget Plan. Included are all adjustments made as part of the FY 2016 Carryover Review, FY 2017 Third Quarter Review, and all other approved changes through April 30, 2017.

- ◆ **Carryover Adjustments** **\$29,359,144**
As part of the *FY 2016 Carryover Review*, the Board of Supervisors approved funding of \$29,359,144 due to carryover of unexpended project balances of \$27,990,998 and an increase due to higher than budgeted FY 2016 revenue of \$1,368,146. Adjustments associated with increased revenue primarily support additional funding for the Circuit Court Case Management and Court Automated Records system projects and the Police Department's Electronic Summons project.

- ◆ **Third Quarter Adjustments** **\$970,992**
As part of the *FY 2017 Third Quarter Review* expenditures are required to increase \$970,992. Of this total, an increase of \$217,975 is required to cover requirements associated with the Circuit Court Case Management System project, \$336,472 is required to appropriate funds to the Circuit Court Automated Records Systems project, and \$527,795 is required to support the Electronic Summons project. These increases are partially offset by a decrease of \$111,250 in the Circuit Court Automated Records Systems project in order to adjust for the impact of an FY 2016 audit adjustment.

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FY 2018 Funded Project Summary Table

The following Project Summary table lists the projects contained in Fund 10040, Information Technology. Descriptions for FY 2018 funded projects are included on the following pages. Information regarding technology initiatives can also be found in the [FY 2018 Information Technology Plan](#) prepared by the Department of Information Technology. It should be noted that, based on limited fiscal resources, some significant projects have not received funding as part of the [FY 2018 Adopted Budget Plan](#). The decision to not fund these projects was based on a thorough review of available balances and upcoming requirements. It is anticipated that these projects will be funded with one-time balances and agency savings as part of a future quarterly review.

Project	FY 2018 Advertised Budget Plan	FY 2018 Adopted Budget Plan
2G70-006-000, Information Technology Training	\$200,000	\$200,000
2G70-015-000, DIT Tactical Initiatives	300,000	300,000
2G70-018-000, Enterprise Architecture and Support	1,696,000	1,696,000
2G70-019-000, Interactive Voice Response Project	300,000	300,000
2G70-020-000, Public Access to Information	725,000	725,000
2G70-034-000, Courtroom Technologies	690,000	690,000
2G70-036-000, Remote Access Mobility	100,000	100,000
2G70-040-000, Facility Maintenance Management System	500,000	500,000
2G70-041-000, Customer Relationship Management	428,500	428,500
2G70-052-000, Cyber Security Enhancement Initiative	500,000	500,000
IT-000025, Integrated Human Services Technology Project	1,000,000	1,000,000
IT-000027, Human Services Integrated Electronic Health Record System	600,000	600,000
IT-000028, Geospatial Initiatives	130,740	130,740
Total Funds	\$7,170,240	\$7,170,240

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2G70-006-000 – Information Technology Training	IT Priorities: <ul style="list-style-type: none"> • Maintaining a Current and Supportable Technology Infrastructure • Enhanced County Security • Improved Services and Efficiency
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FY 2016 Expenditures	FY 2017 Revised Budget Plan	FY 2018 Advertised Budget	FY 2018 Adopted Budget
\$183,580	\$287,460	\$200,000	\$200,000

Description and Justification: This project provides funding for information technology training in recognition of the challenges associated with maintaining skills to keep pace with rapid technology changes. The rate of change in information technology is an ongoing challenge for the County in maintaining relevant proficiencies for its technology workforce, and enabling quick adoption of technology that is beneficial in meeting the County’s mission, goals and objectives. As the County’s business has become increasingly dependent on information technology, training support has become more essential.

Funding of \$200,000 is included to support continuing information technology training and required certifications. The Department of Information Technology anticipates additional required training for County staff in enterprise systems software implementations such as SAP, data analytics, development, integration tools and related applications.

Return on Investment (ROI): Continued funding will enable skills development in new technologies, network management, computer operations, and software applications development and maintenance to enhance the County’s ability to adopt, support, and rationalize systems and agile delivery. In addition, having well-trained staff reduces County reliance on more expensive contractor services.

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2G70-015-000 – DIT Tactical Initiatives	IT Priorities: <ul style="list-style-type: none"> • Improved Services and Efficiency • Completion of Prior Investments • Maintaining a Current and Supportable Technology Infrastructure
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FY 2016 Expenditures	FY 2017 Revised Budget Plan	FY 2018 Advertised Budget	FY 2018 Adopted Budget
\$0	\$121,773	\$300,000	\$300,000

Description and Justification: This project provides for appropriate and timely response to critical unexpected technology needs created by changes in agency business processes, non-IT initiatives with unexpected IT impact, response to state/federal mandates, new regulations and compliance requirements, and other system upgrades, infrastructure and/or integration requirements.

Funding of \$300,000 is included for the Tactical Initiatives Project. The County’s technology strategy is designed to stay responsive in an environment of rapid change with finite resources. From time to time, unforeseen IT demands are created between budget cycles which must be addressed expeditiously to avoid delays and disruptions in delivery of information and services and to safeguard County systems and networks.

Return on Investment (ROI): This project provides for critical unexpected IT requirements to meet agency functions and operations and safeguard uninterrupted performance, operability, security, and integrity of business operations and information. Nearly all County operations rely on contemporary technology systems and web based capabilities to meet core operational goals, enhance transparency, access, engagement, and open government. The County’s reliance on technology to operate and deliver services is growing rapidly. This is fed by demands from citizens, state and federal mandates, partner government entities, and increasing service requirements. Agency users need rapid IT support to ensure critical systems providing public services are operating effectively.

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2G70-018-000 – Enterprise Architecture and Support	IT Priorities: <ul style="list-style-type: none"> • Maintaining a Current and Supportable Technology Infrastructure • Improved Services and Efficiency • Enhanced County Security
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FY 2016 Expenditures	FY 2017 Revised Budget Plan	FY 2018 Advertised Budget	FY 2018 Adopted Budget
\$4,440,671	\$2,712,752	\$1,696,000	\$1,696,000

Description and Justification: This project supports strategic infrastructure and services required for implementation and support of complex multi-phase enterprise-wide business transformation information technology (IT) systems for County general services, enterprise technology, security and infrastructure, and corporate systems.

Funding of \$1,696,000 is included for strategic infrastructure and services necessary for integration of business application and infrastructure systems components. The project includes funding for consultant support for ongoing enhancements to the County’s ERP platform and environment to comply with legally mandated upgrades, technology environment refresh, system administration, enhancements to system functionality, process improvements and ongoing system and data modifications. This project will enable the County to incorporate fully integrated best business practices, improve functional areas, improve the quality and accessibility of information, and reduce redundant data entry, storage and paper processing. The funding supports projected system integration and configuration services and includes various product platforms, security, portal and web services enabling seamless system integration.

Return on Investment (ROI): This initiative continues to support the County’s on-going technology modernization program in line with the IT investment priorities that provide for a stable and secure IT architecture while leveraging IT investments. Enhancements to the County’s ERP platform and environment extends the ability of agencies to perform work and leverages the County’s investment in a modernized platform for financial, procurement and human resource processes. Ongoing support for modernization of County systems empowers both employees and managers to execute processes more efficiently, and supports functions that improve overall system performance and availability.

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2G70-019-000 – Interactive Voice Response (IVR) Project	IT Priorities: <ul style="list-style-type: none"> • Improved Services and Efficiency • Maintaining a Current and Supportable Technology Infrastructure • Completion of Prior Investments
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FY 2016 Expenditures	FY 2017 Revised Budget Plan	FY 2018 Advertised Budget	FY 2018 Adopted Budget
\$244,683	\$154,467	\$300,000	\$300,000

Description and Justification: The Interactive Voice Response (IVR) technology program develops custom interactive telephone applications that can access and update data in a variety of County databases, in addition to providing static information in a timely and convenient manner.

Funding of \$300,000 is included for the next phase of the Interactive Voice Response (IVR) Project. This multiphase initiative will migrate various agency IVR systems to a new and more contemporary platform, develop interactive text to speech applications, and build voice/phone applications for self service automation.

Return on Investment (ROI): This project was established at the request of the Board of Supervisors “to enable the County’s customers to conduct business with the County wherever and whenever it is convenient for the customer.” IVR is one of the foundational programs for enhancing public access to government information and business transactions. Public access technologies such as the IVR expand citizen access to County information and services; minimize staff resources needed to provide basic information, and allow staff deployment to more complex and specialized tasks. The project also improves search capability for citizens and constituents, and enables the County to build applications quicker and more efficiently by maintaining reusable components. The new IVR platform enables more efficient payment, information processing, management of citizen requests and inquiries, and provides opportunities to improve business processes.

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2G70-020-000 – Public Access to Information	IT Priorities: <ul style="list-style-type: none"> • Improved Services and Efficiency • Maintaining a Current and Supportable Technology Infrastructure • Mandated Requirements
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FY 2016 Expenditures	FY 2017 Revised Budget Plan	FY 2018 Advertised Budget	FY 2018 Adopted Budget
\$487,769	\$1,352,134	\$725,000	\$725,000

Description and Justification: In order to promote the County’s goal of “government without doors, walls or clocks,” this funding supports Board of Supervisors Public Engagement goals, including multiple e-government initiatives such as the County’s website and mobile applications that provide information, online services and innovative tools for interaction and participation with County government. These e-government programs also provide cohesive and comprehensive access to information and services for over fifty County agencies.

Funding of \$725,000 is included to provide the necessary support required to meet the increasing demand for the County’s website, e-government and e-transactions services as well as improved navigation, web content synchronization, mobile applications, social media integration, transparency, Web 3.0, support of the County’s intranet and continued compliance with e-health records system. FY 2018 funding will also support the County’s Website Reconstruction Project which includes the implementation of a new enterprise Web Content Management System, refining the current site’s information architecture, redesigning the entire website with a more modern design and improved functionally.

Return on Investment (ROI): The extensive use of the web and convenient use of mobile technology (smart phones and tablets) has driven the need to streamline business processes and to re-engineer the presentation of information on e-government platforms for public consumption. The County’s e-government channels continue to support and enhance the County’s long standing goal that citizens should be able to access their government 24/7. The County’s official mobile application empowers citizen access to County services at anytime from anywhere thereby affirming the County’s strategic goal of connecting people and creating a culture of engagement. This project will continue to generate economies of scale by providing the needed support for the ever-increasing demand for e-commerce/ e-government services and continue to allow expansion and enhancement of the County’s e-government channels to make them more compliant with the world wide web consortium and Section 508 of the Rehabilitation Act for accessibility for those with disabilities. This program also develops and promotes the sharing of data across agency and jurisdictional lines, thereby increasing the scope and value of information and services provided to citizens. It expands the capabilities of content management to improve automated workflow, indexing, and search and retrieval for systems countywide to improve operational efficiencies and collaboration. Internet and Intranet initiatives provide significant wide-ranging opportunities enhancing information and services accessibility to staff and the public. This investment continues to provide County government greater internal efficiencies that enable effective response to growing demand for services associated with County growth and diversity.

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2G70-034-000 – Courtroom Technologies	IT Priorities: <ul style="list-style-type: none"> • Maintaining a Current and Supportable Technology Infrastructure • Improved Services and Efficiency • Mandated Requirements
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FY 2016 Expenditures	FY 2017 Revised Budget Plan	FY 2018 Advertised Budget	FY 2018 Adopted Budget
\$0	\$640,232	\$690,000	\$690,000

Description and Justification: This project is committed to the planning, design and implementation of modern courtroom technologies for new and renovated courtrooms in all three Fairfax County Courts. Starting in 2008, through a dedicated Courtroom Technology Project, the Courtroom Technology Management System (CTMS) began being implemented and is now operational in 18 courtrooms at the Fairfax County Courthouse. The system enables evidence presentation in courtrooms through a centralized, integrated audio/video network of microphones, monitors, assistive listening devices and flat screen displays.

Funding of \$690,000 is included to support adoption of digital technology standards to ensure CTMS compliance with industry standards. A multiphase deployment of a digital hardware replacement plan, as well as retrofitting existing courtrooms with digital technologies began in FY 2017.

Return on Investment (ROI): The CTMS allows new and renovated courtrooms to share a common infrastructure with distributed services through a centralized control room. This capability provides consistency, standardization, and scalability between the three courts, supports improved citizen access to the courts, both internally and externally, facilitates trials and hearings in the most effective and efficient means, and provides the ability of all three courts to share common resources. Improved access and facilitation of court processes and services for citizens, judges, court staff and litigants and others who need to conduct business with the courts continues to be the primary benefit of this project.

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2G70-036-000 – Remote Access Mobility	IT Priorities: <ul style="list-style-type: none"> • Maintaining a Current and Supportable Technology Infrastructure • Improved Services and Efficiency • Enhanced County Security
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FY 2016 Expenditures	FY 2017 Revised Budget Plan	FY 2018 Advertised Budget	FY 2018 Adopted Budget
\$47,385	\$380,271	\$100,000	\$100,000

Description and Justification: This project supports enhanced and expanded capability of authorized users to securely access the County’s systems from remote locations for field service activities, telework, Continuity of Operations Plans (COOP), and emergency events such as pandemic outbreaks or natural and weather emergencies.

Funding of \$100,000 is included to continue support for remote access capabilities. This project established an enterprise-wide standardized remote access control methodology and architecture that provides a solution for employees and external system users, partners and County customers to authenticate their identity in order to gain access to systems and relevant data to conduct work securely. All user authentication management is based on policy and is centrally managed allowing for comprehensive audit and reporting services. This project supports increased security, simplified management, secure access from remote locations, and mobility.

Return on Investment (ROI): This project provides a cost effective approach to enhance the County’s productivity in order to provide flexibility for a variety of remote access devices that increase worker productivity. This capability encourages more employees to take advantage of telecommuting in line with regional goals supported by the Board of Supervisors and also provides County staff necessary remote access capacity in case of emergency events such as hurricanes, snow storms, or pandemic outbreaks.

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2G70-040-000 – Facility Maintenance and Management System	IT Priorities: <ul style="list-style-type: none"> • Completion of Prior Investments • Improved Services and Efficiency • Maintaining a Current and Supportable Technology Infrastructure
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FY 2016 Expenditures	FY 2017 Revised Budget Plan	FY 2018 Advertised Budget	FY 2018 Adopted Budget
\$366,362	\$3,689	\$500,000	\$500,000

Description and Justification: The Facilities Maintenance Management System serves as a single, integrated facilities information resource for the Facilities Management Department (FMD) and the Fairfax County Park Authority (FCPA). FMD and FCPA hold the greatest portion of responsibility for the maintenance of County’s largest and most valuable physical assets: its properties, facilities, and the subsystems that keep them operational.

Funding of \$500,000 is included to complete software upgrades to leverage functionality, minimize customization, simplify system upgrades, provide improved reporting, and integrate with the County’s GIS, human capital and financial management systems. The final phase will also implement a mobile application to provide field staff real time work order processing and access to the system from anywhere in the County.

Return on Investment (ROI): A web based, “one stop shop” for facilities information enables internal improvements and efficiencies as well as more accurate, complete, and timely information to customer agencies. The upgraded Facilities Management System allows County staff to increase the efficiency of facility maintenance service requests process by providing a web based customer request and inquiry interface that saves time handling customers’ status inquiries and work order processing from initiation to close out. Additional modules and features improve maintenance of critical facility assets and reduce maintenance costs by automating the management of corrective maintenance services. The system enables County staff to conduct condition-based facility assessments which helps in the prioritization of capital improvements, provides financial and environmental impact analysis to improve capital planning, and extends the life of County facilities and assets. Other features include space measurement and audit tools that identify opportunities for better facility utilization and occupancy management, move planning and management to streamline relocation processes, and project administration features that track budgets, costs, and schedules for more efficient facilities management. The systems’ reporting module provides with real time access report generation and improved ad hoc report writing versus off-line and labor intensive methods.

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2G70-041-000 – Customer Relationship Management	IT Priorities: <ul style="list-style-type: none"> • Enhanced County Security • Improved Services and Efficiency • Maintaining a Current and Supportable Technology Infrastructure
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FY 2016 Expenditures	FY 2017 Revised Budget Plan	FY 2018 Advertised Budget	FY 2018 Adopted Budget
\$225,074	\$613,414	\$428,500	\$428,500

Description and Justification: Customer Relationship Management (CRM) supports the County’s strategic goal of improving the quality and efficiency of responses to citizen requests/issues by integrating current applications, implementing online 24/7 access strategies, social media tools, and techniques to enhance the overall customer experience and manage service requests via a single tool. This project facilitates implementation of a number of recommendations under the *Contact Center Fairfax* section of the “Enhancing Fairfax County’s Customer Experience and Engagement Opportunities” initiative report to the Board of Supervisors

Funding of \$428,500 is included to support CRM development of an effective unified user approach for handling citizens service requests, case management, and issue tracking. This is the fourth year of a multi-year effort to replace the current legacy CRM solution with a modern solution that integrates with County agencies’ business applications and processes. The enterprise CRM provides for unified tracking and case management of service requests and manages requests via a multi-platform CRM solution across many channels including email, web, social media, and call center capabilities. The improved integration with the County’s Web environment, e-mail and communication systems promotes service efficiency and effectiveness and promotes improved customer experience and citizen engagement goals.

Return on Investment (ROI): CRM technology provides a single interface for the many types of interactions with citizens and constituents without the need for independent silo solutions in agencies. CRM technology facilitates increased efficiencies and effectiveness in managing the many citizen requests and interactions within and across County agencies and business functions. It allows a constituent-focused operation where government is positioned to be proactive to citizen concerns by enhancing collaboration among all agencies/departments and providing knowledge of common issues for follow-up. The CRM solution will also improve transparency by allowing citizens and constituents to easily view how the County manages their request by providing tracking number. Consolidating intakes, reducing the number of duplicate requests, and eliminating redundant systems achieves savings. These cost savings provide tangible evidence to citizens that their government is working for them efficiently by providing better access to information, optimized issue response/processing, and improved accountability/compliance.

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2G70-052-000 – Cyber Security Enhancement Initiative	IT Priorities: <ul style="list-style-type: none"> • Improved Services and Efficiency • Enhanced County Security • Mandated Requirements • Maintaining a Current and Supportable Infrastructure
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FY 2016 Expenditures	FY 2017 Revised Budget Plan	FY 2018 Advertised Budget	FY 2018 Adopted Budget
\$0	\$517,258	\$500,000	\$500,000

Description and Justification: The Department of Information Technology defines and enforces the security standards and policies necessary to protect the County’s information assets and technology infrastructure. The goal of the County’s IT security program is to ensure confidentiality of information, integrity of data, systems and operations, technical compliance with legal mandates such as HIPAA and PCI, privacy and availability of information processing resources. The basic elements of identification, authentication, authorization, access control and monitoring are employed throughout the County’s technology enterprise. This project supports ongoing IT security projects and services to support various initiatives safeguarding the County’s IT assets from evolving cyber security threats, and support for regulatory compliance activities.

Funding of \$500,000 is included for IT Security for continued IT and cyber security system enhancements, replacements and upgrades, service consultation expenses, and future security product and service acquisitions to assist with ensuring the confidentiality, integrity and availability of County systems and information.

Return on Investment (ROI): IT security continues to be fundamental component of the County’s enterprise architecture and strategy. The security architecture and practices fuse best practice principles with a hardware and software infrastructure supported by policies, plans and procedures. This multi-layered approach is designed to provide an appropriate level of protection of all County information processing resources, regardless of platform, and includes incorporation of industry best practices for an overall risk reduction. The secure network architecture is a defense-in-depth approach to network security design. The County is dedicated to the protection of its IT assets from evolving cyber security threats and blocking unauthorized access to County data and information.

Fund 10040 Information Technology

<p>IT-000019 –Planning Land Use System (PLUS) Project</p> <p><i>(Formerly known as Fairfax Inspections Database Online (FIDO) and Land Development System (LDS) Replacement Project)</i></p>	<p>IT Priorities:</p> <ul style="list-style-type: none"> • Improved Services and Efficiency • Maintaining a Current and Supportable Technology Infrastructure
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FY 2016 Expenditures	FY 2017 Revised Budget Plan	FY 2018 Advertised Budget	FY 2018 Adopted Budget
\$0	\$2,750,000	\$0	\$0

Description and Justification: This project is a major strategic investment to replace and consolidate of a number of legacy and disparate land use systems that support zoning and development plan review, building permit/license issuance, code enforcement, inspection, and cashiering activities with an integrated adaptable enterprise solution, and on-going implementation and integration of electronic e-plans review capabilities. Land Use systems targeted for replacement include the 17 year-old Land Development System (LDS), Plans and Waiver System (PAWS), Zoning Application System (ZAPS), the 12 year-old Fairfax Inspections Database Online system (FIDO), and several disparate systems that provide e-services, and mobile wireless support for citizens and inspectors. The legacy systems lack the native agility of modern technologies that provide a flexible enterprise platform for evolving business process and architecture requirements.

It should be noted that in lieu of funding in the FY 2018 Adopted Budget Plan, additional funding of \$1,400,000 is anticipated to be included in the *FY 2017 Carryover Review* to continue to support requirements of the PLUS Project.

Return on Investment (ROI): The PLUS project will modernize the technologies supporting land use and development processes, directly supporting and advancing the County’s Strategic Plan to Facilitate the Economic Success of Fairfax County, specifically Goal 3: Improve the Speed, Consistency, and Predictability of the Development Review Process. The project also supports the goals of Fairfax First, an initiative to implement tactical recommendations to improve the speed, consistency, and predictability of the County’s development review process and to enhance customer service.

This project will deliver significant operational improvements and efficiencies including a single transaction portal for customers and staff, the ability to streamline online plan review, and permit and inspection service delivery. The goal is to replace the County’s aging and antiquated land use systems currently used by multiple land use agencies with a reliable consolidated platform using current technologies. Current systems are beyond their expected useful life. The extended reliance on the systems’ outdated technical architecture is affecting the County’s ability to respond quickly to new state and local ordinance requirements and expected business process re-engineering activities. In addition, the use of modern technologies, such as tablets, smartphones, web services, dashboards, and a single customer portal, is limited due to the age of the current technical architecture. Replacing the current systems will greatly reduce threats to system stability and will enable the use of technologies that will improve customer service and operational efficiency.

Fund 10040 Information Technology

IT-000025 – Integrated Human Services Technology Project	IT Priorities: <ul style="list-style-type: none"> • Maintaining a Current and Supportable Technology Infrastructure • Improved Services and Efficiency
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FY 2016 Expenditures	FY 2017 Revised Budget Plan	FY 2018 Advertised Budget	FY 2018 Adopted Budget
\$0	\$750,968	\$1,000,000	\$1,000,000

Description and Justification: This project supports the multi-year effort to design and implement a unified Human Services IT architecture supporting the Human Services Integrative Model. The vision of the Human Services Integrative Model consists of system-wide vision, shared commitment, differences accounted for, shared decision-making, and accountability for outcomes across all Fairfax County Human Services agencies.

Funding of \$1,000,000 is included to support consulting services and the acquisition of software licenses for the Technology Roadmap for design, development and deployment of an Integrated Human Services system. Within the Human Services system, clients, individuals and families are often assessed with multiple needs spanning across multiple service programs in different Human Services agencies. A holistic approach to addressing needs along the spectrum of crisis to self-sufficiency to sustainability, as well as strong communication, coordination and collaboration components are key factors in successfully meeting Human Services system needs.

Return on Investment (ROI): The strategic use of information technology to support Human Services in Fairfax County will help find the connections in fragmented data across many Human Services systems. It will incrementally link pockets of information across and within functional areas for both a mobile and community based workforce, as well as a diverse client base, and enable analysis of information across programs.

The data collected within the human services system helps shape policy within the County and those policies shape future action. The use of technology is important to ensure these policies and actions are based on robust, meaningful data. Technology is an enabler for programmatic innovation, yet it must also continuously reflect and support current trends and future directions. Innovation in technology also is vital to address the internal needs of the organization such that it can better serve clients.

Fund 10040 Information Technology

IT-000027 –Human Services Integrated Electronic Health Record System	IT Priorities: <ul style="list-style-type: none"> • Maintaining a Current and Supportable Technology Infrastructure • Improved Services and Efficiency
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FY 2016 Expenditures	FY 2017 Revised Budget Plan	FY 2018 Advertised Budget	FY 2018 Adopted Budget
\$0	\$325,000	\$600,000	\$600,000

Description and Justification: This multi-phase initiative supports the acquisition and implementation of an integrated electronic health record system to replace existing independent legacy systems for the Health Department, Department of Family Services, and the Community Services Board for delivery of integrated health services to County residents. The goal of this project is to optimize the potential value of leveraging a common information technology solution with the requisite configuration flexibility to enable these agencies and other health care providers to more effectively coordinate the management and delivery of health care services.

Funding of \$600,000 is included to continue a multi-phase project for acquisition of an integrated electronic health system to serve Fairfax County residents.

Return on Investment (ROI): Each of the above agencies provides distinct health care services and has unique documentation needs. This project will leverage a common information technology solution to enable these agencies and other health care providers – including but not limited to the County’s Community Health Care Network (CHCN) and private providers – to collaborate in the management of health care services for County residents. The acquisition of a common integrated health record solution avoids the cost of multiple individual, independent systems within multiple Human Service agencies resulting in a more efficient management and coordination of health care services.

Fund 10040 Information Technology

IT-000028 – Geospatial Initiatives	IT Priorities: <ul style="list-style-type: none"> • Completion of Prior Investments • Mandated Requirement • Enhanced County Security • Improved Services and Efficiency • Maintaining a Current and Supportable Technology Infrastructure
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FY 2016 Expenditures	FY 2017 Revised Budget Plan	FY 2018 Advertised Budget	FY 2018 Adopted Budget
\$222,382	\$619,439	\$130,740	\$130,740

Description and Justification: This project provides continued support for the County’s planned multi-year implementation and maintenance of essential Geographic Information System (GIS) data.

Funding of \$130,740 is included for continued support of this program. Through a series of complex geospatial transformations the raw imagery taken from aerial imagery flown by the state and converted to GIS data is available to many County agencies including: Police Department; Fire and Rescue Department; and the Departments of Transportation, Housing and Community Development, Public Works and Environmental Services, Planning and Zoning, and Tax Administration. It is important to note that this project consolidates projects 2G70-003-000, GIS-Oblique Imagery, and 2G70-004-000, GIS-Planimetric Data, as these projects perform similar work.

Return on Investment (ROI): Key GIS data sets are used in all County web applications that incorporate maps and in nearly all public safety vehicles through maps included in the CAD/911 system. The GIS database with new impervious features and contouring, facilitates key land use applications as recommended by the Fairfax County’s Environmental Quality Advisory Council (EQAC). GIS data also provides County agencies readily accessible data for locations across the County and the ability to view field conditions from a desktop without the need to travel thus resulting in significant staff time savings and improved response. Oblique imagery is essential for multiple County functions including critical 24/7 public safety tactical tasks, review of zoning applications, and provision of three-dimensional data for Virtual Fairfax, a heavily used public web application averaging over 750,000 sessions a year. Planimetric data is planar data (two dimensional) derived from observable natural and manmade features visible on aerial imagery, making up many of the key GIS layers used in most maps created in the County.

Fund 10040 Information Technology

FUND STATEMENT

Fund 10040, Information Technology

	FY 2016 Actual	FY 2017 Adopted Budget Plan	FY 2017 Revised Budget Plan	FY 2018 Advertised Budget Plan	FY 2018 Adopted Budget Plan
Beginning Balance	\$36,137,773	\$0	\$29,247,894	\$0	\$0
Revenue:					
Interest	\$97,958	\$43,760	\$43,760	\$100,000	\$100,000
Other Revenue ^{1,2}	1,449,698	0	1,082,242	0	0
Total Revenue	\$1,547,656	\$43,760	\$1,126,002	\$100,000	\$100,000
Transfers In:					
General Fund (10001)	\$2,700,000	\$4,770,240	\$4,770,240	\$4,770,240	\$4,770,240
Cable Communications (40030)	3,680,240	2,000,000	2,000,000	2,300,000	2,300,000
Total Transfers In	\$6,380,240	\$6,770,240	\$6,770,240	\$7,070,240	\$7,070,240
Total Available	\$44,065,669	\$6,814,000	\$37,144,136	\$7,170,240	\$7,170,240
Expenditures:					
IT Projects	\$14,817,775	\$6,814,000	\$37,144,136	\$7,170,240	\$7,170,240
Total Expenditures	\$14,817,775	\$6,814,000	\$37,144,136	\$7,170,240	\$7,170,240
Total Disbursements	\$14,817,775	\$6,814,000	\$37,144,136	\$7,170,240	\$7,170,240
Ending Balance³	\$29,247,894	\$0	\$0	\$0	\$0

¹ In FY 2017, Other Revenue reflects \$527,795 in Electronic Summons revenue, \$336,472 in Technology Trust Fund revenue, and \$217,975 in Court Public Access Network (CPAN) revenue.

² In order to account for revenues in the proper fiscal year, an audit adjustment in the amount of \$111,249.73 has been reflected as a decrease to Other Revenue in FY 2016 with an offsetting decrease in the *FY 2017 Revised Budget Plan* expenditure level. This audit adjustment has been included in the FY 2016 Comprehensive Annual Financial Report (CAFR). Details of the audit adjustment were included in the FY 2017 Third Quarter package.

³ Information Technology projects are budgeted based on total project costs. Most projects span multiple years. Therefore, funding is carried forward each fiscal year, and ending balances fluctuate, reflecting the carryover of these funds.