SECTION 3

INFORMATION TECHNOLOGY PROJECTS

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FEATURED IN THIS SECTION

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Information Technology Projects

3.1 Technology Overview

The Information Technology investment fund (Fund 100-C10040 – formerly Fund 104), was established in FY 1995 to optimize centralized management of available resources by consolidating major Information Technology (IT) projects in one fund. Based on the 1994 Information Technology Advisory Group (ITAG) study, this fund was created to account for spending by project and is managed centrally by the Department of Information Technology. The E-911 Emergency Telephone Service Fee, a General Fund transfer, other revenue funds, the State Technology Trust Fund, and interest earnings are sources for investment in eligible Information Technology projects. However, in FY 2001, the E-911 Emergency Telephone Service Fee revenue and related project expenses were moved to Fund 400-C40091 (formerly Fund 120 E-911), to satisfy a state legislative requirement that E-911 revenues and expenditures be accounted separately.

The County's technology 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 and provide an adequate technology infrastructure that supports County technology solutions. The County's long-term commitment to provide quality customer service through the effective use of technology is manifested in service enhancements, expeditious response to citizen inquiries, round the clock on-line service opportunities, improved operational efficiencies, and increased productivity and performance capabilities resulting in better information for management decisions and transparency.

FY 2017 Project Funding Recommendations

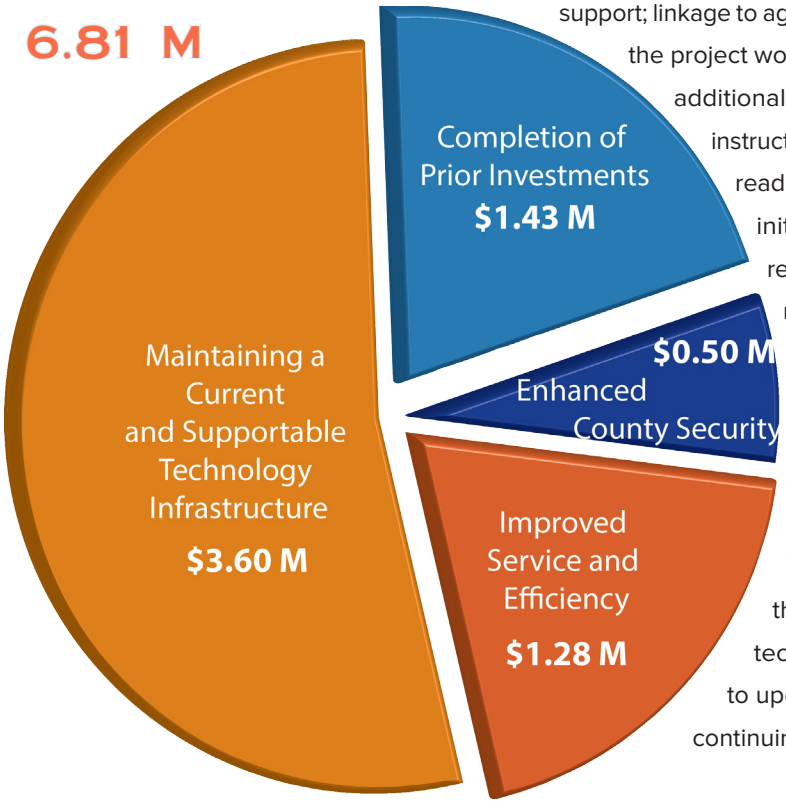
In FY 2017 funding recommendation of $6.81 million, for investments in IT projects is supported by multiple funding sources (General Fund transfer, interest income, and Cable Communication revenues). These initiatives meet one or multiple priorities established by the Senior Information Technology Steering Committee and include a mix of projects that benefit both citizens and employees, and balance new and continuing initiatives with the need for securing and strengthening the County's technology infrastructure. Funded projects will support initiatives for 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, projects have been grouped into only one priority area.

Funding Priorities

The Senior IT Steering Committee, which is comprised of the County Executive, Deputy County Executives, the Chief Financial Officer, the Chief Technology Officer, and other senior County managers, adopted five strategic priorities that guide the direction of IT investments. These long-standing priorities include:

- **Mandated Requirements -** Provide support for requirements enacted by the Federal Government, Commonwealth of Virginia, Board of Supervisors, and 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, and/or to complete a planned project.
- **Enhanced County Security -** Provide support for homeland security, physical security, information security, and privacy requirements.
- **Improved Service 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 on-line 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 manage the County's information and knowledge assets.
- **Maintaining a Current and Supportable Technology Infrastructure -** Focus on technology infrastructure modernization which upgrade, extend or enhance the overall architecture or major County infrastructure components, including hardware, software, and its environment. Ensure that citizens, businesses and County employees have appropriate access to information and services. This also includes cyber security protective measures solutions.

In accordance to the FY 2017 Budget Guidelines, agencies were advised to submit project funding requests that met one or more of the five above Senior IT strategic priorities; as well as specify 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 resources. Agencies were further instructed to carefully evaluate urgency, feasibility, readiness, and the strategic business value of initiatives for which an IT Project funding request would be submitted. FY 2017 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 is designed to facilitate the development of a solid business and technical case for IT project requests, and to update the business and technical status for continuing projects.



Completion of Prior Investments – $1.43 M

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.

In FY 2017 funding of $136,000 is recommended to continue support for the County's planned maintenance of essential Geographic Information System (GIS) data. Oblique Imagery make up many of the key GIS layers used in most of the maps made in the County including: the 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. These key datasets 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 which uses CAD maps.

FY 2017 funding of $75,000 is recommended to support the Automated Board Meeting Records Project. This initiative streamlines, automates, and supports mobile-enabled submission, preparation, and delivery of the Board of Supervisors meeting agenda and board-book package. Sponsored by the Board of Supervisors and the County Executive this project enables the Offices of the County Executive and the Clerk to the Board to electronically create Board agendas and supporting documentation, record Board of Supervisor meeting matters, and post documents on-line for accessibility. FY 2017 funding will support further implementation of board-book packages to Boards Commissions and Authorities (BACs), Board sub-committees and annual software licenses.

Recommended FY 2017 funding of $428,500 supports continued development and implementation of the Customer Relationship Management (CRM) solution in County agencies. This initiative provides a unified user approach for handling citizen 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 24x7 access strategies, integrating social media tools and techniques to enhance the overall customer experience, and managing service requests via a single user enterprise-wide interface tool.

In FY 2017 funding of $596,500 is recommended to support a required refresh of the Courtroom Technology Management System (CTMS). In 2008 the Courtroom Technology project deployed CTMS, currently 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. FY2017 funding will support adoption of digital technology standards to ensure compliance with industry standards. A multiphase deployment of a digital hardware replacement plan, as well as retrofitting existing courtrooms with digital technologies is planned to begin in FY 2017.

FY 2017 funding of $200,000 is recommended for the Sheriff's Civil Enforcement Project. The Sheriff's Office is required by Virginia Code to execute civil process within Fairfax County. The Office of the Sheriff, in collaboration

with the Court Technology Office (CrTO), and Circuit Court & Records (CCR), General District Court (GDC), and Juvenile & Domestic Relations District Court (JDRDC), is implementing the Advanced Civil Enforcement System (ACES), an automated solution designed to replace the existing manual and paper intensive process for processing large volumes of daily service documents. The ACES system provides enhanced efficiencies by electronically processing, distributing and tracking service documents. This solution can also automate processing of civil documents through bi-directional interfaces between the Sheriff's Office and the three courts.

Enhanced County Security – $0.50 M

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

FY 2017 funding of $500,000 is recommended for Information Security strategic and tactical initiatives safeguarding the County's IT assets and supporting regulatory compliance activities. Cyber security continues to be a fundamental component of the County's enterprise architecture and strategy; security architecture and practices fuse best practice principles with a hardware and software infrastructure supported by policies, plans and procedures. This project provides for cyber security system requirements, replacements and upgrades, service consultation, and future security product and service acquisitions to protect the confidentiality, integrity and availability of County systems and information.

Improved Service and Efficiency – $1.28 M

Projects recommended for funding in FY 2017 provide improved service and efficiency in the provision of services to the residents and the business community of Fairfax County. These include projects supporting the County's e-government and public access programs, transparency efforts and initiatives that improve County processes resulting in enhanced efficiencies and service delivery.

In FY 2017, funding of $528,000 is recommended to support the County's award winning e-Government Program to meet the high demand for multiple e-government channels, e-transactions services, and on line accessibility to government information and services. The annual funding increment supports improved navigation, web content synchronization, mobile applications, social media integration, transparency, Web 3.0, support of the County's intranet (FairfaxNet) and sustained compliance with the Department of Justice (DOJ) Americans with Disabilities Act (ADA). The County's e-Government program 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. The program expands the capabilities of content management to improve automated workflow, indexing, and search and retrieval for systems County-wide to improve operational efficiencies and collaboration. Internet and Intranet initiatives provide significant wide-ranging opportunities enhancing information and services accessibility to County employees and the public.

FY 2017 funding of $150,000 and an FY 2016 Third Quarter reallocation of $600,000 from existing Human Services projects in Fund 100400, supports the first phase of the Integrated Human Services Technology project. This multi-year effort supports deployment of a unified Human Services IT architecture supporting the Human Services Integrative Model; 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 County policy and those policies shape future action. The use of technology is important to ensure these policies and actions are based on robust and meaningful data.

FY 2017 funding of $150,000 and an FY 2016 Third Quarter reallocation of $175,000 from existing Human Services projects in Fund 10040, will support the initial phase of the Integrated Electronic Health Record System Project. The goal of this 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 has 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 County residents.

FY 2017 funding of $150,000 is recommended to support the initial phase of the Diversion First Interoperability Project. A FY 2016 reallocation of $330,889 from the CBS Initiatives Project in Fund 10040 is also planned. The Diversion FIrst project has an overall goal of diverting people with mental illness and who have committed low-level offenses or may have criminal charges to treatment instead of incarceration. The technology project's efforts include identification of associated internal and external systems of partner organizations and interventions as well as data elements and intervention measures across varied law enforcement, justice, and mental health systems. This project will develop an interoperable data solution that spans diverse organizational systems in order to determine success, track and monitor individuals, develop aggregated reporting mechanisms, and develop quality improvement approaches to improve outcomes. It will support the data collection, data sharing, and outcome evaluation of these diverse initiatives necessary to determine overall success and will assist with decision-making and outcome assessment.

Funding of $300,000 in FY 2017 is recommended to begin the multi-phase Integrated Library System Project to replace the current legacy library system used by the public and staff to access nearly all library transactions including checkouts, returns, holds, cataloging, collections, etc. In FY 2017 the project plans to consolidate selection criteria, requirements and complete market research; implementation and go-live is currently planned for FY 2018 - FY 2019. The legacy system has reached end of life and will be replaced with a more contemporary integrated web-enabled system with social media features providing better online features as well as informative content, enhanced formats, improved stability, and response time. The goal is to increase online accessibility, customer transactions, provide a wider range of library services, and improve customer satisfaction rates.

Maintain a Current and Supportable Technology Infrastructure – $3.6 M

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. Projects funded in FY 2017 will 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.

Funding of $1,800,000 is recommended in FY 2017 for the Enterprise Architecture and Support Project supporting strategic infrastructure and expert services for 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 Enterprise Resource Planning (ERP) and related business systems. This funding supports necessary software upgrades and integration of business application and infrastructure system components to meet both the County's IT architecture and interoperability goals.

Funding of $1,400,000 in FY 2017 is recommended to continue the Fairfax Inspections Database On-Line (FIDO) and Land Development System (LDS) Replacement Project. A multi-phase initiative designed to replace and consolidate multiple legacy land use systems supporting zoning and development plan review, building permit/license issuance, code enforcement, inspection, and cashiering activities. 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 shadow 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. The legacy systems rely on outdated no-longer supported technologies lacking optimal security capabilities and incompatible with emerging mobile-wireless technologies.

FY 2017 funding of $200,000 is recommended for the Remote Access Project which supports secure remote access to County networks and systems and provides improved security, reporting, and data analysis. This project supports telework capabilities, disaster recovery operations, and recognizes the 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.

Funding of $200,000 is recommended in FY 2017 for on-going information technology training and certification in recognition of the challenges associated with maintaining skills as technological changes are realized 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.

Budget ID Number	PROJECT TILE	FY 2012 ADOPTED	FY 2013 ADOPTED	FY 2014 ADOPTED	FY 2015 ADOPTED	FY 2016 ADOPTED*	FY 2017 ADVERTISED**
FUND 40091							
2G70-056-000	Public Safety Subscriber Radio Replacement	2,314,500	2,314,500	2,314,500	3,531,352	3,531,352	3,531,352
2G70-059-000	Mobile Computer Terminal	2,314,500	2,314,500	2,314,500	1,616,200	1,616,200	1,616,200
3G70-078-000	E911 Telephony Platform Replacement				2,100,000	2,180,000	2,180,000
3G70-079-000	Public Safety CAD System Infrastructure				1,260,000	1,180,000	1,180,000
	TOTAL FUND 40091	**4,629,000**	**4,629,000**	**4,629,000**	**8,507,552**	**8,507,552**	**8,507,552**
FUND 10040							
2G70-003-000	Oblique Imagery – GIS	128,212	150,744	146,280		136,000	136,000
2G70-004-000	Planimetric Data Acquisition – GIS	150,000	187,000	92,000	162,000	90,000	
2G70-006-000	Information Technology Training	75,000	193,668	75,000	200,000	100,000	200,000
2G70-011-000	Automated Board Meeting Records						75,000
2G70-018-000	Enterprise IT Architecture and Support	2,163,200	3,500,000	2,500,000	2,900,000	1,800,000	1,800,000
2G70-020-000	Internet/Intranet Initiatives – e-Government	400,000	400,000	200,000	675,000	528,000	528,000
2G70-026-000	Fairfax Radio System Consolidation	550,167	550,167				
2G70-034-000	Courtroom Technology Management System - Digital Refresh						596,500
2G70-036-000	Remote Access	200,000	200,000	100,000	200,000	100,000	200,000
2G70-041-000	Customer Relationship Management				200,000	400,000	428,500
2G70-045-000	Public Safety Architecture Modernization	1,215,000					
2G70-051-000	Data Reporting – DFS		300,000				
2G70-052-000	IT Cyber Security						500,000
2G70-053-000	Retirement of Legacy Systems		500,000	500,000	400,000		
2G70-054-000	Police In Vehicle Video System		3,670,000	1,860,000			
2G70-055-000	Volunteer Management System	200,000		175,000			
2G70-067-000	e-Summons			175,000			
2G70-069-000	Tax System Modernization – Tax/Revenue Administration		1,000,000	800,000		450,000	

Budget ID Number	PROJECT TILE	FY 2012 ADOPTED	FY 2013 ADOPTED	FY 2014 ADOPTED	FY 2015 ADOPTED	FY 2016 ADOPTED*	FY 2017 ADVERTISED**
IT-000003	Data Loss Prevention Project			500,000			
IT-000004	Emergency Management Portal			200,000			
IT-000005	GRC Auditing			750,000			
IT-000007	Enterprise Project Management				200,000		
IT-000009	Participant Registration System				300,000		
IT-000010	Electronic Plan Submission and Review - LDS				600,000		
IT-000011	ePlans - DPZ				400,000		
IT-000012	ParkNet Replacement				600,000		
IT-000014	Sheriff Civil Enforcement System				315,000		200,000
IT-000017	Enterprise Document Management					450,000	
IT-000018	Enterprise Identity Management					800,000	
IT-000019	FIDO-LDS Replacement					1,000,000	1,400,000
IT-000020	Tele-Psychiatry					300,000	
IT-000021	Fire and Rescue and Police Stations Telephone Replacement					270,000	
IT-000022	Integrated Library System						300,000
IT-000025	Integrated HS Technology[1]						150,000
IT-000026	Diversion First Interoperability[2]						150,000
IT-000027	Integrated Electronic Health Record System[3]						150,000
	TOTAL FUND 10040	**9,251,579**	**8,841,579**	**6,113,280**	**6,752,000**	**6,424,000**	**6,814,000**
	GRAND TOTAL: IT PROJECTS	**13,880,579**	**13,470,579**	**10,742,280**	**15,259,552**	**14,931,552**	**15,321,552**

[1] Funding totaling $600,000 will be reallocated to this project as part of the FY 2016 Third Quarter Review. Of this total, $400,000 will be reallocated from the Human Services Data Repository Project, $167,000 from OFC Imaging and Workflow Project and $33,000 from Health Department HMIS Interface Project.

[2] FY 2017 funding will be in addition to relocation of $362k from CSB Initiatives Project.

[3]Funding of $175,000 will be reallocated to this project as part of the FY 2016 Third Quarter Review from OFC Imaging and Workflow Project.

*Adopted Budget funding reflects new investment for each fiscal year and does not include incremental investments made during annual Carryover or Third Quarter Budget Cycles.

**Advertised funding reflects amounts requested for IT Projects, funding is pending Board of Supervisor's approval.

3.2 Public Safety

2G70-056-000 Public Safety Subscriber Radio Replacement Project (E911 - Fund)

Project Description

This project is a technology refresh/life-cycle replacement program for all MHz digital two-way radios (portable and mobile) in use by the Fairfax County Police Department, Fire and Rescue Department, and the Sheriff's Office. The radios replaced were physically 7-9 years old, over 12 years old in terms of current technology, had reached end of life, and no longer met Public Safety needs or critical interoperability with National Capital Region (NCR) neighbors. The new Public Safety radios have the necessary feature set for encryption of voice traffic, thereby limiting outside scanning and interception of the radio traffic, are compatible with other NCR jurisdictions, and were deployed throughout Fairfax County's Public Safety agencies to maintain operational performance, employee safety, and effective operations in a regional emergency event. Failure to have radio compatibility would compromise mutual aid situations, result in failed response, and increased risk of injury or death to public safety personnel and the public.

Project Goals

This project provided for the replacement of all Public Safety voice subscriber portable and mobile radios. Successful deployment of the new radios enhances communications security, ensures that Public Safety users are on the same platform to provide immediate and systematic response to emergencies, maintains performance, availability, reliability, and provides capacity for growth due to the increase in County population and public safety services demands.

Progress to Date

Project was completed with final system acceptance in December 2012. An additional antenna site (Bailey's Crossroads) was added to the System and both the Primary Antenna Control Site and System Master Site were moved from their previous unprotected sites to the Public Safety and Transportation Operations Center (PSTOC).

With the completion of the Radio Upgrade Project, Fairfax County completed the next logical step in the modernization process, which was the replacement of its Public Safety Subscriber Radios. Over 6,000 portable and mobile radios were procured in September 2013. All radios were programmed to proper frequencies and talk groups, tested, and deployed. This project was completed in the fall of 2014.

Project Budget

FY 2017 funding of $3,531,352 is included for annual increment of a lease payment schedule.

Return on Investment

Keeping the technology current for essential public safety systems is critical to first responder operations, community security and protection of public safety personnel. The new subscriber radios provide end users with updated equipment with increased functionality and serves as a basis for future growth. Nearly all new

infrastructures now support multiple non-proprietary protocols, IP and digital technology, and various types/mixes of mobile radio equipment using fast data transmission speeds. This replacement provides the County with a radio capability that will allow incremental migration to newer technologies in the future. The return on investment is realized by the performance, productivity, and effectiveness of public safety services, with seconds enhancing life/safety results.

2G70-059-000 Mobile Computer Terminal Project (E911 - Fund)

Project Description

Fairfax County public safety communications relies heavily on mobile data communications for the dispatch of equipment and personnel to emergencies and other non-emergency requests for public safety services. Digital communications are used to allow field units (e.g., police, fire and rescue, and sheriffs) to receive dispatch messages, event notifications, to self-initiate events, make traffic stops, check on licenses and registrations, maintain status for response, and communicate with one another and the Department of Public Safety Communications (DPSC) without the use of voice radio or intervention of a dispatcher at the DPSC. The entire structure of the County's public safety response system, including staffing at the DPSC, is based on the heavy utilization of mobile data communications for critical public safety activities.

Project Goals

This project supports the recurring life cycle replacement of Mobile Computer Terminals (MCT) to ensure this critical equipment is kept contemporary and functional for public safety personnel who respond to emergency and non-emergency requests for services.

Progress to Date

The last MCT replacement cycle occurred in FY 2008 through FY 2012 and was a 5 year life cycle replacement for the MCT in vehicle computer equipment. At that time 5 years was deemed to be a reasonable replacement term for the mobile computer fleet. FY 2017 funding is the fifth year of this replacement cycle of MCT equipment. Years 1 through 4 of the life cycle replacement have been completed in FY 2013 through FY 2016.

Project Budget

Funding of $1,616,200 supports the fifth year (FY 2017) of this life cycle replacement.

Return on Investment

In excess of 150,000,000 transactions are currently processed each year via MCTs through the mobile data communications infrastructure and therefore, it is critical to keep this equipment contemporary and available for the many operations utilized by the field personnel. The current fleet has approximately 1500 units including spares. It is anticipated that this number will continue to grow throughout the life cycle replacement of computer equipment as additional functionality is added that can be made available to additional users in the mobile environment.

MCTs keep officers on the street versus behind a desk as they provide an efficient, quick method where the officer can complete reports and perform routine queries from a mobile device in their vehicle. In addition to the many functions currently performed on the MCT units, police officers use the MCT for mobile field reporting. The County has incorporated a field reporting system into records management and integrated it with the CAD system allowing officers to complete investigative reports online from their vehicle with most of the preliminary information downloadable from the event history reports in the CAD system. This enhancement saves countless hours previously expended writing field investigation reports longhand by patrol personnel.

3G70-078-000 E911 Telephony Platform Replacement Project (E911 - Fund)

Project Description

This project supports replacement of hardware and software for the 9-1-1 call processing environment that enables Fairfax County's Public Safety Answering Point (PSAP) to receive and process emergency calls within the boundaries of the PSAP calling area. Due to the life cycle end of the current hardware/ software and termination of maintenance support as declared by the 9-1-1 telecommunications service provider, this project is a required update of the PSAP communications technology environment to continue 9-1-1 call processing functions. Widespread adoption of rapidly advancing technologies like text, video, Voice over Internet Protocol (VoIP), and the saturation of high speed broadband has raised the expectation of 9-1-1 services for the citizens of Fairfax County. Improvements are needed to support new requirements and expectations. Fairfax County's 9-1-1 call processing phone platform currently operates on the traditional vendor telephony supplied platform and equipment that is based on a major change in telephony platforms reaching end-of-life.

Project Goals

This project will support a multi-phase effort to transition the County's core 9-1-1 system architecture to a new supportable platform that is technologically up to date, has more robust functionality to facilitate future requirements and capabilities.

Progress to Date

Phase 1 – In September of 2015 the project implemented Text-to-9-1-1 capabilities in Fairfax County. This was the first jurisdiction in Virginia, Maryland and the District of Columbia to make this capability available to its citizens.

Phase 2 – Completed selection of a new vendor for the replacement of call taking equipment in all Fairfax County 9-1-1 centers and associated secondary locations with project implementation and cutover to the new equipment environment expected by the third quarter of 2016.

Phase 3 – Fairfax County was awarded grant funds from a Department of Homeland Security (DHS) grant for planning and developing the technical specifications culminating in vendor selection in 2016 for the transition to a new regional NG9-1-1 ESInet (Emergency Services Internet Protocol Network) for call routing to replace the legacy 9-1-1 network over a 3-5 year period in a phased manner.

.Project Budget

In FY 2017 funding of $2,180,000 is recommended to continue support for the required hardware and software upgrades associated with this strategic initiatives.

Return on Investment

The improved systems for 9-1-1 services will provide enhanced services and capabilities to the citizens of Fairfax County at a high degree of functionality and in a technologically appropriate manner. These technology upgrades strengthen system resiliency and reliability, and establish a technology foundation for implementation of Next Generation 9-1-1 multimedia capabilities such as text, video and photographs. Future phases will improve system interoperability with other jurisdictions, call overflow with other Public Safety Answering Points, and location accuracy. The introduction of the new 9-1-1 call processing technology platforms will eventually introduce cost savings to Fairfax County as specialized proprietary systems are replaced with commercial off the shelf components which will reduce maintenance costs.

3G70-079-000 Public Safety CAD System Infrastructure Project (E911 - Fund)

Project Description

The Public Safety Computer Aided Dispatch System (CAD), requires a hardware and software replacement life cycle to keep the functionality and capabilities of the system current with updated technology, hardware, improved software and additional required security and functionality. The CAD System is the core technology supporting the intake and dispatch response functions for all Fairfax County public safety agencies including Police, Fire and Rescue, Sheriff, and the Department of Public Safety Communications (DPSC 9-1-1 Center) in their core mission of keeping Fairfax County and its citizens safe. It is used by the call takers and dispatchers to process all calls for service received on 9-1-1 and other requests for emergency and non-emergency services in Fairfax County, as well as for mutual aid interoperability. Over the next five years, this project supports replacement of the aging supporting hardware infrastructure and required supporting software licenses, workstations and associated licenses, and the CAD system.

Project Goal

This project's goal is to refresh/update the current Public Safety 9-1-1 CAD system and components: equipment (hardware) and applications (software) over a five year plan, and baseline a rationalized replacement structure for the future. The existing equipment was purchased several years ago and is starting to exceed normal life expectancy. The Fairfax standard for IT foundational and workstation equipment is five years, keeping in mind usability, maintenance and supportability. This also facilitates planning as software solutions evolve in the marketplace. Keeping the infrastructure current allows the system to sustain better performance, reduce risks for equipment failures, and keep pace with changing technology capabilities, and increasing security requirements.

Progress to Date

Staff from the Department of Public Safety Communications, the public safety agency stakeholders, the Department of Information Technology and advisory experts have researched the issues associated with sustaining 9-1-1 Center performance, best practices for hardware replacements, security and resilience, the state of the industry and readiness to be able to operationalize and integrate next generation 9-1-1 needs and the marketplace for solutions and current solution viability.

Each phase of the proposed project plan addresses the replacement for the components and related software versioning processes with activities including identification, purchase, installation, software license obligations, and ultimate transition to a new CAD solution. The hardware replacement schedule will be coordinated with the partner agencies to ensure minimal impact with other Public Safety projects that may be occurring at the same or similar times.

Project Budget

In FY 2017 $1,180,000 is recommended to support the third year of the five year plan established for this project.

Return on Investment

Public Safety agencies rely on the CAD System to provide mission critical lifesaving and property protecting services to Fairfax County and the surrounding areas. By replacing hardware in a timely fashion, the County safeguards against equipment failure and legacy vendor abandonment of aging technology that could potentially result in service interruptions with grievous consequences. This project incorporates the requirements needed to upgrade and replace all CAD system components, including software versioning over a five year period to keep the system contemporary and upgraded and to allow for continued use by the Public Safety user community. The need for improved CAD system capacity and functionality will continue into the future as a necessary funding requirement. Using a phased, life cycle approach insures that required funding is spread out over a five year period and thus relieves the County of the impact of a major system overhaul in any one fiscal year.

2G70-007-000 Electronic Records Management System Project- Juvenile and Domestic Relations District Court (JDRDC)

Project Description

Fairfax County's Juvenile & Domestic Relations District Court (JDRDC) and DIT have partnered with the Supreme Court of Virginia's (SCV), Office of the Executive Secretary, to implement a Case Imaging System for the scanning, retention, electronic viewing and submission of court documents. The Juvenile and Domestic Imaging System (JDIS) is a custom built SCV solution that includes built-in interfaces with the existing SCV's Judicial Case Management System (JCMS), and other requirements unique to Fairfax County's JDRDC. This implementation introduces shared compatibility between the state and the County with the integration of court documents into JCMS the core system of record for the court. This shared initiative will ultimately benefit all courts, related agencies and jurisdictions throughout the Commonwealth of Virginia.

Project Goals

The JDIS project seeks to reduce or eliminate labor intensive and time consuming hardcopy record searches, retrieval and re-filing processes, and provides simultaneous and instant access to court records with improved security. The JDRDC will realize improved efficiencies and reduced costs associated with storage of paper documents, and safeguards documents with electronic backup capabilities.

Progress to Date

Completion of JDIS Phase 1, Phase 2, Phase 3A and half of Phase 3B has provided the court the ability to capture, display and distribute images electronically for all juvenile traffic, adult criminal and a portion of juvenile criminal case documents. JDIS also expedites the electronic delivery and exchange of documents between the courtroom and the post court counter, financial clerk, and court services units (CSU). The system also enables scanning and submittal of documents by various Court Services Unit (SCU) to the clerk's office for timely acceptance into the electronic case file for viewing by the judges during hearings. Additionally, the first portion of Phase 3B has facilitated secure viewing of case documents by probation units and residential units outside the courthouse.

Planned Project Schedule

Completion of Phase 3B includes JCMS/JDIS integration, remote submission of case file documents and reports by CSU units outside the courthouse, the remaining juvenile delinquency case types, the use of barcoding to automate scanning of summons and subpoena service returns to the appropriate electronic case files, and limited public viewing. This phase is currently in progress and estimated for completion in FY 2016. Implementation of an upgraded JDIS hardware and storage platform for additional backup and recovery, redundancy, secure file storage, testing and training environments is also anticipated to be complete in FY 2016.

Phase 4 will provide quality control reports for reconciliation, increase accuracy of the status and electronic content of individual cases, specifically where probation was ordered, and validate submission of electronic orders to receiving agencies. Additionally, all civil matter case types, both adult and juvenile, will be included in the scanning process. Phase 5 (final) will enable interfaces with the Sheriff's Advanced Civil Enforcement System (ACES).

Project Budget

Additional funding is not required in FY 2017.

Return on Investment

This project improves public access to court records, enhances data security, and significantly reduces staff time dedicated to locating missing files, retrieving and re-filing court records. The system also shrinks the physical storage space required for court files, improves response time for customers and court staff at the Records, Fines and Costs counters, and reduces the incidence of misplaced court files and documents necessary for the continuity of courtroom proceedings.

2G70-021-000 Circuit Court Technology Project

The Fairfax Circuit Court is nationally recognized for its delivery of outstanding public service and continues to actively pursue state of the art technology solutions to improve customer support and operational efficiencies. This project covers multiple facets of Circuit Court operations and receives funding through the Commonwealth of Virginia's Technology Trust Fund.

Project Description

Court Automated Recording System (CARS) / Court Public Access Network (CPAN) – The Clerk's Office of the Fairfax County Circuit Court is responsible for providing citizens with reliable, timely, and accessible public records. More than 48 million Land Records, Public Service and Probate images, dating from 1742 to the present have been digitized, indexed and loaded into CPAN; a web-based, online retrieval system, available 24 hours a day, 7 days a week, with more than 2,000 subscribers located domestically in thirty states, the District of Columbia, and internationally in India. Subscribers include citizens, title examiners, law offices, mortgage companies, banks, Commissioner of Accounts, Federal, State and County agencies.

Case Management System (CMS) – This system automates case processing through the Circuit court and includes: case initiation and indexing, docketing and related record keeping, scheduling, document generation and processing, calendaring, hearings, disposition, accounting functions, security, management and statistical reports.

Radio Frequency Identification (RFID) – The RFID project became operational during FY 2012 and has incorporated an RFID based system to assist in the real-time tracking of court case file folders as they move throughout Circuit Court. The goal of improving efficiency and customer services by greatly reducing staff time, effort and resources dedicated to searching and locating court case files was met. In FY 2013 additional readers were implemented for coverage in all the judges' chambers. The Circuit Court also expanded the RFID system to include criminal evidence which will allow the criminal section to have an evidence management system for audit, inventory and tracking purposes.

On-Line Scheduling System (OSS) – The Circuit Court launched an On-Line Scheduling System (OSS) to allow attorneys to schedule their domestic and non-domestic trials and, civil case trial dates (both jury and non-jury) on-line. The OSS was developed in a collaborative effort with the Fairfax County Department of Information Technology (DIT) with the goal of saving court staff and attorney's time and money by allowing users to select and schedule civil case trial dates electronically without the need to travel to the Courthouse and attend a scheduling conference.

Redaction – The Commonwealth of Virginia passed legislation mandating the Clerk of the Circuit Court to redact social security numbers (SSN) from all images in Circuit Court's automated systems viewable via secure remote access. The Circuit Court integrated redaction system was released in June, 2012, over 42 million back-file images have been processed, and the redaction was integrated into CARS for day-forward operations. After deployment, the system was upgraded to the most up-to-date version of the redaction software and tools that allows staff to identify and correct documents where automated redaction may have missed a social security number.

Project Goals

Circuit Court modernization initiatives in the Clerk of Court's technology program pursues state of the art technology solutions to improve customer support and operational efficiencies for Fairfax County Circuit Court.

Progress to Date

- Replacement of the 10 year old windows based case management system with a fully integrated web browser based case management system providing civil and criminal processing, imaging and electronic filing capabilities.
- Increase the number of courtrooms equipped with technologies in order to facilitate remote testimonies, audio-visual evidence displays, integrated assisted listening, and interpretation capabilities.
- Deployment of a court document recording system that incorporates scanning, indexing, image enhancement and verification for various court documents, such as land records, marriage licenses, wills and judgments. This solution will replace the existing product that has been used to manage the document processing for over 15 years

Other accomplishments include development and deployment of the Court's Land Records Recording System, including document imaging; implementation of the CPAN retrieval system, use of an automated jury management system to administer 60,000 potential jurors annually; deployment of a case management system to control the administration of the Court's judicial case load; development and implementation of paperless probate processing; development and implementation of a streamlined marriage license process which utilizes scanners to import data from customers' operator licenses; and implementation of electronic docketing display directing the public to the assigned courtroom. The system provides a foundation for additional capabilities building on the Court's business requirements. Technological system updates are also addressed through this fund.

CARS

- Digitized back-file images with associated indices and implemented web-based CPAN, 1999
- Scanned, indexed, and stored all land record documents for electronic processing, 2000; redesigned processes to include automated cashiering and scanning capabilities to update the public record in a more efficient manner 2001; eElectronic filing prototype for mortgage releases using the ACH transfer of funds, 2002; implemented Public Services cashiering system, 2005; automated the administration of estates system, 2006; incorporated the use of commercial credit cards for payment of fees and taxes, 2007; land records Electronic Filing System (EFS) made available to the public, 2010; integration of automated scanning in the marriage license application process, 2010; integration of redacted data and processes mandated by the legislature, 2012; development of the Online Marriage Pre-Application, an online resource used by 50% of all marriage license applicants. Use of the application has significantly reduced customer wait times; implementation of the Electronic Filing System which now accounts for 18% of all documents recorded in Land Records, thus reducing staff workload; and automated document recording system has provided the needed scalability to handle the peaks and valleys of the workload, much of which is driven by the unpredictable housing market

CMS

Provided web-based availability of court information on CPAN, 2005 and implemented electronic docket displays, 2006; Circuit Court successfully migrated to a web based enterprise case management system in 2012 and implemented the following enhancements:

- Deployed court-wide scanning of all case documents with on-going day forward redaction.
- Initiated the use of work queues to streamline work processes and incorporated emailing of various court documents to private attorneys and various state agencies.
- Developed a protective order interface with the state.
- Established a report service library in which custom built reports are kept for both on-going and ad-hoc requests

RFID

- Complete and operational during FY 2011; Circuit Court incorporated an RFID based system to assist in the real-time tracking of courts case file folders as they move throughout the Court.

Redaction

Integrated redaction processes and data in current workflow and redacted SSNs from documents available to the public at the Courthouse and via secure remote access as mandated by the legislature. Redaction is currently in support and maintenance.

- Integrated redaction processes and data in current workflow and redacted SSNs from documents available to the public at the Courthouse and via secure remote access as mandated by the legislature.

Planned Project Schedule

- Requirements gathering for a Fairfax County Sheriffs interface for electronic service.
- Requirements and development of a DMV interface in which driver's license suspensions will be electronically transferred nightly to DMV for system update.
- Requirements gathering and development of an interface between the CMS and CARS with the ability to transfer judgment data and the accompanying documents when a judgment is docketed.

Project Budget

Annual funding from Virginia State Technology Trust Fund revenue (mandated by the Code of Virginia specifically for Court Technology by the State Compensation Board and which cannot be used for any other purpose), CPAN subscription revenue, Administration of Justice revenue, and agency funds support technology initiatives in the Circuit Court.

Return on Investment

CARS provides immediate electronic access to CPAN for over 2,000 commercial customers. The system provides added functionality to search for and correct errors that occurred in documents recorded in

the previous land records system. Additional benefits include enhanced retrieval and administration of Circuit Court records and an expedited transfer of information to the Department of Tax Administration (DTA), Geographic Information Systems (GIS) and the Department of Public Works and Environmental Services (DPWES).

The Case Management System's, imaging and electronic filing enhancements will provide increased efficiencies in the processing of more than 22,000 civil and criminal case filings annually. Multiple parties will be able to access electronic case files simultaneously and file documents from their office or home, reducing the need to travel to the courthouse and provide 24/7 accessibility. Potential interfaces with other jurisdictions will allow the exchange of electronic documents and/or data and eliminate existing manual processes between jurisdictions.

Through the implementation of the RFID project Circuit Court saves considerable staff time and resources previously expended in tracking down case file folders. The RFID repository has been growing annually by approximately 27,000 files. The RFID system significantly improves operational efficiency and ensures the safe guarding of legal records and files.

The Redaction Project enhances the security and integrity of CPAN by removing social security numbers from public view. An added cost savings of the project will be the ability of the software to identify items that may be redacted by future legislative mandates without incurring additional reprocessing costs.

2G70-034-000 Courtroom Technology Management Systems - Digital Upgrade

Project Description

Fairfax County's Court Technology Office (CrTO) has completed research and designs for the "next generation" digital courtrooms necessary to upgrade the existing Courtroom Technology Management System (CTMS) launched in 2008 to provide electronic evidence presentation, video conferencing and systems management for all three Fairfax County Courts. In less than 10 years, technology has changed significantly; new digital design is necessary to replace obsolete analog hardware, include newer, digital components for courtrooms undergoing renovation; and the retrofitting of CTMS in 18 existing courtrooms. Analog equipment and repair parts are being discontinued, and existing hardware components require replacement with digital hardware. Upgrading to digital hardware is not a "plug and play" fix, and requires new cabling, connections and new software code.

Project Goals

The primary goal of this project (CTMS2) is to upgrade the high-tech courtrooms in Fairfax County Courthouse to an all new digital platform necessary to meet industry standards. The digital upgrades will support Bring Your Own Devices (BYOD), upgraded digital connections for HDMI and DisplayPort connector types, annotation enhancements, upgraded touch panel displays, and network-managed video services, while retaining existing CTMS functionality. CTMS2 will continue to improve citizens' access to the Courts, facilitate trials and hearings in the most effective and efficient means possible, allow for all three Courts to share common resources, and provide for the flexibility and adaptability required to incorporate future changes in technology and court proceedings.

Progress to Date

- Courtroom construction and technology infrastructure design with the Department of Public Works and Environmental Services and contracted architect – Completed January 2015
- Courtroom renovations – Commenced September 2015
- CTMS 2 digital design – Completed January 2016

Planned Project Schedule

The digital migration will require careful planning and scheduling as only so many courtrooms can be "out of commission" at one time. The digital retrofit is anticipated to take six to eight weeks per courtroom, planned over multiple fiscal years. Phase 1 includes four Circuit Court Courtrooms and retrofitting existing courtrooms for all three courts will be deployed in FY 2017.

Return on Investment

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 supporting improved citizen access, internally and externally, to the courts, facilitation of trials and hearings in the most effective and efficient means, and 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. Substantial benefits and opportunities have been realized by centralizing and standardizing courtroom technology and sharing resources and infrastructure between the three courts. The implementation of CTMS has improved trial management, and provided savings for the County, the courts, attorneys, and litigants

2G70-050-000 Fire Station Alerting Technology Replacement Project

Project Description

This project provided a turn-key system replacement of fire station alerting (FSA) components. This alerting system is a critical part of the 911 systems and public safety response, and is a requirement specified in the National Fire Protection Association (NFPA) 1221 Standard. This technology life cycle replacement brings the Fire and Rescue Department's (FRD) station alerting system to a technical level to integrate with the Public Safety Computer Aided Dispatch (CAD).

Project Goals

The business and operational objectives are to implement a proven FSA system that enables Fairfax County to meet the public safety goals of reduced response times, enhanced communication, and immediate access to relevant and critical information. The goal is to integrate the Fire and Rescue Department's station alerting system with the Public Safety Communication Center systems. The system will reduce reflex time for response by providing immediate unit based visual and verbal alert indication at the time of dispatch and prior to radio voice dispatch, safe lighting and alert process throughout the station, recorded announcement, station alerting capabilities as required by NFPA 1221, and streamline maintenance and support for system components.

Progress to Date

The initial phase for the core system infrastructure to interface and align with the new Computer Aided Dispatch System and replace end-of-life infrastructure and network components was completed in all Fairfax County Fire and Rescue stations. The acquisition and installation of hardware for the Automated Voice Dispatch is complete with the CAD to FSA interface functional after preliminary testing; final testing and acceptance is planned for April 2016.

Future work will include upgrading the remaining infrastructure and components and installation of hardware such as satellite controllers, dispatch timers, and message boards which are in planning stages. Installation will be coordinated with Departments of Public Safety Communications and Department of Information Technology.

Project Budget

This project has met its original scope; **it will be retired in the FY 2017 Adopted Budget IT Plan.**

Return on Investment

The Fire and Rescue Department expects to reduce overall response time to emergency incidents through immediate alerting of personnel. The system leverages the CAD system and provides immediate unit based alert indications at the time of dispatch and prior to radio voice dispatch. The process reduces what is known in the industry as “reflex time”, or the amount of time between when the call is dispatched and when the response units are boarded by personnel and ready to respond. This is a life-cycle replacement from aging and incompatible equipment to an integrated system. Maintenance and support costs for system components will also be streamlined.

2G70-067-000 Electronic Summons Project (e-Summons)

Project Description

This project is designed to develop automated solutions to streamline the traffic ticketing and summons processes by implementing an integrated Electronic Summons (e-Summons) solution to capture and transfer traffic summons information from the point of issuance, through the Police Department to the Courts. The project intends to implement tried and known best - in - breed solutions used by other progressive police departments nationally, and optimize operational processes developed from the earlier pilot phases into the next phase.

Project Goals

Project goals are to provide efficient and timely public access to electronic traffic case records, enable quick citizen access to traffic case records, reduce the time officers spend on each traffic stop thus lessening the inherent risk involved in traffic stops on the highway, improve accuracy and efficiency of data capture, increase the efficiency with which traffic summons are issued and adjudicated in Fairfax County, eliminate redundant paper and manual processes, and enhance data quality as it relates to accuracy, reliability, and timeliness.

Progress to Date

Equipment and initial e-Summons configurations for police vehicle and motorcycles were piloted and tested in earlier phases of this project. Fairfax County Police Department identified a contemporary and integrated e-Summons solution to build on that foundation and implement a robust and well integrated e-Summons solution that includes integration and interfaces with other stakeholder groups and systems including the Courts, Department of Public Safety Communications (DPSC)/CAD 9-1-1, the Police Records Management System, and DIT. This project is in its final stages. Training is currently underway and the devices are fully configured. It is anticipated that in early 2016 these e-summons devices will roll out to approximately 36 motorcycles. Gradual implementation of nearly 1000 e-summons devices is planned for FY 2016. The full implementation of an e-Summons solution will cover 36 police motorcycles and approximately 950 vehicles in Fairfax County.

Project Budget

FY 2017 funding is not required; anticipated revenues from the mandated court fees (details below) will directly support e-Summons implementation in Fairfax County.

(In July 1, 2014 the Virginia General Assembly added new provisions to VA state law (Virginia Code § 17.1-279.1) which permits the assessment of an additional $5 as part of the cost of each criminal and traffic court in each localities district and circuit courts. The Fairfax County Board of Supervisors approved an amendment to Fairfax County Code to adopt the state law. Effective on August 1, 2014 as specified by the legislation all funds generated from the new fees are to be used solely to fund software, hardware, and associated equipment costs for the implementation and maintenance of an electronic summons system in Fairfax County. Funding from the ordinance will also support the purchase of new peripheral equipment such as handheld devices, portable printers, driver's license scanners, and barcode readers. All funds received will be posted to the e-Summons project as part of regularly scheduled budget reviews.)

Return on Investment

E-Summons is an automated solution that enables police officers to issue traffic tickets safely and more efficiently with greater accuracy, reducing manual processes, and eliminating data entry errors that can have potentially serious repercussions for the public, courts and the police department. A fully integrated e-Summons solution eliminates redundant data entry, reduces duplication of effort between agencies, and streamlines court scheduling and docketing processes creating multiple opportunities to improve existing operations. Additional benefits include near real time electronic access to traffic case information for payment of traffic fines.

IT-000013 Police Records Management Refresh Project

Project Description

This project supports replacement of the current Police Department Records Management System (RMS) as the existing software has reached its end-of-life and is no longer supported by the vendor. This project will ultimately impact nearly all aspects of police work and police information collection.

Project Goal

This project aims to replace the current Police Records Management system (ILEADS) with the next generation case management solution that fully utilizes and supports the present and future police department needs and business processes, maintains close integration with the current 911 Dispatch (Computer Aided Dispatch – CAD) system, and eliminates existing system limitations including persistent deficiencies in connectivity with mobile units. The lack of a persistent connection between the police vehicles and the database has caused performance issues when officers interact with citizens and transmit reports.

Project Budget

Funding of $1,000,000 was included as part of FY 2014 Carryover for replacement of the Police Department's current Records Management system. Additional funding is not required in FY 2017.

Planned Project Schedule

The Police Records Management Refresh Project is progressing as anticipated. A substantial upgrade to the current I/LEADS Records Management System was accomplished in December of 2015. The focus of this project has now transitioned to the establishment of a core configuration team for the development, training and eventual implementation of a new web-based Records Management System. This project is scheduled to kick-off on January 2016 with a projected completion date in FY 2017.

Return on Investment

A modern Records Management System (RSM) is a critical necessity in large police departments across the country. A new RMS system will allow Fairfax County police officers to more efficiently respond to incidents, issue electronic summons and complete reports on the scene of incidents rather than waiting to enter case information at a field office, station, or other locations. A modern system also assures more accurate, timely, reliable and accessible information on events, and enables the Police Department to more efficiently act upon incidents, from initial response through tracking, investigation and reporting.

IT-000014 Sheriff Civil Enforcement System Project

Project Description

The Office of the Sheriff, in collaboration with the three Fairfax County Courts (Circuit Court, General District Court, and Juvenile and Domestic Relations District Court) and the DIT Court Technology Office is developing an Advanced Civil Enforcement System (ACES) to automate all existing civil enforcement business processes, and replace the current module in the Police RMS system slated to be decommissioned in FY 2017. The system will include interfaces between the Sheriff's Office and the courts to meet the demands of processing large volumes of service documents on a daily basis, enhanced security, reporting and statistics, and provide a civil records repository with automated backup features. The system will introduce a mobile solution and interfaces with other County agencies including DIT/GIS, Department of Tax Administration, and the Commonwealth Attorneys' Office.

Project Goal

The Sheriff's Office is required by Virginia Code 8.01-293 to execute civil processes within their jurisdiction. The goal of this project is to replace the current civil enforcement module in the Police Records Management system with a comprehensive electronic civil enforcement solution. When fully implemented, the new Advanced Civil Enforcement System (ACES) will automate civil enforcement processes, provide timely and efficient processing and viewing of civil records, a bi-directional interfaces with the courts and other agencies to reduce manual processing and delivery of service documents, and enhance efficiencies by electronically processing, distributing, and tracking service documents which will reduce Sheriff's administrative staff time required to manually enter, sort, route, deliver, locate, retrieve, and refile civil records. The system will also incorporate electronic signatures, barcoding, and implement a mobile solution using existing infrastructure.

Project Budget

FY 2017 funding of 200,000 is recommended to develop interfaces between ACES and the Courts.

Progress and Planned Project Schedule

The ACES project scope was defined and approved; Phase I requirements were completed, and an extensive vendor research and analysis on the best of breed solutions was conducted. In FY 2016, the vendor was selected, and the statement of work is currently being negotiated. Phase 1 includes automating the core civil enforcement processes, barcoding, electronic signatures, reporting and statistics, GIS and mapping, and basic mobile functionality. Phase 1 is currently in progress, and expected to be completed in early FY 2017. Phase 2A includes public/private web access, and a robust mobile solution utilizing the existing iOS infrastructure. Phase 2A is expected to be completed in FY 2017. Phase 2B includes bi-directional interfaces between ACES and the three courts' case management and imaging systems, and other agencies. Phase 2B will begin in FY 2017 and continue into FY 2018.

Return on Investment

A core function of the Sheriff's Office is to ensure timely execution of a variety of services for the courts. The Civil Enforcement application provides efficiencies and cost savings to the Sheriff's Office, including the potential to reduce miles traveled based on route optimization; the development of business rules concerning scheduling a service for completion; reduced data entry requirements using sensors in handheld devices and designing the appropriate user experience; and on-line query on the status of papers served reduces the need to answer phone calls on service status. Provide public/private web access to reduce inquiries, minimize risk of misplaced or damaged files, provide back up, and consistent retention and secure file storage. Planned interfaces with the Courts will develop consistency and standardization between the Sheriff's Office and the courts.

IT-000015 Commonwealth's Attorney Case Management System Project

Project Description

This project will replace an end of life legacy case management platform in Fairfax County's Commonwealth's Attorney's Office with a modern software application and provide for supportable technology hardware, software and infrastructure to improve the operational efficiency and streamline business processes.

Project Goal

The goal is to replace the current legacy case management system in the Commonwealth's Attorney Office with a modern comprehensive case management software system that will provide improved workflow tools, streamline processes, provide enhanced accountability, and improve office efficiency. Other components include conversion of all legacy data, the ability to scan arrest warrants, and interfaces to other County departments such as the Police Department.

Project Budget

This project was funded at FY 2014 Carryover. Additional funding is not required in FY 2017.

Planned Project Schedule

Following completion of business process review and market research, work will continue to finalize contractual agreements and the statement of work planned for completion by spring of 2016. System implementation is expected to start by the end of FY 2016 and continue into FY 2017.

Return on Investment

An updated case management system will significantly improve management and tracking of a large volume of criminal cases handled by the Fairfax County Commonwealth's Attorney's Office. Improvements such as barcode scanning of arrest warrants, auto-generated legal documents, and the automated syncing of attorney calendars will dramatically reduce data entry by office personnel. Generating real-time case assignment reports showing the number of cases assigned, types of cases, and where cases fall into the case life cycle will streamline the current difficult task of case assignment.

IT-000021 Fire and Rescue and Police Stations Telephone Replacement Project

Project Description

This project supports replacement of legacy telephone systems in all Fairfax County Fire and Police Stations. The current telephone systems were installed in 2001, have reached end of life, and are no longer supportable. The project will transition all Fire and Rescue and Police stations phones systems to the County's current enterprise voice platform. The stations will benefit from all common enterprise telephone features such as extension to cellular phones, recording calls, and detailed automated number and locator information, station information to public safety answering points (PSAP), forwarding of voice mail, integration of individual direct inward dial numbers assigned, desk phones, and cell phones.

Once integrated into the enterprise voice system, a police officer or fire fighter can be reassigned to a different station without changing phone numbers. All public safety sites will be linked together through the enterprise voice platform. Additionally, the planned transition to the County's enterprise telecommunication platform will meet state mandated requirement that all emergency calls from a phone station provide PSAP with sufficient location identification information to ensure emergency response.

Project Goal

The goal of this multi-phase project is to provide better internal communications by placing all public safety stations on the enterprise voice platform utilizing the County's I-NET and streamlining public safety stations voice communications by using common technology tools such as computers, telephones and wireless integration.

Progress to Date

This is a multi-year project planned for FY 2016 - FY 2018. To date, the transition of five Police Stations and six Fire Stations have been accomplished, with the stations operational on the County's enterprise voice platform. Stations are able to perform internal dialing across the County-owned INET infrastructure, use common features and functionality of the voice network and reduced recurring cost by eliminating high cost legacy telephone company circuits. During FY 2017, the transition of thirteen Fire Stations will be completed.

Project Budget

Additional funding is not required in FY2017.

Return on Investment

In addition to communications efficiencies and compliance with state mandates, transitioning the current legacy phone systems in Fire and Police stations to the County's enterprise platform with contemporary voice and phone technologies will provide the County substantial savings in recurring maintenance and operational expenses. Once fully transitioned to the enterprise platform, the County will realize an estimated $35,000 savings in annual maintenance, and $107,000 in annual operating expenditures. Also station equipment will fall under the terms and conditions of the enterprise contract which provides for a two hour response time for voice service calls. Streamlining the voice architecture, improving internal communications, increasing staff productivity, reducing recurring costs, and maintaining serviceability of equipment are all priorities of this project and will provide significant return on investment to Fairfax County.

3.3 Corporate Enterprise

2G70-002-000 Orthoimagery Update Project - GIS

Project Description

Orthoimagery serves as a highly accurate quality controlled layer in GIS that can be used to accurately locate features (e.g., building outlines, streetlights, storm water features, and sanitary sewers). It provides the basis from which many of the fundamentally important GIS layers are derived. The aerial imagery used to create the orthoimagery is of high enough quality and accuracy that it can be used for the County's planimetric update project, saving the cost of additional imagery acquisition. Orthoimagery is also available in the County's public web applications that include maps. These applications serve about a million maps per year and enable public users to view parcel outlines, hydrography, as well as major and minor roads. Orthoimagery also serves as a base for the 3-D imagery in Virtual Fairfax. This project is part of the County's ongoing effort to maintain aerial imagery in the Geographic Information System (GIS).

Plane used to acquire ortho images

Project Goal

This project's goal is the continued implementation of a four-year cycle of updating orthoimagery for all 407 square miles of Fairfax County with high resolution data needed by County applications and users.

Progress to Date

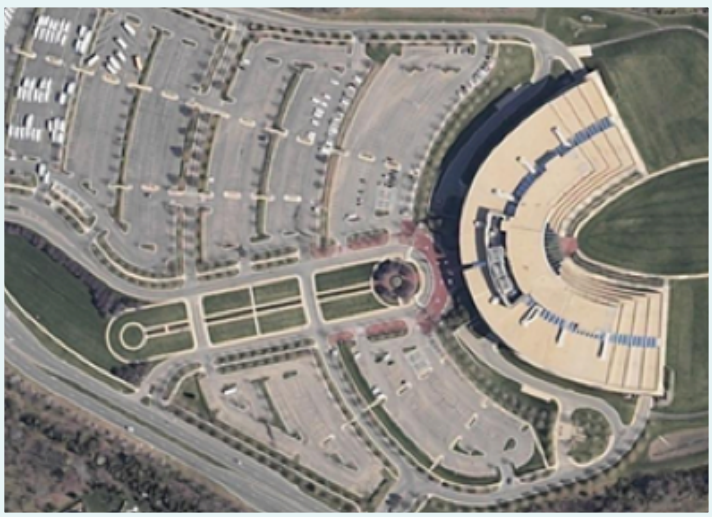
In FY 2013 the four-year imagery update cycle was completed with the latest data set acquired from the state. The County has cost-sharing partnership with the state to obtain the higher resolution imagery for specific Fairfax County needs.

Project Budget

FY2017 Funding is not required.

Return on Investment

GIS provides County staff and citizens the means to electronically access, analyze and display land related data. The imagery is used in the My Neighborhood viewer, the Digital map viewer, the new 3-D viewer (Virtual Fairfax) and in all County web and desktop mapping applications.



Sample ortho image

Multiple County agencies benefit from the use and availability of high resolution orthoimagery data. Orthoimagery is used successfully in property appeal cases by allowing the County to effectively justify property assessments and help citizens with home assessment valuations. The imagery is also utilized in resolving zoning enforcement cases, often providing definitive information about when illegal structures were built, thus helping the County maintain desirable neighborhoods and safe structures. Use of aerial photography has reduced the need for field visitations when County staff has a need to reconnoiter an area for various reasons.

2G70-003-000 Oblique Imagery Project - GIS

Project Description

Oblique imagery enables users to view the sides of buildings and structures, ascertain the urban character of a location, and measure the heights of visible features. The project collects images of every location in the County from at least four directions (N, S, E, and W) enabling agencies such as the Department of Public Works, Tax Administration, the Department of Public Safety Communication and Public Safety Agencies to reduce field staff time by using virtual visitation. Oblique imagery augments orthoimagery which is taken directly overhead and does not capture the sides to structures. Together, both sets of imagery are complimentary parts of the spatial data in the GIS data warehouse, giving County-staff access to a wide range of geo-spatial information about Fairfax County required in their business processes.

Project Goal

This project's goal is to provide refreshed oblique imagery as a useful and key component of the County's spatial data warehouse that also serve as a historic reference imagery base.

Progress to Date

The County has complete oblique imagery libraries for calendar years 2003, 2005, 2007, 2009, 2011, 2013 and 2015. The next update is scheduled during calendar year 2017. The new imagery acquired has much higher resolution than before (3" resolution vs. 4") and is more useful for evaluating properties and creating 3-D building objects for Virtual Fairfax. The imagery is currently available to County users through desktop, Citrix, and web (GEM) applications. The GIS office offers regular training in use of the imagery and its software. The use of oblique imagery is leveling out after substantial increases over the past several years.

Project Budget

FY 2017 funding of $136,000 is recommended for continued support of this GIS project.

Plane used to acquire oblique images

Return on Investment

The Oblique Imagery project provides a combination of cost-savings, enhanced revenue and non-quantifiable benefits to it users. In particular, The Department of Tax Administration (DTA) has found the ability

to see all sides of a structure to determine material composition, floors, decks and other features very useful to its operations in successfully reducing the time and expense involved in staff field inspections.

Sample Oblique image

Oblique imagery is particularly useful in public safety since it enables staff to view and measure the sides of buildings to determine risks, site lines, rescue apparatus requirements, and other key features. This imagery is now used 24x7 in the CAD/911 system to assist call takers in correctly identifying incident location and help dispatchers respond to an incident.

Oblique imagery is also the source of the 3-D building imagery of the Tyson's Corner and Reston/ Herndon areas displayed in the Virtual Fairfax web application (the buildings sit on top of the orthoimagery from the state). The 3-D imagery is essential in meeting a Board mandated requirement for 3-D visualization.

2G70-004-000 Planimetric Data Acquisition Project - GIS

Project Description

Planimetric and topographic data in conjunction with orthophotography serve as the foundational data sets for GIS data of the County. Planimetric data is planar data (2D) derived from observable natural and man-made features visible on aerial imagery, making up many of the key GIS layers used in most of the maps created in the County. These key datasets are used in all County web applications that incorporate maps, and in nearly all of the County's public safety vehicles through the maps included in the CAD/911 system. Since the original planimetric data map was developed in 1997 the County has grown considerably, adding new housing, commercial locations, new and modified roads, storm water management features, and other man-made features. Additionally the topography has changed with new development. The updated program leveraged the 2007 and 2009 aerial imagery acquired in partnership with the State. While the entire County was successfully updated using 2009 imagery, this project will continue the update cycle.

Project Goal

The goal of the GIS Planimetric Data Acquisition Program is to refresh the County's planimetric data on a predictable schedule. Considering the size of the investment necessary to update/add approximately three million features, an 8 year refresh cycle, that is carried out across 4 years, is the most cost and labor effective approach. Data sets include impervious features such as roads, pools, basketball courts and driveways; they also include a capture of 2' contours – a substantial improvement in the accuracy of the elevation data and building elevations. The highly detailed contour and surface information is particularly important for the County's Stormwater management program. Planimetric update is dependent on the availability of current aerial imagery from the state of Virginia in order to acquire the latest changes on the ground.

Progress to Date

Currently 100% of the planimetric data is based on 2009 imagery. In FY 2017, new aerial imagery will be acquired from the state and in 2018 the planimetric update project will commence updating the dataset.

Project Budget

This project is jointly funded by Department of Public Works and Environmental Services (DPWES) and DIT. FY 2017 funding is not required.

Return on Investment

Planimetric, DTM, and contour data is extremely valuable in a wide range of County operations. DPWES/ Stormwater uses planimetric data to carry out mandated Stormwater responsibilities. The Department of Public Safety Communication, Police Department, Fire and Rescue Department and The Sheriff's office use planimetric data in their daily operations. In addition to the public safety usage, there are hundreds of planimetric data users (both direct and indirect) in a variety of County agencies that rely on this data for handling environmental compliance assessments, conducting as-built plan reviews, determining right of way, evaluating development impact on County sewers, locating sensitive environmental areas, assisting in public hearing presentations and task force meetings, assisting with real estate assessment, planning assistance for land development customers, documenting criminal events, and evaluating chemical runoff for hazmat situations. These as well as many other County operations depend on Planimetric data and would be adversely affected if this important data asset is not kept as current as possible.

2G70-011-000 Automated Board Meeting Records Project

Project Description

This project streamlines, automates, and supports mobile-enabled submission, preparation, and delivery of the Board of Supervisors Meeting Agenda and Board book Package by converting from a manual paper-exclusive process to an electronic format.

Project Goals

This initiative is sponsored by the Board of Supervisors and the County Executive to enable the Office of the County Executive and the Clerk to the Board to electronically create the agenda, supporting documentation, record Board of Supervisor meeting matters and post documents on-line for accessibility. This project will significantly improve the quality and efficiency of producing the board packages for the Board of Supervisors and associated committees and subcommittees.

Progress to Date

Easy to use and secure Board meeting management software has successfully been deployed to support the Board of Supervisors meetings, subcommittee meetings, and other County Boards, Authorities and Committees (BACs) such as Retirement Board, Board of Equalization of Real Estate Assessments, and Water Authority.

In FY 2017 this project will continue deployment to additional Board subcommittees and BACs. To date, this project has eliminated printing, assembly, and transportation costs; increased accessibility via PC, laptop, iPad, and provided better management and distribution of board book revisions.

Project Budget

FY 2017 funding of $75,000 is recommended to continue support for this initiative.

Return on Investment

This project increases efficiency and streamlines the production of the Board of Supervisors' package by providing the information and supporting materials on-line, offering Board members an efficient way to review meeting material electronically, increases accessibility, and provides for better management and distribution. Additional benefits are improved productivity in preparing and submission of agenda items, reduction in manual paper intensive processes, as well as reduced space requirements for maintaining large paper copies for Board offices and the Clerks' Office. Cost savings are achieved from implementing electronic board-books by eliminating the print, labor, and transportation costs that were required to produce, assemble, and physically deliver the large multi-volume board books. In addition, revisions to board book content can be updated easily and made available instantly so that a reprint and redistribution of hardcopy is not necessary

2G70-019-000 Public Access Technologies - Interactive Voice Response Project

Project Description

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. 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", in particular for citizens without internet access. IVR is one of the foundational programs for enhancing public access to government information and business transactions.

Project Goals

The primary goal is to continue the application of text-to-speech technology for certain applications aligned with e-Government goals. Interactive Voice Response enhancements include the continued integration of Web and IVR via XML technology for public use. Plans for FY 2016 - 2017 are to update the IVR solution and on-going implementation of IVR transactions.

Progress to Date

The County's IVR system currently answers more than a million calls annually. The system is available approximately 24 hours a day to interact with citizens, providing an additional option for conducting business with the County after regular business hours. By handling the more routine calls, the IVR allows staff to concentrate on those calls that are most in need of personal attention. It also allows access to a great deal of information after regular business hours.

The IVR team developed and distributed a Request for Proposal (RFP) for a new Interactive Voice Response system in FY 2014, implementation of the new IVR system will continue in FY 2016- FY 2017. The following County agencies are primary users of the IVR system:

County Executive, Office of	County Services Information Line
	Medical Registry – Special Needs
	OPA Survey Line (Seasonal)
Courts	Courts Information Line
	Traffic or Criminal Violation Prepayment
	Juror Information
Fairfax-Falls Church Community Services Board	Community Service Board Survey
Family Services	Coordinated Services Planning Survey
	Register for Institute For Early Learning
Health Department	Health Department Information Line
Housing and Community Development	Inquire Affordable Housing Waiting List
Human Resources	County Job Line
Information Technology	IT Service Desk Information Line
Library, Fairfax County Public	Library Information Line
Police Department	Victims of Crime Information Line
Public Works and Environmental Services	Building Plan Review Information Line
	Inquire Building Permit/Plan/Inspection Status
	Schedule/Cancel Building Inspection Requests
	Schedule/Cancel Special Collections (Trash Pickup)
Tax Administration	Real Estate Information & Tax Payment

Project Budget

The program requires on-going support from e-Gov and telecommunications staff to support and expand the IVR application capabilities in additional business areas, and implement enhancements. No new funding is provided in FY 2017.

Return on Investment

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 Public Access Technologies continue to provide a single information architecture and supporting infrastructure for all platforms to deliver new information and e-services to the public. It expands the capabilities of the content management system in order to improve automated workflow, revision control, indexing, search and retrieval for enterprise systems. 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.

2G70-020-000 Internet/Intranet Initiatives Project - e-Government

Project Description

This project supports initiatives that improve public accessibility to government information and services. A comprehensive approach is employed to ensure efficient infrastructure capable of supporting multiple business solutions. In addition to enhancing customer service for availability anywhere, anytime, public access technologies reduce staff involvement in providing basic information and transactions, thereby allowing personnel to perform more complex tasks and respond to requests for more detailed or specialized information. Internet/intranet initiatives provide significant and wide-ranging opportunities to use technology as a means of making information more readily available to the public. Initiatives include research and development of emerging technologies, expansion of Web applications, improvements in search and navigation, integration with internal systems and other public access channels, and sustaining infrastructure.

Project Goals

The project's vision is to provide new information and services on all platforms, while continuing to build on existing information architecture. The planned functionality will be delivered in support of the County's taxonomy of information and services, using a single supporting infrastructure. The solution is based upon a single content repository for all platform and agencies. The repository enables various features of content management to provide accurate and reliable information, provides additional search capabilities on the public web site, and enables information sharing. The project includes implementing standards and processes for information engineering so that the same application and data is used County-wide in the development of Web content and applications.

Progress to Date

The County's Public Web site has been an extraordinary success and has received national recognition. The site receives approximately 19,105,370 visitors, which equates to about 60,375,534 page views for FY 2015. Approximately 55 County agencies have a presence on the site. The functionality of the site has expanded significantly with the addition of an online discussion tool (Ask Fairfax!) to enable citizen interaction with government on various topics, mobile version of the County website with mobile and iPhone applications to list a few. The County website is also translated into 12 languages using machine translation powered by Google. In order to empower public services and affirm County's strategic vision and goals, the website has been enhanced with new and updated interactive features and online applications. In an effort to improve website accessibility, all pages on the public website are tested for compliance with Section 508 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act by passing through the County's automated compliance checking tool.

In order to continue to empower public access to service while affirming the County's strategic vision, Fairfax County has pioneered the implementation of governmental services through various mobile devices like iPhone/iPad, Android and Blackberry. In enhancing the County's long standing goal that our community should access their government 24/7 without walls, doors or clocks, Fairfax County now places government in the palm of their hands with the introduction of efficient and cost effective mobile apps and services.

Fairfax County Government's mobile app:

- Enable citizens instant connectivity to their government
- Provide the benefit of getting services and information from anywhere at any time by delivering information in a more conveniently accessible platform
- Enhance the adoption of online governmental services by reaching a larger and wider user base

In addition to our mobile website, the public can download the official Fairfax County application on their smartphones and tablets for emergency information, news headlines, one-touch calling through our contact directory, GPS maps, social media links, transportation resources and more at http://www.FairfaxCounty.gov/news/mobile.

The ongoing strategy includes 'transparency' and 'sharing' which has become an integral part of the Web experience. Recognizing that online collaboration and social media are essential business function in today's rapidly changing world and key to improving citizen-to-government networking, Fairfax County offers multiple channels such as Facebook, Twitter, YouTube, Instagram, SoundCloud and Flickr for public engagement with County government on various topics during emergencies and otherwise. It also advances the County goal of creating a culture of engagement, boosts County operations and furthers our business mission with residents. Using social media tools is a proven and acceptable way to enhance government transparency and encourages a two-way dialogue with the public which augments the standard website.

In addition to the use of numerous County-developed cross-agency applications like RSS (Really Simple Syndication feeds), Ask Fairfax!, e-mail subscriptions to improve citizen-to-government networking, open source tools like Slideshare (presentation sharing), Google maps (event maps), and Ideascale (social voting) have been leveraged. These are integrated together and come under the umbrella of NewsCenter which is the County's one-stop news shop.

The County has about 27 official social media sites/accounts on Facebook, Twitter and YouTube:

Facebook – http://www.facebook.com/FairfaxCounty

Twitter – http://twitter.com/FairfaxCounty

YouTube – http://www.youtube.com/user/airfaxCountygov

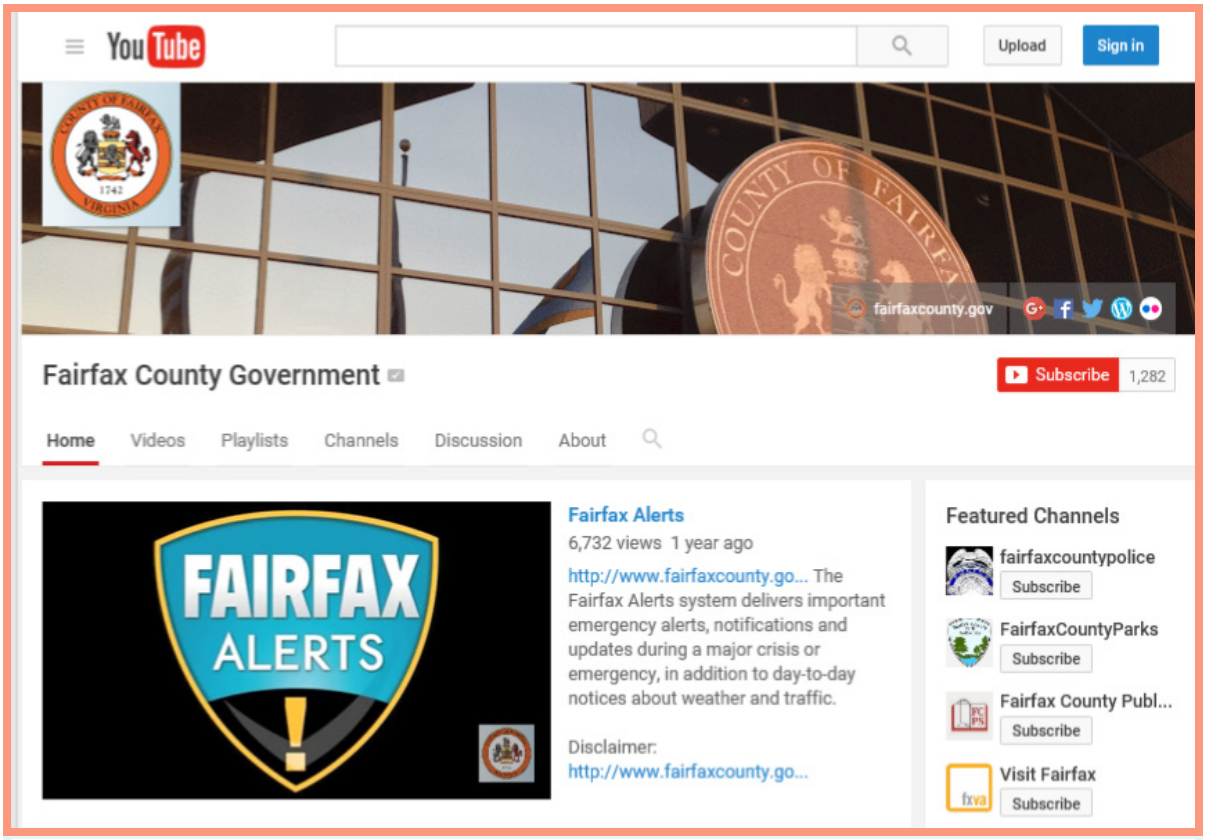
Flickr – http://www.flickr.com/photos/FairfaxCounty

Instagram – https://www.instagram.com/FairfaxCountygov/

SoundCloud - https://soundcloud.com/FairfaxCounty

1 – Public Web Site, Mobile App, Search and Navigation

Fairfax County's innovative use of technology combined with user-friendly Web site design has streamlined the interaction between citizens and the government to provide them the necessary tools for interaction and participation with County government. To improve citizen service delivery and provide effective e-Government services, the County website continues to be redesigned with improved functionality and accessibility features since its inception in early 2000. These efforts are achieved with various forms of outreach such as focus groups, online surveys, and usability tests with constituents. Various Social Media platforms are employed to expand and redefine communication efforts beyond traditional news releases. To continue empowering citizen access to public services, Fairfax County's Mobile App (available on various mobile devices) provides citizens the added convenience and flexibility of interacting with their government on the go from anywhere at any time.

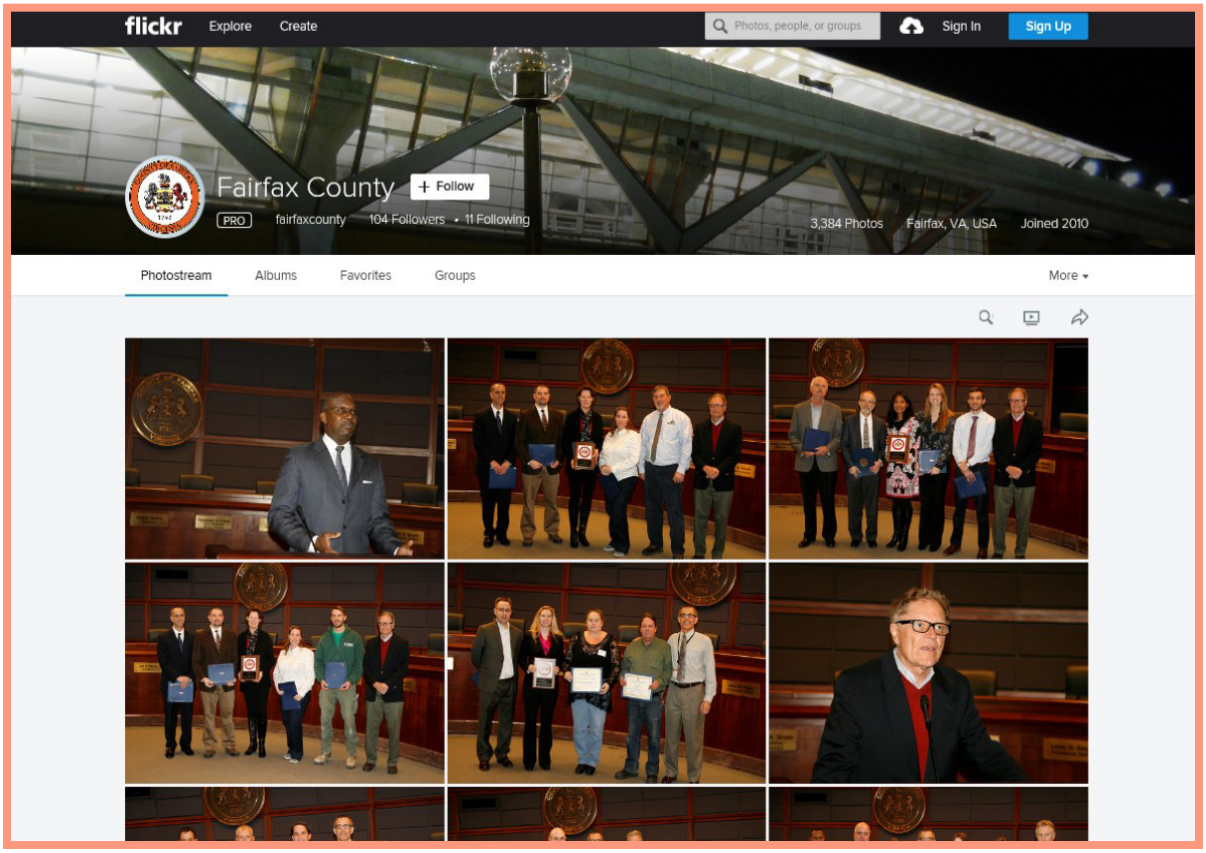


YouTube

In FY 2011 - FY 2013, acknowledging trends in high adoption rates of mobile devices, Fairfax County increased the value of its e-government efforts with the add-on of mobile apps for all platforms like iPhone/iPad, Android and Blackberry for free downloads. Our attention to stewardship of scarce resources was achieved by complete in-house development and repurposing of existing technologies. Mobile accessibility further enhances citizen's convenience and reaches a wider user community with the ability to access services and information in the palm of their hands.

In FY 2014, the County launched a family of new homepages for our primary website at www.FairfaxCounty.gov. The new County homepage uses responsive design to render seamless information across three device types: desktop, tablet and mobile. The refreshed homepage provides a cleaner design and based on years of metrics studies, highlights the key services the public is looking for online along with a pictorial representation of the County activities. To facilitate and improve online service delivery in FY 2014, the County homepage was redesigned so that the most accessed services are featured prominently and easily available on the top in the "Find, Pay, Report" section of the homepage, based on the current website usage and metrics. The search engine was refined in FY 2014 to improve the accuracy and refinement of results and integrate select social media results.

In FY 2015-2016, the County started outlining plans to upgrade the current Web content management system and reviewing the current information architecture to identify steps and gather requirements to improve, restructure and re-engineer the County's website. The goal of this initiative is to create a Web presence that is more topic oriented rather than an organization focused site. As of FY 2015, there has been about 22,200 copies of the official Fairfax County Mobile App downloaded since its launch in June of 2011 with numbers increasing every day. Both the County's website and it's mobile version provide residents of Fairfax County with a wealth of information, online services and connectivity with their government, mobile browsing is undeniably on the ascendancy – it is expected that more people will be using mobile devices to access the web than traditional laptops and PCs.



Flickr

In FY 2017, the program will continue its focus on more citizen/community engagement, allowing for multiple communication channels for access to County government 24/7 and on the go. As we continue this effort, the County's website and the County's mobile app will be re-engineered to make it a more visual, intuitive, citizen-centric, and topic driven site. With the continued use of responsive design and adaptive approach, the same design and features will be translated to the mobile platform. We will continue to enhance search functionality and develop more native mobile applications for public consumption. To further facilitate government transparency, access to County datasets for public consumption will be provided. Open data broadens public transparency about government, improves responsiveness to community needs, permits efficient, data-driven decision-making through an engaged community.

2 – WEB Farm Infrastructure Architecture and Management

The following Internet/Intranet Infrastructure initiatives are on-going:

- Secured network settings on all 34 servers to minimize risk of intrusion
- Refined the server monitoring system
- Implement a statistical reporting system for both Internet and intranet servers

3 – Interoperability

As a participant in the Government without Boundaries cross-jurisdictional project, Internet Services staff installed ASP.Net and created a Web Service, which generates XML data from a SQL database using a collaborative defined schema. This project allows Fairfax County to share park-related data with other local, state, and federal jurisdictions. The project supports effort that developed standards, methodology and architecture for data exchange that are compliant with the Department of Homeland Security. Fairfax County CAD2CAD Exchange between the 9-1-1 CAD systems of Alexandria, Arlington, and Fairfax was successfully implemented representing both a technology integration success and a long sought-after milestone in the operations of 9-1-1 dispatch. On-going interoperability efforts for County agencies as well as other data exchange requirements are supported in this program.

4 – Intranet/Infoweb

"**FairfaxNET**", the County's intranet, which is an employee focused enterprise SharePoint portal that provides an intelligent platform to seamlessly connect users, teams and knowledge supporting the ability to leverage relevant information across business processes to help employees work more efficiently. FairfaxNET is a centralized resource for internal County content, forms, policies, news, application, training and other sources of information. It provides collaboration tools for agencies and work groups which are secure, convenient and a standard workspace for employees to work individually or collaboratively. FairfaxNET is a centralized location for disseminating pertinent Countywide, agency-specific or team/project-specific information. It also provides a venue for automating business processes.

Approximately 55 County agencies now have a presence on the County's intranet site (both InfoWeb and FairfaxNET), offering more than 11,000 HTML documents, 12,500 PDF documents, and 15,000 images on the internal site. Most agencies have Web content contributors, and Internet Services staff support content creation

efforts for those agencies without a dedicated Web presence. The County's intranet will continue to be updated with additional access to enterprise data and interactivity, and expanded to become a viable alternative for full transaction-oriented applications. The addition of new information and increased business functionality is essentially an ongoing project. Based on conversations with a wide range of County managers, it is also expected there will be numerous concurrent application development requests from a dozen or more agencies for core web-enabled applications as the benefits of the technology become more widely recognized. These requests for support are handled on an as-needed basis based on priority, visibility and functionality, and highest Return on Investment.

FairfaxNET is the primary platform for access to internal applications, information and services, employee collaboration and information sharing, and collaboration with other agencies. FairfaxNET is also the gateway to the enterprise ERP solution (FOCUS).

In FY 2015 – FairfaxNET was upgraded to SharePoint 2013. FY 2016-2017 goals include development of project sites to manage and keep track of projects and implement records management for document storage and archival purposes. Work will continue with the County agencies to automate and streamline business process for operational improvements.

5 – Web Content Management

Web Content Management will address refining the site's information architecture, defining and implementing replicable workflows, as well as designing and implementing the supporting infrastructure for Web content contribution.

6 – E-Services

Internet Services prototyped new application development platforms and developed standards and best practices for the current environment. DIT supports other agencies in the development of Web content and applications.

Project Budget

In FY 2017, funding of $528,000 supports the increasing demand for County's web, e-Government and on-line 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 (FairfaxNet) and continued compliance with Department of Justice Americans with Disabilities Acts requirements.

Return on Investment

This project continues to provide single information architecture and supporting infrastructure for all platforms and new information and e-services to the public. It further expands the content management system to improve automated workflow, revision control, indexing, search and retrieval for enterprise systems. The project improves the search capability for citizens and constituents while enabling the County to build applications faster and more efficiently by maintaining reusable components. Public access technologies minimize staff resources necessary for providing basic information, thereby allowing staff deployment to more complex tasks that require detailed or specialized information.

2G70-041-000 Customer Relationship Management (CRM) Project

Project Description

Customer Relationship Management (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 24x7 access strategies, social media tools, and techniques to enhance the overall customer experience and manage service requests via a single user enterprise-wide interface tool.

Project Goal

This project begins a multi-year effort for the replacement of current legacy CRM solutions with an up-to-date solution that integrates with County agencies' business applications and processes, consolidating and reducing redundant hardware, software, and maintenance expenses. 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 e-mail, web, social media, and call center capabilities. The improved integration with the County's Web environment, e-mail and communications systems, promotes service efficiency and effectiveness, improved customer experience, and citizen engagement. Information and data provided with an enterprise view enhances opportunities for cross-agency processes and service planning.

Progress to Date

Phase I included environment setup, business process analysis, configuration, application development, and data migration for eleven County business systems including Board Offices. Phase 2 consisted of the successful data conversion and migration from IQ to the new CRM application for the Board Chairman's office and the Dranesville Board office.

In FY 2016 Phase 3 work continues on business process design for the remaining Board of Supervisors' Offices, Department of Tax Administration, and Office of Public Private PartnershipsP3. Future phases (FY 2017-2019) will continue planned migration of the additional 22 agency applications to the new consolidated CRM platform.

Project Budget

In FY 2017, funding of $428,000 is recommended for continued deployment of an enterprise CRM for handling citizens service requests, case management, and issue tracking.

Return on Investment

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 by 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 is managing their request by providing a tracking number. Consolidating intakes, reducing the number of

duplicate request, and eliminating redundant systems provides taxpayer savings. This 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.

2G70-053-000 Retirement of Legacy Systems Project

Project Description

The FOCUS/ERP project replaced the County's existing legacy mainframe systems for budget, human resources, finance, and procurement. The Retirement of Legacy Systems project supports the conversion and migration of other County agencies' remaining legacy business systems, databases, and data off the mainframe onto more contemporary platforms. This project is the final step in eliminating the old data center infrastructure and operational support model and embrace opportunities for accelerating the on-going consolidation of server and storage environments and 'cloud' type services, which have yielding operational savings and enhanced 'green' IT initiative DIT is pursuing.

Project Goal

This project aims to move several remaining legacy files and data off the mainframe onto more contemporary server based and virtual platforms. New relational data repositories, indexing schemes, analytics and search capabilities are being developed. Upon completion of the data migration and conversion, the County's mainframe platform can be retired.

Progress to Date

Solution research and assessment was conducted in FY 2012. First phase legacy data in various areas associated with public works' legacy land development system data was converted to a new repository, with search and reporting capability implemented in spring of 2012. On-going data migration and conversion will continue through FY 2017. The work accomplished in this project has received industry recognition including from two multi-national corporations.

Project Budget

Additional funding is not required in FY 2017.

Return on Investment

Many efficiencies and cost savings will be achieved with the conversion of old legacy data, which is required and useful information, into a modern data repository with advanced search and reporting capabilities, as well as with the migration off and eventual retirement of the mainframe system. With retirement of the mainframe system the County will achieve savings by ending associated lease payments for hardware, software licenses and utilities, mainframe data storage devices, as well as the cost of separate mainframe security software. Furthermore the converted legacy systems can utilize more efficient virtualized server environments thus providing opportunities for additional savings in the County's data center to include environment, data center operations, and utilities.

2G70-069-000 Tax System Modernization Project - Tax/Revenue Administration

Project Description

This project provides the information systems development and technology infrastructure required to redesign the County's tax and revenue systems. The Tax/Revenue project facilitates a simpler process for citizens to fulfill their tax obligations and pay for services by modernizing the internal processes used for assessing, billing, and collecting County taxes and other revenues. In FY 2010, the County completed the replacement of the legacy real estate mainframe system with the Integrated Assessment System (IASWorld). This project provides for the replacement of the two remaining core tax systems, Personal Property and Business Professional and Occupational Licensing with a web based application. Implementation will allow for a comprehensive overhaul of many existing functions such as personal property account administration, business filing and licensing, vehicle registration, tax assessment, exemptions and adjustments, accounts receivable, and billing. Elimination of outdated technology platforms will enhance opportunities for integration with other County and State systems, as well as, facilitate citizen interaction and self-service opportunities via web based technologies.

Project Goals

The legacy mainframe platform for the Personal Property system and BPOL limits integration with other County and State systems, limits reporting, as well as constrains citizen interaction and self-service opportunities via web based technologies. In addition to the technology constraints, in-house and contract programmer expertise to support the legacy applications is increasingly difficult to obtain and rapidly becoming more expensive. As a result, both tax applications can no longer support efficient assessment, valuation and collection activities. System enhancements and modifications, many of which are required by changes in State and County code, cannot be made economically and require lengthy development periods. Integration with Virginia State Department of Motor Vehicles and Department of Tax Administration applications which are critical for assessment, taxation, and enforcement purposes, cannot be automated due to limitations within Personal Property and Business Professional and Occupational Licensing systems.

Progress to Date

Milestones (Projected)

- Application assessment – July 2013
- Oracle database conversion – January 2014
- Web application development – June 2014
- User acceptable testing – July 2014
- Production Implementation – January 2015
- Incorporation of multiple business process improvements including web, mobile apps, electronic billing for all tax types, enhanced web portal, staffy field mobile apps, and seamless integration with state, County and third party systems will continue in FY 2016- FY 2017.

Project Budget

FY 2017 funding is not required.

Return on Investment

This project eliminates risks to County revenue generated from the assessment and collection of Personal Property and BPPOL taxes. Modern technology platforms will enable the Department of Tax Administration to enhance customer access and improve services to citizens and the business community and enhance the security and use of web technologies for self service functions increasingly used by the community to interact with County systems. This project will also provide for automated integration with other County and State systems directly impacting the County's revenue collection activities, and contribute to retirement of the legacy mainframe environment in the data center.

IT-000001 Fairfax County Uniformed System (FOCUS) Project

IT-000016 Budget Solutions Project

Project Description

Fairfax County government and Fairfax County Public Schools embarked on a multi-year, joint initiative to modernize the portfolio of enterprise systems that support finance, human resources, budget, procurement, and related administrative applications with an integrated approach that has the flexibility to meet current and future requirements. A Steering Committee and project team comprised of County and school personnel was formed in 2006 for program governance. The Government Financial Officers Association (GFOA) provided assistance to the project, advice on best practices and opportunities of ERP systems, and assisted in the preparation and review of the procurement process.

Project Description Goal

Goals for the initiative were to replace the obsolete legacy systems with a contemporary suite of integrated applications; take advantage of new functionalities and enabling practices; provide the opportunity for multi-faceted data aggregation; integrate with e-government initiatives and capabilities; promote telework; and aid in the transformation, transparency and standardization of financial and human resource processes and information. This initiative is designed to foster an environment for change and leverage modern system functionality.

Progress to Date

The software procurement was completed in the summer of 2009 with the purchase of SAP software. The project began implementation activities in summer, 2010; the financial management and procurement system (Phase 1A) went live in November 2011. Project Phase 1B (enhanced supplier management functionality) was completed in FY 2013, and Phase 2 (County human capital management) went live June 2012 for the first payroll run in FY 2013. In addition, a new financial transparency application went live in FY 2014. As part of the transparency initiative, research was conducted by County and schools staff on best web-based practices for reporting integrity, common sense usability standards, and open-government goals.

Work on Phase 3 items, include a Budget Solution (IT-000016) for both County and schools commenced in FY 2015. These efforts include the development of a robust data warehouse, and providing end-users the ability to run ad-hoc reports for financial, procurement, budget and human capital management data. A consolidated expert business group of the core business agencies and a core expert technical center in DIT manage the system and on-going efforts to leverage system opportunities.

The County will continue to focus resources on maintaining and improving staff skills and abilities, including performance of many of the technical programming and system tasks, configuration, and business process redesign efforts. The County's on-going efforts will ultimately result in less reliance on contractors for an overall better operational cost outcome. In many ERP environments, organizations have had to solely rely on expensive outside consultant contracts for system operations and maintenance.

The system is available for use 24x7, which is a substantial improvement over the legacy platform. In addition, improvements have been seen in business operations, such as the time to produce W-2s. Disaster recovery (DR) for the system has been implemented that provides for near real-time availability from a third party off-site facility, a significant improvement over the legacy DR processes whereby system recovery would be achieved over several days. This high availability 'DR' solution is being leveraged for other systems in the County's DIT Data Center.

In FY 2014, a post-implementation review of the system for next stages opportunities of refinements and leveraging functional and technical capabilities was conducted. The information and recommendations from this review have been prioritized and used to develop a long-term strategy for system maintenance and enhancements.

Based on input from IT research advisors, this initiative was a bold achievement that included a unique County government and school system combined with a complex ERP implementation on a short schedule. Other municipalities continue to seek information from Fairfax County on this approach and lessons learned.

Project Budget

Project funding was aligned with the phases of this multi-year project. At this time, funding remains for Phase 3 initiatives and ongoing maintenance of the system. In order to allow for administrative oversight of the new budget solution, funding was reallocated from IT-000001 to IT-000016 (Budget Solution Project) in FY 2015. No new funding is required in FY 2017.

Return on Investment

Due to the successful implementation, the risk that antiquated and disjointed systems pose for system failure and inferior data was mitigated. The implementation of the Employee Self Service Portal (ESS), Manager Self Service Portal (MSS), and enhanced supplier relationship management functionality provides 24 hour transaction access. Also, with role-based access, system controls and security are enhanced. Benefits include real-time system replication to meet modern standards required by external auditors for controls and financial management. Long-term opportunities remain in gaining operational improvements and transparency goals for many years to come, to include the areas of budget projections and publication, reporting, performance management initiatives.

IT-000006 Office of Elections Technology Project

Project Description

This project funds elections technology and data driven solutions for voting and elections equipment used by the Fairfax County Office of Elections. The current Electronic Poll Books used in the County has reach the end of its life cycle and are in critical need of replacement. In addition this project will ensure data driven solutions meet County needs for Election Day work flow processes as well as compliance with federal and state election mandates.

Project Goals

This project will support replacement of voting/elections equipment and Electronic Poll Ballots in Fairfax County.

Progress to Date

The schedule included procurement of the first portion of the equipment for the non-presidential elections in FY 2015 and FY 2016; the remainder to be purchased for the 2016 presidential election (FY 2017). The Office of Elections finalized the contract language and procurement for new Electronic Poll Books for deployment in time for the March 2016 Primary Elections.

Project Budget

Additional funding is not included in FY 2017.

Return on Investment

This project will ensure the County's compliance with Federal and State elections mandates as well as the Report and Recommendations of the Presidential Commission on Election Administration and the Fairfax County Bipartisan Commission report on Election Improvement. These reports specifically addresses long lines at the polls in a Presidential Election. Both reports concluded that, as a general rule, no voter should have to wait more than half an hour in order to have an opportunity to vote. The industry is currently moving towards data driven solutions and newer technologies to ensure voters will have a positive voting experience at the polls.

IT-000007 Enterprise Project Management

Project Description

The Enterprise Project Management initiative addresses a need for a more structured enterprise approach to project management for County projects. The project provides for dashboards and other tracking mechanisms to ensure more effective and streamlined project management processes across County departments.

Project Goals

The goal is to standardize project management solutions to support various business areas across multiple departments. In the event, that specialized software is required in specialized business areas, these solutions

are expected to be integrated into the Enterprise Project Management tool. This project will also leverage and expand existing SharePoint licenses.

Progress to Date

Business process analysis, requirements, market research, and selection will be complete in FY 2016. Work in FY 2017 will include design, development, testing, and implementation of the first phase of a project management solution.

Project Budget

Additional funding is not required in FY 2017.

Return on Investment

Project management tools provide the County with the ability to enhance management of large complex enterprise wide projects from start to finish. These tools enhance and improve project planning and organization, scheduling and resource management, cost control and budget management, collaboration, communication, decision-making, quality management and documentation. In addition, project management tools improve project resource management – physical, financial and otherwise, to meet overall project objectives.

IT-000017 Enterprise Document Imaging Project

Project Description

This project provides for the multi-phase implementation of a contemporary enterprise document management platform and its utilization in support of County business functions. A contemporary Enterprise Document Management platform will support on-going County agencies' efforts for imaging documents and integration with case-management systems and/or agencies operations, and provide for a more cost effective means of compliance with mandated document retention requirements. The document imaging system will be implemented in web format such as Digital Media, 'cloud' architectures, mobile apps, and wireless 'smart' devices, as well as platforms that support cross agencies and enterprise class solutions. Current document imaging systems at the County will be upgraded to latest versions and newer technology.

Project Goals

Goals include implementation of a contemporary Enterprise Document Management platform designed to address the ongoing evolution of technology and its utilization in support of the business functions within the County. Enterprise Document Imaging systems continue to be refined to provide efficiencies and enhanced capabilities to support various agencies/divisions in the County. This project supports the strategic goals of reducing paper records, promotes efficient archival and retrieval of documents, and facilitates electronic workflow process improvement initiatives in County agencies.

Project Budget

Funding is not required in FY 2017

Progress to Date

Contract has been awarded to multiple-vendors for Imaging and Record Management. Business, technical requirements, analysis, and working sessions are currently underway. Phased implementation will begin in FY 2016 with future phases planned for FY 2017.

Return on Investment

Enterprise Document Imaging systems will enable the County to have a rich document management and business process flow for retrieval and storage of vast quantity of required paper records. The new platform will automate workflows, improve business process efficiencies and productivity, reduce paper records and storage needs, and make data more accessible, easily retrievable, secure and compliant with records management regulations such as the Freedom of Information Act (FOIA). Implementation of a more current document management solution will enable on-line search of digital documents that will provide significant improvement in efficiency for County agencies using data as an integral part of daily operations. It also allows more effective use of advanced analytics for decision making, resulting in service improvements for Fairfax County residents. In addition to fast and reliable business processes, the document management solution minimizes the need for storage of paper records, reduces storage space needs and protection against mounting storage costs.

IT-000022 Integrated Library System Project (New)

Project Description

This multi-phase project will replace the current aging Integrated Library System (ILS) used by the public and staff to access nearly all library transactions. The legacy system has reached end of life and will be replaced with a more contemporary integrated web-enabled system with social media features to provide better online features as well as informative content, enhanced formats, improved stability, and response time. The Integrated Library System (ILS) is at the center of all library processes, integrating with the library's public-facing web pages, used for fine payment, online resources such as Overdrive for eBooks, enhanced catalog content such as NoveList, used for collection of delinquent accounts, collection analysis, mobile library catalog apps, SharePoint for internal work processes, and other services. In FY 2015, the system had 456,000 card holders and included 2.6 million items in the collection; it fulfilled 1.1 million customer holds and 12.1 million checkout transactions. The Library's website had 8.4 million page views and the ILS catalog had 25.3 million page views.

Project Goals:

The goal of this project is to replace the legacy library information management system with a more contemporary ILS system with enhanced formats, improved stability and response time, integrated interfaces with all content and web-enabled system with social media features. The acquisition and implementation of a new library system will support the Library's strategic goals of: expanding access to information, resources and services; engage and empower the County's diverse communities; enhance Fairfax County's investment in education; and foster a culture of innovation and creativity.

Planned Project Schedule:

- Phase One: 2016
  - Conduct research, focus groups, surveys, write and publish RFP
- Phase Two: 2017
  - Select vendor, conduct legal review and purchase product
- Phase Three: 2018
  - Deploy and launch new product

Project Budget

In FY 2017, funding of $300,000 is recommended.

Return on Investment

The Integrated Library System replacement project will provide an enhanced customer experience for those who use library services, both in person and online. Every on line transaction results in fewer transactions that need to be addressed by library staff. While there will always be services that are best managed by County employees, many of the most common library services can be managed by the customers independently. In a time of reduced budgets, enhanced online services can help maintain a high level of service. Public library customers, like all members of the public, are spending increasing amounts of time online and with mobile devices. A contemporary and fully-featured integrated library system, with elements intended to engage the public, will encourage the public to access and utilize the library's site to meet their needs.

3.4 Technology Infrastructure

2G70-018-000 Enterprise IT Architecture and Support Project

Project Description

This project supports the strategic infrastructure and expert services required for complex multi-phase enterprise-wide business transformation of IT systems for County general services, enterprise technology, security and infrastructure, and corporate systems including the County's ERP and related business systems.

Project Goals

The main goal is to realize optimal system performance and infrastructure environment efficiencies, and support system enhancement and open-government initiatives. This includes various product platforms, security, middleware, document management, and the web services for seamless performance between Fairfax County Government agencies, and Fairfax County Public Schools environments. Additionally, the project provides for on-going transformation support activities, development of business intelligence and reporting model repositories, system performance, system engineering, security access technology and knowledge transfer. The funding supports projected system integration and configuration services and includes various product platforms, security, portal and web services enabling seamless system integration.

Progress to Date

A modern system landscape and server environment was implemented for development, testing, training, conversion and full production systems needs supporting the SAP ERP solution, portals, security and third party bolt-on products for overlapping project phases. On-going infrastructure and specialized expert support services will continue in FY 2016 and FY 2017 to support Phase 3 project requirements, reporting, scheduled software upgrades enhancements, and technical system refresh.

Project Budget

FY 2017 funding of $1,800,000 provides continued support for strategic infrastructure and services necessary for continued work on enterprise wide business application and infrastructure processes.

Return on Investment

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. This program allows the system to be available on a 24 x 7 basis instead of business–day only use, which extends the ability of agencies to perform work with an improved window for planning and executing system maintenance activities with fewer resources. On-going support for modernization of County systems empowers both employees and managers to execute processes more efficiently, and support functions that improve overall system performance and availability.

2G70-026-000 Fairfax Radio System Project

Project Description

Currently the County has two 800 MHz radio systems, the Public Safety and the Public Service systems. The Public Safety Radio system was recently upgraded to the new P25 digital/IP technology. However the Public Service Radio system is over 13 years old with proprietary technology developed in the 1990's and based on the older circuit-switched analog technology, resulting high maintenance costs, and lacking sufficient call processing capacity to meet current end user requirements. The Public Service Radio system will be decommissioned at the end of 2018 when it is no longer supported by the manufacturer.

After careful analysis of the Public Safety Radio System P25 digital/IP technology capabilities, and commercially based push-to-talk solutions now available for the non-public safety agencies, this project plans to upgrade the Public Safety Answering Point (PSAP) dispatch center consoles, provide improved back-up and redundancy to the Public Safety radio system, and implement broadband Push-To-Talk for non-public safety radio users. Implementing broadband wireless IP phones with push –to- talk for non-public safety users meets a wider set of business requirements for mobile workforce communications. Moving forward there will be a single radio system called the Fairfax Radio System leveraging both P25 digital/IP technology and the latest broadband capabilities with a true technology geo-diverse back-up core system. This will significantly reduce the County's recurring radio systems expenses while providing new capabilities for all of the Fairfax County radio users.

Project Goals

This project provides for the necessary upgrade of the Public Safety system for improved redundancy and modernized dispatch center equipment, and leverages commercial wireless IP phones with push –to- talk for the County non-public safety agencies as well as, the Fairfax County Public School Transportation Department (school buses), Connector, FASTRAN, and Fairfax County Water Authority – approximately 3200 uses.

Progress to Date

Initial meetings have been held with County agencies implementing the Push-to-Talk solution for general County agency radio user; some have already began to use the Push-To-Talk radios. County agency transition is planned for completion within the next six to twelve months (FY2017). Fairfax County Public Schools is evaluating overall options. Interoperability links have been established between the County Push-To-Talk network and the P25 Public Safety radio network. Work is also underway for upgrading the Public Safety dispatch call center processing equipment at Department of Public Safety Communication (DPSC) and the backup facility, Towns of Herndon, Vienna and Fairfax City.

Project Budget

No additional funding is required in FY 2017.

Return on Investment

Broadband Push-To-Talk far exceeds the current Public Service system capacity and provides a future-proof solution by leveraging smartphones and reducing the out-year cost associated with a future "fork-lift" system replacement.

The enhanced Fairfax County Radio system will provide continuing protection and safety for first responders, bus drivers, and other staff that depend on reliable communications; provides enhanced mobile workforce capabilities for all of the Fairfax County workforce; provides enhanced backup capability for Public Safety; improves customer service to County citizens and other County agencies; and future County cost avoidance. Additionally, the system will be interoperable, allowing communication between public safety and public service users for incident or disaster management.

2G70-036-000 Remote Access Project

Project Description

This project supports enhanced and expanded capability of authorized County 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.

Project Goals

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 centrally managed allowing for comprehensive audit and reporting services. This project supports increased security, simplified management, secure access from remote locations, and mobility.

Progress to Date

Through this project, over 4,000+ users can access County systems as authorized, with over 3,000+ able to gain access simultaneously. Project activity is on-going in order to support, enhance and expand enterprise wide remote access, which supports County Telework and Continuity of Operations (COOP) goals.

Project Budget

FY 2017 funding of $200,000 continues support for remote access capabilities.

Return on Investment

This project provides a cost effective approach to enhance the County's infrastructure in order to provide flexibility for a variety of remote access devices that may be used by County staff. The 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 capabilities in case of emergency events such as snow storms, hurricanes or possible pandemic outbreaks.

2G70-052-000 Cyber Security Enhancement Initiative

Project Description

The Department of Information Technology defines and enforces the security standards and policies necessary to protect the County's information assets and technology infrastructure. This project supports ongoing cyber security projects and services to support various initiatives safeguarding the County's IT assets from evolving security threats, 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 and support for regulatory compliance requirements.

Project Goals

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.

Project Budget

FY 2017 funding of $500,000 is recommended.

Return on Investment

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.

IT-000005 Government Risk and Compliance (GRC) Auditing Project

Project Description

The Governance, Risk and Compliance (GRC) Auditing Project provides for implementation of the SAP GRC system security user access monitoring and policy compliance solution. GRC will automate security monitoring and provide real time visibility of system access controls for the County's new ERP (FOCUS) system via a dashboard. GRC will be used by the County's Department of Finance, FOCUS Business Support Group, Internal Auditor, DIT IT Security Office, and in support of the annual financial audit controls review process.

Project Goals

The goal of this project is to automate security monitoring and provide real time visibility of system access controls for the County's new FOCUS system via a dashboard.

The GRC auditing system is an enterprise solution supporting required policy activities of Internal Audit, the Department of Finance, the Information Security Office and senior management. The County's financial auditors have recommended this tool in connection with the preparation of the County's annual Comprehensive Annual Financial Report (CAFR).

Progress to Date

Multiple GRC modules are required to fully automate security monitoring and real time visibility of system access controls for the County's new FOCUS system via a dashboard. To date GRC Access Risk Analysis (ARA) has been installed in pre-production and production environments, which allows for generating Separation of Duty (SOD) reports on SAP standard and customized transactions/authorization objects. This feature enables the analysis of a new role development and/or any role changes to be reviewed and mitigated before moving beyond the development systems. The SOD reports are reviewed by business owners and remediation/ mitigation implemented as required. Currently, 96.5% of the SOD's identified have been mitigated and/or remediated. Additional GRC modules are planned for FY 2016 - 2017.

Project Budget

No new funding is required in FY 2017.

Return on Investment

The GRC auditing solution will help the County reduce the cost and effort needed to proactively prevent risk events and compliance violations. GRC software provides real-time insight into risk position, and embeds risk and compliance programs into the County's strategy, planning, and operational execution. The potential benefits include reduced unauthorized access risk with centralized monitoring and management, improved visibility across risk initiatives, reduced impact and duration of risk events, decreased cost and effort of compliance, risk, and audit programs covering SAP financial, procurement, treasury, human resources and payroll systems.

IT-000018 Enterprise Identity Management System Project

Project Description

This project supports implementation of a single centralized consolidated identify management solution across enterprise County IT systems, that will replace and merge the existing SAP and enterprise Identity Management (IDM) systems with a single solution that provides a more robust, agile, and flexible tool to integrate across all County IT systems.

Project Goals

In order to meet security, management, and compliance demands, the new system will allow central authentication and bring all user accounts into a single common directory for the County's IT enterprise. The planned solution will integrate with Governance Risk and Controls (GRC) security reporting product to allow for stronger security and monitoring of user accounts, and access control for the County's information systems.

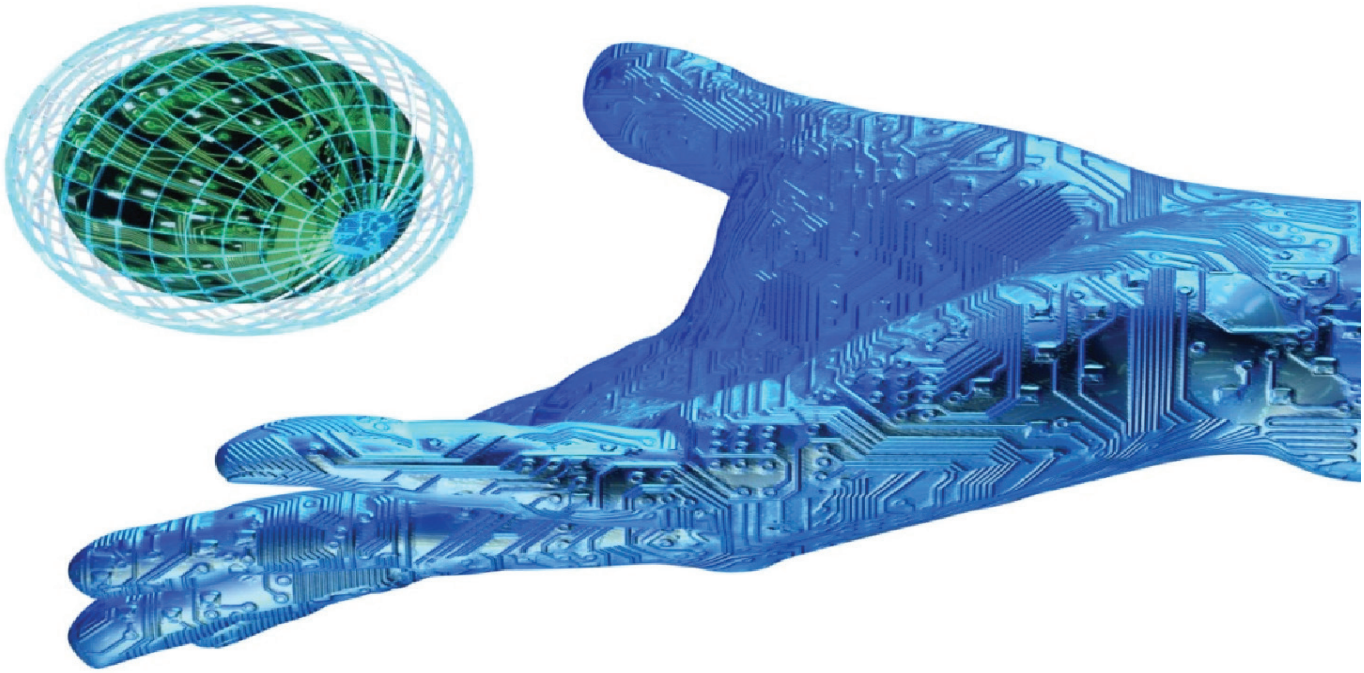
The new system will result in reduced manual account management and processing, increase automation, reduce time on -boarding and off-boarding County users / employees and integrate with all SAP and non-SAP systems for unified and centralized authentication across the County's IT enterprise.

Project Budget

FY 2017 funding is not required. **This Project is complete and will be retired in the FY 2017 Adopted Budget IT Plan.**

Return on Investment

Replacing the existing Identity Management solution with a consolidated system will reduce staff time spent on manual processing of user accounts, thereby reducing Total Cost of Ownership for IT; by enabling staff to define access policies; and also lock down sensitive data such as files, folders and shared folders. The new IDM system will enhance IT security and restrict access to the County's sensitive information, ensuring that unstructured data is only accessible to approved users. Additionally County staff can better evaluate usage patterns, read and write access to help staff determine and assign the appropriate owner of data for all future access requests.



3.5 Human Services

2G70-008-000 Document Management and Imaging Project - Department of Family Services (DFS)

Project Description

This is a multi-year, multi-phased project that supports the transition within the Department of Family Services (DFS) from manual to automated processes for filing, storage and access to records using document management platform technology. Phases focus on specific divisions of the agency with the goal of providing an agency-wide document management solution built on the County standard platform. Phase I implementation for the Self Sufficiency Division was completed by the end of fiscal year 2010. Phase II implementation for the Children Youth and Families division was completed by the end of fiscal year 2013.

Project Goals

This project provides a reliable and secure system to catalog, archive and retrieve sensitive Family Services documents for case management and to improve response times for client inquiries of case records. In addition, the project allows for the management, retention and destruction of DFS records in accordance with State and Federal mandates, and avoids non-compliance issues associated with the degradation, damage, or loss of paper files.

Progress to Date

Project phases are delivered in modular components aligned with the readiness of the necessary infrastructure. By implementing smaller phases, disruption to business operations is minimized. In FY 2005 and FY 2006, Infrastructure components were developed to support the delivery of the initial component for Family Self Sufficiency (FSS). Functional requirements and a prototype design were complete in FY 2007, and requirements definition began for the integration of the Commonwealth's SPIDER system and replacement of a data feed to a key financial system. In FY 2008 system design and initial development/configuration tasks were completed. Since the FY 2010 Phase I implementation of the Family Self Sufficiency document management system stores over 70,000 client case files containing over 26 million documents.

In FY 2010, Phase II requirements definition began for the Children, Youth, and Families (CYF) division; system design and development as well as testing efforts were complete in FY 2013, and the project began phased training and system implementation which were complete at the end of FY 2013 for over 300 Children, Youth, & Families Division staff. Since then 2,000 electronic family and child cases have been created containing over 30,000 documents. Phase II was complete at the end of FY 2013.

While Phase II for the Children Youth and Families (CYF) Division focused on implementing base document management functionality required for system use, Phase III will focus on building upon the solid foundation implemented in Phase II. It is a natural course after system implementation and usage that end users begin to identify ways in which the product can be improved. The CYF division will enhance the system to improve end user experience. Phase III will also focus on incorporating automated workflows as well as include usage

needs of other internal CYF partners within DFS such as Title IV-E eligibility and the Comprehensive Services Act (CSA). This will provide for streamlined processes and greater efficiencies which ultimately improve performance quality and service delivery. Core business requirements are under review with stakeholders in FY 2016 with subsequent phases and implementation planned for FY 2017.

Project Budget

Additional funding is not required in FY 2017.

Return on Investment

This project provides a reliable and secure system to catalog, archive and retrieve sensitive Family Services documents for case management, improved response time for client inquiries enhanced management, retention and destruction of DFS records in accordance with State and Federal mandates. The project also prevents non-compliance issues associated with the degradation, damage, or loss of paper files, more effective and efficient use of staff time, and reduced error rates. Additional benefits include improved case and document security; streamlined field work; enhanced opportunities for telework; and reduced space requirements and risks associated with maintaining and routing paper copies of documents.

2G70-009-000 Document Management and Imaging Project - Office for Children (OFC)

Project Description

This multi-phased document management project continues the structured enterprise approach of imaging and workflow capabilities in the Department of Family Services' Office for Children's (OFC). The School-Age Child Care Program provides direct services to over 13,000 children in 138 centers throughout the County. Files are maintained on all staff, children and centers. The transition to an electronic system will ensure that County residents receive the most efficient, highest quality service and that all legal mandates are satisfied regarding record archival and County residents and client privacy.

Project Goals

This project provides for a structured enterprise approach to the development of imaging and workflow capabilities in agencies that have identified an opportunity to provide increased security and integrity of their records; reduce the labor intensive record retrieval and re-filing process; expedite workflow processes through an electronic workflow management system; provide simultaneous and instant access to records; and reduce costs associated with space and shelving for storage of paper requirements.

Progress to Date

In Phase I, the project transitioned Community Education and Provider Services, the Child Care Assistance and Referral program, and School Age Child Care program (SACC Registration) to document imaging technology. Head Start maintains files for over 350 children and families in multiple locations. With this technology, field staff and federal auditors will have the ability to review files electronically without traveling to multiple locations. Community Education and Providers Services, Child Care Assistance and Referral program and

SACC Registration are currently in production. Phase II of the project will work on integrating the Head Start, School Age Child Care program and the Director's office with OFC's Electronic Records Management System. Work on Phase II of the project is pending replacement of the enterprise document management platform.

Project Budget

Additional funding is not required in FY 2017.

Return on investment

This project supports reduced paper usage and provides for more efficient and less costly file storage for the agency and County Archives. Imaging and workflow projects increase the security of records, protect sensitive information from unauthorized access, reduce staff time required for retrieval and re filing of documents, reduce processing time as workflow efforts streamline the reviews required, provide a viable, accurate documents management system for old and one-of-a-kind documents, promote telework, reduce error rates by reducing manual data entry, and decrease the space requirements for maintaining paper copies of documents.

2G70-027-000 Community Services Board (CSB) Initiatives Project

Project Description

This project supported on-going efforts as determined by the CSB. SYNAPS was developed for the Fairfax-Falls Church Community Services Board (CSB) to improve client tracking, client/third-party billing, enhance client demographic information, staff productivity data, and provide for compliance with the Health Insurance Portability and Accountability Act (HIPAA) of 1996. The replacement of SYNAPS was recommended by the Beeman Commission which was established in 2008 to advise the Board of Supervisors on the future direction and design of the mental health services delivery system. On March 1, 2012, SYNAPS was replaced with implementation of the new Electronic Health Record (EHR) system that is hosted by the software provider on their solution environment.

This project also supports the CSB - HIPAA Database Consolidation and provides support for the design and development of a secure, scalable and easy to use Community Services Board (CSB) HIPAA data repository to store current and future HIPAA related information.

Project Goals

The CSB- HIPAA Database Consolidation project will ensure CSB's compliance with federally mandated HIPAA regulations designed to protect the privacy and confidentiality of individually identifiable health information. The design will include appropriate role based security and scalability to enable multiple departments to store HIPAA - related information on a consolidated and secure platform.

As CSB requirements evolve through a variety of statutory and e-PHI requirements, other enhancements will be planned.

Progress to Date

SYNAPS was replaced with Credible in 2012. Requirements and design for other core business requirements is under review with stakeholders.

Project Budget

This project will be retired in the FY 2017 Adopted Budget IT Plan. At FY 2016 3rd Quarter, existing project balances will be reallocated to the new Diversion First Interoperability Project.

Return on Investment

The CSB HIPAA Data Consolidation data repository will provide a more secure and scalable solution to enable multiple departments to store HIPPA - related information on a consolidated and secure platform. The new repository will provide enhanced search capabilities that will improve the efficiency and speed with which sensitive HIPAA information may be retrieved and reported.

2G70-037-000 Child Care Technology Project - Office for Children (OFC)

Project Description

The Child Care Management System for the Office for Children (OFC) in the Department of Family Services (DFS) determines client eligibility, tracks child enrollments, and processes approximately $1.5 million per month in provider payments for the Child Care Assistance Program and Referral Program. This application processes over 2,500 home child care facility permits for Community Education and Provider Services and connects families with child care providers participating in the Child Care Resource and Referral System. The application tracks current market rates for child care providers and interfaces with the County's financial management system.

The current OFCIS software was acquired in 1999 and has been upgraded several times to remain operational. Assessments of this aging system revealed that it is past its projected useful life cycle and no longer fully met the agency's needs, reporting and compliance requirements, or modern technology standards.

Project Goals

Provide a new child care system that provides a seamless integration of services with the Virginia Department of Social Services' (VDSS) automated child care system and with the Virginia Child Care Resource and Referral Network (VACCRRN). This project will also align reporting strategy with County and state data, reduce redundant data entry, improve operational effectiveness and productivity, enhance web self-service for the child care community, and bring OFC technology in compliance with County standards and requirements.

Progress to Date

An RFP was developed to address a comprehensive set of requirements that satisfied state and local need for a new solution that can also achieve client access and interoperability. The RFP process resulted in an award to a local firm. Following project kickoff and requirements documentation,

the development phase of the project began and will continue through FY 2016, implementation is anticipated to begin in FY 2017.

Project Budget

The project is supported by FY 2011 Third Quarter transfer of $2 million and FY 2012 third quarter transfer of $2.5 million from the Office for Children operating funds that will augment remaining project balances for complete implementation of the Child Care Management System. FY 2017 funding is not required.

Return on Investment

Modernization of the child care system will ensure a stable application to support the business functions of the Office for Children. Efficiencies will be gained in seamless integration of processes for VDSS and VACCRRN allowing quicker processing of applications and child care permits. Migrating to a modern platform that incorporates web technology will provide improved accessibility to data and information from remote locations.

2G70-055-000 Volunteer Management System Project

Project Description

This project will provide an integral approach for recruiting, scheduling, and managing volunteers on a daily basis as well as producing reports by operational unit. Aggregate reports across County agencies will also enable more accurate tracking and reporting of volunteer contributions to the citizens of Fairfax County. This system will also support integration with legacy volunteer software products used by County agencies and partners (some of which may be converted later).

Project Goals

The primary goal for this project is to better manage over 100 programs spread across multiple facilities within Fairfax County and facilitates enterprise growth of volunteer programs with a single software solution that improves recruitment, management, placement, and scheduling. Another goal is to better track the contributions of volunteer activities and provide a shared point of entry for citizens interested in volunteering with Fairfax County. Project objectives include developing common policies and data elements for the County's volunteer programs and streamlining the process of matching volunteer abilities, interests and availability with County agency needs.

Progress to Date

- Contract kickoff and project preparation – completed spring 2012
- Gap analysis, detailed project planning and design - completed summer 2012
- Implementation of the Health Department MRC volunteer program to include the Emergency System for Advance Registration of Volunteer Health Professionals (ESAR-VHP) program – completed winter 2013
- First Phase of the Electoral Board volunteer program to recruit new volunteers for the June 2013 Election – completed spring 2013
- Implementation of the full Enterprise module as well as the following agencies: CERT, Health

Department, Library, Non-Election Day Volunteers (Part of Elections), VITA, and Office for Women and Domestic and Sexual Violence Services – completed fall 2014.

- Implementation of additional County agencies and external organizations – continues through FY 2016 - FY 2017.

Project Budget

FY 2017 funding is not required.

Return on Investment

With over 1 million County citizens and with growing County budget constraints, volunteers are an important component in the sustainability of County programs and services. In 2008, over 12,000 volunteers provided approximately 500,000 hours of volunteer service. At an average rate of $20/hour, this effort resulted in an approximate value of $10M in services provided and cost avoidance by the County. An Enterprise Volunteer Management System will help to expand the culture of engagement by providing centralized volunteering opportunities and facilitating the tracking and reporting of volunteer activities. This will result in additional services provided to citizens and increased cost avoidance by the County as the program expands enterprise-wide. Additionally, capturing data about volunteer employers allows agencies to apply for corporate grants that are increasingly influenced by employee volunteer contributions.

3G70-077-000 Human Services Data Repository Project

Project Description

The Human Services Data Repository Project will use existing County tools and infrastructure to implement a data repository that enables Human Services staff and others such as Public Safety personnel to determine if one or more clients are being served anywhere in the Human Services system. Following implementation of a pilot, future phases include adding more Human Services applications to the repository and expanding the data fields collected to create a portal for Human Services staff that will provide an unduplicated count of clients in the Human Services system.

Project Goals

The goal is to better equip the County to provide services to clients from any point of encounter, whether from within the Human Services system or from within the Public Safety system. Improved access to client data can potentially make a significant difference in a life-threatening situation.

Progress to Date

The Human Services IT Governance Board (HSITGB) will establish strategic direction, policy and priorities for technology initiatives and investments across the Human Service agencies. This group is conducting research and providing guidance related to the data repository project. The project plans to continue with documenting requirements, identifying a preliminary set of demographic data elements, a subset of which will be used in the pilot, and developing scalable technical models to work across multiple Human Services departments.

Project Budget

At the FY 2016 3rd Quarter existing balances will be reallocated to the new Integrated Human Services Technology Project, a strategic initiative recommended for funding in the FY 2017 Budget. **This project will be retired in the FY 2017 Adopted Budget IT Plan.**

Return on Investment

This project provides the Human Services agencies with enhanced program planning, more efficient delivery of services and increased service coordination through the ability to perform trend and demographic analysis of shared data across the Human Services system. Additional non-quantifiable benefits are realized through avoidance of service interruption to clients who may be most at risk of harm, potentially providing life-saving services by providing critical data about clients being served anywhere in the Human Services system. Benefits also include a reduction in staff time required to search through multiple information systems to determine if a client is in the Human Services system, as well as staff hours saved entering and re-entering client demographic data that has already been recorded in another Human Services information system.

IT-000008 Child Welfare Integration Project

Project Description

The Child Welfare Integration System project will provide a single source for case management and alleviate the time social workers spend updating multiple disparate state and local data systems as they work to serve children and families. Considerable time is lost from direct client services as social workers comply with manual processes and update redundant data in silo systems to fulfill both state and local program reporting requirements. The lack of integration between the various systems results in the inability to demonstrate client specific and program-wide progress and does not support data driven decision making. Child welfare clients often exist in complex and unpredictable situations. As such, social workers need a view of all factors influencing children and families which allows them to assess the challenges and to develop comprehensive plans aimed at successful and sustainable outcomes.

Project Goals

The goal of this project is to develop of a single solution for child welfare case management which provides a holistic view of case information, incorporates rules and assessment tools, business workflows, and provides for operational and compliance reports supporting effective service delivery.

Progress to Date

Requirements Analysis, data mapping and modeling and Statement of Work was approved in FY 2016. Phase One is planned to begin in FY 2017.

Project Budget

New funding is not required in FY 2017.

Return of Investment

The Child Welfare Integration System project will eliminate the duplication and redundancy involved with updating multiple stand-alone systems by providing a single secure portal for data recording activities, thus allowing social workers to do their job more effectively. The time savings gained can be applied toward guiding clients towards successful and sustainable outcomes. Savings are also anticipated with relation to measuring and understanding the impact of program efforts on participants through improved reporting capabilities to track efforts, outcomes, and participant progress. This system consolidation effort is expected to reduce the amount of IT support required to maintain the multitude of systems currently in place.

IT-000009 Participant Registration System Project

Project Description

This project will provide the Department of Neighborhood and Community Services (NCS) a consolidated electronic system to register and track participants at community, neighborhood, senior and teen centers. Currently, participants who visit multiple centers complete a separate paper registration form for each center.

Additionally, the NCS centers use different methods to track and count participants, including manual counting of paper sign-in sheets and small ad-hoc databases. As part of the new system, participants will be issued identification cards with identification codes that they will scan upon entrance at any NCS Center. Participant data will be updated annually or as their information changes. The new system will enable staff to verify program/center eligibility and track participant attendance at both the center and the individual activities offered at the center, and provide for better and more accurate data reporting and enhanced protection of confidential participant data.

Project Goals

The primary goal of this project is to support implementation of one centralized, web based, participant registration and tracking system to be used at all NCS centers.

Progress to Date

NCS has entered into a joint effort with the Fairfax County Park Authority to obtain a solution that will both replace the current Park Authority ParkNet system, and also provide NCS with an electronic Participant Registration System. Phase I (FY 2016) included refining functional requirements, RFP development, solicitation, evaluation, vendor/solution selection. Phase II planned for FY 2017 - FY 2018 includes configuration, testing and implementation.

Project Budget

FY 2017 funding is not required.

Return on Investment

The primary focus of this new initiative is improved customer service, significantly enhanced efficiency and accuracy of data reporting, and improved data protection and security. Response from the community indicates tremendous acceptance of an ID card system for entrance into NCS centers. This project will significantly reduce the current burdensome paper registration process and will substantially ease the burden on the participants since each participant has to register only once to be eligible to use any NCS center. The system will also interface with existing financial systems in order to manage program and related fees. NCS will be able to use the data recorded in the system to meet state and local reporting requirements, assist in program development, and enhance results-based strategic planning within the agency. It is anticipated that revenue collection processes will be enhanced through the use of the proposed system.

IT-000020 County-wide Tele-Psychiatry Project

Project Description

The Telepsychiatry Expansion project supports the Fairfax-Falls Church Community Services Board (CSB) initiative to expand the delivery of specialty and general psychiatry services to Fairfax County areas that do not currently have reasonable access to services. To meet the needs of these residents, CSB's Telepsychiatry project will expand the use of mobile televideo units to eliminate the rigidity of where clients are seen and increase efficiency by using other non-local psychiatrists.

Project Goals

Enhancement of existing CSB Telepsychiatry services, a component of telemedicine services using interactive audio, video, or other electronic media to provide diagnosis, consultation, or treatment. This project focuses on establishing the availability of static and mobile telepresence or teleconferencing systems for providing psychiatric services to underserved population of youth and adult clients and to make services available to additional sites and more clients.

Progress to Date

Technical and business requirements are underway in FY 2016.

Project Budget

FY 2017 funding is not required.

Return on Investment

In addition to improved delivery of mental health service to the entire community, telepsychiatry also results in reduced travel time for clients and CSB psychiatrists, increases efficiencies in provision of access to specialty psychiatric providers such as child and adolescent and psychiatrists who speak other languages especially Spanish; provides the ability to conduct unscheduled/emergent psychiatric evaluations 24 hours per day; enables delivery of enhanced psychiatric support for community partners; increases psychiatric evaluations from emergency departments in local hospitals, as well as hospital pre screenings, and pre-discharges psychiatric appointments.

IT-000025 Integrated Human Services Technology Project (New)

Project Description

Within the Human Services system, clients, individuals and families are often assessed with multiple needs spanning multiple service programs. 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 their needs. As the Fairfax County Human Services system moves to an Integrated Business Model, technology will be required to enable and support that vision. The data collected within the human services systems help develop policy which shapes future County action. The strategic use of innovative information technology to support Fairfax County's Human Services Systems will help find the connections in fragmented data and 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. This project supports the development of a roadmap and implementation plan for integrated human services technology.

Project Goals

This project plans to develop a comprehensive view of clients and their needs; deliver a scalable set of properly coordinated services; improve service quality with accurate and timely data; and deploy and maintain cost-

effective IT assets and services. A well-defined technology strategy will lead to solid planning and successful deployment of resources in support for the Integrated HS business model.

Planned Project Schedule

IT Roadmap development including organization and facilitation of Process and Data Optimization and Requirements Teams, extended due diligence, educational showcase demonstrations, and an update to IT Five-Year Plan (post Roadmap completion) is expected to be complete in FY 2016. In addition, targeted business process modeling and analysis in support of laying the groundwork for implementation of IT Roadmap initiatives are to be initiated. Roadmap implementation "ramp-up" which establishes the overall project management structure and supports for procurement activities is expected to be completed in FY 2017; with implementation planned for future years.

Project Budget

FY 2017 funding of $150,000 and a planned FY 2016 3rd Quarter reallocation of $600,000 from three existing Human Services Projects ($400K from retirement of the HS Data Repository Project, $167K from the Office of Children Imaging and Workflow Project, and $33K from the completed Health Management Information System Project) will support the first phase of this strategic Human Services initiative.

Return on Investment

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. Multiple agencies partnering to view clients holistically, tailor services to their specific needs and identify at-risk persons in a timely fashion will enable better client service. Creating an integrated view of client information across human services programs and a central point to access data from relevant human services systems will also remove redundancy in the client experience (e.g., eliminate the need for clients to submit basic eligibility information numerous times). Additionally, common standards will be created across agencies for critical areas such as IT security, data confidentiality, etc. and appropriate mechanisms to deliver information technology and services that support and improve preparedness, coordination, communication, compliance and response of human service agencies will be designed.

IT-000026 Diversion First Interoperability Project (New)

Project Description

This multi-agency, multi-phase technology project supports the County's Diversion First Initiative, which has an overall goal of diverting people who have mental illness and who have committed less serious offenses or may have criminal charges to treatment instead of incarceration or justice system involvement. The Diversion First Initiative spans multiple organizational systems including the Police Department, Office of the Sheriff, Fairfax-Falls Church Community Services Board, the Court system and many community partners. The Diversion First

Interoperability Project supports this strategic County initiative with development of an interoperable data solution that spans these diverse organizational systems in order to determine success, track and monitor individuals, develop aggregated reporting mechanisms, and develop quality improvement approaches to improve outcomes.

Additionally, there are multiple system efforts connected to Diversion First. This includes a Crisis Intervention Team Training for law enforcement personnel and Mental Health First Aid training for first responders, justice system, and community members; the Merrifield Crisis Response Center, where law enforcement can transfer custody of individuals and allow them to be assessed for mental health emergencies and linked to needed services; the establishment of additional mobile crisis units to increase the County's capacity for emergency mental health services in the field; the creation of specialized mental health dockets in Fairfax County courts; the provision of mental health services to people transitioning from incarceration and/or requiring more intensive services in the community; and additional linkages between juvenile diversion services and the adult systems.

Project Goals

Information Technology is vital to support the data collection and return on investment measures across systems and within each component of the Diversion First Initiative. The project will identify associated internal and external systems of partner organizations and interventions as well as data elements and intervention measures across varied law enforcement, justice, and mental health systems to support the data collection, data sharing, and outcome evaluation of these diverse initiatives necessary to determine overall success and assist with decision-making and assessing outcomes.

Creating interoperable data capacity is vital to measuring outcomes and assuring quality improvement as additional diversion components are implemented. The Department of Information Technology will work collaboratively with all members of the Diversion First team focused on evaluation to assure that data requirements are identified and met.

Planned Project Schedule

Logical model framework and process flows determined the need for an interoperable data system. An evaluation work group for the Diversion First Initiative was established to determine measures, data sources, and reporting needs. Development of data and reporting requirements are expected to be shared with the Department of Information Technology before the end of FY 2016.

Project Budget

FY 2017 funding of $150,000 is recommended to support the initial phase of the Diversion First Interoperability Project. An FY 2016 reallocation of $361,948 balances from the CSB Initiatives Project (retired) is also planned.

Return on Investment

This technology project supports the goals of the Countywide Division First Initiative and will enhance effective use of County programs and resources by providing more real-time information about individuals for ascertainment in the diversion process. Replacing manual inquiries about past involvement in a mental health or related systems and implementing interconnectivity between disparate systems improves access

to pertinent information, streamlines processes, and will result in more informed and timely decision making. Diverting individuals with mental illness away from jails towards more appropriate community based mental health treatment is an effective strategy, based on national models, to provide necessary mental health care, enhance public safety by making jail space available to more violent offenders, provide the criminal justice system with alternatives to incarceration, and reduce the cost and associated risks to the individual offender and the public.

IT-000027 Human Services Integrated Electronic Health Record Project (New)

Project Description

This project will deliver person-centered health care services and improve the health status of County residents. The County's human services agencies that provide essential health care services to residents - the Health Department, the Department of Family Services (DFS) and the Community Services Board (CSB – will pursue a common information technology solution that supports the development and management of individualized care plans – including functionality for inter-agency collaboration and interactions with other providers including but not limited to the County's Community Health Care Network and private providers in the community; authorization and coordination of health care services; documentation of health care encounters; practice management including event scheduling, workflow management and workload management; and revenue cycle management including registration, capture of payer information, tracking of resource use, invoicing/ billing based on encounter documentation and resource use, and functionality for financial and cost accounting.

Project Goals

Using the framework supplied through the Fairfax County Human Services IT Roadmap, the goals of this project are to elicit joint requirements for a common or interoperable solution, develop the optimal approach for acquiring and deploying the desired functionality and implement a solution that will support care coordination across Fairfax County human services system.

Planned Project Schedule

This initiative is expected to commence with the completion of the final human service IT roadmap, to ensure the planning and implementation fit within the larger human services technology landscape. It is expected that the planning process will occur in FY 2017 and phased implementation will be initiated prior to FY 2018.

Project Budget

FY 2017 funding of $150,000 and an FY 2016 Third Quarter reallocation of $175,000 from Office of Children Imaging and Workflow Project is also planned to support this multi-phase strategic initiative.

Return on Investment

While each agency provides distinct health care services and has unique documentation needs, there is significant value associated with leveraging a common information technology solution that has the requisite configuration flexibility and enables 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 they provide to the same residents and to more effectively coordinate those services. The implementation of this initiative will avoid the fully loaded cost of individual, independent systems within multiple Human Service agencies; increase data sharing capabilities among Human Services, Public Safety, and other key partnering agencies to view clients holistically, tailor services to their specific needs and identify at-risk persons in a timely fashion; create an integrated view of client information across human services programs and a central point to access data from relevant human services systems; remove waste and redundancy in the client experience (e.g., eliminate the need for clients to submit basic eligibility information numerous times); improve planning capabilities within Human Services agencies and across the system; increase visibility into, and accountability for, client outcomes, cost of service and other key program performance and success indicators; implement common approaches and standards across agencies for critical areas such as IT security and data confidentiality in keeping with Federal, State and County laws and regulations as well as with Integrative Model goals; and bridge service "silos" while increasing administrative flexibility.

3.6 Planning and Development

2G70-040-000 Facility Maintenance Management System Project

Project Description

This project supported the initial acquisition and implementation of an Integrated Facilities and Grounds Management System which 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. The maintenance aspect must be fully integrated with the management of those assets by encompassing all the functional components and activities that support Lease Management, Space Management and Scheduling, Inventory Control, Grounds Management, Contracts Managements, Utilities Management, Physical Security, and Emergency Preparedness/Disaster Recovery.

Implementing a web based, "one stop shop" for facilities information, will enable internal improvement and efficiencies as well as provide more accurate, completed, and timely information to customer agencies. By consolidating the redundant facilities tables and databases maintained by various branches within FMD as well as by the participating "partner" agencies, the County will gain the benefit of more consistent data and improved interagency coordination of information. Multiple County agencies currently use functionalities of the CIFM system to ensure County facilities, parks, grounds, sidewalks, curbs, trails and parking lots comply with requirements of the American with Disabilities Act (ADA).

Project Goals

The current phase of the project will upgrade the system to the latest software releases and fully leverage the functionality to minimize customization, simplify system upgrades, meet the business operational needs of FMD and FCPA, provide improved reporting, and integrate with the County's GIS data and systems and the Human Capital and Financial management systems (FOCUS).

Progress to Date

Work completed to date:

- Portfolio and Demand Maintenance module - implemented March 2007
- Real Estate Leases module - completed August 2009
- Planned Maintenance and Space Management modules - completed June 2009
- Capital Project module - completed spring 2010

In FY 2016 - FY 2017 the project will work to upgrade the system's software platform and application to the latest version of the software. The upgrade and integration has been divided between:

- FY 2016- upgrade of the system's Facility Maintenance module and the related features, as well as the integration with the County's ERP Human Capital Management System to populate the Portfolio with the County's employee data, and the implementation of the Facility Projects

feature. The Facility Maintenance Module is the most widely used module of the system and has the highest upgrade priority from both stakeholder agencies.

- FY 2017 –upgrade of the remaining modules—Facilities Management (Space Planning), Real Estate Management, Capital Project Management and Facility Condition Assessment. Additionally, the integration of the County's financial management system Capital Projects Financial data and the GIS integration will be completed.

Project Budget

New funding is not required in FY 2017.

Return on Investment

Extensive savings will be realized through the streamlining of communications and processes throughout FMD and the Park Authority. The upgraded Facilities Management system will allow County staff to increase the efficiency of the facilities' maintenance service requests process by providing a web based customer request and inquiry interface that saves time for staff in terms of handling customers' status inquiries and work order processing from initiation to close out. Additional modules and features will improve maintenance of critical facilities assets and reduce maintenance costs by automating the management of corrective maintenance services and automating preventive and condition-based maintenance processes to improve and extend the life of critical facilities assets. The system will also enable County staff to conduct condition-based facility assessments which help in the prioritization of capital improvements, provide financial and environmental impact analysis to improve capital planning, and can extend 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 will provide staff with real time access report generation and improved Ad Hoc report writing versus current off-line and labor intensive methods. The on-line reporting will allow front line supervisors to easily review and analyze data.

IT-000010 Electronic Plan Submission and Review Project - Land Development Services (LDS)

Project Description

The Land Use Information Advisory Council appointed by the Board of Supervisors (BOS) issued several guiding principles that included more robust use of technology to facilitate the electronic submission and review of land use applications. The Land Development Services division of the Department of Public Works and Environmental Services (DPWES) plans implementation of electronic plan submission and review to enable architects, engineers and construction professionals to submit changes online by marking up or editing drawings 24 hours a day, 7 days a week, from anywhere in the world. The electronic process enables constant communication where clients are able to collaborate with one another for real time editing. The requirement for printing and transporting paper plans will be eliminated, enabling users to submit plans and track review progress in an inexpensive and efficient manner.

Project Goals

This project builds upon the pilot ePlans program conducted in the Department of Public Works and Environmental Services (DPWES) and the Department of Planning and Zoning (DPZ) and will expand the capabilities currently being developed to review building and site plans electronically. It will yield numerous benefits, including enhanced customer service, reduced carbon footprint, cost savings, cost avoidance, and satisfaction of Board-appointed committee recommendations.

Progress to Date

This multi-phase project builds directly on the prior investment made for the e-Plan pilot projects in DPWES/ Land Development Services (LDS) and DPZ. The LDS pilot of ePlans includes the implementation of 2 plan types to evaluate the software and hardware tools for usability in Fairfax County. The implementation team completed an internal test electronic review of the County's Public Safety Headquarters building in CY 2015. The team subsequently reviewed a customer/industry submitted Site Plan and will similarly work with an industry partner to test the New Commercial Building review process to complete the pilot project. The pilot project has also included the inclusion of partner review agencies to participate in the evolving ePlans process. These partners include the Fire and Rescue Department, the Department of Planning and Zoning, the Health Department, the Engineering and Surveyors Institute (ESI), the Virginia Department of Transportation, and other agencies within DPWES (Urban Forestry, Capital Facilities, etc.).

Progress to date has substantially satisfied the goals of the pilot project. As a result, the initiative will continue by adding the remaining plan types, other external customers, and additional plan reviewers until fully deployed. Workflow and system development for additional processes is scheduled for spring of 2016 and will continue in phases until the system is fully implemented.

Project Budget

FY 2017 funding is not required for this project.

Return on Investment

This project will provide a streamlined and more collaborative plan review process, which advances Goal 3 of the County's Strategic Plan to Facilitate the Economic Success of Fairfax County: Improve the Speed, Consistency, and Predictability of the Development Review Process. In addition to streamlined review and plan submission processes, this project provides significant environmental benefits and financial savings stemming from reduced paper costs and reduced fuel consumption. Once implemented, this project will eliminate/significantly reduce the need to print large paper plans (each over 50 lbs.) and deliver them numerous times for County review. Customer savings and improved customer service combined with a streamlined and more collaborative plan review process advance the County's goal of supporting and enabling further development and redevelopment throughout the County.

Additionally much of the current cost of physical storage (DPWES spends in excess of $59,000 annually to digitize site plans for historical retention) will be eliminated when the electronic plan submission and

review project is fully implemented. Other benefits include simplification of the plan submission and review process, staff efficiency, improved record keeping, streamlined review processes, improved accuracy of data transmitted due to a reduction in the number of times plan data needs to be copied and recopied, industry "goodwill" gained by satisfying a long-standing industry demand, and reduction of costs to retrieve historical plan records with a significant reduction of risk that the documents being sought have been inadvertently lost or destroyed.

IT-000011 ePlans Project - Department of Planning and Zoning (DPZ)

Project Description

The Land Use Information Advisory Council appointed by the Board of Supervisors (BOS) issued several guiding principles that included more robust use of technology to facilitate the electronic submission and review of land use applications. Since that time, the Department of Planning and Zoning (DPZ) has made the initial investment to develop and implement a pilot ePlan system for the zoning application process. This project supports the complete review process from distribution of the case material to the various County agency reviewers through action by the BOS to include archiving the final case materials, thereby developing a fully automated review process.

Project Goals

This project's goal is complete automation of the review process for rezoning applications. The ePlan system application has the ability to be customized for use with all zoning application types reviewed by the Zoning Evaluation Division, including Special Exceptions, Special Permits, and Proffer Interpretations and pre-applications submissions. Further, it is anticipated that the ePlan system can be customized for use by other Divisions within DPZ.

Progress to Date

This multi-phase project builds directly on the prior investment in DZP for an e-Plan pilot project (in CY 2014). Following successful completion of the pilot, this initiative will continue with adding various plan types, other customers, and reviewers until fully deployed.

Phase I was released for use by the Development Community in November 2015. It is expected that refinements to the system will occur during Phase II to address required business process concerns. System design of Phase II is expected to begin in February of 2016 with a projected completion in July 2016. Additional phases will be evaluated and added as the project progresses from FY 2016 to FY 2020 until fully deployed.

Project Budget

No new funding is required in FY 2017.

Return on Investment

The incorporation of the ePlan system for application submission and review will enable staff to process applications in a more efficient manner by significantly reducing the administrative aspects of manually entering application information into existing databases and tracking, copying and distributing the wide variety and growing volume of case materials. Staff resources will have the ability to place more emphasis on the technical review of proposals and assist in addressing efficiency issues related to the increased complexity of rezoning applications. The automation of the land use process, analysis, collaboration, distribution and parallel processing of agency comments and markups will yield considerable reduction in applicant costs and improved staff efficiency. A number of other jurisdictions surrounding Fairfax have implemented aspects of the ePlan system, including Montgomery County and the District of Columbia. Full implementation of this effort will place the County in a position of greater economic development appeal.

IT-000012 ParkNet Replacement Project

Project Description

This project supports the Park Authority's initiative to replace the legacy ParkNet system with a commercial, off-the-shelf (COTS) application to meet the Park Authority and County requirements. ParkNet, the Fairfax County Park Authority's key management and information business application was implemented in the early 1990's and facilitates all point-of-sale activities, internet class registrations, program and camp registrations, pass holder and class attendee check-in, and maintains critical user information. ParkNet is now technologically outdated and without adequate support from the vendor.

The Park Authority operates nine recreation centers (RECenters) with indoor swimming pools and a variety of fitness/classroom/gymnasium spaces; three lake front parks; 68 picnic facilities, several historic sites that can be reserved; two campgrounds; five nature centers, and several other unique facilities that apply user fees and charges such as general admissions, passes, retail sales, equipment and facility rentals, classes and events. In addition to these sites, recreation programs are also held at non-FCPA locations throughout the County including public schools and private vendor sites.

Project Goals

The project will replace ParkNet, the key management and information system for the Parks. The system no longer meets the present business requirements of the Park Authority, is technologically out-of-date, and out of compliance with current County IT standards (it was implemented before most County standards for applications of its size were established).

Progress to Date

An agency task force documented and compiled requirements for the system. The Park Authority then partnered with Neighborhood and Community Services (NCS) to develop a Request for Proposal (RFP) for the Recreation Management System that addresses the requirements of both agencies.

The RFP was issued, responses were received and evaluated with vendor selection and contract award anticipated in January - April 2016 with implementation scheduled to begin in FY 2017.

Project Budget

FY 2017 funding is not required for this project.

Return on Investment

The ParkNet application has become an essential component of providing the County's citizens with the parks and recreation services they expect. With expanded system capability there are opportunities for improved customer satisfaction resulting in enhanced revenue through new application features the agency intends to implement, such as Electronic Fund Transfer payments for pass sales and online facility reservations. Investments in automating Park applications have resulted in increased revenue collections. Revenue collected and recognized through ParkNet totaled $47,298,219 in FY 2013; an increase of more than 200% since ParkNet was implemented in 1995.

IT-000019 Fairfax Inspections Database On-line (FIDO) - Land Development Service (LDS) System Replacement Project

Project Description

This multi-phase initiative will replace and consolidate multiple legacy land use systems supporting zoning and development plan review, building permit/license issuance, code enforcement, inspection, and cashiering activities. 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 shadow 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. The systems rely on outdated technologies and business processes, lack optimal security capacities, and use legacy hardware platforms that have compatibility issues with emerging desktop, tablet and mobile wireless technologies.

Project Goals

The goal of this project is to modernize the technologies supporting land use and development processes, which is in direct support of and will advance 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 result of this multi-year project will be the replacement of multiple legacy land use systems with a consolidated, modern enterprise solution that supports the County's zoning and development plan review, building permit/license issuance, code enforcement, inspection, and cashiering activities. Current systems are 13 to 19 years old; 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. Incorporating business requirements necessitated by newly mandated activities has become a challenging and time-consuming process that further threatens system stability.

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.

Progress to Date

The project has established governance structure and project plans, developed statement of work and contracted for consultant support to develop a high-level service delivery model, business requirements and procurement support, and identified shadow system to include in project scope. Preliminary market research to identify potential vendors has also been conducted.

Planned Project Schedule

- Requirements Definition and Vendor Selection FY 2016 – FY 2017
- System Implementation and Independent Verification & Validation FY 2017 – FY 2019
- Post Implementation Support FY 2019 – FY 2020

Project Budget

FY 2017 funding of $1,400,000 is provided for continued support of this strategic County initiative.

Return on Investment

The project will provide a single enterprise platform that will enhance land use service delivery activities while eliminating the current risk and unknown cost associated with legacy system failure and recovery efforts. For example, should the FIDO system experience a catastrophic (and unsupported) database failure, several land use agencies would have to rely on manual processes to provide internal and web based land use services. Specifically, plan, permit, license, inspection & fee collection activities will experience significant increases in service delivery timeframes, and the County's ability to sustain optimal land use operations for the public will be compromised.