



Fairfax County
VIRGINIA



SECTION 3
INFORMATION TECHNOLOGY
PROGRAMS

INFORMATION TECHNOLOGY PROGRAMS

FEATURED IN THIS SECTION

3.1	TECHNOLOGY OVERVIEW	1
3.2	INFORMATION TECHNOLOGY PROJECTS	6
3.3	PUBLIC SAFETY	8
	IT0001 PUBLIC SAFETY COMMUNICATIONS NETWORK/ SYSTEMS ...	8
	IT0011.5 JDRC ELECTRONIC RECORDS MANAGEMENT SYSTEM	9
	IT0025 ADULT DETENTION CENTER INFORMATION SYSTEM	11
	IT0039 CIRCUIT COURT MODERNIZATION	12
	IT0048 FIRE AND RESCUE INCIDENT REPORTING AND TRAINING RECORDS	14
	IT0062 POLICE RECORDS MANAGEMENT SYSTEM	15
	IT0071 ELECTRONIC SUMMONS AND COURT SCHEDULING	16
	IT0078 COURTHOUSE EXPANSION TECHNOLOGY	17
	IT0080 JUVARE LEGACY DATA CONVERSION AND EXPUNGEMENT	18
	IT0083 PUBLIC SAFETY ARCHITECTURE MODERNIZATION	19
3.4	CORPORATE ENTERPRISE	20
	IT0004.1 FAIRFAX COUNTY MASTER ADDRESS SYSTEM	20
	IT0004.2 GIS ORTHOIMAGERY UPDATE	21
	IT0004.3 GIS OBLIQUE AERIAL IMAGERY	22
	IT0006 TAX / REVENUE ADMINISTRATION	23
	IT0008 LIBRARY PROJECT	24
	IT0011.11 ELECTRONIC ACCOUNTS PAYABLE SYSTEM	25
	IT0011.13 AUTOMATED BOARD MEETING RECORDS	26
	IT0022.9 CORRESPONDENCE TRACKING AND MANAGEMENT SYSTEM	27
	IT0024.1 PUBLIC ACCESS TECHNOLOGY – KIOSK	29
	IT0024.2 PUBLIC ACCESS TECHNOLOGY – INTERACTIVE VOICE RESPONSE	30
	IT0024.3 E-GOVERNMENT – INTERNET/INTRANET INITIATIVES	32
	IT0043 HUMAN RESOURCES INFORMATION SYSTEM	34
	IT0072 CRM – CALL CENTER INTEGRATION	35
	IT0074 DATA ANALYSIS REPORTING TOOL	36
	IT0079 CORPORATE SYSTEM REPLACEMENT	37

INFORMATION TECHNOLOGY PROGRAMS

3.5	TECHNOLOGY INFRASTRUCTURE	38
	IT0050 PUBLIC SERVICE COMMUNICATIONS REPLACEMENT	38
	IT0058 REMOTE ACCESS	39
	IT0060 TELECOMMUNICATIONS MODERNIZATION	40
	IT0061 IT SECURITY	41
3.6	HUMAN SERVICES	43
	IT0002.6 ATHLETIC FACILITIES SCHEDULING SYSTEMS (AFSS)	43
	IT0002.7 HOMELESS INFORMATION SYSTEM	44
	IT0002.9 HUMAN SERVICES COST ALLOCATION SYSTEM	45
	IT0011.8 DOCUMENT MANAGEMENT & IMAGING – DFS	46
	IT0011.10 DOCUMENT MANAGEMENT & IMAGING – OFC	47
	IT0015 HEALTH DEPARTMENT MANAGEMENT INFORMATION SYSTEM	48
	IT0054 SYNAPS EXPANSION	49
	IT0059 CHILD CARE TECHNOLOGY	49
	IT0069 INTEGRATED HOUSING MANAGEMENT SYSTEM	50
	IT0073 URBAN DEVELOPMENT INFORMATION SYSTEM (UDIS)	51
	IT0075 PARTICIPANT REGISTRATION SYSTEM	52
	IT0076 INTERACTIVE WEB INTAKE PROGRAM ENHANCEMENTS	53
	IT0011.15 HOUSING MANAGEMENT DOCUMENT IMAGING/ARCHIVING	53
	IT0081 HOUSING MANAGEMENT SOFTWARE UPGRADE	54
3.7	PLANNING AND DEVELOPMENT	55
	IT0011.12 COMPREHENSIVE PLAN/ZONING ORDINANCE AUTOMATED WORKFLOW	55
	IT0055 FAIRFAX INSPECTIONS DATABASE ONLINE (FIDO)	56
	IT0063 FACILITY SPACE MODERNIZATION	58
	IT0064 PROFFER DATABASE AND STATUS SYSTEM	59
	IT0065 FACILITY MAINTENANCE MANAGEMENT SYSTEM	60
	IT0067 STORMWATER MAINTENANCE MANAGEMENT SYSTEM	61
	IT0068 HOME OCCUPATION PERMITTING SYSTEM	62
	IT0077 LAND DEVELOPMENT INDUSTRY ENHANCEMENTS	63
	IT0082 LAND USE INFORMATION ACCESSIBILITY INITIATIVES	64

SECTION 3

INFORMATION TECHNOLOGY PROGRAMS

3.1 TECHNOLOGY OVERVIEW

Purpose

Fund 104, Information Technology, was established in FY 1995 to strengthen 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. Historically, the E-911 Emergency Telephone Service Fee, a General Fund transfer, the State Technology Trust Fund, and interest earnings are sources for investment in Information Technology projects. However, in FY 2001, the E-911 Emergency Telephone Service Fee revenue and related project expenses were moved to Fund 120, E-911 to satisfy a State legislative requirement that E-911 revenues and expenditures be accounted for separately.

The County's technology strategy has several key elements. These are to provide an adequate infrastructure of technology for agencies to use in making quality operational improvements; redesign existing business processes with technology to achieve large-scale improvements in service quality and achieve administrative efficiencies; and promote the use of technology in enabling government services without "doors, walls or clocks". The County's long-term commitment to provide quality customer service through the effective use of technology is manifested in service enhancements; improved means of providing access to services electronically, expedited response to citizen inquiries, improved operational efficiencies, better information for management decisions, and increased performance capabilities.

FY 2008 Initiatives

In FY 2008, funding of \$13,760,570 is included for initiatives that meet one or multiple priorities established by the Senior Information Technology Steering Committee. These initiatives include a mix of projects that provide benefits for both citizens and employees and that adequately balance continuing initiatives with the need for maintaining and strengthening the County's technology infrastructure.

Funded projects will support initiatives in the Human Services, Planning and Development, General County Services, and Public Safety program areas. Although many initiatives meet more than one of the technology priorities, for narrative purposes below, projects have been grouped into only one priority area.

In keeping with guidelines established for FY 2008, agencies were instructed that funding for new projects would be considered only if the submission met one or more of the following criteria:

- Project met one of the five strategic priorities of the Fund
- Project considered low cost, short-term and small in scope
- Contractual obligations and/or to complete a phase of the existing project
- Project must be completed and maintained without additional staff

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

In addition, projects were reviewed from both a business and a technical perspective. On the business side, consideration included whether the implementation of the project would benefit citizens, the County or both. Benefits of the project were weighed against the cost of the project and several risk factors, including the risk of cost and scope escalation due to factors such as the type of technology chosen, organizational disruption, schedule viability and the impact of delaying the project.

On the technical side, factors examined included how closely the project matched, and its impact on, existing County IT infrastructure, and the technical uncertainty of the project as it pertained to the commercial availability of, and the organizational experience with, the proposed hardware, software and resource support. In addition, consideration was given to the availability of human resources both in DIT and the sponsoring agency to staff the project.

Funding Priorities

The Senior IT Steering Committee establishes the funding priorities for technology projects. Beginning FY 2004, based on global changes in social and economic paradigm shifts, the new priorities shown below were adopted.

The recommended IT investments meet the five key investment policy objectives shown below and are supported by the Senior IT Steering Committee and the ITPAC. A more detailed explanation of the projects within these requirements is provided within:

1. **Mandated Requirements:** *(enacted by the Federal Government, Commonwealth of Virginia, Board of Supervisors, Court ordered or County regulation changes).*
2. **Completion of Prior Investments:** *(multi-year lease purchase, implements phase or completion of planned project).*
3. **Enhanced County Security:** *(homeland security, physical security, and information security and privacy).*
4. **Improved Service and Efficiency:** *(consolidate business practices; support more efficient government; optimize management and use of county assets and data; enhance systems to meet the expectations and needs of citizens; and promote service that can be provided through the Internet- 'e-government').*
5. **Maintaining a Current and Supportable Technology Infrastructure:** *(consistent and reliable hardware, software and communications infrastructure; ensure that citizens, businesses and County employees have appropriate access to information and services).*

In FY 2008, funding of \$13.8 million is provided for initiatives that meet one or multiple priorities established by the Senior Information Technology Steering Committee. These initiatives include a mix of projects that provide benefits for both citizens and employees and that adequately

balance continuing initiatives with the need for maintaining and strengthening the County's technology infrastructure. Funded projects will support initiatives in the Human Services, Planning and Development, General County Services and Public Safety program areas. Although many initiatives meet more than one of the technology priorities, for narrative purposes below, projects have been grouped into only one priority area.

The five investment policy objectives relate to the County's continuing focus on making access to government services more reliable, secure, and efficient. The projects on the following pages are supported and will receive additional funding in FY 2008.

The established priorities for IT projects for FY 2007 are summarized as follows:

Priority	FY 2008 Adopted Funding
Mandated Requirements	\$0.2 million
Completion of Prior Investments	\$1.5 million
Enhanced County Security	\$3.1 million
Improved Service and Efficiency	\$4.3 million
Maintaining a Current and Supportable Technology Infrastructure	\$4.7 million
TOTAL	\$13.8 million

Mandated Requirements — \$0.2 million

The County is responsive to federal and state agencies' mandates, as well as to directives of the Board of Supervisors. Each year, agencies review mandates and directives to ensure compliance. In FY 2008, funding of \$217,200 is included for the development of a project to support data conversion from the Juvenile and Domestic Relations District Courts' legacy JUVARE system. The application currently contains historical, archived data and individual records that must be expunged according to the Code of Virginia. With the system upgrade, maintenance, expungement, and purging of data will be ongoing while still allowing for historical data archiving and inquiry.

Completion of Prior Investments — \$1.5 million

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

FY 2008 funding of \$500,000 will allow for the final build-out of the Fairfax-Falls Church Community Services Boards' (CSB) SYNAPS environment, which is a client tracking, third-party billing, and data system. The final phase of the project will enable a maximum of 800 CSB employees to use the system, which will also be upgraded to current specifications with improved security technology to ensure continued data protection.

In FY 2008, funding of \$351,000 will provide for further enhancements to the Fairfax Inspections Database Online (FIDO) project, which supports commercial and residential land-use management operations, including the maintenance of permits, inspections, contractor licenses, and code enforcement information for the Department of Public Works and Environmental Services (DPWES), Fire and Rescue Department, Department of Planning and Zoning, and Health Department. Most notably, FY 2008 funding will enable the development of a Web-based portal for residents and building industry users to view the status of permits, inspections and complaints, as well as allow users to notify the County of alleged ordinance violations.

Funding of \$280,785 will provide for a back-up location for components of the Health Department's AVATAR system, used as the agency's central database for collecting and maintaining patient information. Funding will help to ensure that the Health Department's central information system remains operational and confidential patient information remains secure, in the event of an unforeseen catastrophic event.

FY 2008 funding of \$194,165 will allow for an upgrade to the Office for Children's Child Care Management system. This application is used to process over 2,500 home child care facility permits, connect families with child care providers in the Child Care Resource and Referral System, determine client eligibility, process provider payments, and track enrollments. The application software and supporting technology must be upgraded in order to ensure the application can maintain its operational integrity and will ensure system compliance with County IT requirements and standards.

In addition, funding of \$125,000 will allow for an upgrade to the Department of Housing and Community Development's financial and property portfolio management software system. The upgrade will promote compliance with Housing and Urban Development (HUD) requirements; include additional accounting, audit tracking, and compliance tools; and enhance security features.

Enhanced County Security — \$3.1 million

Ensuring the security of the County's IT investments and information assets is of primary importance to the Department of Information Technology. Through many

projects and initiatives, efforts are focused on the security of various levels of County data, from e-mail to homeland security measures. During FY 2008, the County will continue to implement a multi-faceted approach to securing County data and assets.

FY 2008 funding of \$2,200,000 is included for the continuation of a multi-phase effort to replace the existing Police Department disparate information systems with an integrated Law Enforcement Records Management System (LERMS). The new system will improve the ability to prevent, respond to, manage, and analyze situations relating to the safety and property of County residents. Intelligence led policing, improved criminal justice, and overall strategic public safety resource deployment will be improved upon implementation. Improvement in the reliability, accuracy, and quality of data will be realized and the system will operate on the principles of "single point of data entry and query" for all functions. The system will expand the capacity of the Police Department, allowing it to better analyze — statistically and through geographic-based means — data on incidents and personnel. It will also aid in identifying trends, and assist in staffing decisions and monitoring departmental effectiveness. The system will integrate with the Computer Aided Dispatch (CAD) system in the Department of Public Safety Communications, ensuring a unified technology platform approach that facilitates the seamless sharing of processes and data across public safety functions and leverages available technologies.

Funding of \$632,166 is provided in FY 2008 for the fourth year of a seven year annual lease-purchase payment for the new Public Service Radio System network infrastructure. The project replaced a 20 year old Public Service Communications System, which provided two-way radio communications for all County non-public safety agencies, as well as the Fairfax County Public Schools Transportation Department (school buses), FASTRAN and Fairfax Water, with updated technology that meets the needs of user agencies. The system provides adequate call processing capacity and area coverage to more than 90 percent of the area within the jurisdictional boundaries of Fairfax County. The FY 2008 project cost is estimated to be \$1,844,805 and based on a portion of project costs, derived from the number of radios users will have operating on the system as a percent of the total number of radios, \$1,212,639 will be recovered from Non-General Fund Supported agencies, the Fairfax County Public Schools and Fairfax Water in FY 2008.

In addition, funding of \$244,160 is provided to continue implementation of additional internal network access controls, forensics tools, other security devices designed to detect viruses and worms, as well as applications to

quarantine renegade devices and prevent unauthorized use of the County's IT systems. The County security architecture is designed to provide an appropriate level of protection for all County information processing resources regardless of technology platform. Aimed at ensuring the confidentiality of information in an evolving environment, new technologies will be employed to meet current and future security challenges.

Improved Service and Efficiency — \$4.3 million

There are several projects funded in FY 2008 that provide for additional improvement in service and efficiency. These improvements are aimed at both external County interactions, such as with residents and the business community, as well as internal County processes, that result in improved results on the provision of direct services.

FY 2008 funding of \$1,145,000 is provided to support agencies that are currently implementing a document management activity or phase, or are ready to invest in a shared services solution. Imaging and workflow initiatives provide an opportunity for agencies to increase the security and integrity of 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 the costs associated with space and shelving for storage of paper requirements. There are two separate initiatives funded in FY 2008 in the Department of Housing and Community Development and the Department of Finance.

Funding of \$800,000 is included in order to begin an assessment for the eventual replacement of the County's legacy systems used to support core business functions including budget, purchasing, finance, and human resource management. The County's human resources system is the first in a phased approach to replace all of these legacy systems. A new system will enable more advanced human resource management capabilities, including workforce planning, analyses of personnel costs, and tracking of employee data. The project will transform the management of the County's human resources activities from a cumbersome, manual system to one that is dynamic and supports the new requirements of human resources management.

In addition, funding of \$450,000 is provided to modernize the capability for reporting on financial data in the County's financial systems. A Data Analysis Reporting Tool (DART) will replace existing ad-hoc, stovepipe reporting with a unified reporting methodology and capability. Financial information from the County's financial, procure-

ment, and payroll systems will be integrated in a data warehouse, and reporting features will provide the users the capability to generate on-demand charts, reports, inquiries, and analyses.

In FY 2008, funding of \$392,000 is included for the further development of an Integrated Facilities and Grounds Management System used by the Facilities Management Department (FMD) and the Fairfax County Park Authority (FCPA). The system will increase the effectiveness and efficiency of staff and the utilization of capital resources required to maintain and manage County and Park facilities and properties. Funding in FY 2008 provides for integration services required for the implementation of a project management module that will help to manage the capital project process (including scheduling of labor, ordering materials, and creating reports) and the use of wireless technology on additional hand-held devices.

Funding of \$386,680 will continue the regular process of updating the aerial imagery and digital orthophotography for the County. The original project to develop the GIS base map for the entire County began in 1996. Annual updates of this data are needed to reflect the changes that have occurred over the years. The current program provides for the update of 25 percent of the County's database each year and allows the County to keep up with the developmental changes and assure users that none of the imagery will be more than four years old. The funding will also continue to support viewing County land in a three-dimensional capacity at County staff desktops in agencies such as the Fire and Rescue Department, Department of Tax Administration, Police Department and Department of Planning and Zoning.

In FY 2008, funding of \$300,000 is provided to further enhance ongoing Land Use Information Accessibility Initiatives and address several of the Land Use Information Accessibility Advisory Group's recommendations including: expanding the initial "Search by Address" and "Search by Magisterial District" capabilities to also access rezoning/site plan history, and multiple plan types (the current inquiry capability is for a single plan type); summarizing key site and rezoning plan data in PDF downloadable formats for citizen access; utilizing a citizen notification technology (like the Community Emergency Alert Network, Listserv or other capability) to contact interested constituents about new land use activities in their nearby community (i.e., Site and Re-zoning plan public hearings, approvals, etc.), enhancing the LDSNET and GIS integration to streamline end user navigation between the two systems, and evaluating and designing web tool capabilities that could include 3D imagery to help enable citizen analyses of proposed land use activities.

FY 2008 funding of \$275,000 will continue integration of e-government architectures (Interactive Voice Response (IVR), Kiosk, Web, Infoweb, and Wireless) in order to enhance the delivery of information and services, and provide new information and services to citizens. This project will continue to generate economies of scale by providing the needed infrastructure support for the ever-increasing demand for e-commerce/e-government services. Funding will allow for additional Web capabilities to be further integrated, such as new as new electronic payment services, including e-checks and scheduled ACH payments.

Funding of \$250,000 will continue efforts to establish a single access point with a common database for County government information and service requests by constituents by integrating and augmenting existing technologies (i.e., voice platform; e-government channels including IVR, Kiosk and Web; Fairfax Inspection Database Online (FIDO); GIS, Intranet Quorum (IQ); and Documentum). The project will provide a familiar, easy to remember telephone number (3-1-1), standardize call taking operations, and enable employees to answer citizen questions and log service requests through a standard interface. This will eliminate the need for citizens to navigate through hundreds of County telephone numbers to find the right one, reduce the number of transfer calls from one agency to another, and minimize the non-emergency help and assistance calls to 9-1-1.

Funding of \$150,000 is provided in FY 2008 to support various technology improvements that originated from the Land Development Process Improvement Initiative, a partnership among Fairfax County government, the Northern Virginia Building Industry Association, the National Association of Industrial and Office Properties, and the Engineers and Surveyors Institute. Some of these recommendations include the implementation of queuing management system and customer flow software that can better manage the flow of transactions, maximizing efficiency and increasing throughput. The queuing system would not only be automated and provide a numbering system, but also would be linked to the Fairfax Inspections Database On-Line (FIDO) and would identify bottlenecks in the intake, site permit, zoning review, and plan review walk-through processes, enabling a redirection of staff and/or customers for faster service.

FY 2008 funding of \$96,648 provides for tactical initiatives which focus on immediate improvements to information technology functions performed in a limited capacity across the County. Efforts in FY 2008 include the implementation of a legislative tracking module which will allow for an automated way to track federal legislative issues and specific legislation of interest to the County.

In addition, funding of \$75,000 will be used to develop an

interface between the Department of Community and Recreation Services' and the Fairfax County Public Schools' (FCPS) scheduling systems, used to schedule community use of public athletic facilities at both County and FCPS sites. The interface will enable the County and FCPS to share specialized data that are common between the two systems and increase scheduling efficiencies, eliminate duplication of data entry, and reduce scheduling conflicts that can sometimes occur. FY 2008 funding provides for the County's share of this joint County-FCPS project.

Maintain a Current and Supportable Technology Infrastructure — \$4.7 million

In an ever changing technical environment, maintaining a current and supportable technology environment is a challenge that must be addressed. The County's technological improvement strategy strives to balance the need to pursue existing initiatives with the desire to adopt new industry technology, and previous infrastructure investments with the need to take advantage of newer features and functionality. Various projects are funded in FY 2008 supporting the goal of having consistent, reliable hardware and software, and ensuring that residents, the business community and County staff have appropriate access to information and services via technology.

In FY 2008, funding of \$2,687,750 supports an initiative to create the underlying architecture for the operational components of an integrated Computer Aided Dispatch (CAD) and Public Safety Records Management Systems (RMS), including public safety communications and Police, Fire and Rescue, and Emergency Medical Services records management. This initiative includes network development, augmentation of the enterprise GIS to meet public safety requirements, and provision of an interim commercial broadband wireless services pending completion of the regional broadband wireless network under development by the National Capital Region (NCR) Urban Areas Security Initiatives (UASI).

Funding of \$1,757,461 will support the modernization of the County's telecommunications infrastructure which will integrate voice, video and data communications onto a common structure. The multi-year project focuses on replacing the County's network of disparate voice technologies with an infrastructure platform based on current technology and integration into the Institutional Network (I-Net). This will ensure the County's voice, data and video network will meet future needs. This new network architecture will accommodate the projected growth in business applications requirements, and will allow cost savings through standardization and alignment with industry trends.

3.2 INFORMATION TECHNOLOGY PROJECTS

FY 2008 funding of \$13.8 million is included for initiatives that meet the priorities established by the Senior Information Technology Steering Committee. The Senior IT Steering Committee and the Information Technology Policy Advisory Committee (ITPAC) endorses several strategic concepts regarding improved efficiency, effectiveness and service delivery countywide. DIT has informed both the Senior IT Steering Committee and the ITPAC that for the IT modernization program in FY 2008, 63 requests totaling over \$29 million were submitted for Fund 104 consideration. Of this amount, 28 initiatives totaling \$13.8 million are funded. Public Safety initiatives totaling \$5.9 million are also recommended in Fund 120 (E-911).

The chart on the following page provides a summary of the IT Project Fund 104 and Fund 120 modernization dollars since FY 2005. The County's IT program continues

to address the need to build a reliable, scalable technology foundation that can support IT projects which improve the effectiveness and efficiency of county services. Although investment dollars are currently constrained, it has been highly recommended that the County not fall substantially behind in its IT investment targets and goals that are focused on using technology as an essential tool to enable cost effective delivery of government services. To date the County's investments in technology have allowed Fairfax County to serve a growing population without significant growth in staff positions that would be otherwise necessary just to provide basic services.

A more detailed explanation of these projects is provided within. The five investment policy objectives relate to the County's continuing focus on making access to government services more reliable, secure, and efficient.



DEPARTMENT OF INFORMATION TECHNOLOGY

Quality and Innovative Information Technology Solutions



Budget ID Number	Project Title	FY 2005 ADOPTED	FY 2006 ADOPTED	FY 2007 ADOPTED	FY 2007 REVISED	FY 2008 ADOPTED
FUND 120						
IT0001	Public Safety Communications Network	6,698,934	8,497,796	5,908,579	7,384,492	7,233,079
	TOTAL FUND 120	\$6,698,934	\$8,497,796	\$5,908,579	\$7,384,492	\$7,233,079
FUND 104						
IT0002	Human Services Information Systems	92,225	60,000	0	696,056	75,000
IT0003	Planning and Development Business Process Reds.	402,674	0	0	0	0
IT0004	Geographic Information System (GIS)	618,080	491,180	411,000	1,256,965	386,680
IT0006	Tax / Revenue Administration	0	866,930	0	976,892	0
IT0008	Library Projects	0	502,336	0	430,504	0
IT0010	Information Technology Training	221,817	300,000	200,000	240,317	250,000
IT0011	Document Management and Imaging	960,256	1,493,410	1,351,629	5,768,621	1,145,000
IT0015	Health Management Information System (HMIS)	83,304	0	0	381,427	280,785
IT0020	Land Records Automated System (LRAS)	0	225,000	0	1,577,882	0
IT0022	Tactical Initiatives	540,600	850,000	276,539	1,822,284	96,648
IT0024	Public Access Technologies / E government	500,000	500,000	475,000	1,225,502	275,000
IT0025	Adult Detention Center Information System	812,465	697,160	0	492,776	0
IT0031	MS Office Suite Migration	607,400	0	0	79,682	0
IT0039	Court Modernization Projects	0	350,000	0	2,473,976	0
IT0041	Program Conversions and Replacements	0	0	0	43,436	0
IT0043	Human Resources Information System	0	0	0	437,956	0
IT0048	Incident Reporting and Training System	0	0	0	3,803,465	0
IT0050	Public Service Communications Replacement	449,930	491,864	588,517	3,987,561	632,166
IT0054	SYNAPS	0	0	0	44,216	500,000
IT0055	Fairfax Inspections Database Online (ISIS)	1,704,455	520,775	285,376	2,877,985	351,000
IT0056	Pilot Courtroom Technologies	250,000	0	0	75,388	0
IT0058	Remote Access	150,000	50,000	100,000	949,921	0
IT0059	Child Care Technology Systems	0	0	0	407,577	194,165
IT0060	Telecommunications Modernization	600,000	3,300,000	4,495,000	8,285,860	1,757,461
IT0061	Information Technology Security	1,260,667	450,000	225,000	246,730	244,160
IT0062	Police Records Management	70,000	300,000	500,000	1,030,107	2,200,000
IT0063	Facility Space Modernization	100,000	99,208	0	130,909	0
IT0064	Proffer Database & Status System	188,700	450,168	137,715	712,949	0
IT0065	Facility Maintenance Management System	792,250	548,750	0	476,125	392,000
IT0066	Personal Property Tax System	0	0	0	216,145	0
IT0069	Integrated Housing Management System	0	160,000	222,500	335,993	0
IT0067	Stormwater Maintenance Management System	0	335,993	0	163,800	0
IT0068	Home Occupation Permitting System	0	163,800	0	333,330	0
IT0071	Electronic Summons and Court Scheduling	0	405,000	552,500	876,929	0
IT0072	Citizen Relationship Management	0	0	0	500,000	250,000
IT0073	UDIS Replacement	0	0	820,000	820,000	0
IT0074	Data Analysis Reporting Tool	0	0	238,000	238,000	450,000
IT0075	Participant Registration System	0	0	300,000	300,000	0
IT0076	Interactive Web Intake Program Enhancement	0	0	130,000	130,000	0
IT0077	Land Development Industry Enhancements	0	0	250,800	250,800	150,000
IT0078	Courthouse Expansion Technology	0	0	1,730,000	1,730,000	0
IT0079	Legacy System Replacement	0	0	0	0	800,000
IT0080	JUVARE Data Conversion & Expungement	0	0	0	0	217,200
IT0081	Housing & Community Development Informatin	0	0	0	0	125,000
IT0082	Land Use Information Accessibility Initiatives	0	0	0	0	300,000
IT0083	Public Safety Architecture Modernization		0	0	0	2,687,750
	TOTAL FUND 104	\$10,404,823	\$13,611,574	\$13,289,576	46,828,064	\$13,760,015
	GRAND TOTAL: IT PROJECTS	\$17,103,757	\$22,109,370	\$19,198,155	\$54,212,556	\$20,993,094

3.3 PUBLIC SAFETY

IT0001 Public Safety Communications Network/Systems

Project Description

This project funds continued support and maintenance of the Department of Public Safety Communications (DPSC) network and components. The network's component systems are vital for ensuring immediate and systematic response to emergencies, and replacement and enhancement is necessary to maintain performance, availability, reliability, and capacity for growth due to increases in County population and demand for public safety services. The PSCN supports emergency communications of the Police, Fire and Rescue, and Sheriff's departments. This includes public safety call taking (E-911, Cellular E-911, non-emergency), dispatching, and all affiliated communications support. Two of the major technologies utilized are a Computer Aided Dispatch (CAD) system with an integrated mobile data communications component and a wireless digital radio network for voice communications.

The mobile data communications capability facilitates the dispatch of resources with minimal voice communications, provides field units direct access to local, state, and national databases, and allows continuous contact with DPSC. As needed, this project provides funding for maintenance of the legacy systems and the mobile data communications component. Maintenance and support resources for legacy systems funded from 911 fees through Fund 120 are provided and ensure continued reliable operation of these critical systems. These legacy systems and components will be supported by this project while a parallel project, IT0083, Public Safety Architecture Modernization, supports development and implementation of a modern, standards-based integrated solution for County public safety agencies.

Project Goals

To ensure immediate and systematic response to emergencies, and replacement and maintain performance, availability, reliability, and capacity for growth due to increases in County population and demand for public safety services.

Progress to Date

Fairfax County migrated to the new digital radio network in FY 2006 to accommodate growing public safety voice communications requirements and to remedy performance, coverage, fragmentation, and reliability problems

associated with an aging, technologically obsolete system at the very end of its sustainable life cycle. Deficiencies in the old system severely impeded critical communications and safety in emergency situations. The new trunked wireless digital voice communications system consolidates all County public safety voice communication and is designed to address coverage, reliability, and operational limitations of the old system used by public safety agencies in the County. It provides capacity for growth and enhancement for the next twenty years.

Project Budget

FY 2008 funding is included for: the fifth year of a five-year replacement cycle for the portable two-way radios currently in use by the Police Department, the Fire and Rescue Department, and the Office of the Sheriff; \$3,733,000 and the first year of a five-year replacement cycle for Mobile Computer Terminals (MCTs); \$3,220,000. Both the two-way portable radios and the MCTs have a useful life of five years.

All of these projects are critical to the County's public safety emergency communications capabilities. Also included is funding for the fifth year lease purchase payment obligations of a five-year lease-purchase for the E-911 call-answering system at the DPSC; \$220,079 and to provide capacity for software design applications; \$60,000.

Return on Investment (ROI)

The return on investment for this project is realized by the performance, productivity, and effectiveness of public safety services in Fairfax County. Replaced and upgraded technology for these systems is critical to the safety of the public and the public safety personnel they support. Upgraded technology preserves the investments in technology that have been made and allow increased functionality, performance, and reliability to be achieved to facilitate responses to, and management of, emergencies. It mitigates the need for extraordinarily large additions of personnel that would be necessary to provide the same level of service and results without this technology. The increased access to important information, improvements to maintenance and reliability, increased capacity for growth, and enhanced functionality for users now and in the future builds upon past investments, responds to critical existing requirements, and sets the stage for the next generation of public safety communications technology.

IT0011.5 JDRC Electronic Records Management System

Project Description

Juvenile and Domestic Relations District Court is in the process of implementing a multi-phase work-flow and electronic records management system that will allow the Court to replace traditional paper-based case files and manual court case processes with electronic court case records and automated workflows for case processing and management. The system will be designed to facilitate information management and the sharing of documents, objects, and unstructured data through the use of imaging, document management, records management, workflow, electronic forms, and enterprise application integration (EAI) tools. This project provides continued funding for the Juvenile and Domestic Relations District Court's planned multi-year implementation of an Electronic Records Document Management System. This document management system, which will be developed using the Documentum Enterprise Content Management system, will allow the court to maintain its case records in electronic rather than paper format. The increasing volume of case records and the complex retention, confidentiality, and destruction criteria as mandated by the Virginia Code have severely impacted the court's ability to manage the court documents. The Electronic Records Management System will convert new case records and retrieve existing case records to electronic format in order to substantially reduce the need to rely on paper documents to initiate services to the public.

Project Goals

An electronic document management system will provide improved security and integrity of records, reduce the labor intensive and time consuming record retrieval and re-filing process, expedite workflow processes through an electronic workflow management system for court documents, provide simultaneous and instant access to court records, reduce costs associated with space and shelving for storage of paper documents, provide means of safeguarding documents with an electronic backup of court records.

Progress to Date

The first set of processes for Informal Hearing/Monitored Diversion was implemented at the end of the third quarter of FY 2006. Functionality enabled in this first implementation included electronic document storage in case file format, workflow, form creation, scanning/scanned data routing, and enablement of electronic signatures. A large portion of the baseline infrastructure was also built. The infrastructure houses the various environments for testing, training, acceptance, staging and production.

Due to the nature of the workflow, the project will develop in functional segments that will cross through Phase I, Module 1 and 2 development plan. The functionality must be built on the processes from intake or pre-court through the public counter, docketing, the courtroom, and post-court. The next process will include implementation of the Traffic/Tobacco Summons (TTS) and it's related processes, followed by the Juvenile Criminal/Civil processes, and then the Adult Criminal processes along with any remaining processes.

The TTS processes will include Judge's orders, motions, capias, rule to show cause, and filing fees. The plan also includes the development of a records room component. The user base will grow substantially; personnel will include the court clerk staff and public counter staff, judges, and the probation staff. Next phases include obtaining the remainder of the user software licenses, updating and/or replacing the remaining workstations, setting-up scanning in the courtrooms and adding scanners at additional locations around the county. An innovative training period to accommodate the large number of users and accommodate the diverse areas of duties will be planned.

Milestones

- ◆ *Initial Servers, Scanners, ePads, SCSI cards, extender cables procured*
- ◆ *User access set up for Pilot, Production, Acceptance, Testing, Scanning, and Training*
- ◆ *Acceptance testing for Informal Hearing/Monitored Diversion initial implementation completed successfully with incidents reported and fixes in place*
- ◆ *Successful completion (June 28, 2006) of 5 scheduled 2 day training classes with a total of 40 users fully trained)*
- ◆ *Successful implementation of processes for Informal Hearing and Monitored Diversion with use by intake officers, intake clerks and limited services staff:*
- ◆ *Pilot start date — May 11, 2006*
- ◆ *Production start date — May 31, 2006*
- ◆ *Scanning, etc. set-up (missing failover to another site in case of all server failure at the Government Center).*
- ◆ *Environments set-up for Acceptance, Test, Training, Production, and Scanning*
- ◆ *CYA software for data retrieval set-up, with 15 minutes scheduled back-ups taking place.*

- ◆ Successful deployment of hardware including desktops, monitors, scanners, and eSignature pads, for all presently activated users
- ◆ Successful deployment of software, including new County/JDRDC image, Adobe, and signature software loaded on users machines, and scanner software loaded on scanning workstations
- ◆ Creation of the ERMS lab (utilized for testing of the application and training sessions) which consists of 8 student workstations, one instructor workstation, a scanner and scanning workstation, and eSignature capabilities.

Future Milestones have been pushed back due to ongoing project restructuring; however, these dates have taken that into account.

- ◆ Requirements completion for Juvenile Traffic/Tobacco Summons Summer 2007
- ◆ Design completion
- ◆ Code completion for Juvenile Traffic/Tobacco Summons and related base processes Summer 2007
- ◆ Acceptance Test/Code fix/Retest Summer 2007
- ◆ User Training sessions Summer 2007
- ◆ Deployment /Rollout of Juvenile Traffic/Tobacco Summons Piece, Fall 2007
- ◆ Begin Requirements and Design of Juvenile Criminal/Civil Process, Fall 2007
- ◆ Requirements completion, Fall 2007
- ◆ Design completion, Fall 2007
- ◆ Code completion for Juvenile Criminal/Civil Process, Winter 2008
- ◆ Acceptance Test/Code fix/Retest, Winter 2008
- ◆ User Training sessions, Spring 2008
- ◆ Deployment /Rollout of Juvenile Criminal/Civil Process, Spring 08
- ◆ Begin Requirements and Design of Adult Criminal/Civil, Spring 08
- ◆ Requirements completion, Spring 08
- ◆ Design completion, Summer 08
- ◆ Code completion for Adult Criminal/Civil, Summer 08
- ◆ Acceptance Test/Code fix/Retest, Fall 08
- ◆ User Training sessions, Fall 08
- ◆ Deployment/Rollout of Adult Criminal/Civil, Fall 2008

Project Budget

Through estimation, past costs, and known future costs, the JDRDC ERMS project should have sufficient funding to finish work through FY '08, so no further funding was requested at the time of the FY '08 fund submission period. BETS report and FAMIS show a current available amount of \$1,882,819, and of that, the project will use approximately \$1,644,325 by the end of FY '08

By the end of the first quarter of FY '08 (end of September), it is expected that this project will have completed the majority of the work to include the legal process portion of the project; meaning close to completion of Phase I, Module 1, and Phase I, Module 2, leaving Phase I Module 3 and Phase II still to complete. The functionality included in this portion is listed below:

1. Precourt Traffic/Tobacco and related processes
2. Juvenile Criminal/Civil (and related) Processes (Intake & Precourt)
3. Adult Criminal/Civil and all remaining processes (Intake & Precourt)

Much of the basic prep work for the Juvenile Criminal/Civil (and related) Processes (Intake & Precourt) and the Adult Criminal/Civil and all remaining processes (Intake & Precourt), should be accomplished in the Traffic/Tobacco Summons (Precourt) piece coming up next.

At the beginning of the second quarter of FY '08 (October) work should begin on Phase I, Module 3, and on Phase II, functionality including Social Folders, eFiling, Integration with State systems and Linkages to other County Agency systems. Estimates for the consulting portion of these phases were created some years ago, but the cost in FY '09 estimates for these portions will be \$730,000. For the FY '09 submission, better and more current estimates should be available. For now, however, and as stated above, of the \$1,882,819, that this project currently has, approximately \$1,644,325 will be used by the end of FY '08

Return on Investment (ROI)

Funding this project will reduce staff time spent in locating missing files, and in retrieving and re-filing records. It will reduce the physical storage space required for court records, avoiding the cost of leased space near the courthouse for overflow storage and in will reduce the amount of storage space required in the new, expanded courthouse. It will expedite the response time to internal and external customers at the Records and Fines and costs counters, and it will provide easier and more efficient public access to court records. The safety of the data will also be established, with back-up systems planned.

IT0025 Adult Detention Center Information System

Project Description

The Sheriff's Information Management System will provide improved functionality for booking, prisoner classification, medical, forensics, inmate programs, community corrections, court services, and administration information needs. In addition, the agency will be better able to meet information exchange requirements mandated by the Virginia State Department of Corrections and State Compensation Board. It will provide new capabilities in areas including visitor tracking, inmate restrictions and discipline, agency-wide event reporting, inmate referrals, community corrections and courts services. Data entry redundancies across the present systems will be eliminated. The new system will support improved information sharing with other criminal justice agencies including the Police Department, Circuit Court, General District Court, Commonwealth's Attorney and other agencies.

Project Goals

The goal of this project is overall modernization of automated systems that support operations of the Sheriff's Office, including replacement of the 25 year-old Adult Detention Center Information System, modernization of the Sheriff Services System, and development of an inmate programs management information system. Although the project was originally conceived as a COTS acquisition, the RFP process did not result in an affordable solution that met the projects functionality requirements without significant customization.

Progress to Date

This project was planned as a multi-year implementation. The requirement analysis was completed in November 2000 and release of the Request for Proposals occurred in January, 2001. The RFP process did not result in an affordable solution that met the projects functionality requirements without significant customization. Due to the extensive customization needs required and the proposals exceeding available funding for the project, the decision was made to undertake the project as an in-house development effort. During 2002 and the beginning of 2003, additional requirements were defined to initiate and the Administrative Maintenance Tool for SIMS, was designed and programmed. In October 2003, the visiting module of SIMS was implemented and rolled into production. Detailed design and programming for the core application was completed in October of 2006. Some additional enhancements were requested and this work is nearing completion. It is expected SIMS will be implemented in late Summer 2007.

Milestones

- ◆ Complete Sheriff Inmate Program module, February 2002
- ◆ Complete Risk Analysis and Proof of Concept for architecture alternatives, April 2002
- ◆ Complete modernization of Sheriff Services System, June 2002
- ◆ Complete Requirements Documentation for Booking, Inmate Records, Classification and Confinement, March 2002
- ◆ Complete design and coding of SIMS Administrative Tool, May 2003
- ◆ Implement SIMS Administrative tables, October 2003
- ◆ Complete requirements documentation for Booking, Inmate Records, Classification and Confinement, July 2003
- ◆ Complete data Identification and conversion planning, August 2003 - February 2004
- ◆ Implement Visiting Module, June 2004
- ◆ Complete migration programming, February 2004 - December 2006
- ◆ Complete the design and coding of SIMS core modules, February 2004 - September 2006
- ◆ Perform analysis, design and code bar code interface and enhancements to time credit, time calculation and weekender functionality, January 2007 - August 2007
- ◆ Implement database server replication for SIMS reporting, April 2007 - August 2007
- ◆ Complete Core SIMS modules September 2007
- ◆ Migrate processes to Core SIMS December 2007

Project Budget

FY 2006 funding of \$697,160 was used to complete the Sheriff's Information Management System (SIMS). Additional funds of \$220,000 were contributed by both DIT and the Sheriff's Office will be used to pursue any add-on functionality. This project was completed using existing staff resources augmented by contract programming staff and consultants for specialized requirements funded through the IT Fund 104. No new funding is provided in FY 2008.

IT0039 Circuit Court Modernization

The Fairfax Circuit Court is nationally recognized for its delivery of outstanding public service and continues to actively pursue state of the art technological 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) — The Clerk's Office of the Fairfax Circuit Court is responsible for providing Fairfax citizens with reliable, timely, and accessible public records. As custodian of historical land records, the Land Records, Public Services and Probate sections of the Circuit Court recognized a critical need to preserve deteriorating paper documents, to ensure their availability for future generations. This project was initiated in an effort to preserve these documents and streamline the methods used to record, maintain, store, and view them. To date, more than 35 million Land Record, Public Service and Probate images, dating from 1742 to the present have been digitized, indexed and loaded into the Court Public Access Network (CPAN). CPAN is a web-based, online retrieval system that is available 24 hours a day, 7 days a week, with more than 2,000 subscribers located in twenty-six states and the District of Columbia. Subscribers include citizens, title examiners, law offices, mortgage companies, banks, the Commissioner of Accounts, and county agencies.

Case Management System (CMS) — Circuit Court is pursuing the replacement of the existing 10 year old case management system with a state of the art system integrating civil, criminal and financial processes with imaging and electronic filing capabilities. A Request for Proposal (RFP) was written and promulgated with an anticipated award date in FY 2008. The system will optimize judicial resources, monitor case loads, increase accessibility to court operations.

Document management interfaces will be established with the Sheriff's Office, Department of Motor Vehicles, Virginia Department of Tax Administration, Supreme Court of Virginia and CPAN to information sharing and referential integrity.

Project Goals

Among the new Circuit Court modernization initiatives in the Clerk of Court's technology program are:

- Expanded electronic filing of more than 100 land record document types

- Replacement of the 10 year old case management system with a fully integrated system providing civil and criminal processing, imaging and electronic filing capabilities
- Redesign of the CPAN web capabilities
- Implementation of the Commonwealth's redaction legislation for land records
- Development of an alternate site for CPAN access to provide additional security and continuity of operations
- Increase the number of courtrooms which use new technologies to facilitate remote testimonies, audio and visual displays of evidence, integrated assisted listening and interpretation capabilities

Progress to Date

Past accomplishments include development and deployment of the Court's Land Records Recording System, including document imaging; implementation of the Court Public Access Network (CPAN) retrieval system, use of an automated jury management system to administer 45,000 potential jurors annually; deployment of a case management system to control the administration of the Court's judicial caseload; 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; implementation of electronic docketing display directing public to the assigned courtroom.

Milestones — CARS

- ◆ *Digitized back-file images with associated indices and implemented web-based CPAN, completed 1999*
- ◆ *Scanned, indexed, and stored all land record documents for electronic processing, completed 2000*
- ◆ *Added non-deed document processes for indexing and storage (judgment abstracts and notices, marriage licenses, financing statements), completed 2000*
- ◆ *Redesigned processes to include automated cashiering and scanning capabilities to update the public record in a more efficient manner, completed 2001*



Fairfax County Courthouse
HDR Architecture, Inc.

- ◆ Expanded images and associated indices available on CPAN to 1742, completed 2001
- ◆ Electronic filing prototype for mortgage releases using the ACH transfer of funds, completed 2002
- ◆ Implemented Public Services cashiering system, completed 2005
- ◆ Automated the administration of estates system, completed 2006
- ◆ Creation and implementation of electronic filing system, estimated completion 2007

Milestones — CMS

- ◆ Provided web-based availability of court information on CPAN, completed 2005
- ◆ Implemented electronic docketing display directing public to the assigned courtroom, completed 2006
- ◆ Conducted demonstrations of case management systems recommended by the National Center of State Courts in preparation for the RFP, completed 2006
- ◆ Award of contract for enhanced Case Management System, estimated completion Fall 2007

Budget

FY 2008 Technology Trust Funds of \$1,299,648 will be used to support CARS, CMS initiatives outlined above.

Return on Investment (ROI)

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, Geographic Information Systems and the Department of Public Works and Environmental Services.

For CMS, anticipated imaging and electronic filing enhancements will provide increased efficiencies in the processing of more than 25,000 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.

IT0048 Fire and Rescue Incident Reporting and Training Records

Project Description

The Fire and Rescue Department has completed two of three major system development initiatives.

In FY 2005 the replacement of the fire incident reporting program was completed. This enables the Fire and Rescue Department to comply with the National Fire Prevention Association (NFPA) coding requirements within the National Fire Incident Reporting System (NFIRS 5). In FY 2006 the Fire and Rescue Department completed implementation of a fire data warehouse. The Data Warehouse was designed to reduce FRD staff time in analyzing records from an ever increasing database associated with fire and medical emergency incidents. The Fire and Rescue Department participates in many nation-wide surveys such as the International City/County Management Association (ICMA) Performance measurement Survey, FireHouse Magazine, National Fire Protection Agency, and Council of Government's surveys. The department also responds to Board of Supervisors inquires, requests from citizen groups and County performance measurements. This solution will provide data access services to browse through records and standardize reporting in response to these national, regional and administrative studies.

In FY 2008 work will continue on the third major system development initiative, the Emergency Medical Services Incident Reporting (EMSIR) system. This system will enable the Fire and Rescue department to comply with the Commonwealth of Virginia's Office of Emergency Medical Services (OEMS) mandated emergency medical services (EMS) data reporting requirements.

Project Goals

The EMS patient care reporting requirements are the focus of EMS Incident Reporting. During FY 2006 carryover process funds in the amount of \$3,162,881 were transferred from the agency operating budget to the Technology Fund to support this project. System procurement is part of a multi-system replacement project called Public Safety Architecture Modernization, which will result in the replacement of the current Computer Aided Dispatch System, Altaris, as well as the legacy Police Records Management System and the implementation of a field-based EMS Incident Reporting System.

Milestones

- ◆ Phase I & II completed, October 2004
- ◆ Data Warehouse completed January 2006
- ◆ EMS Incident Reporting solicitation, April 2006
- ◆ EMS Incident Reporting Vendor Selection, March 2007
- ◆ EMS Incident Reporting Contract Negotiation, September 2007
- ◆ Implementation of a patient care reporting system, Spring 2008

Project Budget

Staff will consist of Fire and Rescue Department Information Technology Section and selected Operations staff. Department of Information Technology staff will provide support for technical aspects for the CAD interface and other issues. EMS Incident Reporting project costs consists of consulting services, programming, training, software licenses, hardware, and capital equipment.

Return on Investment (ROI)

Funding this project allows the Fire and Rescue Department to comply with National Fire Protection Agency coding requirements and the Virginia EMS mandated reporting requirements. Phase III allows the Fire and Rescue Department to achieve many agency objectives in responding to data requests and realize a cost savings of staff time. In addition the EMSIR system will support the ambulance billing function and enable EMS field personnel to accurately record patient care information in a real time manner, and effectively exchange patient care information with hospital based providers. The overall project will improve the quality of data, the management of data and statistical analysis. This project will also improve decision making capabilities such as placement of new fire stations, resource/apparatus standards and improved pre-plans for Operations.

IT0062 Police Records Management System

Project Description

In FY 2007, this project began the first phase of a multi-phase effort to replace existing Police Department disparate information systems with an integrated Law Enforcement Records Management System (LERMS). This project, as well as related Fire and Rescue Department (FRD) service projects, is reliant on IT0083, Public Safety Architecture Modernization Project, which provides essential infrastructure components for these related initiatives. Executive project management will be provided by Department of Information Technology staff to insure that implementation of the records management systems funded in existing projects (IT0048 and IT0062) share integrated and coordinated work plans and leverage resources across phases and functional areas.

A COTS solution to support the Recovered Evidence unit was identified, procured in FY 2007 and successfully integrated and implemented in FY 2008.

Project Goals

The LERMS application will integrate with the Computer Aided Dispatch (CAD) system in the Department of Public Safety Communications, ensuring a unified technology platform approach that seamlessly shares processes and data across public safety functions and leverages available technologies. The new system will improve the ability to prevent, respond to, manage, and analyze situations relating to the safety and property of County residents.

The LEADS system implementation, completed in FY 2007 enables Intelligence-led policing, improving criminal justice, and overall strategic public safety resource deployment. The LERMS system will expand the capacity of the Police Department, allowing it to better analyze — statistically and through geographic-based means — data on incidents and personnel. It will also aid in identifying trends, and assist in staffing decisions and monitoring departmental effectiveness.

Progress to Date

The LEADS project is complete and the application is in production. The Police Evidence Management System is complete and in production. An integrated CAD/RMS solution will be selected during FY 2007 and a gap analysis will be performed to determine the extent to which the COTS solution will meet Police Department needs.

Milestones

Records Management System Replacement (Public Safety Architecture Modernization)

- ◆ Records Management System solicitation, April 2006
- ◆ Records Management System Vendor Selection, March 2006
- ◆ Records Management System Contract Negotiation, July 2007
- ◆ Implementation of new Records Management System, December 2008

Project Budget

FY 2008 funding continues the investment into the new LERMS. FY 2008 funding of \$2,200,000 is provided to complete a business process mapping and make initial payments on a contract expected to be awarded by the beginning of FY 2008.

Return on Investment (ROI)

A unified public safety architecture consisting of a modern LERMS integrated with CAD and other public safety agencies management systems will result in more cost effective public safety operations. The LERMS project will ultimately include all aspects of police work and police information linked through an integrated system. A new system that assures accurate, timely, reliable and accessible information on events, County geography and Police information will permit the Police Department to efficiently act upon events, from initial response through tracking, investigation and reporting. Additionally, having reliable and accessible data from the system will result in the ability to effectively address staffing, crime analysis, resource allocation, tactical planning and strategic planning. The new system will provide opportunities to increase effectiveness by eliminating redundant work and open up opportunities for information sharing and interoperability between law enforcement agencies. This is a significant tool in developing investigative leads, linking crimes across jurisdictional boundaries, and conducting crime analysis.

IT0071 Electronic Summons and Court Scheduling

Project Description

This project is designed as a joint effort between the Fairfax County General District Court (GDC) and the Fairfax County Police Department (FCPD) to develop automated solutions that will streamline the traffic summons and court scheduling processes by managing court dockets in a manner that will minimize high and low periods of activity and provide judges and court personnel with a more predictable and manageable workload. Automated solutions will allow officers to issue traffic summons according to demands set forth by both traffic conditions and state and local traffic safety programs; allow court administrators to manage court dockets efficiently minimizing the time officers and citizens are required to wait in court:

Phase I

In Phase I, the Court Scheduling System (CSS) application was constructed using ASP.NET 2.0. The web application resides on the Fairfax County Infoweb farm and the data for the application is stored on the enterprise SQL Server. Reports were developed using SQL Server Reporting Services.

CSS allows court administrators to enter valid court dates into the application and set minimum and maximum caseloads per courtroom based on statistical information from the OES's case management system (CMS). Fairfax County Police Department staff enters squad requests for traffic court dates into the system. CSS processes the schedule using the agreed upon business rules to distribute officers across court dates. CSS checks for possible court date conflicts by interfacing with the Police Record Management System (PRMS). The application checks PRMS to see if the officer is already scheduled to attend criminal or juvenile court. An e-mail is sent to the members of the squads indicating that the schedule has been processed. The system will indicate where courtrooms are over or under capacity and attempt to level out and evenly distribute court cases. CSS produces reports to help manage and resolve scheduling issues between GDC and the Police Department.

Phase II

This phase will be performed in two parts. In 'Part A', more functionality will be added to streamline the process for assigning officer court dates. CSS will be modified so that FCPD users will no longer select available dates for an officer. Instead, CSS will select court dates for each officer based on the following rules: all court dates for an officer should fall on the same day of the week; all court dates for an officer on a midnight shift should fall on the first day

after a shift has ended; all court dates for an officer not on a midnight shift should fall on a workday; and partners within the Motor Squad should be scheduled to attend court together. 'Part A' is scheduled for deployment in early fall.

In 'Part B' of Phase II, we will be expanding the application to include adding modules to allow the Police Department to enter criminal and juvenile cases court dates. Currently, CSS is designed only for County Police traffic summons. 'Part B' will accommodate the State Police and other jurisdictions allowing each group to maintain their own user populations and shifts. In addition, we also plan to build a CMS to CSS interface.

Project Goals

Goals are to provide the public efficient and timely electronic access to cases to enhance the public's ability to utilize automated options for review of case information and payment of fines; and improve access to statistical information about the monthly summons issuance patterns to identify officers with heavy caseloads.

Milestones

- ◆ Organization of GDC/FCPD project team, April 2006
- ◆ Development of business and requirements analysis, December 2006
- ◆ Address formal guidelines established by State of Virginia, May 2007
- ◆ July – December traffic court calendar processing completed in May, 2007
- ◆ "Part A" of Phase II, completed in late Summer, 2007.
- ◆ 2008 traffic court calendar processing completed in October, 2007.

Project Budget

FY 2007 funding of \$552,500 will continue the multi-phase process of developing a technology solution that meets the needs identified above. These phases include creating a Court Schedule Forecasting application that will use cyclical information about the volume of summons to pre-allocate available court dates to ticket writers in order to avoid unmanageable dockets and officer overtime and the implementation of an Electronic Ticket Writing/Data Entry application to automate the transfer of summons information from the scene to Central Records and GDC.

Return on Investment (ROI)

Automated solutions will allow for the reallocation of existing staff to positions that provide direct assistance to the public, ensure greater accuracy in capturing defendant information, eliminate data entry errors with potentially serious repercussions for defendants, allow faster

ticketing processes that get officers back on the road more quickly, reduce overtime for officers waiting in court, reduce the frustration and time citizens have to wait in court for a hearing, provide more efficient use of Commonwealth's Attorneys and Deputy Sheriffs, as well as provide the public near real time electronic access to case information.

IT0078 Courthouse Expansion Technology

Project Description

This project will assist with the planning and implementation of modern courtroom technologies for fifteen new courtrooms being constructed as part of the on-going Courthouse expansion efforts. These technologies include integrated and mobile evidence presentation, real-time court reporting, wireless access, electronic wayfinding, video conferencing, video arraignment and judges' control of the technologies from the bench. The courtroom technologies proposed will advance the recommendations provided from the working prototype project developed from the original Courthouse design master plan and supported by the Counties affiliation with the Courtroom 21 Project associated with the College of William and Mary Law School.

Project Goals

This project will succeed the recently completed prototype project and implement modern courtroom technologies into 15 new courtrooms currently under construction as part of on-going courthouse expansion efforts. The technologies will be implemented over a two-year planning process and will include integrated and mobile evidence presentation, real-time court reporting, wireless access, electronic wayfinding, video conferencing, video arraignment and judges' control of the technologies from the bench.

Progress to Date

Prototype courtroom was completed in March 2006. Construction schedule has been delayed and implementing technology for the new courtrooms will not commence until Fall 2007.

Milestones

- ◆ *Completion of courtroom prototype project, March 2006*
- ◆ *Testing/ evaluation in "live" trial environments, April 2006 – December 2006*
- ◆ *Completion of planning and design for new/ renovated courtrooms, March 2007*
- ◆ *Completion of construction efforts, October 2007*

Project Budget

FY 2007 funding of \$1,730,000 will support the first phase of implementing the recommended technologies in the new wing of the expanded Courthouse. Funding will support the necessary consulting services and procure the necessary hardware and software needed to outfit a modern day courtroom. Consistency and standardization between the three Courts is necessary to maintain efficient courtroom operations and optimize available resources.

Return on Investment (ROI)

The primary benefit will be improved efficiencies and the facilitation of court processes and services that will provide a direct impact to citizens, businesses and employees. The main objectives are to improve citizens access, internally and externally, 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 flexibility and adaptability to incorporate future changes in technology and court proceedings; and allow the Courts to keep up with the increasing demand and docket backlogs that currently exist.

IT0080 JUVARE Legacy Data Conversion and Expungement

Project Description

This project will enable Juvenile and Domestic Relations District Court to manage their JUVARE mainframe data, dating back to the mid-1970's, through the use of expungement and purging activities, as well as data conversion so that it can be accessed by the current electronic records management system. The JUVARE mainframe application contains data representative of its lifespan since the mid-1970s. Active data entry into JUVARE ceased in FY 2004, as Court functionality was redeployed to various other platforms including: an Electronic Records Management System (ERMS); a Web-based Residential Services Information System (RSIS); the Supreme Court of Virginia's Case Management System (CMS); and the Department of Juvenile Justice's Juvenile Tracking System (JTS). However, JUVARE contains historical, archived data that must be accessible by Court staff and to allow individual records to be expunged according to the Code of Virginia.



Project Goals

Project goals are to provide the capability to convert legacy data from Mainframe VSAM files to SQL compliant database, build queries to support court requirements based on historical data, build expungement and purge Interfaces to capture and execute criteriam.

Progress to Date

New project in FY 2008.

Project Budget

FY 2008 funding of \$217,200 will enable the expunging and purging of data, as well as create a data repository that can be used by ERMS to allow for data query on archived and historical court actions.

Return on Investment (ROI)

The need for dedicated staff and the associated development costs to deploy this solution on the mainframe with the existing data stores will be avoided. Staff to maintain the cumbersome mainframe interfaces also will not be required as mainframe backups of the JUVARE system can be eliminated, and processing cycles will be reduced. In addition, efficiencies will be realized by repositioning the data stored into a more modern repository and increasing ease of use with the ERMS solution.

IT0083 Public Safety Architecture Modernization

Project Description

The Public Safety Architecture Modernization project supports implementation of an integrated Computer Aided Dispatch (CAD) and Public Safety Records Management Systems (RMS), including public safety communications, as well as Police, Fire and Rescue, and Emergency Medical Services records management. This new project provides the underlying architecture for the operational components of a CAD and RMS including network development; augmentation of the enterprise Geographic Information System (GIS) to meet public safety requirements; and provision of an interim commercial broadband wireless service pending completion of the regional broadband wireless network under development by the National Capital Region (NCR) Urban Areas Security Initiatives (UASI). Wideband service will migrate from commercial services to the local government owned and operated NCR network when it is completed. Executive project management will be provided by the Department of Information Technology to ensure that implementation of RMS systems funded in existing projects (IT0048 and IT0062) share integrated and coordinated work plans and leverage resources across phases and functional areas.

Project Goals

The project will implement an integrated public safety information architecture enabling data sharing across functional areas of the CAD and RMS in order to support key public safety lines of businesses and provide flexibility to respond to both internal and external data sharing requirements. In a multi-track and multi-phase project, the legacy CAD, Police RMS and Fire and Rescue RMS will be replaced, and a new Fire Emergency Medical Services Incident Reporting system (EMSIR) will be implemented. Options for integrating with the existing Office of the Sheriff's information system will be evaluated as well.



Progress to Date

New project in FY 2008.

Project Budget

FY 2008 funding of \$2,687,750 is provided to complete: business process mapping and GIS data development; define required network enhancements; and provide initial payments on a contract expected to be awarded by the beginning of FY 2008.

Return on Investment (ROI)

The Public Safety Architecture Modernization project represents the first joint initiative undertaken by the public safety agencies in Fairfax County (Department of Public Safety Communications, Police Department, Fire and Rescue Department, Sheriff's Office and Office of Emergency Management) and provides an integrated public safety suite for CAD and RMS, with supporting network infrastructure to support robust GIS including automatic vehicle location (AVL), automatic vehicle routing recommendations (AVRR), broadband wireless data services and automated field reporting.

3.4 CORPORATE ENTERPRISE

IT0004.1 Fairfax County Master Address System

Description Project

This project provides the County with a Master Address System that will be a foundation for many county applications that use parcel address information. Phase I has been completed. In that phase one centralized database was developed that enables user agencies to draw parcel address data through a unique identifier. This will reduce the need to store parcel address data in user agency databases; rather they can link to the master address database to verify addresses to ensure conformity to the County address nomenclature standard. This initial phase accomplished the design and construction of the master database; compiling, reviewing, and scrubbing existing parcel address data, entering it into the database, and creating a basic data maintenance interface. Phase 2 is to develop the interfaces to several key enterprise systems, including FIDO (inspections), IAS (real estate), LDS (land development processes), and GIS. In later years, other systems will be linked to the database, but those costs are not included in this project. This project builds on analysis already done on the addressing needs of the County and the optimum solution to that.

Project Goals

To provide a single repository or master list of site (parcel) addresses that now includes over 365,000 addresses. Most agencies within the County of Fairfax had maintained separate address databases that are significant to their specific business needs. This project developed a centralized, standardized parcel address database containing all site parcel addresses for Fairfax County. The Master Address System makes the data correct, reliable and more available to many agency users. It also ensures better, more timely service delivery. By eliminating inconsistent data and controlling the maintenance of the data in one centralized place, data integrity of geographic and parcel address data is assured. This system ensures valid and complete site addresses, and will maintain versioning of data. This enables the County to retain historical address data to a level not previously attained.

Progress to Date

In FY 2000, a study of address usage at key county agencies was completed. The study identified a number of issues to be resolved and proposed a preliminary database structure for the master address database. In early FY 2002 the Statement of Work was prepared and contractors brought on board to commence the first stage of this project. This

stage involved preparing the requirements report that documented the address flow in the county and included recommendations on approaches to make the address assignment and tracking process more efficient. In FY 2003 the base database design was revised and enhanced in house by County staff. Work on design development continued in FY 2004 and FY 2005 which included completing the parcel address database construction, migrating and scrubbing address data, building an address maintenance application, and building interfaces between the master address repository and several key enterprise systems. Contractor support was used FY 2004 to assist in the data scrubbing, and in FY 2005 for the development of the address maintenance application. Several system enhancements that allow more efficient processing, maintenance of addresses, improved search capabilities, and links to the ICARE—tax assessment web site were developed in FY 2006.

Milestones

- ◆ *Completed Construction of Address Database, April 2004*
- ◆ *Completed Address Scrubbing to Parcels, October 2004*
- ◆ *Completed Address Maintenance Application, October 2004*
- ◆ *Completed Interfaces to Key Systems, October 2004*
- ◆ *Master Address Repository in production, November 2004*
- ◆ *Completed planned system enhancements April 2006.*
- ◆ *Complete planned interfaces June 2008*

Project Budget

FY 2005 supplemental funding of \$262,400 was provided to complete the creation of a centralized, standardized address repository that contains all Fairfax County situs (parcel) addresses. FY 2006 funding of \$120,000 provided for necessary interfaces between the Mater Address Repository (MAR) and several existing agency databases.

Return on Investment (ROI)

Major quantifiable benefits of the MAR initiative are the elimination of redundant data within the County, increased accuracy and integrity of all parcel address data, and efficiency in redesigning the process of assigning physical

addresses. Maintenance and accountability of address data will be centrally focused in one agency. This project will increase availability of accurate, timely, online data to user organizations. The MAR enables staff to better analyze demographics and statistics within the County. Processes will be put in place to automate previous manual entry into numerous databases. Enhanced track-

ing of address assignment and approvals reduces staff hours for maintaining redundant data; this system will also create more sharable information between agencies. Savings in mailings would be realized due to the amount of mail that is returned due to incorrect addresses. Reconciliation time and stand-alone address databases will be reduced or eliminated.

IT0004.2 GIS Orthoimagery Update

Project Description

This project is for the County's planned multi-year implementation of a Geographic Information System (GIS), as well as related projects that build off of GIS data. GIS provides County staff and citizens the means to electronically access, analyze and display land related data. Aerial photography was taken in 1997 and served as the basis for preparing planimetric data (observable features such as building footprints, edges of roads, sidewalks) and orthoimagery (spatially corrected aerial imagery). Annual updates of this data are needed to reflect the changes that have occurred over the years. The current program provides for the update of about 25 percent of the County's orthoimagery database each year and enables the County to keep more closely aligned with the developmental changes and assures users that none of the imagery will be more than four years old. The funding will also continue to support viewing County land at County staff desktops in agencies such as the Fire and Rescue Department, Department of Tax Administration, Police Department and Department of Planning and Zoning. Since the 2005 cycle, the Digital Elevation Model is being enhanced so that it can support 2' contouring if necessary, and updated 5' contours are being delivered.

Project Goal

To continue implementing a four-year update cycle for the orthoimagery covering all 407 square miles of Fairfax County and use the data from that process to provide updated Digital Elevation Models and 5' contours.

Progress to Date

Four-year update cycle is up-to-date through FY 2007. Imagery was not taken in FY 2006 since the state was going to fly the entire county. Due to contract difficulties, they were unable to fly the County in 2006 but did so in 2007. The cost of upgrading the state imagery to county standards will be covered by the orthoimagery funds.

Milestones

- ◆ County has flown imagery in 2001, 2003, 2004, and 2005.
- ◆ The State flew the entire county in CY 2002 and 2007.
- ◆ The County paid to upgrade the 2007 imagery to 6" pixel resolution
- ◆ Resume flying 25% of County in 2008.

Project Budget

FY 2007 funding of \$235,000 continued the second four year cycle regular process of updating the aerial imagery and digital orthophotography for the County. Contractors do the majority of the work for the County. Preparation of the aerial flight plan materials, data standards and specifications, orthoimagery quality control and assurance, and project management, are expected to take up to four months of County staff time during FY 2007 and FY 2008.

Return on Investment (ROI)

The Orthoimagery project provides a combination of cost-savings, enhanced revenue and non-quantifiable benefits. Orthoimagery has proven extremely valuable in a wide range of county operations. Several agencies have significantly reduced travel requirements while others are expected to use it as they become aware of the potential gains. The use of orthoimagery to justify property appeals cases has allowed the County to more efficiently defend increased property valuations. Orthoimagery has become a highly visible, successful tool to serve citizens regarding their homes assessment valuations. The imagery serves as a highly accurate quality controlled layer in the GIS, with which to accurately locate features (e.g., building outlines, street lights, storm water features). Orthoimagery is also available in several public web applications, enabling users to view aerial imagery of any area of the County. Public users can view parcel outlines, hydrography, major and minor roads, or just view imagery alone. These applications serve over a million maps per year.

IT0004.3 GIS Oblique Aerial Imagery

Project Description

This project provides a form of oblique imagery of the entire county that enables viewers to see the sides of buildings and structures and measure their height. This imagery enables agencies such as the Departments of Public Works, Tax Administration, and Public Safety Agencies to reduce field time in assessing and planning. In addition it will enable them to conduct analyses of buildings not possible in the past. This imagery augments orthoimagery which is taken directly overhead and does not capture the sides of structures. Both sets of imagery are part of the spatial data in the GIS data warehouse, providing County-staff a wide range of information about the County to assist them in their business processes.

Project Goal

The project goal is to obtain the oblique imagery and serve it to all County users who require it. Ideally the distribution would involve minimal desktop hardware configurations as well as desktop maintenance and support time. As users access the oblique imagery, they will be better able to evaluate business needs and processes in view of the new data. The technology goals have been met.

Progress to Date

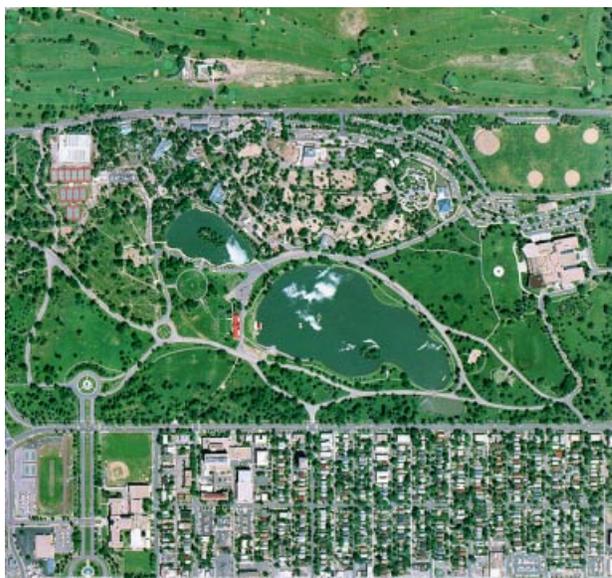
The system is on line and being used daily. The software has been mounted on the Citrix server farm, and the data has been loaded on the County's Storage Area Network, making it available to any County user whose desktop is connected to the Local Area Network. Additional file storage was acquired to handle the imagery.

Milestones

- ◆ The first oblique imagery was taken in 2003
- ◆ New imagery was flown in 2005, and 2007
- ◆ The next imagery acquisition will be in 2009

Project Budget

FY 2008 funding of \$146,180 will continue the annual update photography and imagery conversion to be completed in August, 2007. This program includes the product, which is produced and provided by the vendor as a contracted service. GIS staff coordinates agency needs, specify requirements, perform QA, and provides training and desktop implementation. The updates to the imagery will be done biannually.



The provider of this product provides a two-year program to purchase the imagery. However in 2006 an amendment was signed, extending the contract for 6 years and providing 10% discounts in years 3-6. No other external costs are anticipated. The prices include not only the imagery but the proprietary software for viewing the data. The software license is unlimited on county workstations, thus there will be no additional licensing costs. The County will also be able to share the imagery with the town of Herndon and Vienna since they are within the boundaries of Fairfax County, however, others will have to arrange their own purchases.

Return on Investment (ROI)

The oblique imagery project provides a combination of cost-savings, enhanced revenue and non-quantifiable benefits. Oblique imagery is proving particularly useful in public safety since it enables staff to see and measure the sides of buildings to determine risks, site lines, and other key features. It is also helpful to Fire and Rescue since it is easier to see small vertical features such as fences which could block fire fighter and fire hose access. Assessors are aided in the ability to determine the siding on buildings — an important component of an assessment.

Looking forward, oblique imagery holds the potential to develop 3-D imagery since it contains building facades (skins) and elevation information, essential for effective representation of the actual areas.

IT0006 Tax/Revenue Administration

Project Description

This project provides for 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 2002, the County began replacement of the aging real estate mainframe system with a commercial-off-the-shelf (COTS) called Integrated Assessment System (IAS). Implementation of IAS allowed for a comprehensive overhaul of many existing functions such as real estate administration, account maintenance, assessment, exemptions and adjustments, accounts receivable, and billing. The core system was completed in FY 2004.

Project Goals

Project goals continue to focus on tax and revenue modernization by implementing the remaining web-based modules of the real estate system originally purchased in FY 2002. In FY 2007, additional product modules will enhance the efficiency of property assessing and inspection by field staff; will enable a coordinated approach to managing public inquiries and correspondence; will streamline common real estate transactions through customized forms; and will provide the core technical architecture to enable the other interactive modules to operate.

Progress to Date

The assessment administration, CAMA (assessment), accounts receivable and delinquent collection modules of the client server tax system are operational and fully integrated with the County's cashiering system. These modules comprise the core tax system. Implementation of the WEB front end (iasWorld) to supplement the core system, including appraiser analytical tools and citizen inquiry tracking is scheduled to be implemented during FY 2007.

Milestones

- ◆ Implementation of IAS modules with the exception of the Delinquent Collections Tracking product — February 2004
- ◆ First installment billing for tax year 2004 using IAS, June 2004
- ◆ Implementation of the iCare internet real estate property information lookup tool (Internet plug in for IAS) Integration of IAS with the department's cashiering COTS software Revenue Collector, June 2004
- ◆ Implementation of the WEB based front end real estate system iasWorld, April 2006 through June 2007
- ◆ Installation of the WEB citizen inquiry tracking system module of iasWorld, iRespond, June 2007
- ◆ New WEB page integration, 2008

Project Budget

No additional funding is provided in FY 2008.

Return on Investment (ROI)

The remaining IAS modules to be installed (iasWorld) will permit improved customer service without the addition of staff. Headcount can be held constant as inquiries and correspondence increase as a result of population growth, changing demographics, and changes in real estate assessments and rates. Citizen inquiries will be more effectively managed, and response turnaround times improved. In addition, real estate appraisal staffs can more accurately collect and record property characteristic data from site inspections, as staff will have the ability to input and transmit data from the field. Improvements in data quality and currency will better equip the County to provide more equitable assessments, defend appealed assessments, and improve the timeliness of revenue generated from the real time recording of property improvements. In addition, the new process eliminates redundant data entry work by support staff, as web-based screens will have consolidated fields from several screens in the client-server system. By operating the real estate application within the County, staff can ensure sufficient security of County data communicated over the internet and monitor the application on a 24/7 basis for optimal availability and ensure secure access.

IT0008 Library Project

Project Description

This Library project was designed to more fully support circulation functions, public access to the catalog, and public access to online information services through the Internet, financial accounting, and management information. Network architecture upgrades, equipment upgrades, and enhancements were also part of the program. This project has allowed the Library to expand capacity to manage growth in demand for library services, provide access to Library resources and customer accounts, as well as other library catalogs, electronic documents, and remote databases without constraints of time or location; and provide decision support information for library management to facilitate the growth of the digital library by linking bibliographic records to stored digitized documents.

This project will allow for the installation of 45 self-checkout stations in 21 Libraries. Checking out books is the most labor-intensive aspect of face-to-face customer service for the Library. Self-check out will enable the libraries to maintain good service to customers in the face of increasing demand without adding staff. Existing circulation desk stations will be replaced with "combination stations" having two monitors; one facing the customer, and one facing staff. If the customer has a problem or finds that they can not complete a transaction because of fines owed, etc., staff behind the circulation desk can easily enter the transaction by switching it to the staff monitor and work with the customer to complete the transaction. In FY 2006, three circulation stations at each of the eight Regional Library circulation desks and two circulation stations at each of the twelve Community Libraries was converted to self-checkout.

In addition, the project will provide wireless access to the Internet in the Public Access areas of the Library's Public network at all branch locations. This will enable the Library to expand its ability to serve customers requesting Internet access without expending funds for computers and their maintenance as well as finding space to accommodate more computers, as customers will have to have their own computing device to connect to the Internet.

Project Goals

To adequately serve FCPL users, the new system must be capable of supporting circulation; public and staff access to the Library's catalog and other online databases including digital repositories; acquisitions; bibliographic control; inventory control; serials management; interlibrary loan and document delivery; and management information

reporting. As a part of securing the system, in FY 2004 Fairfax County's Department of Information Technology upgraded and reconfigured the county network to establish separate system network connections for Library staff use, and the public access PCs in branch libraries that provide general Internet access for patrons.

Progress to Date

The self-checkout project is complete. The wireless project has been halted. In March 2006 it was decided that DIT would only set up five pilot sites at five regional libraries using the existing public network circuits already in each branch. The remaining 15 libraries have been deferred until the County selects vendors to provide public "hotspots" at County facilities. DIT staff was commissioned to write an RFP for this project. During April, 2006, DIT Networking staff completed the wireless installation at the five pilot regional libraries. The remaining 15 libraries are on hold until an RFP is issued and the DIT SAC/TAC evaluates the bidders, selects the winner(s), and awards the contract(s).

Milestones

Self checkout machines:

- ◆ RFP for self checkout machines issued, November, 2005
- ◆ Contract awarded, March 2006
- ◆ Software Installations completed, October, 2006
- ◆ Hardware (monitor extension poles) completed, November 2006
- ◆ All branches went live, December 2006

Wireless access:

- ◆ Equipment/ software specified to support wireless public access in libraries, November, 2005
- ◆ Equipment/ software ordered, December 2005
- ◆ Chantilly Library site survey for access points completed; cabling completed, January, 2006
- ◆ Equipment and software received, January, 2006
- ◆ Reston Regional Library site survey for access points completed, February, 2006
- ◆ DIT decided to change the direction of the project and set up five pilot sites at five regional libraries using the existing public network circuits already in each branch. The remaining 15 libraries were

deferred until the County had selected vendors to provide public hotspots at County facilities. DIT staff were commissioned to begin an RFP. March 2006

- ◆ DIT Networking staff completed the wireless installation at the five pilot regional libraries, April 2006
- ◆ The remaining 15 libraries are on hold until an RFP is issued and the DIT SAC/TAC evaluates the bidders, selects the winner(s), and awards the contract(s).

Project Budget

In FY 2006 funding of \$402,336 was provided for the installation of 48 self-checkout stations in 20 Libraries. Checking out books is the most labor-intensive aspect of face-to-face customer service for the Library. In addition, in FY 2007 funding of \$100,000 provided for wireless access to the Internet on the Library's Public network for customers in all branches. No additional funding is requested in FY 2008.

Return on Investment (ROI)

Though circulation is increasing, the Library will not need to add circulation desk staff to handle the additional workload. With the opening of the new Oakton and Burke Centre libraries, 9/9.0 SYE positions will be transferred from existing branches to handle circulation functions. By having the customer complete the scanning of barcodes, moving and lifting books, staff will be mainly engaged with aspects of the transactions such as solving customer problems, handling money, and performing less routine checkout procedures. Customer satisfaction rates are expected to increase because lines will move more quickly as customers can manage their own checkout. Wireless Internet access at Libraries will help the County meet the demand for increased Internet access by Library patrons, at a much lower cost. It will draw more people into the County Libraries that might not be usual customers, and introduce them to the range of available Library services.

IT0011.11 Electronic Accounts Payable System

Project Description

This project is to provide a solution that meets the county's goals for an electronic accounts payable process within the current infrastructure using adaptable technology to meet future requirements. Additionally, it must provide for a phased-in implementation with minimum impact on existing business processes. The project will develop a methodology to utilize new accounts payable electronic processing methods to dramatically reduce the amount of time and effort it currently takes to process accounts payable transactions. The creation of new methodologies will provide in-depth data analysis, targeted audit procedures and improved internal controls to identify and correct weaknesses in the county's accounts payable processes.

Project Goals

This project goal was initiated to improve the operating efficiency of the entire countywide decentralized accounts payable process, and at the same time achieve the Board of Supervisors' mandates to reduce paperwork and support telework. These goals are to be achieved by maximizing the County's use of proven imaging, e-signature, and workflow technologies to replace reliance on paper document processing. In addition to the improved process efficiencies and cost savings expected by this project, we hope to increase countywide internal controls and management reporting by utilizing automated reporting techniques to provide better analysis of the County's accounts payable processes.

Progress to Date

The current status of the project is that the requirements are complete, a Statement of Work was issued for products/services to meet the requirements, responses have been received, and the County is actively reviewing the proposals. The County intends to prove the selected solutions' ability to meet the requirements by a proof-of-concept phase for printed purchase-order related invoices only. Once the proof-of-concept phase is complete, the County will determine if the selected solution is acceptable for County-wide rollout, other invoice types, other invoice receipt methods (fax, web, e-mail), and vendor self-service. Fairfax County Public Schools (FCPS) is participating in the proof-of-concept phase of this project and will be providing their own funding.

Milestones

- ◆ Gap Analysis Document, August 2004
- ◆ Statement of Work Issued for Accounts Payable Expertise, March 2005
- ◆ Contract for Accounts Payable Expertise, June 2005
- ◆ Business Process Redesign Document, November 2005
- ◆ Requirements Document, February 2006
- ◆ Statement of Work Issued for Service/Products to Meet Requirements, June 2006
- ◆ Contracts for services/products/hardware, November 2006

- ◆ *Proof-of-Concept Implementation of Proposed Solution, August 2007*
- ◆ *Documented Proof-of-Concept Solution, November 2007*
- ◆ *County-wide-implementation of proof-of-concept phase, June 2008*
- ◆ *County-wide implementation of all invoicing aspects, December 2008*
- ◆ *Documented countywide solution, July 2009*

Project Budget

FY 2008 funding of \$520,000 will continue prior year efforts to implement a decentralized electronic accounts payable process from within the Department of Finance to county agencies. FY 2005 funding of \$245,762. FY 2006 funding of \$249,210, and FY 2007 funding of \$530,000 was provided in prior years to support Phase I. By using imaging software, e-signature capabilities, and workflow technology, the electronic accounts payable solution will improve the operating efficiencies of this financial process.

Return on Investment (ROI)

This initiative requires the integration of the county's financial and procurement systems and will result in a paperless work process and enhanced management reporting. The greatest financial returns from implementing the electronic accounts payable process will be from reduced staff processing, document filing retrieval time, copier charges and storage costs. According to industry standards, the cost required to scan and index items is less than half of that required to manually file and retrieve folders of information. Based on the county's cost-benefit analysis, the reduction in staff processing time and copier costs would result in an annual savings of more than \$2 million.

In addition, more than 800 boxes of records are archived annually, which currently require 1,600 square feet of storage space. Based on the monthly standard rate of \$22 per square foot for storage, the reduction in storage cost will save more than \$400,000 annually. Furthermore, faster invoice processing will maximize opportunities to realize vendor discount terms, providing their own funding.

IT001.1.3 Automated Board Meeting Records

Project Description

This project initiative will begin the planning, designing and implementing of a document imaging program in the Clerk to the Board's Office. This project will enable the Clerk to the Board's Office to electronically capture Board of Supervisor meeting records and make them available on-line to the public and county staff. In addition, this project seeks to digitally scan the last five years of meeting records and make them available online as well.

Project Goal

To electronically capture Board of Supervisor meeting records and make them available on-line to the public and to county staff.

Progress to Date

Currently in requirements definition. Project will utilize the enterprise infrastructure for electronic records management.

Milestones

- ◆ *Finalize requirements, June 2007*
- ◆ *Develop, design, test, November 2007*
- ◆ *Deployment, training and implementation, June 2008*

Project Budget

FY 2006 funding of \$200,000 is provided to begin planning, designing and implementing a document imaging program in the Clerk to the Board's Office.

Return on Investment (ROI)

This initiative is expected to increase the efficiency of producing the board matters package including streamlining the process of getting the records on-line; provide a viable, accurate document system for older and one-of-a-kind documents; reduce error rates as much of the manual data entry will be eliminated; and reduce the space requirements for maintaining paper copies of documents.

IT0022.9 Correspondence Tracking and Management System

Project Description

The existing structure, purpose and mission of the project provide a readily available infrastructure for County agencies to use to capture communications, track contacts, events, and complaints. This project expands the use of a proven Commercial-Off-The-Shelf (COTS) product known as Intranet Quorum (IQ). The product has been successfully implemented in several County Agencies since its initial launch in 1999. IQ is a Correspondence Tracking and Management System that provides an integrated approach to delivering services to citizens, colleagues, and staff. It gives users the ability to link to other areas within the database and to extend outside the IQ system through scheduling, scanned images, e-mail, fax, and incoming/outgoing postal mail. In addition, IQ offers a variety of data points for easy and complete reporting.

Project Goals

The County first implemented the IQ product at the offices of the Board of Supervisors, the County Executive, and the Clerk to the Board. Expansion of the product to other agencies (or portions of agencies) has continued every year. There are now an additional 10 agencies utilizing the software application — some with the same business processes and some employing it for their agency-unique tasks. Many of these business process implementations have mandated a multi-year or phased approach.

Over the course of the years, the county has integrated its Geographic Information System (GIS) and address data with the product to increase agency productivity. Both applications have recently been upgraded to meet the evolving county technology standards.

To stay current with the county's technological standards, IQ has undergone a total re-write, reflecting the county's preferences in web application language, Oracle database versions, Enterprise platform standards, and desktop software suite. Demonstrating both fiscal responsibility and agency business awareness, only a portion of the existing user base has been migrated to the new version — IQ3. This is allowing staff to perfect their migration strategies and application knowledge, thus minimizing the impact on the agency's productivity.

During FY 2006 and FY 2007 more than half of the existing user base was migrated to the newer version. The FY 2008 projects include completing the migration of the agencies currently using IQ to the new version. This encompasses completion of the IQ migration by addressing the County Executive's Legislative Monitor, a custom standalone

application; and Consumer Protection's customized taxi, licensing, and time modules. These development initiatives must be accomplished in order for these agencies to migrate to the new version.

In addition, in FY 2008 a new application is scheduled to be developed in response to a 2005 Board of Supervisors' directive that the County Executive expands the legislative function to include a larger presence in the federal arena by assessing the policy impact and response to proposed federal legislation affecting the County. As the attention to federal legislation increases, the need has become greater for an automated way to track the issues and specific legislation of interest to the County, to be able to report back to the Board in a clear concise manner, and to have a repository for all agency information related to specific issues and/or bills. Because legislative staff has been so pleased with the Legislative Monitor system, they have requested that a similar system be created to track Federal Legislation.



Progress to Date

Previous implementations included several agency-specific tasks and facilitated the need to establish the infrastructure so that more agencies can quickly take advantage of this technology. Based on lessons learned from previous implementations, a business process analysis involving agency staff and the vendor is underway for additional uses in agencies. The results will be used to effectively automate various business workflow processes and provide templates for future needs.

As IQ has been used in various agencies for several years, business processes have been altered during these years. This multi-phased project is taking advantage of the migration in order to review processes and incorporate the results in the migration.

Milestones

- ◆ Board of Supervisors and County Executive — correspondence, Implementation 1999
- ◆ Department of Consumer Protection, Implementation, 2000
- ◆ Office of the Clerk to the Board, Implementation, 2000
- ◆ County Executive, Legislative Monitor, 2001
- ◆ Office of Public Affairs, Implementation, 2002
- ◆ Human Rights Commission, Implementation, 2002
- ◆ DPWES — Office of the Director, Implementation 2003
- ◆ Alternative Dispute Resolution division, Implementation, 2003
- ◆ Department of Transportation, Phase One Implementation , 2004
- ◆ Police — Review business process, April 2004
- ◆ GIS, Geographic infrastructure and interface development/implementation for selected IQ accounts, April 2004
- ◆ Multi-agency, Roles implementation and workflow enhancements, January 2005
- ◆ DPWES — Urban Forest Management — Implementation, 2005
- ◆ DPWES — Solid Waste — Business process analysis and complaint tracking, 2005/2006
- ◆ Police — Chief's Office — Correspondence tracking — Business process review, workflow development and implementation, 2006-2007
- ◆ Purchasing and Supply Management — Correspondence tracking — Business processes analysis and workflow development, 2006
- ◆ DPWES — Sanitation Districts — Business process analysis, workflow development and implementation, 2007
- ◆ CSB — Incident Tracking — Review business process, 2007
- ◆ County Executive — Federal Legislative Tracking — Business process analysis and product implementation, 2007/2008

Project Budget

FY 2008 funding of \$96,648 is recommended to expand the use of the system to include development of a new application to track federal legislation by County Executive staff for the Board of Supervisors, and maintenance of current customer IQ applications, including Legislative Monitor.

Return on Investment (ROI)

Successful implementation of this service-enhancement project will provide enhanced communications between county staff, departments and agencies, allow agencies to share and monitor the status of projects, responses, and track other issues and events as those items progress through the County processes. The project enables agencies to automate business processes and workflows, reduce duplication of effort, and enable the sharing the information between agencies using present e-mail methods. These benefits are amplified by the delivery of a seamless constituent interface and enhanced customer service. By implementing a proven product, agencies will forego the expense and effort of researching and evaluating similar CRM solutions. In addition, this solution does not preclude installations of applications that support the County's IT architecture, or interact with other agencies' CRM applications.

IT0024.1 Public Access Technology — Kiosk

Project Description

This project provides funding for 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 via their convenience and versatility, public access technologies are capable of limiting staff involvement in providing basic information, thereby allowing staff to perform more complex tasks and respond to requests for more detailed or specialized information.

The multimedia kiosk is one of the key technologies in the e-government strategy deployed by Fairfax County to assist citizens with access to government information and business transactions. A kiosk is a computer that is placed in a structure to dispense information and services. The kiosk application known as the Community Resident Information Services (CRiS) provides access to regional information in convenient locations and also allows citizens to conduct business. Two kiosks were initially deployed in August 1996. Currently, there are 27 kiosks operational in the County with more to be deployed in FY 2008. These kiosks have accounted for over 10.8 million citizen inquiries to date.

Project Goals

In FY 2008, Kiosk enhancements will expand the range of information and applications available through the web and Interactive Voice Response (IVR) channels. Other objectives include deployment of additional kiosks to expand public access, redesign kiosk information architecture based on redesigned county web site and continue the integration of card reader functionality that could enable the kiosks to accept credit card payments.

Progress to Date

- Progressed from a pilot project to a complex, operational program.
- Evolved from a County to a regional kiosk program.
- Continued growth in the area of additional business transactions.
- Incorporated interfaces to state-level business transactions.
- Migrated to a much more user-friendly structure.
- Continued with significant content growth.
- Enhanced technical capabilities of kiosk program in the areas of printing, mapping, location information, user instructions and operations.
- Implemented Metropolitan Washington Council of Government (COG) Commuter Connections on CRiS.
- Added two new partners; INOVA and Economic Development Authority
- Redesigned the application to achieve a new look and feel.
- Developed a video in-house for promoting CRiS.
- Integrated the current application with the Web by introducing a Netkey browser.
- Introduced advanced sound control.
- Completed a feasibility study with DMV to integrate DMV's extraTeller on CRiS.
- Redesigned information architecture for Fairfax County and all our partners.
- Completed replacement of kiosk hardware that included CPUs, printers, monitors, etc., at each kiosk location in FY 2003.
- Completed replacement of enclosures with new enclosures that offer components like keyboard, scanner, and credit card reader etc. in FY 2003.
- Completed Partnership with Town of Vienna and Town of Herndon.
- Networked INOVA kiosk
- Expanded Regional content.
- Continue redesign of hardware/software architecture in order to address security issues in FY 06.
- Continue enhancement of the GIS and Location information portions of CRiS application in FY 06.
- Complete deployment of sound domes in FY 06
- Deployed County's Kiosk in Tyson Corner Community Center FY 06
- Enhanced the security of kiosk in FY '07.



Milestones

- ◆ Deployment of additional kiosks in FY 2008.
- ◆ Continue upgrading of development software.
- ◆ Continue redesign of information architectures for all partners.
- ◆ Add new Partners.
- ◆ Integration of credit card reader with CRIS application using a web application.

Project Budget

A portion of the FY 2008 budget of \$275,000 will be used for consulting services, software and hardware acquisitions and training. The project requires on-going support from Public Access staff and Telecommunications staff to help plan and re-configure new systems, and to help troubleshoot telecommunications system problems.

Return on Investment (ROI)

This project will continue to provide a single information architecture and supporting infrastructure for all platforms and continue to provide new information and e-services to the public. It will further expand the capabilities of the newly implemented content management system in order to improve automated workflow, revision control, indexing, search and retrieval for enterprise systems. The project will further improve the search capability for citizens and constituents. The County will be able to build applications quicker and more efficiently by maintaining reusable components. Public access technologies will minimize staff resources needed to provide basic information, thereby allowing staff to be deployed to more complex tasks; as well as to respond to requests requiring more detailed or specialized information.

IT0024.2 Public Access Technology — Interactive Voice Response

Project Description

This project provides funding for 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 via their convenience and versatility, public access technologies are capable of limiting staff involvement in providing basic information, thereby allowing staff to perform more complex tasks and respond to requests for more detailed or specialized information.

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, convenient manner. The IT project has been deployed to allow citizen's access to Fairfax County services and information via touch-tone telephone service. For those citizens who do not have access to the Internet, the 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." It is one of the foundations for enhancing public access to government information and business transactions.

Project Goals

The primary goal is to continue to apply text-to-speech technology for certain applications determined to be resourceful aligned with e-government goals. Interactive Voice Response enhancements include the continued integration of Web and IVR via XML technology, creating a Polling Place Locator application and developing Wayfinder Court Information IVR for public use.

Progress to Date

The DIT IVR currently answers more than 4 million calls annually since FY 2005. The system is available approximately 24 hours a day to interact with citizens, giving citizens another 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 most need personal attention. It also allows access to a great deal of information even if citizens call after hours or on weekends.

CURRENT APPLICATIONS:

- COURTS: Circuit, General District & Juvenile, Court Information Line (General Information, Traffic and Criminal Fine Payment by credit card, access to specific cases),
- CSP: Consolidate Services Planning survey of services provided,
- DPWES: Building Inspections (Requests and Cancellations),
- DPWES: Permit/Plan/Building Inspection Status Inquiry,
- DPWES: Scheduling Special Pickups of brush or bulk items using customer address,
- DTA: Real Estate Data (spoken data and FAX on Demand by property address),
- DTA: Real Estate and Personal Property Tax Payments
- FIRE: Fire & Rescue's Media Information Line (after-hours fire incident updates),
- HCD: Housing & Community Development's Housing Waiting List (gives position on list),
- HEALTH: Health Department Information and departmental transfers,
- HR: County jobs availability and submitted resume status.
- LIBRARY: Library Information Line (Locate Libraries by ZIP code, phone numbers, directions),
- OFC: Office For Children Training and Class schedules registration Line,
- OPA: Public Affairs 324-INFO Line (general County information, phone number search),
- POLICE: Victim Services Information Line (query of offender release date information),
- DIT: Technical Support Center, help desk for all computer related problems.

Milestones

- ◆ Upgrade existing servers to Window 2003 server
- ◆ Migration old code to new Script Express code
- ◆ Create an application to automate Usage reports.
- ◆ Add Spanish versions to various applications
- ◆ Add text-to-speech functionality to various applications
- ◆ Install new release of Encore software

Project Budget

A portion of the FY 2008 budget of \$275,000 will be used for consulting services, software and hardware acquisitions, and training. The program requires on-going support from E-Gov and telecommunications staff to plan and configure new systems, and to trouble-shoot telecommunications system problems.

Return on Investment (ROI)

This project will continue to provide a single information architecture and supporting infrastructure for all platforms to deliver new information and e-services to the public. It will further expand the capabilities of the newly implemented content management system in order to improve automated workflow, revision control, indexing, search and retrieval for enterprise systems. The project will further improve the search capability for citizens and constituents. The County will be able to build applications quicker and more efficiently by maintaining reusable components. Public access technologies will minimize staff resources needed to provide basic information, thereby allowing staff to be deployed to more complex tasks; as well as to respond to requests requiring more detailed or specialized information.

IT0024.3 E-GOVERNMENT — INTERNET/INTRANET INITIATIVES

Project Description

This project provides funding for 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, any time, public access technologies are capable of reducing 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 to make 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 vision described in the Project Description will be achieved by providing new information and services on all platforms, continuing to build upon our 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 platforms and agencies. The repository enables various features of content management to provide accurate and reliable information, provide additional search capabilities on the public web site, and enable information sharing. The project includes implementing standards and processes for information engineering so that the same applications and data can be used and delivered across multiple platforms, while continuing to provide support for other agencies in the development of Web content and applications.

Progress to Date

The success of the County's Public Web site has been extraordinary. The County site receives approximately 40,271 visitors per day, which equates to an average of 238,414 page views per day and an average of 1,426,878 hits per day. Approximately 55 County agencies have a presence on the site. The functionality of the site has expanded significantly during the past 12 months with the addition of significant content and information. New and updated business transactions have been added during this period as well.

1 – Public Web Site Search and Navigation

Web Content Management is considered to be Phase II

of the Public Web Site Redesign. During the first phase, over 120 content contributors were involved in migrating information from the old site to the redesigned site within a six-month period. We defined a basic Information Architecture for the site, which was then validated by 14 citizen and business focus groups. We developed "look and feel" templates for the redesigned site and coordinated the migration of over 20,000 files to those new templates. Most importantly, we established working inter-agency groups for the development and dissemination of standards related to site design, application development and implementation. As part of the redesign, a "Contact Us" database was implemented, which provides citizens with direct contact information to county staff from a single search interface. We also enhanced the functionality of the site search. In FY '03, we improved the main subject area pages (Living, Doing Business, Visiting and Government). Enhancements of the site included: News & Information section, Emergency Information, Local Weather and improved navigation. In FY '04, we built a robust and secure environment that facilitates delivery of integrated and accurate information to citizens. In FY '05, several new applications were added including Child Care training, My Neighborhood applications, Kids and Teen portal, Seniors and Disability portal, Crime Mapping, and revamped DTA e-pay and Consumer Protection pages. In FY 2006, a new search on the public web site was implemented making site accessible via mobile devices. In FY 2007, the WEB site is undergoing design and search enhancement.

2 – Infrastructure Architecture and Management

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

- Implemented a load balance sever farm for public web site
- Secured network settings on all 34 servers to minimize risk of intrusion
- Implemented a statistical reporting system for both Internet and intranet servers
- Refined the server monitoring system
- Determine and implement a supporting Infrastructure for .NET applications
- Develop .NET standards based on the implementation of .NET projects

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 collaboratively defined schema. This project allows Fairfax County to share park-related data with other local, state and federal jurisdictions. Additional critical work on regional interoperability for homeland security linking Emergency Operations Centers and CAD functions was started in FY 2005 with a pilot prototype in FY 2006. In FY 2008, we will continue our efforts with Homeland Security in creating a data exchange hub for the metropolitan region for public safety information.

4 – Infoweb Redesign

The look and feel of the main page of the Infoweb (Intranet site) was redesigned, and continues to be enhanced. Unlike the Public Web Site redesign, this is an on-going process that links with agency operational improvements.

Approximately 55 County agencies now have a presence on the site, offering more than 11,000 HTML documents, 12,500 PDF documents, and 15,000 images on the Internet site. Most agencies have Web content contributors. Internet Services staff supported content creation efforts for those agencies without a dedicated Web presence. The County Infoweb will continue to be updated with additional access to enterprise data and interactivity. It will also be 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.

5 – Web Content Management

Web Content Management will deal with refining the site's information architecture, defining and implementing replicable workflows, as well as designing and implementing the supporting infrastructure for Web content contribution. We have purchased and are implementing a COTS solution.

6 – e Services

Internet Services prototyped new application development platforms and developed standards and best practices for our current environment. DIT supported other agencies in the development of Web content and applications. New and updated business transactions supported by the Internet Services staff over the last year include:

- HS/OFC Institute for Early Learning Training (IFEL)
- HS/OFC Child Care Management System — Modification in FY '04
- ICARE DTA Real Estate Assessment and Information Query

- DHR Applicant Information Management System (AIMS)
- Public Meeting Calendar
- GIS Digital Map Viewer — Modified in FY '04
- DTA ECheck — Modified in FY '04
- Contact Us — Modified in FY '04
- Library Historical Newspaper Index
- Library Booklists
- Library Picturebooks
- DTA Tax Evaders
- HS HIPPA
- DPZ eComplaints — Modified in FY '04
- Infoweb — IBusiness Enterprises (IBE)
- Infoweb — DFS Independent Living Program (FILP)
- Infoweb — DAHS Facility/Site Profile
- Infoweb — DFS Account Receivable (FAMSAR)
- Infoweb — HS eAssist — Modified in FY '04
- Infoweb — HS FCPMS/IAS — Modified in FY '04
- County WEB — Kids and Teens portal, FY '05
- County WEB — Crime Mapping, FY '05
- County WEB — Child Care training, FY '05
- County WEB — My Neighborhood, FY '05
- County WEB — Seniors and Disability portal, FY '05
- County WEB — Sheriff Service Civil Process, FY '06
- County WEB — Enterprise Search, FY '06
- County WEB — Public web site accessible via wireless, FY '06
- County WEB — Boards, Authorities and Commissions, FY '06
- County WEB — EPartnerships, FY '06
- Infoweb — Courts Electronic Wayfinding — Circuit Court Docket, FY '06
- Infoweb — Sign-in and Course Evaluation System (SACES), FY '06
- Infoweb — Courts Scheduling System, FY '07
- Infoweb — RSSFeeds, FY '07
- County WEB — Athletic Facilities Application Requests (AFAR), FY '07
- County WEB — FAQ's, FY '07
- County WEB — RSSFeeds, FY '07
- County WEB — Podcasting, FY '07

Milestones

- ◆ Provide additional search capabilities on the public web site

- ◆ Enhance the public web site to make it more compliant with Section 508 for accessibility
- ◆ Continue to provide support to county agencies for e-gov initiatives
- ◆ Continue support and expansion of e-payment transaction

Project Budget

A portion of the FY 2008 budget of \$275,000 will be used for consulting services, software and hardware acquisitions, and training. The project requires on-going support from Public Access staff and infrastructure staff to help plan and re-configure new systems.

IT0043 Human Resources Information System

Project Description

The purpose of this project is to seize opportunities to modernize the County's current Personnel/Payroll System (PRISM), with a more technologically advanced database, workflow, workforce management information resource, and user-friendly screen presentation as an opportunity to extend its useful life until the County invests in a new system. The project scope is revised from the original concept of replacing the system. Before launching into a replacement of the existing application, in FY 2002, a study of integrated human resources/payroll/financials offerings was conducted. It was determined that it was not feasible or cost-effective to replace the current portfolio of systems at that time. However, the use of new application integration and Web tools became a viable option for improvement. Such tools were procured as part of the Department of Information Technology's strategy to improve the utility and functionality of legacy systems by modernizing the current production applications at a fraction of the cost of full-scale replacement until a replacement initiative is feasible.

This project provides interim improvements and is the first step towards a strategic goal of achieving human resource management initiatives such as improved end-user functionality, succession planning and knowledge management using technology architecture that can interoperate with an integrated suite of enterprise applications. (See new FY 08 Project 'Corporate System Replacement' Project number 0079).

Project Goals

This project will also provide for improved ability for reporting

Return on Investment (ROI)

This project will continue to provide single information architecture and supporting infrastructure for all platforms and continue to provide new information and e-services to the public. It will further expand the capabilities of the newly implemented content management system in order to improve automated workflow, revision control, indexing, search and retrieval for enterprise systems. The project will further improve the search capability for citizens and constituents. The County will be able to build applications faster and more efficiently by maintaining reusable components. Public access technologies will minimize staff resources needed to provide basic information, thereby allowing staff to be deployed to more complex tasks as well as to respond to requests requiring more detailed or specialized information.

and decision making in agencies by creating information marts and decision tools for better flexibility for workforce management by agencies. Further, the project scope includes improvements identified by Department of Human Resources as part of their strategic plan to improve process and access. This project supports several of the strategic DIT directions as outlined in the Information Technology Plan. It is anticipated that a vendor services will be used for required re-engineering efforts.

Progress to Date

A team of DIT and DHR staff has been formed to study current available solutions and best practices for a HRMS. Best practice implementation-phasing recommendations, based on the industry experience and the County's business operations, will also be included. Other enhancements include improved reporting capabilities for agencies, and improved look and feel for a variety of functions like time-sheet, and on-line pay advice, and the implementation of a succession planning and knowledge management suite, and on-line benefits enhancement.

Project Budget

FY 2006 and FY 2007 carryover funding continued support of refinement of requirements, first stages of the business process improvements, acquisition of tools to improve current system usability, and consultant costs.

Return on Investment (ROI)

Improvements in reporting and transactions in PRISM enhance the ability for agencies to have access to critical information without using programmers to develop certain routine paper based reports.

IT0072 CRM — Call Center Integration

Project Description

This project provides the foundation for a comprehensive call center technology solution which will be based on an open architecture, providing an opportunity for sharing process, resources and critical information across multiple Fairfax County call centers. This project will also address the service needs by remedying existing business problems while improving operation efficiency and upgrading the technology infrastructure for all county call centers. The milestones are the approval of additional funding, actual procurement and subsequent implementation of these tools.

Project Goals

The goal of this project is to determine a comprehensive CRM architecture which will use industry standard CRM, Call Center, and 311 technologies, and incorporate existing county automated tracking systems. The objective of county call centers to meet the needs and expectations of Fairfax County citizens while providing timely and appropriate assistance based on the citizens' needs will be better met with these additional tools. Another goal is to provide an opportunity to leverage call center resources through virtual sessions. This project does not build or consolidate existing call centers nor will it create a central call center site. The concept provides a central technical architecture and infrastructure foundation supporting call center processes, integration of call center processes, and sharing of resources as appropriate in improving overall services. This project is complemented by the telephone modernization project, which will improve the telephony technology foundation needed to distribute and track calls.

Progress to Date

A project steering committee consisting of DIT and agency staff that use or have interest in call center functionality has been established to manage the implementation and integration of the CRM software within the infrastructure environment for Office of Public Affairs (OPA) call center pilot.

Milestones

- ◆ RFP development for CRM software and integration, November, 2005
- ◆ Contract Award, December, 2006
- ◆ Integration/Evaluation, February, 2007
- ◆ Training/Deployment, March, 2007

- ◆ Pilot Implementation, April, 2007

- ◆ Pilot Assessment, December 2007

Project Budget

FY 2008 funding of \$250,000 will complete the pilot implementation. Prior year FY 2007 funding in the amount of \$500,000 was provided to replace the existing stand-alone tools used to provide information to incoming callers by the Office of Public Affairs.

Return on Investment (ROI)

Implementing standard technologies will produce noteworthy cost savings. Primarily, labor savings associated with these activities may be significant. The current environment requires programmers and analysts with very specialized analytical and programming language knowledge which is difficult to recruit these 1980s skill sets. IDMS/R also requires specialized DBA skills. There are very few contract vendors who offer IDMS-skilled programmers, analysts and DBAs. Newer database and software architectures based on more widely adopted standards and refined processes will provide numerous productivity benefits in the Department of Human Resources, DIT and agencies, and reduce the risk of relying on a unique system for support. The new technology re-design will provide the opportunity for DHR to implement a number of features and functionality to provide better utility of the system in performing transactions and using information and data, and more efficient processing.

Additional economies result from increased efficiencies created by process automation and from accountabilities associated with the use of performance management systems. The County will save money by having a more efficient work force. Calls can be handled more efficiently, with Call takers being able to optimize time spent with each caller, enabling them to spend more time on resolving problem cases. The caller's experience will be improved by having better interaction with a better equipped and informed call taker, and faster resolution of interaction. Return on Investment will be realized from the increased productivity due to automation or streamlining of telephone processes, improved productivity associated with performance management systems made possible through technology, and due to improved and reliable capture of data required for mandatory service reporting, which will maximize program funding opportunities, as well as enable best practice service delivery and improved operational efficiencies.

IT0074 Data Analysis Reporting Tool

Project Description

This project provides a modern capability for reporting on financial data from the County's legacy financial systems. The Data Analysis Reporting Tool (DART) will replace existing ad-hoc, stovepipe reporting with a unified reporting methodology and capability. Financial information from the County's financial, procurement, and payroll systems will be integrated in a data warehouse, and reporting features will provide the users the capability to generate on-demand charts, reports, inquiries, and analyses.

Project Goals

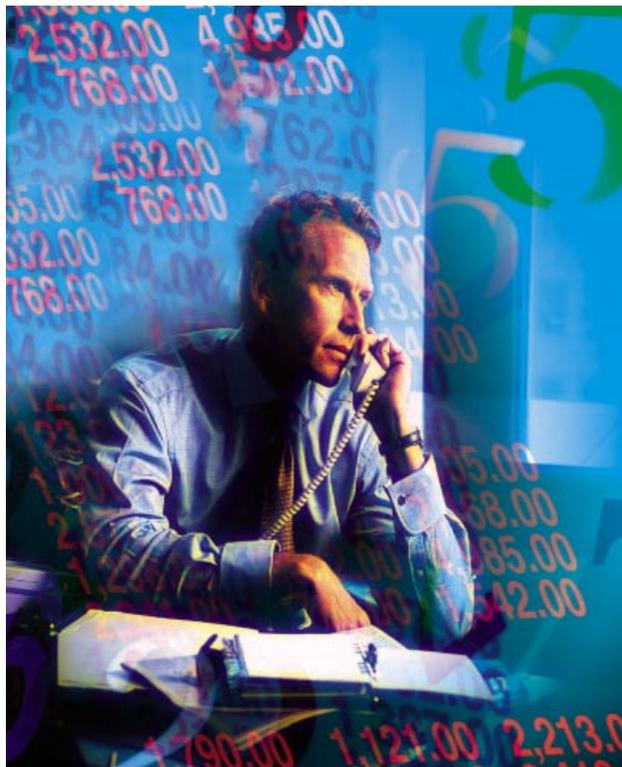
The goal of the project is to maximize the analytical functionality of existing financial and performance data. The solution will enable management to target discrepancies, inefficiencies, and extraordinary line items for cost-savings and improved control. In addition, the project will increase transparency into spending as a whole, while reducing the development time to achieve delivery of new reports and special research results.

Progress to Date

Award had been made to vendor to provide requirements analysis, product specification and selection and infrastructure architecture for enterprise financial data warehouse. Gap analysis and reporting needs phases are complete

Milestones

- ◆ *Requirements definition for agency reporting needs, April 2007*
- ◆ *Data model prototype, October 2007*
- ◆ *Selection of business intelligence platform solution, November 2007*
- ◆ *Develop a prototype, January 2008*



Project Budget

FY 2008 funding of \$450,000 is provided for completing a full requirements analysis and feasibility study which will help in the selection of a Business Intelligence product and initial definition of a corresponding data warehouse. Current reporting capabilities within the County are limited to voluminous reports generated from the County's main-frame systems. These reports are difficult to download and format. Significant time is required to re-key and verify financial data, which impacts the timeliness and usefulness of information.

Return on Investment (ROI)

Cost savings will be realized through a reduction in staff hours, which are now spent re-keying and reconciling financial data. More timely and relevant data also will enhance decision making throughout the County.

IT0079 Corporate Systems Replacement

Project Description

The County's current 'stovepipe' legacy corporate systems which include budget (BPREP), purchasing (CASPS), finance (FAMIS) and human resource management (PRISM) are on various legacy platforms and old technical architectures. An assessment of these aging systems revealed that they are past their useful life, no longer meet today's technology standards, and they do not meet the demands of resource and financial management and decision-making. Of these systems the County's Personnel Resource Information System Management (PRISM) is the most vulnerable to obsolescence and is planned to be the first application in a phased approach to replace all of these legacy systems with a modern, integrated systems suite. PRISM is over 20 years old and highly customized based on historical County operational practices to the extent that it cannot be upgraded. The system functions using obsolete 20 year old technology and has numerous inherent weaknesses. Such old technology impinges upon the County's staff ability to perform workforce planning, analyses of personnel costs, track employee data and interface with the core financial system to support payroll processing. The attrition of in-house technical staff as they approach retirement age will jeopardize future support for maintaining this legacy application.

Project Goal

The County's overall goal is to facilitate agency management and enable self-service business processes. Automation and modernization are empowering both employees and managers to execute processes more efficiently, and make the best strategic decisions based on the most timely and accurate information. This shifts the orientation of the system from that of a data repository to one of an information system solution. The primary goal is the migration of the current system to a more standard, supportable database and development environment that incorporates workflow and Web technology. Although the county has used this original COTS system for 18 years, its technology is about 23 years old and is technologically obsolete.

Aside from the proprietary nature of the software with limited flexibility, a major risk exists due to the reality that the skills pool available to support its database is significantly diminished in the market. The project will provide a comprehensive corporate system that will improve human resource needs and services including HIPAA privacy laws, succession planning, compensation and workforce analysis, payroll, benefits, employment, staff development and employee relations. The main objective is to transform the management of the County's human resources from an antiquated and cumbersome system that relies on manual processes to a system that is dynamic and supports the new requirements of human resource management.

The project is directed by a Policy steering committee comprised of the Deputy County Executive and directors of the core agencies that will consider business and policy changes that will need to be made to facilitate the goal of a modern, efficient and effective solution that maximizes the productivity opportunities of the newly migrated PRISM application.

Progress to Date

New project in FY 2008. Interdepartmental project team formed February 2007.

Project Budget

FY 2008 funding of \$800,000 is provided to begin planning, designing and implementing a replacement human resources system to meet the stated goals and objectives.

Return on Investment (ROI)

The return on investment will be realized through a reduction of HR analysts performing routine services by implementing a more robust employee self-service utility; a reduction in maintaining the various side systems currently used to provide the functionality that is lacking in the core legacy system; and a cost avoidance of an escalating expense required to manage and maintain old technology.

3.5 TECHNOLOGY INFRASTRUCTURE

IT0050 Public Service Communications Replacement

Project Description

This project provides continuing funding for the new Public Service Communications System, which provides two-way radio communications for all County non-public safety agencies as well as the Fairfax County Public School Transportation Department (school buses), FASTRAN and the Fairfax County Water Authority, with updated technology that meets the needs of user agencies. The completed system will provide adequate call processing capacity and area coverage to more than 90 percent of the area within the jurisdictional boundaries of Fairfax County. The 20-year old Public Service Communications System was based on a design that used two transmitter tower locations and twenty radio channels, with ten channels at each tower. The transmitter tower sites were located in Lorton, on the Energy/Resource Recovery Facility smokestack, and in Fairfax City, on the rooftop of the Massey building. The old system only provided geographical coverage for approximately 60 percent of the County and had limited call processing capacity, frequently resulting in unavailability for users. In addition, the old system required users to manually select the correct radio channel based on their location within the County, requiring knowledge of the coverage each channel provided to the different parts of the County. There are large geographic areas where radio communications were not possible and many of these locations are heavily populated areas of the County. The old network did not meet the user needs for additional coverage nor provide for future growth or for advanced features, such as mobile data communications.

Project Goals

The new radio system eliminates severe geographical coverage problem for County agencies, and provides reliable communications for the County fleet, back-up and interoperability supporting emergency management activities, and communications for an increasingly mobile workforce. The new system is also intended to provide a fully independent backup radio system for public safety agencies.

Progress to Date

Prior year activities have consisted of the completion of a consultant study with recommendation for the replacement system, the development of requirement specifications, contract award, tower site acquisition and FCC licensing requirement activities, construction and activation of transmitting tower sites, and the migration of schools and county fleets to the new system. The entire network and remaining migrations will be completed by June 2007.

Milestones

- ◆ *Final Consultant's Report received, November 2001*
- ◆ *System Design begin, December 2001*
- ◆ *Contract Award and Execution, December, 2002*
- ◆ *Licensing and Tower Site Acquisition begin, January 2002*
- ◆ *Licensing and Tower Site Acquisition complete, 2005*
- ◆ *Site Preparation, 2005*
- ◆ *Network Equipment Installation, 2005*
- ◆ *Reliability and Functional Testing, 2006*
- ◆ *System Acceptance, 2006*
- ◆ *Procurement and installation of more than 3,600 new mobile and portable radios, 2006*
- ◆ *Old system retired, September 2005*
- ◆ *Full implementation and completion, June 2007*

Project Budget

The FY 2008 project cost is estimated to be \$1,844,805 and includes the fourth-year of a seven-year annual lease-purchase payments for the new radio network infrastructure, including the increase of radio repeater locations from two to seven sites, to ensure greater than 90 percent call coverage, and for operating costs during the year. The new network eliminates the two zones within the County and provides for seamless coverage on one system regardless of location, as well as provides ample reserve capacity for peak use periods and future fleet expansion. Based on a portion of project costs, derived from the number of radios users that will be operating on the system as a percent of the total number of radios; \$1,212,639 will be recovered from Non-General Fund Supported agencies, the Fairfax County Public Schools and Fairfax County Water Authority in FY 2008, netting in a general fund cost to the county of \$632,166.

Return on Investment (ROI)

The return on investment for this system upgrade results from the enhanced reliability and coverage that has been obtained. The replacement system provides reliable radio coverage to many areas of the County that were not covered by the older radio system. This provides the necessary protection and safety for bus drivers and other staffs that depend on reliable communications, improves customer service to County citizens and other County agencies, and

reduces reliance on commercial wireless networks in addition to future cost avoidance and other non-quantifiable benefits. The new system is fully compatible with the mobile and portable radios used by the County's public safety radio system. This allows for direct communication between public safety and public service users for incident

or disaster management, and provides a separate back-up system for the Public Safety system should that system fail. The County realized a cost avoidance of over \$3 million by using the public service system to serve as the back up to the public safety system, rather than modifying the public safety system.

IT0058 Remote Access (ROI)

Project Description

This project continues funding to enhance and expand the capability of internal users to access the County's systems from remote locations, service field activities, and telework. To accomplish this, the telecommunications infrastructure must be flexible in its modes of access, while maintaining a stable and secure communication environment. Because of the varied hardware and software capabilities of prospective telecommuters and the architecture of agency specific applications, the remote access solution uses a variety of technologies including dial-up modems, Virtual Private Network (VPN) technology, and Citrix servers to meet the various access requirements of remote access and telecommuter users.

This project provides additional funding to enhance and expand the capability of Citrix using thin client technology. Because of the varied project using Citrix to access county information. The telecommunications infrastructure must be flexible in its modes of access, while maintaining a stable and secure communication environment. The use of thin client technology will allow for the potential saving in the PC replacement requirements in the county. The County can purchase less expensive thin client terminals for core business requirement and reduce the support cost with the proper implementation.

Project Goals

An enterprise-wide standardized remote access control methodology will provide a solution for employees and external system users, and also is intended to be expanded to partners and County customers and residents to authenticate their identity in order to gain access to relevant data and do business in a secure manner. All user authentication and authorization management is policy based and centrally managed allowing for comprehensive audit and reporting services to support and log information on the extensive user base. This product will increase security, simplify management, speed reporting and data analysis, and provide secure access from remote locations.

Progress to Date

Required software licenses have been obtained. Business

units to participate in the first phase of the rollout have been identified. Expanded Citrix farm to prepare county for continuity of operations in case of catastrophic events such as pandemic flu, weather related disasters, etc.

Milestones

- ◆ *Plan and procure the necessary Citrix environment using thin client technology, July 2004*
- ◆ *Purchase the required software licenses to ensure compliance with license agreements, July 2004*
- ◆ *Identify business units to participate in the first phase of the rollout, July 2004*
- ◆ *Install and test hardware and software, August 2004*
- ◆ *Full production services to all selected users, November 2004*
- ◆ *Citrix farm expanded, FY 2007*
- ◆ *Additional licenses purchased, FY 2007*
- ◆ *Additional applications added to farm, FY 2007*

Project Budget

In FY 2007, funding of \$100,000 was provided to continue the build out of the telework environment and to increase the number of applications that can be accessed remotely. Additional Citrix licenses, Microsoft licenses and consultant services were required in addition to Security Token Cards and application software licenses.

Return on Investment (ROI)

This project provides a cost effective approach to enhance the County's infrastructure to offer flexibility for a variety of types of end-user devices that may be used by County staff, and to encourage more employees to take advantage of telecommuting in line with regional goals supported by the Board of Supervisors. The use of thin client technology also will allow for potential savings in reducing the desktop configuration requirements in the County: the County can purchase less expensive thin client terminals for core business requirements and reduce overall support costs.

IT0060 Telecommunications Modernization

Project Description

Voice communications is a critical tool used by all Fairfax County Government agencies. Whether it is citizen access via e-government, efficient management of government information, the advancement of education, the safety of our children on school buses, or homeland security, voice communications plays a critical role. The County's current infrastructure has served the County well, but is in need of replacement. Additionally, the current infrastructure does not serve all County locations nor does it support a number of key goals identified by the County as meeting the needs of citizens and employees. As a result, the County is embarking on an ambitious plan to completely modernize and revitalize its voice technology infrastructure.

In May 2006, Fairfax County selected Avaya Inc. to provide Telephony Platform for the County on a going forward basis. Avaya Inc. designs, builds and manages communications networks for more than 1 million businesses worldwide, including over 90 percent of the FORTUNE 500®. Focused on businesses large to small, Avaya is a world leader in secure and reliable Internet Protocol (IP) telephony systems and communications software applications and services. Avaya currently serves many state, local and federal government clients across the country, including the District of Columbia, Loudoun County, and Montgomery County local governments within the metropolitan area.

The Avaya solution will provide many new applications that will benefit both County employees and citizens alike.

Project Goals

The strategic goals of this project is to move the County towards a long-term, flexible voice solution that will underwrite the use of Voice over Internet Protocol (VoIP) while maintaining complete TDM (current technology), functionality. An IP enabled enterprise-class platform will provide the County with the ability to adopt newer value added features of emerging IP telephony. Any new architecture must yield a flexible yet stable infrastructure that can meet immediate telephony needs and support future enhancements. This new platform will be the foundation for eventual movement to a converged network environment. Over the life-cycle of this transformational project, change would be introduced in smaller increments than would be possible in a massive change of technology, applications and processes. The following six strategic goals for Fairfax County voice services were developed and reviewed with senior County technology managers:

Goal 1: Optimize the total life cycle cost for voice services.

Goal 2: Provide common voice architecture, County-wide.

Goal 3: Provide secure remote access for voice and data to expand Telework

Goal 4: Provide compatibility with "best-in-class" citizen access technologies.

Goal 5: Develop a survivable architecture that is scalable and flexible.

Goal 6: Prepare for the convergence of voice and data onto one logical network.

These goals framed the creation of Fairfax County's Strategic Voice Technology Plan.

Progress to Date

Post contract award in May 2006, Fairfax County and Avaya, Inc. launched an aggressive "Immediate Relief/ Proof of Concept" implementation at 7 sites. These sites were chosen to eliminate the escalating degradation of service being experienced in the County's oldest equipment. To date the following agency/locations have been migrated completely to the Avaya platform:

- CSB NW Center
- Chantilly Regional Library
- CSB Lincolnia Center
- ADS Crossroads
- DIT Radio Shop
- CSB Springfield Mental Health
- ADS Administration
- Housing and Community Development HQ

Milestones

- ◆ RFP issued, September 2005
- ◆ Highest rated offeror selected, December 2005
- ◆ Contract negotiations completed, March 2006
- ◆ Contract executed, May 2006
- ◆ Installation at Immediate Relief/Proof of Concept sites begins, September 2006
- ◆ Installation of Massey Core Switch completed, September 2006
- ◆ Installation of Immediate Relief/Proof of Concept sites completed, February 2007
- ◆ Installation at Lab Switch completed, March 2007

- ◆ Installation of Government Center Core Switch completed, May 2007
- ◆ Phase 1 Implementation begins, June 2007
- ◆ Phase 2 Implementation begins, September 2007
- ◆ Implementation of Emergency Survivable Server Network, November 2007
- ◆ Phase 3 Implementation begins, January 2008

The replacement of the current telephony infrastructure is anticipated to be a two and a half year project that when completed will serve approximately 15,000 Fairfax County employees. The installation will occur in phases which will allow multiple opportunities and avenues to prepare the FCG community for the transition, and thereby ensure a smooth change of voice platforms. Successful implementation will require accurate and consistent communications regarding project status, system features and functionality, dialing plan information, and changes that users (both employees and citizens) can expect.

IT0061 IT Security

Project Description

This project supports the County security architecture, designed to provide an appropriate level of protection for all County information processing resources regardless of technology platform. Aimed at ensuring that county systems and information and the confidentiality of legally mandated information are not compromised, new technologies need to be employed to meet current and future security challenges. The Fairfax County Information Technology Security Policy, the mandated specifications of the Commonwealth of Virginia Information Technology Security Policy and Standards, and the Health Insurance Portability and Accountability Act (HIPAA) Security Rule, along with other mandated privacy laws and County internal audit priorities, are examples of governing legal precedence and policy that dictate a requirement for audit controls to record and examine activity in information systems. Such audit controls will protect the integrity and sensitivity control on the information contained within the County's technology infrastructure. This project will provide security analysts and managers with advanced tools to proactively build and measure comprehensive security best practices within agencies and across the County. Additionally this project will afford Fairfax County to manage connectivity to its infrastructure through controlled network connections that will interrogate unknown devices for verification of anti-virus, patch management and licensing standards. Devices

Project Budget

Additional funding of \$1,757,461 is provided in FY 2008 to continue the technology upgrade and implementation. Additional funding is anticipated for subsequent fiscal cycles.

Return on Investment (ROI)

The benefits derived from the implementation of this project are quantifiable and substantial. Direct cost savings include: a reduction in leased circuit costs; a reduction in message unit costs for outside phone calls; and a reduction in overall maintenance costs, including moving phones, adding new phone lines and changes to existing phone service. In addition, the new voice infrastructure will allow Fairfax County to leverage embedded technology assets and to improve service delivery quality. Business processes will be streamlined because of the ability to share information over an integrated communications platform.

found not to be in compliance will be quarantined/or refused access until they can be placed in compliance.

Project Goals

Through this project IT will continue enhancements to the County's modular network infrastructure that will allow for incorporation of necessary levels of security to be embedded in specific functional areas. In order to manage the modular infrastructure and the additional firewalls, intrusion detection systems and networking devices a Network Access Control (NAC) solution will be deployed to identify non-standard and non-secure systems that are a threat to the security of the infrastructure and County data. This ability is required and will be implemented in appropriate areas of the system. Additionally, the on-site support of highly skilled network engineers must be deployed in order to roll out a simplified security design and create a manageable security architecture that allows for security devices to function optimally and provide identification of specific threats. A standardized and centralized secure authentication and authorization methodology for web based applications will be implemented.

An enterprise-wide standardized access control methodology will provide a solution for employees and internal system users, and also is intended to be expanded to partners and County customers and residents to authenticate



their identity in order to gain access to relevant data and do business in a secure manner. The provisioning feature within the solution automates the administration function to provide real time transactional account access for e-business. This tool provides an automated means for centrally managing access to enterprise resources across platforms and provides a secure access to enterprise applications, networks, databases and other essential resources through a single sign-on capability. User authentication and authorization management is policy based and centrally managed. This allows for comprehensive a countywide security monitoring and audit control process including audit and reporting services. The Fairfax County Information Technology Security Policy, the mandated specifications of the Commonwealth of Virginia Information Technology Security Policy and Standards and the HIPAA Security Rule, along with other mandated privacy laws and County internal Audit priorities, are examples of governing legal precedence and policy that dictate a requirement for audit controls to record and examine activity in information systems.

Progress to Date

Work associated with planning and design is started. The required technology tools will be implemented in phases based on infrastructure engineering needs, business function priorities, and legal mandates aligned with county e-business projects. Implementation started in FY 2005, with work on base functions and agency specific deployment in 2007.

Project Budget

FY 2008 funding of \$244,160 is provided to support the County security architecture, designed to provide an appropriate level of protection for all County information processing resources regardless of technology platform. IT security and infrastructure staff are being assisted by consultants that are already augmenting staff in DIT base-line security activities and are currently engaged in on-going network infrastructure improvements as well as the project.

Return on Investment (ROI)

This project will ensure system compliance with security policies, provide for centralized real-time auditing, provide a solution for managing users and their Web application access, ensure timely access to business assets through an authenticated identify, and provide for an immediate response to technology threats. The information security and internal audit offices will have the capability to perform security management audits and analysis centrally across platforms and verify progress in security management protection via software reporting capability. This product will significantly decrease the staff time required for manual auditing and IT security investigations. It will provide enterprise monitoring capabilities for assessment that provide a safeguard that improves reliability and reduces downtime. It will identify non-standard and non-secure systems that are a threat to the security of the infrastructure and County data. This solution addresses multiple regulations with minimum resources by implementing and measuring compliance through automated analysis.

3.6 HUMAN SERVICES

IT0002.6 Athletic Facilities Scheduling System (AFSS)

Project Description

The Department of Community and Recreation Services (CRS) schedules community use of public athletic facilities (fields and gymnasiums), including both County and Fairfax County Public Schools (FCPS) sites. Scheduled athletic community use takes place during weekday evenings and on weekends. CRS currently uses the Athletic Facility Scheduling System (AFSS) to input facility requests, schedule events, issue permits and produce facility schedules in accordance with facility use policies while FCPS uses a separate product (FSDirect) as a facility management tool to input schedules.

The AFSS system allows the designated sports organization representatives to: submit Community Use applications via the Internet; receive notification of application processing status; view/print their organization's permit on line; submit team rosters and practice and game schedules; make payments online (Credit Card acceptance). Guest users (general public) will have the ability to submit applications online. This project will automate a tedious and cumbersome paper process and reduce the number of forms that need to be completed and submitted each season. In addition, by accepting online payments, this phase of AFSS will enhance revenue collection procedures.

Project Goals

The goal of the project is to maximize technology to reduce the burden on both applicants (Fairfax County residents and others) and staff when requesting community use of a public athletic facility. The entire work flow process for scheduling community use of public athletic facilities will be streamlined. Redundant keying of information will be eliminated. Currently staffs receive hard copy application information and have to both review it to identify any changes and key the changes into the AFSS system. Phase II of this project will pull up the requests, verify that the information is consistent with data standards, and approve the automated transfer of the submitted data to the AFSS Request Module.

Progress to Date

This AFSS project is scheduled for full implementation for Summer 2007. To increase efficiencies, the possibility of both CRS and FCPS migrating to the same system was explored. It was determined that the requirements of the two organizations and two systems were significantly different and therefore, it would not be possible to meet

all needs within a single system. However, an interface between the two systems was a viable option that would enable the County and FCPS to share specialized data that are common between the two systems. In addition, it would increase scheduling efficiencies, eliminate the duplication of data entry, reduce scheduling conflicts, and enhance the quality of the athletic facility use experience for the residents of Fairfax County.

Milestones

- ◆ Detailed requirements analysis, July 2004
- ◆ Logical and physical design, October 2004
- ◆ Development of the software for on-line application processing, October 2004
- ◆ Development of the software for roster submission, October 2004
- ◆ Testing of the software for on-line application processing, May 2006
- ◆ Testing of the software for roster submission, May 2006
- ◆ Development of the software for payment acceptance May 2006
- ◆ Testing of the software for payment acceptance, July 2006
- ◆ Development of the software for customer identification and authentication November 2006
- ◆ Testing of the software for customer identification and authentication December 2006
- ◆ Acceptance Testing of combined modules and their integration with AFSS , April 2007
- ◆ Training of staff on Phase II modules, April 2007
- ◆ Sign-off for the on-line application processing, roster submission system, delivery of code, July 2007
- ◆ Commence with interface project, September 2007

Project Budget

Funding of \$102,000 for additional contractor services was provided in FY 2005 to complete on-line registration requirements. Additional funding was acquired in 2006 to complete the payment acceptance and customer identification and authentication modules. FY 2008 funding of \$75,000 is provided to allow CRS and FCPS to partner on this initiative.

Return on Investment (ROI)

Revenues will be enhanced by offering the public the capability to accept online rosters and payments. Response from the athletic community indicates tremendous acceptance of and satisfaction with AFSS and the permits that they receive. The customer using online application processing will benefit from a faster turn-around time to provide space allocation information, as well as increased

communication with staff regarding the status of their application. In addition, many applications currently submitted are poorly handwritten and incomplete. This results in inaccurate data due to misinterpretation of handwriting, or returning the application package to the customer for completion. The consequences often are late submissions and very dissatisfied customers.

IT0002.7 Homeless Information System

Project Description

This project provides funding to several County Human Services agencies for implementing an information system to track and monitor the homeless population served by the County and the local Continuum of Care (CoC). The FY 2001 appropriation bill for the Federal Department of Housing and Urban Development (HUD) requires that all local jurisdictions' programs receiving HUD grant funds develop a database to store specific data on homeless persons receiving services. This new mandate requires these programs to track and report patterns of use of assistance funded under the McKinney-Vento Act, to provide HUD (at least annually) unduplicated counts of homeless individuals using assistance programs, and to provide data that analyzes the use and effectiveness of those programs. These data will be used by HUD to prepare the Annual Homeless Assessment Report to Congress, and for client-level reporting on client characteristics and outcomes through the Annual Progress Report. Local jurisdictions were required to begin reporting these data to HUD beginning October 2003.

The proposed system includes a single database with Internet access for participating CoC organizations to enter information on client demographics, intake assessment and needs, services provided, and service outcomes. Through this system, client and summary-level data can be prepared for HUD reports to be in compliance with the October 2003 mandate. Since the appropriation bill was passed, HUD has profiled several commercial off-the-shelf (COTS) applications that include this functionality. The Human Services Leadership Team has secured one of these COTS solutions for this project through an evaluation of local CoC needs and subsequent evaluation of the COTS options available. Through oversight from the Human Services Leadership Team and the Homeless Oversight Committee, the project team also considered solutions selected for other localities in the metropolitan area, and identified opportunities for increased coordination across local jurisdictions.

Project Goals

Fairfax County is supported by several active community-based organizations that partner with County Human Services agencies to provide support to the homeless population. This network of organizations works together through committees, partnerships, and other special interest councils. This project will allow the County to comply with the mandates prescribed by HUD and further enhance these relationships through facilitating sharing of data, and providing a single reporting mechanism to HUD. In addition, these groups expect to improve services, and location of services, based on the information that a shared database will provide.

Progress to Date

Contract was awarded in FY 2003 and the project began in August 2003. In January 2004, four pilot CoC organizations were trained and began using the new system for live data processing. To date, all HUD grantees have been trained and are in various stages of entering and reporting data on services for the homeless. Project anticipated to be completed by June 2007.

Milestones

- ◆ 4 Pilot organizations began using the system, January 2004
- ◆ 6 additional organizations began using the system, October 2004
- ◆ 3 additional organizations began using the system, November 2005 – April 2006
- ◆ 3 remaining HUD grantees trained, October 2006 – January 2007
- ◆ Project roll out complete; maintenance and support phase begins, June 2007.

Project Budget

Funding in the amount of \$185,500 was allocated in FY 2003 for the purchase of the hardware, software COTS

package, and contractor services for implementation. In house staff was used to prepare requirements, evaluate COTS packages, implement the system, and provide user support. No additional funds are required.

Return on Investment (ROI)

This project allows the County and the local CoC to comply with the October 2003 mandated deadline, and allows County homeless programs to retain current levels of grant funding. The potential for expansion of grant funding is enhanced due to improved program reporting and

administration. In addition to meeting the federal mandate, participating CoC organizations will benefit from on-going tracking and monitoring of the homeless population through increased coordination and information flow among programs to improve service delivery, more efficient tracking of service delivery and measuring program effectiveness, improved information to identify service gaps, and to inform program design and policy decisions. Improved program data and coordination will translate into more effective use of federal, state, local, and private funds to support the homeless population in Fairfax County.

IT0002.9 Human Services Cost Allocation System

Project Description

This project will provide a custom developed system to replace the existing Human Services Payroll Reports (PAYR) system, which automates the allocation of Department of Family Services' and Department of Administration for Human Services' personnel costs to various Federal and State programs. The Cost Allocation Management System (CAMS) serves as the basis for claiming Federal and State reimbursement for more than \$40 million dollars of eligible social services expenditures. The primary service needs addressed by this project are continued compliance with approved Federal and State cost allocation methodologies, as well as increasing requirements for data reporting, analysis, collection, storage, and security.

Project Goals

The new system will address limitations in the current desktop database system including issues such as allocating a position to only one Federal or State program, when some positions support multiple programs; the inability to analyze position changes which would allow agencies to reallocate positions and associated costs to maximize various revenue options; and the inability to track historical data of how positions had been previously allocated for audit requirements.

Progress to Date

This core portion of the project has completed the requirements definition and design phases and is currently in development; however, a mandatory interface to the state has been added to the scope of the project. Due to the additional interface requirements, the project completion date has been extended to October 2007 and additional funding has been provided by the sponsoring agency.

Milestones

- ◆ Complete requirements definition March 2007
- ◆ Complete design, April 2007
- ◆ Complete programming, testing, and implementation, August 2007

Project Budget

FY 2006 initial project funding of \$60,000 was provided for implementation of a custom developed system to replace the existing Human Services Payroll Reports (PAYR) system, which automates the allocation of Department of Family Services' and Department of Administration for Human Services' personnel costs to various Federal and State programs; however, a state-mandated interface was inserted into the project with a state-required deadline of April 2007. Additional funds of \$130,000.00 were provided by the sponsoring agency to cover the costs of the interface development and resulting additional work required to incorporate it into CAMS.

Return on Investment (ROI)

Cost savings will be realized through a reduction in staff hours spent reconciling data through manual processes to prepare claims for reimbursement and meet audit requirements. The new system will mitigate the potential for future liability associated with claiming Federal and State reimbursement for more than \$40 million in expenditures due to the current system's inability to meet increasing Federal and State audit requirements. The ability to easily analyze data will allow users to identify alternative means for allocating costs and increasing reimbursement. Personnel and payroll data will be stored in a more stable, secure environment. There is potential for application across other agencies which claim reimbursement through alternative mechanisms. This potential will be explored during the functional analysis phase of the project.

IT001 1.8 Document Management & Imaging — DFS

Project Description

This project will support the transition within the Department of Family Services (DFS) from manual process to file, store and access records using document management and imaging technology. This project will use the enterprise electronic records management platform technology to achieve its goals, with business-specific components planned for Family Self-Sufficiency and Children, Youth, and Families programs.

Project Goals

Goals of the project are: a) to provide a reliable and secure system for cataloging, archival and retrieval of sensitive Human Services documents in fulfilling case management needs of County residents, and, b) improve response times for client inquiries of case records. In addition, the project will allow for the management and preservation of DFS records in accordance with State and Federal mandates, and avoid non-compliance issues associated with the degradation, damage or loss of paper files.

Progress to Date

This is a multi-year and multi-phased project. As with similar initiatives, the phases will be delivered in smaller, modular components as each component and the necessary infrastructure is ready. By implementing smaller parts instead of the entire phase at a time, 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 began requirements definition. FSS functional requirements and a prototype design were completed in FY 2007. Also in FY 2007, requirements definition began for Children, Youth, and Families, for the integration of the Commonwealth's SPIDeR system, and for the replacement of a data feed to a key financial systems.

Milestones

- ◆ *Design, develop, and test Family Self Sufficiency module: FY 2007 – 2008*
- ◆ *Deliver scanning capability to support FSS: FY 2008 – 2009*
- ◆ *Design, develop, and test Children, Youth, and Family Module: FY 2008*
- ◆ *Scanning upgrade to support CYF: FY 2008*
- ◆ *System Integrations with SPIDeR, FAMIS: FY 2008*

Project Budget

In FY 2005, funding of \$1,179,567 was provided to automate the DFS record/document management processes. No additional funding was provided in FY 2006 and FY 2007. Additional funding is anticipated to support future phases to enable the use of document management technology within the Department of Family Services (DFS).

Return on Investment (ROI)

Cost savings will be realized as a result of improved processing of paper documents, improved use of staff time, and improved error rates related to more effective, efficient document management. These funded initiatives of the imaging and workflow project are expected to increase the security of records, protecting them from unauthorized access; promote telework; reduce error rates as much of the manual data entry will be eliminated; and reduce the space requirements for maintaining paper copies of documents.

IT0011.10 Document Management & Imaging — OFC

Project Description

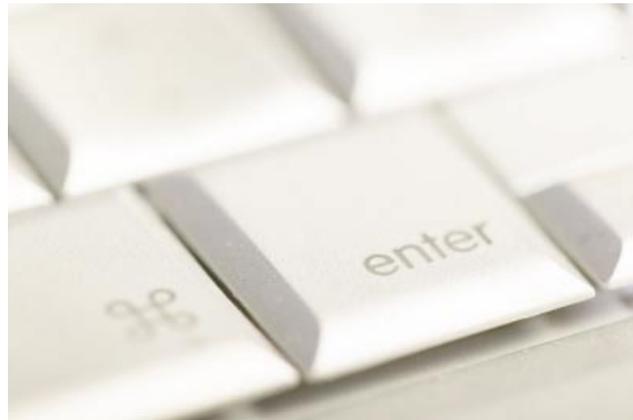
This project will provide for the second phase of the Office for Children's (OFC) Electronic Records Management system. In FY 2007, the project transitioned Community Education and Provider Services, and the Child Care Assistance and Referral program to document imaging technology. The second phase of this project will include the Head Start and School Age Child Care program. Head Start maintains files for over 500 children and families in multiple locations that with this technology could more efficiently be reviewed electronically by field staff and auditors; and the School-Age Child Care Program provides direct services to over 14,000 children in 134 centers. This transition to an electronic system will ensure that citizens receive the most efficient, highest quality of service across OFC program divisions, and that all legal mandates are satisfied regarding record archival and citizen 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

Community Education and Providers Services and the Child Care Assistance and Referral program are currently in production with this technology. SACC Registration acceptance testing and training is projected to be completed by Spring 2007. Head Start and SACC licensing are currently in analysis phase. SACC programming and OFCIS integration is planned for phase 3.



Milestones

- ◆ *Deployment of SACC Registration Module, Spring 2007 (Completes Phase 1)*
- ◆ *Complete Requirements for Head Start and SACC Licensing Modules, Fall 2007*
- ◆ *Design, development, and testing of HS and SACC Licensing Modules, Fall 2007*
- ◆ *Training/deployment for HS and SACC Licensing Modules, Winter 2008*
- ◆ *Phase 3 planning, Winter 2008*

Project Budget

No additional funding is provided in FY 2008. Additional funding is anticipated for the third phase of the Office for Children's (OFC) electronic records management system.

Return on Investment (ROI)

These funded initiatives of the imaging and workflow project are expected to increase the security of records, protecting them from unauthorized access; reduce staff time required to retrieve and re-file documents; reduce processing time as many of the workflow efforts will streamline the reviews required; provide a viable, accurate document system for old and one-of-a-kind documents; promote telework; reduce error rates as much of the manual data entry will be eliminated; and reduce the space requirements for maintaining paper copies of documents.

IT0015 Health Department Management Information System

Project Description

This project supports the information management needs of the Health Department. Recently the fifteen-year old Fairfax County Health Department's Health Management Information System (HMIS) was replaced with a newer system (AVATAR), and required interfaces to link it to other health systems so as to provide a comprehensive set of services to the public was completed. The Health Department currently uses the AVATAR Patient Management System as the central database for collecting and maintaining patient information.

Project Goals

The backup location will allow for continued operations in the event of a disaster or an emergency. In addition, the operating system, database, and application software will be upgraded to current specifications, and security technology will be enhanced to ensure continued data protection.

Progress to Date

The project was divided into four phases. Phase I represent core functionality for patient care and financial services and was implemented in May 2005. The second phase, implemented in December 2006, expanded patient care services by implementing three additional health care clinics serving uninsured and underinsured residents. The third phase will provide electronic billing capabilities and is expected to be completed by Summer 2007. The fourth and final phase will provide additional support to the Adult Day Health Centers and is estimated to be completed in Winter 2007. Software upgrades are planned for August 2007.

Milestones

- ◆ *Initial CAP interface specifications, October 2002*
- ◆ *HMIS Programming completed, March 2003*
- ◆ *Conversion document completed, March 2003*
- ◆ *Final CAP interface specifications, November 2006*
- ◆ *Programming for CAP interface, November 2006*
- ◆ *Testing, training scheduled, November – December 2006*
- ◆ *Implementation of AVATAR core functionality, May 2005*
- ◆ *Expanded patient care functionality and CAP interface, December 2006*
- ◆ *Full maintenance mode, January 2007*

Project Budget

In FY 2008, funding of \$280,785 is included to provide for a backup location for the AVATAR system's hardware and software. Funding will be used to procure additional hardware, such as servers, for the application.

Return on Investment (ROI)

The availability of the AVATAR system will be critical in the case of a natural or man-made emergency event that would compromise County network technology. If a catastrophic event were to occur, a backup facility will help to ensure that the Health Department's central systems remain operational and that confidential patient information is secured.



IT0054 SYNAPS Expansion

Project Description

SYNAPS was developed for the Fairfax-Falls Church Community Services Board (CSB) to improve client tracking and client and third-party billing, enhance client demographic and staff productivity data, and provide for the opportunity to comply with the Health Insurance Portability and Accountability Act (HIPAA) of 1996.

Project Goals

The enhanced system will be upgraded to current technology specifications and reflect improved security technology to ensure continued data protection.

Progress to Date

New expansion effort in FY 2008.

Project Budget

FY 2008 funding of \$500,000 will provide for the replacement of application servers and introduction of a more reliable environment to meet expected growth and increased utilization as the single Electronic Health Record for the CSB, with a maximum user population of 800 users.

Return on Investment (ROI)

The enhanced system will provide greater system reliability and end user satisfaction upon implementation. The final phase will also produce a more reliable and less labor intensive application.

IT0059 Child Care Technology

Project Description

The Child Care Management system determines client eligibility, tracks child enrollments, and processes approximately \$3 million per month in provider payments for the Child Care Assistance Program. This application processes over 2,500 home child care facility permits for 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 providers and interfaces with **FAMIS**. This Child Care Management System is under a maintenance contract with Saber.

The current Child Care Management System software runs Oracle Forms 6 and Oracle 9i database server on a Windows 2000 platform. Oracle no longer provides support for Forms 6, and no longer provides support for 9i on a Windows 2000 platform. This project would upgrade the software for the Child Care Management system to Windows 2003 and Oracle 10g. The cost of this project would include Saber coding oracle forms and reports for the upgrade and the installation of Windows 2003 and Oracle 10g. This upgrade must be performed by Saber under the terms of the maintenance agreement.

Project Goals

This project will allow OFC technology to be in compliance with DIT requirements. It will address security concerns with Oracle 9i. Oracle 10g will provide a more secure database. OFC depends on this database to issue permits and support the Child Care Assistance and Referral program. This includes the online search for child care on the public

web. The major goal of this project is to provide up-to-date, secure technology.

Progress to Date

This is a new project in FY 2008

Milestones

- ◆ Sign-off on Approach Document
- ◆ Completion of Test and Production Environments
- ◆ Completion of System Test
- ◆ Completion of UAT
- ◆ Rollout

Project Budget

The FY 2008 funding of \$194,165 is provided for the necessary software, hardware and consultant services to fully implement this project.

Return on Investment (ROI)

This project will ensure the Child Care Management is operating on supported technology. This system is used to support the Office for Children's business in permitting family care providers and the Child Care Assistance and Referral program. Without this system the County could not issue permits to family day care providers or process over 3 million dollars per month in payments to providers and centers. Upgrading this system would avoid any future cost associated with a non supported system.

IT0069 Integrated Housing Management System

Project Description

Housing and Community Development (HCD) will soon be deploying a new comprehensive housing management system, a result of a redesign effort consolidating 17 programs, six computer systems, six separate databases, and a host of manual processes. This effort will streamline requirements for HCD's compliance with U.S. Housing and Urban Development's (HUD) reporting structure, incorporate all HCD partnership program financial information on one technology platform and enable for project-based reporting requirements for all Public Housing Authorities. Much of the data for the new system can be automatically extracted from the existing County financial and procurement system, eliminating manually entering data which can result in the reporting of inaccurate data or the omission of pertinent financial data.

Project Goals

Overall project goal is to automatically extract information from the existing corporate enterprise systems, eliminating the current manual process of entering data which often results in the reporting of inaccurate data or the omission of pertinent financial data.

Progress to Date

Tier Corporation has completed the initial business review and has proposed a Statement of Work for two phases. Phase I is completed and Phase II is commencing in FY 2008. The initial HUD mandated modifications were completed July 2007 with the second phase to commence in FY 2008.

Milestones

- ◆ Signed Statement of Work, January 2007
- ◆ Requirements' Analysis , March 2007
- ◆ First integration Completed — July 2007
- ◆ Requirements Analysis Phase II , September 2007
- ◆ Second Integration Code commence November 2007
- ◆ Testing Second Integration, February 2008
- ◆ Second Integration Complete, April 2008

Project Budget

FY 2006 funding of \$160,000 was provided to develop an interface between the financial module of the HCD management system and the County's financial and procurement systems. Additional funding of \$222,500 was

provided in FY '07 to complete the interface and ensure compliance with HUD mandates.

Return on Investment (ROI)

The savings for HCD and the County for this project are related to staff time. Currently, there are several HCD Finance Department staff who must dual-enter financial information. Cost savings will be realized by the decrease in compensatory pay and overtime. Clients will receive better customer service when they request information about payments they have made or Housing Assistance payments they are to receive. This project will allow Housing Management staff access to up-to-date information remotely to improve customer service. In addition, landlords and housing assistance clients will be able to access this information through the Web. Payments will be processed as they are needed, instead of the weekly batch processing which is currently being done. Landlords receiving rental payments and clients receiving utility assistance will receive their payments in a timely manner. Capital project expenditures will be able to be monitored more closely by project managers, potentially decreasing the risk of overages. Each housing project and program's financial situation will be able to be monitored individually, allowing Housing Management to make more informed decisions regarding performances.



IT0073 Urban Development Information System (UDIS)

Project Description

The purpose of the project is to replace the obsolete Urban Development Information System (UDIS) and create a cross-functional data repository to better harness the value of the land parcel information the County maintains and making that information more accessible across County agencies. This information includes population and housing unit estimates and forecasts which are used by the County to help determine services and service provision levels, respond to state and federal reporting requirements, and respond to regional initiatives such as transportation planning, air quality modeling, and other programs of regional significance.

UDIS is used to process spatial information about land parcels from a number of non-integrated sources and produce housing estimates and forecasts, population estimates and forecasts, market value estimates for owned housing, non-residential gross floor area estimates and current and planned land use summaries. Design of the new UDIS will better integrate data across multiple County agencies and systems, and will provide for increased functionality for using the data more efficiently including a more granular analysis of parcel data.

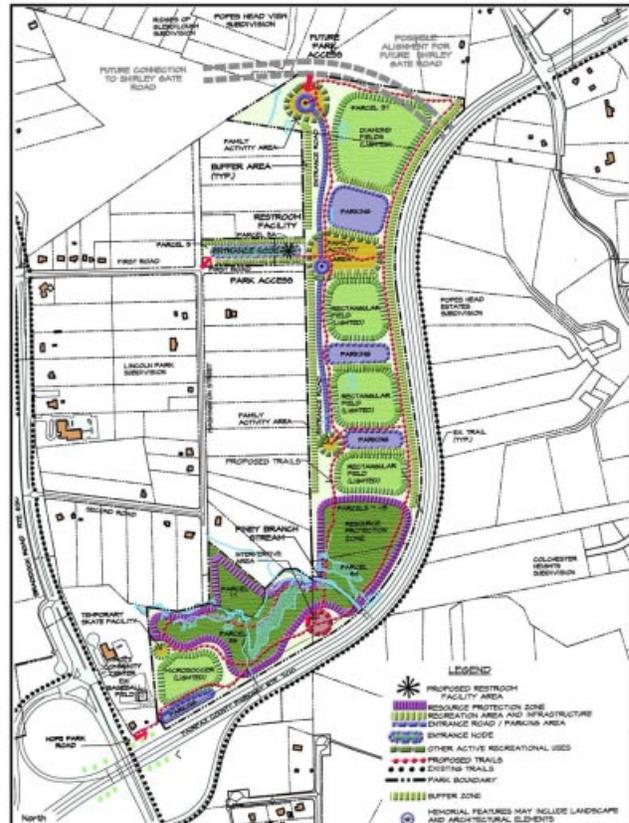
The existing UDIS, an amalgamation of interfaces and reports, had forced County staff to maintain and write software patches for programs that no longer work and supplement missing information through manual intervention. It has exceeded its useful life and is very labor and time intensive to maintain. The new system will have a modern process that captures data regardless of system or format, and will use the County's GIS system as a data foundation.

Progress to Date

- Preliminary analysis, design, and database foundation structure completed July 2006
- Detailed requirements analysis, design, and coding completed May 2007
- Testing and implementation of application to be completed July 2007
- Report development to be completed September 2007

Project Budget

FY 2007 funding of \$820,000 will complete the development of the system and automate report generation, which currently requires manual integration of data.



Return on Investment (ROI)

This updated system satisfies an ongoing requirement to analyze and provide demographic analysis to the Council of Governments and County agencies. The primary customer for this application is the Research, Analysis, and Project Services branch of the Department of Systems Management for Human Services. The Demographers in this branch have the responsibility of preparing detailed population forecasts for submission to the Council of Governments and the federal government. The current UDIS system will be unable to function when the mainframe databases it currently uses are off-line. A more user-friendly and accessible application would also be utilized by other agencies that require demographic analyses and projections, including the Department of Planning and Zoning, the Fairfax County Public Schools, and the Police Department.

IT0075 Participant Registration System

Project Description

This project will allow the Department of Community and Recreation Services (CRS) to implement a centralized, web-based participant registration and tracking system at all community centers, senior centers, and teen centers. The current manual and outdated method of registering and tracking participants leads to inconsistent data reporting, participant confusion and complaints, and programmatic disruption. Implementation of a centralized system will significantly address these issues. Under the planned system, participants will be issued identification cards with bar codes that they will scan upon entrance to any CRS center. This will enable staff to verify program/center eligibility and track participant attendance at both the center and the individual activities offered at the facility. The system will also interface with existing financial systems in order to manage program and related fees. CRS will be able to use the data recorded in the system to meet state and local reporting requirements, and to assist in program development and strategic planning. The system will also ensure the security and confidentiality of participant information.

Project Goals

Project goals aim to implement standardized data collection on participants for all centers, ease the registration process for participants who use CRS centers more than once or at more than one location, provide the ability to sort multiple data fields and develop reports for use in program development, strategic planning and improved customer service for citizens using CRS centers. In addition, the enhanced system will provide an interface with existing county financial systems.

Progress to Date

CRS is in the process of finalizing the business and system requirements for this project. It is anticipated that an RFP will be issued during the summer of 2007 and a contract award is anticipated for the fall of 2007.

Milestones

- ◆ *Finalize requirements analysis, May 2007*
- ◆ *Issue Request for Proposals (RFP), June 2007*
- ◆ *Review proposals, August 2007*
- ◆ *Sign contract, September 2007*
- ◆ *Vendor designs/customizes application, October 2007 — January 2008*
- ◆ *County purchases necessary hardware (servers, photo/scanning equipment), October – December 2007*
- ◆ *Convert existing data into new system, January 2008 – March 2008*
- ◆ *User acceptance testing, February 2008*
- ◆ *User training, March 2008*
- ◆ *Pilot system at a limited number of centers, April 2008*
- ◆ *Full application deployment, May 2007, June 2008*

Project Budget

FY 2007 funding of \$300,000 is provided. No additional funding is requested for FY 2008.

Return on Investment (ROI)

This effort will improve customer service and efficiency, ensure accurate data reporting, and improve data security. This project will significantly reduce the burdensome paper registration process that currently exists for the public. Participants will no longer have to wait in lines to sign paper attendance sheets. The centralized information will provide for better and more accurate data reporting and will ensure that confidential participant data is protected. Additionally, a reduction in the staff time required to process registrations and compile data for reporting purposes is expected.

IT0076 Interactive Web Intake Program Enhancements

Project Description

This project provides support for the Interactive Web Intake program at the Department of Housing and Community Development (HCD). In March 2004, the HCD launched a new Web application giving clients access to services on a 24/7 basis. Currently, HCD collects only enough information through the Web to place its applicants on appropriate waiting lists. There is no capability for applicants to update information, so the process reverts back to filling out dozens of forms and requires time consuming data entry. Furthermore, participants must complete paper-based, annual re-certification packets, including income verification authorizations. FY 2007 funding of \$130,000 is provided to enhance the interactive Web application, including the opportunity to apply online in multiple languages.

Progress to Date

Negotiations with selected vendor are on-going. Project plan and statement of work being finalized.

Milestones

- ◆ Contract award, April 2007
- ◆ Requirements document completed, July 2007
- ◆ Initial coding to commence, September 2007

Project Budget

FY 2007 funding of \$130,000 was recommended for this effort.

Return on Investment (ROI)

By engaging the applicants in data entry, cost savings will be realized through reduced call support, reduced front counter engagements, reduced copying costs, and reduced paper storage and archiving. HCD anticipates that the savings will reduce staffing needs by one full-time SYE in its application center. In addition, the web intake program will allow HCD to streamline its waiting lists and be able to offer rental properties to applicants that are more suited for the available units. The reduced turn-around time will minimize the time that rental units are vacant, increase overall revenue, and enable property managers to maximize resources.

IT0011.15 Housing Management Document Imaging/Archiving

Project Description

This project allows Housing & Community Development (HCD) to join the structured enterprise approach being implemented across the county for the development of imaging and workflow capabilities. HCD serves over 10,000 clients each year, owns or manages nearly 3,000 housing units, financially assists an additional 3,100 properties currently in its portfolio as well as thousands in the past, and manages \$155 million of operating and capital programs annually. Due to the complex work of HCD, the number of entities it must report to (including the Fairfax County Redevelopment and Housing Authority, non-profits, federal entities, etc.), and the resulting number of reporting requirements and timelines HCD must comply with, the volume of paper copies and records needing to be kept makes HCD a suitable candidate for an imaging and workflow solution that will result in improved efficiency, security, and customer service.

Project Goals

Project will provide increased security and integrity of HCD 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

New project in FY 2008.

Project Budget

FY 2008 funding of \$125,000 is included to complete a requirements analysis for the Department of Housing and Community Development (HCD) to improve and augment its housing management and financial programs.

Return on Investment (ROI)

Document imaging and workflow projects are expected to increase the security of records, protecting them from unauthorized access; reduce staff time required to retrieve and re-file documents; reduce processing time as many of the workflow efforts will streamline the reviews required; provide a viable, accurate document system for old and one-of-a-kind documents; promote telework; reduce error rates as much of the manual data entry will be eliminated; and reduce the space requirements for maintaining paper copies of documents.

IT0081 Housing Management Software Upgrade

Project Description

Upgrade existing Department of Housing and Community and Development (HCD) software used for management of its portfolio of properties and for financial reporting. The upgraded software will be a full-featured, financial accounting package that includes management and compliance tools for all federally-funded housing programs, as well as for commercial and tax credit properties.

Project Goals

Project will support Housing and Urban Development (HUD) compliance through use of a single, integrated application

Progress to Date

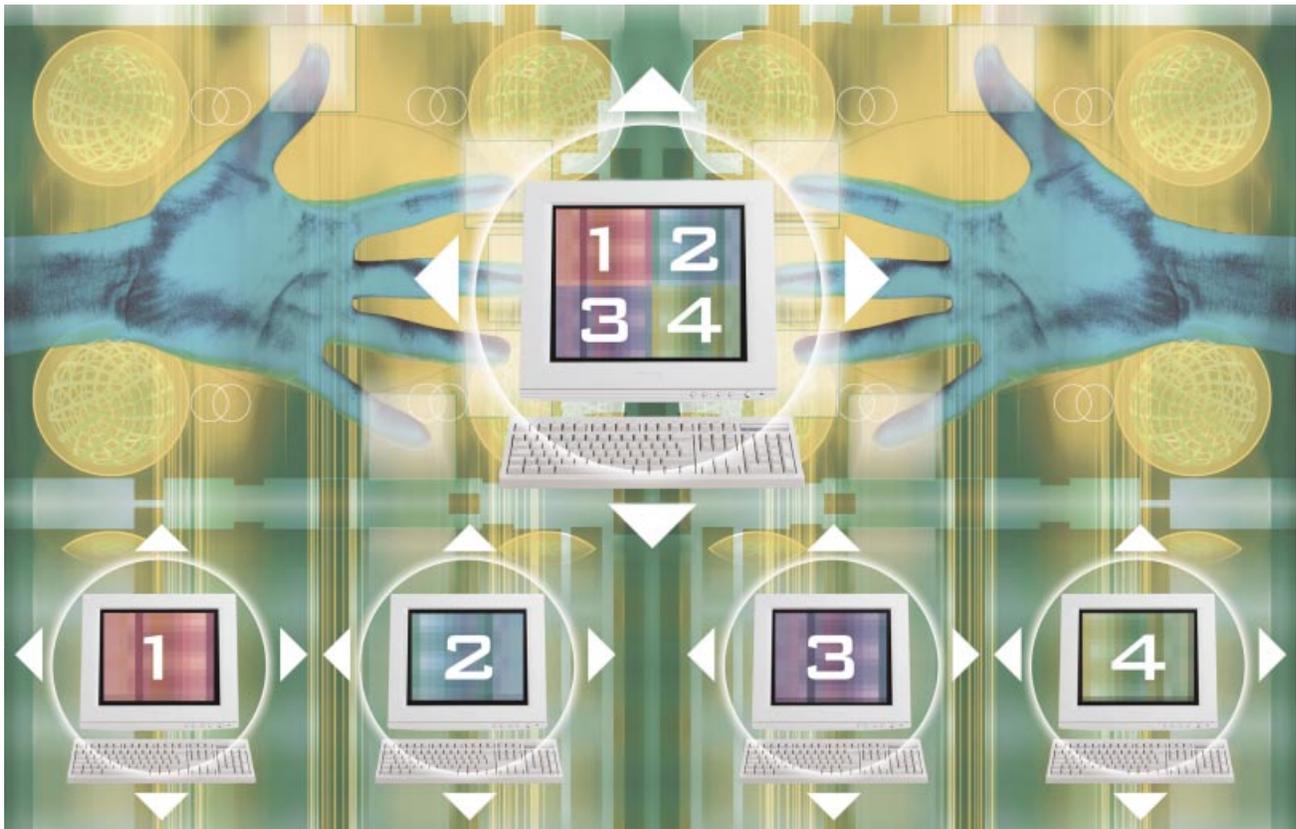
New project in FY 2008.

Project Budget

FY 2008 funding of \$125,000 is provided to upgrade existing Department of Housing and Community and Development (HCD) software used for management of its portfolio of properties and for financial reporting.

Return on Investment (ROI)

The upgrade will promote full Housing and Urban Development (HUD) compliance through use of a single, integrated application. In addition, the upgraded version will enhance security and audit tracking, as well as improve Web access. Furthermore, this upgrade will align HCD with current County technology development standards, and it will support improved HCD business processes among caseworkers.



3.7 PLANNING AND DEVELOPMENT

IT0011.12 Comprehensive Plan/Zoning Ordinance Automated Workflow

Project Description

The Comprehensive Plan is a 5-volume document comprised of over 2000 pages of text and more than 1000 graphics in the form of maps. The Plan text currently exists as several Microsoft Word files. The graphics are stored as 220 dpi bitmap files which are inserted into the Word files. The Word documents are currently considered unstable due to several generations of conversions from legacy word processing applications. The Plan is amended multiple times during the year as amendments are approved by the Board of Supervisors and the Planning Commission. A Document Management System (DMS) will provide an audit trail for these amendments that is necessary to conduct research on Plan history to determine when a particular amendment was adopted. This audit trail will make research more efficient. The Zoning Ordinance exists as several Word documents for a total of approximately 1500 pages of text and seven pages of graphics. Similar to the Comprehensive Plan, the Zoning Ordinance is updated on a regular basis as amendments are adopted by the Board of Supervisors and the Planning Commission.

Project Goals

The workflow component of a Document Management System will save staff time and reduce paper by allowing for an electronic circulation of draft staff reports, amendments, memos, letters, and other staff documents for review, editing and approval. DPZ staff work results in the production of many types of documents such as paper copies for publication or distribution to the public, as well as Web pages and other electronic products. A DMS will increase efficiency in the production of staff work. It would also improve the speed at which staff can make updates to the Plan available. Currently the Plan exists on the Web as approximately 40 large PDF documents (most from 2 to 5MB in size). The Zoning Ordinance exists on the Web as approximately 30 PDF documents. A hybrid Web Content/Document Management System will offer improvement in presentation, search functionality, and performance for both the Comprehensive Plan and Zoning Ordinance on the Web.

Progress to Date

Staff has preparing preliminary process flows for both the Comprehensive Plan review and amendment process and the Zoning Ordinance amendment process.

Milestones

- ◆ Conduct discussions with contractor to document the requirements for security, user interface and navigation, search, versioning and infrastructure, May 2007
- ◆ Prepare design documentation to address application configuration and customization items that have been identified during the requirements analysis phase, August 2007
- ◆ Provide a design for the technical infrastructure required to support this application, October 2007
- ◆ Conduct required application configurations and/or customizations, December 2007
- ◆ Facilitate the County's testing of the solution within the County's environment, January 2008
- ◆ Train DPZ and other relevant County staff, March 2008
- ◆ Transition of application from a test environment into production, June 2008

Project Budget

FY 2006 funding in the amount of \$244,200 is included. No additional funding was requested for FY 2007 and FY 2008.

Return on Investment (ROI)

A Document Management System (DMS) will save staff time and reduce paper by allowing for an electronic circulation of draft staff reports, amendments, memos, letters, and other staff documents for review, editing and approval. DPZ staff work results in the production of many types of documents such as paper copies for publication or distribution to the public, as well as Web pages and other electronic products. A DMS will increase efficiency in staff work. It would also improve the speed at which staff can make updates to the Plan available. The current system used for management of the Comprehensive Plan (the Plan) and Zoning Ordinance are outdated and do not take advantage of the level of technology used in many "e-Government" organizations today. A move to a hybrid Web content/Document Management System will provide Fairfax County with a state-of-the-art solution for presentation, management, storage, retrieval and archiving for the Plan and the Zoning Ordinance both in-house and on the Web. The acquisition of a hybrid Document Management System (DMS) is in line with the Board's desire to become a paperless e-Government entity.

IT0055 Fairfax Inspections Database Online (FIDO)

Project Description

The Fairfax Inspections Database Online (FIDO) project replaces the legacy mainframe Inspection Services Information System (ISIS) in DPWES and multiple stand alone databases in other agencies. This new system will provide a foundation for future e-government applications related to land development, building construction, fire inspection services, environmental health services, and complaints management. This multi-agency project enables data sharing between agencies and enhances one-stop-shopping for the customer.

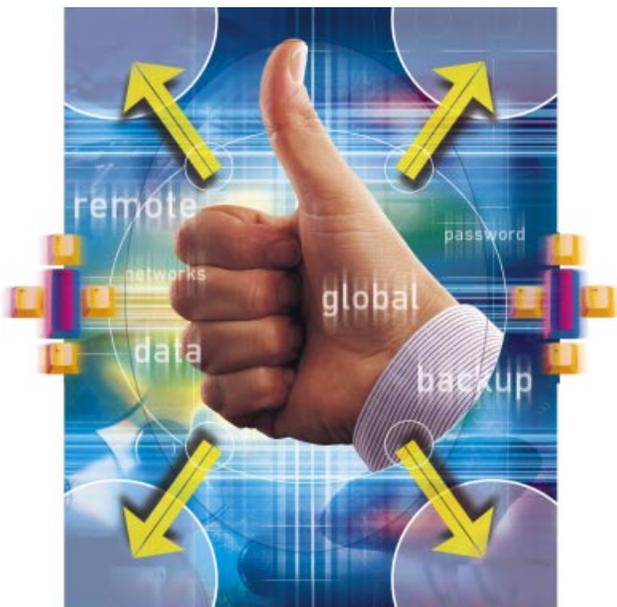
The enhanced cross-agency information flow provided by the new system will significantly simplify the permitting process by streamlining multi-agency review and approval processes. The new system will also enable staff to develop a focus and orientation towards individual construction projects as opposed to maintaining a focus on the permit process itself.

Project Goals

The goal of the FIDO Project is to provide a single database solution that meets the needs of the involved agencies in shared and similar processes. The new FIDO system was integrated with numerous systems (Land Development System, Integrated Assessment System, Master Address Repository System, GIS) to provide a more seamless process throughout the lifecycle of construction projects. Other goals for this project include enhancing customer service by streamlining the permitting process, reducing the timeframes for permit issuance, plan review, and inspections, and allowing the customers and County agencies more direct access to the permitting process and data.

Progress to Date

The initial phases of the Fairfax Inspections Database Online (FIDO) project have been successfully implemented and are in production. The new system has replaced two legacy complaint tracking systems used by the Zoning Enforcement Branch of DPZ, and the Community Health



Safety Section of the Health Department. FIDO is currently being used by these agencies to investigate complaints regarding alleged violations of County's Zoning, Noise, and Health and Safety Menace Ordinances.

The contractor licensing phase of the FIDO project was successfully completed and has been in production since 2004. The licensing module features system interfaces with both the State's Contractor Licensing database and the Fairfax County Business License database; allowing the state mandated license verification process to

be streamlined for permit issuance. The FIDO licensing module also replaced antiquated contractor licensing systems used by DPWES and the Health Department for the issuance of local licenses.

FIDO's Permits Module replaced the mainframe-based ISIS system in March 2006 and was expanded to support the issuance of use permits and licenses at FRD in September '06. Follow-up tasks focusing on web based permit application submission capabilities for customers, and additional FRD permit capabilities are in progress.

The project continues in FY 2008. The deliverables include the implementation of the Permits Module at the Health Department's Environmental Health Division, and the expansion of the Complaints Module at the Department of Public Works and the Fire and Rescue Department. Web based complaint registration capabilities will be made available for customers of the aforementioned departments as well.

The development of wireless systems in FIDO agencies was temporarily delayed to assess the County's long-term strategy for wireless system deployments. Specifically, an enterprise development approach will be employed that many other applications can use to minimize the potential for Agency-specific solutions that require heterogeneous infrastructure investments with expensive out year maintenance costs. Therefore, DIT will develop an enterprise wireless strategy that will include a wireless platform that

can be easily expanded, and centrally managed. Benefits of the wireless enterprise strategy include opportunities to minimize infrastructure (and maintenance) costs while maximizing data integrity, security, and reliability.

Wireless systems for all FIDO agencies will be deployed under the new wireless enterprise platform.

Milestones

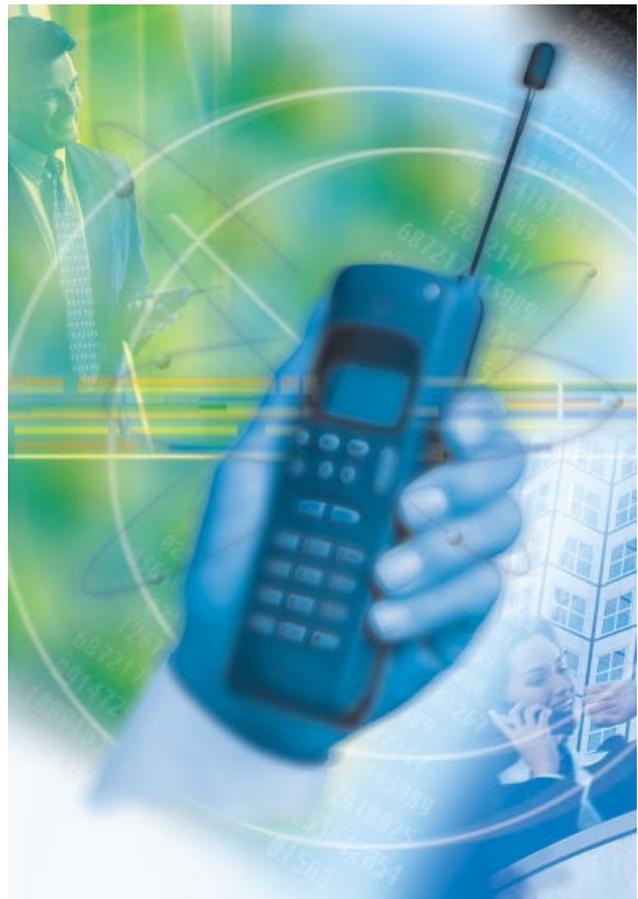
- ◆ *Implementation of DPZ Complaints Management System (Phase 1), September 2003*
- ◆ *Integration of FIDO with GIS, October 2003,*
- ◆ *Implementation of Contractor Licensing Module (Phase 2), January 2004*
- ◆ *Expansion of Complaints Management System — Health Department, September 2004*
- ◆ *Integration of the new system with the LDS database, December 2004*
- ◆ *Traditional ISIS replacement (Phase III), Permitting, Plan Review, inspections, March 2006*
- ◆ *Expansion of Permitting, Inspections and License Modules — FRD, September 2006*
- ◆ *Expansion of Complaints Management System — FRD and DPWES, Spring 2007*
- ◆ *Expansion of Permitting, Inspections Modules — health Department, Summer 2007*
- ◆ *Design and Installation of Dynamic PORTAL for Permits and Inspections is ongoing and will be implemented for each agency*

Project Budget

FY 2008 funding of \$351,000 will support the procurement of additional software licenses to provide FIDO inquiry access for several County agencies. This amount will also support extension of contract staff specialists involved implementing the FIDO system expansion work.

Return on Investment (ROI)

Savings will be realized through a streamlined system that will enable the development and construction industry to work more productively within the County and in turn enhance the tax revenue base. The development and construction industry will recognize significant cost reductions that are presently incurred due to construction delays and delays in occupancy or use of buildings. The County's revenue stream is also enhanced by increasing the speed in which commercial and residential buildings are processed through the system and brought to completion, i.e. the sooner buildings, homes and tenant spaces are completed, the sooner they become a source of revenue for the County. The development and construction process of the County will be perceived as being more business friendly and will attract additional businesses to bolster the tax base. It should also be noted, that the replacement of the ISIS system was necessary to create a platform for future e-permitting and e-government initiatives that may more directly enhance revenue (e.g. charges for access to data, charges for enhanced optional services, etc.).



IT0063 Facility Space Modernization

Project Description

This is a multi-phased project to upgrade the county's conference center (shared conference rooms in the Government Center) and meeting rooms in County buildings with technically advanced conference/meeting capabilities to allow users to have automated support for a variety of meeting purposes, and fully engage in collaborative events. This project removes deficiencies to facilitate effective and efficient group discussions by adding technology and streamlining the room preparation process. The largest rooms in the Conference Center will be outfitted with technical equipment. County agencies, boards, authorities, commissions, nonprofit organizations and civic associations will be able to conduct training, deliver presentations and hold more effective collaborative sessions, and eliminate the need for ad-hoc equipment set up and preparation. Audio/ visual equipment will be accessible, available and ready to use without needing staff set-up time. Customers will no longer need to provide their own projection or A\V equipment, or endure wait time while equipment is found and set up for them. The project will optimize use of County resources such as time, personnel and space to effectively and efficiently conduct County business. Additionally, the project will support Fairfax County's Telework Program by enabling participation in meetings from locations away from the workplace.

Project Goals

The mission and objectives of this project are to provide state of the art technology to allow customers to fully engage in collaborative events. The project will enable leaders and managers to utilize County resources such as time, personnel, and space to effectively and efficiently conduct County business and educate/train its employees. It is consistent with the mission of the County to provide comfortable/livable meeting spaces and to connect people and places. Additionally, the project will support Fairfax County's Telework Program by enabling participation in meetings from locations away from the workplace.

Progress to Date

The initial conference room modernization phase for conference rooms 9 & 10 were implemented and completed in FY 2005. The second phase, the upgrade of the remaining conference rooms was implemented in FY 2006 and was completed in May 2007. The third and final stage, which includes the installation of an electronic message board, will be completed September 2007.

Milestones

- ◆ Conference Rooms 232, 7, 8, Board of Supervisor, December 2006
- ◆ Conference Rooms 315C, 120C, 6 — April 2006
- ◆ Conference Rooms 2 and 3 — April 2007
- ◆ Electronic Message Board — September 2007

Project Budget

FY 2005 funding of \$100,000 provided the start-up required to allow Fairfax County conference center customers to fully engage in collaborative events. FY 2006 funding of \$99,208 from Fund 104 and \$100,000 from Fund 105 were provided for the second year of the project to upgrade and modernize existing government center conference rooms, equipping them with the latest technology. The remaining balance of Fund 104 and 105, \$58,205, will be applied to the purchase and installation of the digital message board.

Return on Investment (ROI)

This project will improve communication capabilities for internal and external meetings, additional augmentation for collaborative crisis management and emergency response, work force training and development activities in an effective and efficient manner, and provides flexibility for and visual equipment for Conference Center users. Cost savings will be gained by the reduced County staff time required to prepare a room for a meeting/presentations on ad-hoc basis. Based on FY 2004 experience of one hour setup and 30 minute take down for each room, (with a \$35 average staff hourly rate and 3,000 large meetings could generate the staff time value in savings of \$157,500 annually). The County will avoid the need for each agency to invest in additional audio visual equipment and again reduce travel time and associated cost.

IT0064 Proffer Database and Status System

Project Description

The Proffer Database and Status System (PRODSS) will create a system for management of approved proffers. This project will include the design and implementation of a database to ensure that County agencies, the Board of Supervisors, and the public have a way to research proffers effectively and to track their fulfillment as a project progresses. The objectives of PRODSS are to monitor the status of the implementation of proffers, enable triggers which alert the Department of Public Works and Environmental Services (DPWES) and other agencies when a proffer is due, and to keep an accurate and timely accounting of the fulfillment of proffers.

Project Goals

The primary goal of PRODSS is to enable County, the Board of Supervisors, and the public to track, research and review proffers more efficiently. Enhancements include the ability to monitor the status of the implementation of proffers, to implement triggers which alert DPWES and other agencies when a proffer is due, and to keep an accurate and timely accounting regarding the fulfillment of proffers.

Progress to Date

FY 2005 funding provided for the initial phase of the project which included a requirements analysis, assessment of existing systems, business process redesign (BPR) recommendations, and high level database design. This phase was completed in 2006. Follow-up DPWES Phase I activities have focused on an impact analysis of the BPR recommendations on DPWES and inter-agency proffer processes given existing budget and resource levels. Senior management in DPWES is assessing any future changes in the proffer process.

Milestones

- ◆ Requirements analysis and review of existing County proffer business architecture, September 2005
- ◆ Assessment of existing systems/proffer support capabilities, November 2005
- ◆ Recommendations to improve the current business process to ensure proffer fulfillment and effective interaction with proposed system, January 2006
- ◆ BPR Impact Analysis June 2006 – September 2007
- ◆ System design and development starting September 2007

- ◆ Recommendations to implement an appropriate technical architecture to meet proffer business data requirements, March 2008
- ◆ Complete total implementation FY 2010

Project Budget

FY 2005 funding of \$188,700 was provided to support the design of a database to make proffers easily accessible to all those who create, enforce, research, and track proffers. Additional FY 2006 funding of \$450,168 provided for the system construction phase of the project. FY 2007 funding of \$137,715 will provide infrastructure modifications to support the project. No additional funding is requested in FY 2008.



Return on Investment (ROI)

Though additional time will be required to enter data into the database, review staff will spend significantly less time researching paper records to determine the existence and fulfillment of proffers. The county will avoid potential costs associated with failure to enforce or implement a proffer. Staff will input data on proffers electronically; status on proffers will be available electronically, improving access to citizens, the board of supervisors, and developers. Proffer triggers such as RUP and Non-RUP estimates will be automated. An up-to-date accounting of proffer status will be maintained.

IT0065 Facility Maintenance Management System

Project Description

This project supports the acquisition of an Integrated Facilities and Grounds Management System as a single, integrated facilities information resource for the Facility Maintenance Department (FMD) and the Fairfax County Park Authority (FCPA). An updated system will increase the effectiveness and efficiency of staff and the utilization of capital resources required to maintain and manage County and Park facilities and properties. The new system will support the goals of the project through the enhancement of data collection methods and tools, improved warranty tracking, elimination of redundant facilities information databases, user friendly interfaces for internal and customer access, and a strong reporting system.

Project Goals

The goals of this project are to acquire and implement a state of the art Computer Integrated Facilities Management (CIFM) System. FMD and FCPA hold the greatest portion of responsibility for the maintenance of the 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 of the functional components and activities that support Lease Management, Space Management and scheduling, Inventory Control, Grounds Management, Contracts Management, Utilities Management, Physical Security, and Emergency Preparedness/Disaster Recovery. By implementing a web based, "one stop shop" for facilities information, we will be able to improve internal efficiencies as well as provide more accurate, complete 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.

Progress to Date

The Phase I — Portfolio and Demand Maintenance — was implemented in February 2007. Phase II will be implemented by July 2007. Phase III and IV will be implemented later in 2007.

Milestones

- ◆ RFP Issued, August 2004
- ◆ Vendor Demos, December, 2004
- ◆ Contract Negotiations, May 2005

- ◆ Contract Issued, June 2005
- ◆ Develop implementation strategy, July 2005
- ◆ Requirements Analysis, Process adjustments, November 2005
- ◆ Data Mapping/Conversion, November 2005
- ◆ Identifying hardware needs / Procurement, June 2006
- ◆ Application Installation, September 2006
- ◆ Phase I — Portfolio and Demand Maintenance, February 2007
- ◆ Phase II — Real Estates and Space Management, July 2007
- ◆ Phase III — Preventive Maintenance and Field Data Collection (Mobile Devices), October 2007
- ◆ Phase IV — Capital Project Management — December 2007
- ◆ Phase V — Post implementation Support, June 2008

Project Budget

In FY 2005, funding in the amount of \$792,250 was provided for FMD to replace their existing Maintenance Management System (which covers work orders and asset inventory), update the current hardware/software capabilities and enhance customer use of the data. FY 2006 funding of \$548,750 provides for a partnership between FMD and the FCPA to pursue a joint system, enabling the FCPA to retire their 16 year-old, out-dated facility management system. FY 2008 funding of \$392,000 will provide funding for the implementation of 75 wireless devices and the implementation of the Project Management module.

Return on Investment (ROI)

Extensive savings will be realized through the streamlining of communications and processes throughout FMD and the Park Authority, the most quantifiable savings derived from time saved by field personnel (crafts, trades and grounds personnel) and Work Control Center staff within the agencies. The replacement system will provide bar coding and wireless technology to greatly improve the speed and consistency of data collection necessary to better utilize field staff by the elimination of excessive hand recording of information that is entered into the system at a later time and/or by a different individual. Accurate and timely data collection plays a vital role in improving time management for field staff and will ultimately work to extend the life cycle of equipment. Improved data collection in the field, along with a web based customer request and inquiry interface will

save time for staff in terms of handling customers' status inquiries and work order processing from initiation to close out. With the implementation of this system, duplicate work

orders, work performed by vendor for inventory that is under warranty and multiple tasks on a work order will all equate to savings by cost avoidance.

IT0067 Stormwater Maintenance Management System

Project Description

This project will consolidate a number of stand alone databases used for work order, complaints and infrastructure inventory in the Maintenance and Stormwater Management Division (MSMD) into one streamlined, integrated work management system. Data is currently captured in multiple, mostly stand alone, applications, some of which are in old technology programs and unable to be run on a network. Most of the data is not linked, requiring repetitive input of information, costing staff time and increasing the likelihood of input error. Non-integrated data also makes it difficult to consolidate and provide information necessary to meet mandated reporting requirements.

Replacement of existing databases with an integrated, web-based system will tie together work orders, materials, equipment, complaints, GIS and infrastructure inventories; allow data sharing across agency and with partner agencies (e.g., Stormwater Planning, Wastewater Collection, and Land Development in the Department of Public Works and Environmental Services, the Fire and Rescue Department, the Health Department, and the Department of Transportation); result in better customer service by allowing residents, Board of Supervisor member offices, and others easy web-based access to information concerning complaint status, work order status, and infrastructure maintenance history by location (e.g., history of flooding at a particular site).

Project Goals

Project goals seek to increase operational efficiency by streamlining the work order, inventory tracking, and reporting processes; improve decision-making through the increased availability of pertinent information and enhanced analysis; provide a tie-in to GIS of the storm drainage data and work orders, and also allow cross-referencing of inventory with other GIS data layers, creating maps for work orders, providing more detailed information to staff and customers; reduce data entry to reduce errors and allow better quality control/quality assurance of data; provide better tracking of "trouble spots" (i.e., systems or structures with recurring maintenance problems); consolidate reporting capabilities for budget preparation and performance

measurements; tie-in to the County's procurement system, CASPS, to capture materials and it's personnel system, PRISM, to capture labor, against work orders, rather than re-entering same data into both systems.

Progress to Date

The Requirements Analysis Phase for this project will begin in March 2007. The design and system development phases are expected to begin during the first quarter of FY '08.

Project Budget

FY 2006 funding of \$335,993 will consolidate a number of stand alone databases used for work order, complaints and infrastructure inventory in the Maintenance and Stormwater Management Division (MSMD) into one streamlined, integrated work management system. Data is currently captured in multiple, mostly stand alone, applications, some of which are in old technology programs and unable to be run on a network. No new funding is provided from the IT Fund in FY 2008.

Return on Investment (ROI)

The benefits of an integrated system include reduced operational costs, migration of aging legacy systems to a modern database, integration of agency data, decreased reliance on preprinted forms and photocopies, an improved level of completeness and accuracy in data collection efforts and improved access to information for decision making. The benefits cannot be obtained with the current technologies and applications. Data will only be entered once at the source. Cost savings will result from the elimination of data entry redundancies existing between the present materials, daily labor time entry and work order databases. Web-based customer complaint/maintenance request and customer inquiry interface will save time for staff in terms of handling customer's initial reporting of problems, status inquiries and work order processing from initiation to close out. In addition, the proposed system will provide public access to data in appropriate cases such as on-line complaint/maintenance requests and work order status, thereby eliminating significant call-taking functions, as well as providing customers direct access to data.

IT0068 Home Occupation Permitting System

Project Description

A Home Occupation Permit is issued by the Zoning Permit Review Branch and is free of charge. About 800 HOPs are processed annually by the Department of Planning and Zoning. Permit issuance is contingent upon the applicant's acceptance of these use limitations and failure to comply can lead to revocation of the permit by the Zoning Administrator. This project will streamline processes within the Department of Planning and Zoning, Zoning Permit Review Branch into one system; and provide access to the information within one system, as Building Permits are already accessed through FIDO. Article 10 of the Fairfax County Zoning Ordinance allows certain businesses and occupations to be conducted in a dwelling unit as a home occupation provided a number of limitations are met. Some examples of permitted home occupations are offices for artisans, cleaning services, computer design services, authors, and home crafters. No clients or customers are permitted with a home occupation. The one exception to this standard is a school of special education (e.g., piano or dance instructor) in which a limited number of students is permitted in the home.

Project Goals

Convert an existing mainframe system for Home Occupation Permits (HOPs) to a permitting system that will be incorporated into the existing Fairfax Inspections Database Online System (FIDO).

Progress to Date

The new HOPS system was completed and implemented at DPZ during the 2nd quarter of FY 2007.

Return on Investment (ROI)

The primary benefit with this project is an increased efficiency for processing a Home Occupation Permit and the fact that staff would be able to access all permits from one system, improving efficiencies and effectiveness. There are currently three ways for a customer to obtain a Home Occupation Permit: apply in person, via Fax, or via mail. In the future it is anticipated that this would be an ideal candidate for an e-permit function over the County's Internet. This would enhance customer service even further.



IT0077 Land Development Industry Enhancements

Project Description

In FY 2005 the Board of Supervisors approved a series of fee increases for Land Development Services (LDS). The industry supported these increases and requested that, as part of their support, the Land Development Process Improvement Initiative be created. The Initiative is a partnership among Fairfax County government, the Northern Virginia Building Industry Association, the National Association of Industrial and Office Properties, and the Engineers and Surveyors Institute. The committee was tasked with evaluating and recommending improvements to the County's land development process. The Board's Development Process Committee has been updated periodically on this initiative's recommendations as requested by the Board of Supervisors.

These recommendations included technology and policy/ programmatic improvements. They suggest exploring the implementation of queuing management and customer flow software that can better manage the flow of transactions and throughput. The queuing system will inform staff that someone is waiting for a particular category of service and track customer wait time. The customer will be directed by display systems where to go next. The system will generate metrics on service levels to assist in staffing decisions. Other recommendations include online capability for Engineers/Developers to review comments from Site Review in Land Development Services (LDS) and other review agencies. In addition, triggered and automatic e-mails will provide Engineers/Developers notification of site-related plans that have reached certain milestones in the life cycle of the plan.

Project Goals

The goal of this project is to expedite the process by which site-related plans are cycled through plan intake, review, and multiple resubmissions. This system is planned to be completed over a two year time period.

Progress to Date

The e-mail notification feature to apprise Engineers/ Developers of the status of Site Plan lifecycle milestones is scheduled for completion during the fourth quarter of FY '07. Web based review capabilities of LDS and Review Agency comments for Engineers/Developers will be completed in the first quarter of FY '08.

Project Budget

FY 2008 funding of \$150,000 will support the procurement, installation and configuration of queuing system management and customer flow software. This figure includes hardware and professional services required to complete the project.

Return on Investment (ROI)

Automatic notification will significantly streamline the process for industry and relieve some of the workload of County staff. Engineers/Developers and their staff must travel to the County to physically retrieve their comment letters from reviewers. This results in project delays and inefficient use of time. Enabling Engineers to download comments from the web will be a significant improvement to customer service. Currently, most outside agencies send their comments by courier. The courier generally operates only a few times a week. There are approximately 20 agencies involved in the review of site-related plans. Having comments available electronically to both applicants and County reviewers will significantly improve the efficiency of the exchange of comments and the review process as a whole. The queuing system will better manage the flow of customers and staff and will have a significant impact on wait times. Currently, the variability in types of permit applications to come in from day-to-day or at different times of the year can be difficult to manage due to the variability in types of permits and the knowledge level of customers and technicians. Furthermore, not all technicians are proficient in processing all permit types. There is a wide range in the complexity and processing time of individual permit types. Optimizing customer flow will improve customer service and will create a more relaxed atmosphere for all customers and for staff as well.

IT0082 Land Use Information Accessibility Initiatives

Project Description

During January 2006, the Board of Supervisors established the Land Use Information Accessibility Advisory Group ("Advisory Group"). The purpose of the Advisory Group was to review the ways in which land planning and development information is made available currently to the public, to make recommendations for accessibility improvements, and to develop a high level plan of action. The Advisory Group made a number of recommendations which were accepted by the Board of Supervisors in January 2007. See <http://www.fairfaxcounty.gov/landusecomm/> for the final Advisory Group report.

Project Goals

These initiatives are undertaken to improve the ability for citizen and business constituents to access and be informed about land planning and development activity in their communities.

Progress to Date

Over the past year enhancements were made to enable two inquiries: the Search Land Use Information by Address and the Search Land Use Information by Magisterial District. Both of these functions also supported searching by and viewing spatial views of land development information on a map. To address the Advisory Group's recommendation to further consolidate land use information in a single location, there is a plan to enhance the GIS My Neighborhood web pages to include information about activities such as rezoning cases, site plan submissions, and building permit information relevant to address-specific web inquiries. This will include summary reports and GIS map displays of active land use activities along with community information concerning elected officials, school pyramids, parks and recreation facilities, and public safety locations (i.e. police and fire/rescue stations), etc.

Project Budget

Funding of \$300,000 is provided to begin implementing recommendations adopted by the Board of Supervisors to further enhance some of the improvements begun in FY 2007, as well as address several of the Advisory Group recommendations that can be more quickly achieved. FY 2008 funding will also support several new planned enhancements to LDSNET (the land development system information on the Internet) and the GIS My Neighborhood

application, based upon the Land Advisory group recommendations. The following capabilities address several of the report recommendations and are scheduled to be developed and provided in FY 2008 (short term):

- Expanding the "Search by Address" and "Search by Magisterial District" capabilities to also include rezoning/site plan history, and multiple plan types
- Summarizing key Site and Rezoning Plan data into PDF downloadable formats for citizen access
- Evaluate and define Citizen notification requirements for an e-mail and/or messaging notification system for Site/rezoning plan submissions and Public Hearings (potentially utilizing e-mail, CEAN, Listserv or other cap ability) to contact interested constituents about new land use activities in their nearby community
- Enhancing the LDSNET and GIS integration to streamline end user navigation
- Evaluate and design web tool capabilities that could include 3D imagery to help enable citizen analyses of proposed land use activities.

In addition to the above initiatives, staff will continue to assess and plan for the implementation of other Advisory Group recommendations that are achievable over the short-term, medium-term, and long-term timeframes. Future initiatives will be re-evaluated and re-prioritized each year as more requirements are developed and funding becomes available.

Return on Investment (ROI)

The projects are intended to streamline the steps required for the constituent to get to relevant information, and make the navigation easier and more intuitive. Through these efforts, Fairfax County is showing its commitment to make the land use process and information even more open, inclusive, and citizen-oriented. These projects will further the ability of citizens to be aware of land use information affecting their neighborhoods, and to participate in the process. This information will be available 24/7 over the County's website. More intuitive access to this information will result in more informed citizens and potentially fewer phone calls requesting staff intervention to access and provide information.