

# FY 2024



# INFORMATION TECHNOLOGY PLAN



[HTTPS://WWW.FAIRFAXCOUNTY.GOV/INFORMATIONTECHNOLOGY/](https://www.fairfaxcounty.gov/informationtechnology/)



FAIRFAX COUNTY, VIRGINIA  
DEPARTMENT OF INFORMATION TECHNOLOGY



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**FAIRFAX COUNTY, VIRGINIA  
DEPARTMENT OF INFORMATION  
TECHNOLOGY**

**FY 2024 ADOPTED  
INFORMATION  
TECHNOLOGY PLAN**



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# SECTION 1

IT GOVERNANCE

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## PLAN OVERVIEW

The County continues to address challenges and meet new opportunities where technology innovation is essential. In an environment of rapid change, the need for responsiveness with finite resources highlights the importance of strategic planning, solid governance, and program management for collaborative decision making and secure solution delivery at a leveraged cost. The County's IT environment builds on an enterprise architecture that includes industry standards, open systems, the web, cyber security, and tools that support a variety of needs and a diverse portfolio of internal and external applications and systems. The supporting infrastructure provides for optimum system performance and security of County data and transactions.

The County's technology strategy supports and is aligned with the Nine Priority areas of Fairfax County's Countywide Strategic Plan (<https://www.fairfaxcounty.gov/strategicplan>). County Information Technology (IT) goals and guiding principles are reviewed periodically for applicability and relevance against new strategic priorities, service demands IT trends, and budget dynamics. For details please see Section 2 - Strategic Directions.

This plan describes technology projects funded through the annual budget to meet the goals and objectives of sponsoring agencies; provides status updates and accomplishments of ongoing projects; and states benefits anticipated by project sponsors. Projects are linked to the sponsoring agency's strategy, outreach and operational improvement plans, and technology goals established by IT executive management and/or the Board of Supervisors.

The projects in this plan are primarily funded in the Information Technology Fund - Fund 100-C10040, and Fund 400-C40091 (E911). Some projects are funded from other sources such as the sponsoring agency's budgets, revenue funds, or other County dollars to augment investment capacity. Funding is also allocated at quarterly budget reviews to optimize the use of available County dollars and align project funding with project budgets, plans and schedules. The following priorities serve as the core basis for budget decisions:

- Mandated Requirements
- Leveraging/Completing Prior Investments
- Enhancing County Security
- Improving Service Quality and Efficiency
- Ensuring a Current and Supportable Technology Infrastructure

Governance, architecture, and infrastructure supporting IT projects and services are described within this plan. However, ongoing Department of Information Technology (DIT) operating, and personnel costs funded in the General Fund - Fund 100-C10001 and the Technology Infrastructure Fund - Fund 600-C60030, grants, routine operational activities, on-going support efforts, normal upgrades and maintenance work are not included. Additional details of each fund are online in the Fairfax County Fiscal Year 2024 Adopted Budget Plan. The IT Plan is focused on principles, investments and strategies, and is organized in four sections:

- Information Technology Governance (Section 1)
- Strategic Directions (Section 2)
- Information Technology Projects (Section 3)
- Appendix (Section 4)

## POLICY GOVERNANCE

Fairfax County's IT governance aligns information technology investments and programs with the County's strategic business goals. The Board's IT Committee, senior executive committees, and a citizen advisory committee provide oversight and guidance on technology programs and investment strategies. Various steering and governance boards are focused on specific programs and enterprise wide projects.

### 1.0 GOVERNANCE

Technology is managed as a centralized enterprise capability in Fairfax County. The Department of Information Technology (DIT) provides technology services on an enterprise-wide infrastructure, architecture framework and standards for most systems. County agencies have a limited number of IT staff that directly support certain agency business specific 'point' solutions or digital industrial systems, and/or provide local first response desk-side user support. Agencies' IT staff matrix to DIT for standards, direction, and assistance in implementing their agency specific business systems, integration, and data strategies. The County's Chief Technology Officer is the Director of the County's Department of Information Technology and manages the County's technology strategy and governance.



### 1.0.1 INFORMATION TECHNOLOGY POLICY ADVISORY COMMITTEE

The Board of Supervisors is committed to providing the County government with the resources necessary to keep pace with emerging trends in information technology and providing citizens, the business community, and employees efficient and convenient access to information and services. To accomplish this goal, the Board has made substantial and continuing investments in technology. In 1997 the Board of Supervisors established the Information Technology Policy Advisory Committee (ITPAC) made up of a group of citizens to provide the Board with expert advice on technology strategy and assist the Chief Technology Officer (CTO) with technology direction and validation of applicable industry trends to government.

ITPAC meets regularly to review the County's technology plans, key projects, and the annual technology investment portfolio; membership includes:

- One representative appointed by each Board Member (10 in total)
- One representative appointed by the School Board
- One representative from each of the following groups:
  - Fairfax County Chamber of Commerce
  - Fairfax County Federation of Civic Associations
  - League of Women Voters
  - Northern Virginia Technology Council

The Committee's duties are to:

- Stay current with information technology developments and provide recommendations to the Board of Supervisors.
- Review the annual Information Technology Plan and investment budget and make recommendations to the Board of Supervisors.
- Review major information technology projects.
- Present facts and issues that it deems important to the attention of the Board of Supervisors.
- Advise the CTO and DIT on technology trends, strategic direction and related issues.

### 1.0.2 BOARD OF SUPERVISORS TECHNOLOGY COMMITTEE

The Board of Supervisors Information Technology Committee is established to discuss IT-related issues, initiatives, policies, and topics reflecting the commitment of the Board of Supervisors to:

- Ensure that the County government keeps pace with appropriate emerging IT trends to support County goals and priorities.
- Provide citizens, businesses, and employees with open government and secure access to services and information.
- Promote innovation and improve effectiveness and efficiency.
- Maintain the security of County information systems and data.

## 1.0.3 SENIOR INFORMATION TECHNOLOGY STEERING COMMITTEE

The Senior IT Steering Committee was created in 1999 to advise the Chief Technology Officer and DIT leadership and provide policy governance oversight for the County's IT strategy. The committee reviews technology priorities to ensure alignment with the County's strategic plans and business initiatives to determine budget recommendations for new and existing IT investments.

Core members of the Senior IT Steering Committee include:

- The County Executive
- Deputy County Executives
- Chief Financial Officer
- Chief Technology Officer/Director of DIT
- Director, Office of Public Affairs
- Other County officials may be asked to participate as needed

The Committee may activate sub-committees around specific issues that report their findings back to the Senior IT Steering Committee. As part of the decision-making process, the Committee presents and discusses strategic policy issues on behalf of the Senior Management Team which is comprised of all County department heads.

## 1.0.4 PLANNING AND LAND USE SYSTEM (PLUS) EXECUTIVE STEERING COMMITTEE

The PLUS project is a major strategic initiative to modernize the County's Land Development systems and business processes by replacing aging, disparate legacy land development systems with an integrated technology solution that enable seamless customer and staff interactions and supports land use, e-plans, and development operations. The Executive Steering Committee provides strategic oversight, evaluates policy implications, assesses business process and organizational impact, approves business solution, unified service delivery models, and provides recommendations to the project's Executive Sponsors. The Committee meets as determined by the Executive Sponsor. Principle members include:

- Deputy County Executive for Land Development Services
- Director of the Department of Land Development Services
- Director of the Department of Planning and Development
- Director of the Department of Information Technology/Chief Technology Officer
- DIT Senior Technical Director
- DIT Technical Project Managers
- Business Project Manager
- Key Stakeholders

### 1.0.5 COURTROOM TECHNOLOGY EXECUTIVE GOVERNANCE BOARD

The Courtroom Technology Governance Board was established to provide governance and oversight for courtroom and court related technology initiatives. The Executive Board reviews and endorses policies and procedures and provides oversight and direction. The Board is composed of:

- The Chief Judge or Judge designee of each court
- Clerk of Court or Clerk designee of each court and Agency Directors
- Juvenile Court Services Director
- County's Chief Technology Officer (CTO)
- Fairfax County Sheriff

The Director of the Courtroom Technology Office is the designated administrator for the board and is responsible for ensuring effective strategic planning, development, and integration of courtroom technology resources and programs with the courts and other criminal justice agencies and entities.

### 1.0.6 GOVERNANCE COMMITTEES FOR OTHER IT INITIATIVES

In carrying out its mission, the CTO, the Deputy County Executives and/or DIT senior directors participate on several key County Committees focused on major County initiatives and/or operational oversight agendas that have significant requirement for IT participation. In addition, production systems may have operating boards for shared services, common requirements, new technology capabilities, data analytics and transparency.

## 1.1 REGIONAL AND NATIONAL PROMINENCE IN THE IT COMMUNITY

In addition to internal committee involvement, Fairfax County Government's Chief Technology Officer (CTO), Chief Information Security Officer (CISO) and other members of the County's IT Management team provide leadership and/or participate on several federal, state, and regional committees including:

- Council of Governments CISO Committee, Chair 2011- current
- Council of Governments Emergency Preparedness Council
- National Capital Area (NCR) Homeland Security Executive Committee Advisory Council
- Regional Working Group for interoperability (Maryland, Virginia, and DC, state and local functional and technical leadership representation)
- Council of Governments Interoperability Committee
- National Association of CIOs
- National Association of Telecommunications Officers
- Virginia Local Government Information Technology Executives (VALGITE)
- SIMS (Society for Information Management)
- Northern Virginia Regional Commission

## INFORMATION TECHNOLOGY GOVERNANCE

- Northern Virginia Regional Preparedness Advisory Committee - Interoperability (NoVA RPAC-I) and Northern Virginia Emergency Response System (NVERS)
- National Association of Counties
- Public Technologies Incorporated, 2013 Class Fellows
- COVITS Board (Commonwealth of Virginia IT Symposium)



# SECTION 2

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Fairfax County's technology strategy incorporates a plan for investments at optimal time to keep pace with technological innovations and growing demands for constituent services. This strategy has helped the County address new economic realities, improve communications, foster open government for public engagement, and leveraged the overall technology portfolio and capabilities on an enterprise scale to meet the County's diverse operational needs. The County's technology strategy supports and is aligned with the Nine Priority areas of Fairfax County's countywide Strategic Plan (<https://www.fairfaxcounty.gov/strategicplan>).

## 2.1 THE DEPARTMENT OF INFORMATION TECHNOLOGY (DIT)

The Department of Information Technology (DIT) provides leadership, governance, architecture, technical resources, and expertise in development and deployment of information technologies to improve efficiency, effectiveness, and promote innovation. DIT is responsible for establishing technology architecture, implementing systems, applications, communications, and overall management of the County's information assets. DIT is further charged with security and safety of County information systems, networks, and data. Agencies are responsible to adhere to IT policies and standards and coordinate their IT requirements with DIT.

DIT's Mission is to empower the community by leveraging technology to provide innovative, secure, and efficient solutions to support the County's strategic goals. DIT's Vision is to be a reliable, proactive, strategic, and trusted partner delivering solutions with efficiency and implement technology solutions that support major County's strategic priorities, reduce risk, improve operational excellence, and drive innovation to improve future capabilities. In support of its Mission and Vision, DIT's Guiding principles are:

- IT Strategic Alignment
- Enterprise Value Focus
- Customer Centricity
- Innovation
- Engaged and Resilient Workforce
- Strategic Collaboration
- Compliant and Secure

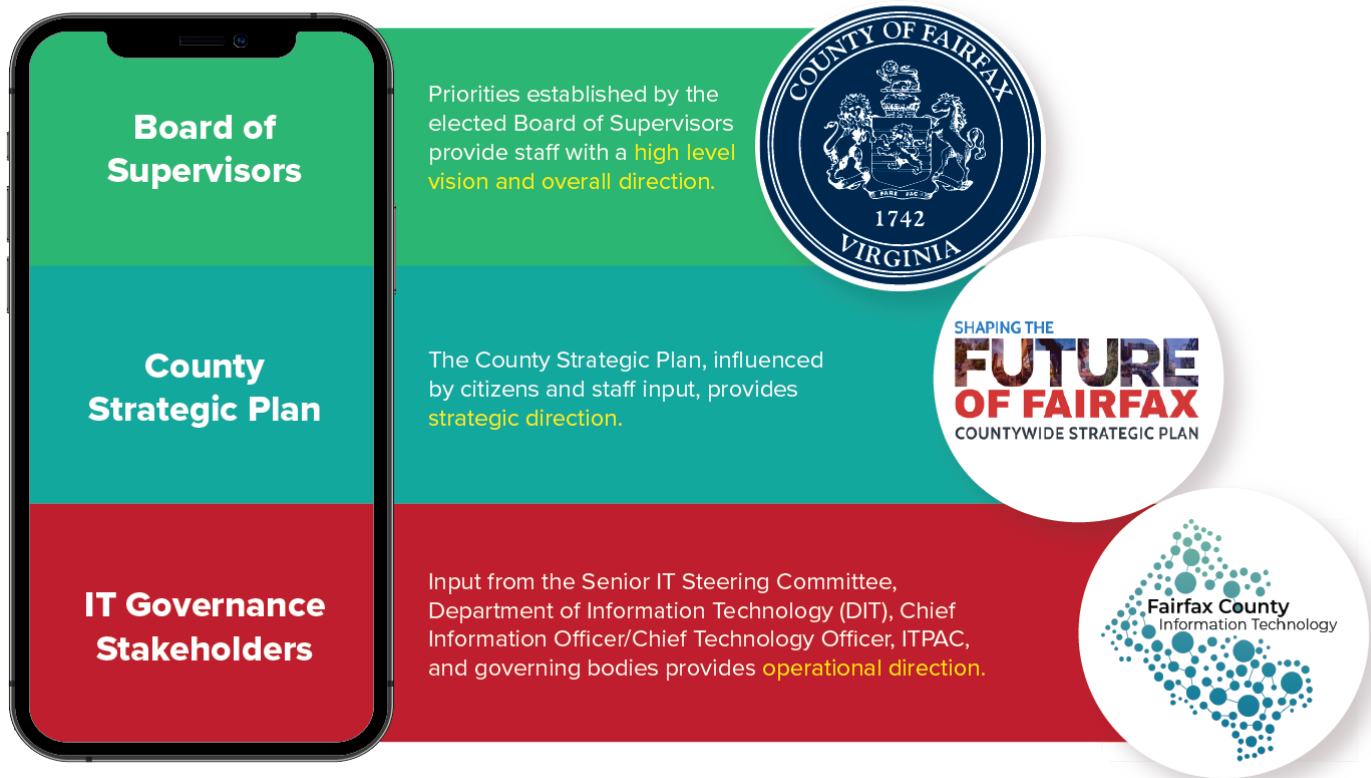
The following five DIT strategic goals are designed to enable Fairfax County's success:

- **Digital Transformation** – Drive end to end innovation that includes people, policies, processes, and technology. It enables the development of new capabilities that improve efficiencies through automation. These efficiencies will be achieved in a secure manner with a focus on improving citizen/government services.
- **Data Management and Business Intelligence** –Leverages data as an asset for continuous improvement and effective decision making by establishing a data stewardship framework that includes standards, governance, privacy, analytics, and open exchange. As the central IT organization, DIT will provide pathways, tools, and expertise to promote data-driven insights and develop evidence-based strategies.
- **Cyber Security** – DIT is dedicated to the protection of its IT assets and the data/information in its charge, as well as ensuring that no unauthorized access or use of such data/information occurs. DIT will continue to maintain a robust and aggressive vulnerability and risk management program to continuously assess and validate the organizations security posture and to ensure compliance with Federal, State and industry regulations and best practices.

- **Cloud Computing** - DIT embraces cloud computing based on business requirements for enabling convenient access via, on-going demand networks to a shared pool of configurable computing resources (e.g., networks, servers, storage, applications, and services) they can be rapidly provisioned and deployed with minimal management effort or service provider interactions.
- **Workforce Optimization**- DIT is dedicated to acquiring, developing, and competitively compensating high-performing human capital resources to sustain and enhance Fairfax County’s complex IT environment. This will require enhanced resources and long-term commitment.

DIT frequently and proactively reviews its strategy to ensure the plan addresses changes to the County’s strategy plans and that stakeholders agree with changes and updates regarding strategic technology initiatives.

### Three Key Elements in Guiding IT Within Fairfax County Government



#### DIT Organization

DIT is organized into IT discipline subject matter expert groups that support enterprise-wide systems and applications. These include **applications that support County agencies’ business systems** including revenue systems (Tax), human and health services agencies, land development, public works, zoning, public safety/criminal justice, and general County agencies including the libraries, parks, and facilities management. DIT supports a **multi-channel e-Gov program** for architectural direction, standards, and strategies for the County’s website, Intranet, web content management system, and mobile applications. The

e-Gov team works closely with County agencies and the Office of Public Affairs in overall management and execution of web-content and social media.

A specialized **Courtroom Technology** group coordinates the implementation and support of modern courtroom technologies for the three Fairfax County Courts (Circuit, General District, and Juvenile and Domestic Relations), and serves as the liaison with the State Supreme Court for technical solution and data interoperability. The **Public Safety Branch** manages programs and new initiatives that integrate systems in public safety, law enforcement, and emergency management which also addresses homeland security, and regional collaborative and interoperability initiatives and mandates.

**The Information Security Office (ISO)** reports directly to the Chief Technology Officer and defines and enforces the security standards and policies required to protect the County's information assets and technology infrastructure. Enforcement and compliance authority for ISO is through the County Executive. The **Technology Infrastructure Division** manages server and storage hardware environments, middleware integration tools, communications and network platforms, enterprise messaging applications, desktops and end-user devices, the network based digital multi-function printing devices (MFD) that support County-wide distributed printing, and the IT Service Desk.

The **Policy, Planning and Administration** division provides DIT with administrative, fiscal, human resources and IT policy support functions; and the **Project/Portfolio Management** Office provides compliance oversight and manages the County's IT Investment Portfolio of IT Projects. In the past decade, the **County's Print Shop, Archives and Mail Services** were transferred to DIT to enhance the county's digitization goals and better align with electronic records retention, management, and policy. These functions together with the **Multifunction Device Programs** created DIT's **Document Services Division**.

In 2020-2021, the County faced extraordinary challenges from the COVID-19 Pandemic shutdowns and service disruptions. DIT adapted quickly and implemented necessary technologies for continuity of operations and established a framework for secure employee telework, virtual Board of Supervisors meetings and meetings of the County's various Boards, Authorities and Commissions. DIT also made significant contributions to Health Department's rapid technology mobilization supporting the COVID-19 vaccination program.

The following are some key DIT accomplishments in the last 12 months:

1. Modernized GIS Infrastructure.
2. Launched new Service Oriented Architecture (SOA) GIS portal.
3. Modernized Web infrastructure.
4. Launched new version of the County's mobile application.
5. Launched Enterprise applications to improve organizational efficiencies – such as PLUS Land Development System, Personal Property Tax System, new web-based tax applications, SAP upgrade to HANA.
6. Network upgrades – wireless access points upgrade in County facilities.
7. Data Center fail over initiative.
8. Security Awareness Training.

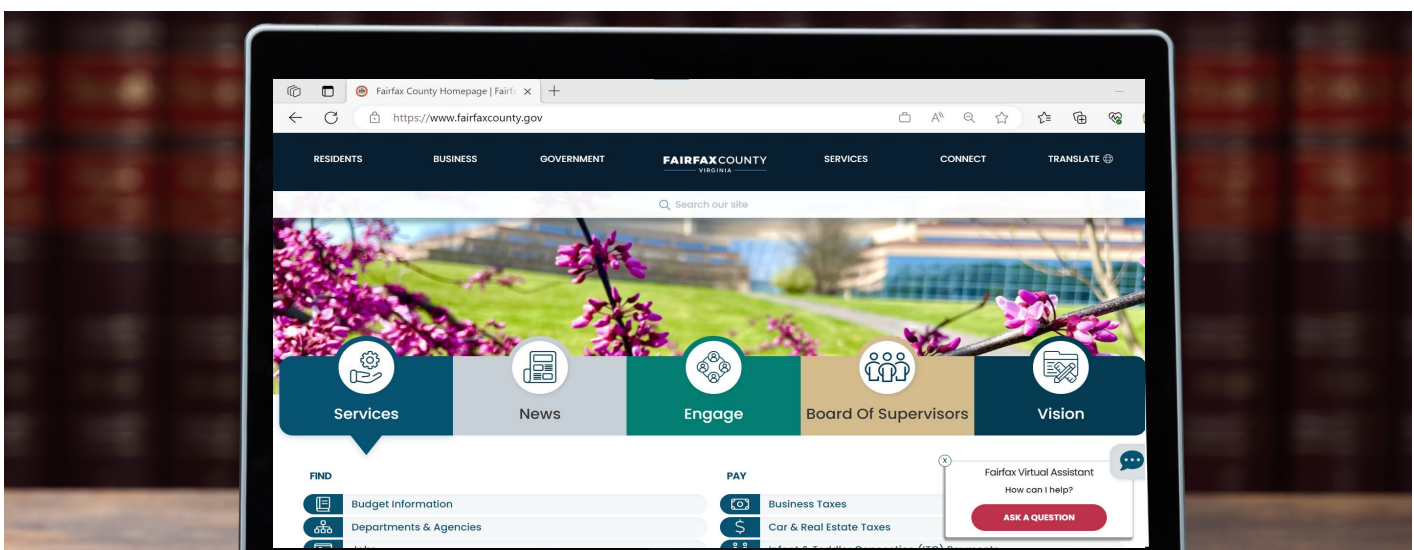
9. Initiated several governance policies and procedures: continued GIS governance, data publishing and web development, data governance, updated policies for archives and retention, PC replacement, 70-70 IT Security.
10. Cloud migration of servers.
11. Starting multi-lingual omni channel 311 initiative.
12. Cloud portal solution for Boards, Authorities and Commissions.
13. New Mobile Device Management solution.
14. Public website refresh (in progress).

Information Technology goals and guiding principles are reviewed periodically for applicability and relevance against new strategic priorities, service demands, IT trends, and budget dynamics.

The following key enterprise initiatives are part of this overall strategy.

## 2.2 DIGITAL GOVERNMENT/E-GOVERNMENT

The Digital Government/E-Government (E-Gov) initiative, a foundational program, supports the County’s goal of a “government without walls, doors, or clocks.” The overall goal of digital government strategies is to bring the County’s many channels closer to its constituents and businesses, providing services in a more efficient way. At the same time, it implements the policies and procedures that integrate all platforms, both for internet and intranet, to create a transparent and innovative government. It also creates a governance plan to include digital security and privacy issues. The program provides the technical basis to create a data-driven environment that is built on the engagement model which utilizes open data, analytics, and personalized engagement to create a transparent service delivery that encourages users to participate. It enables County agencies’ operational efficiency, mobile workforce, emergency management and Continuity of Operations Plans (COOP).



The E-Gov program develops and supports the architecture, web infrastructure, and application framework for over fifty agencies on the Web, other public channels, and internal Web portals. This includes the public website, <https://www.fairfaxcounty.gov/>, online services, mobile apps, social media, web-based applications, Interactive Voice Response (IVR), Cable TV, and the County’s Public Access sites in Libraries and Access Fairfax sites, to provide a unified access point to County information and services. The Department of Information Technology and Office of Public Affairs jointly work on design, navigation, content management and social media integration aspects of the web site. The E-Gov program supports enterprise web application development and provides technical oversight to web developers and programmers. In addition to continuous improvements of the website and deploying new services, transactions and social media, the strategy also includes Customer Relationship Management (CRM), and Web Content Management (WCM) tools for comprehensive, integrated service options to engage and create a partnership with the community in a collaborative way. Popularity and use of E-Gov capabilities continues to expand. Here is a sampling of significant stats:

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
<b>Website Visits</b>	18,160,887	16,314,450	17,821,929	20,382,549	29,671,925,	21,195,770,
<b>Facebook Reach</b>	91,759,813	66,317,648	76,617,759	95,088,315	60,581,636	75,887,345
<b>YouTube Views</b>	305,436	318,264	375,514	762,880	622,533	709,403
<b>Emergency Blog</b>	98,362	161,696	221,372	2,013,020	2,397,792	789,423
<b>County Residents on Nextdoor</b>	122,005	166,136	217,033	272,198	334,658	365,561
<b>Twitter Reach</b>	69,575,979	62,923,888	65,362,561	75,283,983	66,521,480	50,517,822
<b>TOTALS</b>	180,022,482	146,202,082	160,616,168	193,802,945	160,130,024	149,465,324

Sec 2. Table 1 - Number of visits, views, impressions made with Fairfax County’s social media.

The overall digital government program supports Board priorities regarding public engagement, and other County initiatives associated with technology innovation in public service including, land use, Next Generation 9-1-1, Health and Human Services Integration Initiatives, mobility, and transparency.



The County has achieved much success and acclaim for its E-Government focus in integrating the Web and IVR platforms to offer a wide variety of channels for online public access to services and programs, and its success in incorporating social media capabilities in a thoughtful way that enhances service delivery. Fairfax

# STRATEGIC DIRECTIONS

County has consistently received national recognition from the Center for Digital Government as one of the top-ranking localities in the US, placing in the **top ten** for the past fifteen years.

The E-Gov program continues to work with the Commonwealth of Virginia, regional partner municipalities, and federal government agencies in interoperability of common service portals and developing web service standards to enable cooperative access and seamless integration of information and services regardless of the origin or the source.

## WEBSITE

Fairfax County's public website at <https://www.fairfaxcounty.gov> has been an extraordinary success and has received numerous national and local accolades over the years. The modern, topic-oriented Fairfax County website showcases an enhanced business delivery model, with improved search engine optimization and eliminates data silos thereby promoting transparency on the County's website. The County's innovative use of technology combined with user-friendly website design has streamlined the interaction between constituents and the government and provides the necessary tools for collaboration and participation with County government.

Approximately 55 County agencies have a presence on the site. The responsive design promotes a "mobile first" approach and renders the website seamlessly on all mobile devices bringing the County government closer to the public - available from anywhere at any time. The County website is also translated using machine translation powered by Google. The website experience has expanded significantly with improved and new interactive features and online applications including the "Fairfax Virtual Assistant" – an AI powered chatbot, to enable citizen interaction with government on various topics. Department of Information Technology and Office of Public Affairs work together with agencies to determine the most asked questions to inform content added to the Virtual Assistant.



Sec 2. Figure 1 - Fairfax County Website

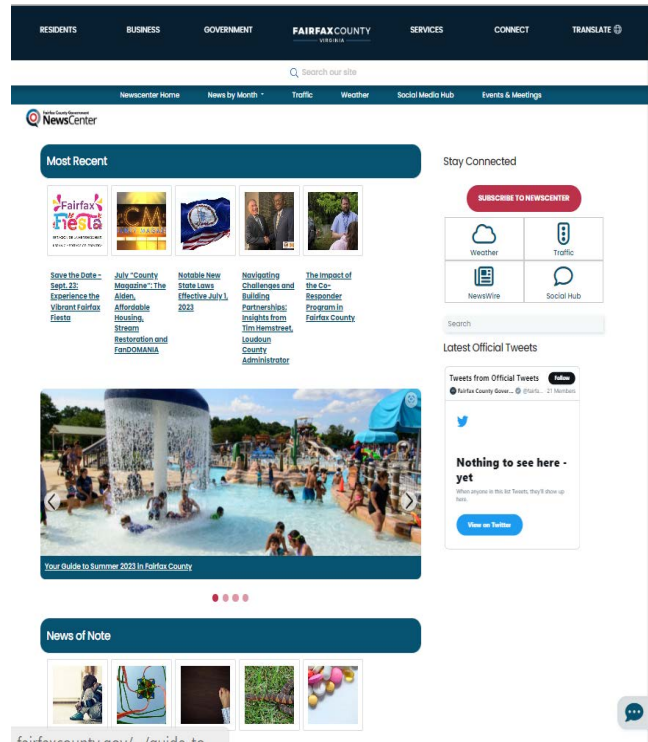
To create a data-driven environment and support the ongoing strategy of transparency, interactive visual data and dashboards were added to enhance the web experience and share relevant information. Through data visualizations the chance of increasing audience engagement and presenting information in an understandable and digestible format is much higher.

The Fairfax County website provides secure and expedient access to hundreds of key online services for its constituents to pay, register or apply for services like tax payments, real estate information, permits, housing, jobs, basic needs, park classes etc., The convenience of conducting business online has many benefits including improved service through greater flexibility, faster delivery, cost and time savings for the public.

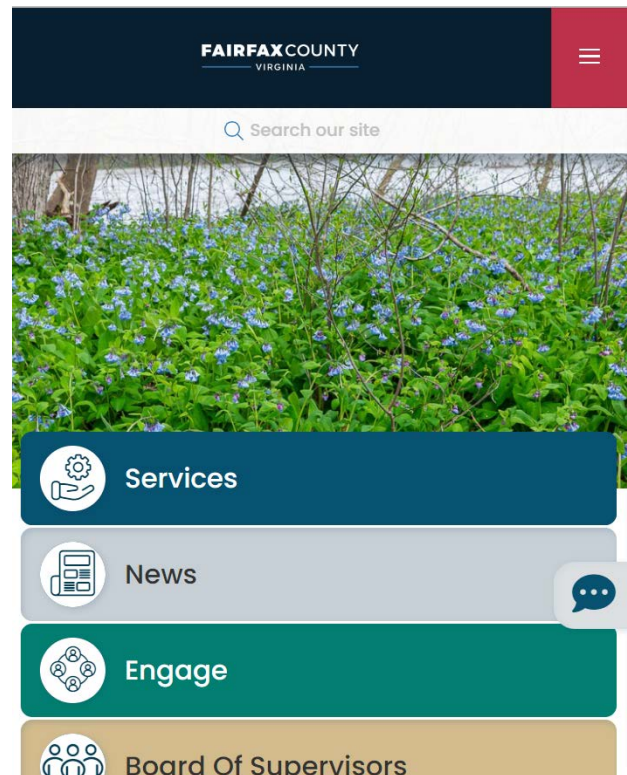
The NewsCenter (<https://www.fairfaxcounty.gov/news/>) on the County’s website is the central location to share County and community information. It is a comprehensive site, that consolidates all the ways residents and employees can stay connected with the County, including news articles, social media hub, podcasts, RSS feeds, and emergency alerts.

For website accessibility, website pages are tested for compliance with Section 508 of the Rehabilitation Act of 1973 (<https://www.section508.gov/manage/laws-and-policies>) and the Americans with Disabilities Act (ADA) by passing through the County’s automated compliance checking tool.

E-Government will keep focus on continuous innovation and implement projects that will provide services and programs using new technologies such as cloud-native application development and integration, containerization, and shared services. The County will continue to invest its efforts in integrating Artificial Intelligence concepts to provide more efficient services, leveraging AI chatbot to engage with the public in additional languages, integrate with home assistants and explore live assistant capabilities.



Sec 2 Figure 2 - Fairfax County NewsCenter Tablet View



Sec 2 Figure 3 - Fairfax County Services Phone view

## MOBILE

Acknowledging the widespread growth of mobile technology, the County website took a “mobile first” approach using responsive design, rendering the website seamlessly on all mobile devices bringing the County government closer to the public - available from anywhere at any time. Providing mobile accessibility allows residents to access the County at their convenience and reaches a wider user community with the ability to access services and information easily from any location.

Supporting the County’s strategic vision and striving to create a citizen-centric approach that goes beyond the website, Fairfax County pioneered the availability of governmental services on mobile devices. In enhancing the County’s long-standing goal that our community should be able to access their government 24/7 without walls, doors or clocks, Fairfax County placed government in the palm of their hands with the introduction of efficient and cost-effective mobile apps and services.

The public can download the official Fairfax County application on their smartphones and tablets for emergency information, news headlines, one-touch calling through a contact directory, GPS maps, social media links, transportation resources and more at <https://www.fairfaxcounty.gov/topics/mobile>. The Fairfax County Mobile App has been downloaded over 5,000 times this past fiscal year.

## SOCIAL MEDIA

Social media in Fairfax County has been a significant success in engaging its residents on platforms people use daily. News articles published on the website are integrated into Facebook, Twitter, Nextdoor, Instagram, Flipboard, Apple News and Google News. The County currently has 26 official Facebook accounts, with additional 10 Facebook pages for each Board of Supervisors which reached over 76 million people in FY 2022. Across the County’s 20 Twitter feeds, total Twitter impressions for FY 2022 was 50,517,822. Nextdoor adoption in Fairfax County continues to be strong with 365,561 verified residents using Nextdoor. The use of these tools is critical to engage in two-way communication with the community. A centralized social media content management system is in place, along with a comprehensive social media policy.

The social media management system’s user interface takes the form of a dashboard, and supports integration of various social networks like Facebook, Twitter, YouTube, etc. This system has helped build an engaging presence on social media with the ability to manage all our social networks and schedule messages for future publishing. Additionally, the real time analytics provided by this tool gives an in-depth view of how well the County’s social media efforts are being received by the public with the ability to visualize the metrics in one easy place. The tool also helps monitor social media conversations that matter to the County, identify its influences, and observe emerging trends.





In coming fiscal years, the use of social media will continue to be important. The E-Gov plan will further integrate social media into operational aspects of agency lines of business to ensure cross-platform sharing as needed. Social media tools will continue to evolve as the leading E-Gov tools of choice in the years to come.

## AUDIO AND VIDEO

Fairfax County launched an Internet streaming radio station simply named Fairfax County Government Radio in 2014. The County owns and produces large amounts of audio content for the County's SoundCloud social media account. The public can listen online (<https://www.fairfaxcounty.gov/publicaffairs/radio>) providing access to County information 24 hours a day, seven days a week. During emergencies, the station is used to share important emergency information in an audio format, similar to the way the County currently uses other platforms such as the emergency alert system (<https://www.fairfaxcounty.gov/alerts>) where residents can sign up to receive emergency alerts by both text and e-mail.

The use of videos has continued to expand beyond the County's existing cable TV channel. Use of recorded video testimony via YouTube for public hearings during COVID-19 is just one example of increased video use as we learn to work and communicate from a distance.

The E-Gov program will continue to affirm the County's strategic vision and goals, with enhancements to services and a focus on improving online service delivery with a coordinated process for implementation. Efforts on re-architecting information, modifying layout and presentation of content on the County website will continue to be of prominence. Emphasis will be placed on providing information based on topics key to the public, based on metrics and usage patterns of the website.

## 2.3 GEOGRAPHIC INFORMATION SYSTEMS (GIS)

Geographic Information Systems (GIS) is a strategic foundational technology, integrated with numerous County applications and business processes. GIS remains an essential component of County operations and is heavily used by a wide range of County agencies for a variety of purposes. The GIS Division maintains an enterprise wide GIS system with a range of technologies, related products and data that provide the foundation for ongoing integration of GIS into County operations as well as enabling the agencies to maximize the use of analytical GIS in their lines of business.

Web-based GIS applications continue to be central to communicating locational based information to staff and residents. Map-centric applications continue to be created by County staff for operations and the public in FY 2023. Many of these are featured in the entries for the annual GIS Excellence Exhibition. <https://storymaps.arcgis.com/collections/42f5e101ab964b18a100d63a52c7b646>.

In FY 2023, the county saw a large expansion and heightened utilization of the internal Enterprise Portal as well as the Police and Fire and Rescue internal portals. These platforms have become hubs for internal applications that support many different groups in day-to-day operations. The modernization of these platforms was completed in the past year.

The public Interactive Map Gallery is the hub for all online maps on the County web site though each appear embedded on the relevant business pages as well. The Interactive Map Gallery alone hosts 90 applications, that serve a variety of informational and interactive services. Cumulatively these applications had over 2.9 million views in FY 2023.

# STRATEGIC DIRECTIONS

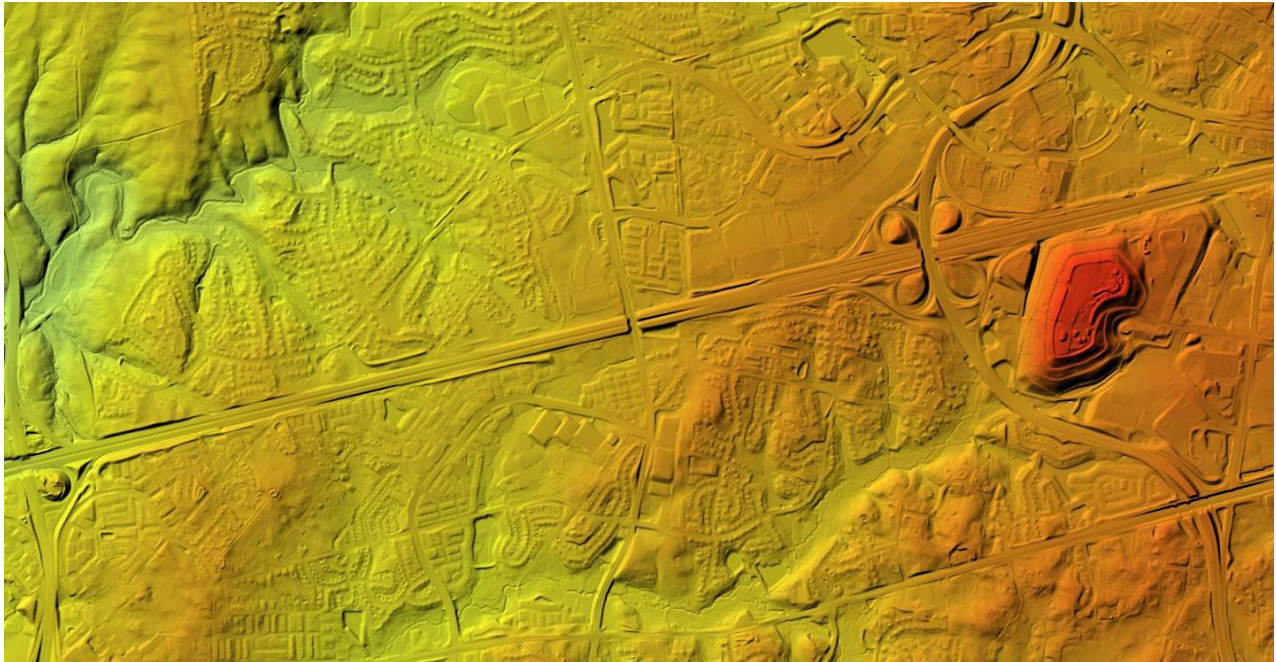
Most Interactive Map Gallery (<https://www.fairfaxcounty.gov/maps/interactive-map-gallery>) applications are focused and thematic, but the public also has access to a general GIS viewer and reporting application. The JADE was developed in FY 2020 as a public facing light GIS that allows residents to work with the GIS layers independent of the thematic applications. The internal facing Geographic Exploration and Mapping (GEM), a sister application, contains largely the same information, with both applications providing residents and staff easy access to GIS information that staff will use in assessments and reviews. Online training videos support the public in learning how to use the JADE application and the use of both applications fill an important open government niche. In FY 2024, the GEM and JADE will receive updates for further improvements.

The availability of key County data through the GIS provides a range of benefits to constituents and County staff. Digital aerial photography is widely used in many GIS applications, providing the ability to do remote reconnaissance or to view past conditions. Parcel and zoning data are key datasets and are regularly maintained by the GIS Division. All parcel map changes are posted daily, providing web users of the Digital Map Viewer (DMV) with the latest versions of the maps. On average, over 13,000 DMV maps are viewed or downloaded per month.

Surface information is crucial to many environmental regulatory and stewardship functions undertaken by the County. The GIS Division leads the region in these areas, with exploitation of LiDAR and Land Cover Analysis, (Figure 5, Land Cover source material and derivatives). In 2015, for the first time, the County obtained **LiDAR** (Light Detection and Ranging) for the entire County. It was captured again in 2018 and another flight was conducted in late 2022. Acquired in partnership with the US Geological Survey, this newer collection is at 8 points per meter totaling 46 billion data points and over 1 TB of data. The resulting detail above ground and the ground level provides high value capabilities while the year to year comparisons now possible give unprecedented insight into how conditions change on distressed streams and other areas. (Figure 6, LiDAR surface of central Fairfax County).



Sec 2 Figure 5 - Land Cover source material and derivatives



Sec 2 Figure 6 LiDAR surface of central Fairfax County

For instance, soil removal volumes can be computed on specific watersheds to understand the scale of change across time. The 2022 LiDAR acquisition will update the analytical comparisons made of stream conditions over time to determine the extent of furtherance of bank subsidence and other hydrological processes. This information will subsequently inform the stream restoration program as well as others.

Oblique imagery and its related software constitute one of the County's core GIS data sets and technology. Originally flown for the first time in 2003, it serves as a key reconnaissance tool for multiple County agencies. Oblique imagery is integrated into CAD/911 operations, Department of Tax Administration assessment processes, the Geographic Exploration & Mapping (GEM) application, the public facing JADE application and serves as the source data used to derive the 3-D building. The County now flies oblique and ortho-imagery annually under GIS Division management. The newest oblique imagery was flown in 2023 and will be received in the summer of 2023, the next acquisition is scheduled for winter 2024. (Figure 6, Oblique Imagery of Herndon Memorial Station).

Planimetric data is another foundational data set for almost all County GIS applications. Planimetric data is information derived from aerial imagery that model natural and man-made visible features. Accurate planimetric data depends on high resolution and high accuracy ortho-imagery. The County is evaluating the use of its own yearly ortho-imagery as source material to start a more timely date cycle. The GIS Division is working with agencies in FY 2023 and FY 2024 to determine the frequency and content of future updates.

Addresses are essential to almost all County operations. The GIS Division collaborated with other County agencies to bring the Master Address Repository (MAR) online in 2004 and collaborated again when it was refreshed in FY 2023. The MAR is the authoritative source of parcel (situs) addresses in the County and since 2004 the office has maintained all County address data

in the MAR system. The Master Address Repository project has been invaluable for the CAD/911 system as well as other major County systems including the Planning and Land Use Systems (PLUS), tax administration systems and is essential for effective operation of the CAD/911 system. Integration with the MAR is a requirement of new and refreshed systems where address is used as part of the record. The new modernized MAR now contains over 375,000 unique authenticated addresses and has a new public interface for external access.

Working towards improved government interoperability is a significant and ongoing strategic activity for the GIS Division, both within Northern Virginia and regionally through the Washington Council of Governments (COG). Interoperability across the National Capital Region (NCR) and with the Federal Government for emergency response purposes is also crucial. Fairfax is a member of the COG GIS Executive Committee and has helped guide the development and implementation of the regionally funded National Capital Region Geospatial Data Exchange (NCR GDX) through its membership in the program's executive committee and through operational Program Management and Direction. The program began in the spring of 2012 and has transformed across time into a hub for public safety GIS Information. Users of the system can exchange contextual, or event related geographic information between emergency operations centers, command posts, or fusion centers. Additionally, the NCR GDX program conducts its own "community" drills to ensure the readiness of the operators and familiarity with the tools to enable the GIS community across the NCR in collaboration with federal agencies to support a regional emergency response.

The CAD2GIS project was established as part of the NCR GDX program. CAD2GIS uses geospatial data feeds from live CAD2CAD data (9-1-1 call and unit information). This data offers a near real time geospatial view of Fire and Rescue unit and incident locations to provide situational awareness at a regional level. The geospatial data can be consumed and integrated into existing applications by participating jurisdictions within in the NCR to support both local and regional emergency preparedness and response operations. Figure 8 shows the regional dashboard for CAD2GIS (figure 8, NCRGDX Regional Dashboard).



As the NCRGDX program continues, County staff who administer the program continue to look for ways to solve or assist with regional GIS initiatives and efforts. The program already provides inter-governmental tools for regional initiatives such as the NG9-1-1 Collaboration Tool which allows for coordinated maintenance of Public Safety Answering Points (PSAP) boundary layers across the region to support NG9-1-1 implementations and to ensure 911 calls are routed to the appropriate PSAP. This system assures the update efforts are uniform and coordinated across the region and within the Commonwealth. Current initiatives seek to create responder level tracking services for Fire and Rescue as well as a law enforcement incident situational awareness tool.

Interoperability is crucial in Northern Virginia as emergency response personnel regularly cross jurisdictional boundaries. Access to accurate street centerline data is particularly important to the Fire and Rescue personnel who may have to cross jurisdictional boundary lines when responding to an incident. The GIS Division maintains Fairfax County's street centerline data used in the CAD/911 system and provides the data to the Commonwealth of VA which aggregates Fairfax County's data into a state-wide centerline file. The Northern Virginia Regional Routable Centerline (NVRRL) project, led by the GIS Division, has been an important and ongoing project enabling centerline data sharing for the CAD/911 system. The project established a common street centerline data model to support vehicular routing and enables participating jurisdictions to share current street centerline data to support vehicular routing, and enables member jurisdictions (Loudoun, Prince William and Arlington



Sec 2 Figure 7- Oblique Imagery of Herndon Station

counties and the cities of Alexandria, Falls Church, and Fairfax) to share routable centerline data across Northern Virginia and the Commonwealth. GIS support for the CAD/911 system is a core GIS office responsibility, involving data maintenance requirements which continue to be a significant effort. With the transition to Next Generation 9-1-1, regional data plays an even more critical role.

GIS technology continues to be an important asset in emergency management. The GIS Division has a team of analysts trained to respond and assist the Department of Emergency Management and Security during an emergency. The team has developed a viewer which enables users in the Emergency Operations Center (EOC) to access various datasets including the regional GDX emergency incident layers, the CAD2GIS data feeds, and other supporting data to support both local and regional response efforts. This viewer will be updated with new capabilities in FY 2024.

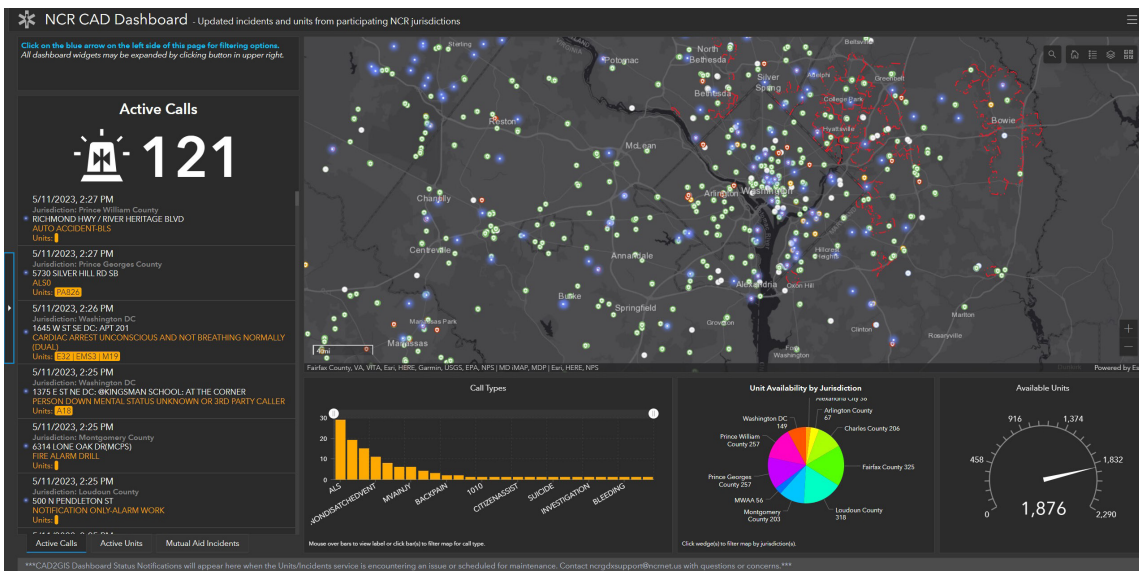
GIS technology enables its users to perform advanced data analysis to inform emergency managers and responders during evolving and dynamic response efforts. For instance, the number of people estimated to be in a particular area, number of homes impacted by a power outage or a boil water order, homes that will be impacted by a sewage pumping station issue, etc. GIS is a key component of situational awareness in the support of emergency operations and activations during which the GIS Division works closely with the Situation Unit to keep the emergency operations staff informed from a common operating picture.

The breadth of GIS utilization across the County, and the extent of its integration into the overall IT architecture are reflected in the award-winning plans and efforts of the preceding years. These awards recognize GIS's achievement in fostering and expanding the use of GIS applications to improve County operations:

# STRATEGIC DIRECTIONS

- In CY 2022, the Environmental Systems Research Institute (ESRI) recognized Fairfax County for excellence in its Enterprise Approach to GIS. This award recognized the way in which Fairfax County has achieved and maintained organizational success through its Enterprise GIS policies and approaches.
- In CY 2020, Fairfax County received a Special Achievement in GIS Award from Environmental Systems Research Institute (ESRI). This award was given in recognition of Fairfax County’s broad based, innovative and enterprise approach to GIS that has resulted in significant benefits to County agencies and residents.
- In CY 2018 the National Association of Counties granted Fairfax County its 2018 Achievement award for its program “Customizing Data for Health and Human Services Planning”, which was GIS-based and helped drive zoning and development decisions.
- In CY 2015, Fairfax County was ranked #1 for jurisdictions with population over 500,000 in the Digital Counties Survey of the “Most Innovative, Pioneering Counties”. The award specifically referenced a GIS application developed by the Department of Neighborhood and Community Services. That application was also a winner of one of the County’s GIS excellence awards the year before.
- In FY 2014, Fairfax County was awarded a Special Achievement in GIS award by Environmental Systems Research Institute (ESRI) for its contributions to ESRI’s national community mapping service. Now a highly-detailed base-map is available for all users of ESRI’s tools. Fairfax County continues to support this effort.
- In FY 2011, Fairfax County GIS, as part of the regional team carrying out the Regional Routable Centerline project, was awarded a Special Achievement in GIS award by ESRI. The award recognizes organizations that use GIS to “improve our world – and set new precedents throughout the GIS community.”
- The National Association of Counties recognized Fairfax County for its use of GIS in the reapportionment process.

Fairfax County is a member of the Northern Virginia GIS managers group, an informal group that regularly meets to coordinate activities, serves on the MWCOG GIS Committee, and also works closely with the State’s GIS agency (Virginia Geographic Information Network), which is part of Virginia Integrated Services Program. Additionally, each year, GIS hosts “GIS Day” and the GIS Excellence Awards which promotes the use of GIS and development of new GIS applications through County wide competition and awards.



Sec 2 Figure 8 NCRGDX Regional Dashboard

## 2.4 CUSTOMER RELATIONSHIP MANAGEMENT (CRM)

Citizens expectations for modern access and interaction with government services continues to grow dramatically. Agencies must leverage technology to capture citizen interaction, track responses to inquiries, manage requests for services, and track complaints and resolutions. To best serve the public, the County needs a common platform that promotes effective and efficient government by integrating with e-government capabilities, supporting omni-channel interactions and leveraging web services and the cloud to improve customer experience and enhance public engagement. The County provides tools and technology that enable data informed decision making, an enterprise-wide view of constituent needs and concerns, and agency responses. Fairfax County continues to respond to this growing need through Customer Relationship Management (CRM) technology platforms that support Low-Code and rapid application development. This allows for a reusable data model, that enables faster development times while maintaining the security and integrity of each agency or business area by leveraging CRM applications and ensuring agency access to data based decision making. Leveraging enterprise low-code CRM application platforms gives citizens enhanced access to inquiry and information about County programs and services.

This project aligns with the County-wide strategic plan and supports the replacement of several customer facing applications/ solutions with more advanced application platforms to improve internal efficiency and ensure equitable access. This initiative has successfully completed data conversion, migration, and implementation of a contemporary CRM user experience across various divisions and programs throughout the County. Applications have been deployed to support eviction prevention efforts, to modernize the Department of Cable and Consumer Services complaint process, and to support needed County services such as the Adult Day Health Centers. Future phases of this project will continue with planned migration from legacy systems to the new enterprise class platform and build applications that ensure multiple modalities for access to the vast services and programs offered by County agencies, with consolidated online and mobile applications - to applications integrated with County call centers.

Staff continues to expand the use of enterprise technologies and platforms to meet the County's digital transformation goals in enterprise application deployment across County agencies and to support the County's strategic initiatives. Enterprise Low-Code application platforms facilitate increased efficiency and effectiveness in managing the many citizen requests and interactions within and across County agencies and business functions. It allows a constituent-focused operation where government is positioned to be proactive to citizen concerns by enhancing collaboration among all agencies and by providing knowledge of common issues for follow-up. The platform also improves transparency by allowing constituents to easily view County management of their requests with a tracking number. Consolidating intakes, reducing the number of duplicate requests, and eliminating redundant systems provide tangible evidence to citizens that their government is efficiently working to provide better access to information, enhance issue response/processing, and improved accountability/compliance.



## 2.5 ENTERPRISE CONTENT AND DOCUMENT MANAGEMENT

The County established a strategic approach to content and document management by developing an integrated solution on an enterprise platform. Content Management is an organization's foundation for the use of information from structured data (through business applications), and unstructured data in electronic or imaged documents (word processing documents, spreadsheets, e-mail, and reports).

**Content Services Platform (CSP)** integrates with Cloud infrastructure and is deployed in containers that allows for full portability of data between County private cloud, public cloud, and on-premises platforms. Artificial intelligence can also be utilized for tasks like assigning metadata and even recommending document organizational improvements, and automatically categorizing content based on predefined terms and taxonomies, which allows AI to work at a scale and speed that improve business processes almost instantaneously. This comprehensive approach and associated implementation of technology provides a familiar search engine-like interface for rapid information retrieval. This platform can also integrate with low-code development tools and empower business users to build applications in hours that used to require months of software engineering. CSP APIs enable connections to preferred workflow, collaboration, business intelligence and analytical tools to minimize complexity and training needs, avoid custom software development, and add functionality with a building block approach. This integrated solution is more cost-effective and provides a seamless integration for use of information exchange and data sharing with other systems required for a complex business transaction.

Content, records, and document management will continue to be a long-term strategy for integration of structured and unstructured electronic and paper-based information and file types to optimize and enhance overall information management, transparency, and decision processes. These initiatives have provided benefits and quality improvements including:

- Increased staff productivity through the delivery of the right documents at the right time.
- Enhanced communication and collaboration through shared information.
- Improved speed of information and transaction flow throughout County agencies.
- Improved access and security through controlled access to sensitive documents.
- Reduced time spent searching for critical documents.
- Improved disaster recovery through electronic storage and backup of information that is far more secure than paper.
- Reduced clerical, paper, printing, and storage costs.

## 2.6 INTEGRATIVE HEALTH AND HUMAN SERVICES MODEL AND INFORMATION TECHNOLOGY

In the last few years, the field of health and human services (HHS) has rapidly evolved. Between the COVID-19 Pandemic, demographic changes, economic changes, and new services and programs, the importance of a health and human model that focuses on integration and interoperability has been affirmed. Individuals and families served by the HHS system often have multiple needs addressed by multiple programs and services. For instance, an older adult, experiencing health and mobility limitations who wants to remain in his home may need at least seven services that currently span four Fairfax County HHS agencies - medication management, nutrition guidance, "meals on wheels", home based support services, senior housing, transportation support, and adult day health care.



With this in mind, over the last several years, the County has engaged in efforts to develop a conceptual foundation and business model which tie together the work of various health, housing and human services agencies in efforts to achieve specific outcomes related to the health and well-being of the County's clients and community. A holistic approach to addressing needs along the spectrum of crisis to self-sufficiency to sustainability, as well as strong communication, coordination and collaboration across programs and agencies are key factors in successfully addressing their needs. The leadership of Fairfax County Health and Human Services (HHS) recognizes that the HHS needs to update its approach to service delivery and management, while leveraging technology to both improve the client experience and realize operational efficiencies. As we move forward, HHS strives for a model that:

- Ensures integrated delivery, management and evaluation of health, housing and human services.
- Is built around a shared vision that focuses on people and their strengths and needs, rather than individual programs.
- Increases the County's ability to assess program performance, identify long-term trends, and create efficiencies.

The ultimate outcome requires shared planning, robust data, and information exchange to shape policies and future actions focused on improved outcomes and shared accountability. This approach also increases the County's ability to assess program performance, identify long-term trends, and create efficiencies. These integrative initiatives have the goal of delivering person-centered services to County residents enabling a cross-sectoral exchange of process and data that better leverages resources and supports the County's overall goals of safety and health for individuals and families.

Information technology (IT) is an essential tool for gaining a comprehensive view of a client's needs and addressing those needs more effectively. Technology is also a critical enabler of improved collaboration across agencies and external providers and programs and between Fairfax County, the Commonwealth of Virginia, and other localities. Finally, it will enable Fairfax County to leverage data analytics for performance evaluation, policy analysis, program planning and budgeting activities.

Acknowledging that this is a complex venture, the goal is not to build or buy a single, all-encompassing, monolithic IT solution that will address the functionality needs of multiple agencies and the programs they manage. Instead, the aim is to be strategic about County IT investments, planning, and commitment to IT resources. Establishing the foundation for how information technology will be used across the health and human services system is the first step towards a multi-year effort enabling the programmatic innovation for the system.

The work is predicated on the need to increase agility in the implementation, management and use of IT, specifically:

- Create a more nimble, responsive approach to IT implementation and provide for a gradual/progressive approach to IT innovation.
- Incorporate "component based" and "service oriented" IT solutions that are designed to interoperate and support various programs/lines of business: wherever feasible, work off common IT components that can interoperate and be replaced or upgraded over time without compromising the functionality and performance of other components.
- Ensure IT supports more rapid, timely changes to policies, business rules and processes.
- Enable greater workforce mobility, user access and self-service where allowable.
- Enable more significant, ideally real-time interaction across the FCHHSS agencies and programs and with FCHHSS external stakeholders.

## 2.7 PLANNING AND LAND USE SYSTEM MODERNIZATION

The departments supporting Fairfax County's land planning and development processes initiated a major strategic initiative, Planning and Land Use System (PLUS), to improve the speed, consistency, and predictability of the development review processes, and improve access to data and reporting. This project replaced and consolidated numerous legacy land use systems supporting zoning and development plan review, building permit/license issuance, code enforcement inspection, and cashing activities. These legacy systems lacked the native agility of modern technologies for a flexible enterprise platform for evolving business process and architecture requirements, lacked optimal security capacities, and had compatibility issues with emerging desktop, tablet and mobile wireless technologies.

The initiative supports County plans to advance economic development and competitiveness, enhance business processes, provide better customer service, and achieve increased reliability in plan review, approval, permitting, and inspections. This initiative also supports Fairfax First and Economic Success strategies and aligns with the Board of Supervisors Public Engagement.

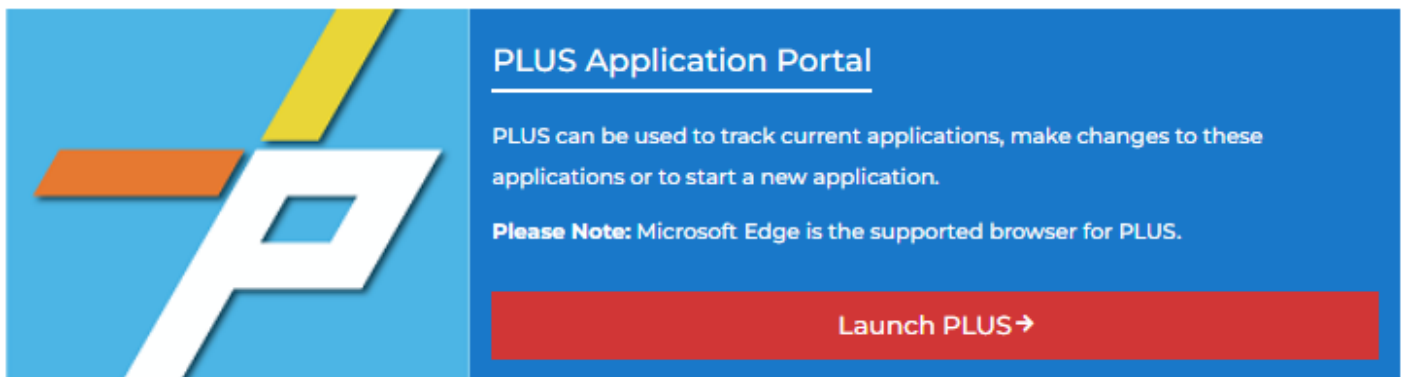
The Planning and Land Use System (PLUS) Modernization initiative and associated projects implemented the best fit IT solution to meet the overall objectives for business functionality, customer service, and technology needs of County departments involved in the regulatory land use and development processes and to modernize and enhance the County's land use business architecture and its underlying technologies. PLUS replaced legacy systems that operated on obsolete technology architectures, and numerous complimentary systems with custom interfaces that were developed to meet evolving business requirements over the past two decades. The legacy systems could not be modified to holistically accommodate the rapidly increasing changes in land planning and development business processes.

The PLUS project replaced and consolidated these aging systems with a modern technology platform driven by re-engineered, streamlined, and integrated business process across the five major land use stakeholder agencies. This project worked with the ongoing Electronic Plan Submission Project (ePlans) to deliver technical integration and functional interoperability. Key features and accomplishments include:

- Executive sponsorship and governance by the Deputy County Executives for Land Development and Information, and a Senior Executive Steering Committee comprised of the Chief Technology Officer, IT Program Directors for Solutions and Land Development, GIS and Web in DIT, and agency directors of the five major agencies associated with the land use process. This group provided leadership and strategic direction for the project including goals, timeframes, and priorities.
- Key leadership for the business scope and process improvement opportunities and goals provided by the Department of Planning and Development (DPD) and Land Development Services (LDS). Other core stakeholder departments include Fire and Rescue – Fire Prevention (FRD), the Health Department – Environmental Health (HD), and Department of Code Compliance (DCC).
- County staff conducted independent assessments of current procedures and processes, benchmarking the County against other best practices, identifying opportunities for improvement, obtaining input from the development community, developing recommendations to improve services and operational execution and performed an in depth market scan for solutions.
- An agile development approach for the PLUS system was adopted to deliver the software on an incremental basis, and continuously improve with end-user feedback to ensure the system meets current business needs. The software platform was upgraded to the most current version.
- The Release 1 was successfully launched in the second quarter of FY 2021.

- The PLUS Project Roadmap was updated in the fourth quarter of FY 2021.
- Release 2 was successfully launched in the first quarter of FY 2022.
- Release 3 was successfully launched in the third quarter of FY 2022.
- Knowledge Transfer sessions from vendor to County staff took place in the fourth quarter of FY 2022.
- Release 4 was launched in the second quarter of FY 2023.
- Project completion successfully achieved in FY 2023.

The Department of Information Technology provided the technological leadership and worked closely with the above core departments to modernize and replace most of the legacy systems and supporting system silos that support land planning and development, inspections, code compliance processes, and provides contemporary capabilities for Web, mobility, and data analytics



## 2.8 DATA ARCHITECTURE AND ANALYTICS

Data is a key enabler for delivery of organizational objectives in Fairfax County. This strategic initiative will use data to power processes and support digital transformation, facilitate improved decision making, and continue building trust with residents.

Data architecture will focus on the following areas:

1. Empower processes and support digital transformation:
  - a. Integrate data collection and analysis by adopting a standardized data framework.
  - b. Ensure standards and protocols are in place to maximize value.
  - c. Implement automation capabilities to streamline data processing and analysis.
  - d. Establish a modern data estate that leverages advanced technologies and tools to drive innovation and scalability.
2. Facilitate better data driven decisions:
  - a. Use public input and data to anticipate challenges and opportunities.

# STRATEGIC DIRECTIONS

- b. Find innovative ways to provide equitable and meaningful services for the community.
  - c. Highlight disparities within a geographical area and distribute resources equitably through targeted intervention.
3. Build trust with residents through transparency:
- a. Provide residents control over personal data through an intuitive portal and increased visibility about how data is used.
  - b. Provide effective data management so residents can select data privacy levels and update personal information when needed.
  - c. Demonstrate positive community outcomes achieved by utilizing resident data for analytical analysis.
4. Ensure technical data governance:
- a. Establish technical data governance policies. Enable technical processes and frameworks to ensure accuracy, privacy, and security across the enterprise.
  - b. Implement and expand data classification and access control mechanisms to protect sensitive and confidential resident data assets.
  - c. Automate regular audits and assessments to monitor and enforce adherence to policies and standards.

Ultimately, the goal of this strategic initiative is to become a data driven organization that uses data to underpin policy, decisions, and actions to improve services and outcomes for residents, businesses, and the County. Data will be used to evaluate and monitor performance and help plan and prepare for the future, predicting issues before they arise. Becoming a truly data driven organization will support delivery of priority objectives and benefit residents by providing tailored and responsive public services and increased efficiencies.



# SECTION 3

INFORMATION  
TECHNOLOGY PROJECTS

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### 3.1 TECHNOLOGY OVERVIEW

The Information Technology investment fund (Fund 100-C10040) was established in FY 1995 to optimize centralized management of available resources by consolidating major Information Technology (IT) projects in one fund. General Fund transfer, other revenue funds, the State Technology Trust Fund, and interest earnings are sources for investment in eligible Information Technology projects. In FY 2001, the E-911 Emergency Telephone Service Fee revenue and related project expenses were moved to Fund 400-C40091, to satisfy a state legislative requirement that E-911 revenues and expenditures be accounted for separately.

The County's technology improvement strategy has two key elements: redesign business processes and apply technology to achieve improvements in service quality and efficiencies and provide an adequate technology infrastructure that supports County technology solutions. The County's long-term commitment to provide quality customer service through the effective use of technology is manifested in service enhancements, expeditious response to citizen inquiries, round the clock on-line service opportunities, improved efficiencies, transparency, and data driven management decisions.

#### FY 2024 PROJECT FUNDING

IT projects (supported by Fund 100-C10040) are not included in the County's FY 2024 Budget Plan. Selected projects approved for FY 2024 funding will be supported with one-time balances and/or agency savings during quarterly budget reviews. This strategy enables the County to optimize the strategic use of available dollars and align project funding with project budgets, plans and schedules. FY 2024 IT Project requests include those that were funded in the County's FY 2023 Third Quarter Review package and others that will be considered as part of the FY 2023 Carryover process.

#### PRIORITIES

The funded projects meet one or multiple priorities established by the Senior Information Technology Steering Committee and include a mix of projects that benefit citizens, staff, and the need for maintaining a secure and strong technology infrastructure. The Senior IT Steering Committee, which is comprised of the County Executive, Deputy County Executives, the Chief Financial Officer, the Chief Technology Officer, and other senior County managers, adopted five strategic priorities that guide the direction of IT investments. These long-standing priorities include:

- **Mandated Requirements** - Provide support for requirements enacted by the Federal Government, Commonwealth of Virginia, Board of Supervisors, and those that are Court ordered or result from changes to County regulations.
- **Completion of Prior Investments** - Provide support for multi-year technology implementations, completion of planned phases of a project, and lease purchases.
- **Enhanced County Security** - Provide support for homeland security, physical security, information security, and cyber security solutions and privacy requirements.
- **Improved Service and Efficiency** - Promote consolidated business practices, support more efficient government, optimize management and use of County assets and data, enhance systems to meet the expectations and needs of citizens, and promote online services. This includes corporate and strategic initiatives that add demonstrable value to a broad sector of government or to the County, and improve productivity and/or enhance effective management of the County's information assets.
- **Maintaining a Current and Supportable Technology Infrastructure** - Focus on technology infrastructure modernization which upgrade, extend, or enhance the overall architecture of major County infrastructure components, including hardware, software, and its environment. Ensure that citizens, businesses, and County employees have appropriate access to information and services.

## REVIEW AND APPROVAL

In line with FY 2024 Budget Guidelines, agencies were advised to submit new project funding requests that met one or more of the five above Senior IT strategic priorities; as well as specify tangible project outcomes, clear project start and completion dates, anticipated implementation and budget plans over the next five years, including subsequent fiscal year(s) impact on enterprise wide infrastructure, maintenance and support, and linkage to agency strategic and business goals. Agencies were further instructed to carefully evaluate urgency, feasibility, readiness, and the strategic business value of initiatives for which an IT Project funding request is submitted. FY 2024 funding requests for existing projects were limited to projects requiring additional support to meet existing contractual obligations, to complete a planned phase and where appropriate progress against existing project plans had occurred. The process is designed to facilitate the development of a solid business and technical case for IT project requests and to update the business and technical status for continuing projects.

In keeping with established procedures, a Project Review Team of senior business and technical staff from the Department of Information Technology (DIT) and the Department of Management and Budget (DMB) reviewed the project proposals. Requests were evaluated for those offering greatest opportunities for operational improvements and support for sustained performance, security, and reliability. Existing projects were also assessed for continued alignment with project plans, schedules and return on investment opportunities. Benefits were weighed against the cost and risk factors including potential changes in scope necessitated by new business drivers, technological relevance, operational changes, project schedule viability, and the impact of not funding or otherwise delaying the project. Technical factors included alignment with the County's technology architecture and standards, impact on existing County IT infrastructure, and availability of viable products and services. Also considered was the organizational experience with the solutions and the availability of staff resources to implement the project.

## FY 2024 PROJECT CATEGORIES

Though the following approved projects meet numerous strategic priorities, for narrative purposes, the projects are listed in one of the following categories:

### COMPLETION OF PRIOR INVESTMENTS

The County's IT program focuses on using technology as an essential tool to enable cost-effective delivery of services. While some projects can be completed within the fiscal year, most are multi-phase projects requiring more than one year of funding.

FY 2023 Third Quarter funding of \$500,000 supports the **Customer Relationship Management (CRM) Project (2G70-041-000)**, an additional \$500,000 will be considered as part of the FY 2023 Carryover Budget. This project aligns with the County-wide strategic plan and supports the replacement of several customer facing applications/solutions with more advanced application development platforms to improve internal efficiency and ensure equitable access. This initiative provides a unified user approach to handling citizen's service requests, case management, issues tracking, and specialized Freedom of Information Act (FOIA) application to comply with a Commonwealth of VA mandate for local jurisdictions.

FY 2023 Third Quarter funding of \$4,000,000 for the **Tax System Modernization Project (2G70-069-000)** supports continued modernization of payment system in the Department of Tax Administration (DTA) including web enhancements for improved public access to fill gaps in external offerings for taxpayers while meeting code requirements.

The **Health and Human Services Integrated Technology Project (IT-000025)** will be considered for \$500,000 as part of the County's Carryover Budget. This project will deliver a scalable set of properly coordinated services, improve service quality with accurate and timely data, and deploy and maintain cost-effective IT assets and services in the Health and Human Services agencies.

FY 2023 Third Quarter funding of \$1,563,300 supports the **Integrated Electronic Health Record System Project (IT-000027)**. This multi-phase project supports the acquisition and deployment of an electronic health record system for the Health Department. This project will optimize the potential value of leveraging a common information technology solution with the requisite configuration flexibility to enable health care providers to more effectively collaborate and coordinate health care services for County residents.

FY 2023 Third Quarter funding of \$400,000 supports continued work toward implementation of **Fairfax County Park Authority's (FCPA) Asset Information Management System (IT-000042)**, and an additional \$345,052 will be considered as part of FY 2023 Carryover budget. FCPA's asset information management program includes Operations and Maintenance for a variety of park authority business areas, capital planning, construction management, and integration with enterprise County systems.

FY 2023 Third Quarter funding of \$450,000 supports ongoing deployment of an Enterprise **Asset Management System (2G70-040-000)** for the Department of Facilities Management (FMD) and an additional \$200,000 will be considered as part of FY 2023 Carryover. This system supports FMD's core business line, Operations and Maintenance service delivery, as well as a mobile application to support demand and preventive maintenance, and specialized reporting and dashboards to enhance FMD executive management of resources and workload management.

## ENHANCED COUNTY SECURITY

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

Planned funding of \$500,000 at FY 2023 Carryover will support the **Cyber Security Enhancement Project (2G70-052-000)** to safeguard the County's IT assets from evolving cyber threats and support mandated regulatory compliance requirements. IT security continues to be a fundamental component of the County's enterprise architecture and strategy, fusing best practice principles with hardware and software infrastructure supported by policies, plans, and procedures. This project provides for IT security system requirements, replacements and upgrades, consulting expenses, and security product and service acquisitions to protect the confidentiality, integrity and availability of County systems and information.

FY 2023 Third Quarter funding of \$1,000,000 supports the **Police Records Management Refresh Project (IT-000013)**, and an additional \$631,481 will be considered as part of FY 2023 Carryover. This project supports replacement of the current Police Department Records Management System (iLEADS) with the next generation case management solution that fully utilizes and supports the present and future police department needs and business processes and maintains close integration with the current 9-1-1 Dispatch (Computer Aided Dispatch – CAD) system.

## IMPROVED SERVICE AND EFFICIENCY

Projects recommended for funding in this category provide improved service and efficiency in the provision of services to County residents and businesses. Many of these projects are multi-year initiatives and include projects supporting the County's

## INFORMATION TECHNOLOGY PROJECTS

e-government and public access programs, transparency efforts, strategic human services and land development initiatives, tax and revenue services, and technology efforts designed to improve County processes for enhanced efficiencies and service delivery.

The County's strategic **e-Gov Program (2G70-020-000)** is supported by \$535,000 included in the FY 2023 Third Quarter Budget and an additional \$400,000 to be considered as part of the County's FY 2023 Carryover Budget. This project supports multiple e-government channels vital for public access to information, transactions, and e-services. The e-Gov program also supports research and development of emerging web technologies, expansion of Web and mobile applications, improvements in search and navigation, integration with internal systems and other public access channels, leveraging artificial intelligence (AI), and data and cloud-native applications and infrastructure. This project also supports the County's intranet (FairfaxNet) and sustained compliance with Department of Justice (DOJ) Americans with Disabilities Act (ADA)

FY 2023 funding of \$630,221 support the Police Department's **E-Summons Project (2G70-067-000)**. This project supports officer safety by reducing the time required to complete traffic stops and improves data integrity by eliminating data entry of citation information into the Police Department Records Management System. This increase includes appropriation of \$130,221 in E-Summons revenues to support anticipated future project requirements.

FY 2023 Third Quarter funding of \$5,000,000 for the **Office of Elections Technology Project (IT-000006)** supports replacement of election equipment as the current equipment reaches end of life. An additional \$5,000,000 will be considered as part of the FY 2023 Carryover process. The primary objectives of this project are to identify and resolve election-specific technology gaps and implement technical solutions that consolidate business practices and increase public access to election information and services.

Funding of \$250,000 for the **Enterprise Document Management Project (IT-000017)** will be considered as part of the County's FY 2023 Carryover Budget. This project supports a multi-phase implementation of a contemporary enterprise document management platform in support of on-going imaging, integration with case-management systems and/or agencies operations, and cost effective compliance with mandated document retention requirements.

The County's **Geospatial Initiatives Project (IT-000028)** is supported by \$649,000 at FY 2023 Third Quarter and will be considered for \$1,000,000 funding as part of the FY 2023 Carryover Budget. This project supports the acquisition, maintenance, and refresh of "foundational" GIS data assets and aerial imagery at optimal frequencies. Additionally, a multiphase multi-year enterprise GIS modernization effort was launched to bolster current and future needs by strengthening mobile/web capabilities, updating critical infrastructure, enhancing data analytics, and developing capacity for systems growth and integration. GIS data is used in all County web applications that incorporate maps and in nearly all public safety vehicles; additionally, GIS data is extensively used by parks, urban forestry, storm/wastewater management, health and human services, planning and development, emergency response, and regional interoperability.

FY 2023 Third Quarter funding of \$404,980 supports the **Department of Tax Administration (DTA) Customer Relationship Management Project (CRM) (IT-000040)** for development and enhancements of an integrated CRM solution for the Department of Tax Administration, responsible for the first line contact with the Fairfax County taxpayers. Deployment of CRM solutions will improve business processes and revenue collection.

FY 2023 Third Quarter funding of \$60,000 supports the **Department of Housing and Community Development's (HCD) Digitization Project (IT-000052)** to improve HCD's digitization efforts. This multiphase, multi-year project will improve efficiency, security, retention, and proper access to HCD documents and create automated archives for documents that are critical and must be kept on site.

## MAINTAINING A CURRENT AND SUPPORTABLE TECHNOLOGY INFRASTRUCTURE

The County's technology strategy leverages existing infrastructure with deployment of contemporary and supportable IT infrastructure to meet business needs. Projects in this category support the goal of updating and strengthening the technology infrastructure, and ensuring that the public and County staff have appropriate, secure and reliable access to information and services.

**Information Technology Training Project (2G70-006-000)** will be considered for \$100,000 at FY 2023 Carryover to support essential IT training to strengthen and maintain staff technical skills and required certification.

The **Tactical Initiatives Project (2G70-015-000)** will be considered for funding of \$200,000 at FY 2023 Carryover. This project addresses unexpected technology requirements, non-IT initiatives with unexpected IT impact, technology changes required in response to new state/federal mandates, regulations and compliance requirements, and other system upgrades, infrastructure and/or integration requirements.

FY 2023 Third Quarter funding of \$1,400,000 supports the **Enterprise Architecture and Support Project (2G70-018-000)** and an additional \$1,000,000 will be reviewed as part of FY 2023 Carryover Budget. This project supports enterprise infrastructure and expert services for complex multi-phase business transformation IT systems for County general services, enterprise technology, security, infrastructure, and corporate systems, including the County's Enterprise Resource Planning (ERP) and related business systems. This funding supports necessary software upgrades and integration of business application and infrastructure system components to meet both the County's IT architecture and interoperability goals.

The **Remote Access Project (2G70-036-000)** will be considered for \$200,000 as part of the FY 2023 Carryover Budget. This project supports the provision of critical secure remote access to County networks and systems for telework capabilities, disaster recovery operations, and recognizes the increasing reliance of agency mobile workers on wireless solutions. Enterprise-wide standardized access control methodology enables secure identity authentication for authorized access to County networks, data, and systems.

FY 2023 Third Quarter funding of \$750,000 supports the **Data Analytics and Business Intelligence Project (IT-000034)**, with an additional \$750,000 to be reviewed as part of the FY 2023 Carryover Budget. This multiphase project supports the County's strategic objective of improving evidence-based decisions ensuring resources (time, money, and people) are used efficiently and effectively, and developing sustainable strategic plans to better serve constituent populations.

FY 2023 Third Quarter funding of \$750,000 supports the **Enterprise Modernization Project (IT-000055)** and an additional \$750,000 will be considered as part of FY 2023 Carryover Budget. This project furthers the County's digital transformation and supports an effective and efficient government by streamlining, securing, and automating systems, while enhancing data collection practices and improving business technology.



## 3.2 PUBLIC SAFETY

### 2G70-059-000 MOBILE COMPUTER TERMINAL PROJECT (E-911 - FUND)

#### *Project Description*

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

#### *Progress to Date*

This Project supports a 5-year recurring life cycle replacement of 1/5 Mobile Computer Terminals (MCT) and peripherals for the public safety fleet for Police, Fire/EMS, and Sheriffs to ensure this critical equipment is kept contemporary and functional for public safety personnel. FY 2024 will be the 2nd year of the next life cycle replacement to keep the equipment contemporary and available. An additional 25 units will need to be purchased due to expansion of the fleet and the need for spare equipment.

#### *Project Budget*

FY 2024 funding of \$1,717,550 supports the replacement of 1/5 of the MCTs and associated peripherals that make up the total fleet.

### *Return on Investment*

More than 150,000,000 transactions are processed each year via MCTs through the mobile data communications infrastructure and therefore, it is critical to keep this equipment contemporary and available for the many operations utilized by field personnel.

Mobile digital communications are connected to the CAD and other information systems enabling field personnel to receive dispatch messages, event notifications, self-initiate events, transmit requests for information from remote databases such as VCIN, NCIC, FBI, etc. and receive messages back from these systems. MCTs allow units to maintain status without the use of voice radios freeing up voice channels for emergency use. MCTs also serve as an officers' desktop for completion of reports and routine functions that would normally require the officer to return to the station, thus keeping personnel in the field. During the COVID 19 Pandemic, the remote fleet allowed officers to maintain acceptable social distancing from each other with open lines of communications still available through messaging each other and dispatch.

## **3G70-078-000 E 9-1-1 TELEPHONY PLATFORM REPLACEMENT PROJECT (E-911 - FUND)**

### *Project Description*

This project supports Fairfax County's initiative to replace legacy 9-1-1 call center hardware and software for dispatch of police and fire units in response to emergency calls and to enable a transition to a Next Generation 9-1-1 set of services. This project began in 2015 as a multi-phase update of the PSAP (Public Safety Answering Points) communications technology environment within the County to continue 9-1-1 call processing functions, and to replace the external service provider network. The widespread adoption of rapidly advancing technologies like text, video, Voice over Internet Protocol (VoIP), and the increased reliance on high-speed broadband services have raised expectations for Next Generation 9-1-1 services. This project supports transition of the County's core 9-1-1 system architecture to new supportable platforms that are technologically current and compliant with National Emergency Number Association (NENA) Next Generation 9-1-1 industry standards to facilitate 9-1-1 public safety services into the future.

### *Progress to Date*

- Fairfax County was the first local jurisdiction to implement interim text to 9-1-1 for vital access to 9-1-1 for hard of hearing individuals.
- A new vendor to replace 9-1-1 call taking equipment and recording in all County 9-1-1 centers was selected and Fairfax County replaced four separate 9-1-1 call handling systems and four recording systems with two integrated systems for 9-1-1 voice recording and public safety radio traffic. The system includes five locations, all on one central platform for improved interoperability and simplified maintenance.
- Additional enhancements for improved business processes continued including situational awareness of call queue activity, staffing forecasts for call takers, management reports, VESTA ESINET (Emergency Services Internet protocol Network) connectivity for NG9-1-1- ESINET Platform, upgrades at the back up location, and additional data repository capabilities for citizen emergency profile data.
- The County led an Request for Proposals (RFP) and awarded a contract to AT&T to replace the legacy call networks with a NG 9-1-1 ESINET which began an additional phase of the project to establish the IP platform for voice and other 9-1-1 media including pictures, videos, etc. This project also integrated ESINET into the VESTA NG 9-1-1 network, incorporated GIS data and coordinated with regional partners. The work for the NG 9-1-1 and initial operational transition in Fairfax County occurred in the summer of 2020.

- The project will continue work towards transition to direct connections from service providers to the ESINET so that citizen calls for assistance are received faster and with more associated information, integration of multimedia calls, refresh of the recording and call handling system which requires a complete update to a cloud-based SAAS platform to increase functional capabilities (such as in-line language translation capabilities and cybersecurity protections) and other improved capabilities and efficiencies. The cloud-based platform establishes the potential for greater regional interoperability using a shared platform

### *Project Budget*

In FY 2024 funding of \$2,180,000 continues support for the required hardware and software upgrades associated with this strategic initiative.

### *Return on Investment*

Improved systems for 9-1-1 services provide enhanced services and capabilities to the citizens of Fairfax County with a high degree of accuracy and functionality with up-to-date technology solutions. These technology upgrades strengthen system resiliency, reliability, and establish a technology foundation for implementation of Next Generation 9-1-1 multimedia capabilities such as text, video, and photographs. This on-going multi-part project improves system interoperability with other jurisdictions, call overflow with other Public Safety Answering Points, and location accuracy. The new 9-1-1 call processing technology platforms will result in cost savings for Fairfax County as specialized proprietary systems are replaced with commercial off-the-shelf components that will reduce maintenance costs.

## **3G70-079-000 PUBLIC SAFETY CAD SYSTEM INFRASTRUCTURE PROJECT (E-911 - FUND)**

### *Project Description*

The Public Safety Computer Aided Dispatch System (CAD System) is one of the County's largest IT systems. The CAD System is the core technology supporting the intake and dispatch response functions for all Fairfax County Public Safety agencies including Police, Fire and Rescue, Sheriff, and the Department of Public Safety Communications (DPSC 9-1-1 Center) in their core mission of keeping Fairfax County and its citizens safe. Call takers and dispatchers use the CAD System to process all calls for service received on 9-1-1 and other requests for emergency and non-emergency services in Fairfax County, as well as for mutual aid interoperability. This project supports the update and replacement of the hardware infrastructure and required software licenses, workstations, and associated licenses, used by the CAD system and its users for current and future functionality over a five-year repeating replacement cycle.

### *Progress to Date*

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

Each phase of the proposed project plan addresses replacement components and related software versioning processes with activities including identification, purchase, installation, software license obligations, and transition to a new CAD solution. The hardware and software replacement schedules are coordinated with partner agencies to ensure minimal impact on other public safety projects. Software updates are also coordinated and driven by the manufacturer and industry standards.



System upgrade in 2022 expanded the capacity of mobile users, and commercial alarm companies' ability to report alarms to Fairfax County was automated. The alarm interface handles sixty-five percent (65%) of all calls for service, freeing up hours daily for the emergency operators to focus on other service calls. Upgrade to the regional CAD-to-CAD interface continues as the new version has a significant number of new functions and can process data faster and more efficiently than the previous versions. There are several other enhancements in the early stages of development planned for completion by the end of the Q4 CY2023. Replacement of all remote CAD hardware at the stations has begun and should be completed in Q4 of CY2023.

### *Project Budget*

FY 2024 funding of \$1,180,000 supports continued replacement plans for the County's CAD system.

### *Return on Investment*

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

## 2G70-021-000 AND 2G70-022-000 CIRCUIT COURT TECHNOLOGY PROJECT

The Fairfax Circuit Court is nationally recognized for its delivery of public service. The Court continues to actively pursue state-of-the-art technology solutions to improve both court efficiency and customer experience. Circuit Court modernization initiatives aim to make the Clerk's over 800 Virginia Code-mandated duties more efficient and cogent, using software programs and integrated systems. This unity of effort, through modern systems and processes better serves Fairfax County Court customers, and protects important Constitutional protections, like due process and speedy trial rights. As the trial-level court, and only court of record in Fairfax County, technology will continue to help the Clerk's Office preserve Fairfax's public history. The review of past accomplishments recited below as "Progress to Date" and future project goals, set out as "Planned Project Schedule," are broken-out between the Court's Land Records systems, and the Case Management systems. These projects cover multiple facets of Circuit Court operations.

### *Project Description*

**Court Automated Recording System (CARS) / Court Public Access Network (CPAN)** – The Clerk of the Fairfax County Circuit Court is responsible for providing citizens with reliable, timely, and accessible public records. Over 56 million court records have been digitized into the Court's Public Access Network (CPAN) which is a web-based, online, digital image retrieval system. CPAN offers subscribers 24 hours a day, 7 days a week online access to land records, judgments, marriage licenses, trade names and probate record images, dating from as early as 1742 to the present. CPAN has over 2,000 subscribers who are located domestically and internationally. Subscribers include citizens, real estate title examiners, law firms, mortgage companies, banks, media outlets, and federal, state, and local governmental agencies.

**Case Management System (CMS)** – The Clerk of the Fairfax Circuit Court is responsible for receiving and maintaining all court records for felony prosecutions and civil litigations in Fairfax County. The Clerk files, indexes, and manages the complete life cycle of a court case and its pleadings, from case-initiation (Search Warrants/Indictments in criminal prosecutions and Petitions/Complaints in civil actions) to the compilation of the appellate record for submission up to the Court of Appeals and the Supreme Court of Virginia. All pleadings, criminal discovery, trial evidence and post-trial motions, as well as Orders of the Court, are kept in perpetual record by the Clerk’s Office.

This kind of dynamic public-record keeping, held in perpetuity, is a ripe environment for the efficiencies digital technology offers. The Clerk’s current Case Management System (CMS) automates case-processing through the Circuit Court, allowing for real-time case indexing, docketing, trial calendaring, data-integrated document-generation and processing, trial/hearing calendaring, disposition-entry, account ledgering and the running of statistical reports.

### *Progress to Date*

- Added color image capabilities to asking applications.
- Rewritten legacy application in the latest .NET technology and upgraded the look and feel of reports with graphical representations to support the latest browsers.
- Improved security of image storage with new security methods to ensure the integrity of public records.
- Upgrade of the Court’s Public Access Network (CPAN) to .NET, which also includes a completely redesigned look for a more user-friendly interface for search and retrieval operations, including the addition of new search features.

Other accomplishments include:

- Development and deployment of the Circuit Court’s Court Document, including document imaging; with integrated redaction capabilities.
- Implementation of the CPAN retrieval system.
- Deployment of an automated jury management system, which serves as a system clearinghouse for the 60,000+ Fairfax citizens who make up the Court’s annual jury pool.
- Implementation of the Clerk’s “Paperless Probate” and “Virtual Probate” process, which makes a difficult time in a family’s life, swifter and more efficient.
- Development and implementation of a streamlined, and mobile-friendly Marriage License Pre-Application, which gives customers the ability to apply for a marriage license online.
- Implementation of electronic docketing display, which serves as directional signage for the public, as they navigate the large courthouse, to find their courtroom.

These systems provide a platform and foundation for additional capabilities, as the Court’s business requirements evolve.

Technological system updates, which are critical to platform vitality and customer-service delivery, are also addressed through this fund.

### **CARS**

- Indexed, and stored all land record documents for electronic processing.
- Completed cashiering and scanning capabilities, to update the public record in a more efficient manner.
- Automated Administration of Estates System.
- Automated the Marriage License Application process.

- Integrated the redaction of data and into existing workflows as mandated by Virginia’s General Assembly.
- Developed Online Marriage Pre-Application, an online resource currently used by marriage license applicants - use of the application has significantly reduced customer wait times.
- Established a collaborative project with the Commissioner of Accounts of the 19th Judicial Circuit and the Circuit Court’s Probate Division, to electronically exchange, maintain and record administration of estate documents and relevant data.

## CMS

- Implemented e-filing for selected Civil case types of existing cases.
- Enhanced Expungement Process for improved quality control and quality assurance.
- Implemented court-wide scanning of all case documents with redaction capability.
- Increased the scope of e-transferred Orders to include final Divorce Decrees, Final Law Orders, Name Change and Guardian Ad Litem (GAL) Orders.
- Initiated imaging all sentencing guidelines within the case management system to facilitate electronic transmission to the Virginia Sentencing Commission.
- Improved Protective Order Interface with the Supreme Court of Virginia: Office of the Executive Secretary, to communicate injunctions in real-time.
- Expanded a Report Service Library, where custom-built SQL-reports are kept for both on-going and ad-hoc statistical Report-Requests.
- Enhanced Central Criminal Records Exchange (CCRE) report capabilities allowing for charges to be removed from the Exception Report.

The project will continue to:

- Modernize existing legacy applications, as well as expansion of document types will be the focus of the CARS project over the next year.
- Establish a Project Management Office for better project communication, improved allocation and alignment of resources and assisting with adherence to the CMS project requirements and schedule.
- Expand e-filing to additional Civil case types and integrate the payment process to enable new case filings.

## *Project Budget*

Annual funding from Virginia’s Technology Trust Fund revenue (mandated by Virginia Code for addressing Circuit Court Clerk’s Office technology needs), CPAN subscription revenue, Administration of Justice revenue, and agency funds support technology initiatives in the Circuit Court.

## *Return on Investment*

Taken together, the Clerk’s modernized land record and public records systems, and the continued digitization of the Court case management systems, provide Fairfax County with a secure, highly efficient, and dynamic trial court that protects important, unquantifiable civil liberties. For instance, CPAN provides immediate electronic access to over 2,000 customers, making all land records, deeds, deeds of trust, liens, and judgments available to the public on every parcel of land located in Fairfax County. In addition to citizen-customers, CARS serves federal, state, and local agencies, particularly sister-agencies such as the Fairfax County Department of Tax Administration (DTA), the City of Fairfax Tax Assessor’s Office, the Fairfax County Geographic Information Systems (GIS) and the Fairfax County Department of Public Works and Environmental Services (DPWES).

Once complete, a comprehensive Court Case Management System will offer Virginia's largest trial court real-time case document imaging, electronic filing, electronic-certifying and payment system portal, and the ability to develop digital trial practice (for the management of digital evidence submission and police body-camera evidence) as well as real-time judicial dashboard capabilities. Multiple parties will be able to access electronic case files simultaneously, and e-file pleadings and other documents from their firms, at any hour of the day or night, reducing road-travel to the courthouse. A more efficient trial court process and e-filing will save self-represented litigants (as well as attorneys) time and money in the life cycle of their case. When the time and cost of litigation reduces, meaningful access to justice is achieved. Finally, potential interfaces with agencies like the Sheriff's Office or other Virginia jurisdictions, will allow the exchange of electronic documents and/or data and eliminate existing manual processes between jurisdictions.

## 2G70-034-000 COURTROOM TECHNOLOGY MANAGEMENT SYSTEMS - DIGITAL UPGRADE

### *Project Description*

The primary goal of this project is to upgrade and integrate the high-tech courtrooms, conference rooms, jury assembly, and jury deliberation rooms at the Fairfax County Courthouse to a modern digital platform consistent with industry standards. The digital upgrades allow for Bring Your Own Devices (BYOD), High-Definition Multimedia Interface (HDMI) connectivity, Wi-Fi, annotation enhancements, upgraded touch panel displays, and network-managed video services, while retaining existing CTMS functionality. The digital CTMS meets the County's strategic objectives of improving citizen's access to the Courts, facilitating trials and hearings in the most effective and efficient means possible, allowing for all three Courts to share common resources, and providing for the flexibility and adaptability required to incorporate future changes in technology and court proceedings.

### *Progress to Date*

A multiphase deployment to upgrade existing courtrooms to a digital platform commenced in FY 2017 and was completed in FY 2022.

Milestones and planned implementation are:

- FY 2017 – Completed Digital Upgrades for four Circuit Court courtrooms (5A, 5B, 5C, 5D).
- FY 2018 –
  - Completed Digital Upgrades for four Circuit Court courtrooms (5E, 5F, 5G, 5H).
  - Completed Digital Upgrade for two General District Court courtrooms (2J, 2K).
  - Completed Digital Upgrade for two Juvenile and Domestic Relations District Court courtrooms (3A, 3B).
- FY 2019 – Complete Digital Upgrades for five JDRDC courtrooms (3C, 3D, 3G, 3H, 3K).
- FY 2020 –
  - Complete Digital Upgrades for two JDRDC courtrooms (3E, 3F).
  - Complete Digital Upgrades for two Circuit Court courtrooms (5J, 4J).
  - Complete Digital Upgrades for two General District Court courtrooms (1A, 1E).
- FY 2021 –
  - Digital Upgrade MCR Network Switch Expansion.

- Digital Upgrades for Adult Detention Center Video Arraignment and Remote Hearing Room.
- Build Out and installation of two additional Adult Detention Center Video Arraignment and Remote Hearing Rooms.
- Digital Upgrades to Courthouse Jury Assembly rooms to enhance audio and allow remote connectivity with the courtrooms and remote destinations.
- FY 2022 -
  - Digital Upgrade to Judicial Conference Rooms for the General District Court and Juvenile & Domestic Relations District Court that allow remote connectivity with the courtrooms and remote destinations.
  - Expansion of video conference capabilities throughout the courthouse to allow for non-contact public service areas.
  - Installation of Attorney/Client virtual conference rooms.
- FY 2023 Plans -
  - Retrofit digital upgrade for courtroom 1A due to prior conflicts with courtroom construction and renovation schedules.
  - Upgrade and migration of Courtroom Digital Audio Recording to an established cloud platform to include speech-to-text capabilities.
  - Complete Digital Upgrade to legal Conference Room for the Office of the Commonwealth's Attorney.
  - Jury Deliberation Room Digital Upgrades.
  - Research and implement translation services products at public counters for the District Courts.
  - Courthouse Data Center and Network Telecom maintenance and sanitization.
- FY 2024 Plans -
  - Digital Upgrade of Courthouse Conference Rooms to allow remote connectivity with the courtrooms and remote destinations.
  - Paperless courtrooms – integration of presentation systems with case management systems.
  - Installation of Attorney/Client virtual conference rooms (contingent on construction and renovation schedules).
  - Integration of CTMS and other hardware platforms with case management systems, software conferencing (Webex, Teams, Zoom, Polycom, etc.) and digital evidence storage platforms.
  - Build out and technology integration of one additional courtroom for the Juvenile & Domestic Relations District Court.
  - Migration of on-premises Audio Recording to cloud environment and implementation of live Speech-to-Text of Courtroom Audio Recordings.
  - Integration of Digital Evidence capture, storage, and Digital Evidence Management Systems.
  - Full implementation of Digital Upgrade of one GDC Courtroom (1A).

## *Project Budget*

Additional funding, when required, will be requested at the appropriate time.

## *Return on Investment*

The CTMS allows new and renovated courtrooms to share a common infrastructure with distributed services through a centralized master control room. This capability provides consistency, standardization, and scalability between the three courts with improved access and facilitation of court processes and services for citizens, judges, court staff, litigants and others who need to conduct business with the courts. Substantial benefits and opportunities have been realized by centralizing and standardizing courtroom technology and sharing resources and infrastructure between the three courts. The implementation of CTMS has improved trial management and provided savings for the County, the courts, attorneys, and litigants.

## IT-000013 POLICE RECORDS MANAGEMENT REFRESH PROJECT

### *Project Description*

This project supports replacing the current Police Department Records Management System (iLEADS) with a next-generation Records Management System (RMS). The existing system cannot be upgraded to current IT standards. The new RMS will provide the Police Department with a commercial off-the-shelf web-based solution that will integrate with third party software and integrate closely with the current 9.4 Computer Aided Dispatch (CAD). The new system will fully utilize and support the present and future needs and business processes of the police department.

### *Progress to Date*

RMS RFP was published May of 2020 with a submission deadline July of 2020. The SAC/TAC review deadline was December of 2020. Eleven submissions were received, and the review committee selected three vendors for demonstration April of 2021. In September of 2021, a preferred vendor was selected. Following contract negotiations, a contract was awarded to the selected vendor in July 2022.

Shortly after the contract award and following project kickoff, implementation of the new system began and is currently underway. The new Records Management System is being configured and tested, and work on the interfaces with various County and state systems is in progress. The projected go live date is anticipated in FY 2024.

### *Project Budget*

FY 2023 Third Quarter funding of \$1,000,000 continues support for this key public safety initiative. An additional \$631,481 will be considered as part of the FY 2023 Carryover Budget.

### *Return on Investment*

A modern Records Management System (RMS) is a critical necessity in large police departments. It enables the Police Department to act more efficiently to incidents, from initial response to tracking, investigation, and reporting. A new RMS will incorporate legacy information from existing PD data warehouse seamlessly with the ability to present, analyze, search, and collate data for custom reporting useful in crime analysis and staffing needs. A modern system also assures more accurate, timely, reliable, and accessible information on events.

## IT-000014 SHERIFF CIVIL ENFORCEMENT SYSTEM PROJECT

### *Project Description*

The Sheriff's Office is required by Virginia Code 8.01-293 to execute civil processes within its jurisdiction, and to report statistics as required by the Virginia Compensation Board. The Office of the Sheriff, in collaboration with the three Fairfax County Courts (Circuit Court, General District Court, and Juvenile and Domestic Relations District Court), and the Department of Information Technology is implementing an Advanced Civil Enforcement System (ACES) to automate existing civil enforcement business processes and replace the legacy systems. The ACES solution provides a desktop and mobile solution, enhanced security, reporting, statistics, and will also provide interfaces between the Sheriff's Office, the Courts, and other County agencies.

### *Progress to Date*

The ACES Project has transitioned to a new, internally built Civil Enforcement System called NuACES supporting critical needs of the Sheriff's Office Civil Enforcement Branch. This includes the civil enforcement processes such as real-time tracking of service information reporting, a single bi-directional interface with the General District Court's Case Management System (CMS), an interface with the County's Geographical Information Systems (GIS) for geocoding and geofencing to electronically track service documents, and a mobile solution utilizing existing infrastructure. The project will continue with development of secure public and internal web access, bi-directional interfaces between ACES and the three Courts' case management and imaging systems, and interfaces with other County agencies.

### *Project Budget*

Additional funding, when required, will be requested at the appropriate time.

### *Return on Investment*

When fully implemented, the new Advanced Civil Enforcement System (NuACES) will provide an integrated and comprehensive civil enforcement solution for electronically processing, distributing, and tracking service documents. The system will significantly reduce staff time from manually process of physical service documents and improve response time to public and court inquiries with secure public and internal web accessibility. Additionally, it will enhance reporting and statistics required by the Virginia Compensation Board, minimize lost or misplaced documents, and provide electronic backup for business continuity.

## **IT-000015 COMMONWEALTH'S ATTORNEY CASE MANAGEMENT SYSTEM PROJECT**

### *Project Description*

The Office of the Commonwealth's Attorney (CWA), in collaboration with the Department of Information Technology implemented a management system with a secure, scalable multi-user platform compliant with Fairfax County IT standards. The CWA's Office has a very high case volume making attorney case and courtroom scheduling a complex and labor-intensive process. The eProsecutor solution is a web-based application that streamlines and automates previous manual processes and improves efficiencies with law enforcement agencies and the Courts with improved workflow tools, streamlined processes, and enhanced accountability. These improvements will aid in making CWA's operations efficient and optimally digitized, while scaling the operation's data capacity to incorporate data-informed decision-making into the team's routine practice.

### *Progress to Date*

The initial system was rolled out in May 2019 and modifications continued into FY 2021 to better capture barcode and case information at the point of origin. The project's original scope is complete. Additional requirements and modifications were identified and are planned in the next phase of the project through FY 2023 - FY 2024. These enhancements will include reconfiguration of the calendar, workflows, forms, fields, and lookup lists and will help the office standardize data entry and collection processes so that case level information is more consistent and reliable. Additionally, these enhancements will help the use of data in the aggregate to promote data-driven decision making throughout the office.

### *Project Budget*

The project has sufficient available budget. Additional funding, when required, will be requested at the appropriate time.

## *Return on Investment*

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

## **IT-000043 GENERAL DISTRICT COURT (GDC) ONLINE DISPUTE RESOLUTION PILOT PROJECT**

### *Project Description*

In cooperation with the Supreme Court of Virginia/Office of the Executive Secretary (OES), the Fairfax County General District Court piloted an Online Dispute Resolution (ODR) solution in the Court's Civil and Small Claims Divisions; the Small Claims Division processes up to 45 small claims cases per court date, resulting in approximately 2,250 cases per year. The ODR system enabled citizens to connect with other case litigants and dispute mediators in a mobile-friendly, safe, and secure environment, with 24/7 on-demand accessibility permitting litigants to view their cases and display their information from anywhere and anytime. The ODR offered a convenient alternative for case resolution when citizens were unable to travel to the courthouse. The Court anticipates efficiencies through deployment of an online solution while maintaining compliance with procedural, technical, and legal constraints. A trend towards "cybercourt" has emerged in the United States as the next generation opportunity, especially with mediation and arbitration.

### *Progress to Date*

Starting in April 2021, when the pilot program went live, small claims cases filed with the Fairfax County General District Court were automatically entered into the system for negotiation and potential mediation. The General District Court monitored and analyzed its processes to ensure the highest number of people registered for and used the remote services. Data gathered through the system's reporting and participant surveys were used to assess the program's effectiveness, convenience, and improvements in litigants' access to justice. During the first year of the pilot, over 900 cases were processed through the ODR system. The Court's metrics indicate that the ODR shortens the average time by 14 days and quadrupled the percentage of cases where parties had either completely or partially negotiated ahead of their court date compared to using a mediation only approach.

The General District Court developed a formal proposal request for a long term ODR solution. The process went to the state of product demos with potential vendors. While this process was ongoing, the General District Court's ability to support the project, particularly the rollout of a long-term solution, was significantly impacted by a severe staffing shortage that is still ongoing. Due to short staffing issues, the General District Court decided to end the formal proposal request without a selection. Once the Court has the resources available and the Supreme Court provides the supporting interface applications to fully implement this project, efforts can resume to pursue a long term ODR solution. The pilot was completed at the end of CY 2022.

### *Project Budget*

The project has sufficient available budget.



### *Return on Investment*

The ODR solution is a streamlined method of dispute resolution in which parties can quickly mediate differences online without repeated hearings in courtrooms. The benefits include a reduction in case backlogs achieved by resolving civil cases before their hearings, shortening case lifetimes to an average of days instead of months, and saving staff time and reducing case touch points thereby increasing party satisfaction. Given the ubiquity of the internet and the public's preference for online accessibility options versus in-person court cases, the General District Court Small Claims division saves significant time, resources, and money by enabling resolution of certain cases via an online court-based mediation and non-binding arbitration process as a first step prior to court involvement.

## **IT-000047 SHERIFF'S JAIL MANAGEMENT SYSTEM (JMS) REPLACEMENT PROJECT**

### *Project Description*

The Jail Management System (JMS) project supports a multi-phase replacement of the current legacy Sheriff Inmate Management System (SIMS) which is near end-of-life. The proposed system will provide a comprehensive, secure, high-availability solution with automated backup and disaster recovery that meet the systems and Fairfax County's established IT standards as defined in the Fairfax County Information Technology Security Policy (70.05 2015) and the Criminal Justice Information Services (CJIS) standards. The new JMS will meet the demands of managing a population of approximately 1,200 inmates housed within the Fairfax County Adult Detention Center by supporting alternative work force, booking receiving and release, classifications, complex sentencing calculations, incident reporting, inmate records, medical, behavioral health, finance, property, programs, professional services, transportation, and visiting. The system will provide accurate reporting and statistics, so the Sheriff's Office remains in compliance with local, Virginia State Code, Supreme Court of Virginia Statutes, and Federal and State data and reporting mandates.

The system will integrate electronic medical records, inmate accounting, reporting, mugshots, scanning, and incident-based reporting (IBRs), as well as interface with multiple state and local systems such as Active Directory, commissary, kiosks, LIDS, NOVARIS, Police Department's Records Management System (RMS), VCIN/NCIC, and VINE. The new system will provide the opportunity to automate remaining manual tasks, provide robust reporting and statistics, automate notifications and alerts, provide a mobile solution, and interface with the Fairfax County Courts (Circuit Court & Records, General District Court, and Juvenile & Domestic Relations District Court) and the Magistrate's Office.

### *Progress to Date*

In September 2021, the JMS Project Team determined that the submissions received in response to the first RFP for the Sheriff's Jail Management System (JMS) did not meet the Sheriff's Office needs (to include mandatory requirements). The project team modified the JMS RFP specifications and requirements, and the new RFP was released in February 2022. The evaluation process is currently underway with a contract award anticipated in Q4 of FY 2023.

### *Project Budget*

FY 2023 Third Quarter funding of \$1,000,000 continues support for this initiative; additionally, \$1,380,000 will be considered as part of the FY 2023 Carryover Budget.

## *Return on Investment*

The proposed Jail Management System will provide an integrated and comprehensive solution with access to real-time inmate information, reduce redundant manual paper intensive processes, increase efficiencies with digitized work queues to streamline inmate processing and digital displays for real-time status updates on booking and release processes, streamline risk assessment, improve inmate management with barcodes and scanning for inmate intake, checking rounds, release processes, interfaces with critical state and local systems, and provide improved system availability, security, integrity and electronic backup to safeguard records. Additional benefits include a mobile solution with robust reporting and statistics, automated notifications and alerts, and interfaces with the Fairfax County Courts (Circuit Court & Records, General District Court, and Juvenile & Domestic Relations District Court) and the Magistrate’s Office. The system will provide accurate reporting and statistics, so the Sheriff’s Office remains in compliance with local, Virginia State Code, Supreme Court of Virginia Statutes, and Federal and state data and reporting mandates.





### 3.3 CORPORATE ENTERPRISE

#### 2G70-020-000 INTERNET/INTRANET INITIATIVES PROJECT – E-GOVERNMENT

##### *Project Description*

This project supports initiatives that enhance and expand service delivery, not only within government, but between government and the public using information and communications technologies. A comprehensive approach is employed to ensure the support of multiple business solutions on a scalable and secure infrastructure. In addition to providing services and information efficiently to foster long-term citizen engagement from anywhere at any time, digital government services increase productivity by diverting staff resources to address 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 and make data-driven decisions to deliver information, services, and programs effectively to the public.

E-Government's vision is to provide new information and services on cloud-based, multi-channel, open-source, and operating system (OS) neutral platforms, while continuing to build on existing information architecture for both the public website and intranet. This includes research and development of emerging technologies, expansion of Web and mobile applications, improvements in search and navigation, integration with internal systems and other public access channels, leveraging the power of artificial intelligence (AI), data and cloud-native applications and infrastructure.

##### *Progress to Date*

#### 1 – WEB CONTENT MANAGEMENT AND PUBLIC WEB SITE

Built on an open-source enterprise Web Content Management System (WCM) in 2018, Fairfax County's website has evolved since its initial implementation. This state-of-the-art platform provides a scalable solution that puts the County in a position to adapt to new technologies. This system meets the County's requirements for security, publishing workflows, and distributed site

management responsibilities. There are 90+ multi-sites in the WCM system to support over fifty-five County agencies that have a presence on the re-engineered Fairfax County website. The award-winning Fairfax County website information architecture presents information based on topics to reduce agency silos and optimize search engine results. The responsive design enables the website to be rendered effortlessly on all mobile devices.

In FY 2023, the project continued its focus on:

- Enhancing the Artificial Intelligence (AI) powered “Fairfax Virtual Assistant (chatbot) to include Spanish, making it bi-lingual chatbot.
- Offering Live Assistant functionality.
- Refreshing the public website to introduce new color palette, enhance UI/UX experience with focus on services and develop and implement new functional widgets for content presentation to enhance citizen interaction with County Government. The County website is also translated to multiple languages using machine translation powered by Google.
- Implementing a new cloud-based communication platform for electronic outreach with the public using email and text messaging.

As metrics show, more than half of the traffic to <https://www.fairfaxcounty.gov/> comes from search, E-Gov will continue to invest in this important aspect and optimize web content so commercial search engines find County content. Google Site Search is used to augment the overall search functionality of the website.

In FY 2024, the program will continue to align with the County’ strategic plan for an efficient and effective government following DevSecOps practices and leveraging cloud-native infrastructure. Continuous innovation using data and machine learning, adding additional languages to the AI powered chatbot, integrating with home assistants, and implementation of a new cloud-based web statistics and analytics solution will remain the focus for the County website.

## 2 – MOBILE APP

Fairfax County pioneered the availability of governmental services on mobile devices. In enhancing the County’s long-standing goal that the community should access their government 24/7 without walls, doors or clocks, Fairfax County placed government in the palm of their hands with the introduction of efficient and cost-effective mobile apps and services.

The public can download the official Fairfax County application on their smartphones and tablets for emergency information, news headlines, one-touch calling through a contact directory, GPS maps, social media links, transportation resources and more at <https://www.fairfaxcounty.gov/topics/mobile>. The app is available for download at Apple App store and Google Play App Store. New features and functionality will continue to be the focus in FY 2024. The Fairfax County Mobile App has been downloaded over 5,000 times this past fiscal year.

## 3 – ENTERPRISE APPLICATION ARCHITECTURE AND SERVICES

E-Government develops and supports many enterprise- wide cross-agency applications like Financial Transparency, Tax Calculator, Directory, Ask Fairfax, Contract Register, NewsCenter and Email Subscriptions. The project develops application framework, standards, and best practices for the current environment to support County agencies in the development of web and mobile applications. It will continue to evaluate and prototype new application development platforms.

A major initiative for integrated cloud-native web sites, applications, services, and infrastructure is bringing Office 365 apps and services (SharePoint, Power Apps, Power Automate, Power BI, Teams), Azure cloud service and applications, and DevOps together for more efficient County platforms and services.

In FY 2024, the program will continue to focus its efforts on innovative projects that will provide services and programs using new technologies such as cloud-native application development and integration, container, and Kubernetes services. More cloud integration, such as multi-channel single-sign-on solution (SSO), are in the road map. More mobile application developments are also planned with cross platform .NET technology.

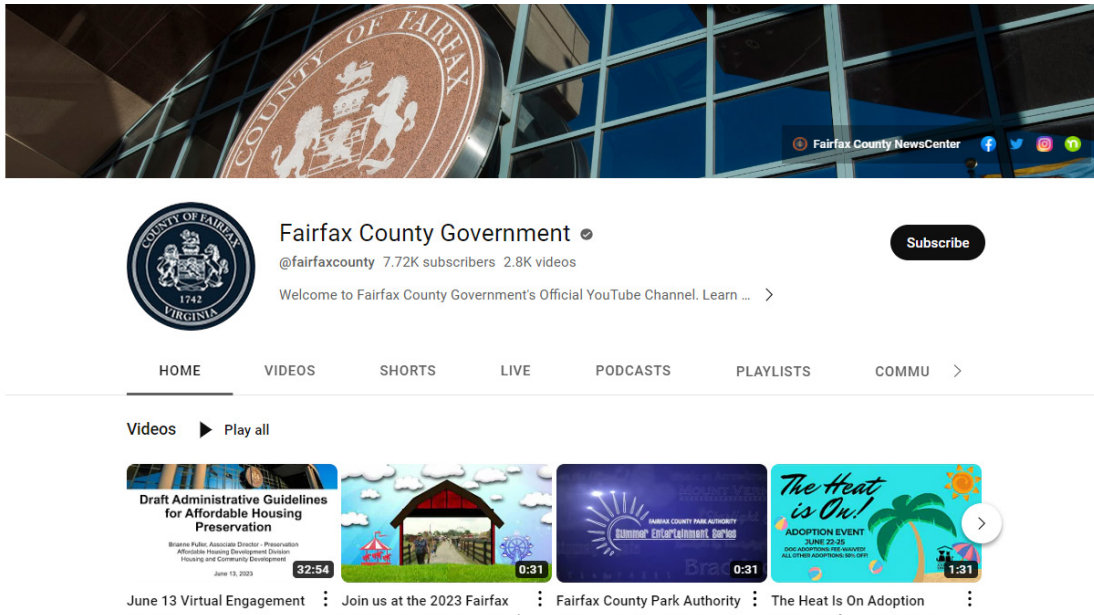
#### 4 – WEB FARM INFRASTRUCTURE ARCHITECTURE AND MANAGEMENT

This project continues to build and upgrade the web farm infrastructure for the public and internal DevOps environment. The following Internet/Intranet Infrastructure operations are on-going:

- Drive cloud-native transitions for applications, infrastructure as code, and DevOps based software development and integration pipelines.
- Create new generation application development and hosting environment based on containers, Kubernetes, and cloud services.
- Secured network settings on high availability internet/intranet server farms for constant improvement of system reliability and security.
- Enhance web analytical reporting to provide data-driven insights for dynamic content distribution on both Internet and intranet.
- Continuous refinement of the monitoring system to ensure 24x7 availability.



Sec 3 Figure 1 - County Facebook page



Sec 3 Figure 2 - County YouTube page

## 5 – INTRANET

“FairfaxNet”, the County’s intranet, is an employee focused enterprise SharePoint Online portal that provides an intelligent platform to seamlessly connect users, teams and knowledge that supports the ability to leverage relevant information across business processes to help employees work more efficiently. FairfaxNET is a centralized resource for internal County content, forms, policies, news, application, training, and other sources of information. It is also the gateway to the County’s enterprise ERP solution (FOCUS).

It provides collaboration tools for agencies and work groups which are secure, convenient and a standard workspace for employees to work individually or collaboratively. FairfaxNET is a centralized location for disseminating pertinent County wide, agency-specific, or team/project-specific information. It also provides a venue for automating business processes.

Approximately 55 County agencies now have a presence on the County’s intranet site, including applications, pages, documents, PDF, and graphics on the internal site. Most agencies have Web content contributors, and Internet Services staff which support content creation efforts for those agencies without a dedicated Web presence. The County’s intranet will continue to be updated with additional access to enterprise data and interactivity and expanded to become a viable alternative for full transaction-oriented applications. The addition of new information and increased business functionality is essentially an ongoing project. FairfaxNET continues to support more evolved and complex automation of agency business processes for operational improvements.

### Project Budget

FY 2023 Third Quarter funding of \$535,000 and planned \$400,000 as part of the County’s FY 2023 Carryover process continue support for this foundational program.

### *Return on Investment*

This E-Government Program continues to provide information architecture, user interface/user experience (UI/UX) expertise, application development framework and supports web infrastructure for all platforms providing new information and digital services to the public web site and intranet. It further expands the web content management system to improve automated workflow, revision control, indexing, search, and retrieval for enterprise systems. The project utilizes open data, analytics, and personalized engagement to create a transparent service delivery that encourages public participation while enabling the County to build applications faster and more efficiently by maintaining reusable components. Robust and powerful intranet platform tools help digital transformation and automation improve staff efficiencies and productivity assisting in rapid deployment of services to the public website.

## **2G70-041-000 CUSTOMER RELATIONSHIP MANAGEMENT (CRM) PROJECT**

### *Project Description*

Customer Relationship Management (CRM) is a foundational technology that supports the County's strategic goal of improving the quality, efficiency, and speed of responses to citizen requests/issues by integrating stovepipe applications, implementing on-line 24x7 access strategies, social media tools, low/no code solutions, artificial Intelligence, and techniques to enhance the overall customer experience and manage service requests via a single user enterprise-wide interface tool. This project is a multi-year effort to replace the legacy CRM applications with updated technology for resident facing applications/solutions using a contemporary low-code enterprise scale platform that integrates with agencies' business applications and processes.

This approach to a centralized rapid application deployment provides a multi-platform solution across many channels including e-mail, web, social media, and call centers. The improved integration with the County's Web environment, contact centers, mail, and communications systems, promotes service efficiency and effectiveness, with improved customer experience, and citizen engagement. This project also improves access and ability to gather data-driven insights by enabling the view of data at the enterprise scale to enhance opportunities for data analytics, improved cross-agency processes, performance improvement, and service planning.

### *Progress to Date*

This project supports the replacement of legacy customer management solutions. Phase 1 included environment setup, business process analysis, configuration, application development, and data migration for eleven County business systems including Board Offices. Phase 2 consisted of successful data conversion and migration from IQ to the new application platform for the Board Chairman's office and the Dranesville Board office. Phase 3 of the project included implementation for Department of Tax Administration Audit branch, Office of Public Private Partnerships, Office of Public Affairs - VFOIA (VA Freedom of Information Act) Front Desk, Media relations, and Sully and Mount Vernon Board Offices.

Phase 4 began with the conversion to cloud based CRM with the O365 upgrade and the transition of VFOIA, 2020 BOS updates, Target, 911 Request, and HD emergency response solution. In the past year, several other legacy systems were converted to modern CRM such as the Department of Cable and Consumer Services. Future phases will continue planned migration from legacy systems to the new consolidated online mobile app-ready application platform as well as refinement to leverage newer technology released within the CRM platform.

## *Project Budget*

FY 2023 Third Quarter funding of \$500,000 and \$500,000 to be considered as part of the FY 2023 Carryover budget continue support for this project.

## *Return on Investment*

This centralized enterprise application platform facilitates increased efficiencies, agile deployment, and improved effectiveness in managing the many citizen requests and interactions within and across County agencies and business functions. It allows a constituent-focused and case management operation where government is positioned to be proactive to citizen concerns and needs by enhancing collaboration among all agencies and by providing knowledge of common issues for follow-up. This solution also furthers our data strategies as it enables centralized management of the data and ensures access to meet both agency and countywide goals. Furthermore, transparency is increased by tracking numbers which allows constituents to easily view management of their request. Savings are generated by consolidating intakes, reducing the number of duplicate requests, and eliminating redundant systems. This cost savings provides tangible evidence to citizens that their government is working for them efficiently by providing better access to inform, optimized issue response/processing, and improved accountability/compliance.

## **2G70-055-000 VOLUNTEER MANAGEMENT SYSTEM PROJECT**

### *Project Description*

This project provides an integral approach for recruiting, scheduling, managing volunteers, and producing reports by operational unit. Aggregate reports across County agencies enables more accurate tracking and managing volunteers as well as producing reports by operational units. This system supports integration with legacy volunteer software products used by County agencies and partners (some of which may be converted later).

### *Progress to Date*

The system integrates all County agencies with volunteer programs and is available to the Board of Supervisor for recruitment of Boards, Authorities and Commissions (BAC) appointees and general volunteers. There are over 59,000 volunteers registered in the system. Pre-COVID over 450 opportunities were being advertised to the public. The project will continue to enhance and expand capabilities and improve user experience.

### *Project Budget*

Additional funding, when required, will be requested at the appropriate time.

### *Return on Investment*

This project supports improved management of over 100 programs spread across multiple facilities in Fairfax County and facilitates enterprise growth of volunteer programs with a single software solution that improves efficiency, recruitment, management, placement, and scheduling. This project also aims for improved tracking and reporting of volunteer contributions and an easy-to-use point of entry for citizens interested in volunteering with Fairfax County. Additional objectives include developing common policies and data elements for the County's volunteer programs and streamlining the process of matching volunteer abilities, interests, and availability with County agency needs. With over one million County citizens and budget



constraints, volunteers are an important component in the sustainability of County programs and services. There are now more than 52,650 ethnically and educationally diverse volunteers registered in the system, representing all supervisor districts.

## 2G70-069-000 TAX SYSTEM MODERNIZATION PROJECT – TAX/REVENUE ADMINISTRATION

### *Project Description*

This project replaced of the County's two core legacy tax systems Personal Property and Business Professional and Occupational Licensing (BPOL) with a web-based application. Implementation allowed for a comprehensive overhaul of many existing functions such as personal property account administration, business filing and licensing, vehicle registration, tax assessment, exemptions and adjustments, accounts receivable, and billing. Elimination of outdated technology platforms enhances opportunities for integration with other County and State systems, as well as facilitates citizen interaction and self-service opportunities via web-based technologies. In December of 2022, a Board Matter was issued to review all tax supporting systems and determine future needs. Additional funding has been added to the project to aid In this review and identification process.

### *Progress to Date*

This project was initiated an in-house effort to redevelop the outdated legacy Personal Property Tax System which includes Personal Property and Business Professional Occupational License, Delinquent Collections and associated reports and interfaces to the cashiering system, WEB, and Commonwealth of VA DMV and DTA. The goal was to redevelop the legacy applications to modern, supportable technology platforms for the existing functionality. The focus was then expanded to include enhancing the citizen, business, and staff user experience with DTA. The expanded scope included database re-organization to eliminate batch processing requirements, addressing data deficiencies and other application limitations, as well as DTA identifying business processing improvements and integration with on-line capabilities including integration with internal County applications, state applications and external County partners. In addition, the applications were optimized to facilitate mobile platform use by County citizens and staff. The initial phase of the project went live on July 6th, 2021; subsequently, additional systems were identified that would fit in the new framework.

As of January 2022, the printing solution changes were implemented to include updating legacy processes and increasing mailing and postage efficiencies. Integration with the Department of Motor Vehicles to auto register vehicles was also completed in January. This reduces the number of mailings and allows the County to mail personal property tax bills more efficiently. The disabled Vets module was completed in February of 2023 with additional enhancements to prepare for the Tax Relief system. Additional items were identified as part of a review after a Board Matter item was issued in December of 2023. A three-year phased project plan is being developed to include: enhancement of web services, increased access to payment methodologies and increasing system performance.

### *Project Budget*

FY 2023 Third Quarter funding of \$4,000,000 continues support for enhancements to the County's revenue systems.

## *Return on Investment*

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

## IT-000006 OFFICE OF ELECTIONS TECHNOLOGY PROJECT

### *Project Description*

This project supports strategic enhancements to Fairfax County's election related technologies and works to identify and implement business and technical requirements for election specific hardware, management systems and applications. The project also manages the acquisition and life cycle management of these systems. All project deliverables and services are designed to meet the operational, security and performance requirements of the County and to comply with Federal and State election laws and mandates. The primary objectives of this project are to identify and resolve election-specific technology gaps and implement technical solutions that consolidate business practices and increase public access to election information and services.

### *Progress to Date*

**Electronic Poll Books** – In FY 2022 the Office of Elections acquired 1000 new pollpads which will replace the existing devices that are reaching end of life. These new pollpads have built in functionality for a cellular data connection that will allow for over the air security and data updates while still turning off all network access on election day as required by election code. Once voting has finished these new pollpads can resume their data connection to facilitate faster tabulation and dissemination of the results.

**Ballot on Demand Printing** – A pilot program for the June 2022 election of a ballot on demand solution is going to run at the six early voting locations. This solution integrates with the existing pollpads and eliminates the need for large amounts of pre-printed ballots. If this pilot is successful, the County will purchase and use the solution for all early voting locations in November.

**Voter Registration** - Initiated a State-wide survey of scanner used to improve document scanning workflow. Directed all Fairfax County operators to perform a new workflow based on the results of this survey to better account for commonly found issues within the State's voter registration system. This effort has helped reduce scanner operator downtime. Plans are to continue leveraging the improved workflows for scanning.

**Election Management System** - Installed a new version of Electionware with improved enhancements for the 2022 primary and general election.

**Voting Equipment** - Successfully tested all equipment ahead of the June 2022 Primary. Planning has begun for a complete replacement of voting equipment after the 2024 presidential election.

**Poll Worker Management** - Poll workers continue to be managed through new elections specific software.

**Election Results** - The Office of Election is leveraging Microsoft forms for webforms to be more secure in its data storage for unofficial results.

### *Project Budget*

FY 2023 Third Quarter funding of \$5,000,000 supports strategic and needed updates to elections technology in Fairfax County, an additional \$5,000,000 is planned as part of FY 2023 Carryover budget.

### *Return on Investment*

This project will ensure the County's compliance with Federal and State elections mandates as well as the Report and Recommendations of the Presidential Commission on Election Administration and the Fairfax County Bipartisan Commission report on Election Improvement.

## IT-000016 BUDGET SOLUTIONS PROJECT

### *Project Description*

Fairfax County Government (FCG) and Fairfax County Public Schools (FCPS) have partnered on a multi-year, joint initiative to implement a budget solution to accommodate the requirements of the end-to-end public sector budget formulation process, projections, reporting and program measures. The annual budget process is an ongoing cyclical process simultaneously looking at two fiscal years (current and future/budget preparation).

Fairfax County Government (FCG) and Fairfax County Public Schools (FCPS) have similar overall budgeting processes with distinct development calculation methodologies, timeframes, and reporting requirements, necessitating the maintenance of autonomy between FCG and FCPS. Business requirements for handling budget development and quarterly adjustments vary from year to year. A budget solution on a modern platform provides the necessary structure and flexibility to meet strategic and tactical requirements with the flexibility to adjust to evolving needs and opportunities.

Modern technology will support preparation of complex budget publications with rapid turnover that rely on consistent data presentation and formatting, in which data must be quickly verified and edited and published in a variety of formats including the WEB.

### *Progress to Date*

Implementation of the Budget Solution is complete for the County and Schools. The project is now focused on prioritization for future phases for the solution which include forecasting/projections, performance measurement data tracking, position count tracking, and budget monitoring.

### *Project Budget*

Additional funding, when required, will be requested at the appropriate time.

### *Return on Investment*

Phase 1 of this project provided functionality for budget preparation and budget publication including the ability for central budget staff to prepare Advertised/Adopted budgets and quarterly reviews. The solution provides a permanent budget system

with built-in integration with other County systems including integration with the enterprise resource planning systems (SAP) and the reporting data warehouse and providing security roles and user administration to allow access by department end users, thus relieving much of the additional work from central budget office staff. In addition, with role-based access, system controls and security are enhanced.

In addition, the budget solution is better positioned to mitigate risks for system failure by implementing disaster recovery and backup protocols on an enterprise platform. Also, the enterprise platform is scalable and supported by multiple resources. Long-term opportunities remain in gaining operational improvements in a cost-effective manner through continuous implementation of enhancements on a platform that is scalable, maintained on-site and supported by in-house staff.

### **IT-000017 ENTERPRISE CONTENT SERVICES PROJECT (PREVIOUSLY CALLED ENTERPRISE DOCUMENT MANAGEMENT)**

#### *Project Description*

Enterprise Content Services (ECSP) project is the County's approach to store, centralize, and share documents and other data; this strategy includes the use of tools that enable the origination, creation, editing, management, review, publishing, search, retrieval, and applied use of information regardless of the initial source or format. ECSP is focused on improving business references allowing the County's mobile workforce to deliver better customer service without limitations of location. Additionally, ECSP provides for cost effective compliance with mandated retention guidelines and governance for data that must be preserved for specific periods of time. This project supports the strategic goals of reducing paper records, promotes efficient archival and retrieval of documents, facilitates public access and electronic workflow improvement initiatives in County agencies.

#### *Progress to Date*

Contract was awarded to multiple vendors for contemporary document management solutions. Business, technical requirements, analysis, stakeholders working sessions and phased implementation which began in FY 2016 continues across County agencies in FY 2024.

#### *Project Budget*

Funding of \$250,000 will be reviewed as part of the County's FY 2023 Carryover Budget.

#### *Return on Investment*

Enterprise Content Services Platform enables the County to have a rich document management and business process flow for retrieval and storage of a vast quantity of required paper records. This technology automates workflows, improves business process efficiencies and productivity, reduces paper records and storage needs, and makes data more accessible, easily retrievable, secure, and compliant with records management regulations such as the Freedom of Information Act (FOIA).

## IT-000028 GEOSPATIAL INITIATIVES

### *Project Description*

GIS is a strategic foundational technology, integrated with numerous County applications and business processes. GIS data and mapping applications are extensively used in tax assessments, social equity awareness, public safety, parks management, urban forestry, storm and wastewater management, planning and development, and other business areas.

GIS is utilized across most County agencies daily for planning and decision making. The quality of those decisions depends on data, currency, accuracy, and completeness. The current initiatives include support for four important sets of data: Ortho/aerial imagery, oblique imagery, planimetric data, and LiDAR (Light Detection and Ranging).

- Aerial imagery is the foundation for accurately placing most of the data in the GIS and creating the planimetric data. Derived from aerial photography, orthoimagery is used in almost every GIS application in the County.
- The planimetric data is highly important to many County operations and features the location of all man made surface natural features. The highly detailed contour and surface data is critical for the County's Stormwater Management Program and is used in all the displays in the County's public safety/emergency response vehicles.
- Oblique imagery is critical to 911 call takers who use it to visualize the scene of incidents. It is also essential for the assessment of properties by Tax Administration, checking zoning applications, and as the basis for the creation of 3D data for Virtual Fairfax.
- The County collaborated with US Geological Survey to acquire its first LiDAR, that data has proven to be of significant value to Urban Forestry and Stormwater. As a result, the County will pursue regular refreshes of LiDAR, particularly as its cost continues to decline. The latest acquisition was delivered to the County and was flown in December 2018. Another flight was completed in late 2022 with receipt in 2023. Additionally, the highly detailed and accurate LiDAR data may reduce expenses for planimetric update in the future.

This project continues to modernize the GIS infrastructure and complete the refresh of several GIS based systems critical to County operations. The completed modernization will enable sound integrations of GIS with operational business systems, expand the operational use of GIS, protect the investment in data, and provide the stability expected of corporate systems. The refreshes take advantage of modern tools for improved functionality and capability.

### *Project Goals*

This initiative supports acquisition, maintenance, and refresh of key "foundational" GIS data assets at frequencies necessary for optimal County operations. It also maintains the GIS system through enterprise licensing, hardware acquisition support, and support for GIS based system refreshes or replacements. The refresh goals for each are as follows:

- **Oblique Imagery acquisition** - refresh every year with 1.7" to 3.5" GSD resolution.
- **Ortho Imagery** - refresh every year with 2" or 3" GSD resolution.
- **Planimetric data** - Planimetric data (derived from orthoimagery) was updated on an eight-year cycle. FY 2022 saw the completion of that cycle and FY 2023 was a planning period for the program. It was determined that LiDAR would replace the topographic update from this project resulting in significant savings by leveraging the County's LiDAR investment effectively. In FY 2024, the County will examine methods for cost effective and more frequent planimetric updates using artificial intelligence and other techniques to reduce costs.
- **LiDAR** - The highly detailed LiDAR surface and elevation data can detect erosion and other changes in the ground surface. It is also useful in analyzing line of site options as with the Route 1 Embark project and helping with land use/land cover analyses. In 2017, the County's Environmental Quality Advisory Council (EQAC) specifically recommended that the County

pursue regular acquisition of LiDAR which is refreshed every 4 years. Fairfax County received a grant to cover 2/3 of the cost for a flight in FY 2023 which coupled with County funding will produce update surface information close to the recommended interval. FY 2024 will focus on the exploitation of the new LiDAR data.

- **3D Modeling** - 3D building modeling has been long used in the Virtual Fairfax application. This data is used to show proposed developments in the existing environment and for community outreach. Given the pace of development and change, this dataset needs to be refreshed, with the older modeled areas given higher priority. FY 2024 will focus on determining where 3D technology benefits the County most and will work with EDA, DPD, and others to update 3D modeling targets.

The Geospatial Initiatives Project plans to complete the update and refresh of key County systems:

- **The Integrated Parcel Lifecycle System (IPLS)**– This tool was created over 15 years ago and is the basis for demographic forecasting. IPLS will be converted from a desktop application to a web-based tool with a public interface.
- **Public Notification Application** – This new public system will provide the capability for the County to push notices to registered users regarding some County conducted, sponsored, or regulated activity near the site they register with the system. Land use notices will be the first notice type supported by the system.

The project also supports modernization of GIS systems to meet current and future needs for increased mobile capabilities, critical infrastructure, data analytics and program management situational awareness tools, and developing capacity for system growth and business systems integration.

### *Progress to Date*

- **GIS Portal Migration and Resiliency** – This is a key component of the modernization that will stabilize the production system by providing resiliency, capacity, backup, and disaster recovery for GIS.
- **GIS Database Migration** – This is the second major component of the GIS modernization and involves moving the 20+ year Oracle installation to SQL with all scripts, processes, data, permissions, etc.

The GIS Modernization initiative which was the largest project component has largely been implemented. FY 2024 will see the final efforts to bring the system up to corporate class, and state of the art GIS capability, with final high availability installations and a new data publishing regiment that will utilize web services instead of direct data connections for all authoritative data. This configuration will assist remote use and keep the system secure for mobile data editors.

The project continues to procure and deliver aerial photography products that are used in many agencies. The 2023 flight was conducted in April and March 2023. The imagery is used directly by the Department of Tax Administration and many other agencies in the heavily used Geographic Exploration & (GEM) application. The imagery is now available to the public in Jade, the sister application to GEM. Additionally, in December 2023 LiDAR was flown.

Technical training assisted division and agency staff with the new technologies and opportunities in the new system. Again, necessary software licensing was maintained for the horizontally and vertically scaled replacement system. Additional, needed hardware, was procured and deployed for the GIS and Fire and Rescue portal.

An IPLS working group developed a statement of work for phase I of the system replacement. A staff augmentation contract has been utilized to staff the effort and the first phase is now underway.

The MAR project was completed in FY 2023. This is the modernized if overdue replacement of a key County system with a substantial number of new features, including a public interface.

### *Project Budget*

FY 2023 Third Quarter funding of \$649,000 and planned FY 2023 Carryover funding of \$1,000,000 continue support for this strategic technology program.

### *Return on Investment*

The GIS Modernization program has many tangible benefits and returns on investment. A properly resilient and scaled GIS system will serve the County for many years to come and provide a stable platform for system integrations into the future. This stability is required for the County to exploit GIS in its information system replacements and new acquisitions. Without the modernization investments, GIS would be a weak link in the information ecosystem and could not safely be relied on for daily operational use.

Key GIS data sets are used in all County web applications that incorporate maps and in nearly all public safety vehicles through maps included in the CAD/911 system. Oblique imagery is essential for multiple County functions including critical 24x7 public safety response and tactical tasks, review of zoning applications, property review by the Department of Tax Administration, and provision of 3D data for Virtual Fairfax. The GIS database with new impervious features and contouring, facilitates key land use applications as recommended by EQAC.

GIS data also provides County agencies readily accessible data for locations across the County and the ability to view field conditions from a desktop reducing the need to travel, resulting in significant staff time savings and improved response. GIS technology provides locational intelligence to County businesses assisting County staff and leadership to make better informed decisions benefiting government and citizens. Planimetric data makes up many of the key GIS layers used in most maps created in the County and provides an easy to display base map for all device platforms. Finally, with LiDAR the County has the most detailed surface elevation data available to date, making it especially helpful in stormwater run-off analyses, canopy evaluations, and line of sight determinations for proposed developments. Many of these cost-effective capabilities would not be possible without the continuing investment in GIS.

## **IT-000033 TAX PORTAL ENHANCEMENTS – DEPARTMENT OF TAX ADMINISTRATION (DTA)**

### *Project Description*

This project supports enhancements for an improved and streamlined, citizen-oriented experience on the My Fairfax - Tax Portal. The County has experienced tremendous growth and steady demand for online and mobile access to the County's tax and revenue systems. This initiative continues to modernize and provide easier access to the County's tax portal while maintaining established information security protocols. Enhancements to the MyFairfax - Tax Portal coincide with established customer service and business initiatives to provide easy access to tax related information and history, and to empower County citizens and businesses to perform all tax related activities, inquiries, payments, etc. remotely, via the web or on a mobile device. Security improvements such as the use of a two-factor and bio-metric identification as well as integration with various password management applications will continue to provide secure access to tax and revenue data.

## *Progress to Date*

In collaboration with the CRM (Customer Relationship Management) team, the Tax Evaders application was successfully moved to Microsoft CRM and went live in FY 2021. This has enabled a better customer service experience for both internal and external users of the system. Future enhancements to the system are planned for better integration with other systems. Enhancements to the MyFairfax Portal now offer more efficient signup processes for external users. Integration with the billing management system has started and additional updates to the system are underway. This includes the creation of a Business Personal Property File and Pay methodology, like the BPOL system. As part of the Tax Modernization Project, many additional features are being identified and reviewed for future implementation.

## *Project Budget*

Additional funding, when required, will be requested at the appropriate time.

## *Return on Investment*

Enhancements to the MyFairfax Tax Portal will improve customer service, decrease the volume of phone calls and in-person visits, help reduce expenditures associated with the printing and mailing of bills, and free staff for other more complex business initiatives. The continual application of new technologies and service delivery methods is necessary to keep up with the demand and expectations for easier online and mobile access to tax information and transactions. Additionally, functional improvements such as access to tax history via a mobile device by scanning intelligent 2D bar-code information already contained on all County tax correspondence, can be leveraged. Further, integration with 3rd party applications to facilitate functions such as taxpayer managed recurring payments provide an additional benefit. These enhancements to the MyFairfax Tax Portal will provide a more robust online experience for all taxpayers by enabling an interactive online experience County citizens and businesses expect.

## IT-000040 TAX BUSINESS PROCESS ENHANCEMENTS - DEPARTMENT OF TAX ADMINISTRATION (DTA)

### *Project Description*

This project will expand the use of Customer Relationship Management solution in the Department of Tax Administration to several of its critical DTA business processes that capture revenue (Business Tax, DTA Call Center and Non-Tax Accounts). The goal of this project is to expand the use of the County's CRM solution to the following DTA sections for improved business processes and revenue collection:

- **Business Tax Section (BTS)** works to bring businesses into compliance by conducting field investigations and surveys for the discovery and audit of business establishments to determine tax liability for business property and business licenses.
- **Central Information Telephone Section (CIT)** is a "one stop" service area to assist and respond to taxpayer inquiries pertaining to individual personal property taxes, real estate, and the payment of personal property and real estate taxes.
- **Non-Tax Section (NTS)** is responsible for collecting delinquent payments for nine different Fairfax County Agencies and many ad-hoc agencies as needed.

## *Progress to Date*

An initial proof of concept was built and tested for operations in the Central Information Telephone Section. Further development has been postponed pending go live of the new personal property tax system. The new Tax System provides a



single account model, known as a tax master account, for easier and more accurate development. One system developed to support the Tax Evader's initiative is live and additional areas were identified for migration to the CRM platform. Given more pressing Board priorities and related enterprise system implementations, it is anticipated that this project will re-start in FY 2024.

### *Project Budget*

FY 2023 Third Quarter funding of \$404,980 continues support for this project.

### *Return on Investment*

The Department of Tax Administration's use of the County's CRM solution in its Audit and Target Business processes has resulted in improved business processes and decision making. DTA anticipates similar improvements from deployment of CRM to several critical business processes that capture tax revenue including the New and Delinquent Business Licenses and Business Personal Property, amendments to already filed Business Licenses and Business Personal Property, and tracking and monitoring delinquent tax payment data.

## IT-000046 PCI COMPLIANCE

### *Project Description*

Fairfax County operates a countywide Payment Card Acceptance Program which allows the County to accept credit and debit card payments for most of the services offered to the citizens and their guests for over 1,100,000 transactions each year. This project supports migrating the County payment card acceptance program from the current systems to a contemporary secure web-based enterprise wide system in compliance with the Payment Card Industry Data Security Standard (PCI DSS).

### *Project Goals*

This project plans to migrate the County's current payment systems to new secure technology for improved security features, better pricing, and lower other costs associated with maintaining a secure and compliant payment card program. Additionally, this project will allow the County to improve and expand programs that can accept credit card and online payments.

### *Progress to Date*

Following project kick off in CY2019, the project is fully implemented and completed as planned.

### *Project Budget*

Additional funding is not required.

### *Return on Investment*

The County strives to provide the public with secure and convenient credit card and online payments. This project, once completed, will improve the program by implementing the most current secure card processing technology that was previously unavailable. The project will reduce the cost of the program and enable the expansion of the program to additional community services.

**This project will be retired from the FY 2025 IT Plan.**

## IT-000051 DEPARTMENT OF TAX ADMINISTRATION TAX RELIEF

### *Project Description*

With expanded coverage and eligibility for the County’s Tax Relief program, a new system is needed to streamline the processes and track applicants. This initiative will replace the current system used by the Department of Tax Administration with one that will include all approved Board of Supervisors’ changes and integrate with the new Personal Property system and Real Estate system. The phased implementation includes scanning and indexing of documents, integration with DocuSign for signatures and workflow of applications.

### *Progress to Date*

The Tax Relief system was upgraded to meet initial requirements of a four-tier structure. As part of the upgrade, additional types of Tax Relief and Rental Grants were identified that need to be tracked in this system. To meet current system requirements, a complete system re-design was started in January of 2023 and is anticipated to go live in FY 2024. This re-design was necessary to include the additional types of Tax Relief approved by the board. Once complete, integration will begin to add document retirement and digitization to the system.

### *Project Budget*

Additional funding, when required, will be requested at the appropriate time.

### *Return on Investment*

This new system will enable the Department of Tax Administration to accept, track and apply tax relief to approved individuals; and will also eliminate paper, reduce mailing, and create greater access to services for qualified individuals. The system will use new technologies to support business operations and develop a solution that meets the needs of the public and the Department of Tax Administration.





### 3.4 TECHNOLOGY INFRASTRUCTURE

#### 2G70-018-000 ENTERPRISE IT ARCHITECTURE AND SUPPORT PROJECT

##### *Project Description*

This project supports the strategic infrastructure and expert services required for complex multi-phase enterprise-wide business transformation of IT systems for County general services, enterprise technology, security and infrastructure, and corporate systems including the County's ERP and related business systems. The goal is to realize optimal system performance and infrastructure environment efficiencies, and support system enhancement and open-government initiatives. This includes various product platforms, security, middleware, document management, and the web services for seamless performance between Fairfax County Government agencies and Fairfax County Public Schools environments. Additionally, the project provides for on-going transformation support activities, development of business intelligence and reporting model repositories, system performance, system engineering, security access technology and knowledge transfer. The funding supports projected system integration and configuration services and includes various product platforms, security, portal, and web services enabling seamless system integration.

##### *Progress to Date*

A modern system landscape and server environment was implemented for development, testing, training, conversion, and full production systems needs that support the SAP ERP solution, portals, security, and third-party bolt-on products for overlapping project phases. On-going infrastructure and specialized expert support services will continue in FY 2024 to support system enhancements including HANA DB migration, workflow and reporting improvements, transparency, system performance and engineering, security access technologies, and technical system refresh.

## *Project Budget*

FY 2023 Third Quarter funding of \$1,400,000 supports services necessary for enterprise-wide business applications and infrastructure processes. An additional funding increment of \$1,000,000 will be reviewed as part of the County's FY 2023 Carryover Budget.

## *Return on Investment*

This initiative supports the County's on-going technology modernization program aligned with the IT investment priorities that provide a stable and secure IT architecture while leveraging IT investments. This program allows for a 24 x 7 system availability and extends the ability of agencies to perform work with an improved window for planning and executing system maintenance activities with fewer resources. On-going support for modernization of County systems empowers both employees and managers to execute processes more efficiently, and support functions that improve overall system performance and availability.

## **2G70-036-000 REMOTE ACCESS PROJECT**

### *Project Description*

This project supports enhanced and expanded capability of authorized County users to securely access the County's systems from remote locations or field service activities, telework, Continuity of Operations Plans (COOP), and emergency events such as pandemic outbreaks or natural and weather emergencies. This project established an enterprise-wide standardized remote access control methodology and architecture that provides a solution for employees and external system users, partners and County customers to authenticate their identity in order to gain access to systems and relevant data to conduct work. All user authentication management is based on policy and centrally managed allowing for comprehensive audit and reporting services.

### *Progress to Date*

Through this project, over 12,000+ users can access County systems as authorized, with over 8,000+ able to gain access simultaneously. Project activity is on-going to support, enhance and expand enterprise-wide remote access, which supports County Telework and Continuity of Operations (COOP) goals.

### *Project Budget*

Funding of \$200,000 will be reviewed as part of the County's FY 2023 Carryover Budget.

### *Return on Investment*

This project provides a cost-effective approach to enhance the County's infrastructure to provide flexibility for a variety of remote access devices that may be used by County staff. The capability encourages more employees to take advantage of telecommuting in line with regional goals supported by the Board of Supervisors and also provides County staff necessary remote access capabilities in case of emergency events such as snowstorms, hurricanes or possible pandemic outbreaks.

## 2G70-052-000 CYBER SECURITY ENHANCEMENT INITIATIVE

### *Project Description*

The Department of Information Technology defines and enforces the security standards and policies necessary to protect the County's information assets and technology infrastructure. This project supports ongoing cyber security projects and services to support various initiatives safeguarding the County's IT assets from evolving security threats, cyber security system enhancements, replacements and upgrades, service consultation expenses, and future security product and service acquisitions to assist with ensuring the confidentiality, integrity and availability of County systems and information and support for regulatory compliance requirements.

The goal of the County's IT security program is to ensure confidentiality of information, integrity of data, systems and operations, technical compliance with legal mandates such as HIPAA and PCI, privacy, and availability of information processing resources. The basic elements of identification, authentication, authorization, access control, and monitoring are employed throughout the County's technology enterprise.

### *Project Budget*

Planned FY 2023 Carryover funding of \$500,000 will continue support for the County's Cyber Security program.

### *Return on Investment*

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

## IT-000034 ENTERPRISE DATA ANALYTICS AND BUSINESS INTELLIGENCE PROJECT

### *Project Description*

This multiphase project supports the County's strategic objective of improving evidence-based decisions ensuring resources (time, money, and people) are used efficiently and effectively, and developing sustainable strategic plans to better serve constituent populations. This project will position the County to address the County's Strategic Plan across all 9 pillars and allow agencies, programs, and initiatives to benefit from innovative technology solutions such as Internet of Things (IoT), Machine Learning, Artificial Intelligence and predictive analytics.

### *Progress to Date*

The data architect is leading the strategy and development of a data centric framework. Development started for standardized acquisition, consumption, storage, and distribution of data in Fairfax County through establishing the infrastructure and the technical governance to support repeatable processes and ensure responsible and compliant data management practices across Fairfax County. In this capacity, several agencies have begun adopting modern data estate. This work continues with other County agencies, specifically the Department of Management and Budget, in developing the Data Strategy and

overall vision and underlying framework of data-centric capabilities and activities for the County. Additionally, data governance framework will be established to ensure responsible and compliant data management practices across Fairfax County.

## *Project Budget*

FY 2023 Third Quarter funding of \$750,000 continues supports for this initiative. Also, an additional \$750,000 will be considered as part of the County's FY 2023 Carryover process.

## *Return on Investment*

Enterprise Data Analytics will create a one-stop-shop for County program information and data, operationalizing data currently held in system silos via a central data warehouse. This project will also support the County's Strategic Plan with innovative technology solutions and predictive analytics. The goal is to have timely, accurate and easily accessible data that is understood, and acted upon, resulting in more proactive and effective decision making. Additionally, implementation of a standardized data analytics platform will help eliminate agency data silos by integrating information from disparate County systems for improved analysis, decision making, and more effective service delivery across a spectrum of County services.

## IT-000044 HANA FIORI MOBILE PROJECT

### *Project Description*

This project supports migration to HANA SAP database for SAP applications and deployment of Fiori Mobility for frequently used SAP functions. HANA is an in-memory database software for SAP applications and is required for SAP S Series upgrades, priority patches and processing high speed transactions and analytics. **Fiori Mobility** is a set of applications for frequently used SAP functions such as workflow approvals, information inquiries, and various self-service tasks for desktop, tablets, and smart phones. SAP Fiori will provide role-based, user experience across commonly used SAP function across desktop, tablets, and smart phones.

### *Progress to Date*

The licenses were procured, a detailed plan for deployment was developed and implementation was complete as planned in February 2023. Fiori project is planned and expected to be completed in FY 2024/2025.

### *Project Budget*

Additional funding, when required, will be requested at the appropriate time.

### *Return on Investment*

SAP HANA transforms critical enterprise functions from finance and supply chain to customer service. It enables business to transact, analyze and predict in real time. The primary benefit of migration to SAP HANA database is its speed and access to data in real time. Its architecture organizes and stores data in columns and in-memory which eliminates data copies, allows for faster loading, with less memory. The HANA SAP database is necessary for new SAP upgrades and patches.

Fiori Mobility is a newly written, easy to use set of applications for frequently used SAP functions, such as workflow approvals, information inquiry, and self-service for desktop, and mobile devices. Fiori provides an easy to use configurable and extendable "map" of the SAP system organized by user roles across various devices.

## IT-000045 LOADRUNNER PROJECT

### *Project Description*

This project supports LoadRunner implementation, a software testing tool used to test applications that measures system behavior and performance under load for faster and enhanced testing to accelerate testing and development, reduce slowdowns and gain a better understanding of performance issues.

LoadRunner can simulate numerous users concurrently using application software, recording, and later analyzing the performance of key components of the application. Accelerating and enhancing application testing helps improve and maintain high software performance and deliver on business performance improvements.

### *Progress to Date*

Testing software as a service will be used on an as needed basis. This project also supports SAP Landscape Management which replaces the existing monitoring application for SAP Systems at substantial cost savings.

### *Project Budget*

Additional funding, when required, will be requested at the appropriate time.

### *Return on Investment*

LoadRunner enables validation of performance, simulates workloads, benchmarks production system performance, and optimizes deployments of SAP HANA database software. The application shortens testing and development cycles, reduces bottlenecks and costly production defects, and enables analysis of performance issues for enterprise applications. LoadRunner reproduces business processes that end users would perform in production, creating scripts that can be modified to simulate actual user behaviors. SAP LAMA will automate repetitive, time-consuming administration tasks and tailor processes to the business specific needs.

## IT-000048 DIGITAL ARCHIVES

### *Project Description*

The project will deliver IT applications, related procedures and user role-based configurations, and initial legacy information collection migrations to streamline the acquisition, management, and display of County information assets that have satisfied their business purpose but have remaining legal and other requirements for their retention and disposal. The deliverables will enable inactive information assets to be ingested and managed in a centralized manner for the remainder of their required lifecycle, providing their timely, compliant disposal to free up County resources and capacity, or facilitating their timely digital preservation into the County's government archives for historical research by County staff and the public.

### *Progress to Date*

One of the target applications (already licensed by the County), has been acquired by another company. Awaiting confirmation of application roadmap to ensure new owner company will continue to offer and support the product. May require new licensing model and/or new instance of application with a new company. In that case, there will be an impact on the budget but is not anticipated to impact development, configuration, and testing of the solution itself.

## *Project Budget*

The project has sufficient budget for the current phases. Additional funding, when required, will be requested at the appropriate time.

## *Return on Investment*

This project provides for improved compliance with state regulations for the retention and disposition of government records and information, improved management and agency access to legacy business information, and efficiencies in day-to-day management of County business records and information (e.g. consolidation and automation of records workflows and procedures, uniform procedure and repository for agency digital conversion projects), and County and IT resources better targeted to SSOT (single source of truth) and the official copies of information.

## **IT-000056 ENTERPRISE MODERNIZATION PROJECT**

### *Project Description*

Across the County many agencies and business units have legacy systems and access databases to perform important business functions. This project will enable DIT and partner agencies to further the County's digital transformation and support an effective and efficient government by streamlining, securing, and automating systems, while enhancing collection practices and improving business technology. The goals of this project include assessing and documenting requirements for legacy systems, aligning and developing solutions for business-critical and important functions, removing all access databases in the enterprise, and providing mechanisms to empower the business address application needs for smaller user groups or units.

### *Progress to Date*

New project in FY 2024; plans include gathering requirements, establishing project management, developing phase I solution options, securing initial infrastructure, licensing, and software needed to implement phase I.

### *Project Budget*

FY 2023 Third Quarter funding of \$750,000 and \$750,000 to be considered as part of FY 2023 Carryover support the first phase of this strategic effort.

### *Return on Investment*

Successful implementation of this project will lead to multiple security improvements and will increase the ability of County agencies to perform work efficiently. An investment in this project enhances the ability for all county Agencies to reach objectives outlined in the County wide strategic plan by ensuring there is safety and security of resources and digital assets. Additionally, this project will improve the County's ability to use data for making data-informed decisions by storing and tracking information in modern IT systems that enable real time operational analytics. By leveraging these modern IT tools and implementing this project, additional returns will be seen in staff time, improved access to citizens and overall service improvements.





### 3.5 HEALTH AND HUMAN SERVICES

#### 2G70-037-000 CHILD CARE TECHNOLOGY PROJECT – (NCS)

##### *Project Description*

The Child Care Management System (CCMS) for the Office for Children (OFC) in the Department of Neighborhood and Community Services (NCS) determines client eligibility, tracks child enrollments, and processes approximately \$1.5 million per month in provider payments for the Child Care Assistance Program and Referral Program. This project will develop and implement a Child Care Management System providing seamless integration of services with the Virginia Department of Social Services' (VDSS) automated childcare system and with the Virginia Child Care Resource and Referral Network (VACCRRN). This project will also align reporting strategy with County and state data, reduce redundant data entry, improve operational effectiveness and productivity, enhance web self-service for the childcare community, and bring OFC technology in compliance with County standards and requirements.

##### *Progress to Date*

This project has streamlined business process workflows and system reports to enable staff, customers, and stakeholders efficiently manage information. Implementation of interfaces with various Fairfax County systems and vendor supported systems eliminated manual repetitive processes and provided for a seamless, streamlined integrated case management process.

Additionally, various modules have been enhanced, which allow:

- Approved family childcare programs to conveniently update elements of their business profile on OFC's website.
- Request information about family childcare permit requirements and inspections.
- Manage and view online reimbursement submissions.

- Capture Emergency related data for childcare programs (family and center) concerning if childcare program was open, days of the week open, hours of operation, capacity, vacancy levels.
- Enable Public Safety staff (Fire and Rescue /Police) to search for childcare based on a certain search criterion, and integrate with the Fairfax County GIS application.

Functionality was also included to meet required federal and state legislative mandates, to provide tablet inspection functionality and update forms, to enable an archive and purge process, and added general enhancements to the CCMS system designed to improve OFC's operations and customer access. FY 2021 plans were adjusted after the start of the COVID-19 pandemic in response to emerging requirements and included integrating Emergency COVID-19 data into the Provider Access module and allow providers to update data as needed. Additional plans include:

- Develop a module to capture family inquiries about the availability of childcare services including Head Start, SAAC, and childcare subsidy. This will include tracking referrals to childcare programs prior to the family applying for childcare assistance, and linking childcare assistance inquiries to the online Child Care Search function on the County website.
- Implement a Learning Management System for registration, tracking, reporting and data aggregation/analysis of adult education sessions across multiple OFC programs:
  - Neighborhood and Community Service (NCS), Office for Children (OFC) has contracted with a vendor to gather requirements for a Learning Management System Module (LMSM) in the Child Care Management System (CCMS). The contract for the requirements gathering ends 08/31/2023.
  - LMSM Background: NCS/OFC has expanded training and adult education services to meet the requirements of several school readiness programs (including grant funded initiatives). This has resulted in an increased business need for a Learning Management system (internal and public facing) that includes multiple service delivery options, provides for data management (collection, tracking, aggregation, and analysis), and is updated regularly to keep pace with technology platforms, devices, and operating systems. The Learning Management System (LMS) will be a module in CCMS and will be managed by internal County employees but utilized by external entities such as Fairfax County Early Childhood Educators. The Learning Management Module in CCMS which will perform the activities of the current Institute for Early Learning (IFEL) system, an SQL Server database developed in 2004 and incorporate additional Learning Management System functionality.
  - The OFC (IFEL) also works to meet the needs of the increasingly diverse population of early childhood professionals in the County by providing professional development, technical assistance, and resources in multiple languages.
- Develop an application checklist workflow in CCMS for Virginia State applications to ensure seamless processing for clients when childcare funding changes from State to local funding.
- Develop a quality control workflow to permit randomized application review.
- Integrate Emergency COVID-19 data into the Provider Access module and allow providers to update data as needed.
- CCAR Application Tracking Report.
- Improve CCSM Provider Access on Mobile Devices.
- School Calendar Management; Team Auto-Assignment; Funding Categories and Team Display enhancement in CCMS and Restricted Access to State Cases in CCMS.

### *Project Budget*

The project has sufficient budget for the current phases. Additional funding, when required, will be requested at the appropriate time.

### *Return on Investment*

Modernization of the childcare system has ensured a stable application to support the business functions of the Office for Children. Efficiencies will be gained in seamless integration of processes for VDSS and VACCRRN allowing quicker processing of applications and childcare permits. Migrating to a modern platform that incorporates web technology provided improved accessibility to data and information from remote locations. Additionally, it has eliminated many administrative processes, given customers the ability to manage data online and enhanced childcare search functionality with County GIS integration. This application processes and manages over 1,939 home childcare facility permits and state licenses for Community Education and Provider Services and connects families with childcare providers participating in the Child Care Resource and Referral System. It also tracks current market rates for childcare providers and interfaces with the County's financial management system.

## **IT-000008 CHILD WELFARE INTEGRATION PROJECT (FROST)**

### *Project Description*

This project will develop an integrated solution for child welfare program staff for a holistic view of case information, business workflows, and data for operational and compliance reports for more effective service delivery. The Online Automated Services Information System (OASIS) mandated by the Virginia Department of Social Services (VDSS) for case management does not fully support the needs of the County's child welfare program management and does not provide the Department of Family Services staff access to all the information required for local reporting. Consequently, reporting on customer data is time consuming, requires redundant data entry and data validation with the state systems. The lack of integration between the various systems results in the inability to demonstrate client specific and program-wide progress and does not support data driven decision making. Child welfare clients often exist in complex and unpredictable situations. As such, social workers need a view of all factors influencing children and families which allows them to assess the challenges and to develop comprehensive plans aimed at successful and sustainable outcomes.

### *Progress to Date*

Following initiation in FY 2016, this project was put on hold pending discussions with the Virginia Department of Social Services (VDSS) on the availability of child welfare collected data stored in the state's case management system, OASIS. Attempts to gain access to an OASIS data export from VDSS were unsuccessful; the project resumed in 2020 with a revised scope of work for a foster care and child welfare resources tracking system now referred to as Foster Care Resource Operation System for Tracking (FROST). In March 2021 FROST moved to production. Due to state policy changes in January 2021 (details were not known until much later), the Foster Care, Resource, and Training modules could not go live with the rest of the system. A change request is currently in progress to address needed changes. The project is currently in UAT (User Acceptance Testing) with an anticipated completion in early FY 2024. Due to DFS vacancies, DFS worked with DIT to reduce the scope of the current release.

### *Project Budget*

The project has sufficient budget for the current phases.

## *Return of Investment*

The FROST system will provide the web-based application required to manage a consolidated data repository of the multiple local systems used primarily for management reports. These include the FCAS (Foster Care Alert System); FAST (Foster Care and Adoption Statistical Tracking); and Foster Care Provider spreadsheets. FROST will provide Fairfax County with a comprehensive solution for managing data collected in various child welfare processes which includes Foster Care Intake, Foster Care Resource Management, Post Adoption Services and Child Welfare.

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

## **IT-000025 INTEGRATED HUMAN SERVICES TECHNOLOGY PROJECT**

### *Project Description*

Within the Health and Human Services (HHS) system, clients, individuals, and families are often assessed with multiple needs spanning multiple service programs. A holistic approach to addressing needs along the spectrum of crisis to self-sufficiency to sustainability, as well as strong communication, coordination and collaboration components are key factors in successfully meeting their needs. As the Fairfax County Health and Human Services system enhances business integration, technology will be required to enable and support that vision. The data collected within the Health and Human Services systems help develop policy which shapes future County action. This project plans to develop a comprehensive view of clients and their needs; deliver a scalable set of properly coordinated services, improve service quality with accurate and timely data, and deploy and maintain cost-effective IT assets and services.

### *Progress to Date*

Most recent work includes the completion of School Aged Child Care System (SACC) system enhancements and the second phase of document management initiative. Additionally, the planning, design, and development work for the release within the first phase of the Health and Human Services Integrated Multifunctional System (HH-IMS) has been completed.

### *Project Budget*

\$500,000 funding will be considered for approval as part of the FY 2023 Carryover budget.

### *Return on Investment*

The strategic use of information technology to support Health and Human Services in Fairfax County will help find connections in fragmented data across many Health and Human Services systems. It will incrementally link pockets of information across and within functional areas for both a mobile and community-based workforce, as well as a diverse client base, and enable analysis of information across programs. Multiple agencies partnering to view clients holistically, tailor services to their specific needs and identify at-risk persons in a timely fashion will enable better client service. Creating an integrated view of client information

across Health and Human Services programs and a central point to access data from relevant Health and Human Services systems will also remove redundancy in the client experience (e.g. eliminate the need for clients to submit basic eligibility information numerous times). Additionally, common standards will be created across agencies for critical areas such as IT security, data confidentiality, etc. and appropriate mechanisms to deliver information technology and services that support and improve preparedness, coordination, communication, compliance, and response of Health and Human Services agencies will be designed.

## IT-000026 DIVERSION FIRST INTEROPERABILITY PROJECT

### *Project Description*

Diversion First is a cross-system initiative that offers alternatives to incarceration for people with mental illness, co-occurring substance use disorders, or developmental disabilities who encounter the criminal justice system for low-level offenses. The goal is to intervene whenever possible to provide assessment, treatment, or needed support, to prevent repeated encounters with the criminal justice system and promote a safer community with enhanced public safety. Diversion First is a collaborative effort involving health and human services, public safety, and the courts. This project supports implementation of a technology solution to standardize and automate data capture, analysis, and reporting, to ensure accuracy of the data, and significantly improve turn-around times for reporting and outcomes analysis. This will ultimately result in enhanced public safety, a healthier community, and a more cost effective and efficient use of public funding.

### *Progress to Date*

The Diversion First project team has finalized and documented data elements from the various data sources to be used in building the Diversion First Data Warehouse and Power BI as its dashboard reporting solution. Data is captured from the Sheriff's Information Management System (SIMS), the Court's Supervised Release Program (SRP), the Merrifield Crisis Response Center Data Sheet (MCRCDs) and Community Services Board's (CSB) electronic health record (Credible). A referral application, dashboard, and business intelligence (BI) tool was developed for the Community Response Team (CRT), and tools have been enhanced as the CRT has evolved. An application was developed for the MCRCDs, which will be expanded to include data for the County's co-responder teams. A BI tool was also developed for Court Services, automating previously manual data processes for pre-trial and probation services. An automated process was developed to transmit results of the Brief Jail Mental Health Screening (BJMHS) from the Adult Detention Center to the CSB for further evaluation and service provision. In addition, significant work has been completed to incorporate behavioral health call data from the Department of Public Safety Communications (DPSC).

To ensure the privacy and confidentiality of the data in the Diversion First Data Warehouse, a Qualified Service Organization Agreement (QSOA) between CSB and the Department of Information Technology (DIT) was signed in September 2019. Memorandums of Understanding (MOU) have also been established between the Sheriff's Office and DIT (December 2019), Police Department and DIT (February 2020), Court Services and DIT (November 2020) Fire and Rescue and DIT (January 2021), DPSC and DIT (January 2022). The CSB also entered an MOU with DIT in March 2022. In 2023, multiple agencies entered QSOA and updated MOU for enhanced data sharing, and to increase the data elements included in the data warehouse.

## *Project Budget*

The project has sufficient budget for the current phases. Additional funding, when required, will be requested at the appropriate time.

## *Return on Investment*

Providing a data analytics and warehouse solution to initiatives such as Diversion First will inform the County of its critical needs, best ways to allocate people, time, and money in achieving the outcomes and metrics critical to the success of the programs. Replacing manual inquiries about past involvement in a mental health or related systems and implementing interconnectivity between disparate systems improves access to pertinent information, streamlines processes, and will result in more informed and timely decision making. Diverting individuals with mental illness, substance use disorders and/or developmental disabilities away from arrest and incarceration and towards more appropriate community based mental health treatment is an effective strategy for providing necessary care and providing an efficient and effective use of public safety resources. Information Technology is vital to support the data collection and return on investment measures across systems and within each component of the Diversion First Initiative. Creating interoperable data capacity is vital as additional diversion components are implemented and enhanced. The project will continue to identify associated internal and external systems of partner organizations, as well as data elements and intervention measures across varied law enforcement, justice, and mental health systems. This work will support the data collection, data sharing, and outcome evaluation of diverse services across the Diversion First continuum, which is critical for decision-making, assessing outcomes and determining overall success.

## **IT-000027 HEALTH AND HUMAN SERVICES INTEGRATED ELECTRONIC HEALTH RECORDS PROJECT**

### *Project Description*

This project will provide a scalable, information technology solution for health care services and related information management that supports service delivery within the Health Department (HD) as well as coordination of service delivery across County agencies. The solution will support multiple Health Department areas to allow for: the coordination of health care services, documentation of health care encounters, practice management including event scheduling, workflow management and workload management, and revenue cycle management including registration, payer information, invoicing/billing based on encounter documentation and resource use, and functionality for financial and cost accounting. The Health Department plans to ensure that the EMR system is implemented in compliance with the County's data governance and integrated analytics frameworks, which will allow for additional HHS analytics insights.

### *Progress to Date*

In FY 2021 the Electronic Health Record contract was awarded. Initial planning meetings were held, which included project planning and requirement review sessions, data mapping and validation, and workflow review sessions. Phase 1 is complete and went live in April 2023. Initial implementation will move clinical operations to the Electronic Health Record system and move County processes away from paper and the original patient management system. The Health Department plans to continue efforts for on-going phases to address school health, communicable disease, and additional clinic operational enhancements.

### *Project Budget*

FY 2023 Third Quarter funding of \$1,563,300 continues support for this initiative.

### *Return on Investment*

There is significant value to investing in an Electronic Medical Record for the public health programs of the Fairfax County Health Department. Implementation of a true EMR for the Department will lead to improved billing practices, increased efficiency operations and increased provider productivity. An electronic system will allow for automated process and the capacity to leverage data on client outcomes, and digitization of paper records will enhance the Department's documentation and records retention processes. Requirements focused on communicable disease investigation and integration with Virginia Department of Health state systems will significantly improve existing process and lead to efficiencies for both organizations with respect to communicable disease reporting and investigation.

## **IT-000050 DEPARTMENT OF FAMILY SERVICES DOMESTIC/SEXUAL VIOLENCE (DSV) CLIENT DATA MANAGEMENT SYSTEM PROJECT (FORMERLY DSV E-HEALTH)**

### *Project Description*

The project will support effective and efficient service delivery to individuals and families impacted by interpersonal violence who seek clinical services. A Client Data Management System is planned for clinical services provided to victims of domestic and sexual violence, stalking, and human trafficking to improve compliance with federal privacy mandates in the Violence Against Women ACT (VAWA) related to security, encryption, privacy, and retention of client records with the victims' personally identifying information. Additionally, built-in workflow will lead to greater efficiencies and contribute to data accuracy. The system will automatically upload data to the required state system and eliminate dual data entry. Inefficiencies in the current system leads to significant additional time for clinicians and quality assurance staff to properly document, record, store, report, and analyze client level data and interactions.

### *Progress to Date*

The project team has documented high-level requirements and identified resources to start work. Detailed requirements analysis is expected to commence by August 2023, followed by a review of potential solutions currently available in the marketplace. The process to procure functionality required for the Client Data Management System will be identified after the detailed requirements documentation and marketplace review are complete.

### *Project Budget*

The current budget is sufficient to address above referenced project plans. Additional funding will be requested at the appropriate time.

### *Return on Investment*

This project provides for cost savings in staff time resulting from effective and efficient service delivery for staff and clients; enhanced continuous quality improvement and caseload management; and continued eligibility for federal and state grant funding. An effective Client Data Management System will reduce staff time in entering required data and enhance current documentation procedures to save staff time which can be re-allocated to increasing the number of clients served or providing

more in-depth, quality services to existing clients. A more efficient service delivery with built-in workflows will improve services and interactions with clients and allow clinicians to self-manage caseloads and client-level outcomes. In addition, improving VAWA compliance ensures long-term eligibility for continued federal grant funding, which is approximately \$1.7 million annually, or 36 % of DSVS annual \$4.7 million budget.

## IT-000052 HOUSING COMMUNITY DEVELOPMENT DIGITIZATION PROJECT

### *Project Description*

This multiphase project will improve Housing and Community Development's (HCD) document digitization efforts and augment the Housing Management and Financial programs including all HCD business/program areas. This program will improve efficiency, security, retention, and proper access to HCD documents and create automated archives for documents that are critical and must be kept on site. HCD is seeking a system and supporting IT hardware that not only transforms the files in an electronic format but also allows for manageable access to those files in a logical manner. HCD's goals are to support various partners and government agencies that have different mandates regarding length of time a document must be kept and the types of documents to keep including legal and financial records, real estate finance/loans, debt and financing documents, tenant/customer files, and design/development/construction records.

### *Project Progress*

The Live environment is expected to launch in FY 2024; delays were attributable to server upgrades and resource allocation issues. Once live, HCD will save time, money, and space; as digitized documents can be accessed securely, shared and edited more efficiently while reducing the cost of printing and storage costs, and minimizing the negative environmental impact.

### *Project Budget*

FY 2023 Third Quarter funding of \$60,000 continues supports this effort.

### *Return on Investment*

This project addresses a critical need in HDC for digitization of paper records. Due to the complex work of HCD, boxes of files are often found stacked along walls for paperwork that must be retained for legal, audit, and federal requirements. With a multitude of remote management sites and two application-service centers, distributing records around the County has become cumbersome at best. Additionally, single paper copies have no practical way to be replicated off-site, and the ability to immediately produce records for Federal audits and annual audits is a concern. Many of these files are critical legal documents, official contracts, affordable housing development documents/plans, tenant files and loan information etc. which if destroyed cannot be recreated and would jeopardize the organization. HCD estimates that 10% of the staff time is spent filing and searching for specific documents and archiving. Additionally, court cases, FOIA's, and transferring documents site to site puts the agency at great risk of losing / misplacing one of a kind legal document that often cannot be replicated.





### 3.6 PLANNING AND DEVELOPMENT

#### 2G70-040-000 FACILITY MAINTENANCE MANAGEMENT SYSTEM PROJECT

##### *Project Description*

This project supports the Facilities Management Department's (FMD) efforts to implement an Enterprise Asset Management System for effective management of the department's core business line, Operations and Maintenance service delivery. The new system provides FMD with a mobile application to support demand and preventive maintenance. The project also provides specialized reporting and dashboards to enhance FMD executive management of resources and workload management. This project will deploy specialized asset and inventory management systems that meet FMD's unique needs. The vision is to deploy mobile applications with an enhanced ability to manage large inventory of assets, to view, manage, and report on work orders, and to improve the efficiency of preventative and corrective maintenance programs.

##### *Progress to Date*

In FY 2019 an application with the requisite functionalities was identified to meet FMD's business needs. A statement of work was developed, and work began on the design and configuration of a system to support the demand maintenance functions for the Operations and Maintenance workforce responsible for maintaining County facilities. Demand maintenance and technician-driven real-time corrective maintenance functions moved to production in FY 2020. In FY 2021, work began on the expansion of operations and maintenance capabilities supporting asset inventory management and preventative maintenance operations. In FY 2022, Activity Dashboards to provide real time snapshots of facility management requests and activities were developed for the FMD Director, Facility Managers, and Chief Building Engineer to monitor performance. Customized reports were also developed to provide the agency with time period-specific and snapshot views of completed activities by type of maintenance, type of service, and by (geographical area) work zones/regions. A preventative maintenance (PM) pilot was completed to test the PM process on a critical asset type. Some FMD assets were validated and loaded into the system. The loading of facility

assets and development of preventative maintenance checklists are ongoing. In FY 2023, additional FMD assets were validated and loaded into the system along with FMD asset manufacturer and models data sets. Updates to FMD dashboards and requests were completed to refine the data reported each fiscal year. Ongoing will be adding in new assets and introduction of a new planned maintenance function that is an easier, user-friendly process to plan for asset, space, and location maintenance. FY 2024 the project will continue work to improve project management, condition assessment and facilities project funding tracking capabilities.

## *Project Budget*

FY 2023 Third Quarter funding of \$450,000 continues support for this effort. An additional \$200,000 will be considered as part of the FY 2023 Carryover Budget.

## *Return on Investment*

FMD reports that the combination of mobile and desktop applications of this Enterprise Asset Management System greatly exceeds the capabilities of previous systems. This project provides FMD facility managers with performance information and reporting tools to support effective planning and management of FMD's maintenance operations for the County's portfolio of facilities and facility assets. The deployment of mobile applications improved efficiencies, timely responses, and communication with FMD customers, which provides a more seamless flow for completing tasks associated with a work request. User Agencies can electronically track all of their work requests for internal coordination and direct feedback to FMD. The work statistics collected during the performance of maintenance activities provides an accurate and robust set of data used for managing manpower needs and asset performance. The continued investments in service request management solutions allow for upgrades to improve the quality of service and provide necessary updates to improve efficiency of mobile tools. The success of this system has aroused interest from other Departments for their service-oriented programs.

## **IT-000019 PLANNING AND LAND USE SYSTEM (PLUS PROJECT)**

### *Project Description*

This multi-phase initiative modernized technologies supporting the County's land use and development processes, directly supporting the County's Strategic Plan to Facilitate the Economic Success of Fairfax County, specifically Goal 3: Improve the Speed, Consistency, and Predictability of the Development Review Process. The PLUS project aligns with other strategic initiatives including Fairfax First (an initiative to improve the speed, consistency, and predictability of County development review processes).

This project replaced and consolidated numerous legacy land use systems supporting zoning and development plan review, building permit/license issuance, code enforcement, inspection, and cashiering activities. These legacy systems lacked the native agility of modern technologies for a flexible enterprise platform for evolving business process and architecture requirements, lacked optimal security capacities, and had compatibility issues with emerging desktop, tablet and mobile wireless technologies.

### *Progress to Date*

- The County established governance structure, project plans, developed statement of work, and contracted for consultant support to develop an implementation approach specific to County needs.

- In addition to replacing LDS and FIDO, the new system also replaced over a dozen complementary systems that have been developed over the years to meet new business requirements.
- The County selected Accela Civic Platform Land Management and Environmental Health Modules for its robust and feature-rich product offerings that will help the County achieve the recommended improvements in the Strategic Assessment.

Planning and design of the future state started in FY 2017, progress highlights and plans include:

- In 2017, County staff selected a software platform and implementation service provider, conducted an initial fit-gap analysis, defined a comprehensive inventory of records, and established environments on the County IT infrastructure.
- County staff conducted independent assessments of current procedures and processes, benchmarking the County against other best practices, identifying opportunities for improvement, obtaining input from the development community, developing recommendations to improve services and operational execution; and an in-depth market scan for solutions.
- An Agile development approach for the PLUS system was adopted to deliver the software on an incremental basis, and continuously improved with end-user feedback to ensure the system meets current business needs. The software platform was upgraded to the most current version.
- Release 1 was successfully launched in the second quarter of FY 2021. The PLUS Project Roadmap was updated in the fourth quarter of FY 2021. Release 2 was successfully launched in the first quarter of FY 2022. Release 3 was successfully launched in the third quarter of FY 2022. Knowledge Transfer sessions from vendor to County staff have started in the fourth quarter of FY 2022. Release 4 was launched in the second quarter of FY 2023.
- The project was completed in FY 2023. The system is live and in use by stakeholder agencies.

**The PLUS project will be retired from the FY 2025 IT Plan.**

### *Project Budget*

The project has sufficient budget for postproduction project related requirements.

### *Return on Investment*

In addition to providing a single enterprise platform that enhances land use service delivery activities while eliminating risks associated with legacy system failure and recovery efforts, the PLUS project delivered a customer service portal for constituents and industry partners with more real time status and transparency about permit applications and land use transactions. Other significant benefits to citizens and staff include GIS integration, modernized mobility platforms for customers and staff, integration with e-Plans and document management systems, decreased processing cycles, opportunities for business transformation, a scalable and flexible configuration to support evolving business needs, future improvements, and delivery of improved metrics and reporting capabilities.

## **IT-000042 FAIRFAX COUNTY PARK AUTHORITY ASSET INFORMATION MANAGEMENT SYSTEM (AIMS)**

### *Project Description*

This project supports implementation of a facilities and asset life cycle management solution to manage ongoing maintenance activities and expanded asset management including linear and bound assets for the Fairfax County Park Authority (FCPA). This project will support reinvestment, maintenance, and upgrades to infrastructure and capital equipment for FCPA. The legacy application did not adequately support the agency or meet its strategic objective. A temporary application is in use to support

basic work order management activities. The scope of FCPA's asset information program includes operations and maintenance for a variety of Park Authority business areas, capital planning, construction management, and integration with the County's enterprise financial systems.

### *Progress to Date*

In FY 2019, an effort was launched to document requirements supporting the specific and unique needs of Park Operations, including supporting the asset lifecycle of non-standard assets. In FY 2020 work was completed on the asset program foundation including classification and prioritization of FCPA assets, asset type inventories, service and work management policies and a condition assessment methodology for FCPA assets.

In FY 2021, FCPA completed its rigorous and comprehensive examination of asset management requirements. The Park Authority evaluated and prioritized its requirements and will focus an Enterprise Asset Information Management system that incorporates a robust Work Order Management system with modern GIS mapping capabilities to facilitate and manage all service requests, for both demand and planned tasks, as well as providing enhanced metrics and reporting capabilities on work orders. The agency is performing a thorough review of existing applications within other agencies as well as neighboring jurisdictions for opportunities to use an existing contract. The proposed system will meet FCPA's Asset Management Branch core requirements to perform their work efficiently and effectively, whether they are creating or executing work orders, identifying, or decommissioning assets, or producing and managing large-scale Park planning projects. The new application requires a robust and agile user interface, intuitive workflows, and the ability to integrate with ESRI for GIS integration. Selection is slated to be finalized before FY 2024 with Phase 1 planning and implementation beginning before FY 2025.

### *Project Budget*

FY 2023 Third Quarter funding of \$400,000 continues support for this project. Additional funding of \$345,052 will be considered as part of the County's FY 2023 Carryover Budget.

### *Return on Investment*

Investment in a contemporary asset management system for the Park Authority will provide the tools and analytical data to determine the total cost of ownership for the acquisition and maintenance of County Park Authority assets. The efficiencies in transitioning field operations managers and staff to mobile devices will improve performance and accuracy of the maintenance of assets and extend the useful life of assets managed by FCPA. The portfolio of the Park Authority's assets is diverse and unique. Assets covered by the new asset management system include park trails, recreation centers, athletic fields, movable assets, equipment, and natural and cultural resources. A well-integrated and comprehensive asset management system will significantly improve the FCPA's quality of information to provide service to customers and residents and improve revenue generated by FCPA programs and facilities. Additional benefits include enhanced decision making based on the condition of assets and requirements for upgrade, renovation, and replacement.

# SECTION 4

## APPENDIX



## AWARDS

Over the years, Fairfax County Government's IT organization has earned numerous awards and recognitions, including:

### 2022

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- Recipient of Excellence in its Enterprise Approach in GIS Award from Environmental Systems Research Institute (ESRI). This award recognized the way in which Fairfax County has achieved and maintained organizational success through its Enterprise GIS policies and approaches.
- In the 2022 Digital Counties Survey, sponsored by the Center for Digital Government in partnership with National Association of Counties (NACO) Fairfax County ranked 2nd among America's top ten jurisdictions with populations of 1,000,000 or greater.

### 2021

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- In the 2021 Digital Counties Survey, sponsored by the Center for Digital Government in partnership with National Association of Counties (NACO) Fairfax County ranked 5th among America's top ten jurisdictions with populations of 1,000,000 or greater.

### 2020

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- Recipient of a Special Achievement in GIS Award from Environmental Systems Research Institute (ESRI). This award was given in recognition of Fairfax County's broad based, innovative and enterprise approach to GIS that has resulted in significant benefits to County agencies and residents.
- In the 2020 Digital Counties Survey, sponsored by the Center for Digital Government in partnership with National Association of Counties (NACO) ranked Fairfax County among America's top ten jurisdictions with populations of 1,000,000 or greater.

### 2019

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- Michael Dent was awarded the Cyber Security Leader of the Year by StateScoop News organization.
- The National Association of Counties (NACo) awarded Fairfax County a 2019 Achievement Award and 2019 Virginia Association of Counties (VACo) awarded Fairfax County with an Achievement Award for "Stream Critter Cube Lab". The Lab connects students with freshwater ecologists to learn how local scientists determine stream ecosystem health through monitoring the diversity of life found in each stream.
- The National Association of Counties (NACo) awarded Fairfax County a 2019 Achievement Award for "Service Gap Analysis Interactive Map: Older Adults". The system assists Older Adults & Persons w/Disabilities in Fairfax County's Long Term Care Coordinating Council (LTCCC) with its mission to identify needs and promote solutions that enhance the lives of older adults, adults with disabilities, and caregivers so that all can participate fully in the community.
- Fairfax County was honored with the Governor's Technology Awards in the category "IT as Efficiency Driver - Government to Government" at the 2019 Commonwealth of Virginia Innovative Technology Symposium (COVITS).

### 2018

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- The National Association of Counties (NACo) awarded Fairfax County a 2018 Achievement Award for "Taking a Citizen First Approach to Website Redesign". This achievement demonstrates how the newly imagined Fairfax County Website leverages technology, design and collaboration with all stakeholders (internal and public) to bring the strengths of modern web applications to bear upon the needs of a wide array of users. The DIT e-Government division under the leadership of Anita Rao, working with the Office of Public Affairs designed and successfully launched the new Website, a massive undertaking.
- The National Association of Counties (NACo) granted Fairfax County a 2018 Achievement Award for "Customizing Data for Health and Human Services Planning". The County GIS was the data foundation for this application collaborating with the Department of Management and Budget.

- Fairfax County's Chief Technology Officer, Wanda Gibson, was selected to join a distinguished group of women: State Scoop's Top Women in Technology 2018. This is an elite group of the women across the State and local government community who are constantly working to improve government and the lives of those governed. Ms. Gibson was selected for her innovative spirit, leadership, service to the public sector community, and the impact she has had on the use of technology in government.
- Fairfax County Website received two "Award of Distinction" awards from the Academy of Interactive & Visual Arts (AIVA) for "Overall Government Website" and for the County "Website Redesign Project".
- Fairfax County received the Commonwealth of Virginia's Innovative Technology Symposium (COVITS) Award for Next Generation Cybersecurity and for the Freedom of Information Act Office.
- In the 2018 Digital Counties Survey, sponsored by the Center for Digital Government in partnership with National Association of Counties (NACO) ranked Fairfax County among America's top three jurisdictions with populations of 1,000,000 or greater.
- Public Technology Institute (PTI) recognized Fairfax County with their 2018 Solutions Awards. The following programs were recognized for their achievement:
  - Geographic Information Systems (GIS) recognized for National Capital Region (NCR) Regional GIS Data NG9-1-1 Preparation Project
  - Public Safety and Emergency Management, Community Resiliency recognized for a regional, locally managed identity management solution for public safety in the National Capital Region
  - Significant Achievement - WEB recognized for leveraging open source web Content Management System (CMS) which offers unlimited opportunities.

## 2017

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- The Integrated Justice Information Systems (IJIS) Institute 2017 Innovation Award was presented to Fairfax County's Broadband Interoperability Team. The Innovation Award recognizes technical innovation that has contributed significantly to the advancement of integration and interoperability in a justice, public safety, or homeland security project or program.
- Received the National Association of Counties (NACo) 2017 Achievement Award in the category of Information Technology for Mobile Connected Courtrooms. Fairfax County Courts and DIT's Courtroom Technology Office, researched, designed and implemented a new digital courtroom platform to allow users to wirelessly connect their personal devices to the existing courtroom evidence presentation system, known as CTMS (Courtroom Technology Management System).
- Center for Digital Government (CDG) 5th place recognition of the 2017 Digital Counties Survey recognizing leading examples of counties using information and communications technology.

## 2016

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- Received CS050 Award for Next Generation Security Program for Fairfax County Government and National Capital Region (NCR).
- Received Public Technology Institute (PTI) Award in recognition of the Next Generation Security Program.
- Center for Digital Government (CDG) 2nd place recognition of the 2016 Digital Counties Survey recognizing leading examples of counties using information and communications technology.
- The Virginia Association of Counties (VACo) recognized Fairfax County Courtroom Interpreting Control System with the Achievement Award recognizing model local government programs.

## 2015

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- Center for Digital Government (CDG) 1st place recognition of the 2015 Digital Counties Survey recognizing leading examples of counties using information and communications technology.



## 2014

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- Received National Association of Counties (NACo) Achievement Award for Emergency Damages Assessment Tracking in the category of Information Technology; Fairfax County Department of Information Technology.
- Received National Association of Counties (NACo) Achievement Award for Next Generation Security Program in the category of Information Technology; Fairfax County Department of Information Technology.
- IT Security Director was honored as a top finalist in the ISE® North America Executive Award in the Academic/Public Sector category.
- Center for Digital Government (CDG) 3rd place recognition of the 2014 Digital Counties Survey recognizing leading examples of counties using information and communications technology.
- Received two COVITS recognitions in the local government category for the IT as an Efficiency Driver G2C (Government to Citizen) for Paying Taxes Using Smartphone, Mobile App and Tax Bill QR Codes and Cross-Boundary Collaboration for the National Capital Region Identity and Access Management Service.

## 2013

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- The Association for GIS Professionals, URISA's Exemplary Systems in Government (ESIG) recognized the National Capital Region Geospatial Data Exchange (NCRGDX) as a Distinguished System.
- Received COVITS recognition in the local government category for the Innovative Use of Technology in Local Government FINALIST: Emergency Data Gathering Repository (EDGR); Fairfax County Department of Information Technology.
- Center for Digital Government (CDG) 3rd place recognition of the 2013 Digital Counties Survey recognizing leading examples of counties using information and communications technology.

## 2012

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- Wanda M. Gibson, CTO, was nominated for 13th Annual Leadership Award, a prestigious award sponsored by the Women in Technology Organization.
- National Information Exchange Model (NIEM) Award recognized the CAD 2 CAD implementation, a key initiative in Northern Virginia that enabled data sharing and views of critical screens on key resource dispatch status between the disparate Computer Aided Dispatch Systems in Fairfax County, City of Fairfax, City of Alexandria, and Arlington County.
- Received COVITS Award in the local government category for the e-Gov team's "Placing Government in the Palm of Your Hand."
- Public Technology Institute (PTI) recognized the significant achievement on Mobile Applications: Government in the Palm of Your Hands.
- VACo (Virginia Association of Counties) Achievement Awards Program recognized Fairfax County among 11 winners throughout the Commonwealth of Virginia for the 'Court Technology Model: Coordinated County and Courts'.
- MarkLogic recognized Land Development Services' (LDS) with the MarkLogic Excellence Award for the "Big Data" Initiative.
- Government Computer News (GCN) recognized LDS with an Honorable Mention Award at the GCN Awards Gala for the County's Land Use "Big Data" Initiative.
- Center for Digital Government (CDG) 1st place winner of the 2012 Digital Counties Survey recognizing leading examples of counties using information and communications technology. Fairfax County earned first place in the IT Leading Initiatives 500,000 or more population category.
- The Mid-Atlantic Association for Court Management (MAACM) awarded the Court Scheduling System its 2012 John Neufeld Award which recognizes individuals or teams for the development and implementation of significant and unique court management systems in the Mid-Atlantic region.

## 2011

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- Wanda M. Gibson, CTO, was nominated as a finalist for 2011 prestigious Women in Technology (WIT) Leadership Award sponsored by the Women in Technology Organization.
- Public Technology Institute (PTI) Web 2.0 State and Local Government Awards for Excellence. The awards recognized innovative use of Web 2.0 applications and social media tools to engage citizens, improve efficiency and increase accountability.
- Industry Green IT Award recognized Fairfax County for successful IT Infrastructure and power management projects that decreased the County's carbon footprint, achieved enterprise wide IT efficiencies and cost savings.
- Fairfax County GIS Manager elected to Board of Directors for The Urban and Regional Information Systems Association (URISA), a premier association for GIS professionals to share ideas and solutions for using spatial information technologies to solve government challenges and improve the quality of life in urban and regional environments.
- Ranked among America's top five in the 2011 Digital Counties Survey, which recognizes leading examples of counties using information communication technology.
- The Center of Digital Government ranked Fairfax County website as one of the finalist in the Best of Web Awards.
- Intergraph ICON Award recognized Fairfax County for a multi-agency collaborative effort between the Department of Information Technology and Fairfax County public safety agencies for successful implementation of a new Computer Aided Dispatch (CAD) and related public safety systems as part of the Public Safety Architecture Modernization Project. The project was initiated and enabled through the County's IT Governance model and managed by the County's Department of Information Technology.

## 2010

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- Wanda M. Gibson, Chief Technology Officer (CTO) was selected as one of the top 25 Doers, Dreamers and Drivers for 2010 by Government Technology Magazine.
- Achievement Awards from the National Association of Counties – Department of Information Technology (DIT) teams participated in the following programs recognized by NACo:
  - Fairfax County Budget Public Input Process - Management & Budget (DIT e-Gov participation).
  - Electronic Accounts Payable System – Finance (DIT Finance and HR Branch).
  - New CAD System – DIT/Public Safety agencies (DIT-Public Safety Branch, Technology Infrastructure Branch, and Network Services)
- Commonwealth of Virginia's Innovative Technology Symposium (COVITS) Award for Regional CAD Interoperability; and Virtual Fairfax GIS application.
- Fairfax County's IT Security Director – was one of a select group of nominees at the state and national level to receive the Cyber 7 Award at the 2010 Federal IT Security Symposium for advancing and promoting IT Security.
- Cybertrust Certification Award by Verizon Cybertrust Enterprise Security Management Program.
- DIT's Director of Courtroom Technology was awarded the Fairfax Bar Association 2010 President's Award for leadership in implementing courtroom technology that has delivered efficiencies in court proceedings.

## 2009

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- NACo Achievement Awards- Courtroom Technology Management System (CTMS).
- Fairfax County received Virginia Coalition for Open Government's Freedom of Information Award in the government category.
- Fairfax County's site took first place in the Best of the Web County Web portal category.
- Digital Counties Survey selected Fairfax County as the fourth-place winner in the 500,000 or more population.

## 2008

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- Third Place Digital County Survey Winner – Center for Digital Gov’t and NACo.
- NACo Award for Information Technology Security Awareness.
- NACo Award for Information Technology Project Management Training Program.

## 2007

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- Wanda M. Gibson named Most Influential Female CIO – Government Technology Magazine
- First Place County Portal Jurisdiction Population – Best of Web.
- Fourth Place Digital County Survey Winner – Center for Digital Gov’t and NACo.
- Computer World – Best Place to Work in IT (one of two governments out of 100 organizations).

## 2006

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- Second Place Digital County Survey Winner – Center for Digital Gov’t & NACo.

## 2005

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- First Place Digital County Survey Winner – Center for Digital Gov’t & NACo.
- Second Place County Portal Jurisdiction Population – Best of Web.
- Enterprise GIS Integration – FOSE Trade Show.
- 2005 Governor’s Award – E-Government Program.

## 2003

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- Achievement Award for Using Technology to Enhance Gov’t – NACo.
- Special Achievements in GIS Award – NACo.
- Best of the Breed Government Sites.
- Third Place top 10 Digital Counties.
- Center for Digital Government Best of the WEB.
- Deputy County Executive CIO named Computerworld 100 IT Leaders.
- CIO and CTO named Governing Magazine Public Officials of the Year.

## 2002

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- Governor’s Technology Award.
- Achievement Award, National Association of Counties (NACo).
- Citizens using GIS in Redistricting – NACo.
- Finalist County Portal Jurisdiction Population – Best of the Web.
- Deputy County Executive CIO named top “25 Doers, Dreamers, and Drivers of IT in US Government.”
- Bertelsmann Foundation of Germany – County’s e-Gov Program recognized as one of top 4 pace setters in the world.
- A+ Government Performance Project – Governing Magazine.

## 2000

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- E-Gov Award for Outstanding Service Technology – MCOG.
- Innovations in America (Semi Finalist).
- E-Gov Pioneer Award – Government Solution Center.
- Webmaster Honor Top 50 Internet/Intranet site.





# FAIRFAXCOUNTY

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## VIRGINIA

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