E-Government Master Plan III
2010 to 2014

Investing in Sustainability, Capacity
Building and Service Delivery
Executive Summary

This plan represents the third edition of Arlington County’s statement of goals for the implementation of E-Government Services. The first plan, *E-Government Master Plan I - 2001*, defined the steps necessary to build a foundation for the transformation of how government service would be provided through the use of technology. The theme, simply stated, was to provide access to government services “*anytime, anywhere with no wrong door*.” The goals and initiatives articulated in the first plan were successfully achieved. A robust, scalable, secure, and reliable network infrastructure was created linking every County facility through a state-of-the-art fiber optic backbone. Data architecture was defined and the critical information necessary to support current and future e-government services was developed. The best practices of program management and system development were adopted and applied to all technology initiatives. Finally, a governance structure through the Technology Leadership Committee was established to guide the County’s technology investments. In summary, the technology and governance foundation necessary to achieve the vision was established.

The next step was to define and implement the initiatives to achieve this goal. *The E-Government Master Plan II: Realizing the Vision – 2004 to 2009* achieved just that.

The guiding principle of this first update of the plan was to provide a common framework for technology planning. This was to be an investment plan that proposed project selections, work focus and timeframes. The plan examined the pipeline of possible new initiatives and technology refreshment efforts that could further the investments made as the result of the first plan. It communicated an approach and a prioritization for the work to be done. It served as a direction to achieve the vision established in the E-Government Master Plan of 2001. In writing the plan we recognized that technologies would change so we had to be sufficiently adaptable to be able to realign our resources and modify our planned initiatives to ensure we utilize the most appropriate technologies to achieve the goals of the plan. The one underlying assumption that has been a constant since the origination of the E-Government Master Plans was the continued support of the County’s Elected and senior management staff.

The third update, *E-Government Master Plan III: Investing in Sustainability, Workforce Empowerment and Enhanced Service Delivery – 2010 to 2014* attempts to further the accomplishments that have been made to date by focusing on three overarching strategies that will continue to provide for the sustenance of these investment while providing enhanced services for our constituents and tools for those who are tasked with providing those services.
The Plan consists of Three Strategic Priorities and Eleven Enabling Strategies to achieve these priorities.

### Sustainability

The goal for this priority is to develop and adhere to a methodological process to examine and refresh the technology inventory of the County so that it may continue to provide value.

The Strategies to achieve the Strategic Priority:

- **Sustaining What We Have** – Develop a process whereby our existing technology investments can be refreshed.
- **Ensuring Continuity of Operations** – Implement systems and processes to ensure the recoverability and continuance of technology support in the event of a planned or unplanned for disruption of operations.
- **Securing Broadband Connectivity** – Providing a secure, robust and scaleable communications infrastructure.

### Workforce Empowerment

- **Upgrading Workplace Technology**
- **Extending the Workforce**
- **Documenting Our Experience**
- **Realizing the Value of Enterprise Investments**

### Extending Customer Service Delivery

- **Realizing Gov 2.0**
- **Redefining Customer Service Delivery**
- **Building Capacity and Confidence**
• **Realizing Energy Savings and Efficiencies** – Modeling through example how technology can be leverage to provide environmental initiatives to reduce our carbon footprint and conserve energy.

**Workforce Empowerment**

The goal for this priority is to provide the tools and capabilities to enable our workforce to provide for the service demands of our community.

The Strategies to achieve the Strategic Priority:

• **Upgrading the Workplace Technology** – Ensuring that the same or better technologies that are available to staff at home are available at their office workplace.

• **Extending the Workforce** – Provide technologies that enable mobile and remote access to workplace technologies to extend service availability and provide for quality of work life.

• **Documenting Out Experience** – Digitizing and indexing the County’s data so that knowledge in that data can be utilized by staff as required.

• **Realizing the Value of Enterprise Investments** - Continuing to provide value from the investments made in core business systems investments.

**Extending Customer Service Delivery**

The goal for this priority is to set new, transformational priorities for how the County may find the capacity to provide more, improved and better services our community.

The Strategies to achieve the Strategic Priority:

• **Realizing Gov 2.0** – Leveraging the transformative communications and participatory features of Web 2.0 / Web 3.0 to redefine Government interactions with its constituents.

• **Redefining Customer Service Delivery** – Creating a performance driven service delivery model that seeks that is resident driven, transparent, clear and concise and accountable.

• **Building Capacity and Confidence** – Implementing initiatives to extend the workforce and our ability to serve our constituents in the most effective, economic, secure, environmental and efficient manner.

Each Priority and Enabling Strategy consists of a number of distinct initiatives and tasks that must be undertaken. Each task requires a process of definition, review, approval, funding,
resource allocation and implementation. Each task will have performance metrics associated to ensure that they have been implemented with in the time scheduled, budget and that they deliver value both quantitative and qualitative to the County.

To that point, we view this E-Government Master Plan as with the previous plans as much more than a strategy but a work plan. As you begin reading E-Government Master Plan III, we begin with a statement of what was proposed through E-Government Master Plan II and a review of what we accomplished to satisfy those goals that will provide both transparency and accountability.

You will find that significant achievements have been realized by Arlington County in technology and this plan offers a vision of what our future achievements will be.

Jack Belcher

Chief Information Officer

Arlington, Virginia
Introduction

This plan represents the third edition of Arlington County’s statement of goals for the implementation of E-Government Services. The first plan, published in March, 2001, defined the steps necessary to build a foundation for the transformation of how government service would be provided through the use of technology. The theme, simply stated, was to provide “anytime, anywhere access to the government with no wrong door.” The goals and initiatives articulated in the first plan were successfully achieved. A robust, scalable, secure, and reliable network infrastructure was created linking every County facility through a state-of-the-art fiber optic backbone. Data architecture was defined and the critical information necessary to support current and future e-government services was developed. The best practices of program management and system development were adopted and applied to all technology initiatives. Finally, a governance structure through the Technology Leadership Committee was established to guide the County’s technology investments.

In summary, the technology and governance foundation necessary to achieve the vision of “anytime, anywhere access with no wrong door” was established. The next step was to define and implement the initiatives to achieve this goal. The E-Government Master Plan II: Realizing the Vision attempted to do just that.

The guiding principle of this first update of the plan was to provide a common framework for technology planning. This was to be an investment plan that proposed project selections, work focus and timeframes. The plan examined the pipeline of possible new initiatives and technology refreshment efforts that could further the investments made as the result of the first plan. It communicated an approach and a prioritization for the work to be done. It served as a direction to achieve the vision established in the E-Government Master Plan of 2001. In writing the plan we recognized that technologies would change so we had to be sufficiently adaptable to be able to realign our resources and modify our planned initiatives to ensure we utilize the most appropriate technologies to achieve the goals of the plan. The one underlying assumption that has been a constant since the origination of the E-Government Master Plans was the continued support of the County’s Elected and senior management staff.

The Achievements Seen through E-Government Master Plan II:

Before beginning the outline for the next few years, it is important to reflect on what has been done since the last plan. E-Government Master Plan II outlined a series of initiatives that would institute a strong technology governance structure that would oversee the refreshment of the core enterprise systems critical to the conduct of county business. By way of summary, here
is what was promised. As will be evident, most if not all the initiatives articulated in E-Government Master Plan II have been or will be completed. In addition, upon review a number of unplanned for initiatives have been undertaken which have consumed technology staff capacity but will provide long term benefit to the County and its residents.

Framing the Discussion:

“To create a strategic context for the plan, the Chief Information Officer and his staff met with the leadership of each department within the County to understand the business priorities for technology. These were then organized into three major areas of focus,

(1) Enabling the fulfillment of County services through well-considered technology investments,

(2) Providing for the easy and efficient access to information for residents, businesses, and County staff and

(3) Ensuring the Continuity of County Services in an Emergency.”

The Goals of E-Government Master Plan II

In each of these areas of focus, goals and initiatives were identified. The achievements have been significant and noteworthy both in terms of the efficiency and economy of their execution as well as the business value that has been returned to the County. What follows are the primary goals identified in E-Government Master Plan II as part of these focus areas and the initiatives that were undertaken to achieve them.

(1) Expanded IT governance of technology investments. Create the policies, procedures and measures to extend and enhance the governance of technology.

• Creation of the Business Systems Analyst (BSA) Program to extend technology competencies throughout the County’s Non-DTS Work Force.
  The technology governance framework was expanded through establishment of the Business Systems Analyst (BSA) program, where employees were trained in the essential skills of project and contract management, business process improvement and requirements definition. These staff resident in the departments have been leveraged to lessen risk and enhance the opportunity for successful technology investment. Training and certification criteria were set as requirements for the position in the areas of project management, business process improvement and contract management.

• Consolidation of Infrastructure Support Specialists (ISS)
  Desktop, telecommunications and network staff positions were centralized and consolidated with established criteria applied for certification as infrastructure technicians.
• **Creation of the IT Procurement Competency Center**
  To streamline the processing of technology related procurement, the position of Information Technology Procurement Officer was created, whose function was to provide guidance to staff as to the best practices of Contract Management and to assist in the processing of technology related procurements.

• **Creation of Line of Business Sponsor Committees to ensure successful implementation and reduce risk.**
  To ensure that the requirements of specific lines of business are satisfied in the plans to make any technology investment, Line of Business Sponsor Committees have been created. These Committees act as subsidiary technology governance organizations to the Technology Leadership Committee, created as the result of E-Government Master Plan I and the primary governing body for County Technology Investments. The Sponsor Committees, created to provide governance to specific technology investments, are aligned to specific business functions, populated by Department Directors, and usually focused on specific technology investments. New Committees are constituted as necessary to provide governance to major technology investments initiated. The Committees and membership created to date are:

  PRISM Sponsor Committee
  - Chief Financial Officer (CFO), HR Director, and Chief Information Officer (CIO)

  Public Safety Sponsor Committee
  - Police Chief, Fire Chief, Director, OEM, Sheriff, Public Health Director, and CIO

  Property Management Sponsor Committee
  - Director, Environmental Services; Director, Parks, Recreation and Cultural Resources (PRCR); CFO, and CIO

  ACE Sponsor Committee
  - Treasurer, Commissioner of Revenue, CFO, and CIO

  Telephone Refreshment Sponsor Committee
  - Director of Environmental Services, Assistant Superintendent of Schools, CFO, and CIO

  Telecommunications Master Plan Committee
  - Arlington Public Schools CFO, Deputy Superintendent for Information Services, County CIO, CFO

  Real Estate Assessment System Refreshment
- CFO, CIO, Director of Real Estate Assessment, Deputy County Manager

Client Based Financial System (CBFS)
- CFO, Director Human Services, CIO

Courts Audio-Visual Refreshment
- Chief Judges of Circuit, General District and Juvenile Courts, Sheriff, Clerk of Courts, CFO, CIO

Constituent Correspondent Management System Refreshment (GRAMS)
- Clerk of the County Board, Assistant County Manager, CFO, CIO

Network Operations Center II
- Director of Facilities, Assistant Superintendent – APS, CFO, CIO

(2) Refreshment of the Core Enterprise Systems. Refresh legacy systems supporting Payroll, Human Resources, Budget, Purchasing, Assessment and Revenue Collections Systems. Human Services Client Management Systems and Court Systems) with the goal of eventual retirement of the Mainframe Computer System.

- Enterprise Resource Planning System (ERP) or PRISM

PRISM as the ERP has been named applies the best practices associated with human resource management, procurement, financial management and budget preparation through a unified, integrated systems approach. The initiative originally envisioned as a three-year effort was completed in 2006 within eighteen months within the budget allotted. The system immediately delivered immense value to the County. Hosted through Software as a Service ‘SaaS’ services provided by Oracle On-Demand, PRISM provides high availability, powerful computational engine to provide critical human resources, budget, and purchasing information to County management.
- **Management Financial Dashboard**
  An electronic dashboard capability was developed in PRISM for management to view ‘real time’ expenses, budgets and encumbrances, viewable at the Division, Bureau, Program, Cost Center and Expense Type.

- **Cash Management**
  Implementation of an automated method to expedite the reconciliation of bank and internal ERP financial statements, resulting in enhanced accuracy and accountability.

- **I - Procurement**
  This component of PRISM simplifies the procurement process by ensuring that the most economical, efficient processes are followed by County staff in the acquisition of goods and services.

- **I-Expense**
  This component of PRISM provides user self service in the filing of expense and travel vouchers and integrates the electronic capture of receipts in the process. This capability has streamlined and shortened the process for submitting, reviewing, and reimbursement of staff for expenses incurred in the performance of County business.

- **Automated Training and Certification Tool (UPK)**
  This capability provides an on-line self training and certification system that streamlines the training and preparation of staff unfamiliar with the use of the PRISM systems.

- **Purchase Card Reconciliation**
  This PRISM module ensures the authentic, authorized use of County Purchase Cards. This has been particularly helpful in the implementation of County guidelines to curtail and control spending.

- **Assessment and Revenue Collection System**

The ACE system creates a unified, integrated approach to the assessment and collection of the residential and business fees, taxes, fines and licenses that constitute the revenue of the County. This initiative was a two year effort. The first phase was completed in 2009 with successful implementation of a new streamlined Cashiering System and an integrated Business tax system. The first
release was recognized as a 2009 National Association of County Officials (NACO) award winner for technology innovation.

The second phase, completing the system implementation was released in February, 2010. The release provided new functionality for the collection of an integrated Personal Property tax and a new County payment portal called the Customer Assessment Payment Portal (CAPP), built upon the concept of a single tax paying entity.

- **Human Services Client Based Financial System**
  The CBFS efforts represent the first step in reengineering processes for the provision of integrated human services support for the residents of Arlington. This phase will result in the retirement and of the mainframe systems and their migration to new technology for the County’s Human Services Systems. The new systems will be integrated with PRISM and are expected to be operational in March, 2010.

- **Jury Summons System**
  One of the last mainframe resident system was replaced with more automated and streamlined capability to summon residents as jurors for the County’s Court system and includes enhanced functionality an Interactive Voice Response (IVR) module.

- **Property Management System**
  The implementation of this system, which leveraged the investment made in Oracle expertise to support PRISM, created a single, unified repository with regard to the location, condition, ownership, and constitution of all buildings owned or leased by the County and Schools. For the first time, the County has the ability to effectively manage its building infrastructure.

- **Constituent Correspondence Management System Refreshment (GRAMS)**
  This system replaced the ten year old constituent correspondence management system that tracked the receipt, distribution and response to resident inquiries to the County with an updated, web based system.

- **Wireless Billing and Auditing Reporting System**
  This System allows the County to more efficiently monitor and track wireless devices, their provisioning and their usage to ensure compliance with County policies and ensure the employee has the most appropriate “calling plan” to maximize value for cost.
• **Retirement of Mainframe**
  All systems and data will be migrated off of the Mainframe and the equipment will be retired from service as of March, 2010.

(3) **Refreshment and Hardening of the Core Network and Server Architecture to ensure increased resiliency and redundancy while maintaining the security and inviolability of the systems and network constituting the infrastructure.**

• **Creation of Backup Network Operations Center**
  To ensure the high availability and redundancy of the County Network and server infrastructure that provides the communications and hardware support for all operations, a backup Network Operations Center was configured and established at 3033 Wilson, home to the Department of Human Services in 2005.

• **Refreshment and Upgrade of the Electrical and HVAC of the Primary Network Operations Center**
  To ensure continued high availability of the County Network and server infrastructure that provides the communications and hardware infrastructure support, the electrical, heating, air conditioning, fire suppression, generator and power distribution infrastructure was updated in December, 2008.

• **Expansion of the Internet Access**
  To ensure the access by residents and businesses to the County’s systems was provided for, the County’s Internet capacity was expanded through the replacement of existing limited bandwidth communications lines with network capacity capable of supporting increased Internet communications. Now separate communications channels with scalable bandwidth support primary County Government operations and distinct public access from libraries, community centers and wireless hot spots.

• **Reduction in Server Footprint (Virtualization)**
  To reduce the number of physical servers, the power consumption and increase the efficiency of processing, server virtualization was introduced reducing by thirty percent the number of physical servers. This was done in part to support the County’s effort to reduce energy consumption.

• **Institution of Improved SPAM and Anti Virus Protection Capabilities**
  To ensure the security and inviolability of County systems and data, enhanced intrusion prevention software and hardware solutions have been implemented. The County employs a threat management methodology that is a multi-layered defense posture that includes systems to ensure that computer systems have current security patches, are physically secure and logically insulated from various data security threats and risks. The County has been recognized by Computer World Magazine, the Homeland Security Journal, the IT Security...
Journal and the Symantec Corporation for its comprehensive threat management initiatives. These efforts have resulted in significant value from interception of unwanted email, virus threats or denial of service of attacks. Arlington’s Chief Information Security Officer has been recognized as a national leader in the Cyber Security area.

- Increased Network Services Functionality
  The County has implemented a number of capabilities to both harden and scale the infrastructure capabilities that provide support for the services required by County users. To identify a few, these would include, SMS ( Software Update Capabilities), UPASS (user self service password change), Wake on LAN (remote power on of desktops), SSL and VPN (secure remote access to network services), MOM (email Monitoring), Trend Micro (blocking of malware), Citrix (remote access to desktop applications), and FirePass (remote secure access to network files).

(4) Streamlining the Recordation, Indexing, and Retrieval of County Records to fulfill the goal of ensuring the capture and inventory of the County’s Electronic Records. The goal is to realize the challenge of knowledge management.

- Application of Electronic Records Management
  To minimize the physical storage requirements and improve the access to vital County information, the best practices of records management have been applied to the migration of both paper and electronic documents into an indexed Electronic Records Management System.

  - Marriage License and Trades Name Filing Systems
    To reduce wait time and streamline the acquisition of Marriage Licenses and filing of trade names a new system was developed that has greatly enhanced the customer experience in dealing with the County.

  - Electronic Patient Records
    Human Services is able to access electronic patient records from its line of business application (Anasazi) thereby reducing paperwork, while providing quick access to information.

  - Tax and Compliance Records
    The Tax and Compliance Divisions of the Office of the Commissioner of Revenue now capture and store their documents electronically. Constituent inquiries can now be handled quickly without searching through paper records.
- **On-Line Access to Real Estate Records**
  Real Estate Assessment documents are now captured and stored for on-demand access and review to expedite resident requests for information.

- **Electronic Civil and Criminal Case Filings**
  Civil and Criminal case documents are now capture and stored electronically, resulting in the staff time savings assembling and preparing the information for civil and criminal cases at the County Courts.

- **Electronic Land Records**
  Land records are now captured and stored electronically to provide immediate access to residents seeking real estate property title data.

- **Ensuring the Privacy of County Resident Information**
  To ensure the privacy of data stored in public records maintained by the County, the processes of privacy and security have been applied to the redaction of vital information from public county electronic records in the Office of the Clerk of the Courts. This represents the redaction of social security information from over approximately six million county records.

- **Street Plans and Board Reports**
  Paper copies of street plans and associated County Board Reports are now electronically captured, stored and preserved.

- **Permit Drawing Archives**
  Documents describing the zoning, inspections and code enforcement activities of the Department of Community Planning, Housing and Development are now captured and available for search and retrieval, expediting the response to resident inquiries.

- **Litigation Inquiries**
  Documents, files and communications associated with pending litigation actions are now electronically stored and available for retrieval by County Attorneys.

- **Cable Television Franchise Records**
  The documents, files and communications related to the negotiation, granting and monitoring of Cable Television Franchise Agreements have been captured, stored and available for retrieval.

- **Internal County Work Processes Documentation**
  A number of county work order and fulfillment processes related to the performance of internal County operations have been automated through the electronic capture and storage of relevant documents, records and communication resulting in improved access to past experience.
Employee Personnel Files
Department of Human Resources has begun the process of capturing the documents, records and communications associated with all current and past County employees creating a streamlined process for accessing employee data.

Capital Project Documents
Department of Environmental Services has created an integrated, indexed repository of the documents, files, drawings and communications related to Capital projects providing a secure and single point of access to this information for County planners and engineers.

Integration of Information
The Electronic Records Management System has been integrated with the core enterprise systems (PRISM, Land Records System, Real Estate System, and ACE) to ensure that related documents and material are associated with the electronic information managed in these systems thereby streamlining the documentation of financial transactions.

5) Enhanced Citizen Facing Services to Demonstrate Value to the County’s Residents and Businesses, demonstrating the value of technology investment to extend capacity to serve the residents of Arlington.

- Refreshed Web Presence
  Upon becoming responsible for the maintenance and operation of the County’s Web site in December, 2008, the Home Page has been refreshed with a new look and functionality that includes integration with emerging social networking capabilities. Plans are being developed to create a more personalized, mobile version that will enhance the ability of the County to interact with its residents and businesses.

- Business License and Meals Tax Filing Online
  This enables County Businesses to file their taxes on-line.

- Real Estate Assessment Appeal System
  This enables residents to submit appeals on-line if they do not agree with the real estate assessment done by the County.

- Implementation of Wireless Hotspots
  To provide Internet access to residents in shared public places, WiFi Hotspots were created at Court House Plaza, Central Library, Shirlington Library, Columbia Pike Library, the new Westover Schools Library facility, and the Shirlington Village Commercial Center.

- Community Center Cyber Centers
Cyber Centers complete with personal computers, business software and broadband internet access were created at the Walter Reed Community Center and the Langston-Brown Community Center to serve the needs of the community for such electronic access.

- **Disadvantage Student Services (Gunston@Home)**
  To address inequities in digital learning opportunities, the County leveraged terms of its Cable Television Franchise Agreement to provide for at home free Internet access to students identified by the Arlington Public Schools as financially distressed.

- **Human Services Non-Profit Network Assistance (Project XTend)**
  To address the inequities for the provision of Internet access available to non-profit community organizations which partner with the County to provide for Human Services, the County leveraged the terms of its Cable Television Franchise Agreement to provide for at home free Internet access to approximately twenty-five of these organizations identified by the Department of Human Services.

- **Permits Plus**
  Web interface provide access to residents as the status of pending permit requests for construction permits in the Department of Community Planning, Housing and Development.

- **Cashiering System**
  To reduce citizen wait time while paying fees or procuring licenses, a Cashiering system in the Treasurer’s Service Counter was implemented that leveraged graphical system interfaces, integrated resident information and check scanning technology. Completed in 2009, there a measurable decrease in the time required to pay fines and fees.

- **Customer Access Payment Portal (CAPP)**
  The County’s Payment Portal was refreshed to provide for enhanced and significantly more secure capabilities to review bills, and pay fees or fines levied by the County.

- **Video Indexing of County Board Meetings**
  Indexing of video recording of County Board Meetings provides residents with streamlined access to specific meeting topics, speeches and scheduled events through a web interface.
• **Verizon Cable Television Franchise Negotiations**
  The Cable Administration Office and the County Attorney’s Office successfully negotiated a franchise with Verizon to provide cable television, Internet and telephone services, called FIOS, throughout the County. The completion is expected in 2011 will provide choice for all County Residents as to a Cable Television provider. In addition, the franchise has resulted in substantial revenue to the County.

• **Earthlink Wireless Negotiations**
  The CIO and The County Attorney’s Office successfully negotiated an agreement to provide for Free Wireless to County and Schools facilities to include community centers, parks, and playgrounds. Unfortunately, Earthlink fell victim to the economic recession and had to request relief from the agreement. The county received a financial settlement from Earthlink.

(7) **Emergency Management Support. Provide the necessary communications, technology infrastructure services to extend the capabilities of our public safety, emergency management and public health staff to provide for the safety and health of Arlington County residents and businesses.**

The Department of Technology Services has become an active and valued partner in the support of Emergency Management Activities. The Department has provided on-site support for public safety and public health responses at the Pentagon (2001), New Orleans (Hurricane Katrina), Hurricane Hannah, the Air Force Memorial, the Marine Corps Marathons, the Pentagon 9/11 Dedication, the Riverview Building Collapse, the Washington Sniper Incident, the Anthrax Response, the School Bus Tragedy, the 2004 /2008 Presidential Inaugurations and the Snow Emergency of 2009-2010.

In addition, DTS has provided support to our public safety partners in a variety of regional exercises: Gallant Fox, Emergency Vehicle Rally, Operations Fowl Play, and Operation ‘Zoe’.

• **Emergency Communications Center**
  Configuration of a streamlined, efficient 911 ECC that was equipped with integrated voice, data and video technology to facilitate response to emergency and non-emergency request for assistance.

• **Enhanced Remote Access Capabilities**
  Remote access capabilities were expanded to include the ability to remotely connect to office personal computers, systems, and documents available at the County. This capability greatly expanded the county’s ability to continue operations during snow emergencies and to provide tele-working opportunities for staff. It truly was an expectedly valuable achievement during this period. It also has created a capability that will address the County’s goal to reduce the carbon footprint and energy consumption resulting from commuting.
• **Emergency Technology Support Unit (Grey Wolf)**
  Retrofitted retired police transport bus equipped with integrated voice, data, video and communications technology. Designed to provide on-site technology infrastructure support to Police and Fire Mobile Command Units, the ETSU received the 2007 CIO 100 Award for the practical, innovative application of technology to support emergency management.

![Emergency Technology Support Unit (Grey Wolf)](image1)

• **AM 1700**
  AM Arlington Radio Station that broadcasts information of note related to public safety and emergency management issues to Arlington County residents. DTS assisted OEM in connection to County’s Network services.

![AM 1700](image2)
- Cyber Security Text Messaging Alerts
  As part of the Citizen Alerting System, DTS now issues warnings and guidance as to addressing cyber security threats to residential and business technology users.

- National Capital Region Network (NCRNET)
  Arlington has participated in the design and implementation of a wholly government operated fiber network connecting the core jurisdictions in the National Capital Region (NCR). This network will provide for the interconnection of existing Institutional Networks in each jurisdiction. Once the ‘tracks’ are laid and the interconnections are completed in July, 2010, emergency management and other core government services such as Voice, Video and Data will be shared across jurisdictions of constituting the NCR.

- Computer Aided Dispatch (CAD) to CAD Data Exchange
  One of the first critical application to use the NCRNET will be the Computer Aided Dispatch System. A pilot is underway whereby Alexandria, Arlington and Fairfax County will exchange dispatch call information electronically. Initial tests have demonstrated a significant decrease in the time to exchange dispatch information. A pilot test of the service as already demonstrated immense value reducing the time to request and dispatch emergency vehicles from neighboring jurisdictions by as much as seventy per cent.

**Unexpected Initiatives**

As in any plan, unplanned for initiatives arise that result in redirection of resources. What follows are initiatives that are currently being worked on by the Department that were not necessarily planned for at the time of the writing of the last E-Government Master Plan in 2004. These would include:

- Move of Human Services Staff from 3033 Wilson to the Sequoia Complex
  DHS staff will vacate their current geographically dispersed locations in the County and be consolidated in the Sequoia Complex on South Washington Blvd. The building will require network, telephones and audio/visual infrastructure to support approximately six hundred staff. The move will be completed in the Summer of 2010.

- The Construction of the new Cultural Center (Artisphere)
  The cultural center will be distinguished by technology infrastructure to support public WiFi, video conferencing and the business infrastructure of the center. Completion date is expected in the Fall of 2010.
• **The Remediation and Upgrade of the Sound, Video and Docket System of the County Courts Facility.**
  The aging audio speaker infrastructure will be replaced by a new integrated voice, data and video system as well as new electronic docket system by the Spring of 2010. DTS has taken the primary leadership role in completing the system.

• **Design, Construction, and Configuration of a new Network Operations and Data Center**
  Initiated by the decision to evacuate the Human Services Facility at 3033 Wilson, the County’s back-up data center was slated for relocation. The new center will provide additional capacity for the primary enterprise technology systems of the County as well as provide redundancy and backup for the critical systems residing in the Emergency Communications Center (ECC) and as well back-up data storage for the Arlington Public Schools, who will also be co-located in this new facility. Completion is expected in the Fall of the 2010. The new center will be a model for energy efficiency.

• **Refreshment of the Core Network Infrastructure**
  The throughput and performance of the Network Infrastructure had reached its end of life. The County has begun the refreshment and modernization of the network. The end result will be a more powerful, resilient, and redundant network backbone connecting all County buildings and facilities. The network refreshment is expected to be completed in the summer of 2010.

• **Refreshment of the County’s Central Telephone and Voice Mail Systems**
  The TDM Mitel Based Telephone and Voice Mail System had reached its end of expected life (over 18 years old). The County has embarked upon the refreshment of the phone system with a converged, unified voice and data system based on the Cisco Voice over Internet Protocol (VoIP) architecture. Completion is expected in the Winter of 2010-2011.

**Planning for E-Government Master Plan III**

Planning and writing of the third version of the E-Government Master Plan series began in the winter of 2008. The initial draft was completed in the Spring of 2008 focusing on three themes, (1) consolidation, (2) simplification and (3) standardization. However, two significant events occurred during the final stages of the editing which caused pause and the need to reframe the plan and our assumptions for the next plan. The events were first, an unprecedented downturn in the economy caused in large part to unmanaged corporate investments. The resulting recession had a major impact on the county’s revenue base. Second, a new President took office, supported by a new emphasis upon citizen involvement and
participation. Social networking prompted serious, new discussion of WEB 2.0 and its public sector variation, Gov 2.0. What was merely a trend in early 2008 became a legitimate, authentic vehicle for government to embrace.

As a result of these two disruptive and revolutionary events, we decided to ‘rethink’ our assumptions and ‘redraft’ the plan.

In the Fall of 2009, the Technology Leadership Committee (TLC) delegated a subcommittee of its members the develop the strategy for the County’s Technology investments over the next few years. The Technology Steering Committee (TSC) developed three priority areas for which technology investments should be directed. These three priority areas were (1) sustainability of the County’s current technology investments, (2) investments to empower and extend the capacity of the County Work force and (3) investments to extend the quality of service delivery.

The challenge was to identify the needs and the goals, and then to identify the sources for funds to achieve these requirements. The methodology was applied to the drafting of the 'Six Year Capital Investment Plan' for technology
Upon an analysis, the TSC identified some striking conclusions. With regard to sustainability of the technology investments, the County faced an obligation of approximately ninety two million dollars just to keep running the technology already had in place to support the functioning of government.

This significant amount was due primarily to three events.

First, the advent of Y2K had seen the County’s invest an extraordinary amount of funds for the remediation of those computer systems and technologies that risked not working when the year 2000 arrived. Every business critical computer application was either replaced or refreshed with a new version. It’s now been ten years, and the majority of the systems, though still functioning are in need of refreshment or replacement.

Second, the unexpected and unfortunate events of September 11, 2001 generated a huge outpouring of Federal Funding to acquire new technology especially in the Public Safety, Emergency Management and Public Health areas. Much of this funding came as the result of limited term grant funding with no allowance for the refreshment and on-going maintenance of these technology investments. This welcomed Federal largesse was accompanied by the creation of a sustainability debt which the County was left to bear.
Third, the natural, progressive maturation of technology and the dependence of all sectors of the County upon it to do the basic tasks of government created yet another sizeable investment burden. The County correctly invested in creating a fiber optic network backbone to connect the institutions of government, modernized its email and desktop system architecture to meet the demands of the county workforce for improved services and then set about refreshing the core system infrastructure supporting payroll, purchasing, human resources, budget, employee benefits as well the many disintegrated systems supporting the assessment and revenue collection processes of the County. These systems primarily residing upon aging mainframe architecture were redesigned, streamlined and configured to meet the needs of the Arlington Community. Yet these investments will also require more support and attention as new capabilities have added powerful functionality and capabilities, they have also had the resource impact expected of increasing the skill levels required to support these investments.

The result has been the creation of a digitally equipped government that is able to meet the demands of its constituents better, cheaper and more efficiently than before. The costs to support these investments would be humbling in good times, but are even more formidable in the 2010 economic times that face the County and the Country.

**Laying the Foundation for the Future: E-Government Master Plan III**

The challenge we face today is that just to stay even with where we are today will take significant financial investment. But in reality we must recognize that the appetite for technological solutions to extend the work force and enhance service delivery will increase not diminish. Therefore, the technology goals that will create the foundation for the E-Government Master Plan will resonate with the themes of sustainability, work force empowerment and service delivery. How we achieve these goals while continuing to support all the competing functions and lines of business of local government will be the challenge.

In the next few pages we will lay out ten strategic initiatives that we suggest must be taken to satisfy the goals identified by the Technology Steering Committee. Any attempt to predict the future of technology must first begin with the realization that the speed at which new technologies are being introduced makes any prediction subject to possible obsolescence soon after it is made. Therefore, we reserve the privilege of returning to these strategies and providing a course correction should technology innovation determine the need.
Enabling Strategies

- Sustaining What We Have
- Ensuring Continuity of Operations
- Securing Broadband Connectivity
- Realizing Energy Efficiencies and Savings
- Extending the Workforce – Tele-work on Steroids
- Upgrading the Workplace Technology – Satisfying Consumer Demand
- Realizing the Value of Enterprise Investments
- Documenting Our Experience
- Realizing Gov 2.0
- Redefining Customer Service Delivery
- Building Capacity and Confidence

These Strategies have been aligned to the Strategic priorities identified by the Technology Steering Committee of the Technology Leadership Committee.
**Priority I: Sustainability**

Sustainability and refreshment of the technology investments that have been made is the primary priority in the plan. Much has been made of the utility provided by technology to the everyday functioning of the County. The assertion can be made and proven that technology is now an essential critical component of the daily work of the County. Just to take note, in the summer of 2009, a moving van cut the County’s primary network link to its servers resulting in an eight hour outage. That outage brought County services to a near standstill. Of course operations continued, but without the technology to enable the provision of these services the quality, speed and completeness of County service delivery was greatly diminished. Therefore, it is agreed that sustainability is the primary priority for future technology investment.

The focus of this priority will be to develop and adhere to a methodological process to examine and refresh the technology inventory of the County so that it may continue to provide value. While public safety technology investments are not specifically identified they are included with the non-public safety or civilian technology investments to populate the universe of investments that must be considered.
The first strategy, **Sustaining What We Have**, focuses upon developing the mindset to create a normalized, predictable refreshment cycle. Instead of unplanned for, or unexpected ‘spikes’ in funding cycles to accommodate emergency technology refreshments, the strategy will attempt to document and schedule refreshments well in advance of them becoming an emergency. In addition, the goal will be to assess the best, most appropriate manner of refreshment rather than just refreshing what has been in place. Simply, reassess and leverage synergetic opportunities that create enhanced value and efficiency. We will apply this process both individually and in sum to both public safety and civilian technology investments.

Also, we recognize that Arlington by its geographic location, residency acumen, and reputation as a place of good government has the opportunity to leverage partnerships with Federal, State, Educational and Business interests to further provide for the community. Examples of this most recently are the Ballston-Roslyn Bid partnership which netted the Artisphere; the Virginia Tech-IBM partnership which will create a world class research and development center; and the Washington Capitols partnership which created the Kettler Ice Complex.
The second strategy, **Ensuring the Continuity of Operations** recognizes that no strategy for sustainability can survive if there is not an accompanying plan to achieve the continuity of business operations in the event of a disaster. An actionable, operational disaster recovery plan that is based upon locating recoverable assets in multiple geographically dispersed locations is essential. The maturity of hosted or ‘Cloud’ solutions has framed our vision to achieve this necessary redundancy. In addition the Cloud portends to deliver unprecedented levels of agility, flexibility and scalability. It simply can not be ignored as a medium of service support. We see this as much more than back-up data storage. The ability to remotely access on a transactional basis, applications, is critical to the continuance of the business of government. Questions as to security, availability and reliability, need to be answered through service level agreements. As well not all applications are suited for ‘Cloud Computing’. To begin, we offer a tactical decision framework for Arlington County.
It is with SaaS (Software as a Service) that the County believes the greatest value can be found and therefore our recommendation is that there are certain County Applications that lend themselves to such a hosted, off-site solution. These are applications or services that must be available all the time (24x7), that have mission critical data that cannot afford to be unavailable for any period of time, or have a requirement to be supported by the very best available security and redundancy as is possible. For the County, these would be those applications or services that support Electronic Mail, Records Retention, the County’s Web, Enterprise Applications, such as, Payroll, Human Resources, Purchasing, Budget, and services that support the assessment and revenue collection functions or services that support inter-jurisdictional information sharing (Public Safety CAD 2 CAD or Emergency Alerting Services). By making this decision we migrate from a capital expenditure, where we invest in hardware, personnel and security to an operating expenditure where we invest an annual fee to a hosting partner who is responsible for guaranteeing availability, security and business continuity. The business benefit comes down to now establishing a predictable financial investment that places the burden for service, refreshment and security upon a trusted partner.

In arguing for this direction for enterprise applications, we also recognize that ‘one size does not fit all’. For the vast number of department applications and services there is not a financially attractive alternative to remaining with an on site, premises hosted capital expenditure defined hosting services model. In this scenario we would see the primary site being the under construction Network Operations Center (or NOC II) and over time the current Court House Plaza location becoming the backup center.
Ensuring Continuity of Operations

- Create a measureable and actionable Disaster Recovery Model that recognizes the emergence of cloud services

- Rationalizing and Implement a Hosting Services Strategy
  - Enterprise Applications to Hosted (Cloud) model
    - Primary Service Provision via Hosted Cloud model
    - Back Up Service Provision through Premised availability in NOC II (Warehouse)
  - Departmental Servers to a Premised Hosting Model
    - Primary Service Provision through Premised availability in NOC II (Warehouse)
    - Backup Service Provision through Premised availability in CHP NOC

The third strategy, **Securing Broadband Connectivity**, represents one of the most critical initiatives to be proposed. Today, the County’s network infrastructure is dependent upon the terms of a Cable Television Franchise agreement whereby the County was provided with dark fiber communications to interconnect its and the Schools facilities. It is critical that this connectivity remain the property of the County and the Schools. To ensure that, the County and the Schools have initiated an effort to leverage various related initiatives to deploy a robust, high capacity broadband fiber based network. Once deployed, this will provide the resiliency and redundancy necessary to sustain the County’s technology investments. The immediate tactical goal will be to create a wholly redundant, recoverable infrastructure linking the core facilities in both the County and Schools, realizing that a number of smaller, but significant sites, will be initially delayed for implementation. For these sites the County will continue to negotiate for the right to use ‘free of charge’ the fiber as we believe is inherent in the Cable Franchise Agreements.
The fourth and final enabling strategy, **Realizing Energy Savings and Efficiencies** appears under the strategic priority of sustainability and focuses on ways to utilize technology investments to reduce energy consumption and carbon production. The Gartner group predicts that just in mainstream information technology alone (servers, personal computers, voice and data networks, cell phones and printers) power consumption will see a 2.4% annual compound growth rate from approximately 860 terawatt-hours (TWh) to about 909 TWh. (Excerpt from Simon Mingay’s, “Sustainability and Green IT: A National Policy Perspective”, Gartner, June 1, 2009). This estimate was based on the assumption that organizations were employing the ‘Best Practices’ of technology conservation at the same time. Not good news, in face of the hope to continue to reduce global GHG (Green House Gas) emissions.

The challenge in technology is that while we are not directly responsible for energy conservation, we have an obligation to demonstrate how we can take steps to not only reduce our carbon footprint, but how we can leverage advances in technology to further the energy conservation initiatives County-wide to achieve the energy goals we desire. Examples in technology are the virtualization of servers, the automatic turning on and off of devices, energy star compliant equipment and data center initiatives, such as, cold / hot air containment aisles to house server racks and tele-work solutions.
For the County, demonstrating the low carbon sustainable solutions that technology can further, such as, road and traffic management, where metered traffic signaling can reduce congestion, intelligent building real estate where the security, HVAC, lighting, fire prevention and cameras can be managed through a consolidated integrated system, and public transportation, where buses, subways and trolley car system schedules can be regulated to afford the best, speediest service at a reduction of vehicle transits.

In so doing, energy savings and efficiencies can be realized. In summary, we believe that best practices can directly reduce energy consumption in ICT systems. Further, since over seventy percent of energy consumption relates to buildings and transportation and since ICT systems can lead to substantial energy savings in both sectors, we have included **Realizing Energy Savings and Efficiencies** as a fourth and final goal.

---

**Realize Energy Savings and Efficiencies**

- **Implement Energy Saving Strategies**
  - Server Virtualization
  - Green IT power saving initiatives
  - Remote Access Expansion to Expand Tele-Work
  - Green Data Center Initiatives

- **Facilitate County Operations Adoption**
  - Intelligent Real Estate Management
  - Transportation Management
  - Traffic Monitoring tools to streamline access and egress

- **Establish Targets and Measurements**
  - Dashboards to Present in Real Time Energy Consumption
Priority II: Work Force Empowerment

The second priority involves strategies to extend the capabilities of the Work Force. The County’s work force is its most critical asset. The numbers of county staff have been reduced while the expectations of the community for service have increased logarithmically. At the time of the first E-Government Master Plan we noted that we expected ‘Anytime, Anywhere Access to Government Services’ to be common place. With the adoption of cell phone, IPHones, IPADS, Smartphones and wireless connectivity by a constituency that is predominantly ‘Tech Savvy’ there is an acknowledged demand for the ability to interact with the Government and its staff anytime of the day or night. To meet this demand, technology enablement is essential and it must be such that the ‘at work’ environment is equal to or if not better than that ‘at home.’

- Upgrading the Workplace Technology
- Extending the Workforce
- Documenting Our Experience
- Realizing the Value of Enterprise Investments
The first strategy is the challenge to **Upgrade the Workplace Technology**. We can not permit our work place technologies to age if we expect to truly to be a world class community. Today, our desktop office environment has aged to the state where while it works, it is becoming outdated by new versions of software, new capabilities and more powerful mobility solutions. We must invest in the upgrade and refreshment of these capabilities. New workers are entering the county work force from other schools and other organizations and they look with bewilderment at the dated state of the office technology. Add to this the rapid proliferation of commercial grade 3G, 4G, LTE or WiMax wireless networks providing broadband speeds that are accompanied by appliances, such as the IPhone, the Droid, the Blackberry and the IPAD, that leverage thousands of applications that can be utilized to provide to the County. It is essential that the County provide its workforce with as good, if not better technology ‘at work’ that they have ‘at home’.

As well the introduction of newer technologies, there must be a recommitment to provide for the training and education of County staff in these new technologies. While many will be accustomed to the technologies through home and educational use, the true value of the power of these technologies will only be realized by a persistent approach to the education and certification of staff.

---

**Upgrading the Workplace Technology**

**Satisfying Worker Demand**

- **Refresh the ‘At the Office’ Technology Tools**
  - **OS**
    - Windows 7 (Windows 8) Operating System
  - **EMAIL**
    - Outlook 2010 (Outlook 2013)
  - **Office Productivity Suite**
    - Office 2007 (Office 2010, Office 2013)
  - **Extended Workplace Collaboration**
    - Document Collaboration / Unified Messaging
  - **Extending the Desktop Refreshment to the Field**
    - Leverage Broadband Wireless for Field Worker Mobility
  - **Tailor Desktop technology to Functionality**
    - The Desk-less, Mobile worker, how will they be served?
The second strategy in the effort to empower the work force is to equip them with the tools necessary to perform their work tasks remotely or simply titled, 'Extending the Work Force – Tele-work Enhancements'. Tele-work is an over-used and at the same time under-utilized concept. Today, with broadband communications available to most, the effort needs to be made to transform the work culture to one that can be conducted either at the County or at a remote site. When work needs to be done that requires shared data and documents or that requires interaction with others, why can not work continue as if there were no separation caused by distance or the constraints applied of the traditional 8 to 5, Monday through Friday work environment? Is there way to stretch the capacity of the work force to satisfy resident demands for service and not exhaust the work force? Can we still provide for the quality of work life and continue to be an employer of choice? We can, but to do so requires an investment and commitment to transform how we operate. It is much more than acquiring new technology but adopting new work behaviors that recognize that the body of work can be completed without necessarily having the worker in sight. Recent operations interruptions, such as the massive snow storms of the winter of 2010 have clearly indicated that County staff, regardless of having performance agreements for tele-working, will do so. It is imperative that the County recognized the value of enhancing the remote tele-working capabilities of its staff. Yet the most significant impediment is likely to be the transformative culture change that must drive the adoption of the technology improvements.
The third strategy is a continued emphasis in both the first and second E-Government Master Plans, that “Documenting Our Experience”, through the capture and placement of the County’s records into a searchable, preserved repository of knowledge. The change that has come with this version is that we now believe that this must be extended to not only electronic documents, but as well to an audio, video, or paper source of knowledge about the County. Achieving this strategy will represent a monumental effort however there are tactical steps that can be taken to begin the journey. The first is to create a Records Competency Center of Excellence that can establish policies and provide guidance for the capture and preservation of these records. Next, while we would like to do it all, you need to start somewhere, and the challenge is to start now with the mandate that every designated source of knowledge to be placed in the repository, be captured beginning today at its creation stage.
The fourth strategy is to continue reap the benefits of the major investments, **Realizing the Value of Enterprise Systems**, we have made in recent years in the refreshment and integration of our core enterprise systems, purchasing, payroll, human resources, budget, electronic records management and the assessment and collection systems. Over twenty five million dollars have been expended to create this core enterprise functionality. Much has been done to provide tools to better manage our expenses, staff and revenue collection, but more can be done and we need to continue to focus on the realization of these benefits through the enablement of inactive program modules, improved user driven reporting and the creation of powerful executive decision dashboards.
Priority III: Extending Service Delivery

The third priority is probably the most relevant to our community. Yes, Arlington does provide world class service to its residents. The question, can be done? The growth of social networking has generated requests for more participation and self service. Can we create an cadre of residents who assist in identifying areas in need of service? Are there new ideas, applications, and service delivery vehicles that can be created to satisfy the new demands of the community? Does the role of government change through such a model? The Federal Government is actively trying to understand the phenomena and align its governing practices accordingly. Two way interactive communications, transparency and accountability are now just not nice to have, but directives of the President to Federal Agencies.

Realizing the Value of Enterprise Systems

- **Enable Available Purchased but yet implemented Modules**
  - Advanced Procurement
  - Grants and Projects

- **Implement Real Estate Assessment System**

- **Further Extend Implemented Modules**
  - Property Manager
  - Financial and HR Analytics for Decision Making

- **Expand End User Reporting Capabilities**
  - Relentlessly seeking to improve the customer experience
  -Enabling User Requests for enhancements to reporting capabilities
  - Improved data validation and quality assurance
  - User defined Dashboards
We need to continue to work to understand just how the growth of social networking will characterize our County’s government as move toward what is popularly called Gov 2.0.

---

**Priority Three**

**Extending Customer Service Delivery**

Enabling Strategies

- **Realizing Gov 2.0**
- **Redefining Customer Service Delivery**
- **Building Capacity and Confidence**

The first strategy here is to recognize the impact of social networking through a series of specific initiatives that will result in **Realizing Gov 2.0** for the County. To begin we need to streamline and expedite the creation and publication of content to the web. The current content management system is woefully inadequate to meet today’s web publishing needs. Our residents desire accurate, just in time information focused on them, their place of residence, place of work, experience or interest. The County wants to ensure a common, authentic, uniform message is crafted and disseminated to all who desire it in a manner that most appropriately meets their specific needs. These are not contrary goals but complementary through refreshment of technology and institution of coordinated authoring. A common theme is establishing personality for bureaucracy. We can’t assume that interactive communication has
only one face, that of the requestor, government must be willing to place a face or a persona to its interactions. If we are successful then the goals inherent in Gov 2.0 can be achieved.

A cautionary note here will be to ensure that the speed at which the County adopts Gov 2.0 is done in a measured and considered manner so that the technology does not overwhelm the capacity of the Government to respond and meet resident demand. Critical to the successful adoption of Gov 2.0 will be the education and training of staff as well as streamlining of accompanying business processes to gather, disseminate and respond in authentic manner. Establishing expectations as to the schedule and detail of responses to social networking communications will be necessary to permit the County time to build capacity and refine communications processes.

The second strategy is the most ambitious but probably the most critical if we are to realize the values inherent in Gov 2.0. We can open our channels of communication, expand our publishing capabilities and invite constituent participation, but to be successful, the interaction must be actionable and integrated into how we deliver customer service. Hence, our second strategy entitled, Redefining Service Delivery.

What we are suggesting here is the development of a Road Map to achieve 311 Customer Service. Realizing that this must be a top down mandate from the Manager and the Board, which has yet to be expressed, we need at least to prepare for this inevitable decision.

To begin we are recommending a cross departmental business process review that will result in the definition of a Citizen Driven Enterprise Work Order Management System. Next, Define and implement a customer service identity model that will uniquely describe the interactions of all residents and businesses with the county in a consistent, documented manner so as to provide enhanced predictive customer service. Predictive Engagement, whereby we recognize who you are and what business has been conducted previously. Then, provide for the integration of electronic and traditional communications vehicles to facilitate the posting of requests for service, the dispatching of service provision and the review of the quality of the service performed to satisfy that request. Finally there must a communications campaign to brand the effort and establish measurable performance criteria.

This will be the most significant of the initiatives proposed in the plan and will require careful thought and planning. It is much more than acquiring technologies or the branding of a communications channel, such as Arlington 311, it is about laying a foundation of consistent, integrated businesses processes that can certify that requests for service and information are registered, scheduled, tracked, and satisfied in a transparent and measurable manner. Once identified as a direction, we must define what a new service delivery model will be and gain the acceptance of the Manager, the Board and the Community before proceeding.
The last strategy, **Building Capacity and Confidence**, while placed here as an essential initiative to be support the redefinition of our service delivery model could as well be an essential ingredient for the support of the previous two priorities.

It is about establishing confidence in the workforce and the community that there is a stewardship of the investments we are making in technology. Stewardship defined as governance that assures the considered, secure, fiscally responsible and ethically conscious decision making to expend valuable county resources.

It is about establishing the value of such investments as being essential to providing for the community. What we can not ignore is that there is still a gap between those who technology enable and those who are not. The ‘Digital Divide’ while lessened through the consumerization of technology still exists. It has been a key component of the previous E-Government Master Plans and is so of this plan, that there must be continued attention to provision of access to training, computers and broadband communications through community centers, libraries and other public facilities for these individuals. So too, attention must be provided to those non-profit organizations who serve the disadvantaged. Frequently, they are as technology
disadvantaged as the individuals they serve. The County must continue to provide technology support when possible to these organizations.

It is about focusing on what is core and seeking partners to help perform the non-core lines of business.

It is about aspiring for a lean and agile IT that maintains the highest levels of availability and reliability of technology assets while exhibiting a predictive quality to see and plan for the future needs of the County and its workforce that will realize value in the future as well as today.

The reality is that budgets are likely to maintain their current levels, workforce numbers will remain constant but the appetite for technology will grow exponentially. Community demands will increase not subside and it only through the effective investment in technology as an enabler will be able to meet this demand.

As well we must continue to seek ways to encourage innovation through consistent outreach to staff and the community as to finding new, better ways to provide service.

---

**Building Capacity and Confidence**

- **Steward the County’s Information Technology Resources**
  - Increasing the perception of customer value and satisfaction
  - Continuing Confidence in our Reliability, Performance and Security
  - Relentlessly pursuing efficiencies and economies to extend service and capacity through the use of technology

- **Lean and Agile IT**
  - Implement cost containment initiatives premised on consolidation, simplification and standardization to realize savings, economies and performance improvements

- **Focus on What’s Important – ‘The Core Lines of Business’**
  - In Source the Core lines of business and Out-Source the Non-Core

- **Make Investments that Realize Benefit today and tomorrow**
  - Refocus Technology Governance to provide a strategic orientation

- **Don’t Forget Your Work Force**
  - Invest in the education/training to achieve a world class work force
Concluding Remarks:

Technology Strategic planning is in many ways part mysticism, part empirical experiential knowledge framed by an understanding the culture of the community being served. What we have laid out above is a game plan that focuses on sustainability, the work force and service delivery.

Strategic Priorities and Enabling Strategies

**Sustainability**
- Sustaining What We Have
- Ensuring Continuity of Operations
- Securing Broadband Connectivity
- Realizing Energy Savings and Efficiencies

**Workforce Empowerment**
- Upgrading Workplace Technology
- Extending the Workforce
- Documenting Our Experience
- Realizing the Value of Enterprise Investments

**Extending Customer Service Delivery**
- Realizing Gov 2.0
- Redefining Customer Service Delivery
- Building Capacity and Confidence

These priorities represent three unassailable goals that in today’s economic environment will certainly gain acceptance. The strategies underpinning each of the priorities will require further discussion. Just what do we mean by these, where do we start, what will the priority be, what will be the value to realized through their implementation, how will new technological advances change these strategies, and how much will it cost are questions that will need to be answered. The last most important question to be answered is do we have the capacity and will to follow this strategy.

At a minimum we have created a vision of the future for technology investment in the County. This is E-Government Master Plan III.