

# COUNTY OF LOUDOUN

## Department of Information Technology

### Five year Strategic Plan

2015 – 2019\*



- *The 2015-2019 strategic plan is currently under a major revision due to changes in its development process. The current plan has been updated in 2015 but is not comprehensive of all changes and updates.*

**STRATEGIC PLAN**  
**2015 – 2019\***

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## **Mission Statement**

Deliver effective, reliable, innovative information technology solutions to the citizens while maximizing the effectiveness of county government.

## **Guiding Principals**

- I. Respond with the best technological solution to the needs of the community
- II. Establish technology standards for all IT initiatives.
- III. Maximize the return on investment for all IT initiatives.
- IV. Continually improve and streamline delivery of services

## **Overview**

### **Technology is more than a service, it is an investment**

All organizations, regardless of size, complexity, or purpose, have long range plans that are strategic to the organization's long term success. **The purpose of this document is to define and articulate the critical information systems and services that are required in the next 5 years.** While delivery of information technology systems and services is centralized in the Loudoun County government through the Department of Information Technology (DIT), this plan looks at initiatives impacting all County Departments.

There is an element of risk in this plan as it outlines new initiatives and looks at technology upgrades. New technologies will be invented and existing technologies will evolve; the goal is to invest in technology based platforms, systems, and service delivery resources that will support the delivery of efficient services to the citizens and grow cost effectively over the long term.

## **5 Focus Areas**

This document identifies five technology based areas to focus time, money, and resources, for maintaining and enhancing public service delivery to the citizens and businesses of Loudoun County. Multiple steps will need to be accomplished to complete work in these focus areas, but this document maintains a high level strategic view. As funding and resources become available more detailed plans will be developed. Initiatives that are significant to a targeted service delivery area -- but are less global in nature -- are not identified in this document.

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## **I. Migrate core applications to next generation systems**

### **Goal: Transition to Software Defined Data Center**

- a. Transition existing infrastructure to fully virtualized infrastructure
- b. Position the County to be able to take advantage of both private and hybrid clouds.
- c. Implement a comprehensive cloud management platform

### **Goal: Maintain integrity of core Revenue and/Administrative/Financial Systems as legacy systems are transitioned to a new platform**

- a. Maintain core financial systems as the current system is approaching end of usable life.
- b. Procure and implement new core Administrative/Financial Systems by 2013.
- c. Migrate mainframe information systems to new technology platforms.
- d. Retire mainframe by 2014

### **Goal: Seamless transition of public safety focused applications**

- a) Implement technology upgrades to Computer Aided Dispatch(CAD)
- b) Implement technology upgrades from E911 to NG911
- c) Integrate GIS into CAD and NG911 solutions to provide better mapping and location solutions.

### **Goal: Implementation of public focused applications**

- a) Focus of community service applications e.g. new library tracking software

## **II. Government without walls**

### **Goal: Enhance the usability and functionality of Virtual Government**

- a. Improve and expand online citizen services and access to data.
- b. Expand and enhance the network infrastructure to support future needs of teleworkers and mobile workers.
- c. Continue development of an “Always on network ... available government”
- d. Facilitate communications between the citizens and public officials.

## **III. Succession Planning**

### **Goal: Ensure orderly transition at DIT**

- a. Execute a succession plan that recognizes over 35% of DIT employees will be eligible for retirement during the next five years.

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- b. Ensure that the departmental succession plan is consistent with county-wide succession planning.
- c. Ensure DIT goals align with the customer requirements for transition

**IV. Expand Communications Services – Internal and External**

**Goal: Enhance LAN/WAN network services**

- a. Migrate from 10 Mbps to 100 Mbps TLS circuits for remote sites
- b. Increase Internet bandwidth
- c. Implement leased fiber ring to lower network costs and expand capacity.
- d. Increase fault tolerance and reduce reliance on single vendor
- e. Add a second point of presence at a separate County facility for National Capital Regional Network (NCRNET)

**Goal: Ensure 24x7 Operation of the Public Safety Communications Systems**

- a. Support the current radio system through vendor planned sunset in 2010
- b. Implement new public safety radio network by 2010

**Goal: Enhance Voice Service Delivery**

- a. Converge voice and data networks where practical
- b. Integrate voice and data systems i.e. enhanced messaging and mobility

**Goal: Facilitate increased broadband access for residents, business, government**

- a. Resolve broadband service problems for residents, business and government where possible.
- b. Streamline and/or reduce county review and regulatory requirements to enable faster/more efficient broadband expansion

**V. Establish Disaster Resiliency and Continuity of Operations**

**Goal: Prevent or minimize service disruptions during disasters**

- a. Ensure availability of county network resources if a localized disaster occurs
- b. Establish means to recover critical applications with-in 24 hours
- c. Establish redundant systems to ensure continuity of Government operations
- d. Complete the establishment of a back-up ECC center

Focus Area I  
Migrate core applications to next generation systems

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## **Goal: Transition to Software Defined Data Center**

### **Current Network and Servers Infrastructure Environment**

An IBM Z114 2818-I03 Enterprise Mainframe Server houses several of the County's core applications including Land Records and Tax Administration. Mid-range IBM UNIX servers running AIX 6.x exist for targeted turnkey applications including Public Safety, GIS, Student Information, School Data Warehousing and Tivoli Storage management. An HP N4000 running HP-UX 11 hosts the SirsiDynix Horizon Library System.

The County also utilizes Intel based Microsoft Windows 2008 and 2012 servers. The County has standardized on VMware ESXi hypervisor on IBM X Series servers with Intel Xeon processors utilizing blade center technology where appropriate. The majority of these servers are virtual and all future server hosts should be virtualized. The County leverages a 6.5 Citrix farm to support the Anasazi and GIS platforms.

### **Future Needs**

Expectations for DIT to deliver applications and services quicker and cheaper will continue to increase. Transitioning beyond the limitations of the existing hardware-centric architecture will allow DIT to better meet those needs. The ability to extend virtualization beyond compute to network and storage, will make data center services easier and less expensive to configure and manage. Having the capability to provision applications and services on both on-premise private clouds and secure infrastructure-as-a-service (IaaS) platforms will provide the utmost flexibility. Creating seamless workload mobility across a hybrid environment will allow Loudoun County to utilize virtually any hardware, minimizing the need for specialized infrastructure. A comprehensive management tool will automate and manage IT services across these heterogeneous clouds. The platform will orchestrate the changing dynamics of software-defined workloads.

### **Business Value**

- Faster application provisioning
- Higher efficiency and lower costs
- Run applications across multiple platforms and clouds
- Automate business continuity

## **Goal: Maintain integrity of core financial systems as legacy systems are transitioned to a new platform**

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**Current Environment**

The County’s core financial systems were acquired over twenty years ago and are based on functional requirements and a technological architecture that satisfied the County’s business needs and budgetary requirements at the time of acquisition. Some of these systems are shared with the Loudoun county Public Schools, while others serve only County government agencies. In all cases, the core financial systems have been augmented with both purchased and County developed add-on systems. Add on programs, and manual processes were developed to maintain functionality and usefulness in the core financial systems.

The core financial systems can be categorized into three functional areas:

	<b><u>Revenue</u></b>	<b><u>County Administrative And Finance</u></b>	<b><u>Public School Admin And Finance</u></b>
<b><u>Departments</u></b>	<ul style="list-style-type: none"> <li>- Commissioner of Revenue</li> <li>- County Treasurer</li> <li>- County Assessor</li> </ul>	<ul style="list-style-type: none"> <li>- Department of Management and Financial Services</li> <li>- All County Departments</li> </ul>	<ul style="list-style-type: none"> <li>- Loudoun County Public Schools Departments of Personnel Services and</li> <li>-Business and Financial Services</li> </ul>
<b><u>Functions</u></b>	<ul style="list-style-type: none"> <li>- Record keeping</li> <li>- Generation of tax levies</li> <li>- Billing and collection of funds</li> </ul>	<ul style="list-style-type: none"> <li>- Financial accounting</li> <li>- Fixed asset accounting</li> <li>- Budgeting</li> <li>- Purchasing</li> <li>- Payroll</li> <li>- Benefits</li> <li>- Position control</li> <li>- Human resources</li> </ul>	<ul style="list-style-type: none"> <li>- Financial accounting</li> <li>- Fixed asset accounting</li> <li>- Budgeting</li> <li>- Purchasing</li> <li>- Payroll</li> <li>- Benefits</li> <li>- Position control</li> <li>- Human resources</li> </ul>

**Current Limitations**

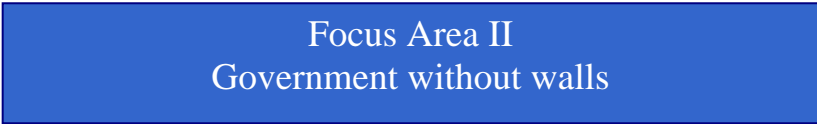
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- a. Technical architecture is based on legacy standards. Systems are no longer supported by vendors.
- b. Many of systems are now unsupported by vendors – DIT is supporting equipment on a best effort basis.
- c. Current architecture is not suited to new COTS applications.

## **Business Value**

The two systems in question have supported the County's operational needs sufficiently through out their lifecycles. Over the last few years, DIT has become increasingly concerned that these systems may not possess the robust qualities necessary to maintain efficient operations in the face of ever increasing workloads. Also, the current systems' user interface capabilities have become antiquated compared with the automated features and facilities offered by newer technologies. These two factors prompted the County to enlist contractor assistance to determine methods of enhancing and streamlining current operations, as well as supporting future requirements. (Soza report)



### Focus Area II Government without walls

## **Goal: Enhance the usability and functionality of Virtual Government**

### **Current Environment**

Nationally 50% of homes have a broadband connection. In Loudoun County 86% have a broadband connection and 93% of County residents have access to the internet from their home. Loudoun residents are technology savvy and will continue to seek information on line instead of driving to a government building to obtain the information.

From August 2007 to August 2008 the number of User Sessions – distinct users accessing [www.loudoun.gov](http://www.loudoun.gov) – increased 45% from 213,047 to 309,074. More and more need web access.

Continuing to support tele-working, by ensuring continued access of mission critical systems on a 24/7 basis VPN and critical systems so remote workers have the same user experience as a worker in a government building. Safety, security, reducing traffic

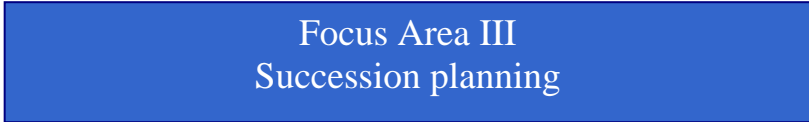
### **Future Needs**

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Continually ask ourselves

How do citizens interact with government and gain information about their community?

How will citizens want to interact with government to gain information?



Focus Area III  
Succession planning

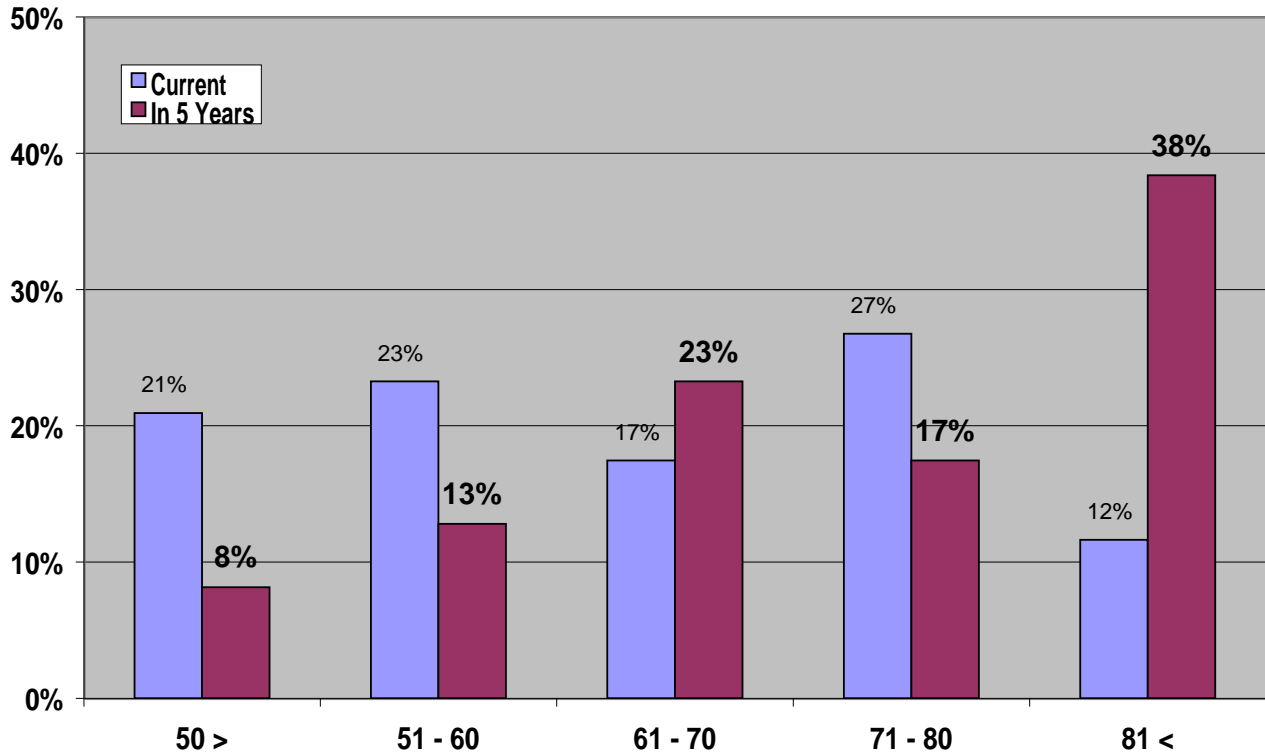
**Goal: Ensure orderly transition at DIT**

**2013 Environment**

As the chart below depicts, in 2013, 38% of DIT employees will be eligible for retirement within 5 years. The need was to work with HR and with other departments to transition the existing knowledge base to new employees and ensure continuity of operations.

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Over the next 5 years -- 38% of DIT employees will be eligible for retirement  
81 years of service (Age + time) in VRS.

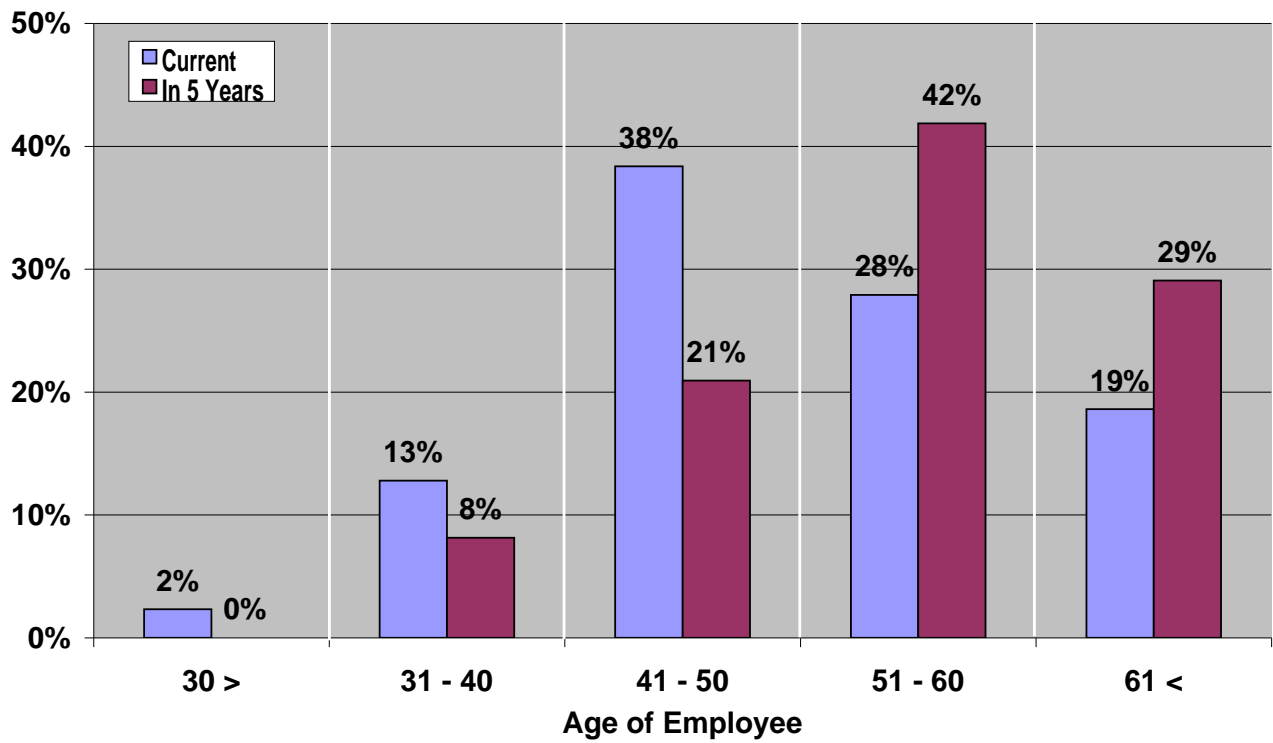


### Graying of IT

In a technology industry, retaining and hiring employees with knowledge of new skills and new systems is critical to service delivery. DIT has hired experienced employees to manage and maintain legacy systems. In 2013, DIT will have had no employees younger than 30 and only 8% of its employees will be under the age of 40 in 5 years. 47% of employees are over the age of 51 -- in 5 years 71% of employees will be over the age of 51.

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### In 5 years -- 29% of DIT employees will be over the age of 61



### Current Initiatives

In 2014 DIT began to address the staffing issues by developing entry level technician program. The program recruits technical staff with no or minimal experience and provides them with training across multiple IT disciplines. These entry level positions have allowed DIT to develop a succession plan to recruit junior level technicians to address the department's large number of employees who are within 10 years of retirement.

### Future Needs

Continue to identify legacy systems for replacement/upgrade. Additionally, identify those critical employees that maintain legacy systems to ensure that systems are supported up until retirement and documented transition plans are in effect as new systems are activated and old systems are retired.

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## Focus Area IV

### Expand Communications Services – Internal and External

#### **Goal: Enhance LAN/WAN network services**

#### **Current LAN/WAN Environment**

Loudoun's owned network is comprised of a 15 mile fiber network in Leesburg connecting the major government buildings.

Connectivity to other facilities has been accomplished by leasing circuits from Verizon. Adding to the cost of provision and expansion of the county government network is a **Local Access and Transport Area (LATA)** -- a geographical area that was established in 1984 during the breakup of AT&T into the baby bells. The LATA runs along Goose Creek and Rt 28 bisecting the County. Service providers, like Verizon, are prohibited from providing end to end communications services that originate in one LATA and terminate in another. Because of this, Loudoun County incurs extra cost for a Verizon leased circuit that crosses over the LATA boundary and a long distance carrier must be used. There are approximately 80 county government facilities connected to the network. The County is currently paying \$9,000 a month for the inter-LATA fees.

A County owned meshed fiber backbone connects the majority of the County locations in Leesburg to the DIT Datacenter. The Wide Area Network (WAN) is comprised of 10/100/1000 Mbps Verizon Transparent LAN Services (TLS) circuits and a long distance Verizon optical network (LDVON) link joins the County's two geographic LATAs. The County utilizes a mix of FIOS and Comcast ISP services for smaller branch offices that connect via IPsec VPN.

Access to the Internet is provided by two circuits geographically separated for redundancy: a 400Mbps Verizon circuit located at the DIT Network Operating Center (NOC) and a 400Mbps Novoc/Cogent circuit at the main Government Center building in downtown Leesburg.

#### **Future Needs**

As additional county facilities are established and the need to share information and online services increases, the county's network will require expansion and increased bandwidth. Migrating from 10 Mbps to 100 Mbps TLS circuits will improve access to data and online services for remote sites.

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In addition, increasing the Internet bandwidth will provide improved access times to external systems/information as well as better access for citizens and teleworkers to Loudoun County internally-hosted services. The addition of a leased fiber ring will provide the infrastructure for highly available, high-speed WAN connectivity. This redundant ring will extend Loudoun County's WAN in the southeast quadrant of the county and eliminate the need and expense of the inter-LATA circuit. The ring will also connect Loudoun County's core sites via two 10 Gbps circuits and provide point to point redundant connectivity between the primary and backup Emergency Communication Centers via two 1 Gbps circuits.

### **Interoperability**

Northern Virginia is made up of the cities of Alexandria, Fairfax, Falls Church, Manassas, Manassas Park; and the counties of Arlington, Fairfax, Loudoun, and Prince William; This area is a part of the Baltimore Washington Metro area, the 4<sup>th</sup> largest metro area in the US with a population of approximately 2,000,000 people. Northern Virginia also comprises Region 7 of the Regional Preparedness Advisory Committees.

The 2007 Virginia statewide strategic plan, outlines a statewide goal of interoperable communications between jurisdictions within and between operating regions. The goal is real time voice and data communications between jurisdictions and their operating groups so that all government teams can respond efficiently in daily interactions and in case of a major emergency. [http://www.interoperability.virginia.gov/pdfs/2008\\_Strat\\_Plan.pdf](http://www.interoperability.virginia.gov/pdfs/2008_Strat_Plan.pdf). Additionally the jurisdictions associated with the Council on Government (COG) have interconnected their networks. This was accomplished via the National Capital Region Network – NCRNet. Funding for the NCRNet was provided through the department of Homeland Security via UASI and PSIC grant funding. Loudoun County established fiber connectivity to the NCRNet through a \$900,000 grant in late 2008 through mid-2009. To enhance the reliability, availability and fault-tolerance of the NCRNet, DIT will look to add a second NCRNet point of presence at a separate facility on the County network.

### **Business Value of a Enhanced LAN/WAN**

- Increased performance, scalability and stability.
- Network redundancy.
- Reduce reliance upon a single source for core sites.
- Elimination of ongoing expense of leased Inter-LATA circuit – estimated \$1.1 Million over 10 years
- More robust disaster recovery strategy.

### **Goal: Ensure 24x7 operation of the public safety communications systems**

#### **Current Environment**

The current radio system is used by the Loudoun County Sheriff's office, Loudoun County Fire and Rescue and Emergency Services was upgraded in 2009. This involved a complete refresh of

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the infrastructure to include the microwave backbone support of the Public Safety Radio system, Mobile and Portable subscriber units. The radio system was converted from Frequency Division Multiple Access "FDMA" to Time Division Multiple Access "TDMA", thereby effectively doubling the radio system capacity. In 2014 a complete refresh of the portable subscribers units was completed. Currently the radio system infrastructure is on a bi-annual infrastructure software and firmware replacement.

### **Future Needs**

DIT plans on replacing the Microwave system for the Public Radio system in 2019. In addition the Mobile subscriber units are scheduled for replacement in 2019.

### **Goal: Enhance voice service delivery**

#### **Current Voice Environment**

The County currently utilizes a hybrid TDM and VoIP Avaya telephone system.

#### **Future Needs**

Converging voice and data networks will reduce connectivity duplication and allow for superior standardization and configuration of networks and resource. Migrating from 10 Mbps to 100 Mbps circuits at remote sites will allow for migration to VOIP and improve delivery of voice services. Integrating voice and data systems will provide for enhanced messaging and mobility.

#### **Business Value of a Enhanced LAN/WAN**

- Improved voice quality
- Enhanced message delivery
- Improved availability and fault-tolerance
- Standardization of technology
- Expanded reporting

### **Goal: Facilitate increased broadband access for residents, business, government**

According to the 2014 Loudoun County Survey of Residents, performed by the Center for Survey Research, Weldon Cooper Center for Public Service, of the University of Virginia, project #14.019, roughly 95% of all the residents of Loudoun County have Internet access of some sort at their homes. Roughly 98% of the County's residents have cell phone services at their homes, although roughly 90% report that their service is only "somewhat reliable" with 44.6% of rural residents rating their carrying capacity for cell phone services below "very good".

Rounded estimates from the U.S. Census Bureau's 2013 American Community Survey, Time Series, estimates that roughly 37% of Loudoun County residents are under the age of 24, 47% are

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between the ages of 25 to 54, and 17% ages 55 and above, with nearly 9 in 10 (89.2%) households with school-aged children. These statistics represent an ever growing group that relies heavily on Broadband connectivity for their Internet browsing, educational research, gaming, and as a video entertainment source. This group is more likely to access the Internet via a “Wireless” Broadband solution, as opposed to a “Wired” service, where both services are equally needed not only for convenience, but also for speed and content delivery methods.

The requirement for more reliable Internet access has increased not only among the school-aged residents of the County, but also from Telecommuters, and Home Based businesses. From the above mentioned survey, roughly 36.8% of County residents Telecommute, and roughly 19.4% of County residents have home based businesses. These expanding requirements, combined with the educational research requirements, and the developing requirements for Tele-Health, Tele-Medicine, remote security services, etc., requires a Broadband solution that can carry more traffic, faster, with more reliability and less expense.

The office of the Broadband and Cable TV Administrator has been focusing on expanding the Broadband footprint availability throughout the County. While the non-rural portions of the County are very well serviced by Broadband providers, roughly 30% of rural residents claim that they do not access the Internet because there is no available service to choose from, other than satellite services. That equates to roughly 30,000 residents that would like to access the Internet via a reliable provider, but either are not serviced by one, or the ones that are available are not very reliable.

Efforts are being made to expand the Broadband footprint deeper into the rural portions of Loudoun County by identifying, and implementing, developing technologies (such as RFoG) that could make expansion of existing “wired” services providers’ networks more cost effective, resulting in a solution that could accomplish these expansion requirements. This research effort to identify developing technologies does not stop at “wired” solutions, but also looks to technologies such as OTT (over-the-top digital streaming video) solutions, giga-bit Ethernet, G.fast DSL, and expanded/upgraded Wireless Broadband solutions to the repertoire of solutions available to the rural market.

The solutions being researched are not only limited to existing service providers within Loudoun County, but are also trying to attract new sources of services from smaller providers that have utilized the federal grant/loan programs available to provide Broadband services to rural communities throughout the state. Some of these providers currently have fiber optic backhaul connectivity into the various Internet portals in Northern Virginia, and could potentially become rural service providers given the correct business environment and business case models. To that end, Loudoun County has embarked on identifying, and correcting, the zoning requirements that may pose a roadblock to this expansion effort. The County has also embarked on identifying various County owned property’s that could be used as connectivity locations for the co-location of infrastructure for these expansion efforts.

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Focus Area V  
Establish Disaster Recovery and Continuity of Operations

**Goal: Prevent or minimize service disruptions during disasters**

**Goal: Prevent or minimize service disruptions during disasters**

**Current Environment**

In September of 2007 work was completed for an IT Disaster Recovery planning effort for Loudoun County. The importance of this initiative is documented in Loudoun's

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Continuity of Operations Plans. These plans rely heavily upon the existence or fast recovery of IT services. The Disaster Recovery initiative sought to achieve the following business goals:

- Develop Recovery Time Objectives for Key Applications and Services from the Departmental Perspective
- Assess Current Ability to Meet the Defined Recovery Time Objectives
- Develop High-Level Recovery Strategies to Enable the County to Meet the Defined Recovery Time Objectives
- Develop Estimated Costs for Implementing the Defined Recovery Strategy

This effort focused on identification of the key technology services, business applications and related technology infrastructure that supports departments within Loudoun County. Information about these applications and services along with draft recovery time objectives (RTO) were then reviewed with the Emergency Management Operations Committee (EMOC). The EMOC then adjusted the draft RTOs based on the respective departmental business needs. These adjusted RTOs as reflected in Section 2 – Target Recovery Time Objectives, were then utilized as the basis for developing the high-level recovery strategies and related costs as defined in this document.

### **Plan Scope and Assumptions**

The scope of this project focused specifically on the primary data center that the office of Information Technology manages. 95% of all county applications and technology services rely upon this site for operation. The applications and services that rely upon this site for operation were reviewed as part of this project. This planning project focused on the assumption that a *localized disaster* within the data center such as a fire rendered the main data center site inoperable for an extended period of time.

### **Target Recovery Time Objectives**

The Recovery Time Objectives (RTO) that were developed in conjunction with the Emergency Operations Management Committee. These RTOs were utilized as the basis for the recovery strategy design in this document. The following information reflects the recovery tiers for applications and technology services. Each application or service was placed into a tier based upon the business owner's perspective on the need for the application or service. The following is a summary of the recovery tiers that were defined for Loudoun County.

Tier 0 Applications/Services in this tier have a requirement of “realtime”  
The goal is no outages of this service in the event of a disaster.

Tier I Applications/Services in this tier will be operational within 24 hours.

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Tier II Applications/Services in this tier will be operational within 1 to 3 days.

Tier III Applications/Services in this tier will be operational within 4 to 7 days.

Tier IV Applications/Services in this tier will be operational within 8 to 14 days.

Tier V Applications/Services in this tier will be operational within 15 to 31 days.

### **Future Initiatives**

Implementation of the Disaster Recovery plan has been segmented into three phases that require funding to complete. Funding for this initiative will be an issue as it is necessary to pay for these steps in a best effort/available fund manner.

#### Phase 1

- General recovery and network service recovery strategy for site and technology co-location, diversification of data communications architecture, core technology services, internet connectivity VPN access, and hardware replacement.

#### Phase 2

- Completion of public safety redundancy efforts, application restoration

#### Phase 3

- Completion of enterprise virtualization platform, mainframe repurposing, and possible mainframe warm site efforts.

### **Business Value**

Supports County's Continuity of Operations Plans by allowing for continuity or recovery of IT applications in face of catastrophic event at data center.

### **The Technology Planning Process**

The Loudoun County Department of Information Technology will strive to lead the rest of the County departments in the creation of a process to establish and maintain a County technology strategy. Various dynamics have manifested themselves which highlight the need for a technology strategy. With a technology strategy, certain outcomes beneficial to the entire County government will be achieved. We will follow a step by step process to establish and then maintain a technology strategy.

Various dynamics may have manifested themselves which highlight the need for a technology strategy. There may be levels of dissatisfaction with the Information Technology department's

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service across the organization which is evident by other departments attempting to organize their own technology staff and initiatives. The Information Technology Department may not be working to support a clear business mandate. As a result, expected project benefits may not be achieved. Finally, it may be unclear how the Information Technology department is delivering strategic benefits.

With a technology strategy, certain outcomes beneficial to the entire County government will be achieved. For example, technology investments can be prioritized within the context of a technology strategy. Another example would be that a mutual understanding and true alignment on how the entire government can utilize emerging technologies to:

- Satisfy citizen's and government department's requirements
- Manage government processes
- Manage organizational performance

Other outcomes beneficial to the County would be a functioning technology governance model which ensures that the business strategy is achieved and there is no doubt amongst all County departments that technology investments deliver value relative to desired business outcomes. We will follow a step by step process to establish and then maintain the County's technology strategy. First to establish a technology strategy, the Information Technology department will review the County department's strategic and tactical goals and attempt to align them with the technology projects and goals. In order to accomplish this, we will:

- Conduct interviews of executives and the operational staff
- Benchmark technology spending
- Perform a Software Applications and Systems Review
- Review the gaps between the County department's strategic goals and the current operations of the Information Technology department
- Develop the Information Technology short-term and long-term project plan and timeline
- Establish an entity to review and approve the technology strategy
- Publish the County's technology strategy

Going forward, to maintain the technology strategy, we will:

- Perform an annual review of the strategy (or more frequently, if the situation warrants)
- Capture and report accomplishments
- Reassess technology trends
- Measure against benchmarks
- Adjust as necessary
- Review and approve
- Publish

With a County technology strategy in place, an Architectural Review Board (ARB) will be able to use it to make decisions. Technology projects seeking approval to start, need to comply with it. Technology projects seeking approval to implement will conduct Production Readiness reviews to ensure compliance with the technology strategy. And with a County technology strategy, technology management will use it to make decisions about:

- Required staff skillsets

- *The 2015-2019 strategic plan is currently under a major revision due to changes in its development process. The current plan has been updated in 2015 but is not comprehensive of all changes and updates.*

- Staff training
- Contracting work out or doing work in-house
- Buying versus building
- Retiring and replacing old technologies

The Loudoun County Department of Information Technology is committed to leading the rest of the County departments, using a collaborative and inclusive approach, in the creation of a process to establish and maintain the County's technology strategy.

- *The 2015-2019 strategic plan is currently under a major revision due to changes in its development process. The current plan has been updated in 2015 but is not comprehensive of all changes and updates.*