Mecklenburg County Information Services & Technology

2009 Report

and

2010 Plan

A Message From the Director

It is my pleasure to present the IST FY09 Report and FY10 Plan. The FY09 Report lists accomplishments for the fiscal year that ended June 30, 2009. The FY10 Plan lists strategies and initiatives planned for the new fiscal year beginning July 1, 2009. The Executive Summary briefly describes the most notable initiatives, and the FY09 Report and FY10 Plan provides more details.

I am very pleased with the IST Balanced Scorecard results for FY09. Overall, 89% of IST's performance measures were exemplary and 11% were successful. Key measures and results were:

- ➢ Customer Satisfaction – 95%
- ➢ Technology Related Capacity (Enterprise) – 88%
- ➢ Employee Climate Survey, Leadership Practices – 93%

I am very proud of the progress IST has made with its Culture Initiative. The following compares results from the FY06 and FY09 Employee Climate Survey:

Results	FY06	FY09
Exemplary	**5**	**26**
Successful	10	5
Mixed	**12**	**1**
Needs Improvement	9	0

These results show how far IST has come in transforming our environment to a positive and trusting environment. I would like to thank the Culture Club and the Senior Leadership Team for their leadership and efforts to achieve these excellent results.

I would like to thank the entire IST staff for their many contributions to our Balanced Scorecard and Employee Climate Survey results. These results would not be possible without your commitment and performance. I also appreciate the partnerships we have with our customers to provide services and solutions to serve the citizens of Mecklenburg County.

Executive Summary

Below are the nine strategies in our eGovernment Plan and notable initiatives completed during FY09 and planned for FY10.

❖ **Support mobile workers and customers**
❖ **Improve collaboration**
   ➢ FY10: MeckWeb Upgrade - The County's Intranet site will be upgraded to SharePoint 2007, including all content and a new design. SharePoint 2007 offers improved tools to facilitate more effective communication and collaboration between peers and teams.
❖ **Expand self-services**
❖ **Improve usability and integration of data**
   ➢ FY09 & FY10: Enterprise Document Imaging System - FY10 will be the third and final year of this project to replace seven department imaging systems and provide a document imaging system for all County departments.
❖ **Improve data management**
   ➢ FY09: EmailXtender - Implemented this e-mail archiving product that greatly simplifies the archival process for all e-mail customers, assuring accessibility of e-mail for internal and legal investigations.
   ➢ FY09: DiskXtender - This product transfers inactive files (80% of total file space) to slower, less expensive storage, saving money and reducing the time for backups, which has been a major problem.
   ➢ FY10: DSS Data Warehouse and Justice Analytical Warehouse - These two major data warehousing projects will aggregate data from multiple sources and provide users a historical, current, and predictive view of business operations necessary for management and decision-making.
❖ **Expand the use of the web**

➢ <u>FY09 & FY10: CharMeck.Org Upgrade</u> - The County and City have partnered to upgrade the existing CharMeck site to utilize Microsoft Office SharePoint Server 2007 (MOSS). Implementation to the new site will occur in FY10. MOSS incorporates a number of software upgrades including Web 2.0 application features such as blogging, wikis, RSS feeds, etc. MOSS provides an improved search function and simplifies content management. IST outsourced infrastructure support to the City of Charlotte.

❖ **Adopt more efficient technologies and work processes**
  ➢ <u>FY09: PC Replacements</u> - 1,927 PCs were replaced including 376 more than were initially planned due to better negotiated pricing, enabling IST to begin a project to upgrade to Office 2007. This enabled the County to forego a similar $2M Technology Reserve request for FY10, as all PCs are now compliant with the County's current software standard.
  ➢ <u>FY09: Voice Over IP (VOIP)</u> - Completed a VOIP product selection and implemented a pilot at both the Woodard Center and the new Medical Examiner's Office.
  ➢ <u>FY09: Security</u> - Several security improvements were completed including a security dashboard to track issues, laptop PC encryption, vulnerability scanning, virus/malware upgrade, and a new remote authentication system that can assure secure VPN connection of non-County PCs.
  ➢ <u>FY09 & FY10: Business Process Management (BPM)</u> - IST expanded this function, which was created in FY07, to seven staff to provide BPM services. Demand continues to grow as customers discover the benefits it provides. A BPM strategic plan is scheduled to be completed in October. Notable projects include DSS, Criminal Justice, Budget, Elections, and Finance.
  ➢ <u>FY10: Office 2007 Upgrade</u> - The enterprise rollout of the latest version of the Microsoft suite of products will be completed in October.
  ➢ <u>FY10: Multi-function Machine (MFM) Contract</u> - The joint contract with the City of Charlotte and Rock Hill has been renegotiated and will result in annual savings of $123,000 (10%) beginning in FY10. IKON will replace the entire printer fleet with the latest Ricoh printers, and also provide printer monitoring software that will enable the County to achieve further efficiencies and cost savings.
  ➢ <u>Consolidated the DSS IT Division into IST</u> - Eleven positions were consolidated into IST at the request of the DSS Director. IST developed a new organizational structure to better meet the needs of DSS that resulted in a more efficient organization and the elimination of three positions.
  ➢ <u>Consolidated Register of Deeds Infrastructure Support</u> - The Register of Deeds requested IST provide this support in lieu of a contractor.

❖ **Expand disaster recovery and reliability**
  ➢ <u>FY09 & FY10: Disaster Recovery</u> - IST implemented a "warm-site" recovery location in Durham in August 2008, enabling recovery of tier 1 systems in the event of a disruption to business operations. Business continuity plans were developed by major departments to allow them to operate in the event of a disruption to their business operations. Several additional systems will be added to the site in FY10, and a comprehensive test will be conducted. A high speed 10

gigabit connection will also be established that will give the County the ability to upgrade the DR site to a hot-site.
- ➢ FY10 Pandemic Plan - IST, HR, Health, and DIRM are leading an effort for all departments to develop plans for continuation of County services in the event of a widespread H1N1 outbreak this fall and winter.

❖ **Provide a sustained funding model**

Project Portfolio Management - A product has been purchased to allow better management of projects, resources, planning, reporting and monitoring. In conjunction with improved governance, this will enable IST to more effectively manage and utilize its project and operational staff.

Notable Projects

❖ **FY09 Completed Projects**

- ➢ Replace Tax Legacy System - Phase 1 was implemented in July 2008 and all vehicle and real estate taxes were billed from the new system. The majority of Phase 2, which includes Individual and Business Personal Property plus numerous change requests, was implemented in FY09 as well. Phase 2 will be completed in FY10 for this $4.9M project.
- ➢ Pre Trial Case Management - A modern web based system replaced an outdated mainframe application. The new system provides many improvements to enable case managers to better manage their heavy caseloads. It also has a self service component that allows defendants to check in through kiosks deployed in the Sheriff's Office.
- ➢ AMH Provider Services Organization (PSO) System - This new system replaced an outdated system and supports the provision of behavioral health care services County-wide.
- ➢ Just One Call Web - This system was rewritten into a modern web based system that provides community support and assistance for the elderly, including community resources and referrals, and allows for a seamless referral transmission for requested services to the Adult Social Work division of DSS.
- ➢ Appraisal Process Improvements - This is a continuation of a series of related projects that began two years ago. The Address One System was enhanced and integrated with the street centerline data in a joint project with the City of Charlotte. In addition, a pilot Change (Difference) Detection project was started that will use oblique photography to detect changes in property that are expected to result in increased property tax revenue.
- ➢ Medical Examiner - A case management system was provided at the Medical Examiner's new facility.

❖ **FY10 Planned Projects**

- ➢ eGovernment Strategic Plan - The three-year plan will be refreshed this fall.
- ➢ Criminal Justice IT Strategic Plan - The Criminal Justice Citizen's Task Force recommended the development of this plan. IST engaged the IJIS Institute to

conduct a high level overview of justice IT systems and related business processes. Their report is due in September and will provide the foundation for a comprehensive planning effort.

➢ Finance and Performance Budgeting Upgrades - Finance, SOI, and IST staff are doing a major upgrade to these CGI AMS systems, which will result in numerous improvements to the functionality used by all County departments.

➢ Arrest Processing and Pre-Booking - IST will develop a web based system that will provide the MCSO with better subject data and business intelligence, improved reporting, and allow total elimination of mainframe processing (assumes the NC AOC will implement their statewide magistrate system in the third quarter of 2010, eliminating last mainframe applications). This system will be designed to readily interface with other justice applications (AOC, CMPD, and County), process arrests, provide flexible reporting, comply with national justice standards, and share data with others.

➢ Justice Analytical Warehouse System (JAWS) - This project will create a data warehouse comprised of State and local justice data that will enable participating agencies to aggregate and exchange data for analytical, management, and decision-making purposes. It should lead to increased public safety, greater justice system efficiency, and better transparency of the justice system. The data warehouse will serve the MCSO, CMPD, PD, DA, Courts, Magistrate, and others.

➢ AMH eCura Replacement - This system will replace the current AMH financial and billing system, providing a much more effective financial system for the AMH LME.

Fiscal Year 2010 Plan

The eGovernment Strategic Plan identifies key business needs and develops technology strategies that will enable the County to achieve its goals and objectives. It provides a basis for technology decisions, including IT priorities, budgets and resources. It is closely aligned with the County's Corporate & Community Scorecard, the Strategic Business Plan and the County's Managing For Results model. The three year eGovernment Stategic Plan is the basis for the IST Annual Plan.

eGovernment Strategies and 2010 Initiatives

❖ **Support mobile workers and customers**
  ➢ <u>Mobile Security</u> - IST will continue to deploy new remote access platform (Connectra) to address security issues and expand access capabilities. This allows the remote PC to be scanned for viruses and ensure it has the latest security patches and adds additional security by offering multi-factor authentication using your cell or home phone.
  ➢ <u>BlackBerry Service Upgrades</u> - IST will upgrade the BlackBerry environment to the latest revision and enhance BlackBerry management by including remote device connectivity and asset management.
  ➢ <u>Broadband Wireless Network Stimulus Grant</u> - IST is partnering with the City of Charlotte and other local government entities in developing a $28M stimulus grant request and forming a consortium to govern the project and operation of the network if it is funded.
❖ **Improve collaboration**
  ➢ <u>MeckWeb Upgrade</u> - County employees need and expect tools that foster efficient and effective communication and collaboration between peers and teams. Many of these employees use social collaboration tools in their personal lives and expect equal or better access to these same Web 2.0 tools at work. IST recognizes this need and has plans to upgrade our collaboration suite and Intranet to Microsoft Office SharePoint Server 2007.
  ➢ <u>Instant Messaging -</u> IST will continue to educate and promote this technology to County departments and install instant messaging to those users within the County who will use this communication medium.
  ➢ <u>GoToMeeting</u> - This offering allows web conferencing for people to meet online instead of in a conference room. This technology allows co-workers and customers to view any application running on the presenter's PC. IST plans to pilot this technology with County departments that need this level of collaboration.
❖ **Expand self-services**
  ➢ <u>Application Development</u> - IST will develop and purchase applications with self-service capabilities. Examples of this include DSS Online Applications, LUESA Self Facilitation, Pre-Trial Release, etc.
  ➢ <u>Help Desk Live Chat</u> - Employees now have a new way to obtain help from the IST Technology Services Center (TSC) thanks to the new Live Chat feature. By visiting the new IST MeckWeb page, users can click a link to chat live with a

TSC staff member. Users taking advantage of Live Chat are asked to provide their name and e-mail address before being connected to a TSC staff member. The users can ask any non-critical question through Live Chat, although some requests require a follow-up phone call to resolve. If a customer needs directions to resolve an issue, the TSC will e-mail him or her a step-by-step list to help.

❖ **Improve usability and integration of data**
  ➢ Enterprise Document Imaging System - This is the final year of a three year project to implement an enterprise-wide imaging solution that will replace seven departmental imaging systems. The system will be accessible by remote field workers, teleworkers, and customers where applicable. It will improve efficiency by streamlining workflow and facilitating sharing of imaged documents among departments and citizens. The preceding phases included establishment of the initial infrastructure and a limited roll-out pilot project. The remaining phases will implement the system for the remaining County departments.
  ➢ Database Consolidation - IST will continue to perform database upgrades and consolidation over the next year. Several key upgrades are planned including: SharePoint, ISSI, Business Objects, and EDMS. IST will continue to upgrade existing SQL 2000 databases to SQL 2005.
  ➢ Business Intelligence Upgrade - IST has two major data warehouse projects scheduled for FY10—DSS Data Warehouse and Criminal Justice Warehouse. Both of these applications will combine data from multiple data sources and provide business users a historical, current, and predictive view of business operations. New functions will include data mining, dashboards, drill downs, and predictive analysis.

❖ **Improve data management**
❖ **Expand the use of the web**
  ➢ CharMeck.Org Upgrade - Migration to the new site is expected during FY10.
  ➢ Social Media Strategic Plan - Social Media is increasingly becoming a part of our everyday lives. Sites such as Facebook, MySpace, YouTube, Twitter, and others offer the opportunity for the County to better communicate with each other and the citizens of Mecklenburg County. In collaboration with Public Service & Information, IST will develop a strategic plan to better understand how to implement social media within the County.
  ➢ Service Oriented Architecture (SOA) - IST will continue to expand SOA during FY10. Specific plans include:
    o Continue using web services for integration with legacy applications.
    o Continue to find pragmatic ways to reuse service components for integration and new application development, including composite applications.
    o Explore expansion of SOA tools with a pilot of Microsoft BizTalk 2009 as a potential enterprise service bus (ESB).
    o Enable UDDI registry for all County services.
  ➢ Mashup Applications - IST is currently developing the Flood Data Mitigation web application and mashing data from six different applications with GIS maps.

❖ **Adopt more efficient technologies and work processes**

- ➢ Continued Adoption & Implementation of ITIL - IST adopted the Information Technology Infrastructure Library (ITIL), a framework of best practices designed to improve the quality of IT service management. Over the next year, IST will work to complete the Service Catalog, improve Change Management processes, and expand root cause analysis through Problem Management.
- ➢ Business Process Management - IST will continue to expand the Business Process Management efforts. Major projects planned for 2010 include:
  - o LUESA Customer Service Business Process Study
  - o DSS ESD/SFA Intake Analysis – Phase 2
  - o Veterans Office Process Automation
  - o Post Election Process Study
  - o SOI Budget Process Evaluation – Phase 2
  - o Accounts Payable and Invoice Process Study
  - o Contact (Vendor) Approval Process
  - o Post Judgment Services Center (PJSC) and Fines Collection Process Evaluation
  - o DSS Bus Pass Process
- ➢ Office 2007 Upgrade - The standard desktop software for the County is Microsoft Office suite. We are currently on release 2003, which is now obsolete. Therefore, IST has started a project to upgrade the entire County from to the latest release, which is 2007. To make the transition as smooth as possible, the upgrade is being rolled out one department at a time.
- ➢ Multi-functional Printing - This year, the County's multi-functional printing contract with Ikon was renegotiated. As a result of new pricing and technology, the County will save $123,000, or 10% of our current expense annually, with a decreased cost per copy rate for printing, copying and duplex printing. Through the use of new technology such as ROI Print Manager, we will be able to monitor the printing patterns of customers and modify their printing behaviors, eliminate waste, and save County dollars. IST also conducted a cost analysis for network printing which helped us identify the County's total cost of ownership and annual expense for operating and maintaining network printers. This data, along with the data we will gain through ROI Print Manager, will help us to identify further efficiencies in County printing costs in FY10.
- ➢ Network and Communications Strategic Plan - In the coming year, additional enhancements are planned to continue to improve network reliability, including routing protocol changes to automatically redirect and prioritize traffic, as well as upgrades to several essential core network services.
- ➢ Woodard Center Phase 3 Infrastructure - IST will install networking infrastructure for County equipment and staff in the Woodard Center building for phase three.
- ➢ Cloud Computing - Cloud Computing is a style of computing in which dynamically scalable and often virtualized resources are provided as a service over the Internet. This allows IST to not only deploy services quickly, but also to avoid server and ongoing hardware maintenance when acquiring services through the cloud. IST is interested in utilizing the cloud with several offerings such as Google Postini (e-mail spam filter, virus scanning), GoToMeeting (online web

conferencing), Daptive (project portfolio management), and others. IST will also investigate cloud offerings for live chat and faxing over the next year.

❖ **Expand disaster recovery and reliability**
  ➢ <u>Phase II Disaster Recovery</u> - During Phase II of the Disaster Recovery project, additional applications will be added and the applications will be stress tested to ensure everything is functioning correctly.
  ➢ <u>Pandemic Readiness</u> - IST is leading an effort to create a pandemic readiness plan in the event there is a H1N1 breakout within the County.
  ➢ <u>Network Upgrades</u> - IST will continue to enhance our network infrastructure over the next year. Plans include upgrading various link speeds, increasing redundancy, upgrading our routing protocol to OSPF, etc.
  ➢ <u>10Gb Connection to Disaster Recovery (DR) Site</u> - This new connectivity not only makes it possible for a hot site DR, but also give us capability for much higher Internet speeds at a very low price. For example, IST will increase Internet speed from 80Mb to 420Mb without an increase in our budget. This connection also gives the County the option to use the DR site as a production data center at about a third of the cost for our present data center.

❖ **Provide a sustained funding model**
  ➢ <u>Portfolio Management</u> - To better manage the ever increasing demand for IT projects, IST has contracted with a third party, Daptiv, to implement a project portfolio management system. This is a web-based service containing customizable tools that will allow departments to submit their own project requests. It has robust features for creating status reports and dashboards, managing project resources, and managing project costs. These features will provide departments with timelier, more meaningful information about their projects. Implementation is scheduled for fall of 2009.

Other Projects and Initiatives

❖ **Noteworthy Projects**

➢ <u>Replace Tax Legacy System, Phase 2</u> - This new $4.9 million property tax information system (NCPTS) integrates the property tax assessment and billing functions of the Property Assessment and Land Records Management (PALRM) with the tax collection function of the Office of the Tax Collector (OTC). This phase, which includes Individual and Business Personal Property functions plus numerous change requests, is 90% complete and will be completed in the fall.

➢ <u>AMH eCura Replacement</u> - This project will replace an outdated system, eCura, used by Area Mental Health's Local Management Entity.

➢ <u>Felony File Tracking</u> - This project will procure and implement a system that tracks felony case files in the Old Courthouse. There are approximately 15,000 felony files created each year and currently no system to track them. This system will help the District Attorney's Office know where files are located in the and reduce the amount

of staff time spent looking for missing files.

➤ DSS Mobile Data Units - This project will equip vehicles with mobile data transmitters, which will provide real-time data entry, detailed reporting of trip information, mileage, vehicle location, and vehicle and driver efficiency. The data can then be uploaded to a central system instantly. The result will be faster, more accurate data and an efficiency gain amounting to one and a half to two FTEs.

➤ CGI Upgrade - This project will apply the latest upgrade to the Advantage 3 finance and performance budgeting system. This is a web-based application that spans all County departments, but is used extensively by the Finance and Budget departments.

➤ Arrest Processing and Pre-Booking - This initiative will result in the development of a web-based arrest processing system that will provide MCSO better subject data and business intelligence, improved reporting, and aid IST in moving all applications off the mainframe. This new system will decouple the Magistrate and Warrant Repository system and put the County in a better position to integrate with the State magistrate system, NCAWARE, which is scheduled for Mecklenburg in third quarter 2010. This system will be designed to interface with the required applications (State and County) to process daily arrests, utilize the latest web and reporting technology, provide compliance with current justice standards, and provide the necessary data sharing in conjunction with the proposed CJIS Data Warehouse project. All deliverables for this are to aid in the coordination and collaboration efforts underway within our criminal justice system.

➤ JAWS - Justice Analytical Warehouse System - This project will create a data warehouse of State and local criminal justice databases, enabling participating agencies to combine and exchange data for analytical and decision-making purposes as well as future integrated justice initiatives, which leads to increased public safety and better transparency between the criminal justice community and the citizens of Mecklenburg County. This project will serve the Mecklenburg County Sheriff's Office (MCSO), Charlotte-Mecklenburg Police Department (CMPD), District Attorney, Public Defender, Magistrate and the court community at large.

➤ CAMA Process - Multi-year functionality for CAMA is needed by PALRM to facilitate County wide real property revaluations every two years and to increase operational efficiency of AssessPro users for real property assessment.

❖ **Culture Initiatives for 2010**

Culture Audit
IST will conduct another culture audit in September. A culture audit is an online assessment tool to examine the department's culture and climate and is a means for tracking culture change over time. IST will determine improvements since the last culture audit and opportunities for improvement in order to increase employee satisfaction and morale.

Culture Commitments
The Culture Club will revisit the IST Culture Commitments to ensure that our current initiatives are in line with these commitments. This effort will also focus on training and communicating these commitments to IST employees. This includes indentifying how we can adjust our Culture Club internal processes to keep these commitments as a top level focus.

Continuation of FISH!
The FISH! initiative began May 1, 2009. This initiative was implemented by having IST teams view the FISH! video with the option of a FISH! team member being there to answer any questions. After employees viewed the video, they received a magnet that depicts the four principles of FISH! Those principles are Choose Your Attitude, Be There, Make Their Day and Play. Each principle was introduced to IST for two weeks by the use of visual aids and fellowship. IST is continuing the FISH! initiative through walking teams, which incorporates all the principles of FISH! FISH! is reinforced through visual aids by using the easels and bulletin boards that are strategically placed within the Woodard Center and at least one activity per quarter based around the FISH! themes. The goal is to continue this initiative for a year and evaluate the success through the use of a survey at the end of a year.

Team Building
IST plans to research and implement team building across the department. Team building should lead to:

- ❖ Improved communications across teams
- ❖ Improved working relationships
- ❖ Elimination of silos
- ❖ Higher levels of trust and support
- ❖ A climate of cooperation where employees are motivated to help co-workers be successful
- ❖ Collaborative problem-solving
- ❖ Diverse co-workers working well together
- ❖ Higher levels of job satisfaction and commitment

Rewards and Recognition - iSTar Enhancements
IST implemented the iSTar program on January 1, 2009 to track and reward employees for:
- ❖ Outstanding Customer Service
- ❖ Outstanding Service Delivery
- ❖ Outstanding Performance
- ❖ Significant Contributions to Culture Change
- ❖ Creativity & Innovation

This program is off to a great start and we aim to increase usage this year with an active campaign promoting iSTar and its benefits, as well as application improvements to increase system performance, usability, and communication.

Got Art?
IST will create, promote, and maintain the "Got Art?" program. This program is designed to help employees feel more connected to the work space by encouraging employees to submit artwork created by themselves or family members. This artwork will be appropriately framed and/or displayed throughout our space. This program will help us learn more about our co-workers and their interests and offer a method of decorating and personalizing the office space.

Information Exchange
The Culture Club is developing an Information Exchange program. This program will provide a process for indentifying teams and/or individuals, who have connected, conflicting, or complementary processes or skills. Once these have been identified, the program will offer a structure for sharing this knowledge to improve process efficiencies and promote a better understanding of supporting processes and groups. The goal of this program is to facilitate the breakdown of information silos, increase productivity, and improve employee morale by facilitating intergroup communication and collaboration.

FY10 Projects	Cost	Mobile Workers	Collaboration	Self-Service	Integration of Data	Data Management	Expand the Web	Efficiencies	DR/Recoverability	Funding
ISSI Just 1 Call	$ 512,893	Y	Y	Y			Y			
Transportation - Bus Passes	TBD			Y				Y		
HVAC for Real Estate Services	$ 14,200							Y		
Criminal Courthouse Renovation	$ 162,507		Y							
Historic Courthouse Project	$ 42,955		Y							
Jail North - Youthful Offenders	$ 35,029		Y			Y				
Server Virtualization and Colocation	$ 19,170					Y		Y	Y	
Disaster Recovery Phase 2	TBD					Y		Y	Y	
Full Desk Encryption	$ 64,400					Y			Y	
Endpoint Security Enhancements	TBD					Y			Y	
eJuror Rewrite	$ 117,860			Y			Y			
Jail Population Tracking Website	$ 59,143							Y		
SJS Felony File Tracking System	$ 247,925					Y		Y		
AssessPro 4.6.X Upgrade	$ 269,966			Y		Y	Y			
EDMS Cityworks Upgrade	TBD					Y				
FINS Phase 3	TBD						Y			
LUESA Water Quality Data Repository II	$ 83,780					Y				
CAMA Multi-Year Requirements	TBD					Y		Y		Y
CSS Database Consolidation	$ 25,000					Y				
EPIC+ Rewrite	$ 2,840					Y	Y	Y		
CLASS Database Upgrade	$ 47,963				Y	Y				
Business Objects Upgrade	$ 15,088				Y	Y				
Health Dept. Performance Measures	TBD							Y		
DSS Mobile Data Units	$ 273,481		Y		Y			Y		
Enterprise - Office 2007 Upgrade	$ 382,460		Y		Y			Y		
Enterprise - Windows 2008 Upgrade (AD)	$ 163,400				Y			Y		
New Tmetrics Server	$ 57,180							Y		
ePerformance Module -- PeopleSoft 8.9	$ 150,227	Y			Y		Y			
CGI Upgrade to Version 3.7	$ 926,485		Y		Y	Y				
LUESA Electronic Plan Mgmt System	$ 268,431		Y			Y				
Digital Plan Review and Submittal	TBD		Y	Y				Y	Y	
Contractor Dashboard	$ 97,272			Y						Y

Project	Cost										
Salary Survey Database	TBD										
Imaging	TBD		Y		Y			Y			
Ikon/Richoh Contract	TBD							Y			
Flood Mitigation Data Mgmt System	$ 26,980				Y	Y		Y			
LUESA Water Quality Time Tracking System	$ 73,485		Y					Y			
LUESA Storm Water Project Tracking System	$ 22,720		Y					Y			
Data Warehouse (DW) Server Replacement	$ 17,750					Y				Y	
YFS Data Warehouse	TBD					Y				Y	
ISSI-FSIS Interface	TBD				Y						
Automated Letters and Forms	TBD							Y			
AMH eCura Replacement	$ 851,526			Y	Y		Y				
AMH - BCMS Replacement	$ 656,783		Y	Y			Y				
CRD ChildCare Administration	TBD							Y			
Replace Tax Legacy System (3 year project)	$ 5,356,458				Y		Y				Y
BOE-Election Forecasting and Planning	TBD							Y			
BOE-EDM Class Scheduling	TBD		Y	Y	Y						
Park & Rec Bond Process	$ 24,708					Y		Y			Y
LUESA Customer Service Process Initiative	$ 56,800		Y	Y				Y			
Budget Process	$ 39,760		Y					Y			
PJSC and Fine Collection	TBD		Y					Y			
Veterans Office Process Evaluation	TBD	Y	Y					Y			
SharePoint 2007 Upgrade	$ 81,650		Y		Y						
Post Election Process	$ 28,400							Y			
DSS ESD/SFA Intake Analysis Phase II	$ 102,240				Y			Y			
Accounts Payable Process Study	TBD		Y		Y	Y		Y			
Contract Approval Process Evaluation	TBD		Y		Y	Y		Y			
Current Outcomes and Contract Mgmt	TBD							Y			
CAMA Process Requirements	TBD					Y		Y			
DSS Transportation Process Study	TBD			Y	Y			Y			
IST Balanced Scorecard System	TBD					Y		Y			
LUESA FTP Server	TBD				Y		Y				

Fiscal Year 2009 Year in Review

The eGovernment Strategic Plan was very well received by departments and management. Below is a list of accomplishments that are aligned directly with the nine key strategies adopted in the 2007 eGovernment Strategic Plan.

eGovernment Strategies and 2009 Initiatives

❖ **Support mobile workers and customers**
  ➢ BlackBerrys - IST added an additional BlackBerry Enterprise Server (BES) as the County continued to expand the number of BlackBerrys used. This facilitates mobility, enabling employees to access much of their daily work from a small, portable device.
  ➢ Wireless/WiFi - IST continued to expand the County's wireless access capabilities, adding an additional 36 Wireless Access Points (WAPs). IST also piloted new wireless technology, 802.11n, which effectively doubles the amount of bandwidth available to each user.
  ➢ Field/Telework - IST expanded the County's teleworking and field work capabilities. This includes the use of Microsoft Terminal Services, Softgrid, and others, which allows workers to access their desktop environment remotely as well as cellular air cards which give users access to County resources anytime, anywhere across the country.
  ➢ Security End-Point Scanning - IST piloted a new security appliance called Connectra, which enables users to connect non-County owned computers and ensure they are properly scanned for appropriate security patches, virus software, etc.
  ➢ Soft-phone - IST piloted soft-phones for County workers as part of the Voice Over IP introduction at the Woodard Center and the Medical Examiner's Office. This allows County workers to make phone calls using their PCs while teleworking and working remotely in the field.
  ➢ Teleworking Policy - IST partnered with HR and Legal and revised the outdated Teleworking Policy. It is currently being adopted by senior management.
❖ **Improve collaboration**
  ➢ Unified Messaging - IST completed a pilot of unified messaging and will deploy as an enterprise service pending a resolution to the storage and e-discovery questions that were raised. This will allow County workers to have a single source for both voicemail and e-mail (Outlook Inbox).
  ➢ Instant Messaging - IST continued to deploy Microsoft Live Communication Services (LCS) to specific workers, who need instant messaging capabilities to better communicate and collaborate among their work teams.
❖ **Expand self-services**
  ➢ Help Desk Self-Service Portal - A new Help Desk portal was added over the past year, allowing end users to open and review their problem incidents online.
❖ **Improve usability and integration of data**
  ➢ Enterprise Document Imaging System - FY09 was the second year of a three year project to implement an enterprise imaging solution that will replace seven

departmental imaging systems and provide an imaging system for all County departments.

➢ <u>Database Consolidation</u> - The following databases were upgraded to the latest software release over the past year: Budget/Finance, Magic, DSS Worker Assignment, DSS Front Desk, DSS MIT, MeckWeb, LUESA Journeyman, and CAMA.

❖ **Improve data management**

➢ <u>EmailXtender</u> - This project provides an enterprise archive for all e-mail, simplifying the archival process and assuring the accessibility of e-mail for legal investigations. This greatly shortens the process for pulling e-mails together for legal requests and allows employees to spend less time managing and searching for e-mails.

➢ <u>DiskXtender</u> - Currently 80% of file server space is holding files that are not accessed at all or only viewed occasionally. Because these files do not change often, but are still needed to reference information, storing these files on higher speed disks is very costly. It also takes a great deal of time to back-up these files each night. DiskXtender allows us to move the data to less expensive, slower disks that are still online and de-duplicate the data (only keeping one copy of the file instead of multiple copies of the same file).

❖ **Expand the use of the web**

➢ <u>CharMeck.Org Upgrade</u> - The City and County jointly maintain the public-facing website, CharMeck.org. The County and City have partnered and upgraded the existing CharMeck site to utilize Microsoft Office SharePoint Server 2007 (MOSS). The County has outsourced the infrastructure and support of the new technical environment to the City. MOSS incorporates a number of software upgrades including Web 2.0 application features such as blogging, wikis, RSS feeds, etc. MOSS also improves searching and simplifies content management.

➢ <u>Web Strategic Plan</u> - A Web Strategic Planning Team, comprised of employees from IST, Public Service & Information, LUESA, and the Health Department, developed a web strategic plan for Mecklenburg County. The plan addressed the current state of CharMeck.org and opportunities for improvement based on data collected from SWOT (strengths, weaknesses, opportunities, and threats) analysis and internal and external focus groups. The plan includes recommendations for a web governance structure and a web organizational structure for the County.

➢ <u>Web Analytics Tool</u> - SiteImprove was selected to replace WebTrends for web analytics. Department specific web analytics reports can be scheduled to be automatically sent out daily, weekly, or monthly. All web pages are scanned for spelling errors, broken links, accessibility issues, etc. The product also provides uptime reports.

➢ <u>Service Oriented Architecture (SOA)</u> - IST is committed to developing service oriented architecture within Mecklenburg County. Although all applications utilize components of SOA, the following enterprise services were released during FY09:
  o Active Directory Services – enables application integration with AD
  o Notification Service – enables automated e-mail notification service

- o MCCJIS Services – enables integration with Arrest, Warrant, Mugshot, and OMS legacy applications
- ❖ **Adopt more efficient technologies and work processes**
  - ➢ Continued Adoption & Implementation of ITIL - One staff member has been dedicated to lead this multi-year initiative. FY09 accomplishments included training all IST in the basics and improving Incident, Problem Management, and Change Management processes.
  - ➢ Business Process Management - IST established this function three years ago and now has a staff of six dedicated to providing this service for County departments. Demand for this service continues to increase as customers discover the benefits it can provide. Major projects completed in 2009 include:
    - o LUESA Flood Mitigation Data Management System workflow analysis
    - o Election night business process improvement study
    - o Improve eJuror business process
    - o SOI budget process evaluation – Phase 1
    - o DSS ESD/SFA Intake Analysis – Phase 1
  - ➢ Continuous Process Improvement (CPI) - This initiative used Lean Six Sigma methodology to streamline internal IST processes with the objective of improving services and operational efficiencies.
  - ➢ PC Replacements - Approximately 1,551 aging and unreliable PCs and laptops were originally replaced from the $1,977,889 Technology Reserve Fund, saving the County $451,000. An additional 376 PCs were replaced using $281,000 of the remaining balance. These additional replacements were necessary to upgrade to Office 2007. This enabled the County to forego a similar $2M Technology Reserve request for FY10 as all PCs are now compliant with the County's current software standard.
  - ➢ Voice Over IP (VOIP) - IST completed a VOIP platform selection by piloting VOIP at both Woodard Center and the new Medical Examiner's Office.
  - ➢ Woodard Center Phase 2 Infrastructure - IST designed and implemented the Woodard Center network infrastructure for Phase 2.
  - ➢ Information Security - Information Security had several initiatives. These include:
    - o Information Security Dashboard - Created an integrated software base and reporting structure to support the real-time tracking of vulnerabilities and action planning.
    - o Full Disk Encryption - Implemented full disk encryption which encrypts and protects County laptops in the event they are stolen or misplaced.
    - o Risk & Compliance Management Software - Automated security risk assessments and projected target areas. This allows the efficient deployment of limited resources towards areas identified as higher risk with a higher degree of confidence.
    - o Vulnerability Scanner – Implemented vulnerability testing software that can be automatically scheduled allowing efficient scans of critical assets.
    - o Mobile Wireless Security - Implemented software and hardware to detect and locate rogue wireless access points. This allows the user

to pinpoint rogue locations more efficiently as opposed to numerous manual process techniques and steps used today.

❖ **Expand disaster recovery and reliability**

➢ <u>Disaster Recovery</u> - IST completed the warm-site recovery location implementation. This allows the County to recover critical tier-one applications and services in the event of a disruption to normal operations. Business Continuity Planning (BCP) was completed with additional work being performed as necessary to support ongoing projects and activity. The BCP information application was upgraded to a web-based version. This allows all County representatives/managers to maintain their planning information directly, improving efficiency and effectiveness.

➢ <u>Network Upgrades</u> - Over the past year, IST has upgraded the speed of several circuits, added more redundant paths, piloted an updated routing protocol called OSPF, continued to increase the Internet speed, and introduced several new security appliances designed to keep Mecklenburg County's network safe from outside intrusion.

❖ **Provide a sustained funding model**

➢ <u>Project Portfolio Management</u> - Mecklenburg County has more IT initiatives than can be funded. At the same time, cost pressures are always present and understanding what real value IT initiatives deliver can be difficult to measure long-term. County management and IST must prioritize which IT initiatives get funded by balancing business goals with various evaluation criteria. Portfolio management is a set of tools that allows the County to better manage, select, prioritize, staff, monitor, and report the status of projects for the enterprise. Over the past year IST has continued to refine these processes and procedures.

Other Projects and Initiatives

❖ **Noteworthy Projects**

➢ <u>Pre-Trial Release Case Management</u> - This application, a web-based program compatible with Microsoft platforms, allows staff to collect, analyze, and disseminate information about defendants more accurately and efficiently. In addition, the project included two automated kiosks that enable program participants to check in after court appearances and while under supervision. This feature reduced demands on staff, while enhancing the level of surveillance provided persons awaiting trial. Funding for the project was derived from a federal grant.

➢ <u>MEWEB</u> - This system is a digital whiteboard application that tracks and records the Medical Examiner's cases. Written in .NET, the application tracks, records, and reports pertinent information on cases that are reported to and/or receive services from the Medical Examiner. It also has ad-hoc report and archive functionality. Other benefits to the Medical Examiner include:

  o Backup/Archive - When MEWEB files are archived and backed up on servers, staff can access information easily.

- o Reporting - The Medical Examiner did not have a reporting mechanism before this system and had to rely on the State to send them reports. Now they have a real-time local system to match/compare data to State data.
- o Service Delivery Changes - This system changed an ineffective and time-consuming manual whiteboard process (paper and a board to track cases) to a secure online system.
- o Reduced/Avoided Costs - There has been an 85% decrease in the time required to record and track cases. Before MEWEB it took approximately 10 minutes to process an incoming case. Following the implementation of the system it takes 1.5 minutes.

➢ Appraisal Process Improvement - This is a continuation of a group of related projects that began two years ago. This year the AddressOne product was successfully enhanced and integrated with the street centerline data in a joint project with the City of Charlotte. Additionally, a pilot of the Change (Difference) Detection project using the previously acquired oblique photography was started and is in progress.

➢ AMH Provider Services Organization PSO System - The new system replaced an outdated system and supports the provision of behavioral healthcare services Countywide.

➢ Just One Call Web - This project was a rewrite of the Just One Call application in an ASP.net format. It provides community support and assistance for the elderly, including community resources and referrals and allows for a seamless referral transmission for requested services to the Adult Social Work Division of the Department of Social Services.

➢ AssessPro 4.6 Upgrade - This was a project to engage the software vendor, Patriot Properties, to upgrade the County CAMA (computer assisted mass appraisal) system, AssessPro, to version 4.6. This involved updating AssessPro integration with other applications, including POLARIS, Real Estate Lookup, and the integrated data store. All work has been completed except the ParcelSync integration, which has been postponed until after annual tax billing has been completed.

❖ Balanced Scorecard and Customer Satisfaction

IST Balanced Scorecard Results

Red	Yellow	Successful	Exemplary	Perspective
			2	Customer/Stakeholder
		1	5	Internal Business Process
		1	2	Financial
			7	Employee & Organizational Capacity
0	0	2	16	Total

Preliminary results indicate that IST has improved its Balanced Scorecard results over 2007. Most measures attained were exemplary and the remaining two were successful.

❖ Creativity and Innovation

In 2007, IST introduced the Creativity & Innovation Awards to recognize IST employees, who make significant contributions through creativity and innovation. With recent budget challenges, IST asked employees to submit creative and innovative ideas as well as cost-saving ideas. At the 2009 State of IST Address in April, the following employees were recognized for their ideas.

➢ Jeff McIntosh **-** Jeff implemented an application technology that allows any application to run alongside any other in a virtualized environment.
➢ Steven Smith **-** Steven developed a website that allows employees of IST, the Sheriff's Office, and DSS to connect remotely three different ways to other PCs for support.
➢ Curt Williams **-** Curt submitted a cost-saving idea to outsource e-mail filtering (spam and virus) to Google Messaging.
➢ Wallace Branch and Jim Binford **-** Their idea is to create a root cause team with representation across IST.
➢ Bill Ardern **-** Bill's idea is to investigate the use of Google Apps as an alternative to Microsoft products for document creation, storage, and real-time collaboration.
➢ Dwayne Campbell **-** Dwayne's idea is to create a customer-facing dashboard that serves as a complete view of IST projects and enterprise initiatives.

❖ Consolidated the DSS IT Division into IST

At the request of the DSS Director, IST developed a new organizational structure to better meet the needs of DSS that resulted in a more efficient organization and the elimination of three positions. The DSS Director and her leadership team are very complimentary of the services they are receiving from this new organization.

❖ **Consolidated Register of Deeds Infrastructure Support**

Register of Deeds agreed to allow IST to provide this support in lieu of a contractor.

❖ **Employee Culture Change**

IST remains committed to improving employee satisfaction and morale. Notable initiatives in FY09 in IST's ongoing quest to achieve high employee satisfaction and trust were:

Employee Climate Survey
For FY09, IST received 26 exemplary, five successful, and one yellow. IST has continually improved since launching its Culture Change initiative three years ago. To illustrate the improvement, during FY06, the results were five exemplary, 10 successful, 12 yellow, and nine red.

IST Culture Audit
A culture audit was done again in FY09 and continued to show steady improvement from the prior year.

iSTar
The Culture Club developed iSTar, a rewards and recognition program to recognize the following accomplishments:

- Outstanding customer service
- Outstanding service delivery
- Outstanding performance
- Creativity and innovation
- Significant contributions to Culture Change

The iSTar system went live on January 1.

FISH! Philosophy
IST's implemented the FISH! Philosophy, which consists of four principles:

- Choose Your Attitude
- Be There
- Play
- Make Their Day

Through the FISH! Philosophy, we build stronger relationships with the team members we work with, the customers we serve, the teams we interact with, and each other.

❖ IST Move to Valerie C. Woodard Office Center

Technical Services, Administration and APM groups successfully moved to the Valerie C. Woodard Center in March 2009. The move was seamless as we were able to move the Technology Services Center early and keep them up and running for customers. This is the first time that the entire IST Department has resided in one location.

❖ Green IT

Over the past year, IST has been committed to the County's Green initiatives. Several initiatives that IST has been involved with that support this endeavor are:

- Mobility strategy that allows many workers to work remotely from their house or from the field to help limit the number of times workers have to travel to and from work.
- Over the past year, IST has ensured that all monitors and other computer related hardware is EnergyStar compliant.

- IST has aggressively pursued utilizing server virtualization. Server virtualization allows multiple servers instances to be loaded on a single physical box. Currently, we have 116 virtual servers physically sitting on approximately 20 physical boxes saving the electricity that would be needed if each of those servers were being operated on a separate box.

❖ **Cost Savings**

- Reduced FY10 budget by $1,569,471 (7.4%). Summary of savings were:
  - Salary & Benefits, $654,412 (5%), 5 Vacant and 1.5 filled positions
  - Travel, $25,719 (54%)
  - Training, $101,039 (25%)
  - Printing, $91,750 (84%)
  - Professional Fees, $251,478 (35%)
  - System & Efficiency Fees, $159,200 (35%)
  - Departmental Supplies, $107,671 (63%)
  - Computers, $35,400 (52%)
  - Capital Equipment, $61,000 (21%)

  Note: There is duplication of several of following items the FY10 budget reduction, but in those instances it provides additional insight into the budget reductions.

- Enterprise multi-function machine (MFM) printing contract was negotiated with IKON and will result in annual savings of $123,000 (10%) for all departments beginning in FY10. IKON will replace the entire fleet of MFMs with the latest technology using Ricoh printers. They will also provide software that will enable the County to monitor and modify its printing behavior, eliminating waste, and provide further cost savings. In addition, IST conducted a cost analysis for network printing and this analysis helped us to identify the County's total cost of ownership and annual expense for operating and maintaining network printers. This data, along with the data we will gain through ROI Print Manager, will help us to identify further efficiencies in County printing costs in FY10.
- Mainframe Cost Reductions of $225,000 were achieved through reduced usage and reduced contractor services.
- Xerox Printers were eliminated at the end of FY09. Projected cost savings for FY10 is $90,000.
- PC Replacements - Saved $451,000 of $1,977,889 Technology Reserve Fund appropriation for replacement of 1,551 PCs. $281,000 of the remaining balance was used to buy 376 additional PCs. These replacements were necessary to upgrade to Office 2007. This enabled the County to forego a similar $2M Technology Reserve request for FY10 as all PCs are now compliant with the County's current software standard.
- Justice Analytical Data Warehouse grant of $496,914 was received from the State. The grant requires a 25% local match funded from the Technology Reserve.

- Canceled Blackberrys with savings of $5,711 and realigned plans to save an additional $23,000.
- Verizon Air Cards - renegotiated contract with $12,000 savings.
- Network Printers - IST took over maintenance and had a savings of $10,000. This required HP certification of staff.
- Tape savings - using fewer tapes in more efficient new tape backup system. Some savings were achieved in FY09, but anticipate $80,000 savings in FY10.
- Radio Services - dropped usage and disposed of old radios, saving $4,800.
- LUESA Savings - Avoided $80,000 of vendor fees by having IST staff write software to purge old records from POSSE, a vendor system. Saved $19,200 of postage by providing e-statements to contractors in lieu of mailed statements.
- Technology Reserve funds reclaimed - $235,777 of Internal Service Request funds were reclaimed from FY09 and prior years by reassessing needs based upon austere budget situation.

❖ Awards and Recognition

2009 Mecklenburg County NACo Achievement Award for the Capital Improvements Projects Mapping System in collaboration with GIS and RES. The system provides one-stop access to all major capital improvement project information and proposed 10-year expenditures via an easy to use web site.

❖ Completed Projects and Initiatives

IST completed 43 projects totaling approximately $6.6M during FY09. Below is a list of the projects completed along with how each project aligns with the eGovernment Strategic Plan.

FY09 Projects	Cost	Mobile Workers	Collaboration	Self-Service	Integration of Data	Data Management	Expand the Web	Efficiencies	DR/Recoverability	Funding
Appraisal Process Imp - Oblique Photo	$ 17,182	Y					Y			Y
PeopleSoft Tax/Maint/Tools	$ 76,467					Y		Y		
Fleet Maintenance Consolidation	$ 2,876		Y					Y		
GIS - ePayment Services	$ 15,833			Y						Y
LUESA - Holds Dashboard	$ 23,927			Y			Y			
BOE - Polling Place Management in EDM	$ 62,977	Y							Y	
Appraisal Process Imp - Addressing Ph II	$ 17,005	Y					Y			Y
Star Card (LUESA)	$ 16,792			Y						
PID Utility - Merge & Delete	$ 44,517				Y			Y		
PLCMC – CAFM	$ 18,354					Y		Y		
Voice Mail	$ 94,146	Y		Y						
LCS Phase II	$ 10,934									
Freedom Mall Infrastructure	$ 201,960					Y		Y	Y	
Convert IP Addresses	$ 36,246	Y	Y							
Election Night Process Study	$ 14,733	Y				Y				
Budget CIP - GIS Integration	$ 9,764		Y							Y
EPS Residential Master Plan Reciprocity	$ 120,594		Y							Y
Trade Internet Permit System –TIPS	$ 121,937									Y
BOE EViD Purchase	$ 2,201	Y						Y		
Health Dpt Performance Measures	$ 6,958							Y		
Administrative Court 1st Appearance Ph 1	$ 57,794			Y						
Disaster Recovery - Tier 1	$ 172,431					Y			Y	
CCMIS	$ 190,302			Y				Y		
LUESA South	$ 34,258	Y			Y					
FMDMS - Process Improvement	$ 37,098					Y		Y		
Medical Examiner's Office Move	$ 120,274									
Pre-Trial Release	$ 920,664				Y	Y				
Server Consolidation	$ 12,745				Y			Y	Y	

Project	Amount									
DSS ESD/SFA Intake Analysis - Ph I	$ 58,433	Y	Y	Y				Y		
SOI Budget Process Evaluation	$ 9,479				Y			Y		
LUESA Servers/Systems Retrofit	$ 263,543					Y				Y
Survey Tool Needs Analysis	$ 6,248		Y				Y	Y		
POSSE WAP Replacement	$ 42,736	Y					Y	Y		
EPIC+ Rewrite Analysis	$ 20,484					Y		Y		
eJuror Phase II – BPI Study	$ 36,459			Y			Y			
AddressOne 2.1 & Centerline Integration	$ 110,325		Y		Y	Y		Y		
eMailXtender – Phase II	$ 9,763		Y			Y		Y		
File Server Consolidation	$ 12,745					Y				
Freedom Phase 2	$ 60,386		Y		Y			Y		
FY09 PC Replacement	$ 1,764,489	Y				Y				
Imaging Implementation.	$ 1,693,575	Y	Y		Y	Y		Y		
BOE Election Night Check-In	$ 49,310			Y				Y		
BOE - Voter Demographic Report	$ 3,456			Y			Y			