

# Information Technology Executive Summary

As reported in last year's report, IST Director Jerry Pinkard has retired after more than 22 years of service to the County. As with any change in leadership, new and improved opportunities are assessed at both the organizational and operational levels. Throughout 2011 the Information Services and Technology Department (IST) was part of an Enterprise service assessment that not only included this area, but Real Estate Services, Human Resources, and Public Service and Information. The result of the assessment included a recommendation for the County to hire a new Chief Technology Officer (CTO). In September of 2011 Gwen Simmons was hired to be the County's first CTO. She will now lead the newly named Information Technology area as part of the new Business Support Services Agency (BSSA). You will have a chance to get to know Gwen on the next page.

Going through these organizational changes did not limit IST from continuing to service its customers at the highest level. For example, in **FY11** we completed projects such as:

- Receptions Intake Scheduler (RAIS)
- eJuror
- Automated Call Center
- 4G Broadband (MOU)
- Business Objects Upgrade
- Project Portfolio Management (Daptiv)
- Child Support Enforcement Initiative
- DSS / IST Strategic Plan
- Address Management Program (AMP)

- County Judicial System (CJS)
- PC Replacements
- Server Replacements
- Library IT Support Services
- Remote Access (VPN) Upgrade
- Time Warner Transition
- Data Center Relocation
- Microsoft Enterprise Agreement
- Improved Internet Connectivity
- iPad / Smartphone Pilot

In FY12 we have some very exciting plans to complete the following projects:

- eCura and ECHO 5010 Compliance
- Automated Letters and Forms (ELF)
- Mobile Data Units
- PeopleSoft Upgrade
- MeckWeb Upgrade
- Arrest Processing Rewrite
- Justice Data Center Warehouse
- DSS / BPM Strategic Plan
- NCFAST
- Program Review Assessment

- PC Replacements
- Server Replacements
- Storage Area Network (SAN) Replacement
- Call Center Replacement
- Office 2010 Assessment
- Long Term Telephony Strategy
- Next Generation
   Wireless Infrastructure
- Microsoft Exchange 2010 Upgrade

For more details on these and other projects please read through the following pages. You will particularly be interested in the focus stories we highlighted as well. As you read on, please keep in mind that our mission is to partner with you (our customer) to enable you to operate efficiently and effectively. We are excited to continue this partnership now and in the future.

### A Message From the CTO



I am very excited and honored to be the Chief Technology Officer of the BSSA-IT department. It is my pleasure to present the IT FY12 Plan and FY11 Report. The FY12 Plan highlights Chief Technology Officer major strategies and

initiatives planned for the new fiscal year such as Call Center replacement, Storage Area Network (SAN) replacement, PeopleSoft upgrade, Arrest Processing rewrite and integration with the State NCAWARE, Justice Data Warehouse, and DSS Automated Letters and Forms. The FY11 Report list IT accomplishments for the fiscal year that ended June 30, 2011. The report has been expanded again this year to include customer testimonials. These testimonials allow you to hear directly from customers regarding how IT services have met their business needs. The report also includes focus stories and a special interest video regarding how IT services have not only met a business need but also served the community.

The Information Technology department is now a part of a bigger agency (Business Support Services Agency) all focused on excellent customer delivery. To enhance our customer focused, BSSA announced the formation of the new Customer Support Center to improve communications within

the organization about the customer, improve communication with our customer, and improve overall operations of our service units. The BSSA has also announced the formation of a new web services team to be led by Jessica Davis (new Web Manager) effective November 30, 2011. The new web team will enhance our web presence on MeckWeb and CharMeck for each County department. The new Web Manager will dual report to **Danny Diehl** and me for web shared accountability.

As the BSSA big team continues to gel as one team, we will continue to focus on Culture Change initiatives to support cross department team work. We have many activities planned to facilitate our collaboration (e.g. Chili Cook off, Holiday celebration). As we move forward, we want to make sure our culture is one which focused on operating with integrity, being proactive, being accountable to our customers, each other, and the taxpayers. Creating a positive and trusting environment is my top priority and I am very excited about all the wonderful opportunities ahead for the BSSA-IT department. We are off to a great start as we complete the FY12 fiscal year and begin to ramp up for the new FY13 fiscal year. Thank you for all you do for your customers and the citizens of Mecklenburg County.

### Applications/Database Initiatives

eCura and ECHO 5010 Compliance State mandated project to ensure conversion and compliance from HIPAA 4010 to 5010.

Automated Letters and Forms (ELF)

Eliminate unnecessary manual activities associated with filling out and copying multiple forms and notifications.

#### Mobile Data Units

Implement paratransit mobile devices into fleet vehicles at DSS.

#### PeopleSoft Upgrade

The purpose of the project is to upgrade the PeopleSoft HR and Payroll systems.

#### MeckWeb Upgrade and Outsourcing

Upgrade the County intranet from SharePoint 2007 to SharePoint 2010.

#### Arrest Process Rewrite

Migrate the legacy mainframe CJIS system onto a newer platform.

#### CAMA Multi-Year Phase I

First of two phases to move the County to a 2-year revaluation cycle.

#### ACL Audit Exchange Application

Provide a system that would allow analyzing entire data populations and establishing continuous auditing procedures.

#### Justice Data Warehouse

Build a centralized location for criminal justice data.

### 2011 Report

- **New Programs/** Services/Initiatives
  - **Focus Stories**
- **Data Center Relocation**
- **BPM Projects & Initiatives** 
  - **Focus Stories**
- **Document Imaging and HR Project Search**
- 12, 14 Reduced/Avoided Costs
  - **Focus Stories**
- **Library IT Consolidation** 13
  - **Focus Stories**
- **Automated Call Center** 15
- **Awards & Recognition**
- Other

#### 2012 Plan

- Infrastructure Initiatives
- **BPM Initiatives**
- 6-7 **Substantial Service Delivery Changes**

### Infrastructure Initiatives

#### PC Replacement

The purpose of the project was to replace computers that are five to six years old.

#### Server Replacement

Final year of the 2-year server replacement initiative.

### Storage Area Network (SAN) Replacement

Replace Mecklenburg County's Storage Area Network with a newer, up-to-date platform.

#### Call Center Replacement

This project will replace the old, outdated T-Metrics call center platform that serves as our enterprise call centers (DSS, 2HELP, myHR).

#### Office 2010 Assessment Rollout

Upgrade to Office 2010 for all tablet PC rollouts. Enterprise rollout will be assessed as well.

#### Long Term Telephony Strategy

As the County approaches the end of its legacy-based telephony solution with AT&T (Centrex), we need to fortify the County approach in determining our long-term telephony strategy going forward. This project will help us define the future state of Telephony services (VOIP).

#### Next Generation Wireless Infrastructure

Our Countywide Wireless Access Points (WAPS) need to be updated to not only become more efficient but also allow for increased devices such as the iPads, iPhones, Droids, etc. The Next Generation infrastructure will expand coverage and density. This transition will begin in 2012.

#### ASA Mobility Pilot

The firewall device will enable increased VPN connectivity for multiple remote devices such as smart phones, IP phones, etc.

#### Microsoft Exchange 2010

The purpose of the project is to migrate the Countywide email platform from Exchange 2003 to Exchange 2010.

#### brary Infrastructure Integration

As a continuation of the 2011 Library functional IT consolidation into IST, the next step in this process is completing the technical infrastructure migration into the County's co-located data center at Peak 10.



#### Department of Social Service (DSS):

DSS/BPM Strategic Plan: Execute the strategic plan that was approved in August 2011.

**Document Management Program:** This will be a multi-gen/multi-phase DSS enterprise initiative to implement a document management system with following goals:

- Substantially reduce paper by 50%.
- Eliminate paper-driven processes.
- Design and streamline all digital (paperless) processes.
- Increase caseload throughput by 50% by decreasing end-to-end cycle time.
- Eliminate physical record rooms and transition to an e-record room.
- Potential savings \$600,000/record room.

**NCFAST:** This is a multi-year project to implement a new case management system deployed by the State. The following are major deliverables:

- Lead the change readiness effort in collaboration with the State.
- Document current state processes starting with the Food Nutrition Services program.
- Conduct a gap analysis to determine requirements that will not be met by NCFAST.

continued

### Substantial Service Delivery Changes

#### IST Customer Support Center



Customer Support Center (CSC) was established by the Business Support Services Agency on November 2, 2011. The structure of the CSC is based on the work of an IST team made up of representatives from Customer Relationship Management (CRM),

Desktop Services, and the Technology Services Center (TSC). Noted below are some key pieces of information about the CSC.

#### Goals/Purpose of the CSC:

- Improve communications within the department about the customer.
- Improve communications with customers.
- Identify/create employee career opportunities.
- Improve operations and overall efficiencies.

#### Four Key Service Areas:

- 1. Customer Consulting and Coordination Providing support for how customers can achieve business goals through IT solutions and coordinating IT services from multiple IST areas.
- Technical Training, Education, and Communications Providing IT-related training, education, and status updates for customers.
- 3. Technical Support Addressing IT issues onsite, remotely, and via the telephone.
- 4. IT Service Management Handling change management, knowledge management, and security management items.

#### BPM Initiatives continued

**Call Center Process Evaluation:** Conduct an evaluation of the call center to determine requirements prior to the new Cisco technology.

#### City Projects and Initiatives:

**IT Consolation:** The City of Charlotte is consolidating the management, maintenance, and renewal of IT infrastructure throughout the City. As part of the consolidation, the business process requirements are being documented prior to the commission of these assets from the business units into the City's corporate IT. The business process analysis work will include detailing out expectations that can be incorporated into service level agreements and operating level agreements.

#### Program Review:

BPM has been requested to partner with the Office of Management & Budget (OMB was previously SOI) to conduct the efficiency module of Program Review. Previously, Program Review approach encompassed three measures (performance, efficiency, and relevance) collectively to evaluate County services and programs. This year, each measure will be conducted separately and included in a comprehensive report. BPM will use a variation of the assessment phase to evaluate 34 services and programs from September to February.

#### Virtual Desktop Initiative (VDI)

Virtual desktop infrastructure (VDI) is the practice of hosting a desktop operating system within a virtual machine running on a centralized server. In 2012 IST will focus its efforts on using this technology to better serve our customers in the office and in the field. This not only saves the County money but also allows for more efficient work processes, lower device down times, and greatly reduced support costs. The beauty with this approach is we can also use the iPad for this as well.

#### iPad Pilot

In 2011 IST conducted an iPad pilot project to determine the feasibility of using iPads as business efficiency tools. It was determined the iPad is a business efficiency tool, as it provides quick and mobile access to email and the Internet, document management, note dictation, etc. iPads will be made available at the discretion of department directors. In 2012 IST will continue to explore network connectivity, desktop virtualization, security enhancements, and potential application integration.

#### Smartphone Pilot

In 2011 IST conducted a pilot project that deployed smartphones to a small group of employees to determine IST's ability to integrate these devices into our environment and support them. The outcome of the pilot was that IST decided to support Android devices and iPhones in addition to BlackBerrys. We see increased use of smartphones coming in 2012 along with increased application integration.

## 2011 Report

## New Programs/Services/Initiatives

#### Receptions Automated Intake Scheduler (RAIS)

The purpose of the project was to provide a system with a more streamlined method to generate customer appointments and assign workers real-time for the Economic Services and Services for Adults divisions within the Department of Social Services (DSS).

#### eJuror Web Application

The purpose of this application was to increase the public's ability to interface with the Trial Court Administrator's Office (TCA) by offering services via the web.

#### Automated Call Center

The purpose of the project was to research, recommend, and implement an Automatic Call Distribution (ACD) system for Child **Support Enforcement.** 

#### 4G Broadband - MOU

The purpose of the project was to seek federal funding to build a Countywide broadband communication network that will provide improved communication services for public safety.

#### Business Objects Upgrade

The purpose of the project was to identify the County direction for enterprise ad hoc reporting needs and to update the existing reports to the latest version of Business Objects.

#### Project Portfolio Management (Daptiv)

The purpose of the project was to acquire a software solution to support project portfolio management, project management, applications portfolio management, and the business processes associated with these activities.

## FY11 PC Replacement

The purpose of the project was to replace computers that are five to six years old.

#### Library IT Support Services

During the FY11 budget process, the Board of County Commissioners (BOCC) established a contingency for providing funding to the Charlotte Mecklenburg Public Library. Part of this contingency called for the Library Board of Trustees agreeing to pursue with Mecklenburg County the consolidation of some Library functions. In short, IST is now providing IT services to the Library for the following areas:

- **Desktop and Help Desk Support**
- **Telecommunications**
- **Network Services**
- **Application Delivery and Support**
- **IT Project Management**

#### Time Warner Litigation

In September of 2011 Mecklenburg County and Time Warner Cable agreed to end a long-term litigation case involving connectivity services. In short, Time Warner Cable agreed to provide Mecklenburg County the following services with a substantial cost savings to the County:

- **Dark Fiber Services to five Major Campuses** (Including Kuralt Centre, Jail North, and Valerie C. Woodard Center)
- Metro-Ethernet Connectivity Services (14 locations)
- **Cable Modem Connectivity Services (50 locations)**
- Free Basic TV Service to ImaginOn





**Technical Services Director** 

**IST relocated** an enterprise data center that houses 400+ County servers, network infrastructure, and Storage Area Network (SAN). The previous cost was \$366,960 per year. This was reduced to \$268,960 per year for a savings of \$98,000 annually.

#### From Technical Services Director Jeff Vince:

Mecklenburg County houses most of its 400+ servers and network infrastructure at another data center location. These servers support most of our customers. Services include email, document imaging, file storage, PeopleSoft, Finance, etc. In 2011 we decided to move all of this equipment to another data center. This was done over the Labor Day weekend in September. Although doing this yielded a fairly significant cost savings to the County, it required full IST collaboration and planning to pull it off successfully. As one of my counterparts stated, "You only want to do this once in your career." In short, we turned off everything on Friday and had everything up, running, and tested by 2 p.m. Sunday afternoon. This was well ahead of schedule! What do we attribute this success to? Listed below are a few things:

#### Pre move day activities:

- Identified and secured an experienced data center move partner (Versiant).
- Having IST Project Management partner with Versiant Project Management.
- Completed a detailed documentation for all equipment housed at previous location.
- Implemented and tested network connectivity to new data center location (for both primary and backup connections).
- Completed the installation and testing of core network data center infrastructure.
- Having backup equipment already configured.
- Secured cloud based email for optimized communications for technical teams associated with the move.

#### **Closing Thoughts:**

None of this could have been completed successfully without the full commitment, dedication, and determination of our talented staff. This, plus the completion of the pre-planning steps noted above, made for a smooth transition on the actual move weekend.

## BPM Projects & Initiatives

Child Support Enforcement (CSE) Process Re-Engineering Initiative

The objective of this initiative was to conduct a study of the CSE operations and determine solutions that would optimize processes, increase efficiencies, and improve service quality. Accomplishments include:

Improve Paternity Establishment %: The goal of this project was to improve Paternity Establishment KPI to qualify for State and Federal reimbursements.

- Baseline Measures (2009 2010): Agency performance measures were trending around 72%, which did not meet the federal standard of 90% or greater.
- Current Measures/Outcome (2011): Implemented processes and SOPs that improved performance measures to 94%.

Document Management System: The objective of this project was to implement a document/file management system that would enable access to digital files and reduce physical file space requirements. Accomplishments included:

- Implemented RFID system to secure and track all physical files.
- Reduce the record rooms by 67% (3 to 1) with a savings of \$26,604 a year.
- Annual Productivity Improvement: \$285,000 (projected).

#### DSS/IST Strategic Plan

The objective was to develop strategic plan to serve as a blueprint and establish a foundation and framework to pursue, develop, and implement effective and efficient solutions that align to the goals and objectives established by DSS. The following were accomplished:

- DSS SET approved in August of 2011.
- Established a Roadmap Team to facilitate project and enhancement of prioritization requirements.

#### County Judicial System (CJS)

In 2011 BPM led the execution of the SJS/IT Strategic Plan that was approved by the Criminal Justice Governance Committee in June of 2010.



### Focus Stories

Document Imaging and HR Project Search

Developed in 1996, Project Search is designed to provide work experience and jobs to students with developmental disabilities. The Mecklenburg County HR Department is home to the very first implementation of Project Search in North Carolina. HR trains the resources initially then deploys them to numerous departments within the County. Some of these departments utilize the Document Imaging Management Enterprise (DIME) process developed and implemented by IST. As stated by Mecklenburg County Chief Technology Officer **Gwen Simmons**: "Using our state of the art document imaging technology not only gives these workers valuable experience to take into the future workplace, it goes a long way to fulfilling the County mission of serving Mecklenburg County residents by helping them improve their lives and community."

For more information on Project Search, please review the following video: http://www.youtube.com/watch?v=2eb-aoSENf4

AMP is a City-wide enterprise initiative that kicked-off in July of 2009. The goal of the AMP is to advance comprehensive City services to benefit the citizenry of Charlotte-Mecklenburg with enhancements in address data quality and with address-related business processes. The following are the major accomplishments:

- Completed Business Process Engineering (BPE) phases.
- Implemented Address Change Notification process.

- New process ensures City address changes are. facilitated by County IT Change Management process.
- Completed Mailing Services Study: Identified opportunities to include address validation steps in KBU mailing processes, documented the standard validation process, and mailing related steps across vendor processes that could be transferred to a City Address Resource (cost avoidance \$\$14,000).





## Reduced Avoided Costs

#### Microsoft Licensing Enterprise Agreement

Microsoft Licensing Enterprise Agreement – IST changed its licensing agreement to a user-based solution and also dropped the Office suite, Exchange, and SharePoint licenses since the County already owned future releases with our original agreement. The previous cost was \$625,000 per year. This was reduced to \$302,000 per year for a savings of \$323,000 annually.



#### Data Center Relocation

IST relocated an enterprise data center that houses 400+ County servers, network infrastructure, and Storage Area Network (SAN). The previous cost was \$366,960 per year. This was reduced to \$268,960 per year for a savings of \$98,000 annually. (See story on page 9.)

#### Time Warner Litigation

The cost savings associated with Time Warner Cable and Mecklenburg County ending its long-term litigation case involving connectivity services is as follows: The initial five year term of this agreement represents a \$786,243 cost savings to the County. The 15 year term option represents an estimated savings of \$2,358,729. All 69 locations noted in the agreement will increase data transport speeds. The five dark fiber locations will yield a substantial increase in speed and capacity.

#### PC/Laptop Pricing

IST negotiated vendor best pricing to secure more PCs and fund a virtual desktop pilot project for a future thin client initiative. This resulted in a total savings of \$585,000 between FY 09 and FY 11.

#### Business Objects Upgrade

IST renegotiated the contract with original features. We also added expanded online report creation, viewing, and ad-hoc report creation tools. The previous cost was \$165,000 per year. This was reduced to \$38,000 per year for a savings of \$127,000 annually.

#### Internet Connectivity Pricing

IST negotiated service with new service providers. The new services increased Internet bandwidth by 340%. The previous cost was \$184,000 per year. This was reduced to \$75,000 per year for a savings of \$109,000 annually.

continued



## Focus Stories Library IT Consolidation



Library CEO Vick Phillips

During the FY11 budget process, the Board of County Commissioners (BOCC) established a contingency for providing funding to the Charlotte Mecklenburg Public Library. Part of this contingency called for the Library Board of Trustees agreeing to pursue with Mecklenburg County the consolidation of some Library functions under the direction of the County Manager and the management of County departments. This included most IT functions such as desktop support, network services, server management, telephony, applications, and project management

support services. In short, an outside Steering Committee recommended that this consolidation should occur. As of July 1, 2011, all IT support staff reported to IST. Here are few comments from the Library CEO **Vick Phillips**:

"When I began consolidation conversations with the County IST staff, I was very impressed with Brian Cox and Jeff Vince and their focus on their customers. As one who was considering becoming one of their customers, this was very reassuring. After we agreed to consolidate on July 1, 2011, it did not take long for me to see some very practical and tangible evidence of that focus.

"We experienced a power outage at Main Library on August 5 that exposed an infrastructure bottleneck that brought the entire 20-branch network down, not just Main. My solution was to ask for a bigger generator to keep Main's server room running longer. When **Jeff Vince** and **Bill Ardern** got involved, at the suggestion of Real Estate Services (RES), they proposed a better, more sustainable and redundant network structure that added value to the Library on many fronts.

"Not only does this show the value of collaboration with both IST and RES, it is a great example of an outside vendor thinking and acting like an owner. I am confident that the Library is better off in the long run by partnering with the Mecklenburg County IST team."



### Reduced/Avoided Costs continued

#### Mobile Telecommunications Optimization

IST consolidated to two carriers, utilized pooled minutes, and provided unlimited text messaging. This resulted in a total cost savings of \$89,111.

## Internet Firewall/Content Filter/Virtual Private Network (VPN) Service

IST combined the three services onto one next generation platform. The previous cost was \$147,000 per year. This was reduced to \$59,000 per year for a savings of \$88,000 annually.

## Substantial Service Delivery Changes



#### iPad Pilot

IST conducted an iPad pilot project to determine the feasibility of using iPads as business efficiency tools. It was determined the iPad is a business efficiency tool, as it provides quick and mobile access to email and the Internet, document management, note dictation, etc. iPads will be made available at the discretion of department directors. This assessment also included potential network connectivity, desktop virtualization, security enhancements, and application integration.

#### Smartphone Pilot

IST conducted a pilot project that deployed smartphones to a small group of employees to determine IST's ability to integrate these devices into our environment and support them. The outcome of the pilot was that IST decided to support Android devices and iPhones in addition to BlackBerrys.

#### Email Spam Filtering

IST moved to a cloud-based service provided by Google. Converting to this service saved \$22,000.

## City of Charlotte and Charlotte-Mecklenburg Schools (CMS) Collaboration

IST provided project management, business process management, business analyst, and application development resources and services to the City of Charlotte and CMS. Outsourcing these services to the City and CMS provided the funding needed to preserve County positions and enhanced the City/CMS/County relationship. IST received \$477,311 for this service.

#### Business Objects Migration

IST migrated Water and Land Resources to Business Objects, which allowed them to discontinue their SAS licensing with no additional cost to our environment. This resulted in a cost savings of \$100,000 per year.

#### Remote Access via Palo Alto

The purpose of the project was to migrate from Connectra to Palo Alto for VPN access. This change saved the County \$26,000.

## Focus Stories Automated Call Center

The purpose of the project was to research, recommend, and implement an Automatic Call Distribution (ACD) system for Child Support Enforcement. The benefits included:

- More efficient business management facilitated by detailed in-house reporting
- Reduction of agent time devoted to incorrectly routed calls
- Improved customer service due to less wait time for call routing and resolution
- Baseline for future enterprise voice over IP (VOIP) call centers.

Here are a few comments from Joan Kennedy, Director of Child Support Enforcement: "The Mecklenburg County Child Support Enforcement Department successfully collaborated with IST to design, procure, implement, and bring online phase I of a local call center. Early in FY11 the two departments formed a project team led by **Dorothy Morrow** of IST and **Tameika Leslie** of CSE to take on the State mandate that the Child Support Office have a customer service representative on site to handle customer calls that could no longer be directed to the Statewide Call Center. Together the project team developed the project scope and requirements based on CSE needs and call volume history and implemented the local call center using the new County standard Cisco Call Contact Center platform. Through this successful collaboration the CSE Customer Contact Call Center went live on March 11, 2011."

### Awards & Recognition

#### NACo Achievement Awards

IST received NACo Achievement Awards for the following applications:

#### iSTar

IST created an automated rewards and recognition system that allows employees to recognize each other for achievements in the following categories: outstanding customer service, outstanding service delivery, outstanding performance, significant contributions to Culture Change, and creativity and innovation. iSTar allows employees to nominate their co-workers, view awards received from co-workers, track points earned, and earn vacation time.

#### **RAIS**

The Department of Social Services and IST partnered to create the Receptions Automated Intake Scheduler system also known as RAIS. The system was developed to enable DSS to create appointment schedules for workers in the Economic Services and Services for Adults divisions. The system has improved monitoring and managing customer queue times, process flow, and service process times. It allows workers to monitor their customer assignments from other systems and provides statistical reports on customers.

### Other



Year End FY11 (07/01/2010 - 06/30/2011) statistics

Total Calls Received: 31,370Total Emails Received: 7,956

Abandoned Call %: 1% (Industry "Best Practice" is 3-7%)
First Call Resolution %: 73% (Industry "Best Practice" is 70%)

% Closed w/in SLA: 99%

**Note:** First Call Resolution (FCR) is the % of calls resolved during the original call. Ex: Password resets, etc.

