INFORMATION SERVICES
& TECHNOLOGY

# 2003 REPORT AND 2004 PLAN

AUGUST 2003

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The following annual report presents detailed documentation of the accomplishments of the Mecklenburg County Information Services & Technology (IST) Department for fiscal year 2003, which ended June 30, 2003, and presents the IST work plan for fiscal year 2004, which began July 1, 2003.

As part of its continual pursuit of excellence, IST generates this annual report not only to measure its own progress, but to help communicate to other agencies what IST is doing and to give agencies insights about what IST can do for them.

If you have any questions about

projects in this report or about IST in general, please don't hesitate to contact us! Contact information is provided at the end of this report.

#### ABOUT INFORMATION SERVICES & TECHNOLOGY

The Information Services & Technology Department provides information technology (IT) infrastructure and automation services to all County departments to support their operations and delivery of services to the public. Services are also provided to other governmental agencies and users that prove beneficial to the County and its citizens. These services include:

- Establishing technology architecture and standards and policies for hardware, software, networks, integration, data, and related methodologies.
- Planning, consulting, and leading the County in the usage of automation technology.

- Managing and operating the County's IT infrastructure, which includes data and voice networks, Internet, servers, and mainframe data center.
- Analyzing, designing, and procuring or developing new applications systems that are beneficial to the County and its constituents.
- Supporting existing application systems developed or procured by IST.
- Applying sound information security principles and practices to appropriately secure data and systems.
- Installing, training, and supporting microcomputer

systems.

 Procuring hardware, software, networks, and automation services consistent with County policy and State law.

The Department endeavors to provide these services responsively, in a cost-effective manner, and by utilizing technology in an appropriate manner. The Department adheres to the principles of the Mecklenburg County Vision Statement.

#### **MAJOR ACTIVITIES AND PROJECTS - 2003**

### INTEGRATED SOCIAL SERVICES INFORMATION SYSTEM (ISSI)

Integrated Social Services
Information System (ISSI) is a
new integrated case management system that will support
four major DSS divisions:
Economic Services, Services
for Adults, Fraud, and Youth
and Family Services. It replaces four existing legacy
systems that support those
agencies. The system is a

custom development effort being carried out by IST and culminates a multi-year effort to modernize the information systems supporting DSS. The system will eliminate duplicate data that presently exists between the four divisions, provide a more powerful and intuitive user interface, and capture more information. The primary focus during FY2003 was the design and development of AIMS (Economic Services) and OASIS (Services For Adults), which represent about 80% of the total system and are planned for implementation in the Fall of 2003. Fraud was implemented in November 2002.



### THE INTEGRATED CRIMINAL JUSTICE INFORMATION SYSTEM (ICJIS)

The Integrated Criminal Justice Information System (ICJIS), a multi-year, \$20M project, will be implemented in a phased approach. ICJIS has three major systems: a local Law Enforcement (LE) System, a state Court System, and an Electronic Folder that provides an integrated view of the local and state databases. The Electronic Folder will address a major project challenge of integrat-

ing the local and state systems as the state Court System will be located in Raleigh. The LE System is scheduled for implementation in early FY2005 and the Court System and Electronic Folder in early FY2006. This project is being done in partnership with the state Administrative Office of the Courts. Court Services is leading the County's effort. PEC, a system integrator, is the prime

contractor for the project. IST is providing technical oversight, LE data conversion, infrastructure setup, and quality assurance for the County portion of the project. ICJIS will have a major impact on the County's IT infrastructure, and several new technologies are being introduced, including MQSeries, an IBM product that provides applications integration, and other capabilities.

Technical
Innovation &
Leadership

### PEOPLESOFT/HUMAN RESOURCES INFORMATION SYSTEM (HRIS)

The PeopleSoft Human Resources Information System (HRIS) replaces four existing Human Resources (HR)/ Payroll Applications (Time Collection, GEAC HR/Payroll, Restrac, and the Registrar Training System) with one integrated system and added capabilities. Productivity is expected to improve, and HR

will be able serve more employees without increasing staff, as many functions will become self-service.

Contracts were signed with software vendor PeopleSoft and systems integrator Empower in March 2002, with the project officially initiated in May 2002. IST brought in an additional consultant to provide technical assistance. The project's implementation Phase 1 (replacement of all legacy functions) is scheduled for September 2003, and Phase 2, Employee Self Service, will be implemented about three months later.



#### MECKLENBURG COUNTY INFORMATION SERVICES & TECHNOLOGY

#### PERMITS & INSPECTIONS SYSTEM

The legacy Code Enforcement system is scheduled to be replaced by Computronix's Posse system in September 2003. Computronix and its two subcontractors, Selectron and MobileHWY, will replace the following legacy components:

- Core system
- Remote inspector subsystem

- Interactive Voice Response (IVR) sub-system
- Internet sub-system
- Web-enabled cell phone sub-system

The Posse system provides a strong, flexible foundation upon which to implement continuous improvements and additional components. Replacement of this legacy system is the last large sub-

project within the Land Development family of projects.



Permits & Inspections System

#### DELL COMPUTER PURCHASES

IST continued DELL's Countywide volume purchase agreement for procuring desktop and notebook computers and with Microsoft software purchases through DELL's NC Select agreement for an excess of \$1M in Countywide procurements. Estimated annual savings were \$200,000 over State contract prices.



#### REAL ESTATE LOOKUP

Real Estate Lookup
(RELookup) is the Internet
public access tool accompanying the CAMA (Computer
Assisted Mass Appraisal)
project. This online service
provides various ways to look
up detailed information about
real estate properties in
Mecklenburg County as recorded by the Tax Assessor.

Real Estate Lookup was created by IST and implemented in January 2003.

Of special interest is that this application was the first use of Microsoft's .NET technology at the County. A database was created that provides a single source of information for RELookup, POLARIS, and other applications

requiring public real estate information.

This application receives 2,000 to 5,000 daily visitors.



Real Estate Lookup

### PROPERTY OWNERSHIP LAND RECORDS INFORMATION SYSTEM (POLARIS)

Property Ownership Land
Records Information System
(POLARIS) is an Internet mapping application designed for access and retrieval of maps and GIS data layers associated with real property in Mecklenburg County, North Carolina. POLARIS replaced the GIS Real Estate System, which was first published on the Internet in 1998. PO-

LARIS has similar content and features, but the technology and presentation have been significantly enhanced. While Mecklenburg County now has twelve online GIS applications for public use, POLARIS is the industrial-strength application that is used for sophisticated real estate mapping and analysis needs. The application inte-

grates thirty-five unique data layers into one seamless package. Very few GIS applications anywhere have this much data to display on a publicly accessed Internet site, and the application has received an average of over 12 million hits per month.



**POLARIS** 

#### ADDRESS INFORMATION CENTER

Address Information Center provides one-stop shopping for basic information about an address. It gathers GIS information from nearly a dozen sources and conveniently presents it within a single application. The system provides a very easy-to-use interface and reports commonly requested GIS information at a glance, with links to specific applications

for more advanced users or those requiring more details and functionality.

Key features of the system include:

- Performs searches on addresses, owner names, and parcel IDs.
- Provides an interactive map with aerial photography.
- Provides demographic information, building photos,

real estate information, crime statistics, voting information, school attendance information, zoning information, flood zone information, and a list of public parks within three miles of the address.

• Provides a convenient summary report for printing.

With one address you can access a wealth of information.



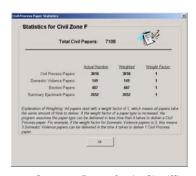
Address Information Center

#### SHERIFF'S REDISTRICTING SYSTEM

The Mecklenburg County
Sheriff's Redistricting System
creates service zones for the
Sheriff's Office to serve official papers. The Sheriff's
Office uses 30 deputies,
working in four shifts, to
serve over 120,000 papers a
year. Creating an equitable
workload distribution for
these papers was virtually
impossible to accomplish
manually. The new Sheriff's
Redistricting System allows

shift commanders to add, change, move, split, and delete zone boundaries in such a way so that approximately the same number of papers can be assigned to each of the service zones. The system also has the capability to weigh the different paper types, so the Sheriff's Office can recognize that certain papers take longer to serve than others. This weighting takes the "time to serve"

factor into consideration, so the new district boundaries can be assigned based upon actual workload as opposed to counts of papers alone. The application also provides online calculations for any zone, so the exact number of papers applicable to any zone can be quickly seen.



Summary Report for the Sheriff's Redistricting System

#### MIGRATE FROM THE MAINFRAME PLAN

Most of the County's major mainframe computer systems are planned for replacement within the next two years. Assuming this occurs, it will no longer be cost effective to operate the remaining systems due to the high fixed cost of mainframe computer operations. Therefore, IST

has developed a strategy for replacing the remaining systems with alternative technology-based solutions. We anticipate these replacements will require an investment in FY2005, to get these systems off of the mainframe during FY2006, around December 2005. Part of the

mainframe cost will be redirected to the new operating environments. There should, however, be a substantial cost savings once we cease mainframe operations, and IST recommends reinvesting those savings in future technology improvements.

#### IT ORGANIZATIONAL ASSESSMENT STUDY

As the result of County management's desire to address the IT organizational issue, The Gartner Group was retained to conduct an IT Organizational Assessment in November to determine the best IT organizational model for the County. The present organization is a mix of centralized and decentralized resources that was established many years ago. Countywide IT has experienced major growth in staff-

ing, funding, and importance. The County's FY2003 budget for IT Countywide exceeds \$33M, and includes 208 FTEs, with more funds in the business units than in IST. These factors drove the need for the assessment, as the current technical environment has changed dramatically from when the present organizational model was adopted. The Gartner final report had a number of recommendations regarding IT

governance, IT Executive
Advisory Council, and IT organization. Gartner recommended that the County
adopt a Shared Services
business model and centralized IT organizational model.
County management supports the recommendations
and intends to begin the
process of planning and implementing the recommendations this summer.

#### IT GOVERNANCE

IT governance is defined as "the institutionalization of a process that guides how individuals and groups cooperate to manage technology. In short, governance provides a framework for making IT decisions." The growth, complexity, and importance of IT at Mecklenburg County suggested that the County establish a new governance structure for the effective management of technology, information, and related resources. A Technology Advisory Committee (TAC) was established in October 2002 as the primary means of governing IT for the County. TAC was formed to provide advice and recommendations to the Senior Executive Team (SET) and County Manager on the use of investment priorities for the use of various technologies, and to provide governance oversight of IT for the County to assure that policies, strategies, and initiatives are in alignment with County goals and objectives.

TAC was comprised of executives and technology managers. Gartner recommended that the advisory committee be comprised solely of County executives to assure that IT has a business focus. TAC agreed with this recommendation and senior management is in the process of reconstituting the advisory committee to become the Integrated Technology Executive Council.



### RADIO SYSTEM STUDY & RADIO CONSOLIDATION INTERLOCAL AGREEMENT

Due to the difficulties in negotiations with the City and the Board's desire for a County managed regional radio system, IST engaged the services of J&J Consulting Group to evaluate the most viable radio system alternatives available to the County and make appropriate recommendations. County management requested that we evaluate all reasonable alternatives, but at a mini-

mum, the study should address consolidation of radio services under City management or a County managed regional radio system. While the study was in progress, the County was able to finalize the Radio Consolidation Interlocal Agreement with the City. The consultant recommended that the County agree to consolidate radio services under City management because a) the Interlo-

cal Agreement was a fair and reasonable agreement for the County, b) the County's share of the consolidated operating costs would be \$800,000 to \$1,000,000 less per year, and c) the County's share of capital costs would be at least \$4.1M less than if the County acquired its own system agreement.

#### NEW CITY/COUNTY WEB SITE

Implementation of the new City/County web site took place in October. This totally redesigned web site required the conversion of 5,000 pages of content using new content management software. The new web site dramatically improved usability

by providing consistency in presentation, improved navigation, and intuitive services-oriented access. It is expected the new web site will increase usage and promote the demand for more Internet services.



www.charmeck.org

#### DATA AND APPLICATION INTEGRATION

As the County has modernized its application portfolio, the need for improved integration of data and applications has increased. The ILR Seamless Access to Data Study, which focused upon the integration of data and applications, concluded that the County should pursue several forms of technology including web portals, data warehousing, metadata, reporting tools, web services, and message brokering. IST has made the following progress in those technologies:

IST conducted a data warehousing study to determine the requirements for Register of Deeds and Tax Assessment data and created a plan for the development of a data warehouse.

IST and Public Service & Information conducted a web portal research study to determine the applicability of portal technology tools for the County's business needs

IST installed MQSeries, a message broker from IBM, initially for use in the Inte-

grated Criminal Justice Information System

IST implemented two pilot projects using Microsoft's .NET application technology, Tax Real Estate Lookup and the IST Work Order System.

IST expanded use of Business Objects, our enterprise reporting tool, to Tax CAMA, DSS ISSI, LUESA Plan Review, Budget BRASS, and Environmental Protection EPIC+.

"You've done an outstanding job with this site! I'm very impressed with the quality of the information provided and the ease with which I can access it.
Congratulations!"

Citizen

#### **WEB PORTAL RESEARCH STUDY**

IST and Public Service & Information joined forces to conduct a portal study for Mecklenburg County. While there are numerous definitions and interpretations of the term portal, the simplest definition is: a gateway or single point of entry for customers to access information, resources, or services via the web. Portals are a collection of technologies that provide an integrated

visual display of multiple resources. The project team researched portal capabilities, benefits, technology, trends, and infrastructure and resource requirements. Four leading portal vendors, IBM, Plumtree, Microsoft, and Peoplesoft demonstrated their portal products to Mecklenburg County. Team members also reviewed leading public and private portal web sites. While a portal imple-

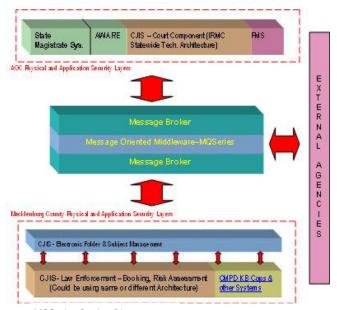
mentation was not funded for FY2004, IST continues to evaluate portal technology and to implement features, such as data and application integration, common to portals.



The Portal Project

#### INSTALLED MQSERIES FOR ICJIS

MQSeries, IBM's message broker, was purchased and installed on a test system for the enterprise integration of ICJIS, to ensure successful development and implementation of Court Component for Statewide implementation and Law Enforcement Component for Mecklenburg County. This project is currently in the testing stage.



MQSeries Design Diagram

#### OTHER PROJECTS

IST also worked on a number of other projects and significant system upgrades. Some of these include: Printer Maintenance Contracts, Desktop Imaging, IP Connectivity to the State, Wireless Technology, Dynamic Web Publishing, Web-Enabled Plan Review, EPIC+, 2003 Tax Revaluations, Air Quality

Monitoring Sites GIS, Address Verification, Code Enforcement GIS, Tax Collections GIS, CyberVault Security System, Voice Over IP Technology Study, and UCD Help Desk Call Routing.

This is only a small sampling of the many projects IST undertook in FY2003. If you are interested in finding out more, please contact us directly and we would be more than happy to answer your questions! Contact information is located at the end of this document.



IST Staff Monitoring Network Utilization

#### **TELECOMMUNICATIONS**

- Maintained total Centrex reliability (uptime) of 99.9925% and total voicemail reliability (uptime) of 99.9998%. Processed 1,426 requests for day-to-day moves, adds, and changes to the telephone lines.
- Completed the cable plant design and specifications for the new courts building.
- Continued and com-

- pleted negotiations with City on radio consolida-
- Drafted, released, and awarded an RFP for Switched Long Distance service to BellSouth with an expected annual savings of over 25%.
- Participated in the 311
   Call Center Development project with Telvation.

timely manner
and go overboard
to assist
departments in all

of their needs."

**IST Customer** 

"IST has some

who deliver

products and services in a

very talented folks

#### DESKTOP IMAGING AND SOFTWARE DISTRIBUTION

IST researched, evaluated, and implemented a new desktop imaging technology. Remote Installation Services (RIS) is a new feature of Windows 2000 that we use instead of Ghost. This project saves 1.5 support hours per PC and eliminates the need to purchase Ghost's imaging software which costs \$10 per PC or approximately \$15,000 annually.

IST also implemented Zen-Works software distribution for most applications, including both internal and out-of-the-box solutions. This technology saves support time, eliminating the need to visit the desktop. It also assists application staff with application roll-outs.

#### **REPORT SUMMARY - 2003**

#### **NEW SYSTEMS**

- Implemented two new systems using new web services technology: Real Estate Lookup and the IST Work Order System
- Web Plan Review
- GIS: 11 new GIS applications were completed including POLARIS
- EPIC+
- Permitting & Inspection System \*
- Peoplesoft HRIS \*

- Integrated Social Services Information (ISSI) Adult Medicaid, Economic Services, and Adult Social Work Services \*
- Integrated Social Services Information (ISSI) Fraud
- Integrated Criminal Justice Information System (ICJIS) Law Enforcement System (FY2005), Court System (FY2006)
- CyberVault Security System
- \* Active projects to be completed in FY2004

#### PLANS, STUDIES, AND PROCUREMENTS

- Balanced Scorecard RFP
- Developed and Implemented IST Balanced Scorecard
- Negotiated ICJIS \$17M Contract With Vendor, PEC, and State AOC
- ILR Data Warehouse Study
- ILR Seamless Access to Data Study
- Web Portal Research Study
- Radio System Study
- Long Distance RFP With 25% Cost Savings
- Cellular RFP with 20% cost savings
- 311 Call Center Feasibility Study

- Completed Cable Design for the New Courts Building
- Migrate From the Mainframe Plan
- Installed MQSeries, Applications Integration Software for ICJIS
- Renegotiated New PC Pricing From Vendor, Dell, at 14% discount
- Implemented Customer Service Improvements
- Evaluated Microsoft Exchange 2002 and GroupWise 6.5
- Conducted IT Organizational Assessment
- Established IT Advisory Committee (TAC)

#### IT INFRASTRUCTURE IMPROVEMENTS

- Implemented New City/County Website, Including New Search Engine
- Continued Active Directory Services Rollout
- Implemented High Speed Wireless Link to DSS as a Backup
- Established IP Connectivity to the State
- Began GroupWise 6.5 Migration
- Implemented Dynamic Publishing for Internet Content
- Improved Internet Infrastructure, Including Load Balancing Servers and a Redundant ISP
- Information Security: Implemented Vulnerability Scanning/Monitoring of Critical Servers, SPAM E-mail Filtering Solution, and Security Awareness Program

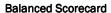
- Revised IT Policies: Information Security, Network Usage, Telecommunications, Internet, and email
- Replaced Mainframe Computer Disk Storage and High Speed Printers
- Acquired Oracle Database Software for Peoplesoft HRIS and Permitting Systems
- Updated IT Architecture in Application Tools, Information Security, and Network Service
- Business Objects Expanded Use to Tax CAMA, ISSI, Plan Review
- Added Redundant Primary Network Switch at CMGC and Replaced Primary Network Switch at CMGC and at HMC

#### MECKLENBURG COUNTY INFORMATION SERVICES & TECHNOLOGY

#### ADMINISTRATIVE AND FY2003 BUDGET INFORMATION

#### Organization

- The County reorganization resulted in IST reporting to the General Manager of Strategic
  Organizational Improvement. This is a logical organizational move as it puts IST in a good
  position to support organizational change and eGovernment.
- GIS Application Development was transferred back to IST from LUESA as part of the County reorganization. IST is pleased to have GIS back and believes centralizing all applications development is best for the County.



The County has developed a Community & Corporate Scorecard that directly ties to the Board of Commissioners' Community Vision 2015 and is the framework for the County's Managing for Results initiative. All County departments, including IST, have developed departmental scorecards that are aligned with the Corporate Scorecard. IST used its scorecard for the first time in FY2003 (Appendix C). The scorecard has been revised for FY2004 to better reflect the appropriate outcomes, strategies, performance measures, and budget linkages (Appendix D). This is still a work in process to align outcomes and measures with the budget and to also link performance to the scorecard. It is expected to take several years to get the scorecard to a stable and mature level.

#### **FY2003 BUDGET**

ORG	Description	Actual Expenses
2510	Financial Services & Administration	\$1,448,687
2520	Data Center Operations & Technical Support	\$3,315,375
2530	Land Records Division	<b>\$1</b> ,957,859
2540	Justice & Social Services Division	<b>\$1</b> ,946, <b>1</b> 87
2550	Microcomputer/ Network Division	\$2,475,757
2560	Radio Services	\$1,134,416
2570	Telecommunications	\$575,871
2580	GIS Application Development	\$979,325
Total		\$13,833,477



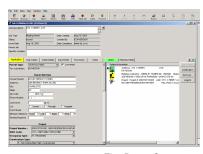
#### MECKLENBURG COUNTY INFORMATION SERVICES & TECHNOLOGY

#### **UPCOMING PROJECTS AND INITIATIVES - 2004**

#### PERMITS & INSPECTIONS SYSTEM

Progress for this ongoing project continues. Office staff and inspectors are being propelled into modern technologies, shifting from mainframe "green screens" to client/server and web-based interfaces. And for builders, the new system will add capacity as well as features to the wildly popular Interactive Voice Response (IVR) system, and to the web-enabled cell phone components. The

Internet site is also being totally reworked and will include "my permits" and "my inspections" pages for contractors to bring them directly to their own work in progress.



The Posse System

### INTEGRATED SOCIAL SERVICES INFORMATION SYSTEM (ISSI)

OASIS (Services For Adults) and AIMS (Economic Services) are scheduled for implementation by October 2003 and November 2003.

ISSI Child Welfare, a new ISSI project, is planned for 2004 and is expected to take about a year to complete.

### THE INTEGRATED CRIMINAL JUSTICE INFORMATION SYSTEM (ICJIS)

Development of the Integrated Criminal Justice Information System (ICJIS) will continue in 2004. The Law Enforcement System is scheduled for implementation in early FY2005 and the Court System and Electronic Folder in early FY2006. PEC, a system integrator, is the prime contractor for the pro-

ject. IST is providing technical oversight, Law Enforcement System data conversion, infrastructure setup, and quality assurance for the County part of this project.



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### PEOPLESOFT/HUMAN RESOURCES INFORMATION SYSTEM (HRIS)

Phase 2 will continue for the duration of 2003, adding employee self-service. Phase 3 will add the Public Library of Charlotte and Mecklenburg County payroll to PeopleSoft application processing, scheduled for 3Q FY2004.



#### INTEGRATED LAND RECORDS (ILR) DATA WAREHOUSE

The next step for ILR is to conduct a proof of concept (POC) phase, which will build a data warehouse prototype. The six week POC will provide a clear understanding of our expectations and a confirmation of the requirements. The cost of the POC was estimated at \$92,000 for hardware, software, and consultant costs. At the conclusion of the POC phase, the plan is to deliver a non-operational,

but tangible, data warehouse (limited to two years worth of data) with data sources from two departments (Register of Deeds and Property Assessment and Land Records Management). A five month implementation phase will follow the POC phase with an estimated project budget of up to \$425,000 (includes the POC budget). This phase is still awaiting final approval.

#### BALANCED SCORECARD STRATEGIES

Mecklenburg County has adopted the Balanced Scorecard as its primary mechanism for setting goals, measuring success against those goals, and making budgetary decisions. A procurement project to identify the best supporting software was conducted in FY2003, and final vendor qualifications and

negotiations are scheduled for early FY2004. An implementation project is scheduled to begin immediately thereafter, with the goal of having a new system for use during FY2005 budgeting (early 2004).



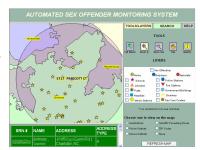
Managing for Results

#### SHERIFF'S GIS SEX OFFENDER SYSTEM

The Sheriff's GIS Sex Offender System, a web based application will track sex offenders in Mecklenburg County by address, work address, and address of close family and friends. The application will provide the ability to enter an address to find all sex offenders in a specified distance of an address. Additional layers of data will include daycares, schools, and parks.

This system is designed to be used by both Mecklenburg County's Sheriff's Office and law enforcement agencies from surrounding jurisdictions to help ensure public safety and to provide a research and analysis tool for crime prevention and resolution.

Promoting a safe and healthy community is a high priority for Mecklenburg County, and this system is one of many IST has designed for law enforcement use to meet that end.



Automated Sex Offender Monitoring System

#### TAX COLLECTIONS GIS PHASE 2

Tax Collection GIS provides the Office of the Tax Collector a visual means of collecting unpaid tax bills via a digital map within a web browser. The application performs three functions: spatial analysis, resource searches, and tax collection database queries. All of this work was previously done manually in a laborious, time consuming, expensive, and error-prone process. This new system

allows the users to quickly enter information and assign tasks to collectors in a way that provides better overall efficiency and accuracy.

Phase 2 of this project will provide additional features, including vehicle tax, business privilege licenses, and other features to assist Deputy Tax Collectors out in the field.

#### GIS SUPPORTING HEALTHY COMMUNITIES

GIS Supporting Healthy Communities will allow citizens, government leaders, and researchers to access valuable public health data from which quality of life in Mecklenburg can be assessed and tracked.

The system provides an interactive mapping application, allowing the user to see spatial patterns of information that would otherwise be unrecognizable. Data can be queried in a myriad of different ways, and disparate health information can be viewed simultaneously, allowing causative and relational patterns to emerge.

The system also allows the user to create detailed re-

ports and hard copies of the queried information.



GIS Supporting Healthy Communities

#### UPDATE THE MIGRATE FROM THE MAINFRAME PLAN

IST developed a strategy in FY2003 to replace all of its mainframe computer applications. This was prompted by the fact that most mainframe applications are scheduled to migrate to other platforms within the next two years. The only major application that is not scheduled to migrate off of the mainframe is Tax Collections. There are also a number of smaller systems and databases that

must be moved. IST will develop a plan in FY2004 for the migration of all remaining systems and databases (Appendix E). This will include a requirements study for the Office of the Tax Collector, as it will be a major project to replace our current system. We anticipate these replacements will require an investment in FY2005 to get these systems off of the mainframe during FY2006

(around December 2005).

Part of the mainframe cost will be redirected to the new operating environments.

There should, however, be a substantial cost savings once we cease mainframe operations, and IST recommends reinvesting those savings in future technology improvements.

For more information on the Migrate from the Mainframe Plan, see Appendix E.



#### FINANCIAL SYSTEM REPLACEMENT AND INTEGRATION

AMS's Advantage 2 is currently used by Mecklenburg County to handle all financial transactions and record keeping, and it operates on the County's mainframe computer. Effective July 2005 this version of the software will no longer be supported by AMS, necessitating an upgrade to their newer version. Advantage 3 is browser based and will allow easier access across County depart-

ments and be more intuitive for users. It is also the base upon which AMS is developing all future enhancements.

The first AMS Advantage enhancement of interest to Mecklenburg County will be the integration of the BRASS Budget System. BRASS is currently a separate standalone application. During the fall of 2003, AMS intends to fully integrate BRASS into the

base Advantage 3 system.

#### RADIO CONSOLIDATION

The Commissioners approved the Radio Consolidation Interlocal Agreement to allow consolidation of Radio Services under City Management at its July 8, 2003 meeting. This culminates a three-year effort to consolidate Radio Services. The Agreement is a fair and favorable agreement for the County and provides

the lowest cost for Radio Services.

A consolidated Radio System provides all public safety agencies in the County a highly functional, interoperable system.

#### IT REORGANIZATION

The Senior Executive Team (SET) reconstituted the IT advisory committee in August. The new committee will be comprised of County executives, giving it a business focus. The new committee will provide IT governance for the County, including IT funding prioritization, policies,

strategies, and standards.
The committee's first major task will be to lead the
County's effort to implement the Gartner IT Organizational
Assessment recommendations to adopt the Shared
Services business model and centralized IT organizational model. This is a major organ-

izational task that could take 18 months or more to complete. IST management will provide leadership and support to this effort, as the design of the new organization will require expertise in IT organizational design, which is a core competency of our senior managers.

#### BEGIN I-NET DEVELOPMENT AND IMPLEMENTATION

The County has been in protracted cable franchise negotiations with Time Warner (TWC) for years. The major obstacle has been TWC's refusal to give the County dark fiber for an institutional network, which is an outstanding contractual commitment from the last franchise agreement. The County is in a formal process that will determine whether TWC can satisfactorily meet the County's requirements or potentially lose their franchise. Whatever the County

and TWC agree to is likely what the City will receive as well for their franchise agreement.

County and City staff are working with TWC to develop requirements and a conceptual design for an I-Net that will satisfy the County and City needs and provide a basis for new franchise agreements. I-Net has very strategic implications to the County, as it can provide a high speed network capable of supporting video, voice, and data transport needs

and could be a very long-term solution (i.e. 20 years or more). TWC would fund most, if not all, of the cost, resulting in major cost savings to replace existing leased services. If successful, implementation will likely be phased in over an estimated two year period.

#### IPP/BPP REPLACEMENT

The County's Individual Personal Property and Business Personal Property systems currently run on an HP minicomputer under a form of the Unix operating system. The platform, operating system, database, and programming language fail to meet current architectural standards. Further, vendor support for

the HP3000 MPE/iX operating system will end in December 2006, necessitating a replacement of these two systems before that date. To achieve that, an RFP will be published and products evaluated during FY2004.

#### ELECTRONIC PUBLIC RECORDS POLICY

IST is updating the Mecklenburg County Electronic Public Records Policy. This policy was originally written in 1997. The objective of this policy is to provide clarity and guidance to Mecklenburg County employees about the provisions of the North Carolina Public Records Law as defined in North Carolina General Statute 132. This policy primarily focuses on the portion of the law cover-

ing inspection and examination of records. The policy also provides implementation instructions for documenting electronic databases. This initiative will ensure all databases subject to the indexing requirement have been properly indexed, including all purchased computer systems.

A revised draft of the policy will be presented to all County departments and reviewed by the County Attorney before going to the County Manager for signature and implementation. The revised policy, indexes, and procedures will be published on IST's Intranet web site.

#### DATA AND APPLICATION INTEGRATION

The following initiatives will address improved integration of data and applications:

- ILR Data Warehouse this project will develop a data warehouse of Register of Deeds and Tax Assessment data, enabling internal agencies and the public to access information in a variety of ways. The long-term vision is for a data warehouse of all land records datasets and other County datasets that provide internal agencies and the public a consolidated
- view of the information they need in a flexible, easy to use manner. Subsequent phases of this project will allow the County to achieve this vision.
- MQSeries this application integration technology will be used for the ICJIS implementation.
   IST intends to also use this technology for other application needs that require a complex integration solution such as this.
- Web Portal Pilot funds were not appropriated

- for a web portal pilot. Nonetheless, IST hopes to do a limited pilot to demonstrate the value and benefit of this technology.
- Business Objects IST will continue to extend the usage of this enterprise reporting and analytical tool to County applications. Business Objects is a key tool that will be used in the development of the ILR data warehouse.

#### MECKLENBURG COUNTY INFORMATION SERVICES & TECHNOLOGY

#### PLAN SUMMARY - FY2004

#### **NEW SYSTEMS**

- Permit & Inspections Systems
- Peoplesoft HRIS
- Code Enforcement Self Facilitation
- Balanced Scorecard System
- ILR Data Warehouse
- Integrated Social Services Information Adult Medicaid, Economic Services, and Adult Social Work Services
- Master Client Index (MCI) Rewrite
- Integrated Social Services Information Youth & Family Services (FY2005)
- Integrated Criminal Justice Information System (ICJIS) Law Enforcement System (FY2005), Court System (FY2006)
- Web Portal Pilot (Subject to Funding)
- GIS: 15 New or Improved GIS Applications Are Planned

#### PLANS, STUDIES, AND PROCUREMENTS

- Tax Collection System
- Vehicle Tax System
- Individual & Business Personal Property Systems
- Financial System Replacement
- Update the Migrate From the Mainframe Plan
- Remote Network Connectivity Study

- Voice Over IP Evaluation
- Establish New IT Executive Council and IT Governance
- IT Reorganization Plan and Begin Implementation
- Provide Specifications and Evaluate Bids for New Courts Building Cabling Infrastructure
- Redesign MeckWeb, the Intranet Web Site, Using Content Management Software

#### IT INFRASTRUCTURE IMPROVEMENTS

- Radio System Consolidation
- Radio Capital Infrastructure Upgrade Phase 1
- VFD Paging System Replacement Phase 1
- Expand Information Security Vulnerability Scanning & Monitoring
- Secure E-mail Delivery
- Implement Intrusion Detection/Prevention System (Subject to Funding)
- Enterprise Disaster Recovery (Subject to Funding)
- Virus Scanning of Internet Traffic

- Complete GroupWise 6.5 Migration
- Upgrade FAX Software to RightFax 8.5
- Begin Institutional Network Development and Implementation (Contingent on TWC Agreement)
- Redesign MeckWeb, the Intranet Web Site, Including Dynamic Publishing Capability
- Continue Implementation of Enterprise Tape Backup System
- Continue Securing Network Perimeter
- Pilot BellSouth MLPS for ISDN Replacement
- Replace DSS Primary Switch

#### FY2004 BUDGET INFORMATION

#### FY2004 BUDGET

ORG	Description	Budget
2510	Financial Services & Administration	\$1,689,653
2520	Data Center Operations & Technical Support	\$2,852,546
2530	Land Records Division	\$1,943,695
2540	Justice & Social Services Division	\$1,942,553
2550	Microcomputer/Network Division	\$2,206,706
2560	Radio Services	\$1,167,535
2570	Telecommunications	\$501,178
2580	GIS Application Development	\$954,193
Total		\$13,258,059

IST's budget for FY2004 is \$13,258,000, a 2.3% reduction from FY2003. Significant technology funds were cut from most departments this year, which will make it a challenging year from a technology perspective. The following is an interesting comparison of the FY2004 budget versus the FY2000 budget:

Description	FY2000	FY2004	Difference
Total Budget	\$13,563,000	\$13,258,000	-2.2%
County Funds	\$13,118,000	\$11,862,000	-9.6%
PCs	3,300	4,000	21%
Servers	94	137	46%
Network switches/routers	-	234	NA
Telephones	4,950	6,400	29%
Internet applications		38	NA

The IST budget has declined -2.2% (-9.6% County funding) during the past four years. Despite the budget reduction, IST has added many new services and technologies during the past four years, while dropping very few due to customer needs and demands.

New services and capabilities include:

- Established Information Security Team comprised of four people, resulting from creative reorganization and reallocation of positions. This Team has dramatically improved information security by reducing security vulnerabilities, enabling continued growth and usage of the Internet.
- Implemented a sophisticated, high performance metropolitan area data network (MAN) that replaced the County's flat network that was basically comprised of a series of local area networks. Modern applications require a high speed, functional, and reliable network. The CJIS integrator has given the County high marks for the capability and quality of our network.
- Established a network operations center to proactively manage and monitor the County's MAN. Previously, staff would react to network problems and did not have adequate monitoring tools to diagnose more complex problems. Staff now has sophisticated monitoring tools and have been trained to use them for proactive monitoring of network performance as well as trouble-shooting problems.
- IST has implemented an impressive list of 38 Internet applications providing information and services to the public. The public has been very complimentary of these applications. The GIS web site alone receives more than 14 million hits and 50,000 visitors per month.
- IST has implemented a modern, highly functional Internet infrastructure that supports current internal and external customer needs and is well positioned to support future needs. In 1998, there were three Internet servers, as compared to 20 servers today.

#### **Technology Improvements:**

- Continued modernization of application software tools, including latest software tools for Internet development.
- Added application integration tools for CJIS and other systems.
- Replaced most County applications with modern, relational database systems. IST's Data Administration Team manages and supports the data for these applications.
- Implemented major new business analysis and reporting tool, Business Objects, which provides ad hoc reporting and reporting on demand. This will be a key tool for data warehouse applications.
- Implemented Microsoft's Active Directory Services in order to centrally manage and share information on network resources and users while acting as the central authority for network security. This product was required for the implementation of ISSI, but is being used throughout the County as well.
- Implemented Asset Management capability to track hardware and software assets Countywide.
- Implemented a fax server to allow electronic submission and receipt of faxes from the desktop.
- Implemented numerous information security products.
- Implemented web content management software for publishing web content. Also added a new Internet search engine for the recently redesigned City/County web site.

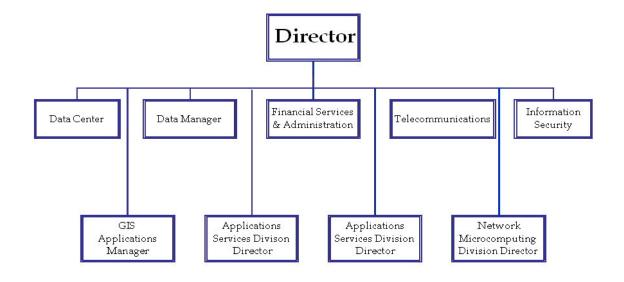
#### APPENDIX A: IST MISSION STATEMENT

The Information Services & Technology Department provides information technology (IT) infrastructure and automation services to all County departments to support their operations and delivery of services to the public. Services are also provided to other governmental agencies and users that prove beneficial to the County and its citizens. These services include:

- Establishing technology architecture and standards and policies for hardware, software, networks, integration, data, and related methodologies.
- Planning, consulting, and leading the County in the usage of automation technology.
- Managing and operating the County's IT infrastructure, which includes data and voice networks, Internet, servers, and mainframe data center.
- Analyzing, designing, and procuring or developing new applications systems that are beneficial to the County and its constituents.
- Supporting existing application systems developed or procured by IST.
- Applying sound information security principles and practices to appropriately secure data and systems.
- Installing, training, and supporting microcomputer systems.
- Procuring hardware, software, networks, and automation services consistent with County policy and State law.

The Department endeavors to provide these services responsively, in a cost-effective manner, and by utilizing technology in an appropriate manner. The Department adheres to the principles of the Mecklenburg County Vision Statement.

#### APPENDIX B: ORGANIZATIONAL CHART





# APPENDIX C: IST FY2003 SCORECARD DESIRED RESULTS AND MEASURES EFFECTIVE AND EFFICIENT GOVERNMENT

#### Introduction

This report is for the first year of the IST Balanced Scorecard (BSC). The data for the performance measures has been derived from a number of sources, including an IST customer survey. Since this is the first year for the IST Scorecard, it is very much a work in process. Major revisions have been made for our FY2004 Scorecard, and we believe it will be an improved measure of IST's performance.

GIS was excluded from this report because the IST BSC was developed before they came back to IST in November, and most of the data gathering was already in process. GIS will be fully incorporated into the IST FY2004 Scorecard.

I would like to acknowledge the good work of the IST BSC Team, comprised of Barry Abrams, Sue Chamberlin, Dennis Izzo, Evelyn Minter, and Paul Stahlschmidt. I would also like to commend Leslie Johnson and Andy Lucas for their excellent guidance and support as we developed our very first BSC.

#### DESIRED RESULT—INCREASED IST SERVICE VALUE

**Strategies:** Align IST services according to Corporate Scorecard and priorities established by Technology Advisory Committee (TAC).



#### Measures & Performance:

Percentage of departments that indicated IST helped them increase service value - The actual response on the IST Customer Survey was 82% versus a target response of 75%.

Percentage of IST services aligned with Corporate Scorecard - IST determined that all IST services are aligned with the Corporate Scorecard, based upon a matrix (Attachment A) identifying which Corporate objectives each IST service supports. Unfortunately, the Technology Advisory Committee was disbanded before the IST alignment assessment could be confirmed with them.

### DESIRED RESULT—INCREASED COUNTY EMPLOYEE AWARENESS OF IST RESPONSIBILITIES, SERVICES, AND RESULTS

Strategies: Improve customer productivity through the use of technology.



#### Measures & Performance:

Employee awareness of IST services - The IST Customer Survey asked this question for each IST service. The target response was 75%. The actual response average for all objectives was 52%. Strategy: IST is developing a communications plan for promoting and improving awareness of IST services.

#### DESIRED RESULT—INCREASED CUSTOMER SELF-SUFFICIENCY

Strategies: To promote IST services.





Percentage of Help Desk calls resolved first time - Achieved 65% versus a target of 55%, which is the industry average for first contact resolution.

#### DESIRED RESULT-INCREASED CUSTOMER SELF-SUFFICIENCY CONT.

Strategies: To promote IST services.

#### Measures & Performance:

Help Desk Customer Satisfaction — The Help Desk achieved a score of 94% based upon Help Desk surveys throughout the year, and exceeded the target of 80%.

### DESIRED RESULT-PRESERVED IT FINANCIAL STABILITY AND MAINTAIN ORGANIZATIONAL INTEGRITY

**Strategies:** S1 - Bid competitively for products and services, S2 - Regularly track expenditures against budget, S3 - Reduce costs via continuous improvement.

#### Measures & Performance:



Percentage variance of actual versus budgeted IST expenses - General Ledger actual expenses for FY2003 were \$13.848M versus a budget of \$13.951M, representing 99.26% of budget.

Enumeration of Request for Proposals – The following competitive procurements were done in FY2003:

Total	\$1,066,000
Tax Collections Print	250,000
Long Distance Services	60,000
Mainframe Disk Storage System	186,000
Balanced Scorecard System	400,000
County-wide Cellular Phone Service	\$170,000

**Enumeration of cost savings** - cost savings of \$704,166 were achieved in FY2004 through negotiations, changes, and product eliminations, affecting both IST and other departmental budgets. Most cost savings are already reflected in the FY2003 budget. The list is as follows:

PeopleSoft HRMS Hardware/Software	\$98,944
Business Objects Software	24,776
Dell Computer Contract	114,000
Canceled Software Products	42,245
Version Merger - Negotiated Discount	3,071
Hardware Purchased Via Ebay	19,500
Server Hardware	3,500
Cisco Training	4,000
Alltel Cellular Contract	80,000
Restructured Help Desk	250,000
New Long Distance Service	30,000
DSS Communications Link to the State	31,630
RightFax Fees	2,500
Total	\$704,166

### DESIRED RESULT—IMPROVED COUNTY-WIDE IT FUNDING/RESOURCE ALLOCATION DECISIONS

**Strategies:** S1 – Review County-wide services and optimize IT organization for efficient and effective service delivery, S2 – Establish a County-wide IT advisory committee .

#### Measures & Performance:

**Implement IT Advisory Committee** - The Technology Advisory Committee (TAC) was established and met several times. TAC reviewed and prioritized Countywide IT funding requests for the FY2004 budget. It also oversaw the IT Organizational Assessment conducted by The Gartner Group. Based upon a recommendation by Gartner to have a stronger business focus by the Technology Advisory Committee, it was agreed to reconstitute the committee and only have senior department and executives on the committee. The new committee, the IT Executive Council, was formed in August 2003.

Percentage of IT projects aligned with County goals and objectives – 100% of completed and active IT projects are aligned with County goals and objectives.

Percentage of IT project costs (aggregate) approved by TAC - TAC reviewed 100% of the IT projects that requested funding during the FY2004 Budget process. It ranked the priority of 11 projects with a combined value of \$4.7M and did not recommend that one other project be funded. The County Manager supported TAC's recommendations, but only 4 projects with a value of \$2.7M were approved by the Board.

Percentage of approved IT projects that achieve at least 80% of stated objectives - 100% of completed IT projects have achieved at least 80% of their stated business objectives. The projects (criteria is 200+ hours) are:

Web-enable the Plan Review System

Replace the Environmental Protection Information & Control (EPIC) System for Air Quality

Intergraded Social Service Information (ISSI) - Fraud

**Enterprise Asset Tracking** 

**Active Directory Services** 

Business Objects Reports for Land Development Projects

Web Enabled Computer Assisted Mass Appraisal (CAMA)

Update Plan Review Technical Design Documentation

Research Replacement of "SPITAB" Table Management Utility System

Enable End-User Reporting Via Business Objects for CAMA Data

Create a Utility Subsystem to Manage Land Development Code Table

CyberVault II

Services for Adults (SFA) Transportation

SFA Transportation Finance

MECK/Administrative Office of Courts (AOC) Warrant Modification

**CMPD** Warrant Interface

2003 Revaluation Notices

Percentage of departments with a service level agreement with IST – The target is for 100% of departments served by IST to have a service level agreement. All departments presently have some form of service level agreement, but not all services are covered. A new comprehensive service level agreement that includes all services has been developed. It is presently being reviewed with departments before it is finalized for implementation in FY2004. The agreement is flexible enough to accommodate changes to recognize unique needs of specific departments.

### DESIRED RESULT—INCREASED IST EMPLOYEE MOTIVATION AND SATIFACTION

Strategies: S1 - Continue to utilize QAA program, S2 - Implement alternative work schedules for on call coverage.

Measures & Performance:

**IST employee motivation and satisfaction rating** – IST had 18 green lights (67%), 3 yellow, and 6 red lights from questions IST had control of in the Employee Climate Survey conducted in September 2002. Strategy: IST conducted employee focus groups and developed and implemented an action plan to address employee issues and concerns. IST also intends to conduct further employee focus groups in October as a follow-up.

Number of QAAs awarded to staff - 56 awards worth \$11,678 were awarded in FY2003.

#### DESIRED RESULT-DECREASED TURNOVER AND OPEN REQUISITION TIME

**Strategies:** S1 – Flextime per IST standards, S2 – Telework per IST standards, S3 – Promote the advantage of County benefits & programs, S4 – Complete new hire requests accurately the first time.



Measures & Performance:

IST turnover rate - The FY2003 rate was 2.7% versus target of 10%.

Average years of service of IST staff - Average years of service is 7.41 years.

Average number of days vacant IST positions are unfilled – This measure was deleted from the Corporate Scorecard. HR was unable to provide data for this measure. IST will drop it from its FY2004 Scorecard.

### DESIRED RESULT-FULLY QUALIFIED EMPLOYEES WITH PERSONALIZED CAREER PLANS

**Strategies:** S1 – Provide high quality, cost effective PC training for County employees, S2 – Provide online guidebook on County policies and procedures for web page design and layout, S3 – Annually update individual training plans.



Measures & Performance:

Number of students trained (Countywide) - IST trained 1,368 students, approximately 0% change from FY2002.

**Training Survey Results** – Received average rating of 98% excellent and 2% satisfactory from student training evaluations, versus a target of 80%.

**Individual training plans updated** – IST is changing its employee review process to include more specific training plans as opposed to general plans that are presently used. Plans updated = 100%. IST is dropping this measure in FY2004.

Individual training plans updated – Will be used in conjunction with the prior measure for training. Training is a very important in developing and retaining qualified and technically current staff, and IST will assure that it has a training plan in place that meets the needs of the County and staff and provides useful performance measures.

Training 12 months	Planned Days	Completed Days	Comp vs. Plan
Totals	572	705	123%

# DESIRED RESULT—DEVELOPMENT OF POLICIES, STANDARDS, AND THE TECHNOLOGICAL ARCHITECTURE WITHIN MECKLENBURG COUNTY GOVERNMENT



**Strategies:** S1 – Procure, develop, implement, and support applications for County departments according to plans; S2 – Guide departments in identifying effective and efficient technologies to do their jobs; S3 – Support existing infrastructure and introduce new technologies in support of County departments; S4 – Plan, implement, and monitor Information Security solutions to safeguard County data and minimum unauthorized access, viruses, or security breaches.

# DESIRED RESULT—DEVELOPMENT OF POLICIES, STANDARDS, AND THE TECHNOLOGICAL ARCHITECTURE WITHIN MECKLENBURG COUNTY GOVERNMENT CONT.

#### Measures & Performance:



**Customer Satisfaction Rating** – A combined average of 80% customer satisfaction was received for office productivity software and supporting technologies, versus a target of 75%. Office productivity includes E-mail, Microsoft Office Suite, and RightFax. Supporting technologies includes information security, disaster recovery, local area networks, mainframe, remote access (RAS), telecomm/telephony/radio, VPN services, and web infrastructure.

**Technology Index for infrastructure components** - Actual index score was 99.9% versus a target of 99.59%. The Index includes availability of the County network, mainframe, Internet, and telecommunications. The industry considers 99.5% availability for these infrastructure components to be a good target and 99.9% an aggressive and exemplary target. Higher targets could be achieved but only with a much larger investment of funds and resources.

Component	12 month index	
Mainframe	99.9	
Network	99.9	
Internet	99.9	
Voice Mail	99.9	
Centrex	99.9	
Ave	99.9	

**Technology Index for applications** Actual index score was 83% versus a target of 75%. Index includes average value of applications supported and customer satisfaction rating (both determined from IST survey), average work order satisfaction rating (from completed work order forms), and average quality of implemented projects, which is determined by number of errors in production system and actual implementation versus schedule.

Apps Component		12 month index
Ave. value apps supported	From survey	78
Ave. cust satisf w/IST	From survey	78
Ave. WO satisf	Compl. WO's	98
Quality/timeliness	Ave quality of Impl. Proj.	78
Totals		332
Ave	10	83.00

Note: The technology indices for infrastructure and applications are quite different in nature. Hence, there is a variance between the two in the actual and target scores. The infrastructure index is very objective using only systems availability, which is an excellent measure of infrastructure performance. The applications index includes both subjective customer ratings and objective measures.

#### 2003 ACCOMPLISHMENTS AND 2004 PLANS

Please refer to the 2003 Report and 2004 Plan located on MeckWeb for information about 2003 accomplishments and 2004 plans.

#### ISSUES AND IMPROVEMENT OPPORTUNITIES

IT Organizational Assessment – This will likely be the most significant IT organizational change the County has experienced in my 15-year tenure. I anticipate major changes to the organization. It will likely take 12 to 18 months to consummate and has the potential to improve services, reduce costs, provide greater resource capacity, improve technical capability, improve IT governance, and many other attributes. Nonetheless, it will be a challenging effort by IST, ITEC, and the departments to design and implement the new organization. It will require an extraordinary amount of time and strong County management support to be successful.

#### ATTACHMENT A: BSC OBJECTIVES/IST SERVICES MATRIX

SV2: Are IST services aligned with BSC objectives?  IST Services Offered	BSC Objectives	Increased service value	Increased awareness of County responsibilities, services, & results	Improved communication & information management	Improved productivity	Preserved financial stability & maintained organizational integrity	Improved funding/resource allocation decisions	Reduced or avoided costs through partnerships	Increased employee motivation & satisfaction	Enhanced workforce retention & recruitment	Increased employee knowledge, skills, & abilities	Improved technology-related capacities
Automation Consulting				Χ	Χ							Χ
Applications Acquisition				Χ	Χ							Χ
Applications Development				Χ	Χ							Х
Data Management				Χ	Χ							Х
Data Security Planning				Χ		Χ						Χ
Desktop Services				Χ	Χ							Χ
Disaster Recovery Planning						Χ		Χ				Χ
IST Help Desk				Χ	Χ							Χ
IST's Intranet site (meckweb/coist)				Χ	Χ							Х
Mainframe Services				Χ	Χ			Χ				Х
Microcomputer Training				Χ	Χ				Χ	Χ	Χ	Х
Network Services				Χ	Χ							Χ
Radio/Telecommunications Consulting & Support				Х	Χ			Χ				Х
Web Services			Χ	Χ	Χ			Χ				Χ

#### APPENDIX D: IST FY2004 SCORECARD

**Mission**: To provide a complete range of technology services and support the automation needs of all County agencies as well as some City and State agencies.

Effective & Efficient Government					
Corporate Outcome	Increased Service Value				
<b>Departmental Outcome</b>	Increased IST Service Value				
Strategies:	Align IST services according to Corporate Scorecard and priorities established by Information Technology Executive Council (ITEC)				
Programs/Services	• N/A				
Measures:     Output     Outcome	<ul> <li>IST Customer Survey (specific questions)</li> <li>Negotiate Service Level Agreements for all customers and services</li> <li>Complete work requests "on time" (as negotiated)</li> </ul>				
Rationale(s):	• {list}				

Corporate Outcome	Improved Communication & Information Management
<b>Departmental Outcome</b>	Improved communication and access to information by internal customers
Strategies:	S1: To provide accurate, consistent, and timely information to internal customers, business partners, and/or department employees S2: To ensure information is readily accessible by staff to do their job
Programs/Services	N/A
Measures:	<ul> <li>Internal Customer Satisfaction rating: Effective Communication</li> <li>Department Employee Satisfaction rating: Effective Communication (Countywide survey)</li> <li>Department Employee Satisfaction rating: Accessibility to Information to Do Job (Countywide survey)</li> <li>Publish IST's Annual Report and Plan</li> <li>Implement a formal Communication Plan</li> </ul>
Rationale(s):	<ul> <li>One of the best ways to determine how well communication is being conveyed to internal customers, business partners, and employees is by soliciting their feedback.</li> <li>One of the best ways to determine if information is readily accessible to staff to do their job is by asking them.</li> </ul>

Corporate Outcome	Improved Productivity				
<b>Departmental Outcome</b>	Continuously improve IST's productivity				
Strategies:	S1: To map business flows for key IST processes and implement at least one process improvement for each IST business unit, to include program and/or service delivery as well as data collection and information management methods S2: To use technology where appropriate to streamline and/or eliminate IST processes S3: To seek and develop partnership and IST outsourcing opportunities that increase the efficiency and effectiveness of service delivery (where applicable) S4: Improve customer productivity through the use of technology				
Programs/Services	N/A				
Measures:	<ul> <li>Percentage of IST business units establishing productivity goals</li> <li>Implementation of at least one process improvement per IST business unit</li> <li>Percentage of calls resolved by Help Desk without escalation</li> <li>Reduction in operating costs per capita, while maintaining services and customer satisfaction</li> </ul>				
Rationale(s):	<ul> <li>Tracking the efficiency of key business processes is a widely used for method improving productivity</li> <li>It is difficult to identify a global performance measure for quantifying the efficiency (efficiencies) gained through integrating technology in a business process. In lieu of this, a consistent approach for tracking the impact is by noting the technological enhancements and expounding on how it improved productivity.</li> <li>It is difficult to identify a global performance measure for tracking the efficiency of partnerships and outsourcings. In lieu of this, a consistent approach for tracking the impact is by identifying the partnership or outsourcing, noting the impact to service delivery and providing data to substantiate the improved efficiency.</li> </ul>				

Corporate Outcome	Preserved Financial Stability & Maintain Organizational Integrity		
<b>Departmental Outcome</b>	Preserved IT Financial Stability & Maintain Organizational Integrity		
Strategies:	To responsibly and accurately manage the department's operating and capital budgets by expending funds within approved budget, meeting revenue attainment goals, competitively bidding for products and services, reducing costs through continuous improvements, and following all statutory county requirements		
Programs/Services	N/A		
Measures:	<ul> <li>Enumeration of contract dollars saved via renegotiating &amp; bidding existing services</li> <li>IST costs as compared to industry costs</li> <li>Provide effective Information Security by preventing viruses, reducing junk Email, and minimizing security incidents</li> </ul>		
Rationale(s):	<ul> <li>Expenses (demands in services) are strongly correlated with the economy and associated cost drivers for program and service delivery including growing population or customer-base.</li> <li>Through renegotiating and bidding for existing services, businesses and organizations are able to ensure that a contract vendor's associated costs are at (or below) market for comparable services.</li> <li>The ability to revert money to the general fund is an indicator of being a good steward of County dollars as well as demonstrating support for the collective achievement of goals.</li> </ul>		

Corporate Outcome	Improved Funding/Resource Allocation Decisions		
Departmental Outcome	Improved County-wide IT Funding/Resource Allocation Decisions		
Strategies:	S1: To continuously evaluate the efficacy and value of existing programs and services delivered by IST department S2: Review Countywide IT services and optimize IT organization for efficient and effective service delivery		
Programs/Services	IT Steering Committee		
Measures:     Output     Outcome	<ul> <li>Percentage of IST's controllable scorecard results achieved</li> <li>Complete the IT reorganization/recentralization</li> <li>% IT project costs (aggregate) approved by Steering Committee</li> <li>% approved projects that achieve at least 80% of stated objectives</li> </ul>		
Rationale(s):	If we fund successful programs aligned with the Balanced Scorecard, we should achieve our desired results.		

Corporate Outcome	Reduced or Avoided Costs Through Partnerships		
Departmental Outcome	Reduced Annual Costs through Partnerships		
Strategies:	To develop and enhance funding and service partnerships including cost-effective outsourcing opportunities		
Programs/Services	• Share services through partnerships including mainframe and radio services to the City of Charlotte		
Measures:	Dollars saved through partnerships (snapshot data)		
Rationale(s):	The measure tracks the monetary savings realized though partnerships and outsourcings.		

Corporate Outcome	Increased Employee Motivation & Satisfaction			
Departmental Outcome	Increased IST Employee Motivation & Satisfaction			
Strategies:	S1: To recognize and reward exemplary individual and team performance S2: To create an environment where employee innovations and process improvements are valued S3: To offer opportunities for broadening areas of accountability S4: To promote an open and quality work environment			
Programs/Services	N/A			
Measures:	Department Employee Perception Rating: Recognition & Rewards (from annual Countywide Climate Survey)			
	Supplemental Data from HR			
	Number of Quality Achievement Awards (monetary and non-monet			
	<ul> <li>Department Employee Perception Rating: Value of Innovative Ideas &amp; Process Improvement Recommendations (from annual Countywide Climate Survey)</li> <li>Department Employee Perception Rating: Job Enhancement Opportunities (from annual Countywide Climate Survey)</li> </ul>			
	<ul> <li>Supplemental Data from HR</li> <li>Number of Vacancies Filled as Promotions</li> <li>Number of Vacancies Filled with In-Band Adjustments</li> <li>Percentage of Reclassifications to Higher Pay Bands</li> <li>Percentage of Reclassifications with In-Band Adjustments</li> </ul>			
	Department Employee Perception Rating: Qualtiy Work Environment (from annual county-wide Climate Survey)			
Rationale(s):	<ul> <li>Employee perceptions of recognition opportunities, value of employee input for program or service delivery improvements, job growth opportunities, and office work environment are strongly correlated to employee motivation and satisfaction (Countywide survey).</li> <li>Supplemental data serves to validate employee perceptions.</li> </ul>			

Corporate Outcome	Enhanced Workforce Retention & Recruitment	
Departmental Outcome	Enhanced IST Staff Retention & Recruitment	
Strategies:	<ul> <li>S1: To offer flexible work schedules/options</li> <li>S2: To regularly review job questionnaires and work plans</li> <li>S3: To recruit qualified persons for jobs within a timely fashion</li> <li>S4: To recruit and maintain a diverse workforce</li> <li>S5: To retain successfully performing employees</li> </ul>	
Programs/Services	N/A	
Measures:	<ul> <li>Department Employee Perception Rating: Flexible Work Schedules/Options (from annual Countywide Climate Survey)</li> <li>Percentage of New Hires Retained for 2 Years (fiscal year) from HR</li> <li>Department Workforce Diversity Profile (calendar year) from HR</li> <li>Department Turnover Rate of Successful Performing Employees with 2+ Years of Service from HR</li> </ul>	
Rationale(s):	<ul> <li>Employee perception of work life balance opportunities is strongly correlated to retention and recruitment. (Countywide survey)</li> <li>Employees know if their job questionnaire/description accurately reflects their assigned duties. (Countywide survey)</li> <li>An industry norm for determining if organization has successfully recruited the right person for a job is its ability to retain employees for at least 2 years. (HR report)</li> <li>Comparing organizational demographics to community and/or industry representation is a commonly used method for tracking workforce diversity. (HR report)</li> <li>Turnover is business standard for tracking retention rates. (HR report)</li> </ul>	

Corporate Outcome	Increased Employee Knowledge Skills & Abilities		
Departmental Outcome	Fully Qualified Employees		
Strategies:	Countywide S1: To provide high quality, cost effective PC training for County employees S2: Provide online guidebook on County* policies and procedures for web page design and layout  IST-internal S3: To invest in learning and growth opportunities, including supporting employee participation in degree-accredited continuing education classes		
Programs/Services	<ul> <li>Enterprise Microcomputer Training Program</li> <li>Various Technical Certification Training Programs</li> </ul>		
Measures:     • Output     • Outcome	<ul> <li>County-wide         <ul> <li>Number of Student's trained (student days)</li> <li>Training Survey Results</li> </ul> </li> <li>IST-internal         <ul> <li>Percentage of IST employees self-reported participating in training (Countywide survey)</li> <li>Average training days per employee</li> <li>Percentage of IST employees self-reporting training helped them in their jobs (Countywide survey)</li> </ul> </li> </ul>		
Rationale(s):	<ul> <li>The infrastructure is not in place to capture management's optimal performance measures. Hence, an intermediate measure of soliciting employee feedback on participation in training opportunities within a given year has been established. The measure will include professional in-house training classes, computer classes, <i>Power of Learning</i> sessions, and professional conferences and seminars</li> <li>The optimal measures are to be systematically tracked. With full integration of the new Human Resource Information System, this goal can be realized.</li> <li>The average number of training hours per employee is an industry norm for tracking an organization's commitment to increasing employee knowledge.</li> <li>Many organizations establish core competencies for positions and track the percentage of employees who exceed the minimal requirements and advance their skills.</li> </ul>		

Corporate Outcome	Improved Technology-Related Capacities			
Departmental Outcome	Development of policies, standards and the technological architecture within			
•	Mecklenburg County government			
Strategies:	Countywide S1: Procure, develop, implement, and support applications for County* department according to plans S2: Guide departments in identifying effective and efficient technologies to do their jobs S3: Support existing infrastructure and introduce new technologies in support of County* department S4: Plan, implement, and monitor Information Security solutions to safeguard Cour data and minimum unauthorized access, viruses, or security beaches			
	IST-Internal S5: To strategically replace outdated equipment, machinery, hardware and software S6: To ensure employees have the right tools to effectively do their jobs			
Programs/Services	<ul> <li>S1 – applications</li> <li>Desktop</li> <li>Government Applications</li> <li>E-mail (application)</li> <li>S2 - consulting</li> <li>Automation consulting</li> <li>S3 - infrastructure</li> <li>Data center</li> <li>Data management</li> <li>Local Area Network</li> <li>Telecommunications/Radio</li> <li>Web infrastructure</li> <li>E-mail (infrastructure)</li> <li>S4 - safeguard data</li> <li>Data security</li> <li>Disaster recovery</li> </ul>			
Measures:	Technology index for infrastructure			
• Output	Technology index for infrastructure     Technology index for applications			
• Outcome	<ul> <li>Percentage of Equipment within Industry/County-Defined Lifespan         Department Employee Perception Rating: Availability of Technological Resources (Countywide survey)     </li> <li>Achieve percentage of tasks from IST's FY04 Work Plan</li> </ul>			
Rationale(s):	<ul> <li>The measure is a widely used norm for tracking investments in technology.</li> <li>Employees know whether or not they have the appropriate tools to do their jobs effectively.</li> </ul>			

### MECKLENBURG COUNTY INFORMATION SERVICES & TECHNOLOGY

#### APPENDIX E: MIGRATE FROM THE MAINFRAME PLAN

The current trend, in the IT industry generally and within the government sector specifically, is to acquire and develop non-mainframe, "Wintel" applications, and this trend holds true for Mecklenburg County. With the high fixed costs of supporting a mainframe environment, spread over a decreasing application base, IST has determined that an orderly migration from the mainframe should be commenced. This recommendation was communicated to the Technology Advisory Council on April 9, 2003.

The overall migration plan subdivides into two parts: applications residing on the mainframe (must be replaced or rewritten) and applications residing on Wintel platforms but using databases on the mainframe (must be reconfigured).

Migration Date	Applications Residing on Mainframe	Customer Department	IST Team
09/03	LD - Permits & Inspections	LUESA/Code Enforcement	ADMIN
09/03	HR Information System	HR	ADMIN
06/04	Jail System (Waiting on Funding)	Sheriff	CJIS
12/04	Central Repository (Waiting on NCAWARE)	Sheriff	CJIS
12/04	Magistrate System (Waiting on NCAWARE)	Court Services	CJIS
08/04	Arrest Processing	Sheriff	CJIS
08/04	Risk Assessment	Court Services	CJIS
NLT 06/05	Advantage Financial	Finance	ADMIN
NLT 12/05	Tax Billing & Collections / Web Lookup Group1 (COTS Mailing Software) Street Assessment / Web Lookup Street Lighting / Web Lookup	Finance/Tax Collections	ACE
NLT 12/05	Business License Print Jobs	Finance/Tax Collections	ACE
NLT 12/05	BOE Precinct Book	BOE	ACE
NLT 12/05	Street File / web Lookup	LUESA/Code Enforcement	ACE
NLT 12/05	DSS Miscellaneous (State Reports, Tapes)	DSS	HUM

Table 1: Mainframe as Application Server

Migration Date	Applications Using Mainframe Databases	Customer Department	IST Team
09/03	Mecklenburg Client Index (MCI)	DSS	HAY
06/04	Sheriff's Paper System	Sheriff	CJIS
06/04	Journeyman	LUESA/Code Enforcement	ADMIN
NLT 12/05	Address Verification Tool	LUESA/PALRM	GIS
NLT 12/05	Master Address Table	LUESA/PALRM	GIS
NLT 12/05	Address Extract Application	CMPD	GIS

Table 2: Mainframe as Database Server

Assumptions: IST Operations staff needs must be considered and carefully planned, and the City of Charlotte's needs cannot be overlooked.

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