



NORTH CAROLINA
ADMINISTRATIVE OFFICE
of the COURTS

Overview of Court Information Technology

Presented to the Joint Legislative Oversight Committee
on Justice and Public Safety

April 10, 2014

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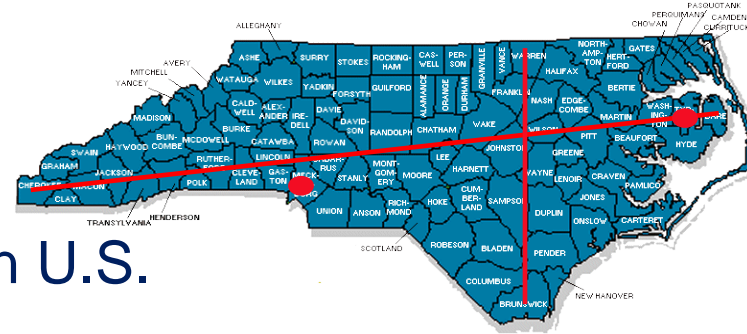


Agenda

- IT Service Delivery Drivers in North Carolina
- Connecting People Using Technology
- Performing Work Using Technology
- Connecting Processes Using Technology
- Information Technology Challenges
- Next Steps

North Carolina Geography and Demographics

- 100 counties – seventh most in U.S.
- ~10 million population – tenth largest in U.S.
- Wide range of populations in counties:
 - Mecklenburg has ~960,000 population
 - Tyrrell has ~4,200 population
- Travel time from Murphy to Manteo by car is ~10 hours
- Travel time from Warrenton to Bolivia is ~4 hours
- Nearly 49,000 square miles in area



A geographically dispersed organization is challenged by time, size, and distance.

N.C. Administrative Office of the Courts

Technology Services Division
Networks and Infrastructure

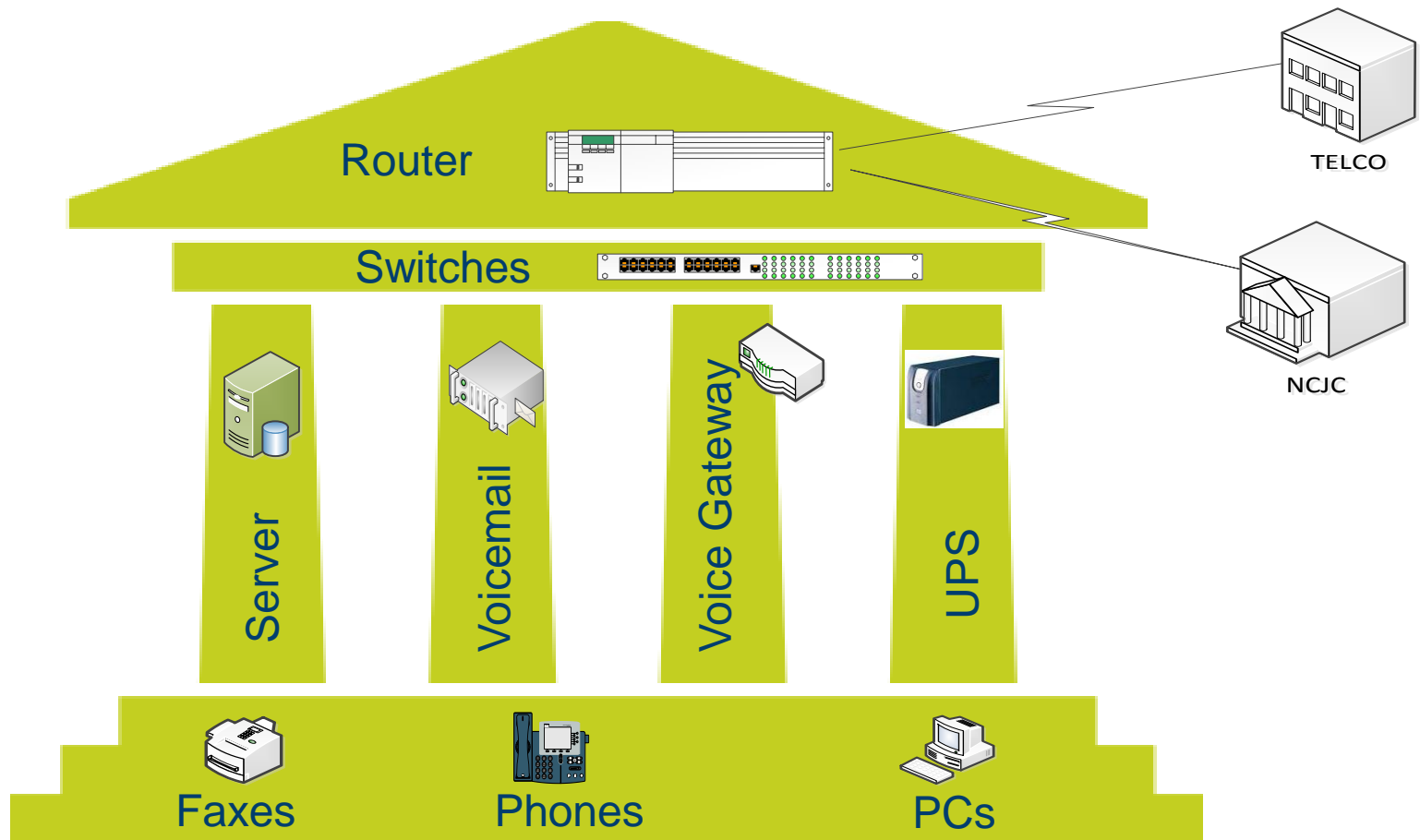
Connecting People Using Technology



NCAOC Serves Diverse User Interests

- 533 elected officials
 - 7 Supreme Court Justices
 - 15 Court of Appeals Judges
 - 97 Superior Court Judges
 - 270 District Court Judges
 - 44 District Attorneys
 - 100 Clerks of the Court
- 696 appointed officials
 - 15 Special Superior Court Judges
 - 681 Magistrates
- ~6,600 Judicial Branch employees in total
- 33,000+ law enforcement officers
- Nearly 10 million citizens
- 1,600 courtrooms (2008)

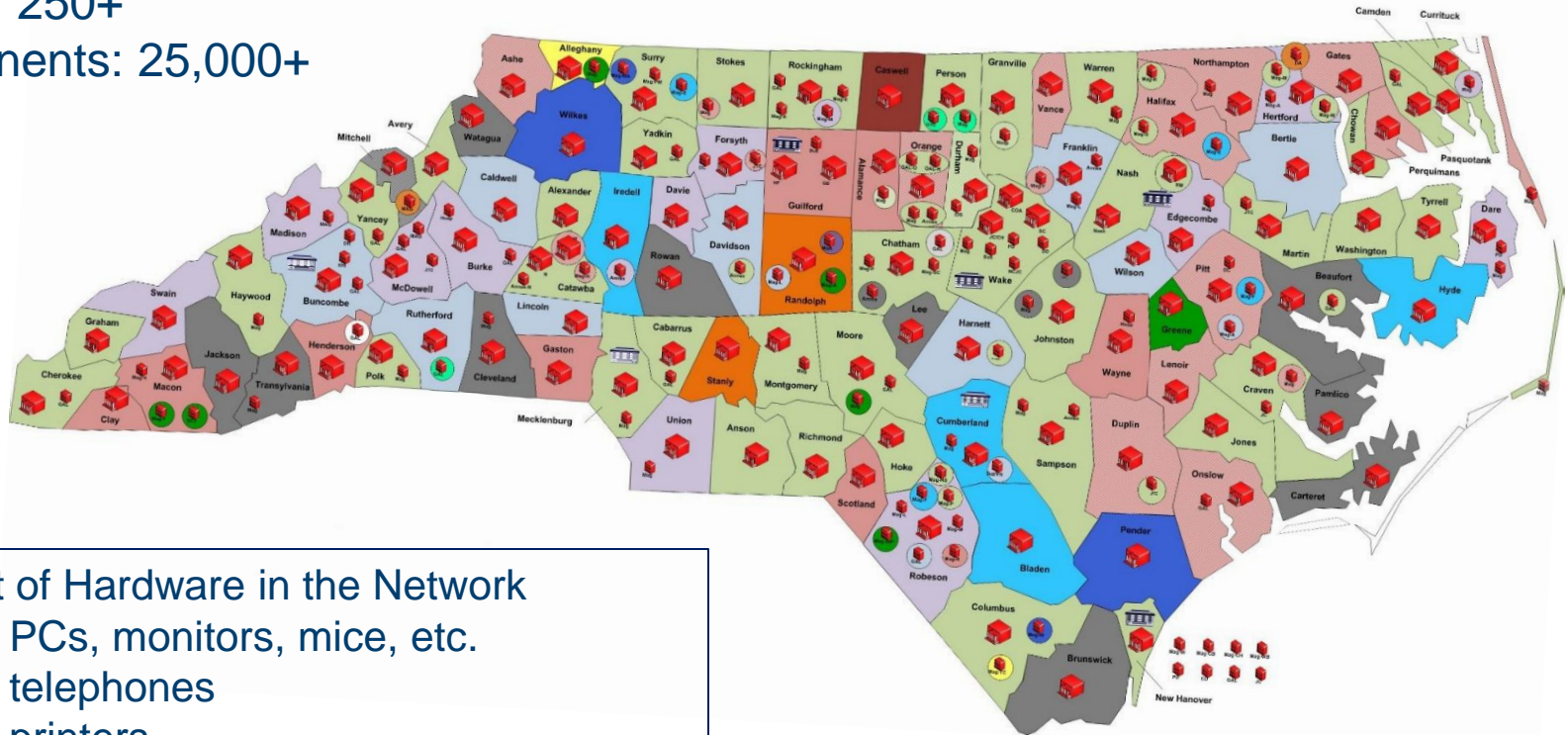
The Anatomy of a Courthouse



Distribution of NCAOC's Networked Locations

Locations: 250+

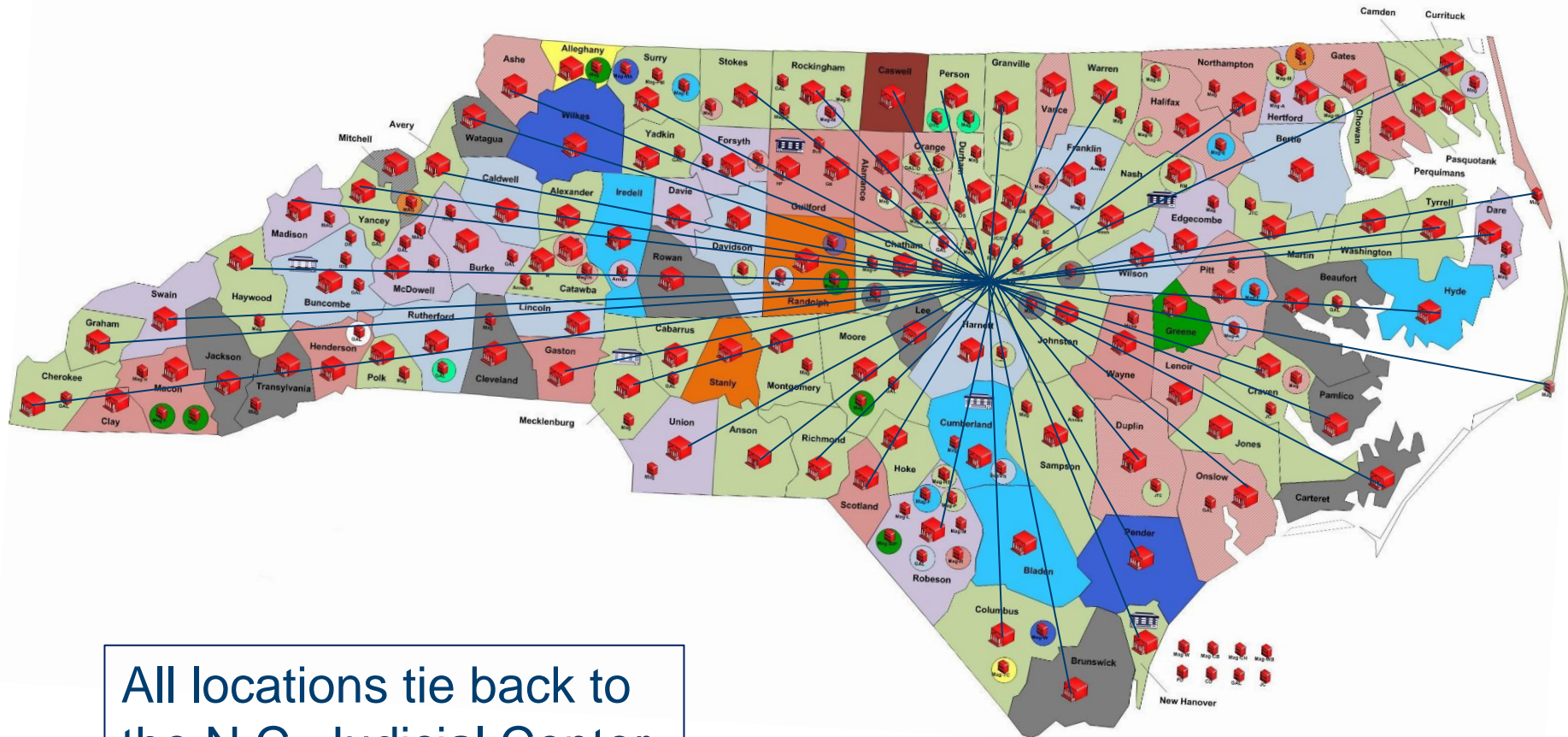
IT Components: 25,000+



Partial List of Hardware in the Network

- 9,500+ PCs, monitors, mice, etc.
- 9,300+ telephones
- 4,900+ printers
- 100+ local servers
- 246+ network circuits
- 420+ public access terminals
- Many faxes, routers, switches, copiers, etc.

Distribution of NCAOC's Networked Locations



All locations tie back to the N.C. Judicial Center.

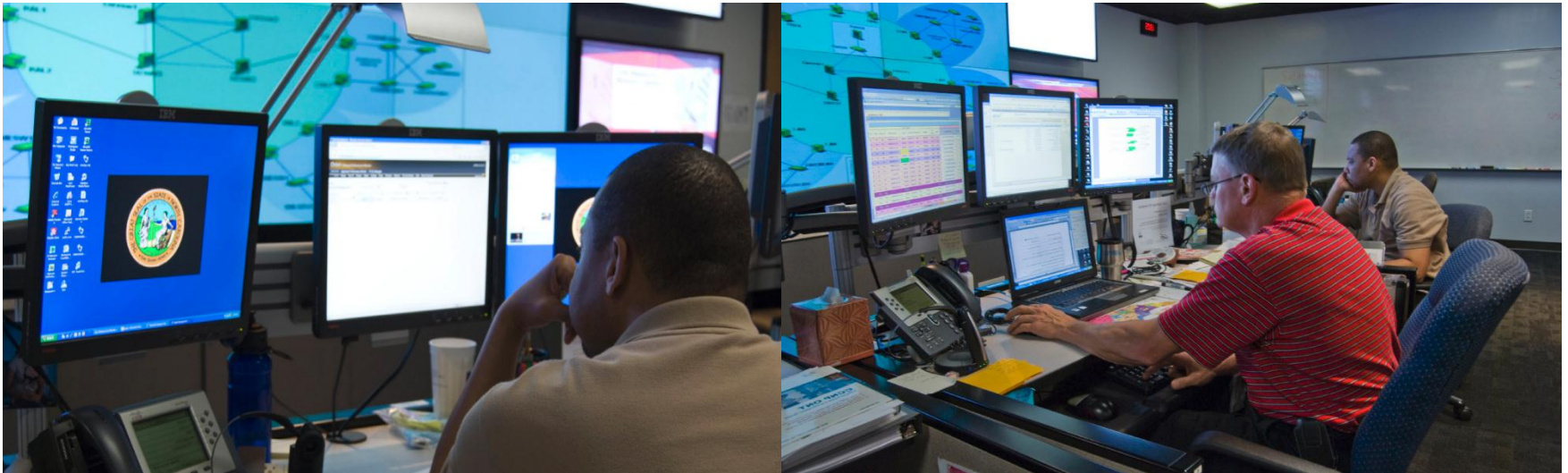
North Carolina Judicial Center Data Center – Partial Equipment List

- 2 mainframe computers
- 575 data center servers
- 3 storage area networks (~1.4 PB)
- Data replication system
- Tape backup systems
- Uninterruptible power supplies
- Backup power generator
- High availability/redundant architecture
- Disaster Recovery

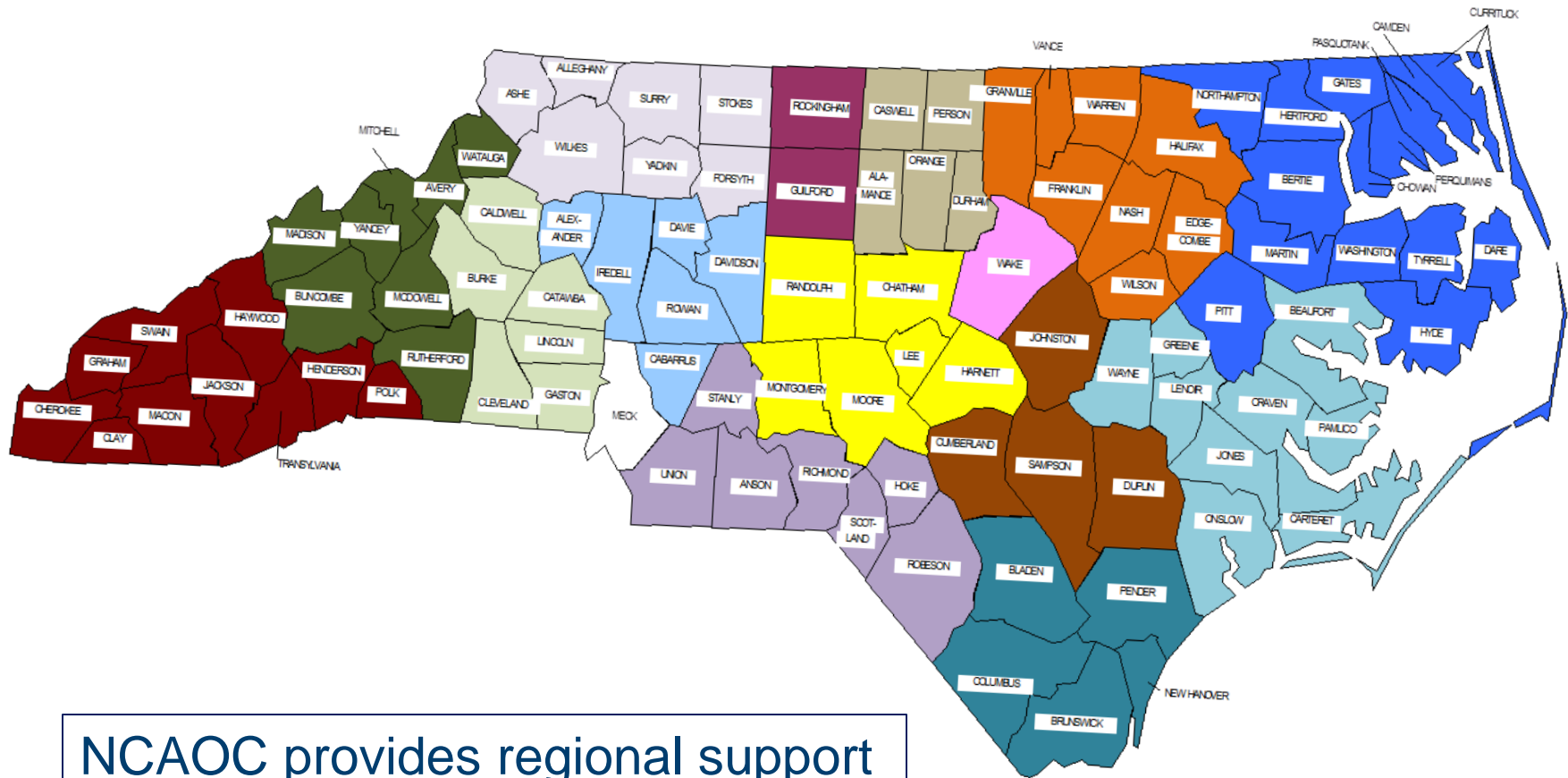


North Carolina Judicial Center Network Operations Center

Provides 24 x 7 x 365 network monitoring



Distributed Computing Services Support Map



NCAOC provides regional support teams for all 100 counties.

N.C. Administrative Office of the Courts

Technology Services Division
Applications Development

Performing Work Using Technology



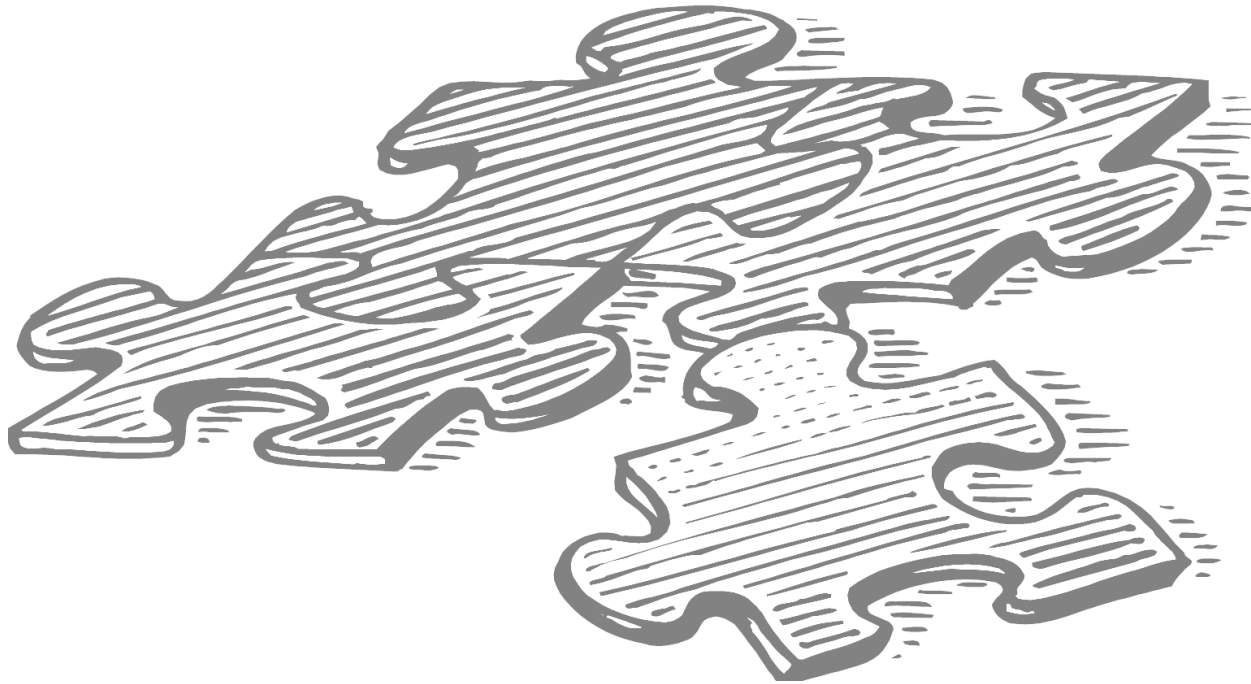
Selected NCAOC Applications and Systems

- **AOC supports over 50 major applications including:**
 - **Automated Criminal/Infractions System (ACIS)**
 - ~2.3 million cases filed
 - ~2.4 million case dispositions
 - ~1 million transactions/day
 - 25,000 users
 - **NCAWARE**
 - Over 10 million processes (served and unserved)
 - 1 million+ processes/year
 - 40,000+ court and law enforcement users
 - **eCitation®**
 - ~8 million citations processed since inception (1999)
 - 86.3% of all non-arrestable citations statewide
 - ~3,300 citations created each day
 - Used by over 17,000 officers in over 400 law enforcement agencies
 - **payNCticket®**
 - 420,000 citations paid; \$91.3 million collected
 - **Credit Card Payments (Courthouse)**
 - To date: 52 counties; over 10,000 transactions; over \$2 million collected

N.C. Administrative Office of the Courts

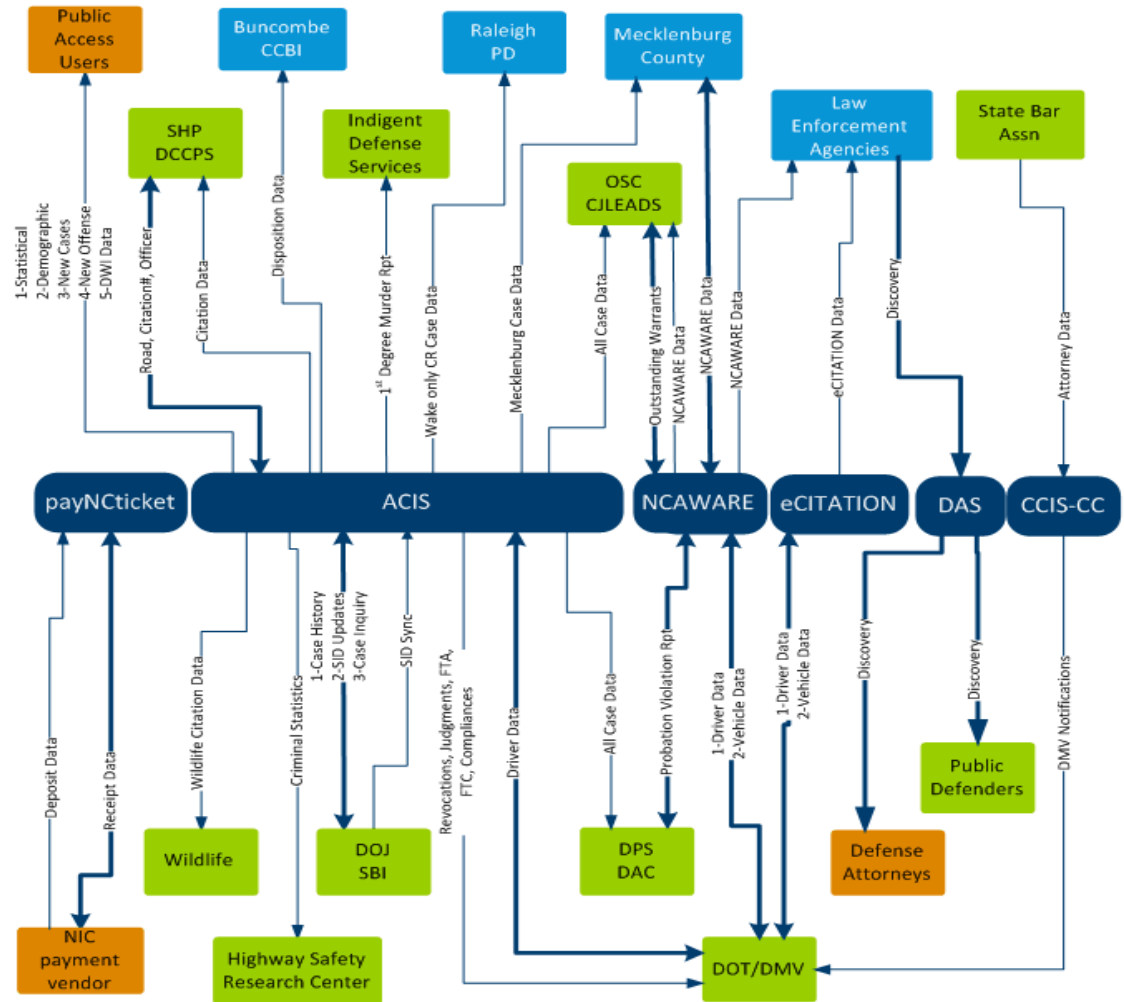
Technology Services Division Application Interfaces

Connecting Processes Using Technology



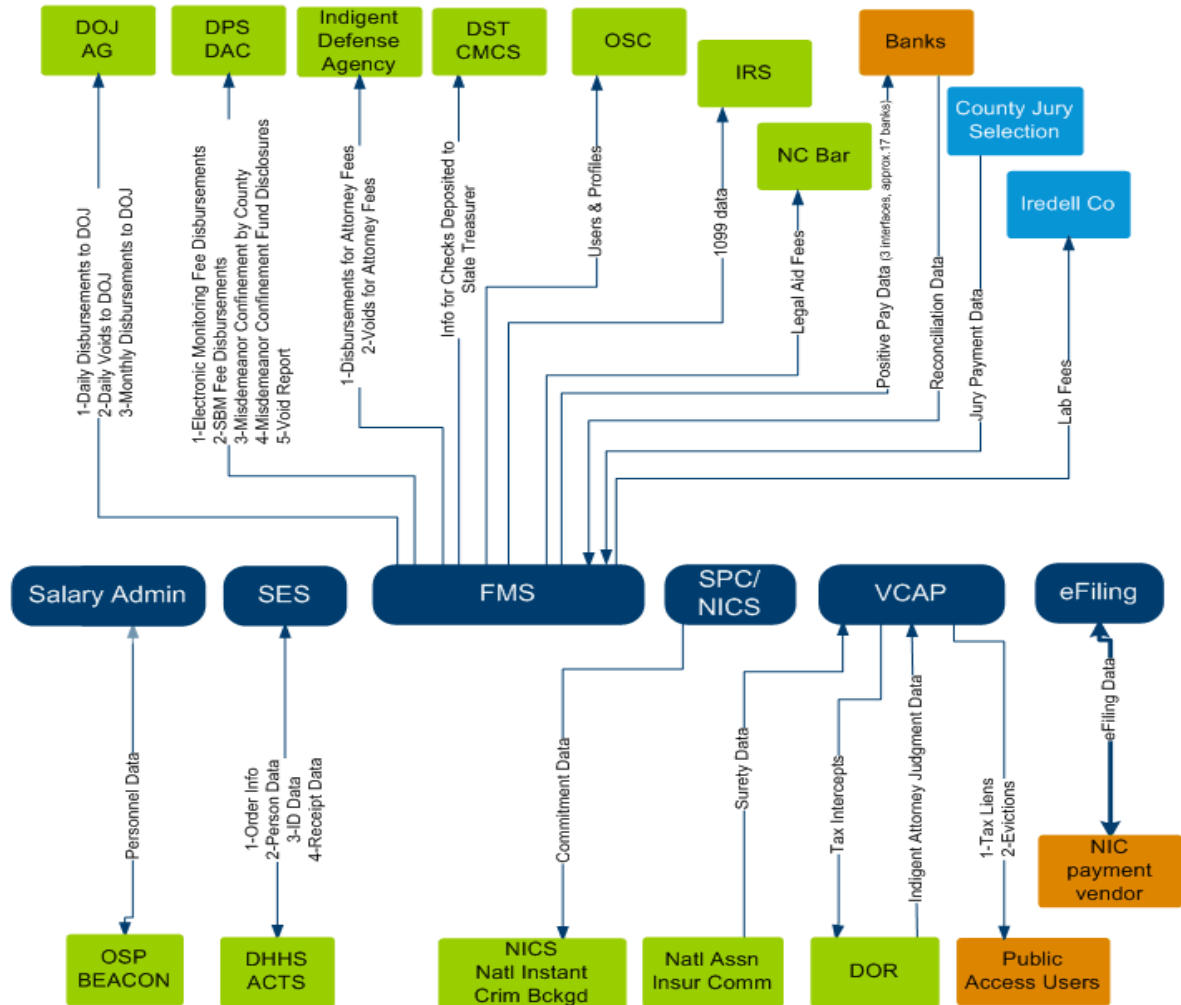
Interfaces To and From Criminal Court Systems

- 12 real time interfaces
- 17 batch interfaces
- 14 government agencies
- Vendors
- Private entities



Interfaces To and From Non-Criminal Court Systems

- 1 real time interface
- 18 batch Interfaces
- 14 government agencies
- Vendors
- Private entities





Information Technology Challenges

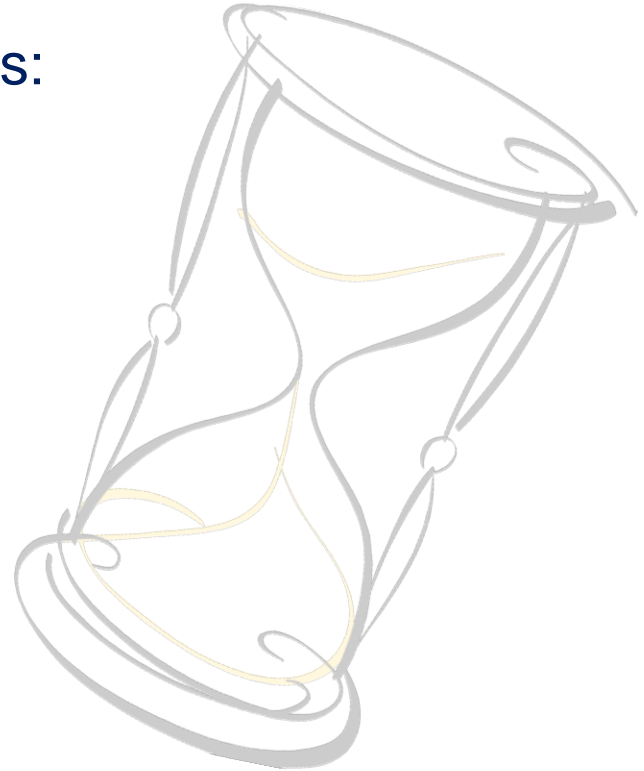


NCAOC Judicial Branch Applications

NCAOC maintains over 50 Judicial Branch applications

- Age of existing enterprise applications:

– Less than 5 years	11
– 5 – 10 years old	21
– 11 – 15 years old	10
– 16 – 20 years old	2
– More than 20 years old	9



Old technology is costly and increasingly hard to maintain.

Information Technology Workload



- 19 major projects currently underway
 - 11 application development projects, including: CCIS-CC 5.5 (June 2014); Court Time (legislative mandate); CMS-PD replacement; and, Credit Card Payment rollout.
 - 8 infrastructure projects, including: redesign Courtnet; database management system upgrade; mainframe operating system upgrade; Magistrate Video rollout; and, email and file archiving.
- ~2,000 requests for application enhancements and fixes
- ~80 major project requests have been logged
 - Application development projects include: ACIS replacement; Discovery Automation System enhancements; expand eFiling capabilities; micrographics/electronic content management; and, many others.
 - Infrastructure projects include: disaster recovery enhancements; operating system upgrades; expand video capabilities; mobile device encryption; automated password resets; enhance information security capabilities; and, others.

Growing demand for new technology requires consistent resources.

Maintaining the Installed Base

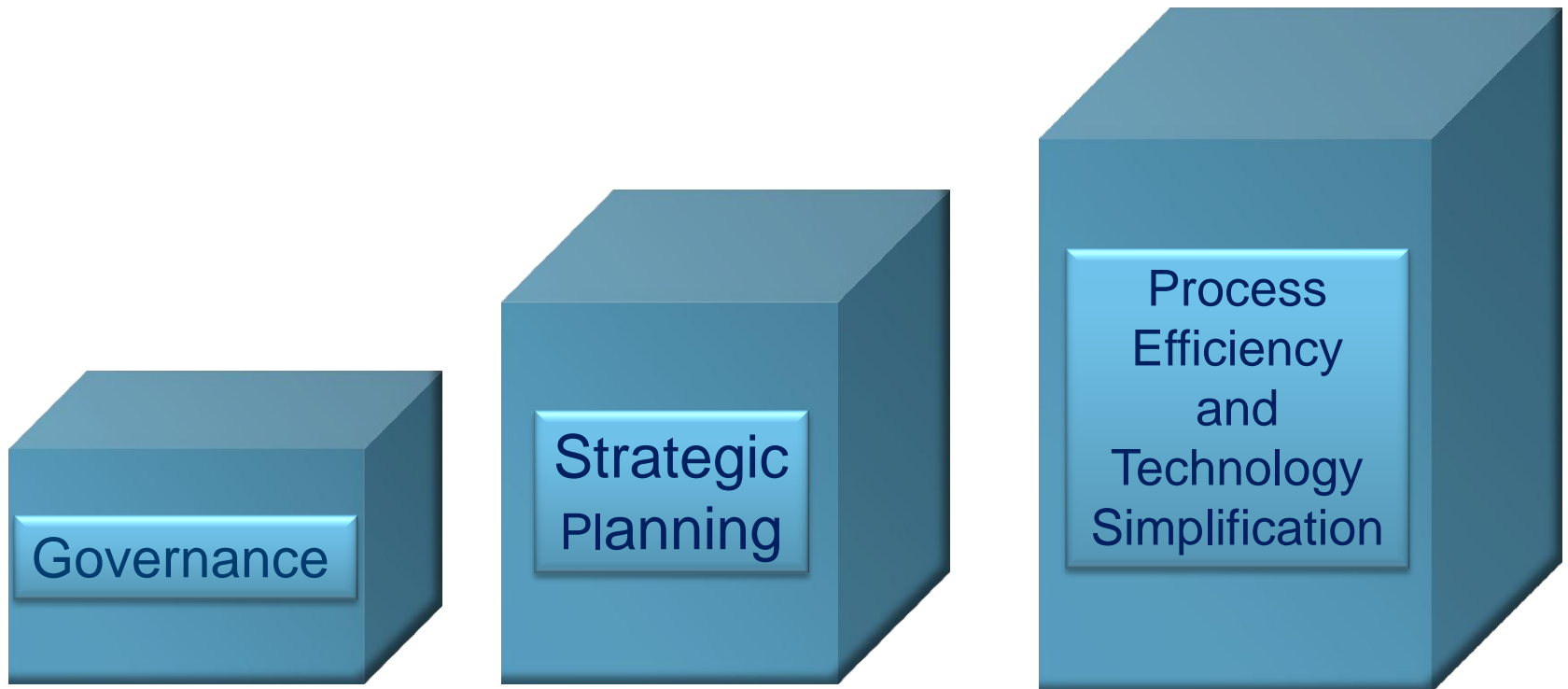
Budget Category	Annualized Cost	
Hardware/Software/Services		
Network Communication Services	\$4,500,000	Data and voice circuits
Hardware Lifecycle Replacement	\$5,500,000	PCs, printers, servers, phones, scanners, switches, routers, etc.
Hardware Maintenance	\$1,000,000	Mainframe services, routers, switches, DR, etc.
Software Licensing and Maintenance	\$5,000,000	Database, operating system, desktop, tools, applications, DR etc.
Subtotal HW/SW/Services	\$16,000,000	
Personnel Supporting Installed Base		
Infrastructure/Helpdesk Support (93% of internal staff)	\$8,700,000	24x7 support for network, systems, voice, and video across state
Application Development/Support (75% of internal staff)	\$7,300,000	Patches, upgrades, fixes, and operations support for 50 applications and 48 interfaces..
Subtotal Personnel	\$16,000,000	
Total Installed Based Support Cost	\$32,000,000	



Competition for Talent

- Within the last 1.5 years:
 - AOC **Infrastructure** section lost 6 highly skilled staff to local companies for compensation-related reasons.
 - AOC **Application Development** section lost 3 highly skilled staff to local companies for compensation-related reasons.
 - In each case, the offered salary was \$8,000 to \$30,000 more than their current salary at AOC. In at least 1 case, the new company offered a hiring bonus.
 - We are experiencing an increasing number of rejected offers due to uncompetitive salaries for the most sought after skills.

Next Steps for AOC Technology





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Questions and Comments

Thank You

