



NORTH CAROLINA  
ADMINISTRATIVE OFFICE  
*of the* COURTS

# Overview of Court Information Technology

Presented to the Criminal Justice Information Network  
Governing Board

May 29, 2014

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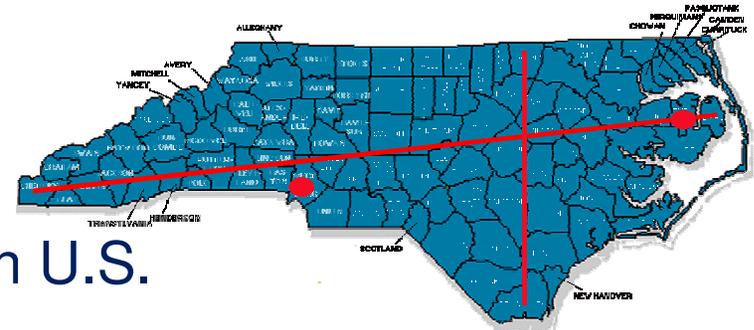


# Agenda

- IT Service Delivery Drivers in North Carolina
- Connecting People
- Performing Work
- Connecting Processes
- IT Challenges
- 2014 and Beyond
- Status Updates

# 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



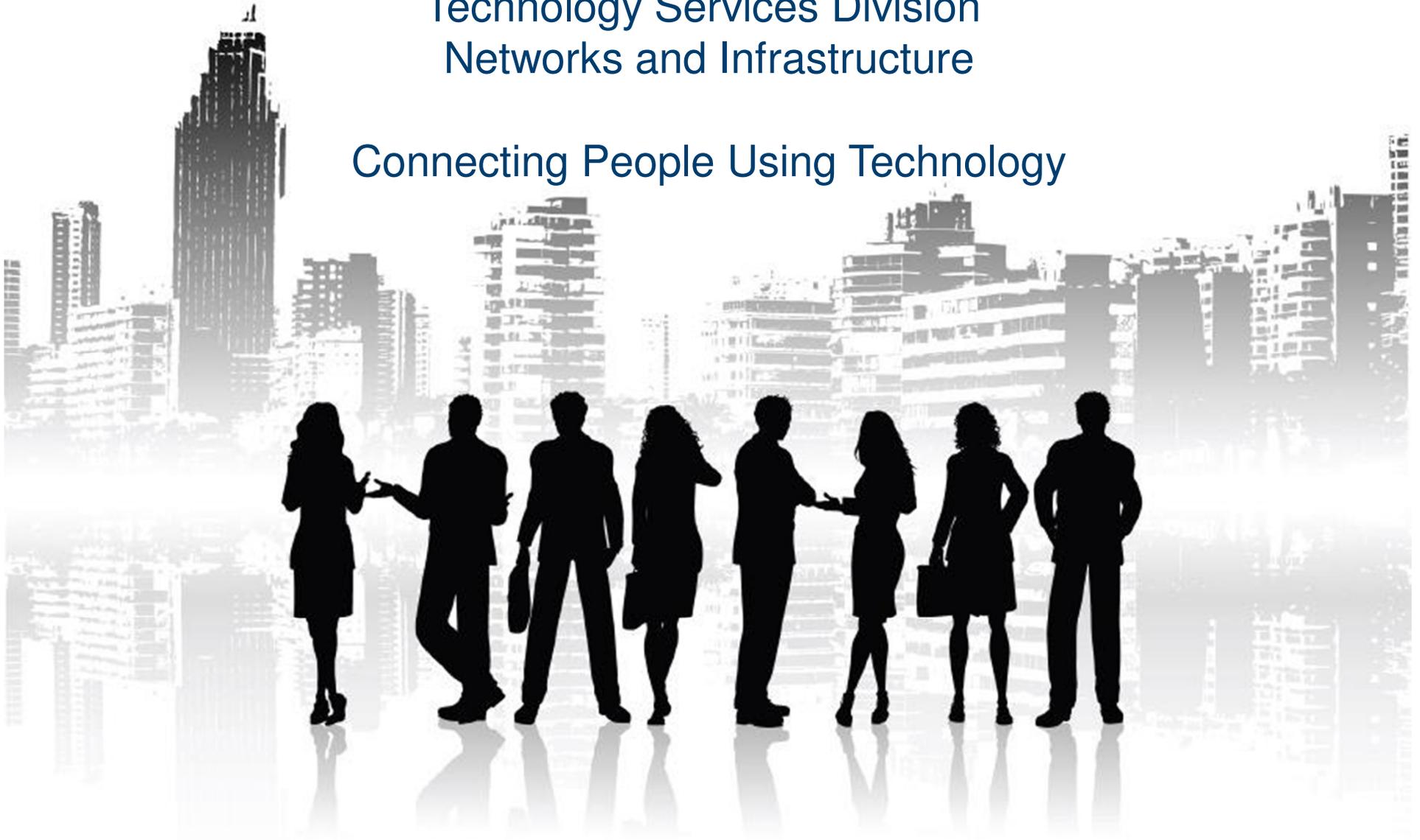
- Travel time from Murphy to Manteo by car is ~10 hours
- Travel time from Warrenton to Bolivia is ~4 hours
- Nearly 49,000 square miles in area

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

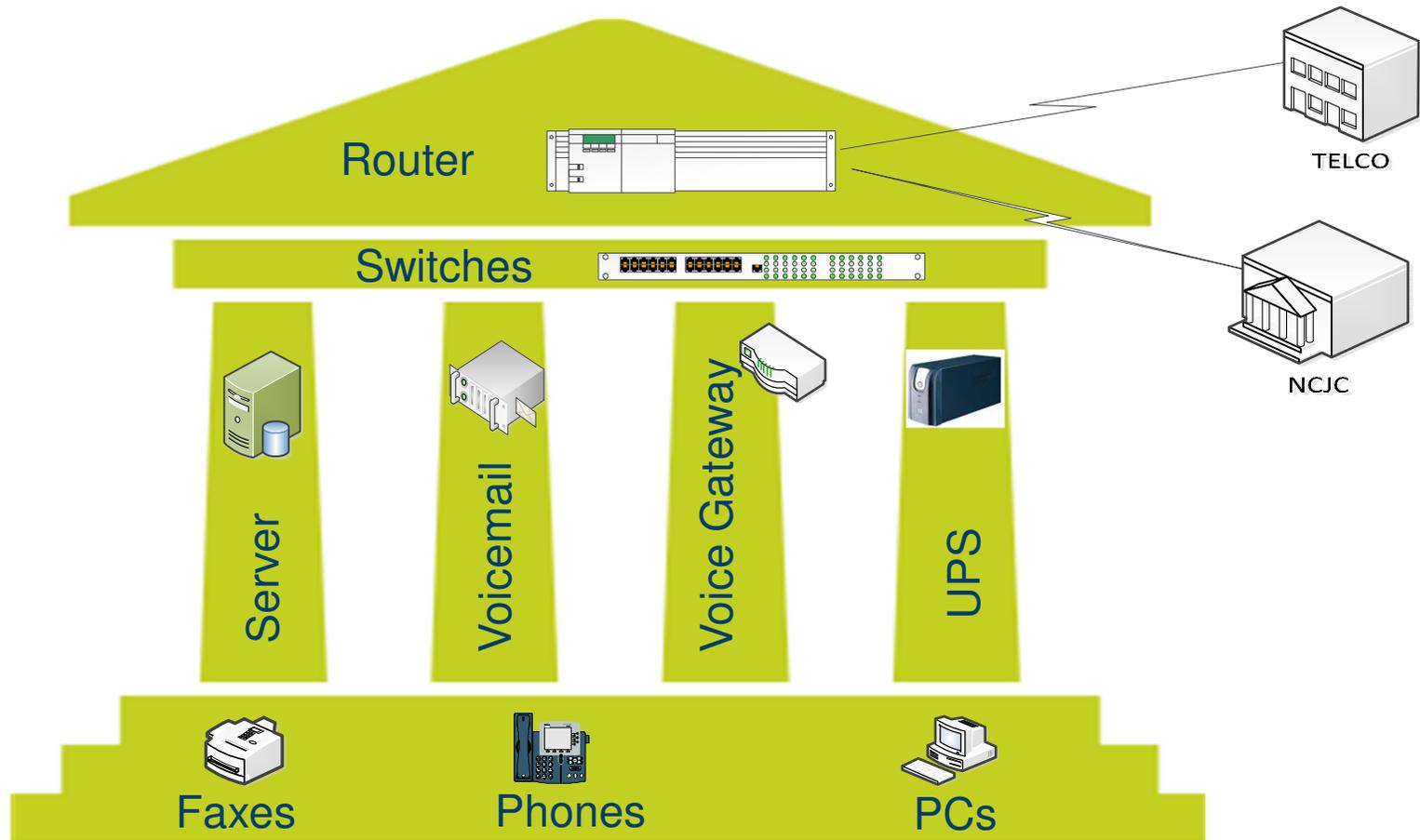


# NCAOC Serves Diverse User Interests

- 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

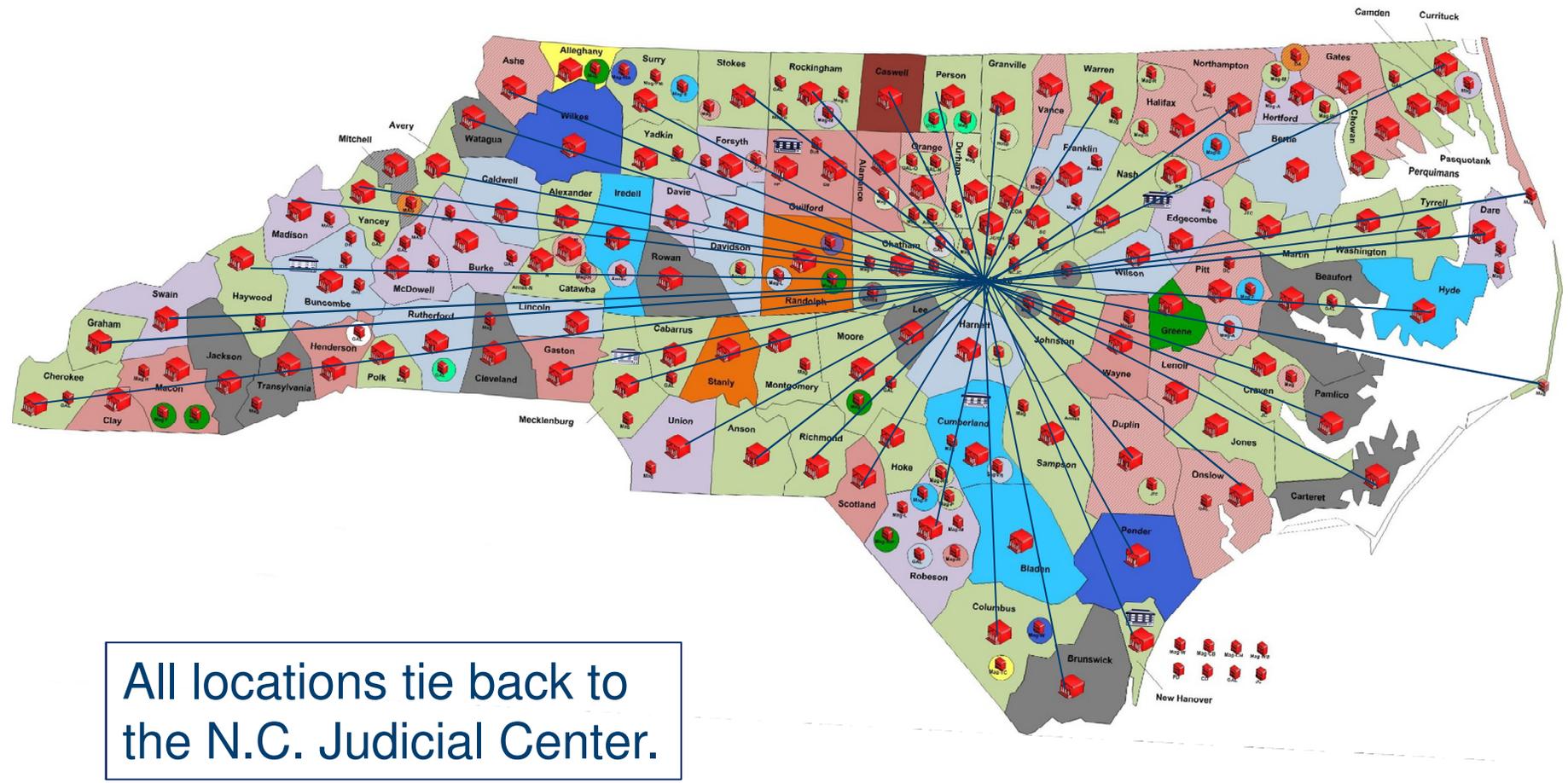


# The Anatomy of a Courthouse





# Distribution of NCAOC's Networked Locations



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

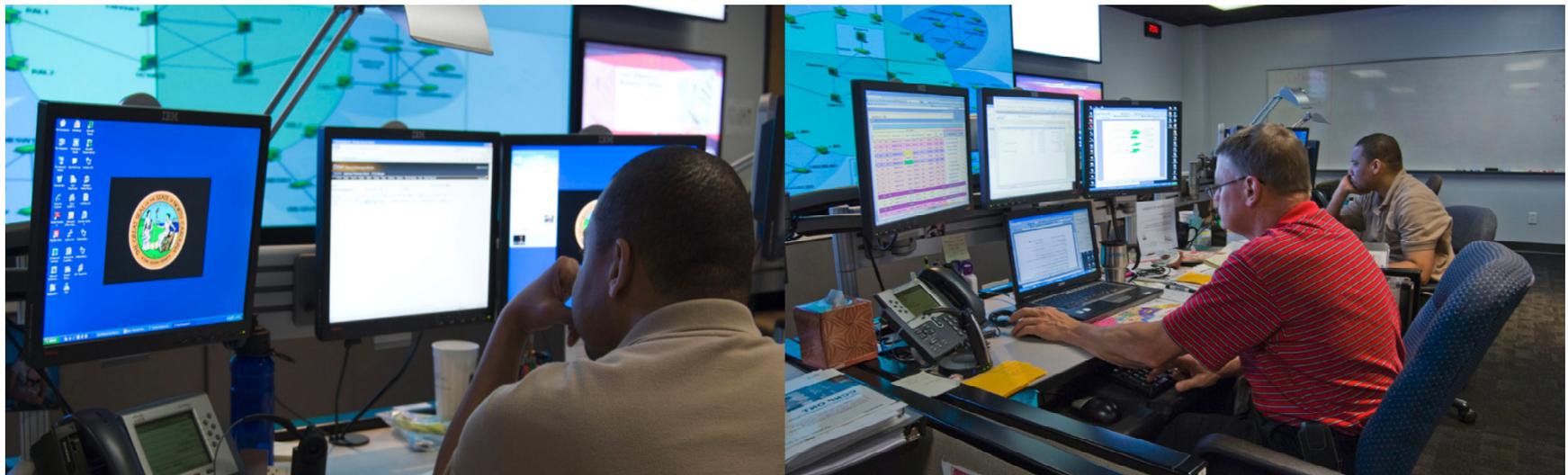
# North Carolina Judicial Center Data Center – Partial Equipment List

- 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

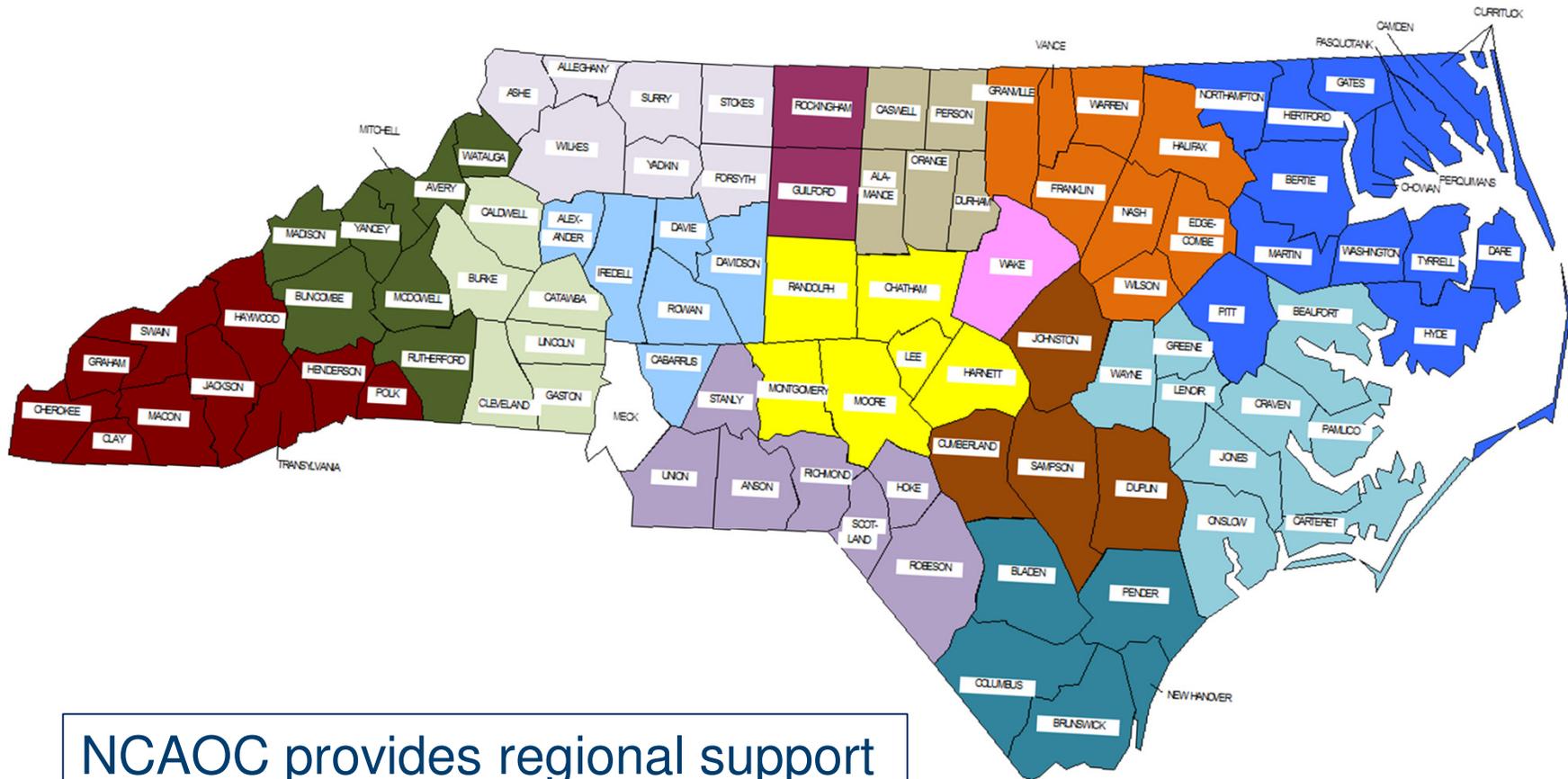


# North Carolina Judicial Center Network Operations Center

Provides 24 x 7 x 365 network monitoring



# Distributed Computing Services Support Map



NCAOC provides regional support teams for all 100 counties.



# 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

# Transactions Flowing through Selected Systems

## ■ NCAWARE

- Over 10 million processes (served and unserved)
- 1 million+ processes/year
- 40,000+ court and law enforcement users

## ■ Automated Criminal/Infractions System (ACIS)

- ~2.3 million cases filed
- ~2.4 million case dispositions
- ~1 million transactions/day
- 25,000 users

## ■ Criminal Court Information System – Clerk Component (CCIS-CC)

- ~2 million cases processed/year (2012-2013)
- ~25,000 automatic record corrections fed to DMV systems

## ■ Criminal Court Information System – District Attorney (CCIS-DA)

- Over 6.5 million cases tracked
- 1,300 users



# Transactions Flowing through Selected Systems

- **Discovery Automation System (DAS)**

- Over 500,000 documents under management
- Over 63 million pages
- Over 4,500 DAS users

- **eCitation®**

- ~8 million citations processed since inception (1999)
- 86.3% of all non-arrestable citations statewide
- 3,365 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**

- 100 counties
- over 25,000 transactions
- over \$4 million collected since January 1, 2014



# Transactions Flowing through Selected Systems

- Over 1,900 offense codes tracked in multiple systems
- ~72,000 service desk/help desk tickets processed in 2013
- 86,700 system/application security requests
- Email transactions
  - ~72 million external messages processed in 2013
  - Only ~15 million (21%) were delivered
  - 57million (79%) were classified and discarded as spam, viruses, and other malware.

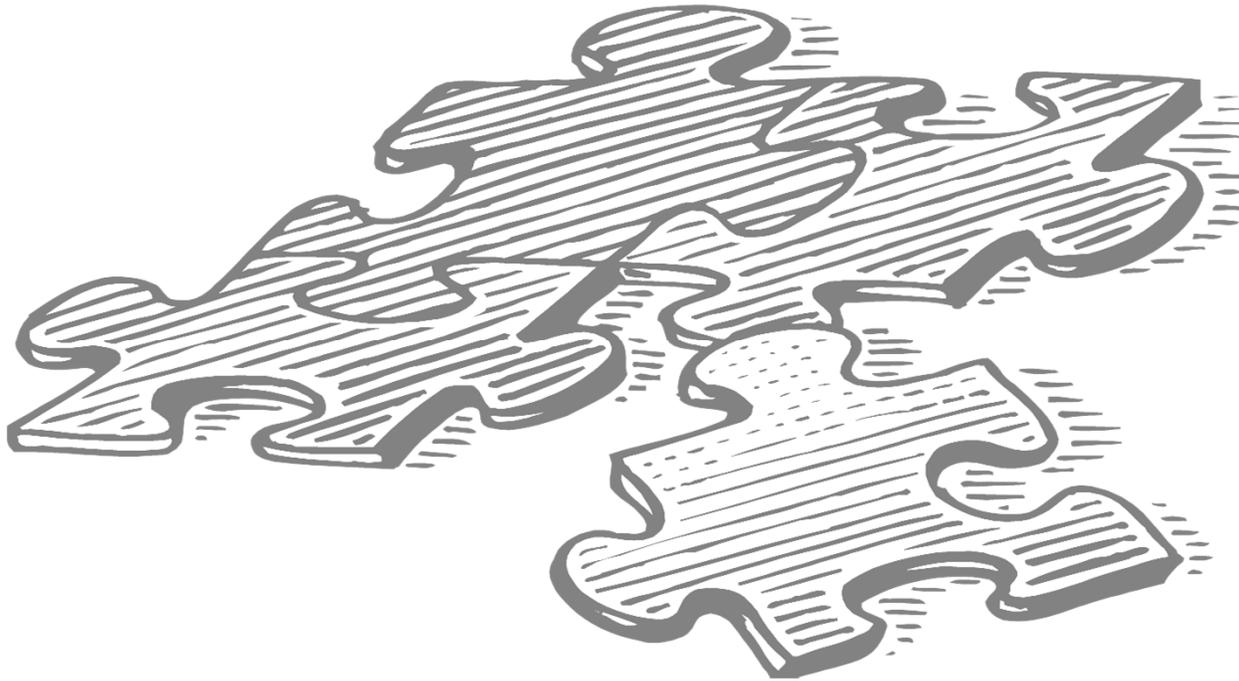


The judicial branch, law enforcement, and citizens  
***depend*** on technology

# N.C. Administrative Office of the Courts

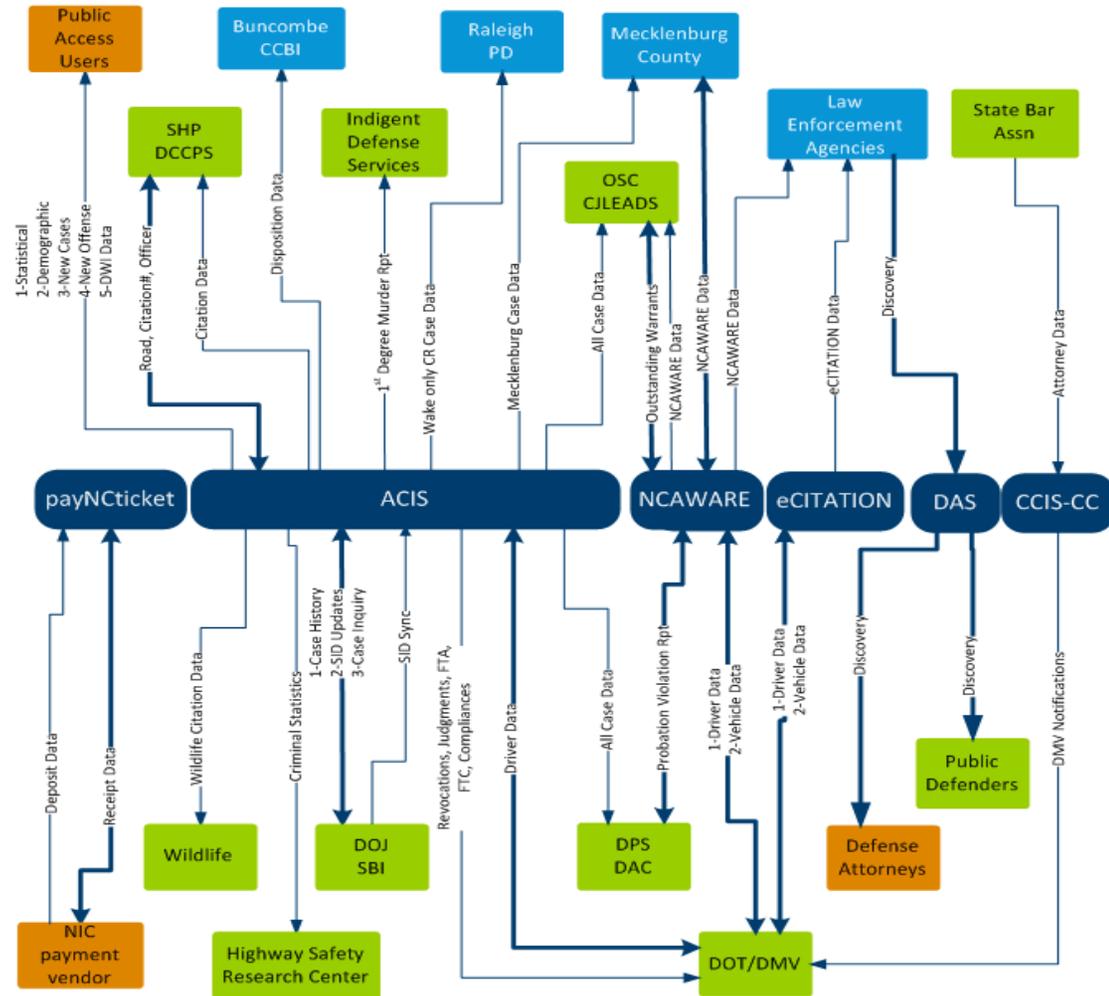
Technology Services Division  
Application Interfaces

Connecting Processes Using Technology



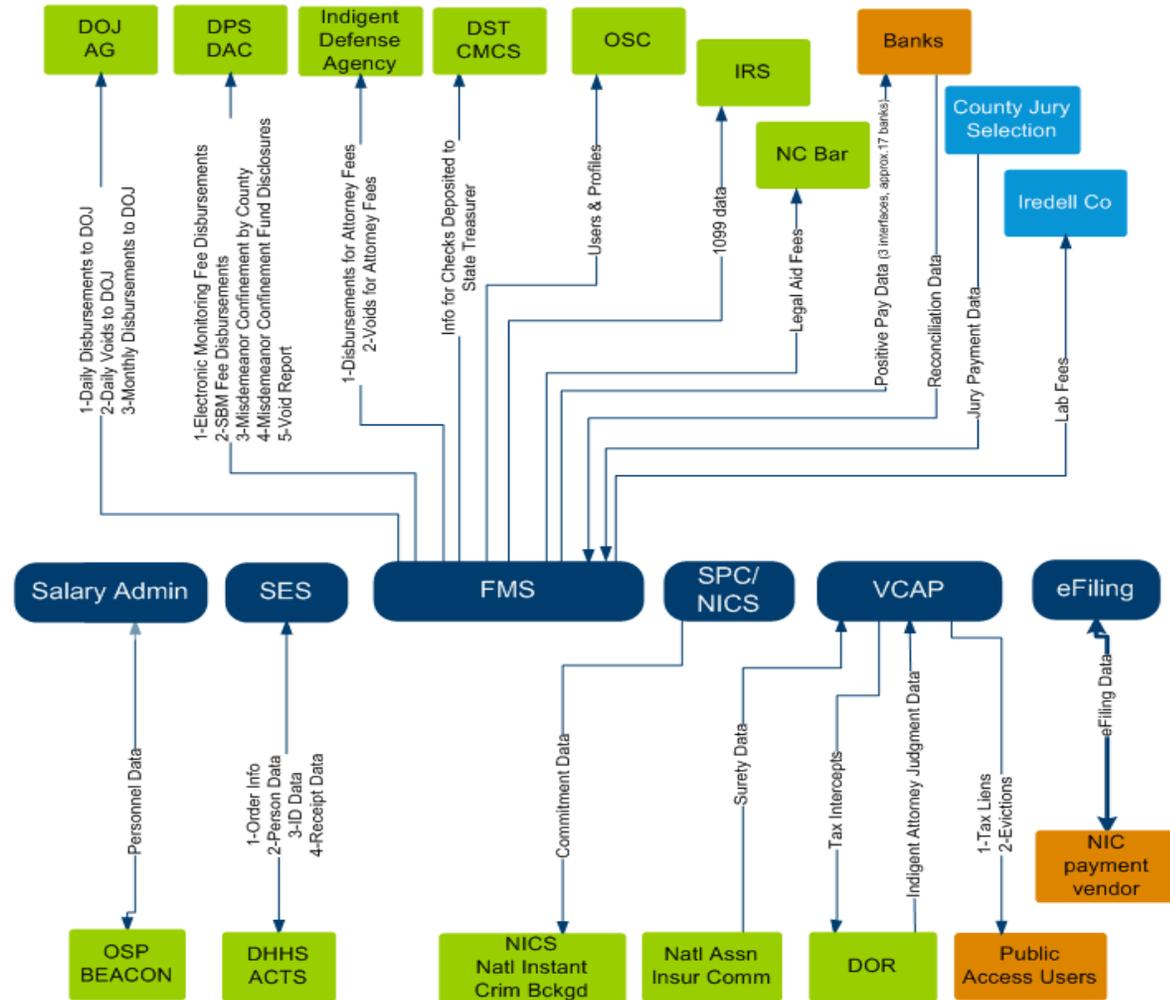
# Interfaces To and From Criminal Court Systems

- 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

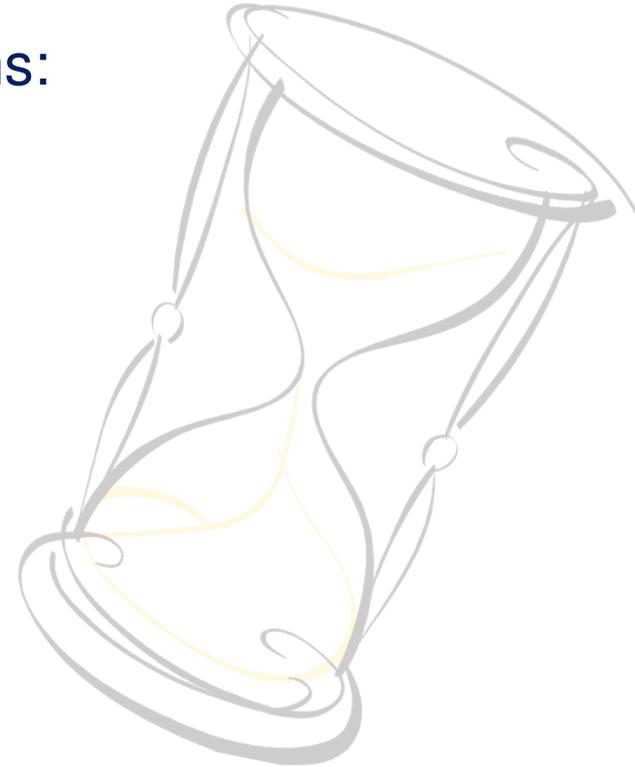


# NCAOC Judicial Branch Applications

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

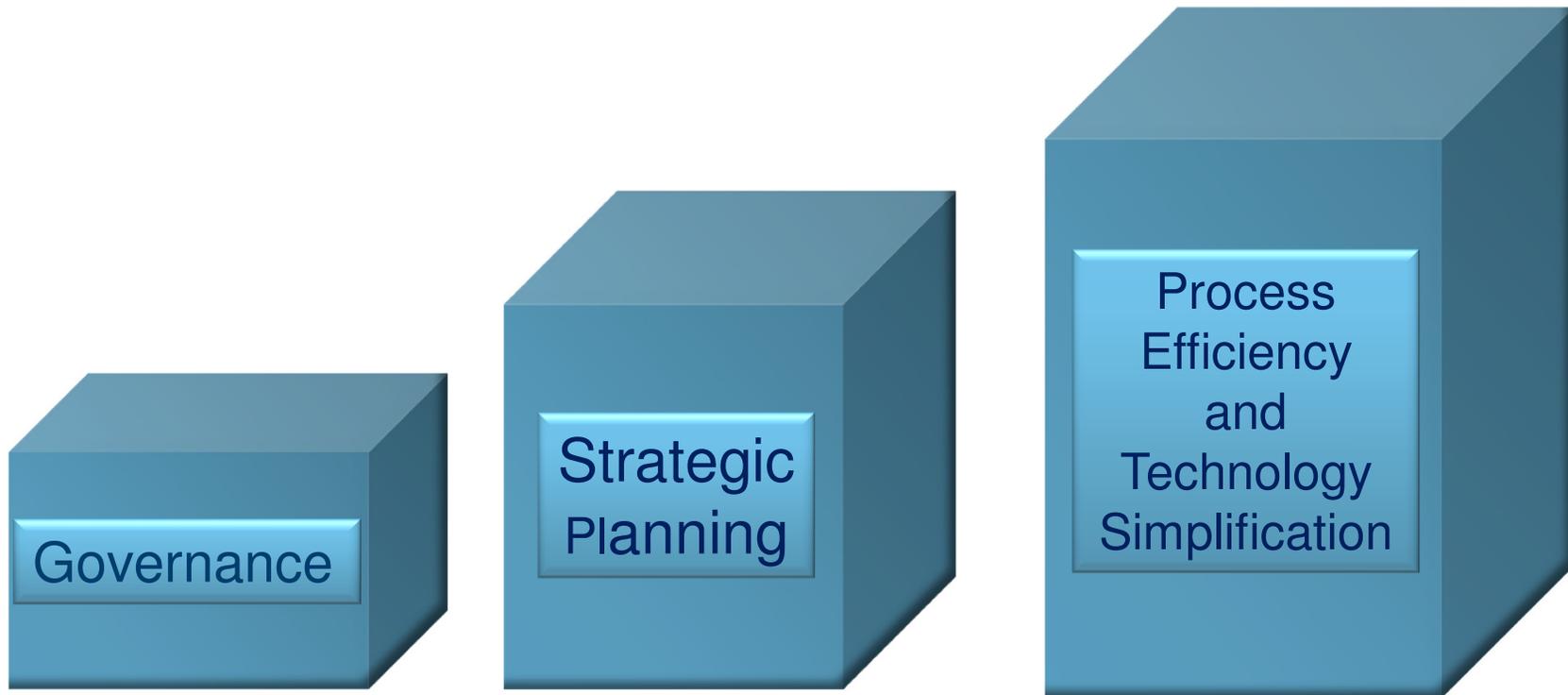
Budget Category	Annualized Cost	
<b>Hardware/Software/Services</b>		
Network Communication Services	\$4,500,000	Data and voice circuits
Hardware Lifecycle Replacement	\$5,500,000	PCs, printers, servers, phones, scanners, switches, routers, etc.
Hardware Maintenance	\$1,000,000	Mainframe services, routers, switches, DR, etc.
Software Licensing and Maintenance	\$5,000,000	Database, operating system, desktop, tools, applications, DR etc.
<b>Subtotal HW/SW/Services</b>	<b>\$16,000,000</b>	
<b>Personnel Supporting Installed Base</b>		
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..
<b>Subtotal Personnel</b>	<b>\$16,000,000</b>	
<b>Total Installed Based Support Cost</b>	<b>\$32,000,000</b>	



# 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



# Current Status and Future Plans

## NCAWARE:

- Implemented in all 100 counties February 4, 2014. Recent change, May 20, to easily filter search screens by law enforcement officer's status, active or inactive. For citations we improved road entry fields to prefill the road's name based on location.

## eCITATION:

- Project initiated to review options to replace eCITATION (originally system was a CJIN project). Currently this system is on a unsupported platform and needs to be moved to a newer platform.

## MVP:

- MVP provides a audio/video software solution to LEAs and Magistrates, allowing them to perform initial appearance proceedings and process search warrants via video technology. This technology has been implemented in 30 counties.

# Current Status and Future Directions

## CCIS-CC:

- Implementing on June 16 the next phase in replacing ACIS. This release includes entering all dispositions in CCIS-CC and turning off this feature in ACIS as well as replacing CourtFlow functionality.

## eFiling:

- Implemented Domestic Violence eFiling in Alamance County in June 2013.
- Implemented VCAP integration for Pilot counties for Civil Superior and Foreclosure cases in May 2014.
- Planning for Domestic Violence eFiling in Wake County in 3<sup>rd</sup> Quarter 2014. Also, the domestic violence protective order will be available to law enforcement via NCAWARE.



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# Questions and Comments

Thank You

