



NORTH CAROLINA
ADMINISTRATIVE OFFICE
of the COURTS

Supplementary Information on Court Technology

Provided to the House Committee on Judicial Efficiency and Effective
Administration of Justice

January 23, 2014

North Carolina Administrative Office of the Courts



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Nearly 50 years have passed since the enactment of the Judicial Department Act of 1965,¹ which provided the legislation necessary to implement the adoption of a constitutional amendment by the people of North Carolina in 1962. This amendment required the establishment of a unified court system under the chief justice of the Supreme Court of North Carolina for purposes of both budget and management. This crowning piece of legislation implemented many of the elements of “a unified judicial system,” as had been advocated by Roscoe Pound and the American Bar Association since the early 1900s and North Carolina court reformers since 1955. These elements include the following:

- Consolidation of a multiplicity of lower courts into a two-tier trial court system
- Centralization of judicial administration for the state’s courts
- Centralized rule-making authority
- State funding of the court system
- State-level budgeting of state funds for court expenses

The state was rightly proud of its new unified court system. The consolidation of hundreds of local courts inferior to the superior courts into a new district court division and the establishment of the North Carolina Administrative Office of the Courts (NCAOC) were two of the greatest changes to the system.

Data Collection and the Rise of Technology

The push for unification was grounded in a goal of improvement in the performance and efficiency of the courts. The members of the North Carolina General Assembly understood the need for data to determine the effectiveness of the courts. Even in 1965, the first duty they set out for the director of the Administrative Office of the Courts was to “collect and compile statistical data and other information on the judicial and financial operation of the courts and on the operation of other offices directly related to and serving the courts.”²

For years, that data collection effort was entirely manual. Before 1976, data were collected by clerks of superior court and sent in monthly or quarterly. In 1976, a revised system of manual reporting improved data collection, with clerks for the first time reporting the case number of cases filed in the trial courts, along with the date of filing and disposition. Information was entered on reporting forms daily and then mailed each week to the NCAOC, where it was keyed

¹ S.L. 1965-310.

² G.S. 7A-343(1).

on magnetic computer tape and sent to the State Department of Administration's Computer Center to be "processed."

In that same year, the NCAOC received federal Law Enforcement Assistance Administration (LEAA) funding to begin an effort to develop a "complete electronic data information system."³ That effort took many years, with only LEAA funding to support the project for the first several years. In the meantime, the manual data collection continued.

By 1978, a separate "Systems Division" had been established within the NCAOC. It had the responsibility to oversee the development of the automated information system, as well as handle the data entry and electronic processing of the data the clerks mailed in weekly. By 1979, NCAOC had three Harris mini-computers and was preparing to implement the "criminal component" of the court information system in some pilot counties. In 1979-80, the Systems Division became the "Information Services" Division. By then, four pilot counties were reporting criminal case data through the new information system. No new LEAA funds were received after 1979-80.

In its 1982-83 Annual Report,⁴ the NCAOC reported for the first time a separate line item for Information Services expenditures – a total of \$1.3 million. Clerks were still mailing in their weekly reports. The amount the NCAOC expended on Information Services varied sharply in the following years, depending on appropriations from the General Assembly.

Funding levels were uncertain from year to year, but with a doubling of investment to almost \$10 million from FY 1988 – 89 to FY 1989 – 90, the NCAOC could finally report that 99 counties were on the criminal module, and that all 100 counties were on the infraction module of the NCAOC's Court Information System, as well as on a basic civil indexing system called TCIS.⁵ For these case types, data collection was fully automated.

NCAOC Strategic Plan and Architecture

In the mid-1990s, several reports and studies pointed to the need for technology modernization: the April 1995 Criminal Justice Information Network Study, the 1996 Maddox and Ferguson Report,⁶ and the December 1996 report of the Futures Commission.⁷ The Futures Commission highlighted the need for a statewide technology plan and consistent funding from the General Assembly to modernize court technology.

³ *North Carolina Courts: 1976 – Annual Report of the Administrative Office of the Courts.*

⁴ *North Carolina Courts: 1982-83 – Annual Report of the Administrative Office of the Courts.*

⁵ *North Carolina Courts: 1989-90 – Annual Report of the Administrative Office of the Courts.*

⁶ Administrative Office of the Courts, *Information Systems Planning Sessions*; August–September 1996.

⁷ Commission for the Future of Justice and the Courts in North Carolina, *Without Favor, Denial or Delay: A Court System for the 21st Century*; December 1996.



Following these recommendations, in 1998, the General Assembly appropriated funds for the NCAOC to engage an external consultant to develop a strategic, five-year information technology plan. In early 1999, as the result of a competitive bid process, the NCAOC awarded a contract to the GartnerGroup for assistance in the plan's development.

Gartner Report. The resulting *Strategic Information Systems and Technology Plan* was published in December 1999. A companion document laid out NCAOC's new technical architecture, which was approved by the Information Resources Management Commission (IRMC) and endorsed as a model for state government.⁸ The new architecture called for using the OS390 as a central server, COBOL components and Java, a DB2 database, and a browser-based presentation.

Within the plan, several strategic goals were set out:

- Maintain stable and responsive information systems that are reliable and continuously available, even in the midst of change
- Comply with state and federal statutory mandates
- Implement a uniform technical architecture that is consistent with IRMC's architecture guidelines
- Modernize the infrastructure and applications
- Provide adequate training and support to users
- Use new kinds of technology to streamline the courts and improve and speed up processes
- Provide universal access to information, along with reporting and decision support tools, to the users in the court system
- Provide effective means of electronic communication that court system personnel can use to communicate internally and externally
- Integrate systems with other state agencies, such as the State Highway Patrol, Division of Motor Vehicles, and the Department of Health and Human Services
- Communicate and provide access to the community – both the legal community that does business with the courts and the public at large
- Control the costs of the technology and measure the benefits

Reflecting the commitment of NCAOC's executive leadership to implementation of the strategic plan and the modernization of infrastructure and applications, NCAOC hired its first ever CIO in May 1999. Following issuance of the plan, NCAOC also reorganized its Court Management and Information Services Division into two divisions – Technology Services and Court Services – thus separating the technology support and user support (i.e., training) functions, in alignment with Gartner's "best practices." Starting with infrastructure issues, the NCAOC immediately began implementing the recommendations of the strategic plan and technical architecture.

⁸ GartnerGroup, *Technical Architecture*; August 11, 1999.

In January 2001, the GartnerGroup completed an assessment of NCAOC's progress to-date. Gartner reported:

"The AOC is tracking to the Strategic Information Systems and Technology Plan, and it is paying off."

"The AOC has made a quantum leap forward in the last year, and now must sustain the momentum."⁹

Gartner found that organizational structure and management practices had improved at all levels and that applications development was proceeding according to the plan. With a generous expansion budget appropriation in FY 2000–2001, the NCAOC was able to replace some obsolete equipment, hire new staff, and emphasize staff training.

Since that time, the NCAOC has completed or is currently working on many noteworthy projects, all making progress toward a more modern and integrated information technology environment, most with web-based applications that are user friendly:

- eCITATION® – a statewide system that allows law enforcement officers to create an electronic citation, schedule court dates, produce a copy of the citation for the defendant, and electronically file the citations to the Automated Criminal/Infractions System (ACIS).
- NCAWARE – a statewide warrant repository that provides law enforcement officers and court officials with real-time web-based access to current and historical criminal processes and defendant information. Now implemented in 99 counties, it will be statewide by February 7, 2014.
- CCIS-DA (Criminal Court Information System – District Attorney) – a statewide case management computer system for district attorneys.
- DAS (Discovery Automation System) – a system that provides electronic access to open discovery of all evidence in felony cases and tracks its disclosure to the defense.
- eFiling – a system to allow attorneys to file cases and pay any associated filing fees online for civil superior and special proceedings foreclosure cases. After being implemented in three counties, eFiling was put on hold due to budget constraints.
- payNCticket® – a system to allow citizens to make online payments via credit or debit card for most waivable NC traffic citations.
- Credit Card Payments – a system to allow case fines and fees to be paid via credit card at the courthouse (implemented in six pilot counties by the end of 2013).
- Special Proceedings Confidential (SPC/NICS) – the system that allows the clerks of superior court to capture data for involuntary commitment and the determination to remove mental health commitment bar and transmit the data to the National Instant Criminal Background Check System.

⁹ GartnerGroup, *Progress Review: Strategic Information Systems and Technology Plan*, January 23, 2001



- J Wise – a browser-based application that provides recordkeeping for juvenile clerks and allows staff from family court, family drug treatment court, and the Guardian ad Litem program to perform cases management tasks.
- NCAOC Intranet – the statewide intranet for Judicial Branch users.
- VoIP – replacement of the telephone system statewide with modern Voice over Internet Protocol.
- Microsoft Outlook – email and calendaring upgrade implemented statewide.
- Network Metro Ethernet Technology – network migration that increased bandwidth tenfold, with no additional recurring costs.
- Magistrate Video Project – currently implemented in 22 counties, this project deploys video equipment to allow video communications between magistrates and law enforcement officers for initial appearance and warrants, thus eliminating travel time to the magistrate’s office.
- Disaster recovery (DR) – implementation of disaster recovery plan and execution of 11 DR tests.

Compared to those early days when an “electronic data processing system” was mostly a dream, the NCAOC’s Technology Services Division (TSD) now supports 53 different major applications and the phones, computers, data access, and data storage for the more than 6,700 court officials and staff in the Judicial Branch.¹⁰ It also serves nearly 33,000 law enforcement officers, who use NCAWARE, ACIS, VCAP (Civil Case Processing System), and eCITATION. Some of the State Highway Patrol’s applications are hosted on the NCAOC mainframe. In addition, the NCAOC has 70 data interfaces with external federal, state, and local agencies and businesses.¹¹ With NCAOC’s enterprise servers, 99.7% of court technology system applications are available 24/7/365. The NCAOC also has an additional 187 minor or internal technical applications that it supports.

Challenges of a Unified Court System

While a unified court system was undoubtedly a monumental step forward for the Judicial Branch, it does pose some technology challenges. North Carolina’s commitment to a unified court system obligates the NCAOC to provide consistent technology for court users and the public in 260 locations throughout the state’s 100 counties. With the continued onslaught of the information age and the growing dependence on information and data, the NCAOC’s “obligation” becomes an imperative.

¹⁰ See “Technology Services Division: Applications Development – Major Deliverables by Calendar Year” and “Technology Services Division: Infrastructure – Major Deliverables by Calendar Year” for summaries of the major accomplishments of AOC’s Technology Services Division over the last 11 years.

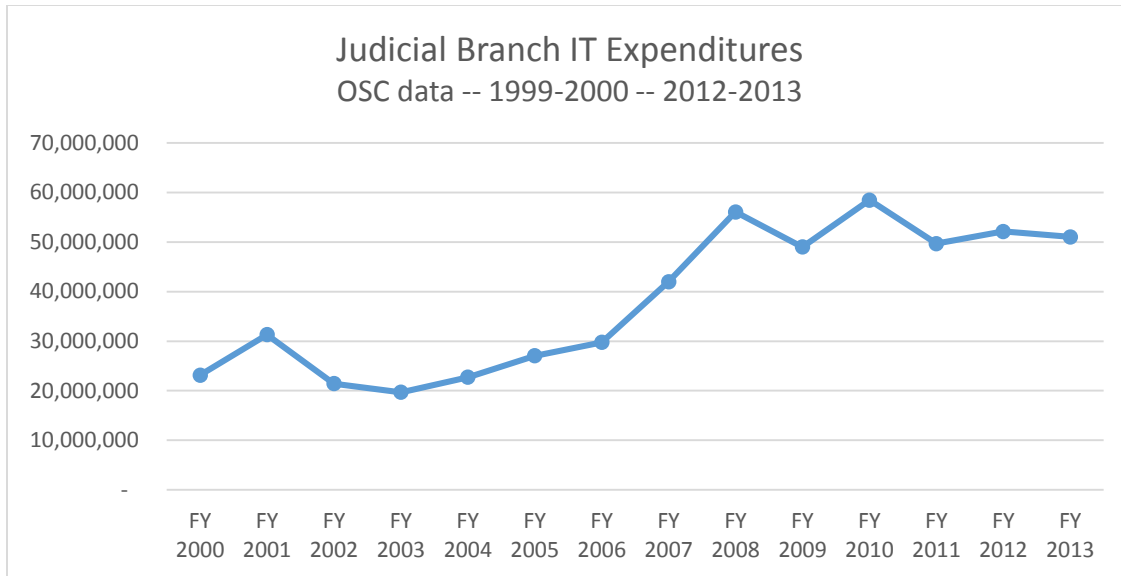
¹¹ See “North Carolina non-criminal court information systems: Interfaces to other government agency and business systems” and “North Carolina criminal court information systems: Interfaces to other government agencies and business systems.”

While unification has many advantages in terms of providing consistent processes in the delivery of justice, it also contributes to great complexity in maintaining reliable, secure, statewide networks and services processing millions of cases annually on a unified basis. As long as things are working well, providing uniform and reliable technology to the 260 locations can greatly further the goal of providing consistent and timely justice. Everyone throughout the judicial system can use similar tools and have access to the same information. However, one consequence is that with 260 locations, the technology infrastructure has many potential points of failure that can disrupt the NCAOC's ability to achieve its goals. Therefore, unification has introduced significant overhead (although justifiably so) in support of the ideal of improving the performance and efficiency of the courts throughout the state, with uniform access to justice for all.

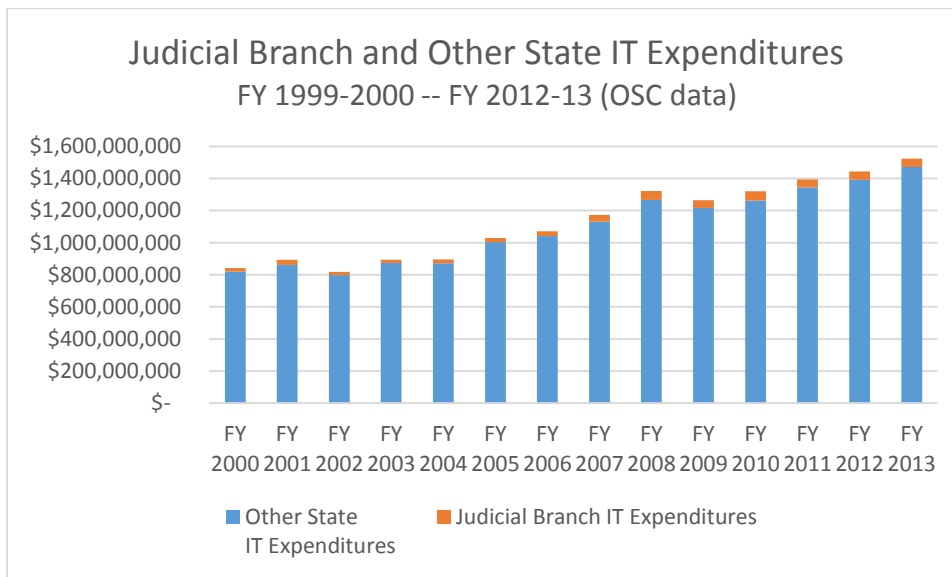
Other IT Challenges

Funding. In every evaluation completed and every report that has been written over the last three decades, the issue of lack of funding comes up without fail. In a message to the General Assembly on April 19, 1999, Chief Justice Burley Mitchell said, "The need for better computer technology for the courts continues to be a difficult and alarming problem. I am convinced that the single most important resource for improving the operation and management of the courts is effective computer technology." The December 1999 Gartner report stated, "IT in the court system is adequately funded and staffed for a late 1980s mainframe-based operation. Funding is barely adequate for the court system today, at this point in its transition. . . . [M]odernization cannot be achieved without an increase in resources."

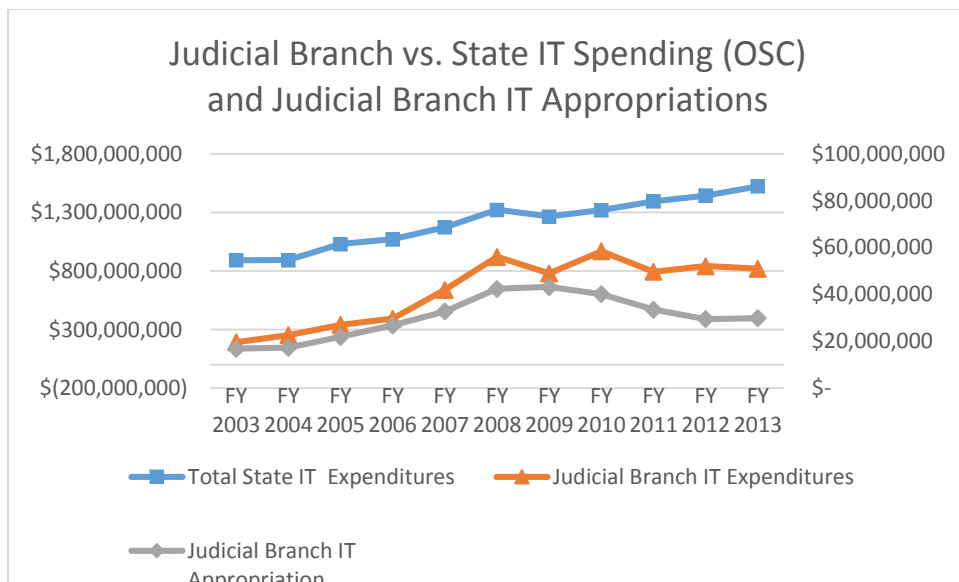
After an increase in IT appropriations the following fiscal year (2000–01), the funds available for IT expenditures then dropped and increased slowly but steadily through FY 2007-08. At that time, funding became more unpredictable from year to year, as the state and the courts faced the largest economic downturn since the Great Depression. Technology spending sharply contracted and has since been in slight decline. New investments were curtailed, and funds are being used to maintain current services and infrastructure.



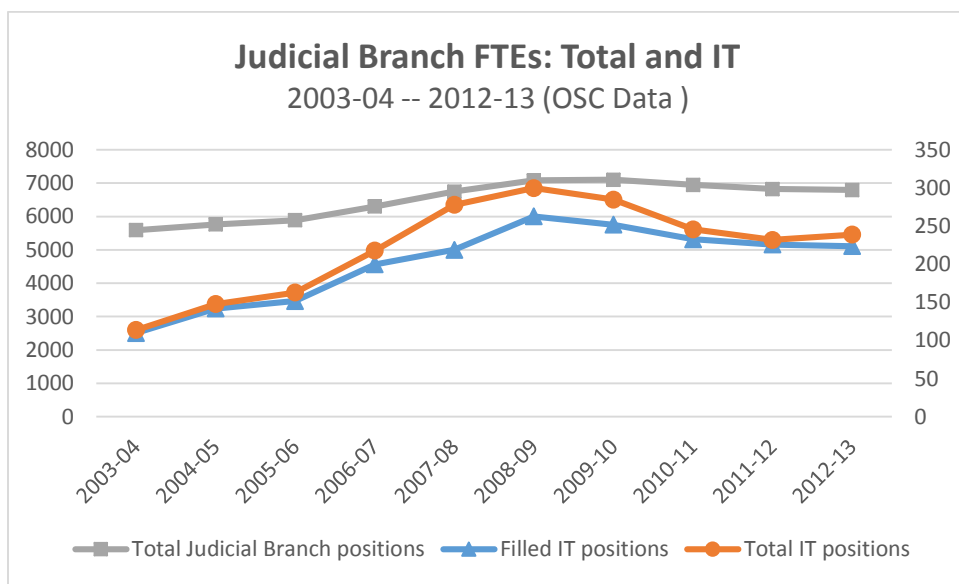
The Judicial Branch's IT budget is a fraction of the IT budget for the remainder of the state.



In the past five years, as demand for more technology has increased exponentially, the Judicial Branch's IT budget has actually decreased, while the IT budget for the state as a whole has increased. The Judicial Branch's certified General Fund IT budget is \$29.9 million in FY 2012 – 13, down from \$43.2 million in FY 2008 – 09.



The pullback from a prior trend of increasing investment is shown in the funded versus filled technology positions. The following chart illustrates the relative decreases, since FY 2008–09, in both filled IT positions and total IT positions, compared to the total number of positions in the Judicial Branch:



The figures in the four charts above are based on data from the Office of State Controller, which includes IT expenditures and positions regardless of funding source: appropriations, receipts, grants, special funds, and the Office of Indigent Defense Services (which has a different budget code than that for the NCAOC). The actual figures for IT positions within the NCAOC are lower.

Industry estimates suggest that about 70% of technology budgets in the government sector go toward “running the business.” However, an analysis by NCAOC shows that a full 80% of NCAOC’s IT budget is dedicated to supporting and maintaining the applications and infrastructure that the NCAOC already has in place. That leaves only 20% of the IT budget for enhancements and new projects.

New technologies and qualified staff. As the NCAOC works to modernize its technology, employees with new skill sets are needed. Unless the economy is in a downturn, the NCAOC finds it difficult to attract employees with specialized skill sets, since state salaries are not competitive with those in the business world. With the current cuts to information technology, funds for training NCAOC’s current IT staff are not available, which makes it difficult to cross-train current NCAOC staff.

Unforeseen projects and resource management. With its staff stretched so thin, the NCAOC has to reshuffle its priorities to handle unforeseen projects that arise due to new legislation or initiatives at the federal or state level. While the intent behind the legislation is laudatory (e.g., the Justice Reinvestment Act, the credit card payment project, CJLEADS, eFiling for Alamance domestic violence victims, etc.), the new technology requirements, if unfunded, mean that staff have to be shifted from other projects, either stopping them entirely or slowing them down, which results in the disappointment and dissatisfaction of one or more of the Judicial Branch’s diverse user groups. These are valuable projects, but they disrupt efforts to staff other long-term projects.

Prioritization of projects. The NCAOC supports the technology needs of many different types of court officials, staff, and Judicial Branch agencies:

- Clerks, deputy clerks, and assistant clerks
- District attorneys and assistant district attorneys
- Superior court and district court judges
- Magistrates
- Trial court administrators
- Court reporters
- All NCAOC divisions
- Judicial Branch support staff
- The Judicial Standards Commission
- Conference of District Attorneys
- Dispute Resolution Commission

- Conference of Clerks of Superior Court
- Innocence Inquiry Commission
- Chief Justice’s Commission on Professionalism
- Sentencing and Policy Advisory Commission

For the appellate courts and the Office of Indigent Defense (IDS), the NCAOC hosts the IT infrastructure they use – desktops, printers, network, phones, servers, and storage – as well as supports the case management system for IDS.

Each of these diverse groups of supported court officials has its own set of top-priority desires, creating competing stakeholder demands that are difficult to prioritize when it is not possible to attend to each group’s requirements at the same time. Even within one group of court officials, one district may request or require different features in an application or different handling of a system. NCAOC recognizes the need to develop more inclusive mechanisms to manage these priorities.

Geographic Factors. The geographic dispersion of Judicial Branch users requires network connectivity to the 260 locations that TSD supports. Each location requires a set of network components to connect it to the North Carolina Judicial Center. The costs for these components are not one-time costs. In order to provide the service to each location, there are monthly data charges for each circuit, people that monitor the circuits and components, annual maintenance, equipment replacement, etc. In addition, the same can be said for PCs on each employee’s desk, as well as many other facets of technology.

Addressing These Challenges

In the face of these ongoing challenges, the NCAOC has taken steps, both in the past and in the present, to address some of these issues.

Court Information Technology Fund. In 1997, the General Assembly authorized the NCAOC to “contract with third parties to provide remote electronic access to court information.”¹² Since the NCAOC incurred expenses in providing data to third parties – expenses that would otherwise not have been reimbursed if any proceeds from the contracts went to the General Fund – the NCAOC sought assistance from the General Assembly. Chief Justice Mitchell, in a message to the General Assembly in 1999, stressed the importance of “dependable recurring funding” to implement the technology plan being produced by the independent consultant authorized by the General Assembly in 1998. Later in 1999, the General Assembly created the Court Information Technology fund within the Judicial Department.¹³ As stated in the latest version of G.S. 7A-343.2, this nonreverting fund “shall be used to supplement funds otherwise

¹² S.L. 1997-199; see G.S. 7A-109(d)

¹³ S.L. 1999-237, section 17.15.(b)

available to the Judicial Department for court information technology and office automation needs.”

Once the “Remote Public Access” program was up and running, the infusion of funds on a year-to-year basis was a great help to the NCAOC. While the amount brought in varied from year to year, the NCAOC could count on the fact that it would receive at least some additional funds for pressing technology needs.

In 2008, the General Assembly established a state court facility fee for the “upgrade, maintenance, and operation of the judicial and county courthouse phone systems,” with the fee credited to the Court Information Technology Fund.¹⁴ At first the fee was one dollar for every criminal, civil, special proceedings, and estates case. The fee was raised to three dollars in 2009 and four dollars in 2010.¹⁵ This fund has helped NCAOC to support and upgrade the more than 9,300 telephones located in court offices across the state.

In these tight budget times, the Judicial Branch has become reliant on this crucial funding for information technology. In fiscal year (FY) 2012–13, more than 20% of the Judicial Branch’s IT expenditures came from the Court Information Technology Fund.

IT Governance Committee of the State Judicial Council. Created in 1999 by the General Assembly, the State Judicial Council is an advisory and oversight body for the Judicial Branch of Government, chaired by the Chief Justice of the Supreme Court and consisting of representatives from every component of the court system, the bar, and public, non-attorney members.¹⁶ Its various specific and general duties (in G.S. 7A-409.1) encompass studying and monitoring the operations of the court system and identifying areas for improvement.

At the State Judicial Council’s meeting on December 6, 2013, a special IT Governance Committee for the Judicial Branch was appointed to recommend strategic direction for Judicial Branch technology. After reviewing principles of IT governance, the committee is to recommend a high-level governance structure to ensure that the Judicial Branch’s IT funds are used in the most efficient and effective way to optimize investment outcomes and enable the Judicial Branch to achieve its goals with the help of technology. The committee will discuss the evaluation, selection, prioritization, and funding of the various projects desired by the many Judicial Branch stakeholders and make recommendations to the chief justice and the NCAOC director. With competing priorities and limited funds, the input of this committee, with representation from every group of court officials, will be invaluable in helping the NCAOC to balance the investment portfolio of technology.

¹⁴ S.L. 2008-107, section 29.8

¹⁵ S.L. 2009-451, section 15.20

¹⁶ S.L. 1999-390, section 1. See G.S. 7A-409.

ATTACHMENTS

North Carolina Administrative Office of the Courts, *Technology Services Division: Applications Development – Major Deliverables by Calendar Year*; December 31, 2013.

NCAOC, *Technology Services Division: Infrastructure – Major Deliverables by Calendar Year*; December 31, 2013.

NCAOC, *North Carolina non-criminal court information systems: Interfaces to other government agency and business systems*; January 2014

NCAOC, *North Carolina criminal court information systems: Interfaces to other government agencies and business systems*; January 2014.

NCAOC, *Technology Services*, December 31, 2013.

