NC CONNECT



Report to the

Joint Legislative Oversight Committee on Information Technology Fiscal Research

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Legislative Request

This report is submitted pursuant to Session Law 2014-100, s. 15.7(b) which directed that "by February 1, 2015, and more frequently as requested, the Office of the State Chief Information Officer shall report to the Joint Legislative Oversight Committee on Information Technology and the Fiscal Research Division on NC Connect activities including providing an update on how NC Broadband in the Department of Commerce has been incorporated into NC Connect."

Background and Purpose of Effort

In early 2014, informal discussions began between the Office of Information Technology Services (OITS) and Cabinet agencies about how to better align the State's broadband and digital infrastructure efforts for increased efficiency. This initiative, under the working name "NC Connect", organized State-level broadband efforts under the Office of the State Chief Information Officer. These changes were made to provide for better coordination and resource sharing around this technology infrastructure. This team could then serve as a foundation to assist in the development and implementation of Governor McCrory's digital infrastructure strategies.

This initiative is a priority because broadband technology provides a critical foundation for public safety, economic development, education and efficiency for our state, with rapidly growing demand by businesses, citizens and government. The term "broadband" refers to a range of technologies that allow for fast, high capacity data transmission that provides access to a variety of services and resources, including the Internet.

Today, the State of North Carolina is directly and indirectly involved in the development, management, and operation of broadband networks through several different departments, agencies, and initiatives. NC Broadband is one of the primary initiatives under this consolidated effort. Another prominent initiative is FirstNet, previously in the Department of Public Safety (DPS).

The NC Connect alignment consolidates the foundational pieces of the NC Broadband effort and the FirstNet initiative under the Office of the State CIO (SCIO). The NC Connect team currently works with broadband providers and agencies to make the State's broadband infrastructure more effective and more efficient, and to increase capabilities and utilization in order to meet the Governor's infrastructure goals.

Some of those areas that have already been identified as opportunities for improved coordination include:

Office of Information Technology Services

- Oversight of the State network, strategic sourcing for State network
- Relationship to connectivity for schools/e-Rate, and to community anchor institutions
- NC 911 Board

Department of Commerce

• Economic development efforts

- Rural Infrastructure Program
- Marketing of State assets

Department of Public Safety

• Coordination of the FirstNet initiative

Department of Public Instruction

- School Connectivity
- e-Rate

Department of Transportation

- Rights-of-Way
- State fiber

Department of Administration

• Towers/State Property

The centralized and streamlined NC Connect initiative provides the opportunity to work across agencies, break down silos, and identify the needs of broadband infrastructure development as part of the missions of each agency.

Alignment Activities in 2014

In May 2014, the Office of the State Chief Information Officer, the Department of Commerce, and the Department of Public Safety announced the effort to align North Carolina's broadband efforts for improved sharing of resources in support of Governor McCrory's infrastructure and efficiency strategy by bringing together the NC Broadband team within NCDOC and the FirstNet team in the DPS together under the Office of the State CIO.

Office of the State CIO

In support of the alignment effort, a Memorandum of Agreement (MOA) between NCDOC and OITS was developed and then executed on December 1, 2014 to coordinate broadband efforts between NCDOC and OITS. The MOA calls for the Office of the State CIO to house and staff the broadband staff moving forward, with the effort physically located at NCDOC (new Education Building) in order to maintain interagency collaboration.

In summer 2014, the State appropriated \$250,000 to NCDOC in non-recurring funds to allow for continuation of the NC Broadband program through June 30, 2015. Under the MOA those funds are to be contracted out to OITS to provide staff to continue the broadband efforts through the fiscal year. OITS agreed to staff a small broadband team with a focus on broadband planning for local communities, specifically for deployment, utilization and adoption, with a focus on economic development and serving rural areas.

The broadband team also provides subject matter expertise in the areas of broadband planning with local communities, broadband technical expertise, and broadband as related to economic development. The team

also works with the NCDOC Rural Division as needed to provide technical assistance on any broadband infrastructure grants awarded by NCDOC. OITS agreed to collaborate closely with NCDOC, particularly in areas such as digital infrastructure policy and digital infrastructure as it relates to economic development planning, processes and marketing. Under the Agreement, relevant NC Broadband data, databases and web applications will be transferred to OITS for continued utilization.

FirstNet NC

In July 2014, the State and Local Implementation Grant Program (SLIGP), a federal grant from the National Telecommunications and Information Administration (NTIA) awarded to North Carolina was officially transferred from NCDPS to OITS. The grant was awarded for planning efforts around the development of a national public safety broadband network and also provides funding for education, outreach and planning within North Carolina. The FirstNet broadband network will provide the opportunity for data delivery on a dedicated 4G LTE for emergency responders and allow for interoperability between local, state, and federal response agencies. Since moving under OITS, the former director retired and a new FirstNet director joined the OITS team in October 2014. The current FirstNet director presented to the Joint Legislative Oversight Committee on Information Technology on December 18th, 2014 with an update on the status and details surrounding FirstNet in North Carolina. The staff is currently preparing for the state consultation with the FirstNet Authority in April 2015. The State and Local Implementation Planning Grant runs through July 2016.

NC Broadband

NC Broadband has been a time-limited division within NCDOC, created in January 2012 to carry out the work of the State Broadband Initiative grant from the National Telecommunications and Information Administration (NTIA), with a team of approximately ten staff members at full operation. The work under NC Broadband has included efforts such as: broadband planning and coordination with other State agencies; data collection and mapping of broadband assets and coverage areas in NC; development of public private partnerships to encourage additional deployment; and regional work with local counties on broadband planning, utilization and economic development.

The federal grant, supported by matching funds from the Golden LEAF Foundation, has an end date of January 31, 2015. (The State budget references a December 31, 2014 end date for the federal grant work, but this work has been continued through January 31, 2015 to fully leverage the federal dollars available and to complete its grant deliverables and transition work efforts under OITS).

Current Status, January-February 2015

With the federal NC Broadband work at NCDOC to be completed by January 31, 2015, the continuing broadband work will be fully transitioned to OITS in early February. As such, the alignment effort will be fully staffed and underway in February 2015. The early working name for this effort is "NC Connect." A new division name that best reflects the joint work efforts will be determined soon.

In early January 2015, a Director was recruited (filling a recently-vacated position at OITS) and has taken the leadership role for the new team. The Director reports directly to the State CIO, with the FirstNet and NC Broadband teams reporting to the Director. While some staffing is still being finalized, the positions currently being set up by Human Resources include 11 FTES: four positions split-funded between



OITS/FirstNet/broadband, three solely FirstNet positions, and four broadband positions. The division structure aligns the public safety and broadband work to leverage knowledge and expertise between these two teams and meet a common mission. All 11 positions referenced above are filled or expected to be filled, by the end of February.

Moving Forward

North Carolina became known as the "good roads state" during the 20th century by building the physical infrastructure needed to connect our cities and towns. Last year the State released the "25 Year *Transportation Vision for North Carolina: Mapping our Future*", a plan for our State's roads and transportation infrastructure for the coming decades. The State has a similarly important mission regarding the need to connect our citizens through the digital infrastructure of the 21st century. Broadband infrastructure provides a critical foundation for education, economic development and efficiency throughout our state, with a rapidly growing demand for services from businesses, citizens, schools and government. Connectivity is essential in order for communities to thrive in today's global environment—providing entrepreneurs, small businesses and large corporations with the tools necessary to compete in local, state and national markets. Access to broadband, coupled with effective utilization, helps grow a digitally-empowered workforce, and provides citizens with more affordable and efficient access to education, healthcare, public safety and government services.

North Carolina has many technology assets to leverage and is in a position to become a leader in digital infrastructure. The State has more than 100 broadband providers serving urban and rural areas with a combination of technology types including DSL, cable, fiber, fixed wireless, mobile, satellite. Through the North Carolina Research and Education Network (NCREN), operated by MCNC, the State's k-12 school systems have "all you can eat" bandwidth. MCNC's open access fiber ring provides broadband access through 82 counties with speeds that scale up to 100 Gigabits per second. North Carolina has next-generation fiber technology running to homes and businesses in many of the most rural counties thanks to some of the rural telephone co-ops. Broadband providers are competing to deploy fiber to homes in several of North Carolina's large urban centers. Mobile providers are competing daily to significantly expand coverage across the state, including 4G networks. There are significant partnership opportunities with other utility providers such as rural electric co-ops.

Although our existing infrastructure is substantial, North Carolina, like other states, has pockets of unserved and underserved areas. The need and demand for faster speeds and capacity is growing and will continue to grow rapidly. The State must continue to develop partnerships to fully leverage its assets and ensure that North Carolina has the infrastructure it will need in the future. This work requires partnerships at all levels, including federal, State, local government, community and the private sector.

The alignment and focus of the new consolidated effort will support the State's commitment to establishing a Biennium Strategy for broadband infrastructure. Through strong private sector broadband providers, the commitment of many of North Carolina's local communities to broadband growth, unique middle-mile assets, State and local partners, and continued focus on education and economic competitiveness, North Carolina is well positioned to leverage a digital future.