Tracy Doaks
Secretary, NC Dept of IT and State CIO

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Please ask questions using the Q&A function

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CROWDSTRIKE

NCTECH Association
Data Division Update

John Correllus
Chief Data Officer
Organizational Focus

Enterprise Data Governance
Enterprise Data Management
Enterprise Entity Resolution
Enterprise Geospatial
Analytics and Visualizations

Criminal Justice and Child Safety
Financial Transparency, Fraud and Compliance
Longitudinal and Performance
Healthcare

Incorporate data, information, knowledge across areas of focus
Data Division Key Priorities

- Expand the Health Information Exchange
- Modernize the Educational Longitudinal Data System
- Increase Use of Data and Analytics Across All Domain Areas
- Extend the Enterprise Entity Resolution Initiative
- Develop and Leverage Data as a Service (API’s)
Vision

Every North Carolinian should be able to access affordable, reliable high-speed internet anywhere, at any time.
How We Do What We Do

- State Broadband Plan
- Partnerships & Programs
- Technical Assistance/Community Playbook
- Data Collection, Analysis & Mapping
- Rural Grant Program
NC Broadband Availability and Quality Index
By Census Tract

'The Broadband Adoption Potential Index' is a compilation of eight indicators (see below for list) combined to create a holistic measure of broadband access in NC's counties. For more information about the methodology, purpose, and how to understand your county's score visit: www.ncbroadband.gov

Broadband Availability and Quality Index Indicators:
• Percent of the population with access to 25/3 Mbps broadband service
• Percent population with access to 100/20 Mbps broadband service
• Percent population with access to fiber
• Ratio of upload to download median advertised speeds
• Households per square mile
• Percent housing units built in 2010 or later
• Percent population with access to no providers
• Percent population with access to DSL only
The Broadband Adoption Potential Index' is a compilation of eleven indicators (see below for list) combined to create a holistic measure of county’s broadband adoption potential. For more information about the methodology, purpose, and how to understand your county’s score visit: www.ncbroadband.gov

Broadband Adoption Potential Index Indicators:
• Percent households with a DSL, cable or fiber-optic subscription
• Percent population ages 18 to 34
• Percent population age 25 or more with bachelor’s or more
• Percent households with children
• Percent workers age 16 and over working from home
• Percent population ages 65 or over
• Percent households with no internet access
• Percent households with no computing devices
• Percent population in poverty
• Percent noninstitutionalized population with a disability
• Percent households with limited English
The North Carolina Broadband Infrastructure Office, with the Friday Institute at NC State University, is conducting a five-minute survey* to gather data on internet connectivity from North Carolina farmers. The data will be used to inform research, policy and funding recommendations to assist communities where internet access is inadequate.
Federal and State Broadband Deployment Grant Awards
2015 to 2019

Underserved Census Blocks Reporting DSL Only, Satellite, or
Less Than 25 mb/s Download and 3 mb/s Upload Service
Enterprise Security & Risk Management

Maria Thompson
State Chief Risk Officer
# 2019 NC Reported Ransomware Attacks

<table>
<thead>
<tr>
<th>Date</th>
<th>Affected Entity</th>
<th>Ransomware Variant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mar 2019</td>
<td>Orange County (hit 3 times in 6 yrs)</td>
<td>Ryuk</td>
</tr>
<tr>
<td>Mar 2019</td>
<td>Pasquotank-Camden EMS</td>
<td>Unknown</td>
</tr>
<tr>
<td>Mar 2019</td>
<td>Robeson, NC</td>
<td>Ryuk</td>
</tr>
<tr>
<td>Apr 2019</td>
<td>City of Greenville</td>
<td>RobinHood</td>
</tr>
<tr>
<td>Jul 2019</td>
<td>Richmond Community College</td>
<td>Ryuk</td>
</tr>
<tr>
<td>Aug 2019</td>
<td>Lincoln County Sheriffs Off/911 (X2)</td>
<td>DopplePaymer</td>
</tr>
<tr>
<td>Sep 2019</td>
<td>Wildlife Commission</td>
<td>DopplePaymer</td>
</tr>
<tr>
<td>Oct 2019</td>
<td>NC State Bar</td>
<td>Neshta (dropper)</td>
</tr>
<tr>
<td>Oct 2019</td>
<td>Columbus Co School System (x17)</td>
<td>Ryuk</td>
</tr>
<tr>
<td>Oct 2019</td>
<td>ABC Board (x21)</td>
<td>Sodinokibi</td>
</tr>
<tr>
<td>Dec 2019</td>
<td>EBCI</td>
<td>Sodinokibi (Insider Threat)</td>
</tr>
</tbody>
</table>
# 2020 NC Reported Ransomware Attacks

<table>
<thead>
<tr>
<th>Date</th>
<th>Affected Entity</th>
<th>Ransomware Variant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feb 2020</td>
<td>Duplin County</td>
<td>Ryuk</td>
</tr>
<tr>
<td>Mar 2020</td>
<td>Durham County</td>
<td>Ryuk</td>
</tr>
<tr>
<td>Mar 2020</td>
<td>City of Durham</td>
<td>Ryuk</td>
</tr>
<tr>
<td>Mar 2020</td>
<td>Burke K-12 X (24)</td>
<td>AKO</td>
</tr>
<tr>
<td>Mar 2020</td>
<td>Alleghany K-12</td>
<td>Phobos</td>
</tr>
<tr>
<td>Mar 2020</td>
<td>City of Shelby</td>
<td>Ryuk</td>
</tr>
<tr>
<td>Mar 2020</td>
<td>Mitchell K-12</td>
<td>Snatch</td>
</tr>
</tbody>
</table>
Cyber Incident Trends

- Organizations do not have an accurate network topology
- Poor Network Security configuration
- Security devices are misconfigured
- End of life equipment/software still being utilized
- Security logs only extend back a short time period
- Focus on availability more than security
- Poor Patch Management
- Risk Transference and Cloud services
- Poor Cyber Hygiene
- Lack of cyber funding and prioritization
Legislative Updates

House Bill 217

§ 143B-1379. State agency cooperation and training; liaisons; county and municipal government reporting.

✓ Updates the definition of what is reportable and adds the term and definition of “Significant cybersecurity incidents”
✓ Adds to the liaisons tasks to provide corrective action plans
✓ Includes Privacy as a requirement and not just Security
✓ Excludes military personnel identified as security liaisons from requiring background investigations in lieu of security clearances
✓ Legislatively mandates cyber awareness training and reporting (includes contractors)
✓ Requires that county and municipal government report cybersecurity incidents.
✓ Further clarify that cyber incident information shared to DIT will be protected under G.S. 132-6.1(c)
✓ Encourages private sector entities to report cyber incidents

Link to report incidents: https://it.nc.gov/resources/cybersecurity-risk-management/statewide-cybersecurity-incident-report-form
Vendor Risk Management – Security Requirements

Vendor Readiness Assessment Report

- Identifies key security requirements that need to be met for cloud hosted or onsite hosted applications
- Reduces confusion on which State security policies apply
- Quick way to identify gaps in applications

3\textsuperscript{rd} Party Security Rating Service

3\textsuperscript{rd} Party Attestations
- SOC 2 Type 2
- FedRAMP
- ISO 27001
- HITRUST
We Want to Partner with You
Combating Cyber incidents is a Team Effort
Solutions Delivery

Glenn Poplawski
State Solutions Director
Enabling Digital Transformation

Benefits for Citizens

• Simpler, faster, more intuitive experiences with state government.
• Transparent, open, accessible government
• Security and privacy

Benefits for State Government

• Cost savings and efficiencies
• Decreased call center volume and fewer office visits
• Engaged, productive staff
• Better positioned for workforce of the future

Learn more: DIT IT Plan: https://it.nc.gov/roadmap
Digital Technology Ecosystem

**AI Layer** - Now + Other tools TBD*

**Integration Layer** - Now + boomi

**Cloud Service Broker**

- **Virtual Server**
  - Leverage existing languages and tools

- **Containers**
  - Maximum portability

- **Platform as a Service**
  - Extensive runtime options

- **Serverless**
  - Maximum speed with serverless apps

*Not currently implemented but capability needed

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**ID/Access Management**

- Identity and Access Management
- Security

**Analytics**

- BI/Analytics
- Large Scale BI/Analytics

**Data Services**

- Data Services
- GIS
- Social Media Analytics

**Digital Commons**

- Digital Commons

**App Services**

- Compute Models

**Platforms**

- Cloud Service Broker

**Common Interoperable Framework**

- Analytic/Data Services
- App Services
- Transactional/iBPM
- IA/RPA/ML/NLP/Chatbot
- iPaaS/Data Integration/iBPM

**Security**

- Security
- Identity/Access Management
- Network Security Policy Mgmt
- Application Delivery
- Security Ratings

**Identity/Access Services**

- Mobile Device Mgmt
- Endpoint Mgmt/Security
- Anti-Spam Email Filtering
- Data Loss Prevention
- AV/Cloud Access Security Broker
- Security Info & Event Management
- Vulnerability Management
- Threat Intelligence
- DDoS Defence
- IPS/IDS
- Network Security Policy Mgmt
- Application Delivery
- Security Ratings
Service Delivery

Susan Kellogg
Deputy State CIO & Chief Services Officer
COVID Support = Rapid Deployment

• Strong, on-going interest in cloud technology for rapid provisioning

• Improved speed to adoption

• Example: Multiple call centers stood up or grown in 2-3 weeks using AWS/3rd Party and current on-prem solutions

• Technology is not the limitation; Onboarding and training people is

• Seeing volumes beyond anything we have seen to-date
Introduction

Nate Denny
Legislative Liaison and Chief of Staff
Priorities

Tracy Doaks
Secretary and State CIO
VISION: A CULTURE OF INNOVATION AND OPERATIONAL EXCELLENCE

COLLABORATION BETWEEN STATE AND LOCAL GOVERNMENT
Forge strong partnerships with local governments and build awareness of available NCDIT resources, including IT procurement, shared services and cybersecurity tools.

DIGITAL TRANSFORMATION
Leverage digital technology to make government services more accessible and interactive to achieve better outcomes for our customers and residents.

CYBERSECURITY
Continue to be a leader in cybersecurity through a whole-of-state approach that protects the state, its residents and their data.

BROADBAND
Ensure all North Carolinians have access to an affordable high-speed internet connection anytime, anywhere.

WORKFORCE
Invest in our people to ensure we have the necessary skills to be agile and adapt to changing technology and business needs.

This investment also will allow us to recruit and retain talented people with a passion to innovate and serve.
NC Tech Government Affairs Update
May 21, 2020

I) Governor’s Executive Orders & Reopen Plans

II) COVID 19 Session  www.ncleg.gov

A) Policy bill (S 704)

- Postpones certain income tax payments to July 15 and waives interest on certain payments
- Provides unemployment compensation flexibility and gives employers a tax credit for 1st Q 2020
- Extends certain education deadlines and requirements
- Seeks more PPE, certain legal immunity, more telehealth, modifies regulations
- Provides regulatory flexibility including video notarization and extending DMV timelines
- Provides limited legal immunity for “essential businesses” and emergency response entities
- Outlines procedures for meetings of public bodies by remote, simultaneous communication

B) Appropriations bill (H 1043)  $1.6B (mostly federal)

Health care appropriations

- Funds to Duke, UNC-CH, ECU Brody, WFU, Campbell for vaccine and treatment research
- $50 M for PPE and other supplies for use by hospitals, senior living facilities, doctor’s offices, and the Division of Emergency Management
- $25 M to expand virus testing and contact tracing
- $65 M for rural hospitals, and $15 M each for teaching & general hospitals

Education appropriations

- $75 M for school breakfast and lunch programs
- $1 M for Wi-Fi routers in school buses, $11 M to for student mobile internet access points, $30 M to local school systems to buy computers and other electronic devices for students, $5 M to purchase computers and other devices for school personnel, and $3 M for non-digital remote instruction resources to students
- $4.5 M for cybersecurity at K-12 schools
- $70 M for supplemental summer learning programs for k-4 students
- $25 M for community colleges to enhance online learning et al
- $44 M for the UNC system for online learning et al
- $20 M for private colleges and universities for online learning
State and local government appropriations

- $70 M for state government operations, including prisons, IT costs for remote needs, and temporary staff to help the state unemployment office
- If allowed by federal policy, provides $300 M for NC DOT, $20 M for state agencies that have lost receipts due, and $150 M to replace local government lost revenues (if not already received it directly from federal government)

Health and social services appropriations

- $20 M to support local health departments, increase nursing capacity and the number of community health workers, and infection control in nursing homes
- $6 M for food banks
- $25 M for certain adult, family and group homes
- $50 M for health programs in rural, underserved, and minority communities
- $5 M for the NC Association of Free and Charitable Clinics
- $1.5 M to NC MedAssist to offset prescription costs for indigent or uninsured
- $5 M to the NC Community Health Centers Association to cover treatment costs
- $1.8 M to Old North State Med. Society for rural & African American communities
- $2.24 M for a monthly increase of $100 for each child living in foster care

Economic development appropriations

- $5 M to stimulate tourism
- $125 M for a small business loan program through the Golden Leaf Foundation, which is up to $50,000 per business. A similar effort has already distributed $15M.
- $9 M to the GREAT program to incent internet buildout

III) May 2020 GA Session

A) FY 2020

B) FY 2021 (begins 7-1-20)

- Senate $S bills (S 800-818)
- Tax bills (H 1079—sales tax, H 1080—Rev Laws/IRC)
- IT related (H 1071—SCI $$, H 1105—GREAT $30M, H 1122—broadband)
- Bill introduction deadline—May 26

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Matt Bales mbales@brookspierce.com
Secretary Tracy Doaks and the NC DIT Team