The e-NC Authority Update

March 2010
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Where Are We Now? NC

Internet Usage is Moving Faster than you Think…

Internet Penetration Demographic
Percentage of ALL North Carolina Households
That Have Home Internet Access

	1999	2002	2004	2008
Overall	36%	52%	59%	70%

During this period above, the proportion of all NC homes subscribing to Internet access has increased from 36 to 70 %. (Note: figures include all access speeds, including dial-up.) Nevertheless, while it is still far from universal, in less than a decade the Internet has become a common part of our everyday lives.

e-NC recommends aggressive goals in terms of availability of broadband Internet access.

e-NC Recommended Goals on Access and Bandwidth		
	*2012	2015	*2018
For NC Citizens	5 Mbps	45 Mbps	100 Mbps

From e-NC's Broadband Internet Action Plan, submitted to the NCGA in Jan. 2009.

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Findings-2008 e-NC Citizen Survey

What Kind of Connection Do People Have?

- Dial-up has dropped from 56% to 14% in the last four years.

- 1.5% report that they still make a long distance phone call to connect to the Internet (via dial-up).

- Over half the respondents with home Internet access report that they subscribe to a high-speed connection (54%), and another 25% report subscribing to a broadband connection.

- 17% report using a cell phone to access the Internet and 6% report using some type of pocket organizer (Palm Pilot, Blackberry, etc.).

- In total 28% of respondents access the Internet using a device other than a computer. All of these respondents also had a home computer and home Internet access.

- Note: 83.33 percent of households in North Carolina have high-speed Internet access available to them (per Dec. 2007 e-NC data collected from service providers)

New Study in 2010

STATE ENVIRONMENT FOR BROADBAND

- Why is it hard to get broadband to the last mile?
- NC IS RURAL -----2ND OF 50 STATES

NORTH CAROLINA   -2ND IN RURAL POPULATION

AFTER TEXAS

TEXAS -   OVER 3000000
NORTH CAROLINA - OVER 3000000
$$$
$$

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MONEY TO SUPPORT DEPLOYMENT

- FEDERAL STIMULUS AWARDED
- $ 2 MILLION MAPPING/PLANNING
- $ 26 MILLION MIDDLE MILE
- 92 + Applications

PLANNING TO SUBMIT IN BTOP 2- DUE MARCH 15

$80 TO $100 Million MCNC 2nd Middle Mile

Counties---few have the match to go forward

RUS-Department of Agriculture-file for last mile BIP

NTIA File for Middle Mile, Public Computer Centers and Sustainable Adoption

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Google Trials

- Everyone wants to try for funds – ultra fast broadband based on fiber

- If you'd like a Google fiber optic trial in your community, complete this section of the request for information. RFI due March 26 http://www.google.com/appserve/fiberrfi/public/options

- Selection: one or two communities in the US

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NATIONAL BROADBAND PLAN

Announcing tomorrow at 10:30am

Federal Communications Commission (FCC)
  Washington, DC

e-NC

MONEY LEVERAGED

- ## BTTs: Since 2001 seven sites have created a total of 1906 jobs @ 30,000=57 Million through 2009

- ## Work on broadband –

  - For every $l invested in broadband $3 dollars returned to the economy (without multiplier effect)*

  - With multiplier effect some place a $10.00 return to $l.00 invested)**

  - Need nonrecurring funds for assistance to private sector companies, nonprofit companies and local governments---- When applying for funds match counts….in decisions of grant making entities

  - Funds we received from state appropriations for incentives have taken counties from below 70% to almost 70% or higher-----

  - * Source: US Bureau of Economic Analysis   **Source: US ARRA Documents

State Incentives Funding

- e-NC Connectivity Incentive Awards – 2008-2009
- From NCGA funding
- $2.155m Awarded
- To deploy the 10 Least-Connected Counties:

County	% of Households with High-Speed Internet Available (prior to grant)	% of Households with High-Speed Internet Available (after the grant)
Caswell	56.76 %	63
Cherokee	51.29	71
Duplin	54.89	85
Gates	47.96	71
Graham	52.43	70
Greene	49.10	77
Jones	45.07	71
Pamlico	54.69	80
Tyrrell	55.64	83
Warren	46.89	86

REACH OUT FOR PUSHING BROADBAND: AVAILABILITY AND ADOPTION

- INCENTVES - $$$ MONEY FOR DEPLOYMENT
- LIFELINE ONLINE PILOT FOR ECONOMICALLY CHALLENGED HOUSEHOLDS
- ACTION STUDIES:
  - Electric and relevant other utility easements e-NC-- and Electric companies and Telecom companies (E&T co-ops also included)
  - Highway right of ways –access to buried fiber-study proposed with e-NC and DOT
  - Tower assessment—development of rules of access to state owned towers (State Forest Service, Weather AND Highway Patrol, Public Safety towers)
  - Public-Private Partnership-nonprofit partnerships body of law review and recommendations e-NC and Attorney General and industry (elec and tele) attorneys
  - e-NC Authority sunset provision removed/funding from

budget sources

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ARRA Broadband Programs: BTOP and BIP

Broadband Technology Opportunities Program (BTOP) under NTIA

Purpose & Criteria:

Grant funds for *Broadband Infrastructure, Public Computer Centers, Sustainable Broadband Adoption*

Broadband Infrastructure Program (BIP) under USDA-RUS

Purpose & Criteria:

Awards can include grants, loans or grant/load packages for *broadband infrastructure*

MCNC: Middle Mile

Per OERI, e-NC is providing staff support for BTOP Reviews

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e-NC Mapping and Planning Grant Award

On October 5, e-NC was one of the first four applicants in the nation to receive a mapping and planning grant (under the NTIA's SBDDP)

Project: **NC BRIM** (North Carolina Broadband Rigor in Mapping)

Purpose:

Broadband Mapping and Planning at the state level

Data to contribute to development of a national broadband map

- Mapping – award of $1,589,077 over 2 years, with possible additional funding for 3 more years
- Planning – award of $434,799 over 5 years
- The 20% match is being met primarily through e-NC staff time (as this work ties into e-NC's legislative mandate as the state broadband authority), and through match provided by university partners.

NC BRIM Data Collection Elements

Data Collection Methods

- Service Provider Data from Broadband Service Providers
- Service Provider Data through Data Mining/Web-Crawling
- Broadband Consumer Survey – Local Level
- Plus, Wireless Propagation/GIS Modeling

Additional collection under the Planning piece:

- Citizen Surveys (3 surveys over 5 years)
- Survey analysis of broadband adoption and strategic gaps

NC BRIM Project Elements

Verification and Assessments (e-NC)

The results from the multiple data collection methods will be tested and cross-validated through comparison of these multiple methods. The e-NC Authority's staff will work with multiple experts in conducting this research and in the assessments.

Outside Researchers

- A statistics expert from ECU will serve as a research advisor for e-NC throughout the mapping grant, and will conduct the Citizen Surveys and advise on the Broadband Consumer Data process.
- A marketing expert from the UNC-CH Kenan Institute will oversee the BB Consumer Data Study
- A GIS expert from UNC-G will perform the Wireless Propagation/GIS Modeling work.

External Evaluators

3 external evaluators will work with e-NC in year 1 to assess the various data collection methodologies. The NC Center for Geographic Information and Analysis (CGIA) will also serve as a technical advisor and evaluator on the mapping.

Technical Advisory Committee and Data Confab

A Technical Advisory Committee will also work with e-NC to review and assess these methodologies.

In March 2010, e-NC will hold a Data Confab, with these evaluators and the technical advisory committee to determine which data collection methods are most cost effective, for report back to NTIA.

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NC BRIM Project Elements - Planning

- Citizen Surveys (three over 5 years)

- Survey on Broadband/Businesses

- Public Computer Access Revisited

- Lifeline Online Program

- Last Mile RoundUp Broadband Project

- Virtual Forum for Vulnerable Populations

- Regional Business Online Forum

- N.C. Broadband Idea Group (NC BIG)

UPDATE ON OTHER ACTIVITIES DEC-MAR

- NCTN NC TELEHEALTH NETWORK

- SMART METERS & BROADBAND DEPLOYMENT – Senator Queen Committee

- COUNTY REQUESTS

- CITIZEN REQUESTS

- BTTS & SMART FARMERS TO MARKET

NC TELEHEALTH NETWORK

- Bandwidth and speed requirements for healthcare increasing rapidly.

- NCTN assists 210 public health agencies and free clinics obtain broadband

- Leverages $6 Million for building and operating networks -FCC's Rural Health Care Pilot Program

- In planning - additional phases to fully build out system to hospitals & providers

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SMART METERS & BROADBAND

Initiative to investigate connections between Smart Metering and Broadband

Among those involved:

- Electric Companies
- Electric Cooperatives
- Telecommunications Companies
- Product Development Companies
- Research Organizations: NC State University and Entrepreneurial Companies
- Advanced Energy Research Corporation (AEC)
- The e-NC Authority
- N.C. Utilities Commission

EVERYDAY REQUESTS

- Citizen Requests

- Local Government Requests for Assistance (30)

- Business Requests for Assistance

- BTOP Applications Requests for Assistance

- Federal agencies: FCC, NTIA, GAO, Etc.

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BTTS – A GREAT SUCCESS

Smart Farmer's Program: National best practice
   (9 N.C. counties)

Purpose Award: Tim Will, Director of Foothills
   Connect BTT

1906 jobs created at the e-NC Business &
   Technology Telecenters (as of 12-31-09)

STAFF RESOURCES STRESSED

- First state broadband authority; established by N.C. Legislature

- Operations Started January 2001

- State Funds for Operations <$495,000

- Federal funds from BTOP $2,023,874

- Money Reserve down to $0 in July 2010

- 5 Full-time and 3 Part-time Staff

- 15 Great board members

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SUPPORT FOR STATE BB AUTHORITY

E-NC Authority sunset provision should be removed-
Funding from budget – Increased from 495,000 to 900,000 –increase of 495,000
Sunset provision causes problems with seeking funds from other sources—both federal, private foundations and corporate

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