



# SOUTH CAROLINA BROADBAND STUDY COMMITTEE

## *The North Carolina Experience*

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# Rural Internet Access Authority



## ► Background

- 1993 North Carolina Information Highway
- 7/99 Rural Prosperity Task Force
- 4/00 Joint Select Committee
- 6/00 Whiteville Agreement
- 7/00 RIAA created (sunset 12/31/03)

## ► Four reports in 1999 and 2000 pointed to North Carolina's need for advanced technology:

- *Falling through the Net*, U.S. Department of Commerce, 1999
- *Vision 2030*, series of reports, N.C. Board of Science and Technology, 1999
- *Choices for a New Century*, N.C. Rural Economic Development Center, 1999
- *Final Report*, N.C. Rural Prosperity Taskforce, 2000

# RIAA Structure

## ► Commission

- 21 members
- Appointed by General Assembly
- Staggered terms
- Chair - Dr. Jim Leutze

## ► Staff

- Executive Director - Jane Smith Patterson
- Full time, part time, contractors

## ► Life

- Established Aug 2000; Operating Jan 2001 - Dec 2003

# RIAA Goals

- ▶ Ensure local, dialup service available statewide
- ▶ Complete, and keep up to date, an inventory of telecommunications infrastructure
- ▶ Establish Telecenters
- ▶ Identify and establish training programs
- ▶ Promote increased use of computers and the Internet
- ▶ Ensure that high speed Internet service is available to rural North Carolina citizens and businesses
- ▶ Provide Advice and Counsel to the NC General Assembly

# Authority's Funding Sources

- ▶ *Public-private partnership*
  - \$30 million in private funding from MCNC, a self-supporting nonprofit
  - \$700,000 grant from the U.S. Department of Commerce's Technology Opportunities Program
  - \$200,000 from the Appalachian Regional Commission
  - In-kind and cash support from more than 80 other organizations

# Beginning Principles

- Technology neutral
- Encourage local solutions
- Use private sector to the maximum
- Avoid “extra special” regulations
- Avoid “same solution for all”

# Mapping Broadband Availability



## ► The Inventory

The study on existing information technology and services in the state was completed in November 2001. This information is now available and can be accessed through Geographical Information System (GIS) Map. In order to keep information current, e-NC has developed a system for the Service Providers to update their service information on this GIS site.

## What Was Studied

The study involved the following information:

- Telephone company wire centers, their service areas and the full range of services they provide
- Cable television companies, their distribution locations, the service areas and services they offer
- Cellular companies operating in the state, their coverage areas and the methods of access they offer Fixed wireless services and transmission frequencies
- Companies that provide satellite services, the nature of those services and coverage area
- The ability of radio and television stations to transmit digital data signals
- Federal, state or local government networks and applications that can be used or made available to the public

## ► Location of Information

Information from the inventory was mapped into a GIS, which can be viewed at [Telecom Service Provider Mapping System](#) . Since the KPMG study, the e-NC has conducted annual in-depth studies on every county to determine where gaps in service exist in North Carolina in order to make recommendations for filling these gaps. The information gathered in this study can be found in the e-NC [100 County Reports](#) and has also been incorporated into the current GIS.

# Gauging Needs

## ► Examples of Completed Research

- Citizens Survey (*December 2001*)
- Infrastructure Inventory (*December 2001*)
- E-government Survey (*February 2002*)
- E-health Survey (*February 2002*)
- Digital Literacy Survey (*March 2002*)
- Net Readiness Survey (*March 2002*)
- 100 County Report (*June 2002*)
- E-agriculture Survey (*July 2002*)

Visit [www.e-nc.org](http://www.e-nc.org) to download copies.

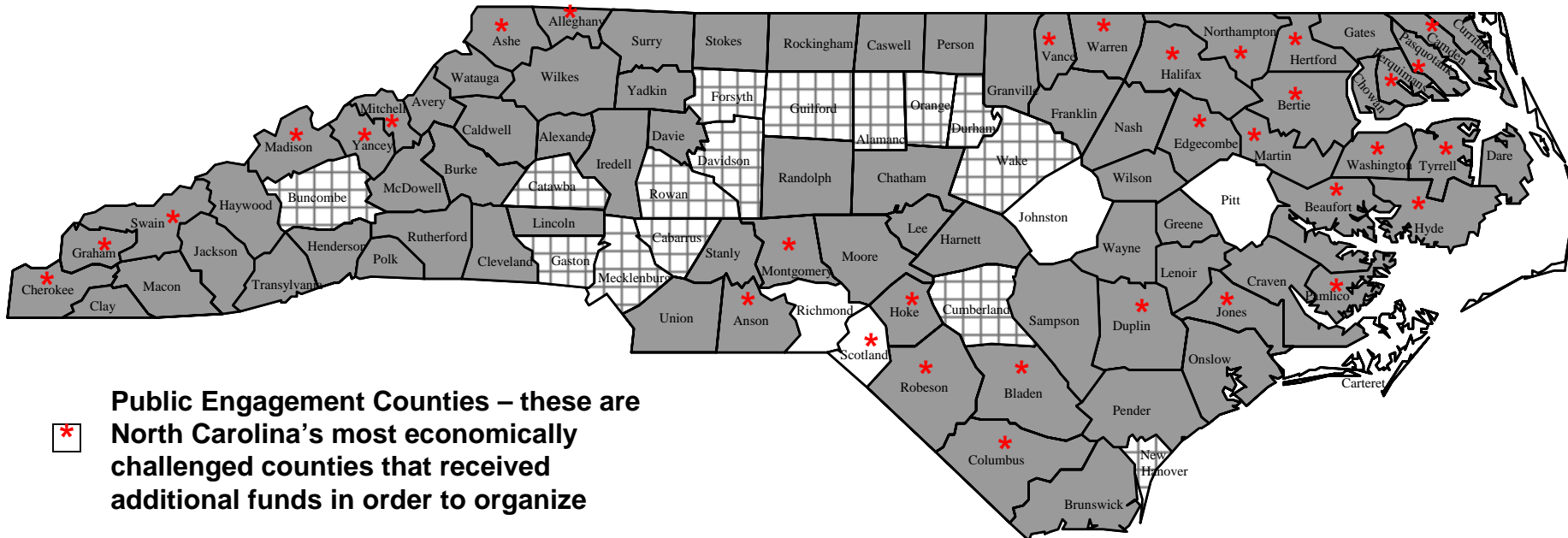


# Local Awareness

## *E-communities*

- ▶ E-NC works with local citizens to build community commitment to and participation in bringing high-speed access and training to all areas of the state
- ▶ **Goal:** create a fully connected state - an "e-NC" made of e-communities
- ▶ **"E-champions,"** or local technology champions, leading county-specific efforts

# E-communities Program



**Public Engagement Counties – these are North Carolina’s most economically challenged counties that received additional funds in order to organize**



**E-communities (rural counties that successfully completed the planning phase of the e-communities program)**



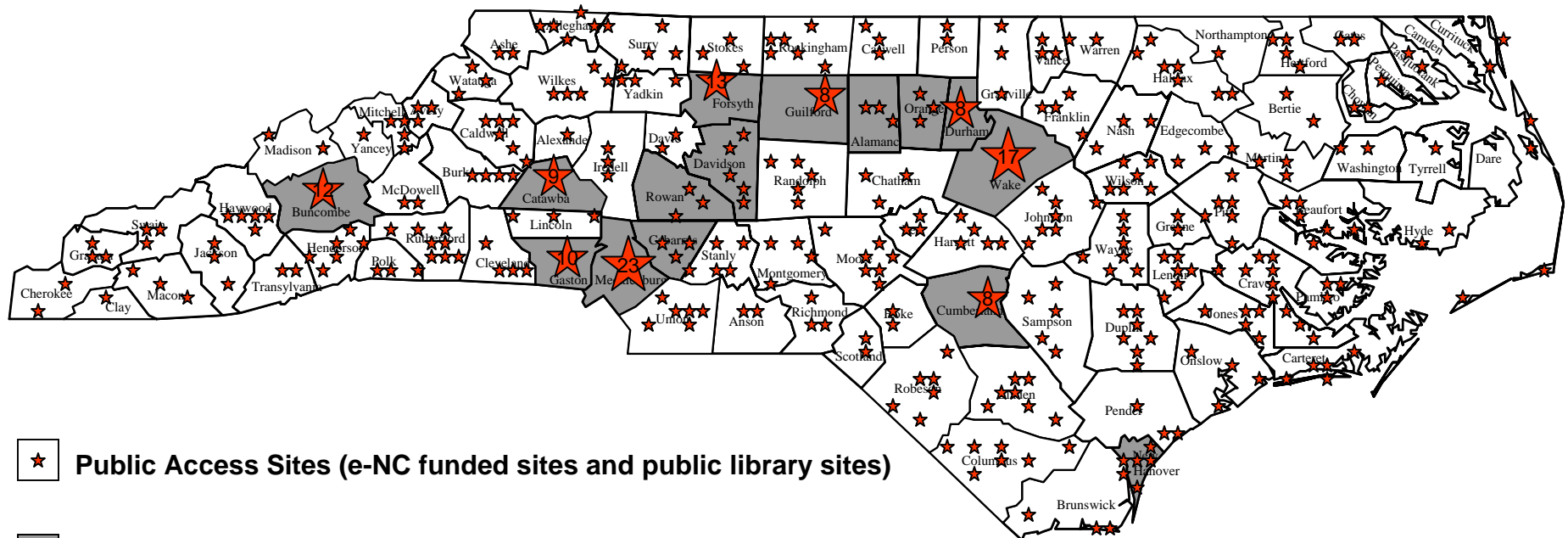
 **Urban Counties**



# Increased Public Access

- ▶ Opened or expanded more than 140 public access sites across North Carolina
  - Partially funded by e-NC, sites are opening or expanding in 64 rural counties
- ▶ Citizens can get free access to computers and the Internet

# Public Access Sites



# Training

- ▶ 25 e-business workshops for small business owners conducted around the state - attendees receive *Business Connections* handbook
- ▶ \$721,718 for 28 grants for free or low-cost digital literacy training programs for citizens, with a special emphasis on:
  - Unemployed
  - Disabled
  - Elderly
  - People learning English



# Grant Program

- ▶ Demand vs. Supply
- ▶ Middle mile vs. Last mile
- ▶ Demand Grants
  - E-community
  - E-learning
  - E-government
  - E-health
  - E-agriculture
  - E-commerce
- ▶ Supply Grants
  - Wireless
  - Wireline
  - Cable
  - Satellite
- ▶ Public Access
- ▶ Telecenters

# *RIAA GRANTS*

- ▶ Total grant summary
  - Telecenters - \$4.0M
  - Digital literacy - \$0.7M
  - Public access - \$1.0M
  - Public engagement - \$0.2M
  - E-community - \$2.5M
  - Connectivity incentives - \$9.8M
  - LEG-UP - \$0.7M
- ▶ Total - \$18.9M



# *RIAA FUNDS SPENT*

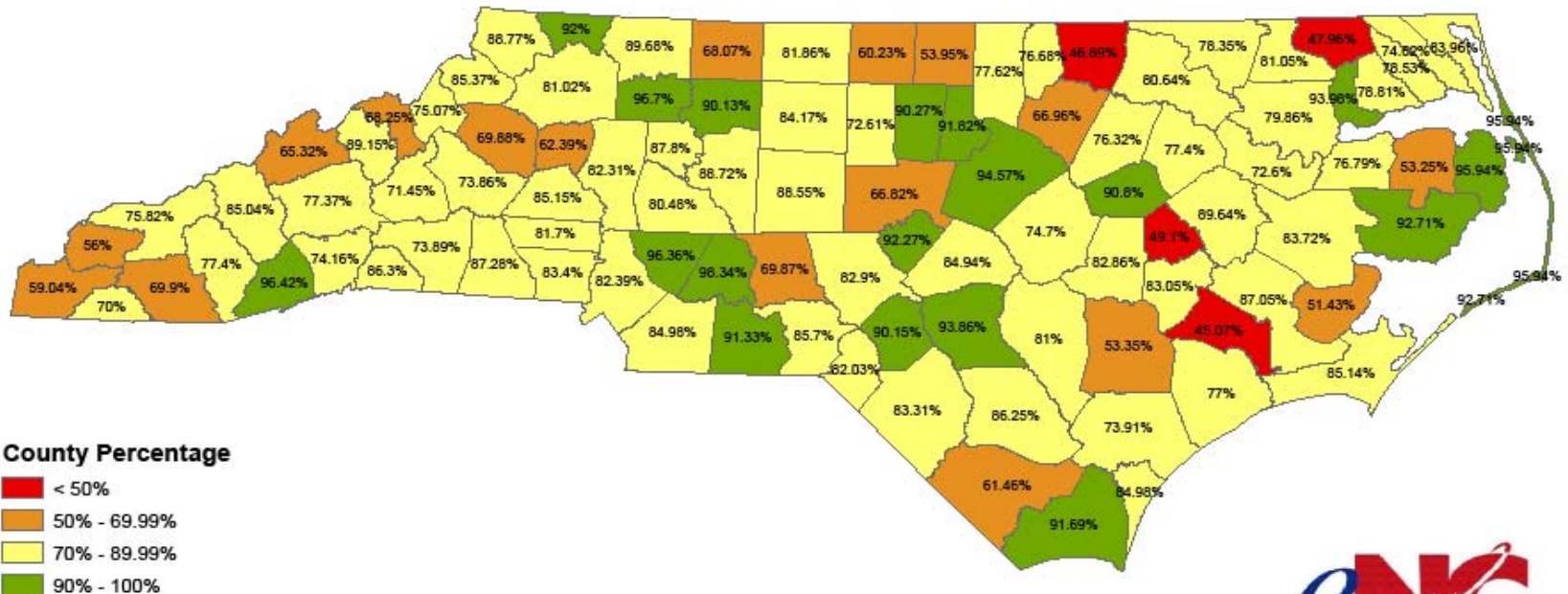
- ▶ Budget summary
  - General Admin - \$4.6M
  - Education and awareness - \$8.1M
  - Inventory - \$1.0M
  - Telecenters - \$4.5M
  - Incentive grants - \$11.0M
  - Overhead - \$1.2M
  - Carry over - \$0.6M
- ▶ Total - \$30.0M



# 2006 Households with Access to High-Speed Internet Service (83.54%)



2006 High Speed Internet Access  
DSL and Cable Modem Composite



8/28/07

Based on data supplied by service providers. Current 12/31/06.

# Who can access broadband in 2007?

83.54% can now access affordable broadband even without counting wireless

3,000 volunteers working within 85 e-communities

7 Business & Technology Telecenters  
(one developing Telecenter)

Over 400 public access centers (140 are ours) rest are public libraries providing digital literacy

## E - NC

- ▶ Successor organization to RIAA
- ▶ First State funding - \$500K each for 2005, 2006, 2007
- ▶ Sunset extended from 2006 to 2011
- ▶ Additional funding for Business Technology Telecenters
- ▶ Statewide broadband connectivity now over 83%
- ▶ Many rural counties below 70% availability
- ▶ Additional incentive grant funds for 2007 - \$1.2M
  - Focus on four counties below 50%
  - Require 50% match from service provider
  - Minimum bandwidth required - 384 kbps for home; 768 kbps for business
- ▶ E-NC named to manage PEG channel funds from video franchise legislation

# North Carolina's e-NC Authority

info@e-NC.org



e-NC Information

e-NC Programs

Research Projects

e-NC Publications

News Updates

## e-NC in my county

Select County

## Public Internet Access

Select County

## Digital Literacy

Select County

## Search for Dial-Up Internet Providers

Enter your phone number:

search

## ISP login

## Keyword Search:

Find

## Advanced Search

## Site Map

*e-NC is a grassroots initiative to encourage all North Carolina citizens to use technology, especially the Internet, to improve their quality of life and their economic prospects.*

## What's New

11/3/2006

## Public Access and e-Communities



## eNews

- Imaging Experts Perform MRI
- Cardiac Scans By Remote Control (10/25/06)
- The Vital Role of Local
- Governments in Wireless Broadband (10/17/06)
- Web lets UNC prof do armchair
- archaeology (10/15/06)
- Riding the Waves of Web 2.0
- (10/5/06)
- Health care moves home
- (10/3/06)
- The New World of E-lections:
- Social Networking Web Sites (10/3/06)

**e-NC 2006 ICT Conference: ICT Delivering the Economic Promise. Nov**

## Calendar

### Upcoming Events November 2006

13 e-NC Wireless & ICT Conference...

### December 2006

6 e-NC Authority Commission Meet...

Internet Infrastructure



Start



Intel(R) PROSet/Wireless

e-NC: A grassroots ini...

Microsoft PowerPoint - [...]

Internet

# The North Carolina Model

- ▶ Comprehensive and inclusive
- ▶ Technology neutral
- ▶ Public-private-nongovernmental partnership
- ▶ Grassroots movement with motivation coming from local areas
- ▶ Active leadership and enthusiastic support staff
- ▶ Statewide effort
- ▶ Statistically valid research
- ▶ Scaleable applications provide models to be replicated statewide