CONCERT

Communications for North Carolina Education, Research, and Technology

State-wide video and data network

Operated by MCNC

Primary funding from the State of North Carolina

111 direct, 32 dialup IP, 52 UUCP connections

30, 000+ hosts connected

4.5 Megabit link to the Internet via ANS

NC-REN

North Carolina Research and Education Network

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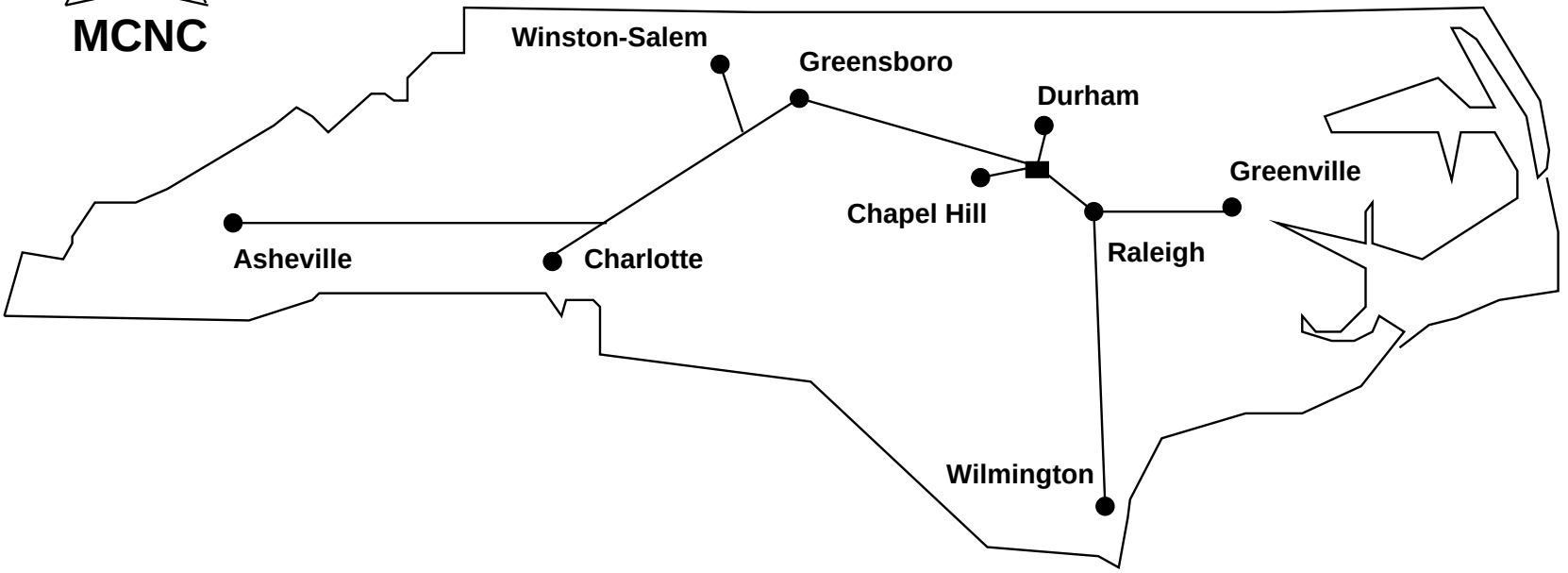
NC-REN Backbone

MCNC



- Backbone Cities (POP)
- NOC - Research Triangle Park

tas@ncren.net 7/20/94

Changes

Name change

- **CONCERT -> NC-REN**
- **concert.net -> ncren.net**

Service changes

- **Drop commercial services**
- **Concentrate on R&E connections**
- **Help sites better utilize their connections**

Name Problems

BT and MCI wanted the CONCERT name

- **MCNC had never registered it**

MCNC management wanted:

- **NC more prominent**
- **Alignment with NREN**
- **Emphasis on R&E**

Name Change

We are officially NC-REN

- **Press release April 15, 1994**

Conversion to ncren.net in progress

- **Domain registered in February, 1994**
- **Local changes simple but time-consuming**
- **Remote changes hard and time-consuming**
- **Complete by October 1, 1994**
- **Concert.net decommissioned January 1, 1995**

Service Problems

Helpdesk overload from dialup UNIX accounts

Commercial providers springing up left and right

The Umstead Act

- **NC state law**
- **State funds cannot subsidize competition with commercial services**

Service Changes

Dialup UNIX turned over to Interpath in March, 1994

Commercial dialup IP and UUCP gone by October, 1994

Commercial direct connects gone by January 1, 1995

Will continue direct connects, dialup IP, and UUCP for R&E and state and local government

The Future of NC-REN

Actively pursuing new connections

- **Remaining private colleges**
- **Community colleges**
- **K-12**
- **State and local government**
- **Public libraries**

The Future of NC-REN

Providing security services

- **Firewalls**
- **Kerberos**
- **PEM**
- **Secure DNS**
- **Secure routing**

Expanding information services

- **Mbone**
- **NC State government documents**
- **WWW services and consultation**

The Future of NC-REN

Internet connection upgrade

- **45 Megabit link (thanks to the NSF)**
- **October, 1994**
- **Provider???**

The North Carolina Information Highway (NCIH)

- **State-wide ATM network for video and data**
- **Joint effort of MCNC, State gov, phone companies**