

Federal-State Joint  
Conference on  
Broadband Adoption



February 7, 2013  
Derrick Bulawa  
CEO, BEK Communications

# Broadband in the Rural

Demand is High

Adoption CAN be High

BEK Communications



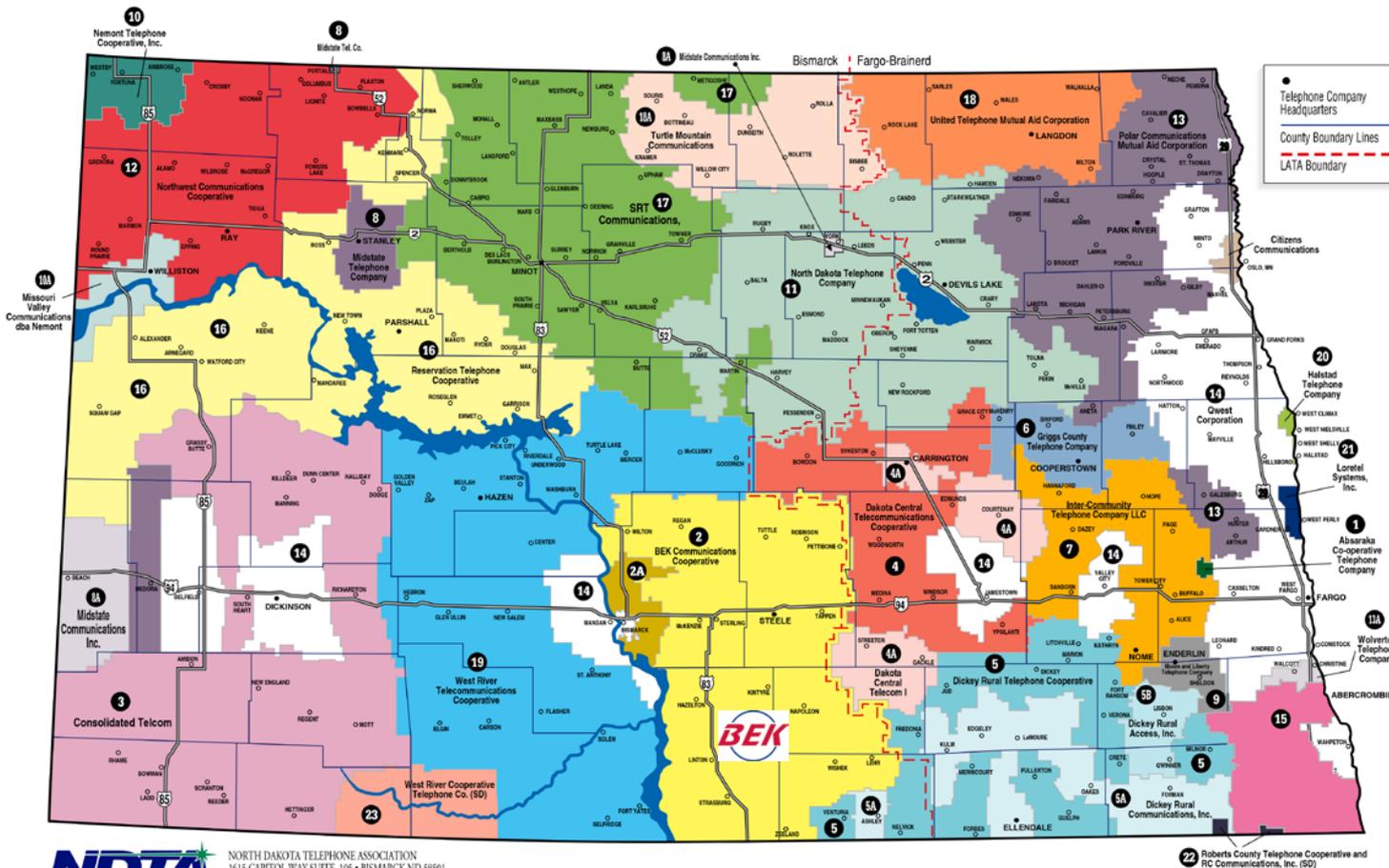
# BEK Communications Cooperative

- **COOP ILEC** - Formed in 1952 (60 years old)
  - Established by farmers because no one else would provide service
- Headquarters in Steele, North Dakota
- Serving 6+ rural counties, over 5,585 Sq. Mi.
- 5,394 members; .95 avg. member density per Sq. Mi.
- 2126 rural members; .38 rural member density per rural Sq. Mi.
- 3,825 broadband customers **71% adoption (Def. 1)**
  
- **CLEC Rural Bismarck** – Initiated 2010 with ARRA Grant/Loan
- Serving about 550 Sq. Mi.
- 1,175 Rural homes passed
- 1,005 Rural homes served
- 894 broadband customers **89% Adoption (Def. 1)**
  - **100% Fiber to the Home by June 2013**



# ND Statewide Map of ILECS

## NORTH DAKOTA TELEPHONE EXCHANGE AREAS



### Local Exchange Companies

1. Absaraka Co-operative Telephone Company	.....(701) 896-3404
2. BEK Communications Cooperative	.....(701) 475-2361
2A. BEK Communications Rural Bismarck Exchange	
3. Consolidated Telcom	.....(701) 483-4000
4. Dakota Central Telecommunications Cooperative	.....(701) 652-3184
4A. Dakota Central Telecom I	
5. Dickey Rural Telephone Cooperative	.....(701) 344-5000
5A. Dickey Rural Communications, Inc.	
5B. Dickey Rural Access, Inc.	
6. Griggs County Telephone Company	.....(701) 797-3300
7. Inter-Community Telephone Company LLC	.....(701) 924-8815
8. Midstate Telephone Company	.....(701) 628-2522
8A. Midstate Communications Inc.	
9. Moore and Liberty Telephone Company	.....(701) 437-3300
10. Nemont Telephone Cooperative, Inc.	.....(406) 783-5654
10A. Missouri Valley Communications	
11. North Dakota Telephone Company	.....(701) 662-1100
12. Northwest Communications Cooperative	.....(701) 568-3331
13. Polar Communications	.....(701) 284-7221
13A. Wolverton Telephone Company	
14. Onest Corporation	.....(701) 222-8969
15. Red River Rural Telephone Association	.....(701) 553-8309
16. Reservation Telephone Cooperative	.....(701) 862-3115
17. SRT Communications, Inc.	.....(701) 858-1200
18. United Telephone Mutual Aid Corporation	.....(701) 256-5156
18A. Turtle Mountain Communications	
19. West River Telecommunications	.....(701) 748-2211

### Local Exchange Companies From Neighboring States Serving ND Subscribers

20. Halstad Telephone Company (MN)	.....(218) 456-2125
21. Loretel Systems, Inc. (MN)	.....(218) 784-7171
22. Roberts County Telephone Cooperative Assn. (SD)	.....(605) 637-5211
RC Communications, Inc.	
23. West River Cooperative Telephone Company (SD)	.....(605) 244-3236



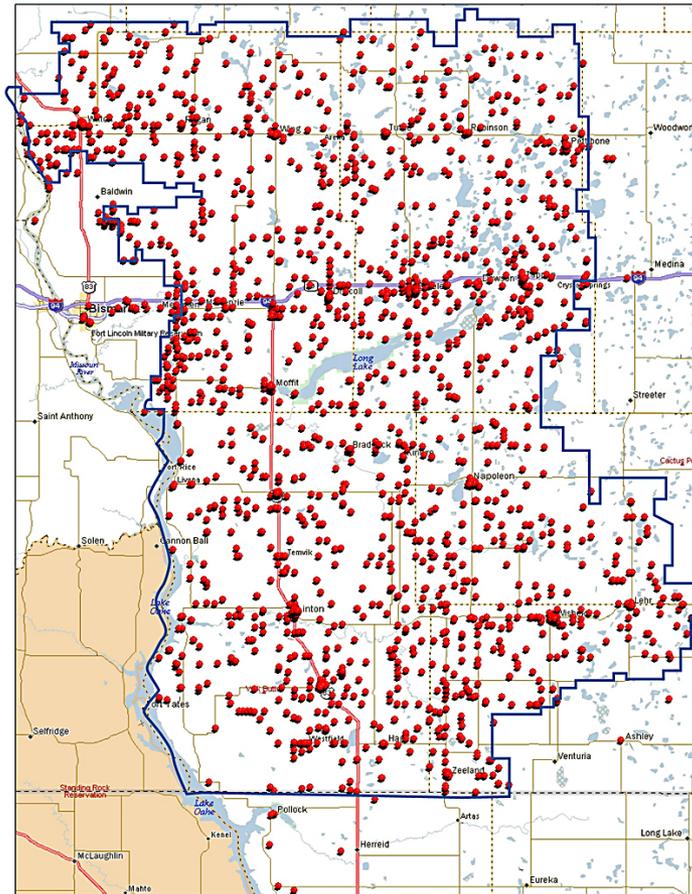
NORTH DAKOTA TELEPHONE ASSOCIATION  
1615 CAPITOL WAY SUITE 105 • BISMARCK ND 58501  
PHONE: 701-223-6022 • FAX: 701-223-6023  
www.ndta.net



# Membership Map

## BEK Membership Distribution

● BEK Member



5585 SQ Miles  
5394 members  
2126 rural members  
40% rural  
Northern Plains  
Long winters  
Short growing season

Grain  
Cattle  
Coal  
Oil

MN (6.0° E)

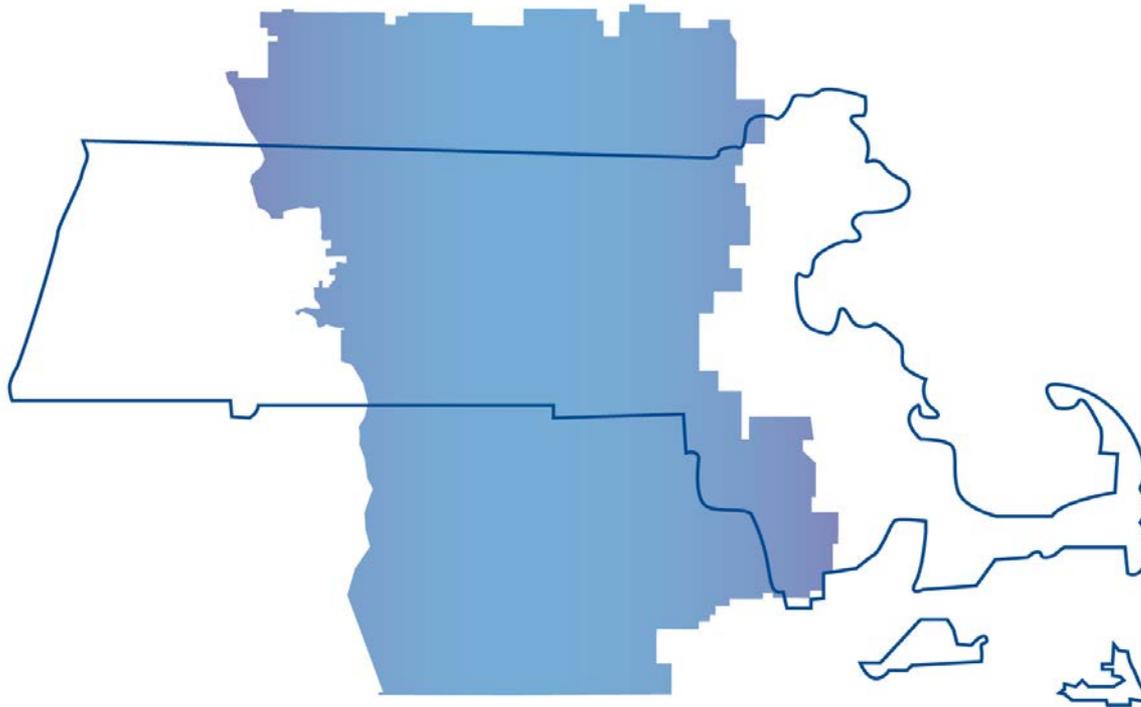
0 4 8 12 16 20 mi

Data Zoom 8-1



# BEK Service Map Compared to Massachusetts

<b>BEK Communications Population</b>	<b>18,500</b>
<b>Massachusetts Population</b>	<b>6,587,531</b>





Bismarck

Bismarck, ND

Jamestown, ND

**100 Miles to a:  
Wal-Mart  
Trauma Center  
College**

100 Miles

120 Miles

Zeeland  
North Dakota

**Mary's Farm**

100 Miles

**Life in Rural North Dakota**

Aberdeen

Aberdeen, SD

# What is Broadband Adoption?

1. Is it the use of a computer over the internet? (Def. 1)
2. Is it the purchase of an Internet package (Dn/Up speeds)?
3. Is it the use of IP product on the regulated BEK network ?
4. Is it the use of IP products on an IP network, (regulated and unregulated)?(Def. 4)



# Product Lines

- Phone Service w/unlimited LD (TDM )
- Broadband Service 12M to 200M
- IP TV service 300 Digital Channels w/VOD, DVR, Whole Home DVR
- Cloud Surveillance Service (IP)
- Cloud Business PBx Service (IP)
- SIP based voice (IP Voice)
- Ethernet Transport Service (IP) (Towers & Institutions)
- Sports TV Broadcasting (IP) (240 games per year)



Walpole 2010



DIOR Backus/IV 4/14/12



State Volleyball 2010

**We have embraced an IP product strategy**



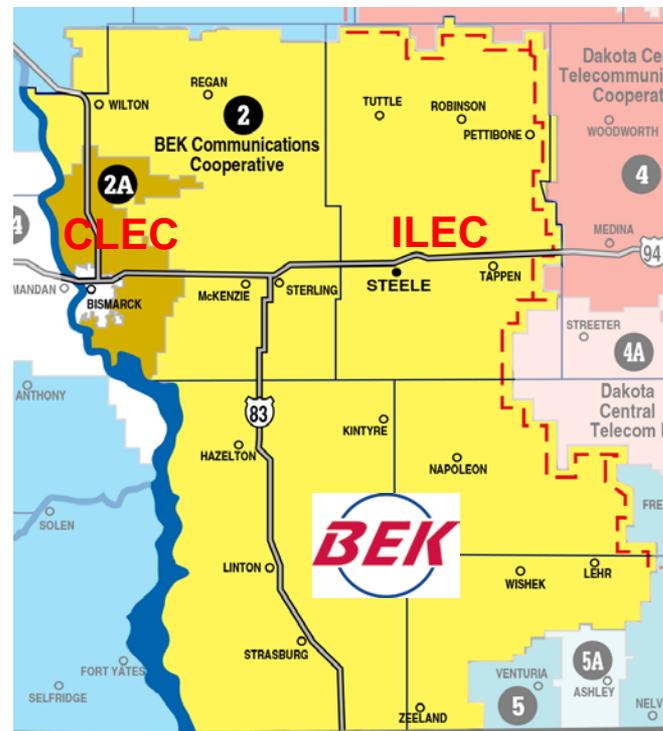
# High Quality - High Capacity

- **Work & Professional Needs**
  - VPNs
  - Web Conferencing (voice & Video)
  - VOIP
  - Collaboration Tools
  - Cloud based applications
  
- **Home & School**
  - Online education
  - Online Testing – No Disconnects (Fail)
  - Skype
  - Netflix
  - Face Book, Face Time
  - Vonage
  - Games

Base Products 12M ILEC & 20 M CLEC

# Adoption Rate & Products

- CLEC – Rural Bismarck
  - 20/2 Mbps \$40
  - 30/3 Mbps \$55
  - 40/4 Mbps \$100
  - 50/5 Mbps \$125
  - Adoption Rate 89% (Def.1)
- ILEC – BEK Communications
  - 12/1 Mbps \$35
  - 20/3 Mbps \$45
  - 40/4 Mbps \$ 65
  - Adoption Rate 71% (Def.1)



- Rural remote has higher adoption than Rural Towns "Necessity"

- CLEC
  - 100% adoption IP Products
- ILEC
  - 77% current adoption of IP Products
  - 85% forecast adoption of IP products by June 2013 (complete FTTH cut-overs)

# Adoption Objections & Opportunities

## Objections

- Can't use a computer
- Typing is for a secretary
- Can't see the key board
- Fingers are too big to type
- Arthritis in fingers
- Afraid of something new
- Too old to learn computers
- Why do I need to learn that ?
- Cost (computer & internet)

## Opportunities

- Non-computer devices
  - Ipad or Ipod
  - Any touch screen
  - Surveillance devices
  - Vonage (VOIP boxes)
  - NetFlix (Streaming devices)
  - Online medical devices
  - Emergency Alert devices
- Age in place technology
- Medical reporting device

**Must Overcome the:  
Ergonomical – Economical – Emotional Challenges**



## How they changed

- Earned MBA online
  - Started insurance business and quotes online
- Learned claims processing online
  - Processes insurance claims for AETNA online
- Accounting degree online
  - Accounting services online for rural businesses
- Quit job and 112 mile commute
  - Started advertising business online
- Online cattle auctions



## How they changed

- Electric contracting business
  - Blueprints, locates, designs online
- Medical invoice coder online
- Work from home for Microsoft
- Work from home marketing
  - Left the city to take over family business



## BEK Superheroes

Click on the link below to listen to them tell their stories:

- [Everyday Superheroes](#)
- Or go to YouTube, and search for "[BEK Communications](#)" then click on "[BEK Everyday Superheroes](#)"