

# MiEnergy Cooperative

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PRESIDENT/CEO



# MiEnergy Cooperative

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Headquartered in beautiful Rushford, MN





August 2007



# Flood recovery

- Groundbreaking ceremony  
November 2007
- First day of  
business September  
29, 2008.

# The Basics

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Merged January 1, 2017

76 total employees

- 33 lineworkers

43 substations

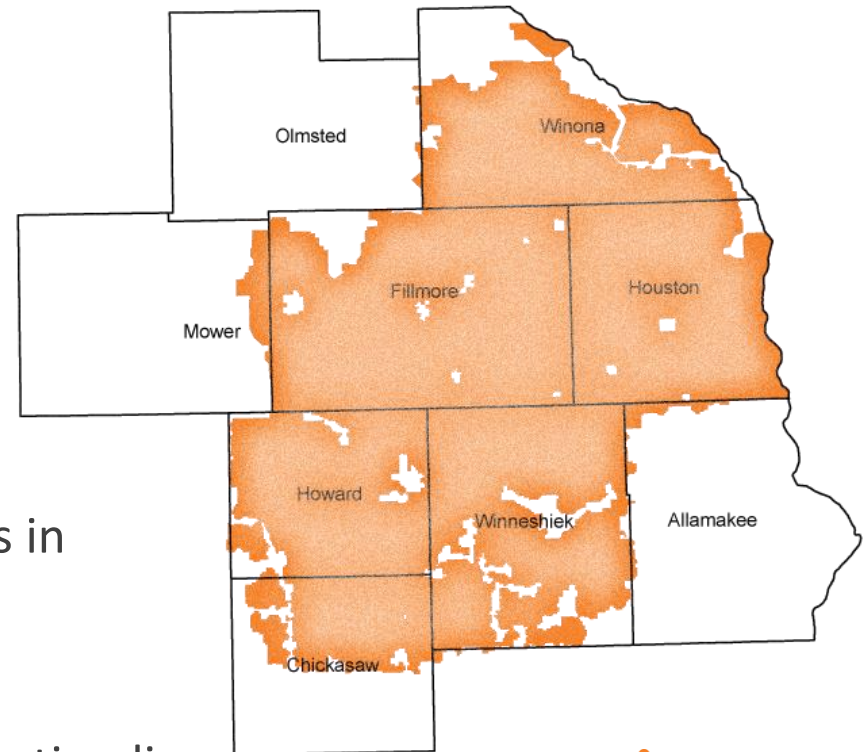
5,500 miles of line

22,900 meters/18,800 members

Offices in Rushford & Cresco; Outposts in Caledonia, Harmony & Spring Valley

11 wholesale cities

Average 4 members per mile of distribution line



# Electric Industry Changes

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## Advanced Metering Infrastructure (AMI)

- Hourly meter data communicated back to our offices
- Special time-of-use energy rate options – Real time

## Outage Management System (OMS)

- Instant notification from the AMI of outages
- Lineman operate with iPads/OMS

## Supervisory Control & Data Acquisition (SCADA)

- Computer control system to monitor system data
- Electronic system device operation (breakers/regulators)



# Electric Industry Changes

## Energy Management

- System operation to control home appliance for 'peak shaving'
- Commercial & industrial energy management

## GIS Mapping Technology

- 5,500 miles of electric distribution line and all cooperative infrastructure - GPS point.

## Mobile Workforce Management

- Automatic Vehicle Locating (AVL)



# Electric Industry Changes

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## Future Continues to Evolve

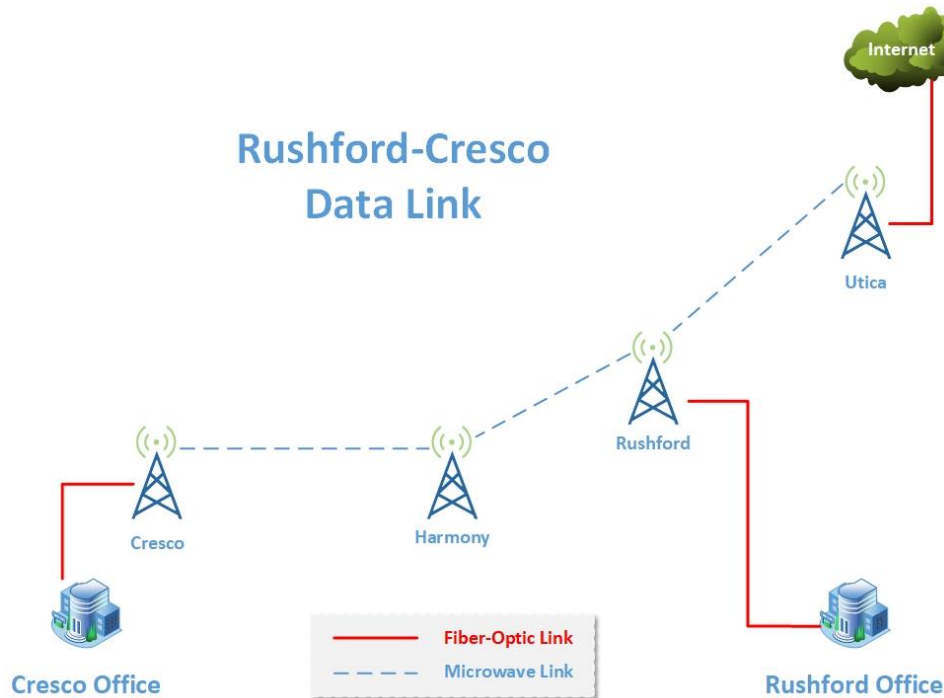
- Electric vehicles and charging networks
- Smart home technology
- Distributed generation/solar
  - (650 members systems)
- Residential battery storage
  - National pilot program





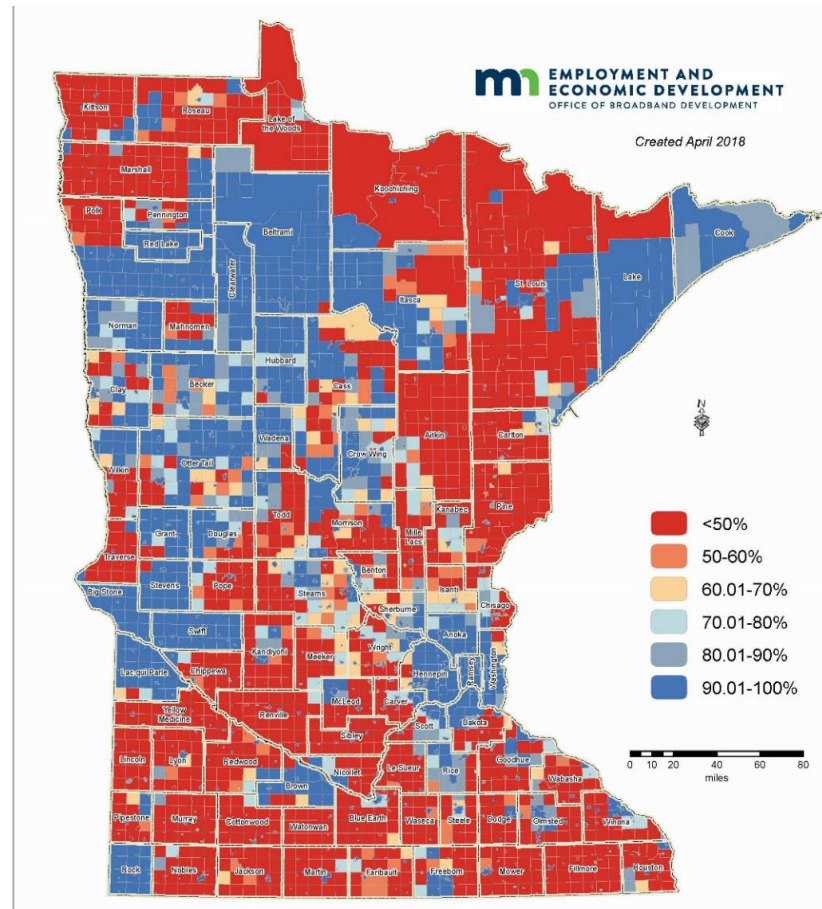


# Internet Connectivity/Network Design



- Offices were communicating via the high-speed microwave link and fiber backbone
- Utilized cellular VPN connections
  - Expensive & data limitations

# Broadband





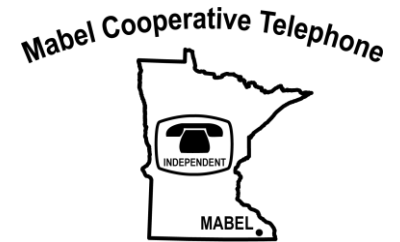
About us

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# Partnerships

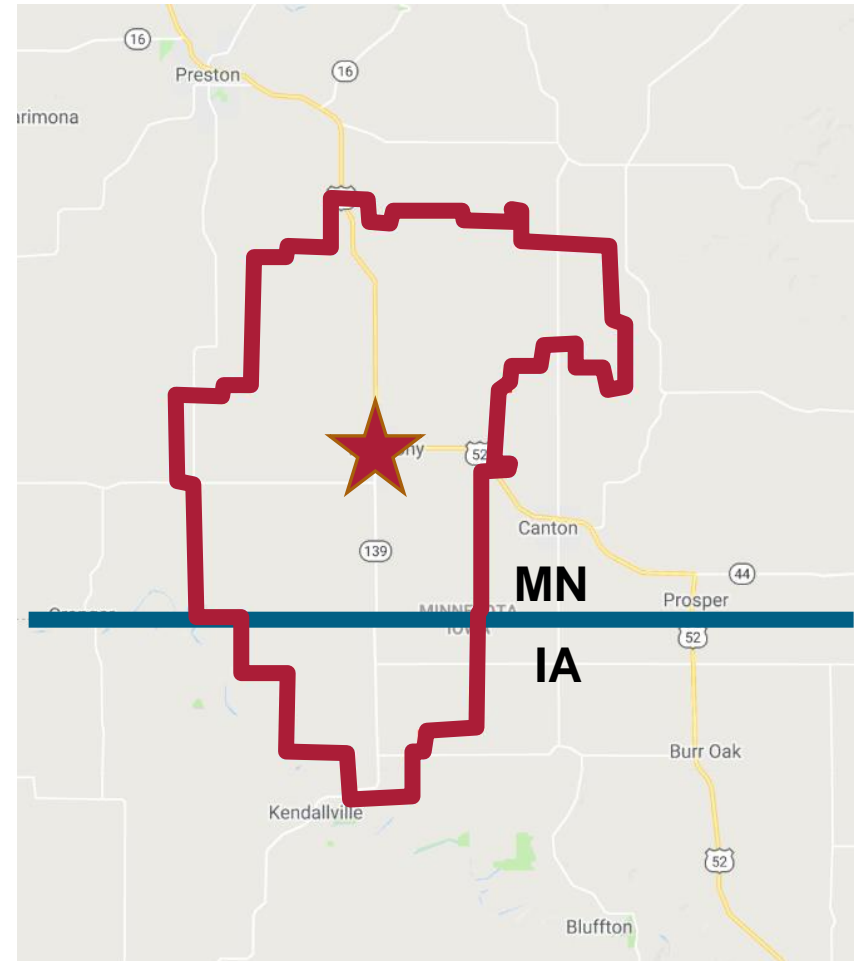
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- Spring Grove Communications local telephone cooperative.
- Mabel Cooperative Telephone Company local telephone cooperative.
- Spring Grove Communications, Mabel Cooperative Telephone and MiEnergy own Harmony Telephone Company.
- Natural partnership with MiEnergy Cooperative.

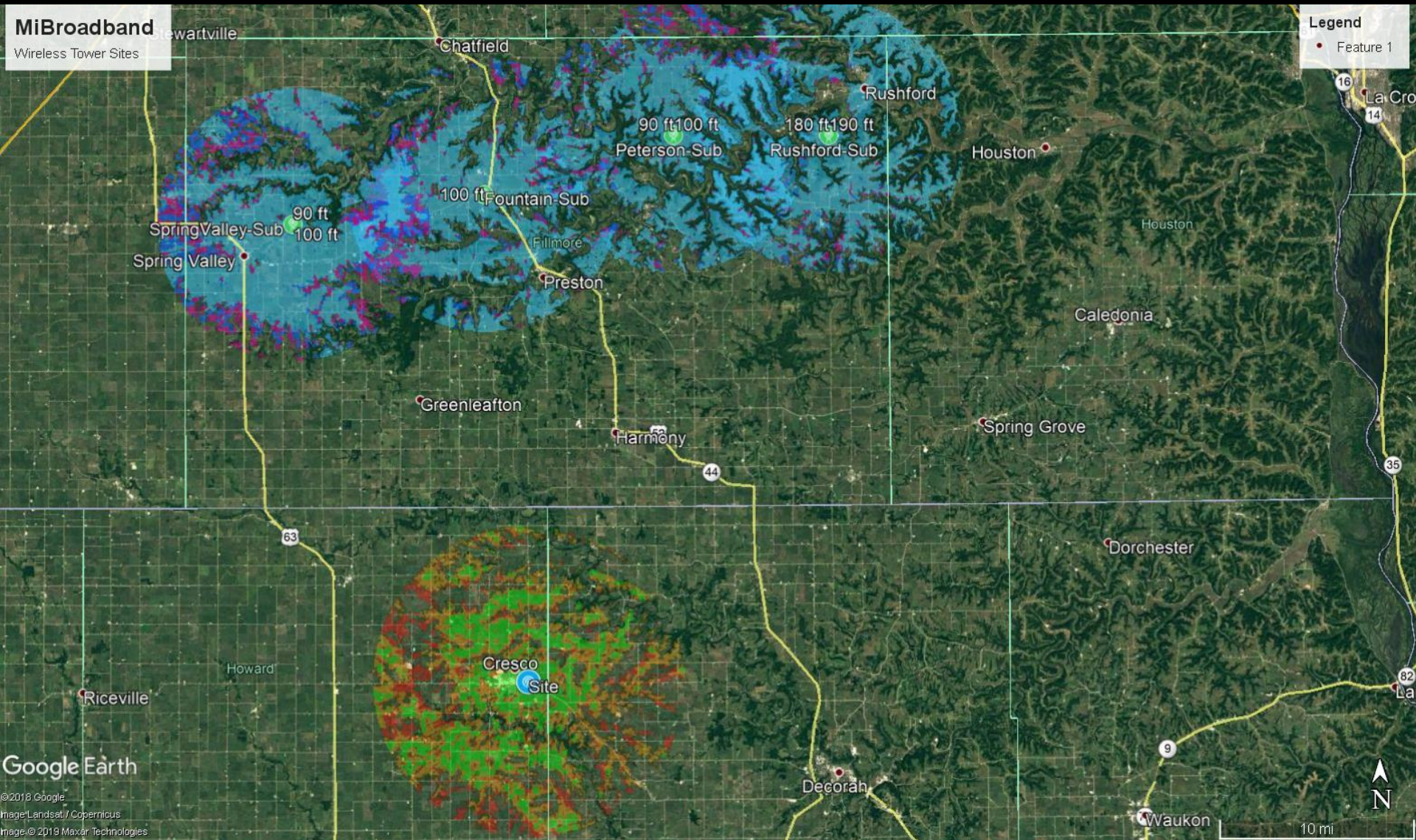




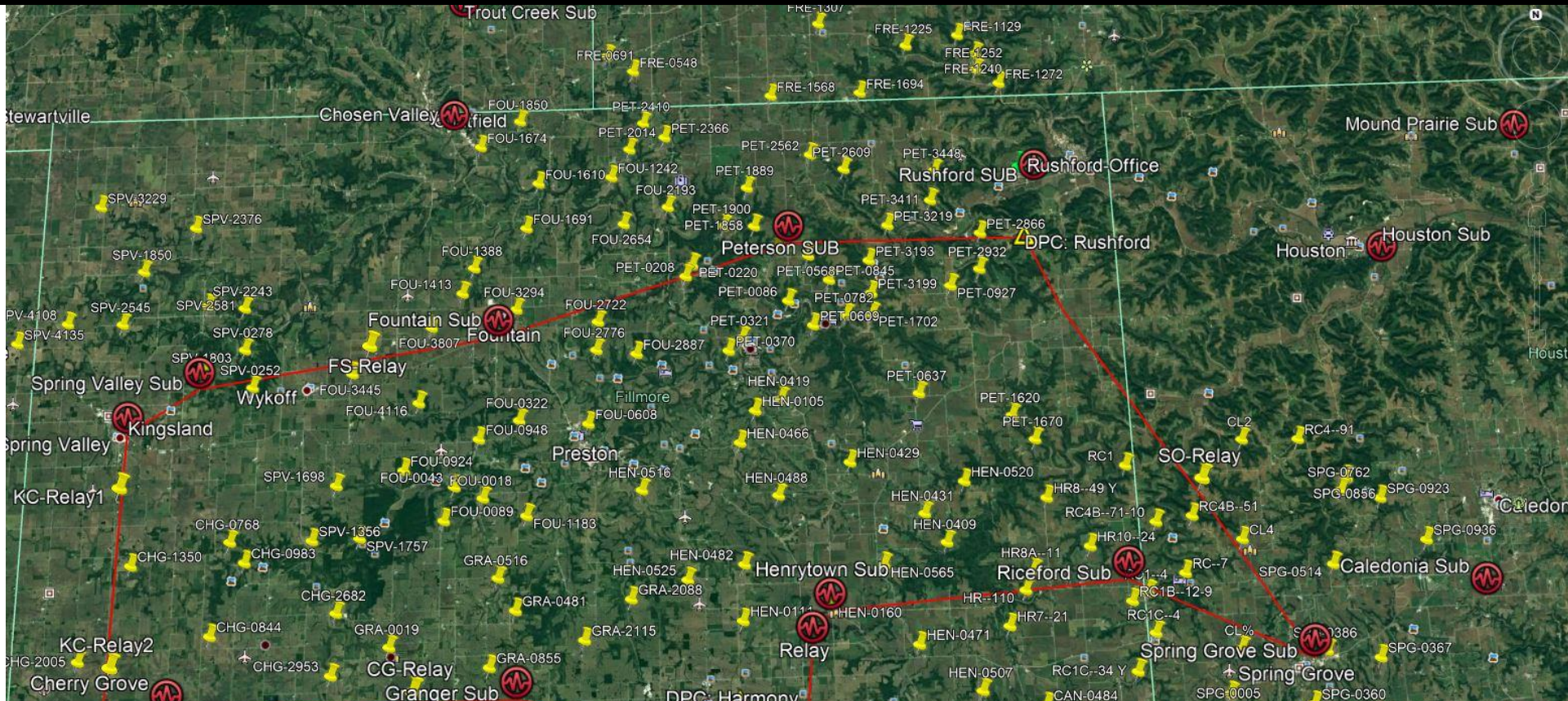
- Formed in 1945.
- Purchased in 2006 by Mabel Cooperative Telephone Company and Spring Grove Communications. In 2018, MiEnergy joined this partnership.
- Serves approximately 100 square miles in southeastern Minnesota and a small area of northeastern Iowa
- Began providing fixed wireless broadband service in 2013.



# MiBroadband Wireless Tower Sites



# Advanced Metering Infrastructure (AMI)



Build an AMI/SCADA communications network with ample amount of expandability while providing dependable, two-way communications reaching 100% of our endpoints in Minnesota and Iowa.



# Progressive

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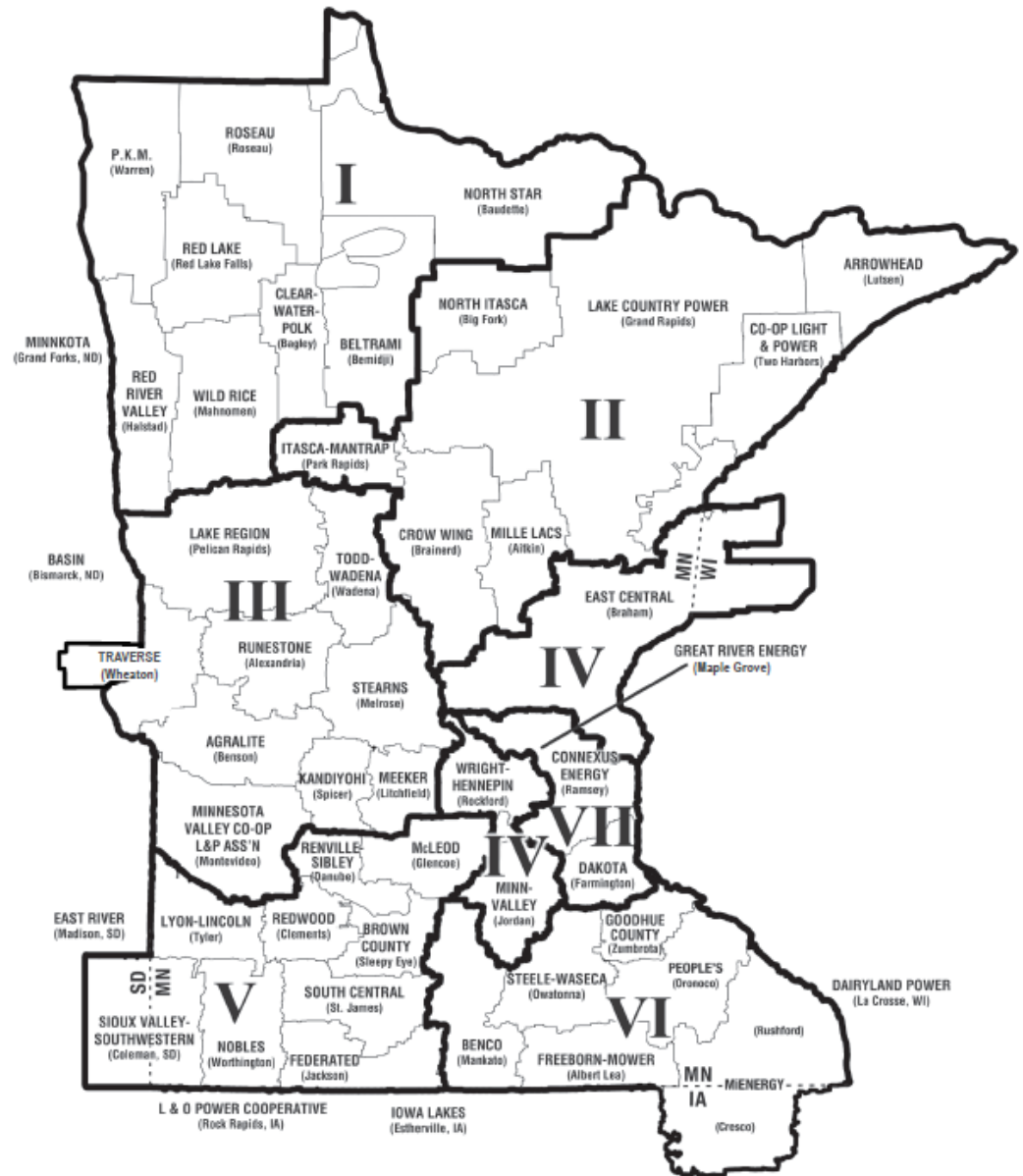
\$5.4 Million ReConnect Award

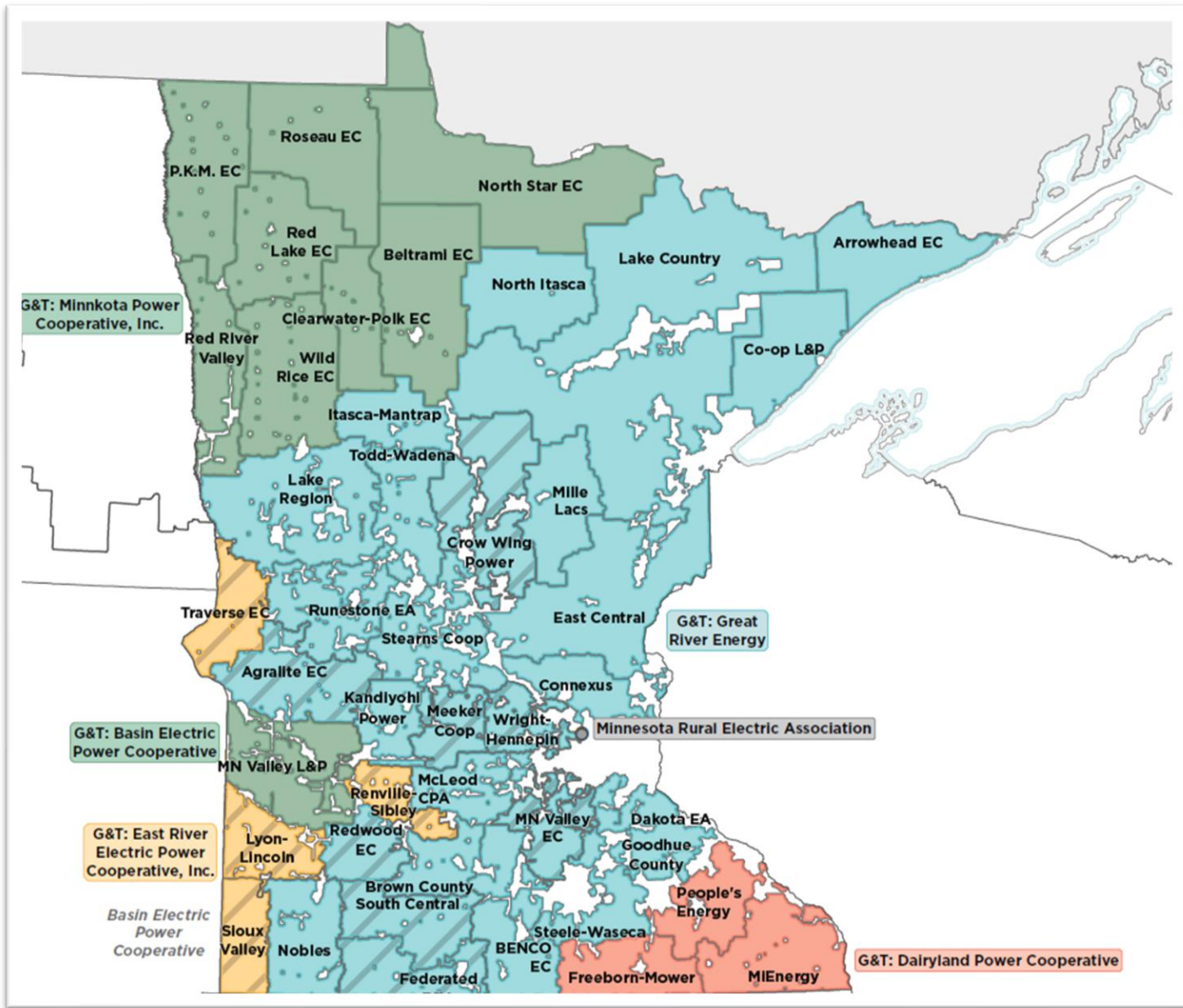
\$9.7 Million ReConnect 2 Award

\$715,000 IA CARES Grant

\$1.2 Million MN Border-to-Border Broadband Grant

# Minnesota's electric distribution cooperatives







44 rural electric distribution cooperatives in Minnesota

6 generation & transmission cooperatives in Minnesota

- Several already have existing fiber in overhead static wire

Only 4 electric cooperatives involved in retail broadband

Cyber security protection

- Ownership of the fiber is critical by the electric cooperative
- Opportunity to lease fiber strands?

Cooperatives cannot lease the fiber to a 3rd party unless it has a new easement permitting retail fiber usage in the cooperative's existing ROW easement.

# Thank You

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