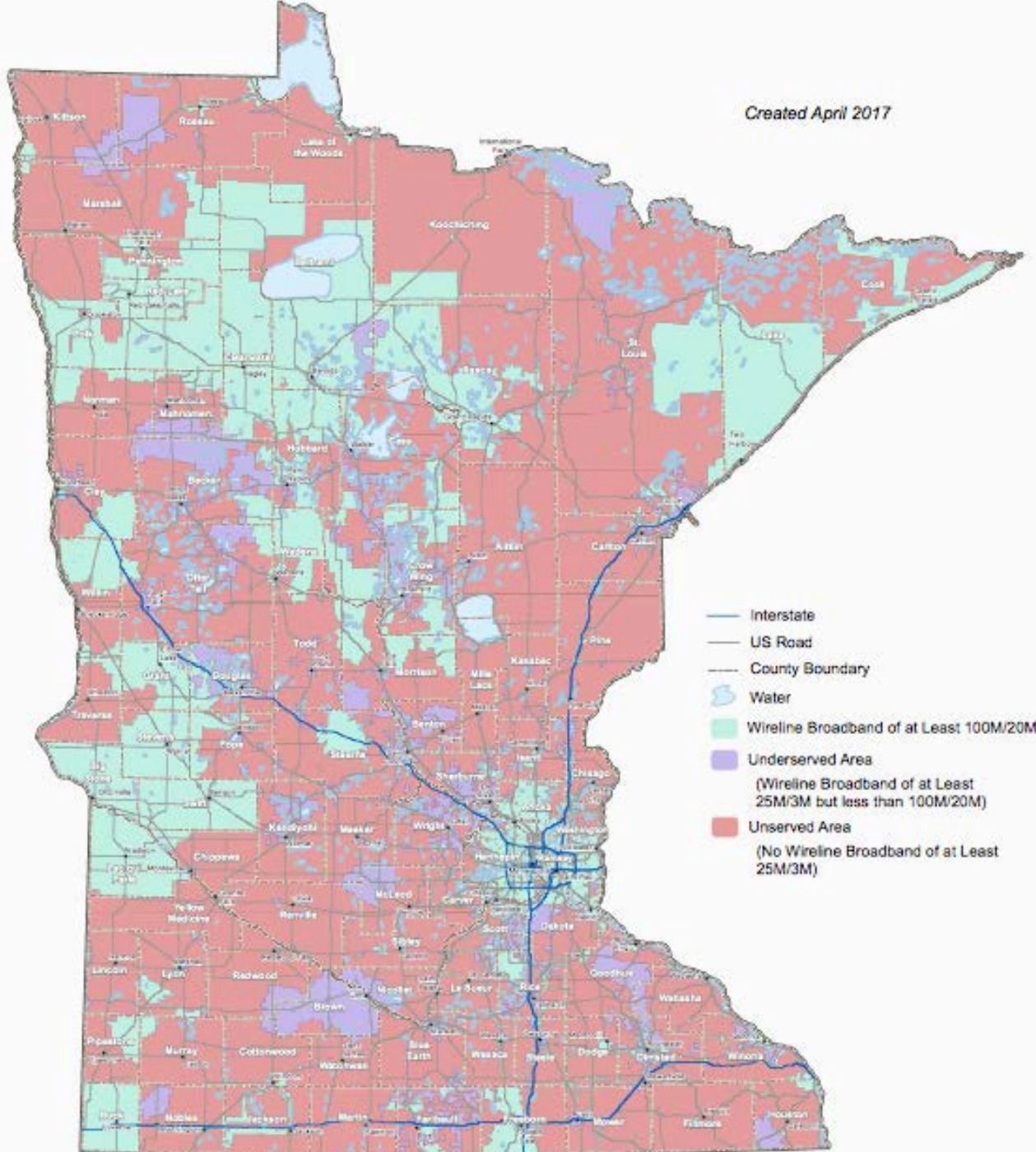


# Broadband Trends, Deployment Challenges & Public Policy

Coalition of Greater Minnesota Cities  
November 16, 2017



DEED Grant  
Eligible Areas  
in Red

Map Key

Green = Go

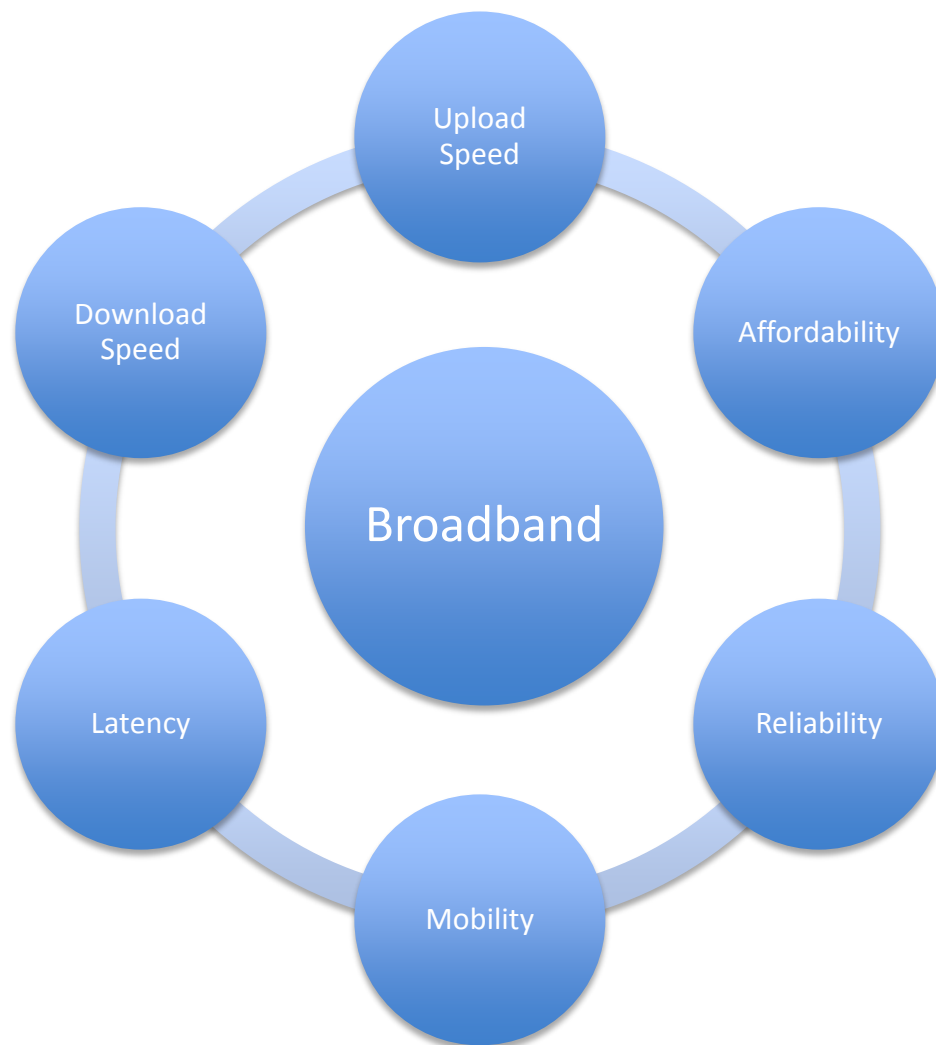
Red = Stop

Green = \$\$\$

Red = Bankrupt

# Assessing Your Community's Broadband

## It's more than just "how fast?"!



Digital Divide Index

Blandin Case Studies

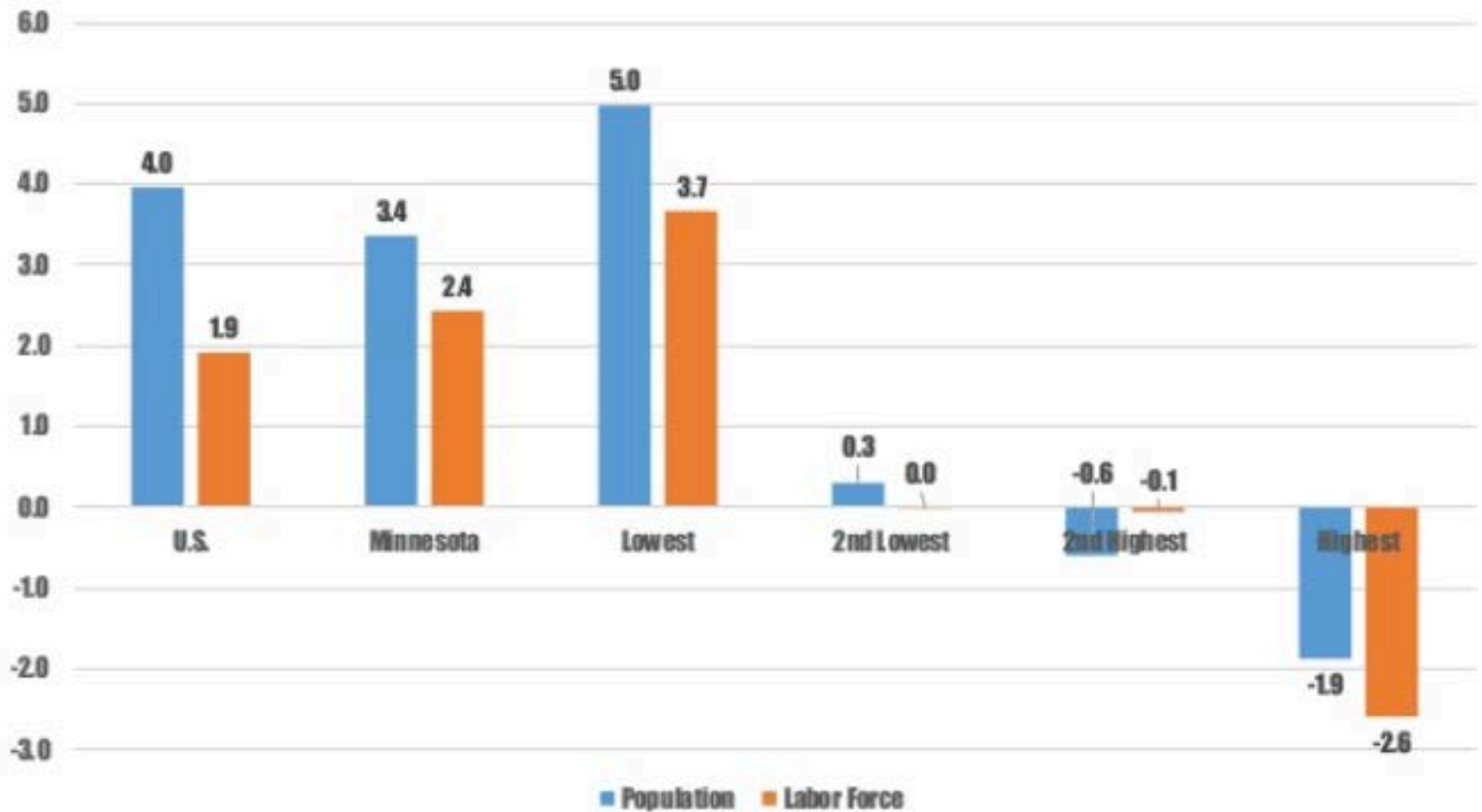
# **BROADBAND DRIVES RURAL VITALITY**

# Digital Divide Index

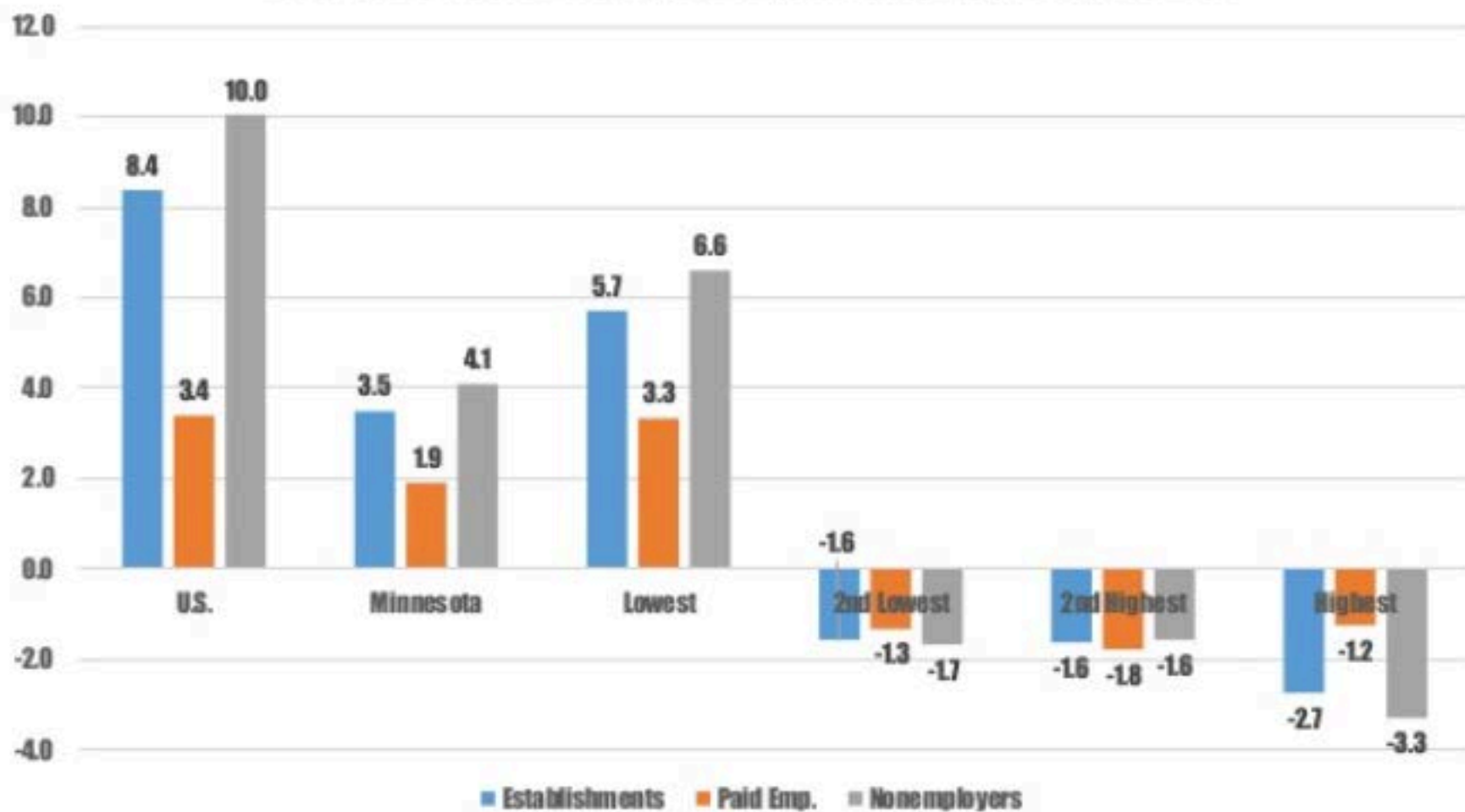
- Infrastructure/Adoption
  - Percent without access to 25 Mb/3 Mb
  - Number of residential connections at 10/1
  - Average advertised speeds
- Socio-economic characteristics
  - Percentage 65 and older
  - Percentage with less than a high school diploma
  - Poverty rate



### 2010-2015 Percent Change: U.S., Minnesota, & DDI Quartiles



### 2010-2015 Percent Change: U.S., Minnesota by DDI Quartiles





# Blandin Case Studies

Great Broadband Meeting  
Smart Economic Development  
Strategies

# Locations

- Bemidji/Beltrami County
- Brainerd/Crow Wing County
- Red Wing/Goodhue County
- Two Harbors/Lake County
- Sibley County

# In these communities, broadband...

- Is increasingly invisible
- Providers are community partners
- Attracts people and investment
- Helps economic developers do their job
  - Workforce development and attraction
  - Innovation
  - Marketing

# Broadband Trends

- Bandwidth utilization continues to rise rapidly
- Site selectors seek direct fiber connectivity
- Fiber-fed fixed wireless is greatly improved
- Symmetric bandwidth is critical
  - Download is consumption
  - Upload is production
- Real estate value impact
  - 70% won't buy a house without broadband
  - Fiber connections raise home values

# FCC funds to improve rural broadband through enhanced DSL

- CAF2
  - CenturyLink, Frontier, Consolidated & Windstream
  - 10/1 required
  - 80% of unserved households
  - Capital grant to providers
- ACAM
- Arvig, TDS, NU, BevCom, etc
- 25/3, 10/1, 4/1 required based on geography
- Operating subsidy over several years

# Public Policy Considerations

- DEED Border to border grant needs \$\$\$\$
  - Rural economic vitality requires broadband
  - Broadband deployment requires subsidy
  - Rural Broadband Coalition
- Rural towns need a connected countryside
- Pursue options
  - Full city
  - Industrial park
  - Downtown
  - Business incubator/accelerator/co-working space
  - Public access

# Discussion

- Blandin Foundation
  - Community Broadband Resources
    - Up to 32 hours of technical assistance
    - <http://broadband.blandinfoundation.org>
  - Ongoing info
    - Blandin on Broadband Blog (daily or weekly)
      - <http://blandinonbroadband.org>
    - Blandin Broadband E-news (monthly)
      - Subscribe @broadband.blandinfoundation.org
- Bill Coleman
  - [bill@communitytechnologyadvisors.com](mailto:bill@communitytechnologyadvisors.com)
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