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# Connect Minnesota Broadband Mapping Initiative

Presentation to the  
Minnesota Ultra High-Speed Broadband Task Force

September 18, 2009

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## *Why We Exist...*

**Connected Nation is a national non-profit 501(c)(3) organization that facilitates market-based strategies for:**

- 1) expanding broadband availability and**
- 2) increasing broadband adoption rates**

**across the United States by establishing public-private partnerships at the state level. Connect Minnesota is a non-profit subsidiary of Connected Nation.**

### *Our Mission Statement*

*We believe that states, communities, families and individuals can realize great economic and social advantages when we **accelerate broadband availability in unserved areas and increase broadband use in all areas, rural and urban, alike.***



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## *Minnesota's Map: What's Next*

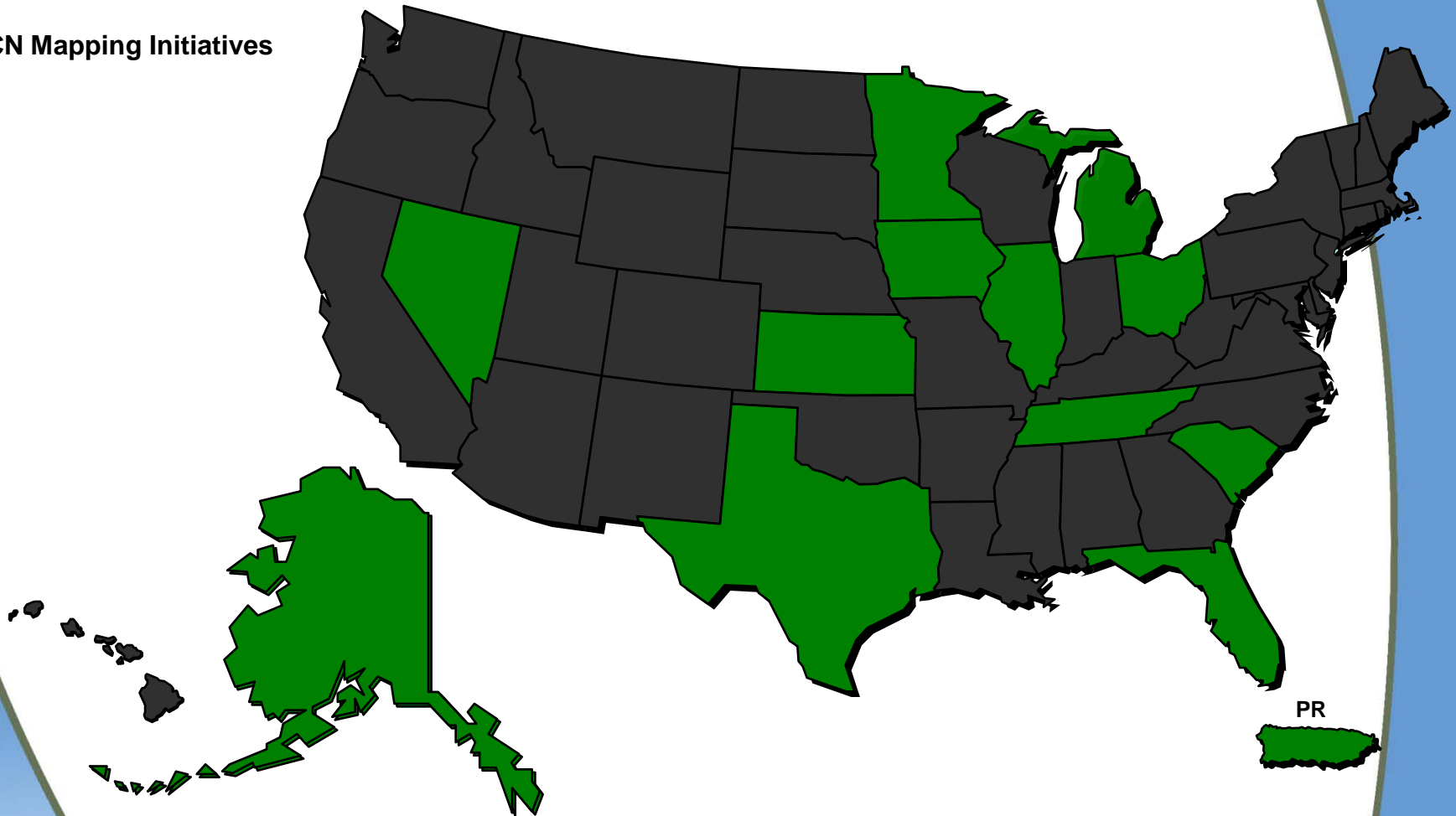
- **The federal Broadband Data Improvement Act (P.L. 110-385) created the “State Broadband Data & Development Grant Program” (SBDD) that was funded by Congress in the American Recovery and Reinvestment Act at \$240 million.**
- **The SBDD Grant Program will provide funds to states to create and maintain broadband maps for a period of at least two years (up to five years, pending funding availability)**
- **Connected Nation was named by Gov. Tim Pawlenty as Minnesota’s “single designated entity” to receive SBDD grant funds**
- **An application was filed with NTIA on August 14<sup>th</sup>.**



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## Connected Nation's Mapping Work Under NTIA's Mapping Grant Program

 CN Mapping Initiatives





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## *Minnesota's Map: What's Next*

- **A decision from NTIA is expected by September 30.**
- **If awarded, Minnesota's maps will be converted over to the new "BroadbandSTAT" platform**
- **The raw data collected and supplied to NTIA at the Census Block level of detail will also be supplied to the state GIS office.**
- **The maps will be continuously updated for a period of at least two years**
- **A statewide survey on broadband use and barriers to broadband adoption will commence**
- **A project manager will be assigned as an on-the-ground resource in the state**



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***Connected Nation's  
Work in Minnesota  
Under the Mapping Program  
Created by SF 3337  
November 2008 – June 2009***



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## *The Connect Minnesota Broadband Mapping Initiative: Background*

- **An omnibus bill containing language to create a statewide broadband inventory mapping project was included in SF 3337, which passed the legislature on May 7, 2008 and was signed into law by Gov. Tim Pawlenty on May 12, 2008. The Minnesota Department of Commerce was charged with issuing a Request for Proposals from qualifying vendors.**
- **Connect Minnesota, a non-profit 501(c)3 subsidiary of Connected Nation, submitted a bid and was subsequently selected by the Minnesota Department of Commerce to develop the map for the state beginning in November 2008.**
- **Connected Nation has collected broadband availability data from more than 340 broadband providers to map broadband availability in a manner that accurately represents coverage. Maps have been produced for KY, TN, OH, WV, SC, NC, and MN to date, with maps under NTIA's broadband mapping grant program currently pending in twelve states and one U.S. Territory.**



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## *Minnesota's Map: Key Points*

- **Provider participation was and remains voluntary**
- **110 providers are represented on the map**
- **The Minnesota Department of Commerce asked us to release a preliminary set of maps by February 1, 2009 to provide an opportunity for public input. A final set of maps was completed on June 30, 2009.**
- **During that 5-month window, Connect Minnesota:**
  - **Continued the process of field personnel validating data**
  - **Sought input from the public, provider community, and state leaders to identify any inaccuracies and suggest revisions... (that feedback will continue to be received via the [www.connectmn.org](http://www.connectmn.org) web site)**
  - **Gathered data from providers that weren't originally represented on the February 1 map**



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## *Minnesota's Map: Key Findings*

- **We received availability data from cable companies, municipalities, WISPs, rural cooperatives, ILECs, and CLECs that operate DSL, cable, fixed wireless, mobile wireless, and fiber service platforms.**
- **Approximately 94% of Minnesota Households have access to broadband service that meets the FCC's minimum threshold for broadband at 768 Kbps.**
- **The remaining 6% comprises approximately 97,300 households, or about 313,000 people, that do not have access.**
- **Providers in the Twin Cities, along with some rural providers, provide much higher bandwidth services to consumers—well beyond the 768 Kbps minimum.**

# MN Broadband Service Inventory (Platform Neutral)

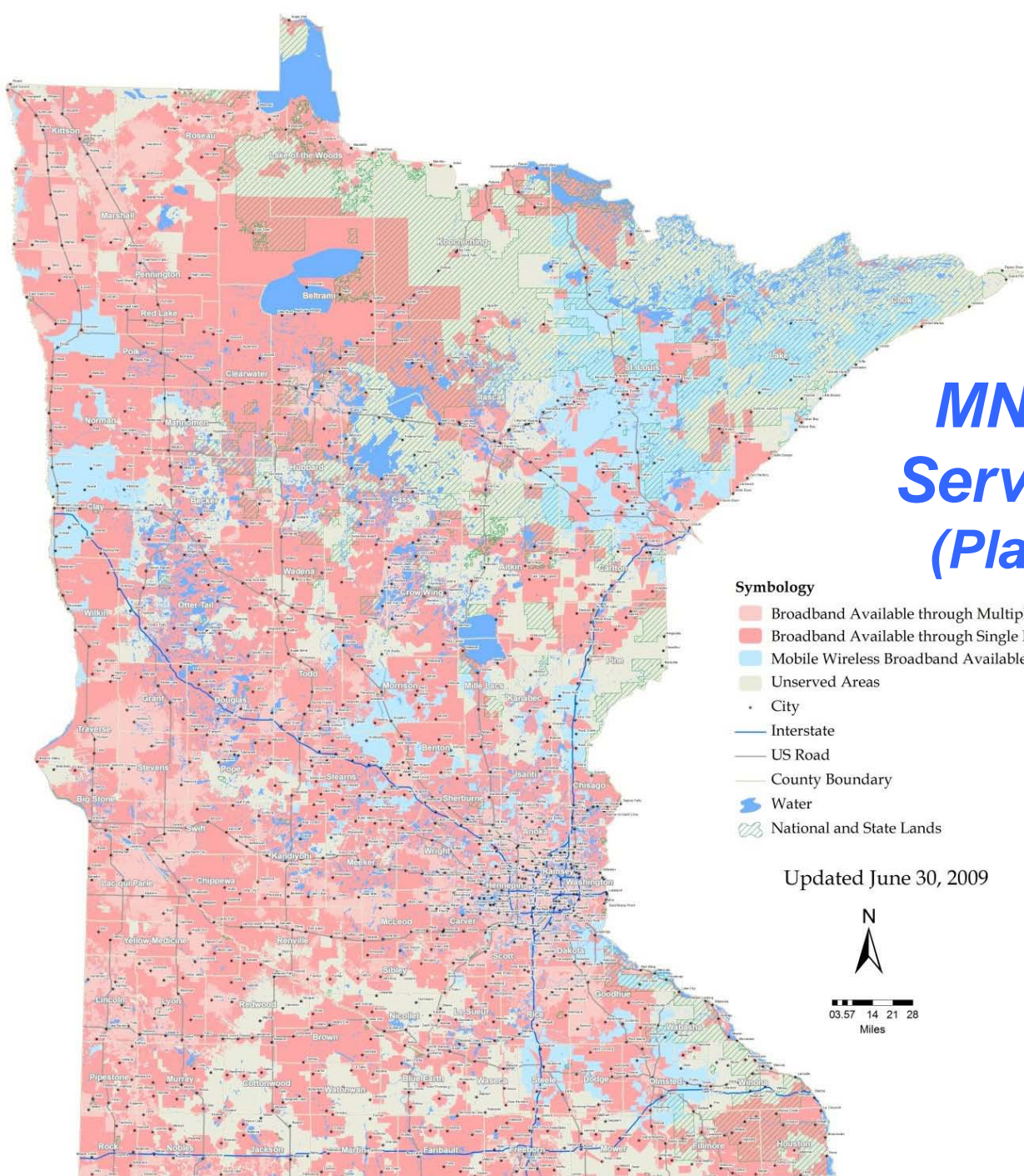
## Symbology

- Broadband Available through Multiple Platforms
- Broadband Available through Single Platform
- Mobile Wireless Broadband Available\*
- Unserved Areas
- City
- Interstate
- US Road
- County Boundary
- Water
- National and State Lands

Updated June 30, 2009



03.57 14 21 28  
Miles



# MN Broadband Service Inventory (by platform)

## Symbology

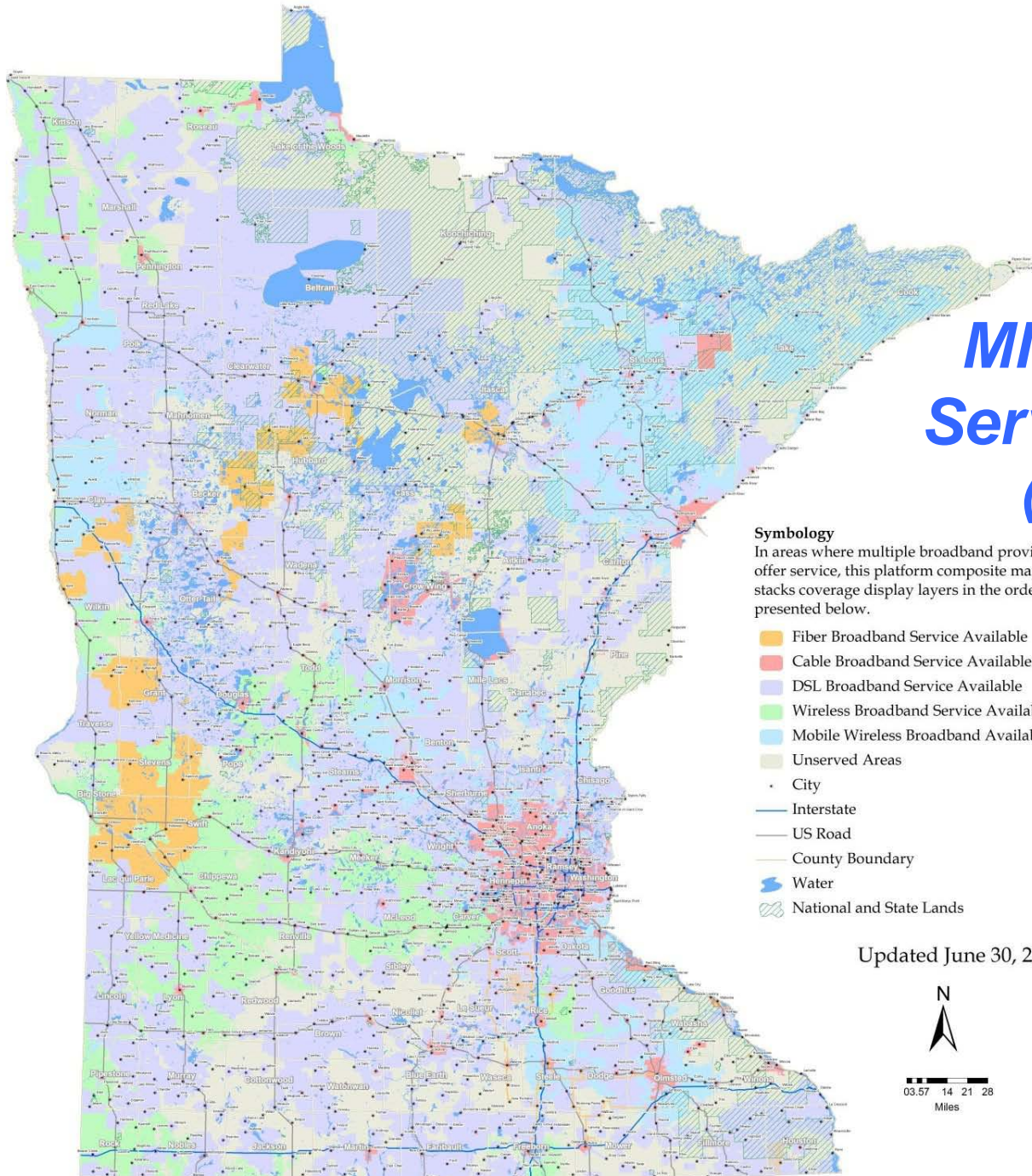
In areas where multiple broadband providers offer service, this platform composite map stacks coverage display layers in the order presented below.

-  Fiber Broadband Service Available
-  Cable Broadband Service Available
-  DSL Broadband Service Available
-  Wireless Broadband Service Available
-  Mobile Wireless Broadband Available\*
-  Unserved Areas
-  City
-  Interstate
-  US Road
-  County Boundary
-  Water
-  National and State Lands

Updated June 30, 2009



03.57 14 21 28  
Miles

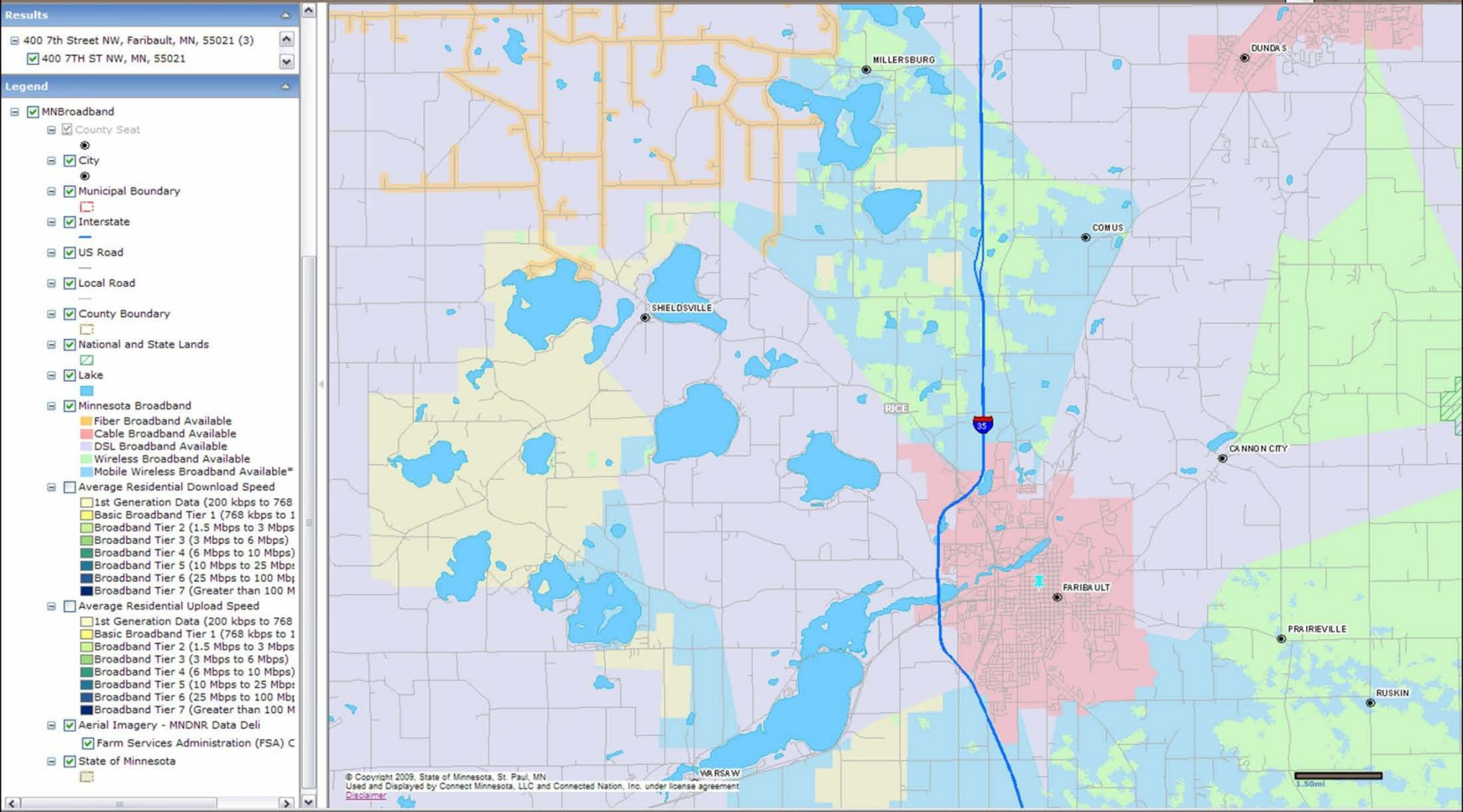


# Interactive Map Available at <http://www.connectmn.org/>



## Minnesota Broadband Service Inventory

Connect Minnesota | Connected Nation | Help | Map Your Address | Identify Broadband Providers



# Household Density of Unserved Areas (by Census Block)

## Symbology

- City
- Interstate
- US Road
- County Boundary
- Water
- National and State Lands

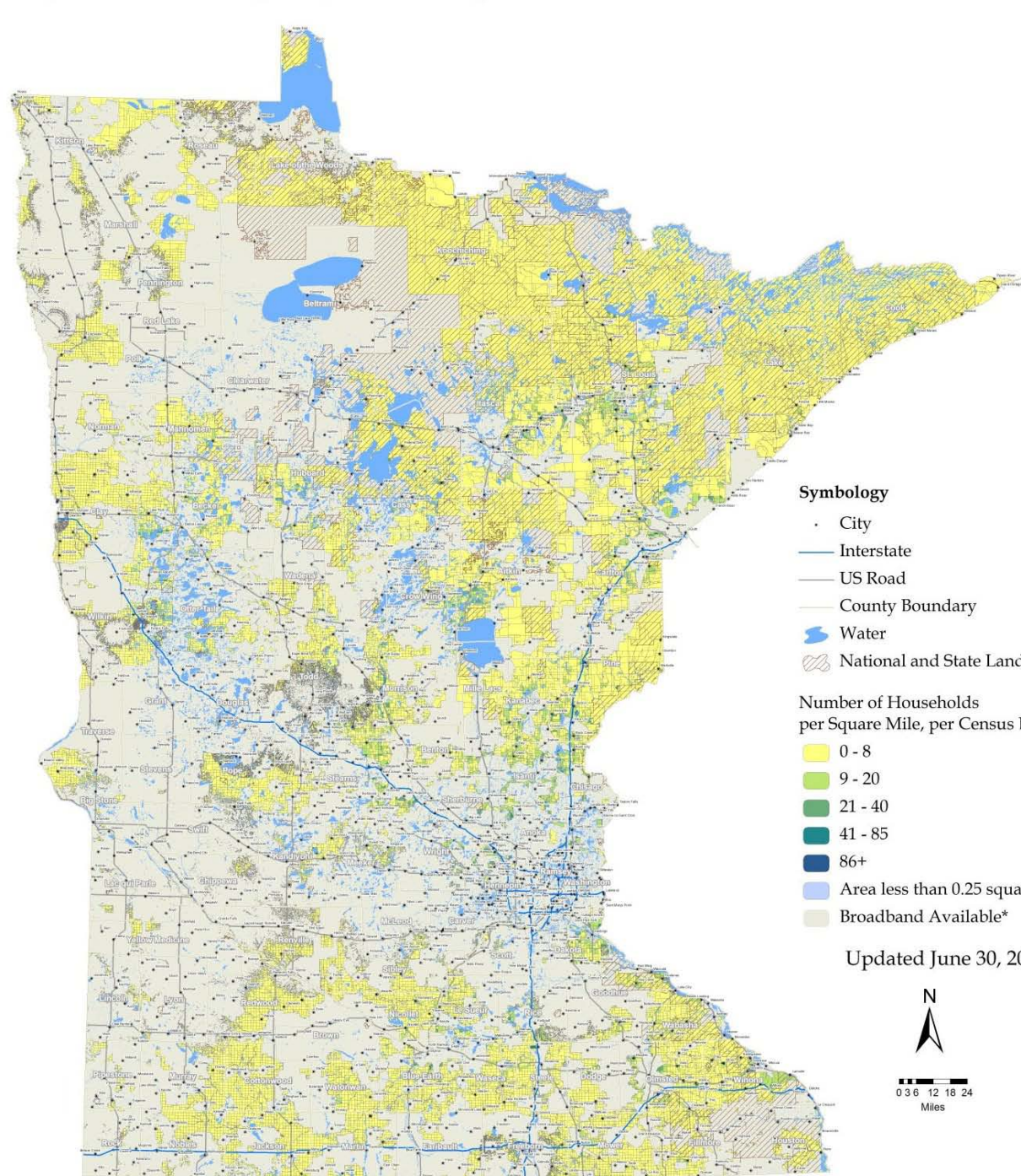
## Number of Households per Square Mile, per Census Block

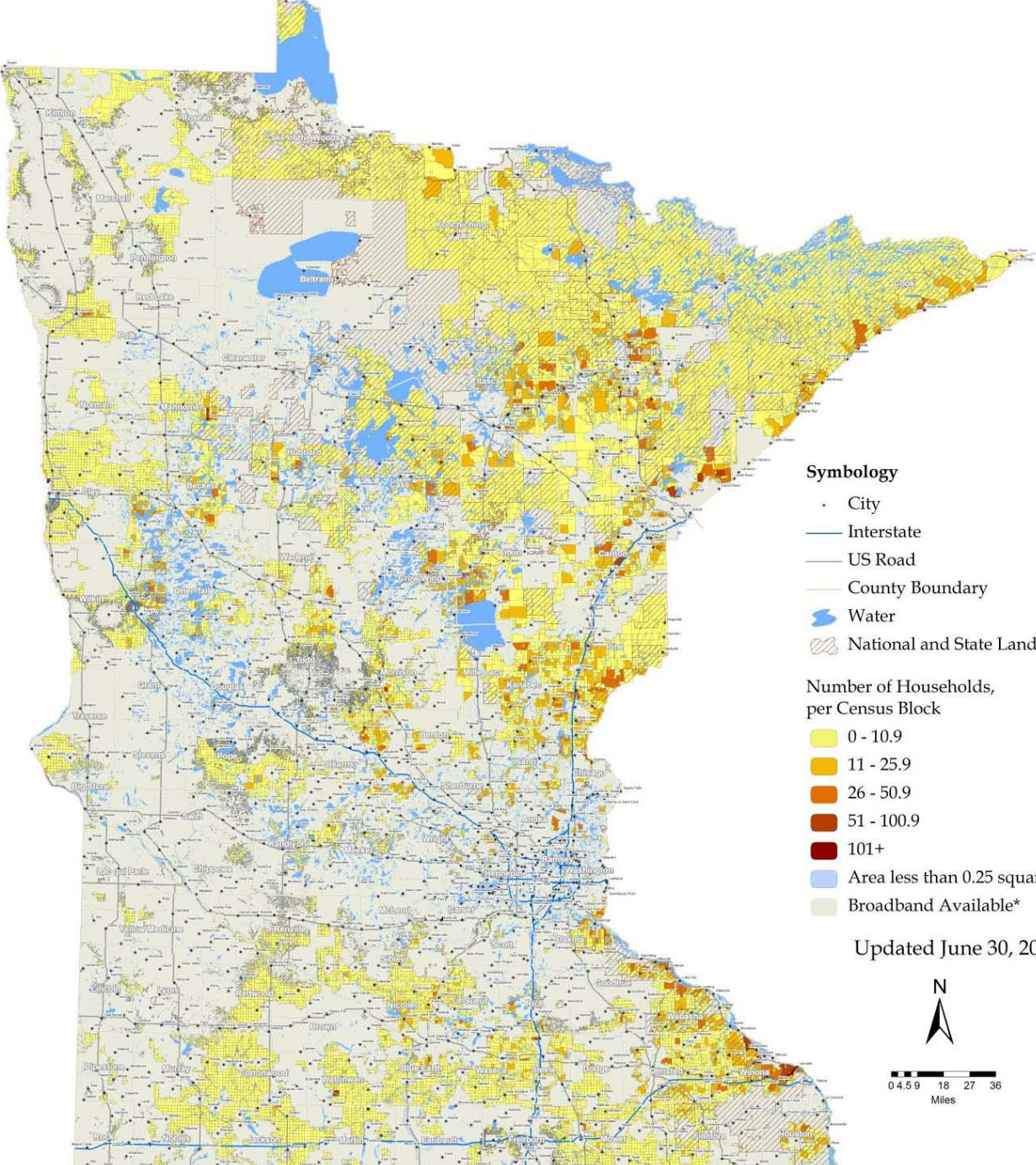
- 0 - 8
- 9 - 20
- 21 - 40
- 41 - 85
- 86+
- Area less than 0.25 square mile
- Broadband Available\*

Updated June 30, 2009



0 3 6 12 18 24  
Miles





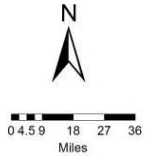
**Symbology**

- City
- Interstate
- US Road
- County Boundary
- Water
- National and State Lands

**Number of Households, per Census Block**

- 0 - 10.9
- 11 - 25.9
- 26 - 50.9
- 51 - 100.9
- 101+
- Area less than 0.25 square mile
- Broadband Available\*

Updated June 30, 2009



# Number of Unserved Households (by Census Block)

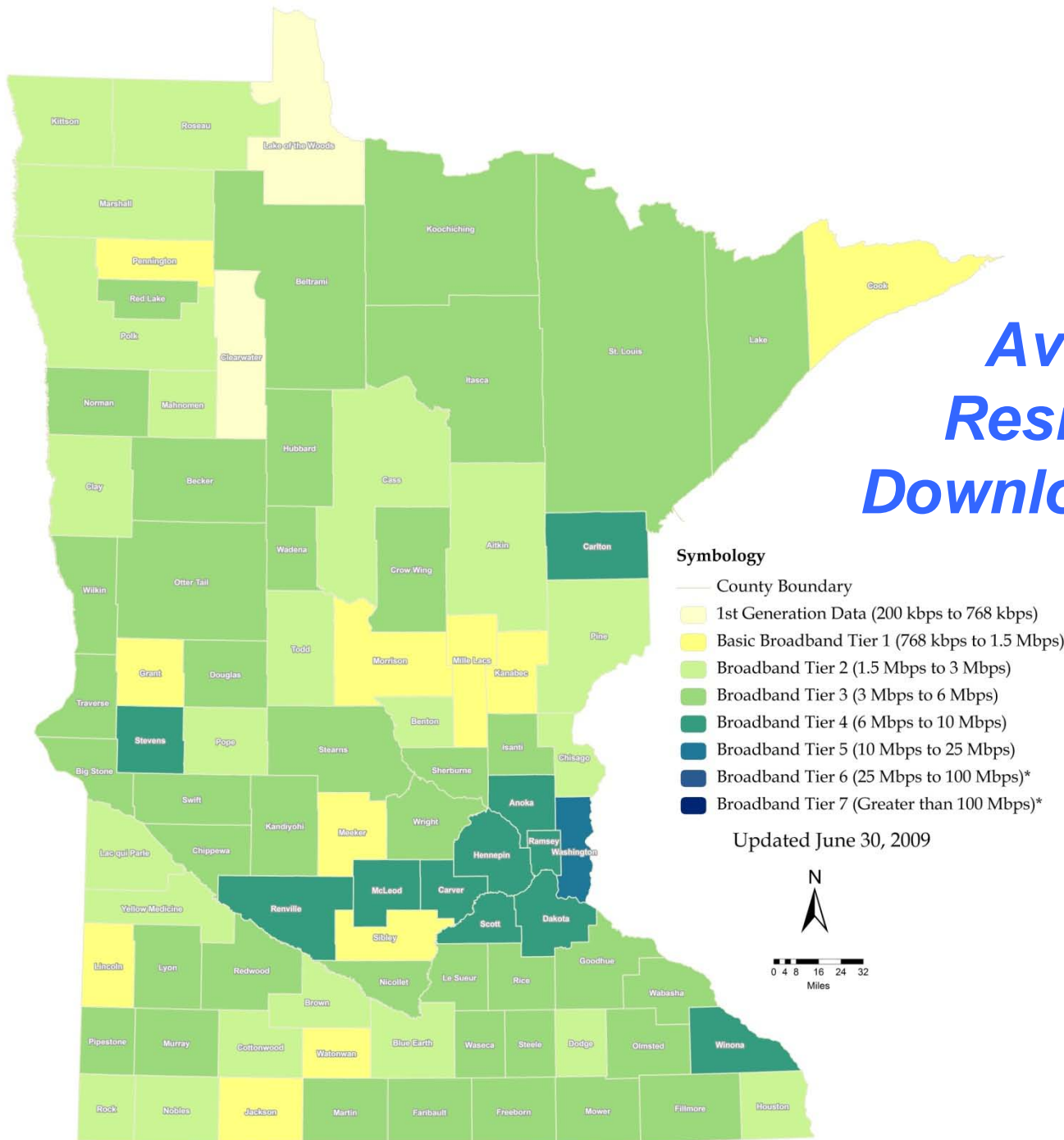


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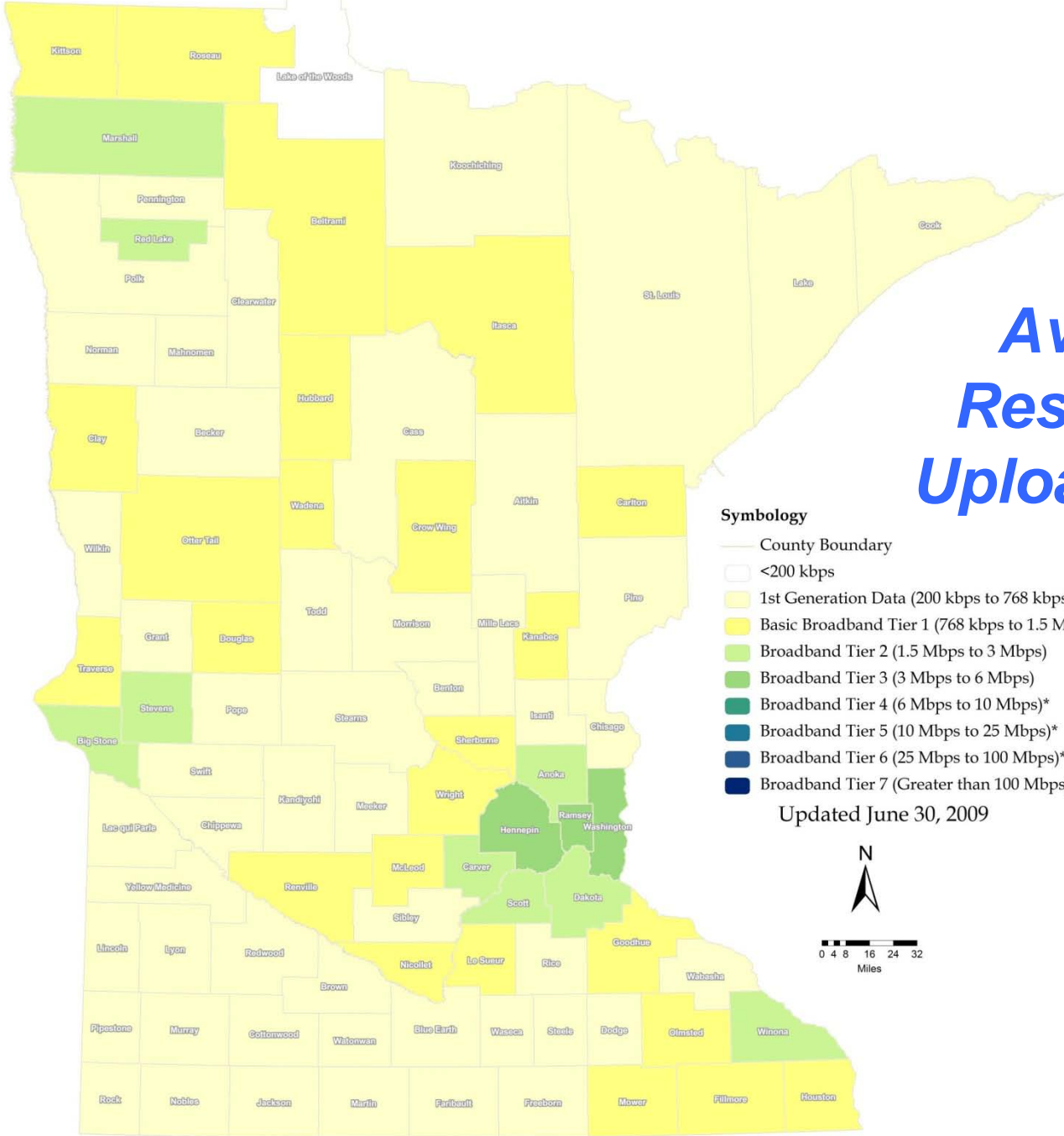
## *Speed Maps*

- **The average download speed statewide is higher than we've seen in any other state that we've mapped, at approximately 7.2 Mbps**
- **The average upload speed statewide is approximately 2.1 Mbps**
- **Actual user speed testing data was obtained from Ookla Net Metrics' testing servers, including the dedicated Connect Minnesota speed testing tool, in or near the State of Minnesota. Users performed these tests at [www.speedtest.net](http://www.speedtest.net) and [www.connectmn.org](http://www.connectmn.org).**
- **The sample size is comprised of approximately 519,674 tests performed between November 2008 and June 2009.**

# Average Residential Download Speed



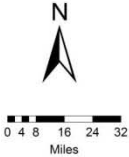
# Average Residential Upload Speed



### Symbology

- County Boundary
- <200 kbps
- 1st Generation Data (200 kbps to 768 kbps)
- Basic Broadband Tier 1 (768 kbps to 1.5 Mbps)
- Broadband Tier 2 (1.5 Mbps to 3 Mbps)
- Broadband Tier 3 (3 Mbps to 6 Mbps)
- Broadband Tier 4 (6 Mbps to 10 Mbps)\*
- Broadband Tier 5 (10 Mbps to 25 Mbps)\*
- Broadband Tier 6 (25 Mbps to 100 Mbps)\*
- Broadband Tier 7 (Greater than 100 Mbps)\*

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**Q & A**



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