



CONNECT
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**The Connect Iowa
Broadband Mapping and
Planning Initiative
and
Connected Nation's Demand
Stimulation Programs**

presented to the
Iowa Broadband Deployment Governance Board

October 2, 2009

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Who We Are and Why We Exist...



Connect Iowa is a subsidiary non-profit of Connected Nation, a national 501(c)(3) organization with primary offices in Washington, DC and Bowling Green, KY. Connected Nation's mission is to generate and support economic development by:




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

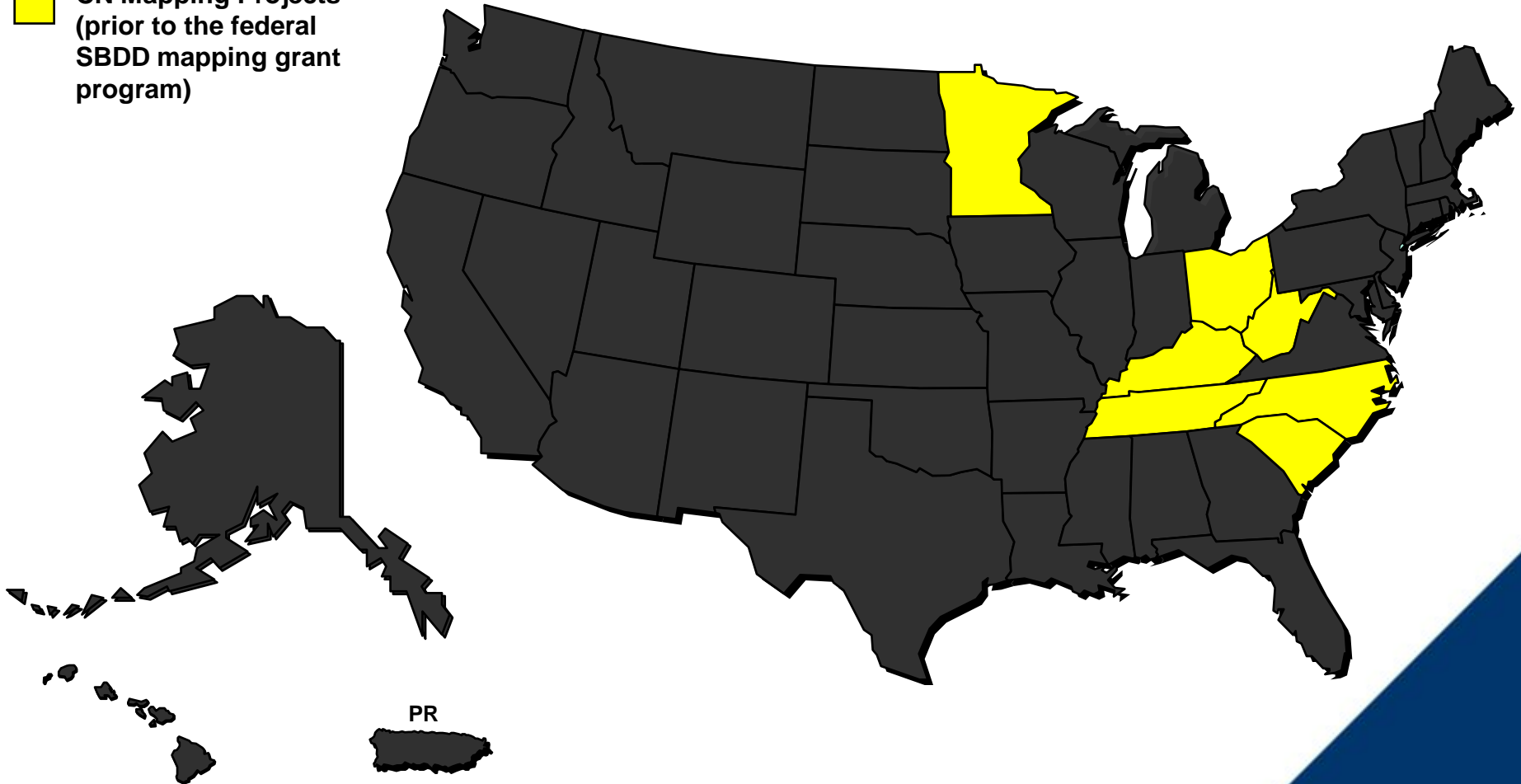
Connect Iowa was established to serve as the state's partner in accomplishing these goals.

Under NTIA's State Broadband Data and Development Grant Program, Connected Nation will be working in at least twelve states and one U.S. territory.

Connected Nation's Mapping Projects 2005-2009



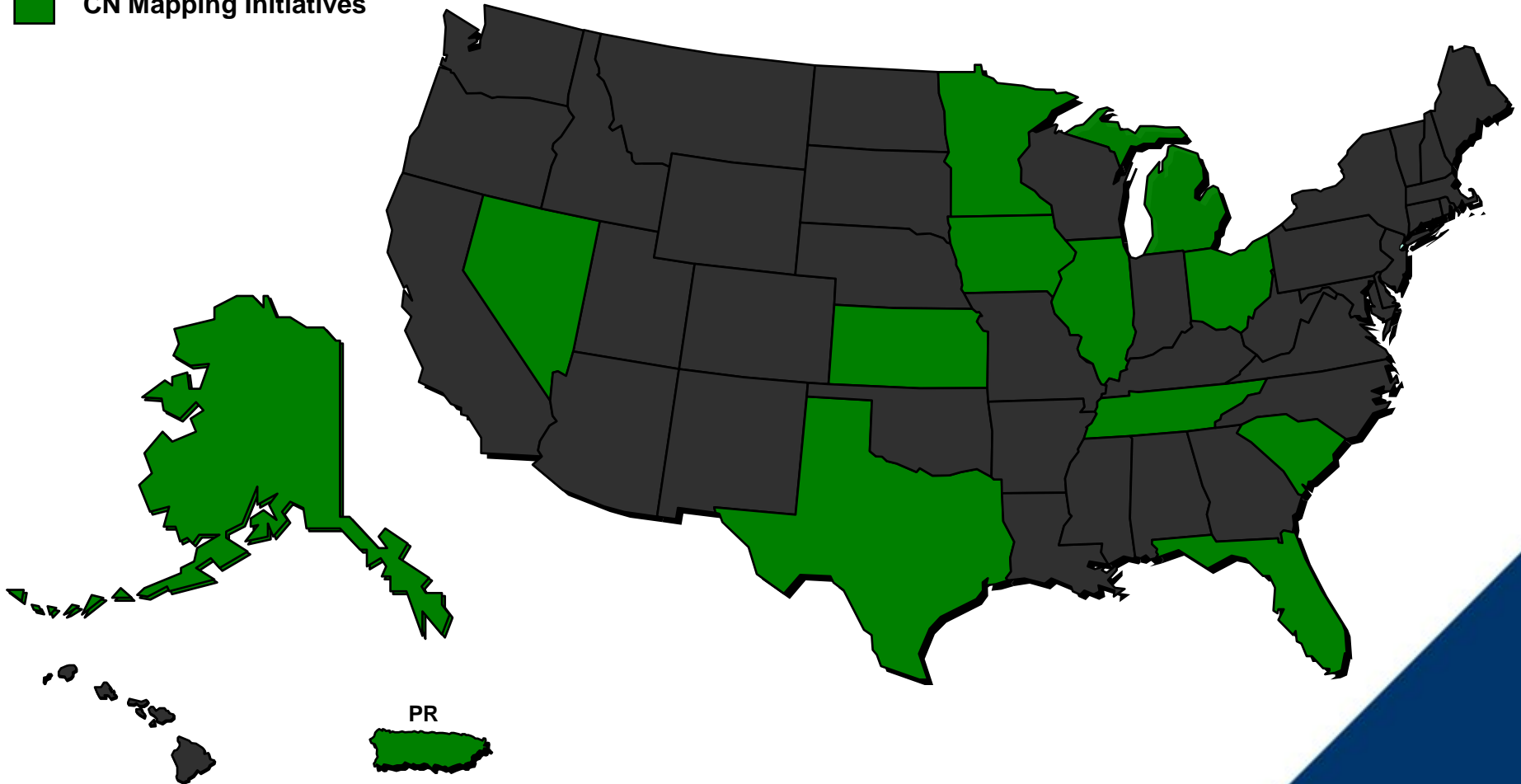
 CN Mapping Projects
(prior to the federal
SBDD mapping grant
program)



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



 CN Mapping Initiatives



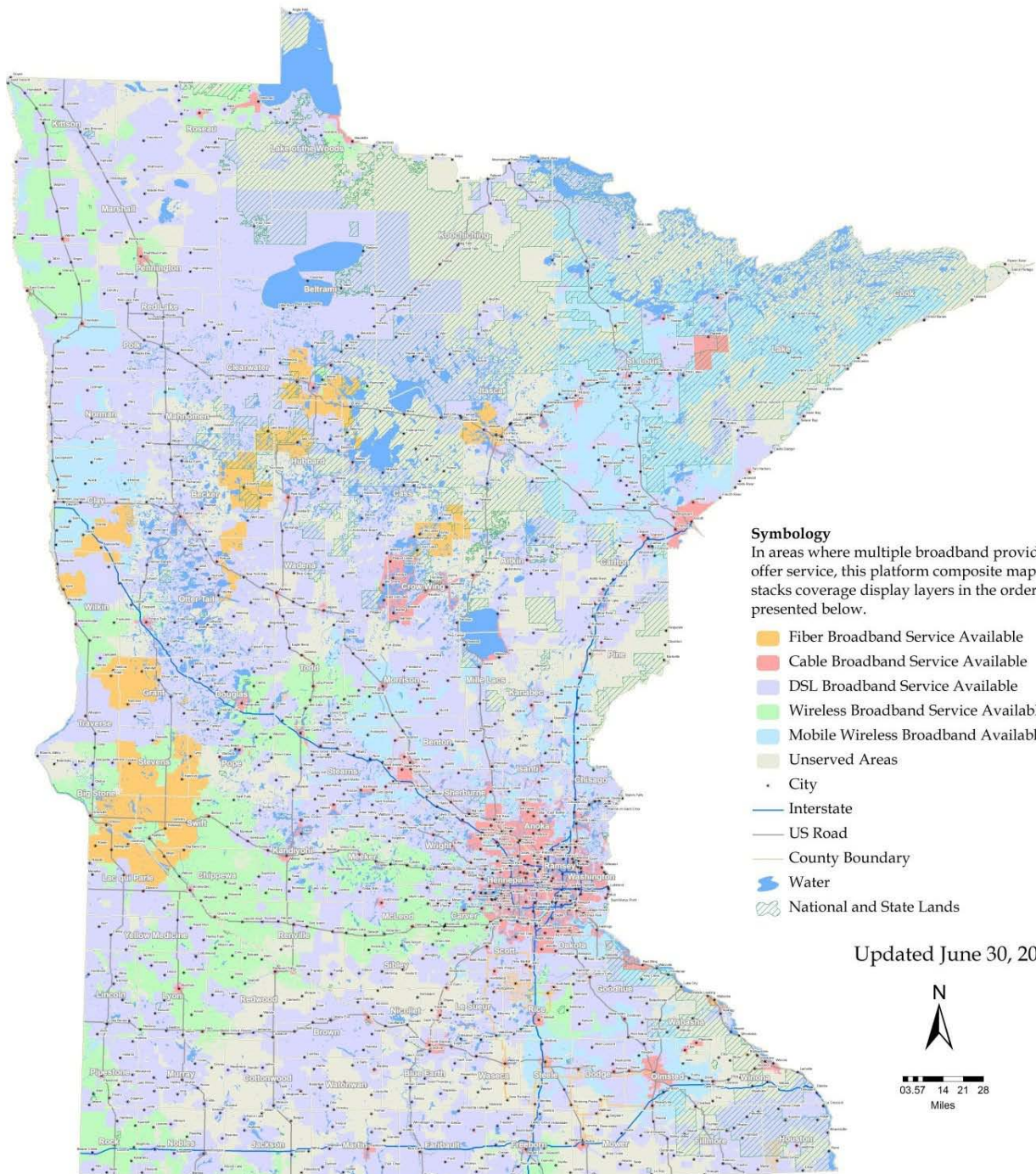
Minnesota's Broadband Service Inventory

as of June 30, 2009
110 Providers Represented

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



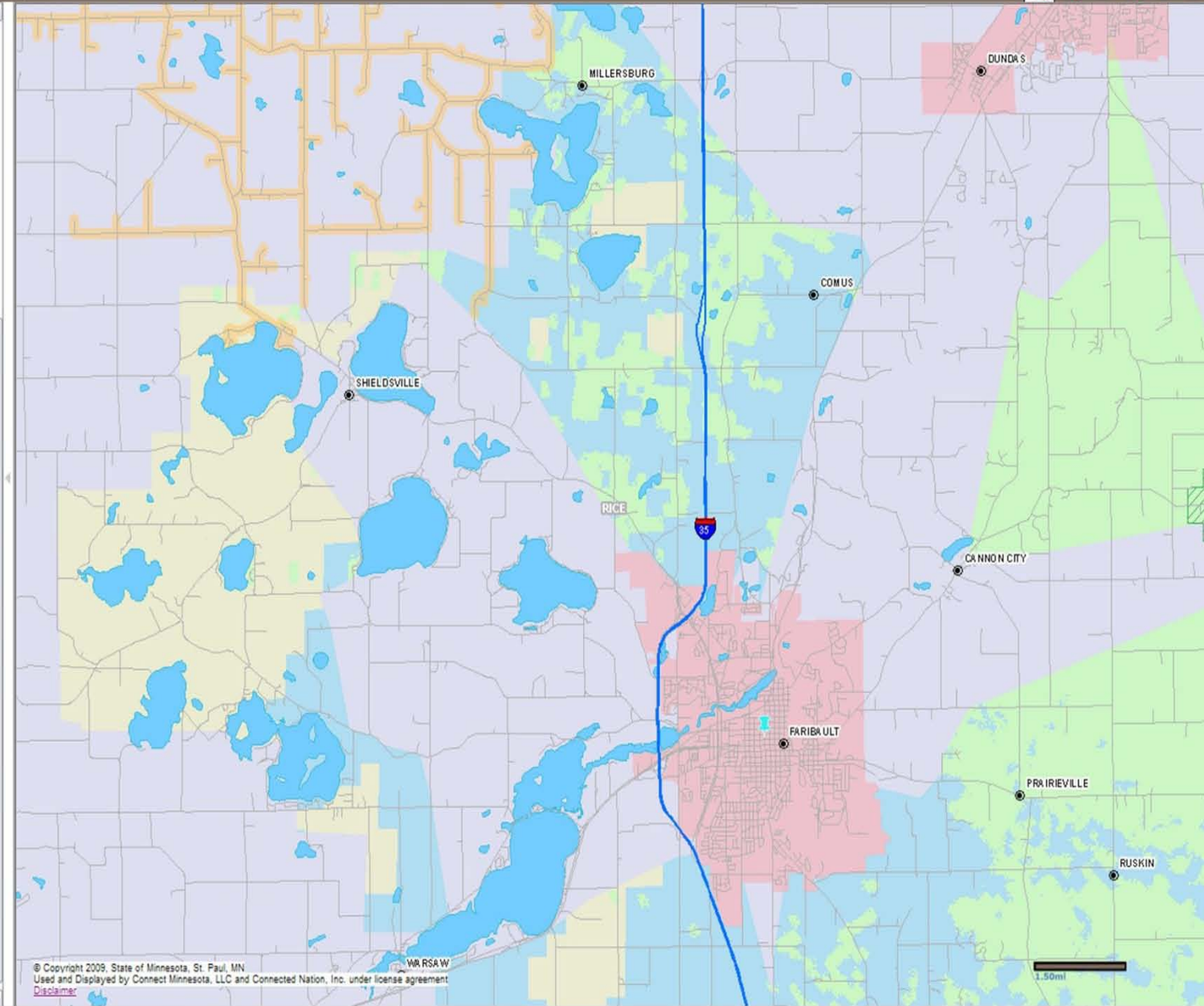


Results

400 7th Street NW, Faribault, MN, 55021 (3)
 400 7TH ST NW, MN, 55021

Legend

- MNBroadband
 - County Seat
 - City
 - Municipal Boundary
 - Interstate
 - US Road
 - Local Road
 - County Boundary
 - National and State Lands
 - Lake
 - Minnesota Broadband
 - Fiber Broadband Available
 - Cable Broadband Available
 - DSL Broadband Available
 - Wireless Broadband Available
 - Mobile Wireless Broadband Available*
 - Average Residential Download Speed
 - 1st Generation Data (200 kbps to 768
 - Basic Broadband Tier 1 (768 kbps to 1
 - 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 Mb;
 - Broadband Tier 7 (Greater than 100 M
 - Average Residential Upload Speed
 - 1st Generation Data (200 kbps to 768
 - Basic Broadband Tier 1 (768 kbps to 1
 - Broadband Tier 2 (1.5 Mbps to 3 Mbps)
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 - Broadband Tier 4 (6 Mbps to 10 Mbps)
 - Broadband Tier 5 (10 Mbps to 25 Mbps)
 - Broadband Tier 6 (25 Mbps to 100 Mb;
 - Broadband Tier 7 (Greater than 100 M
 - Aerial Imagery - MNDNR Data Deli
 - Farm Services Administration (FSA) C
 - State of Minnesota



***Household Density of
Unserved Areas in
Minnesota
by Census Block***

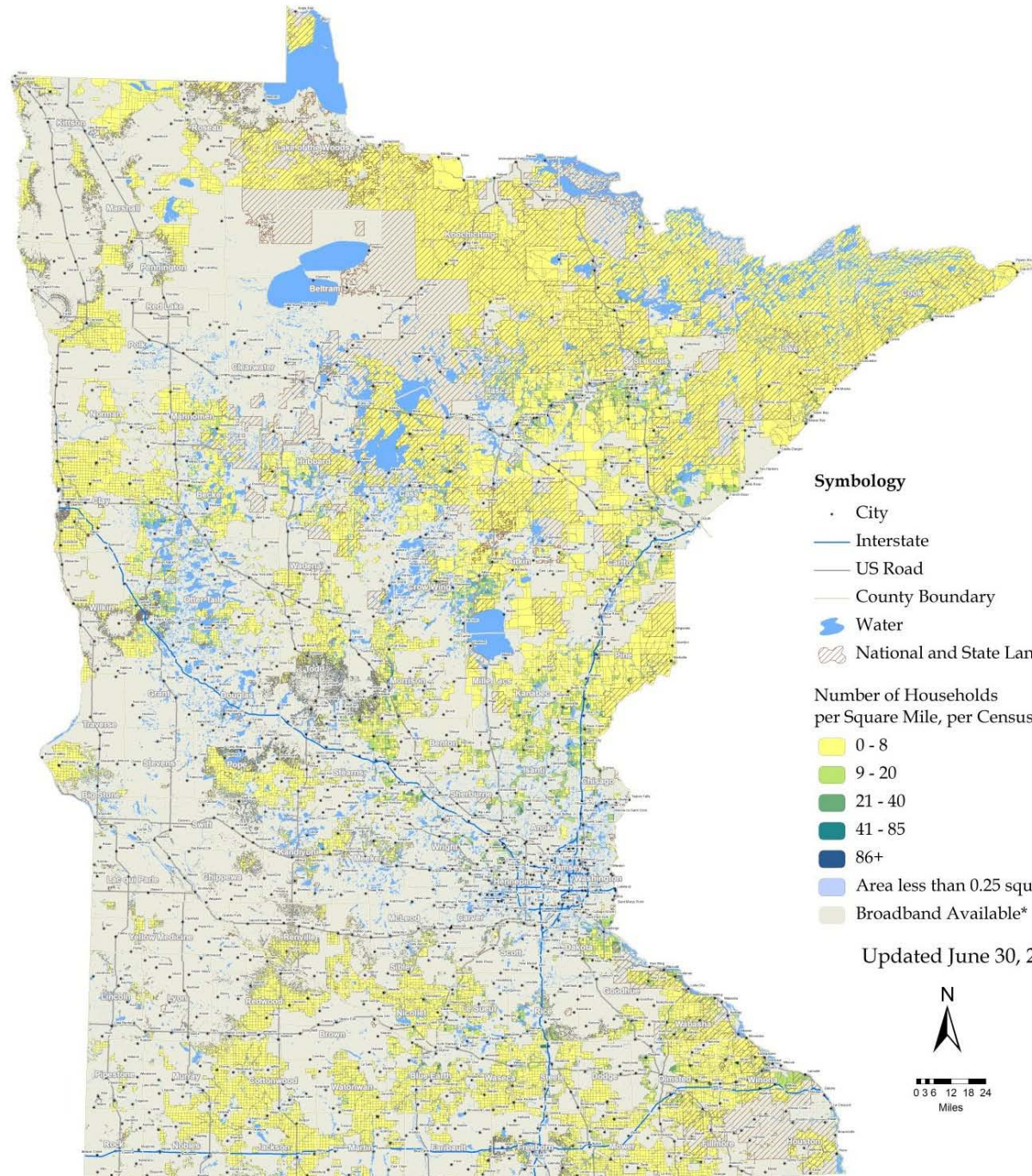
Symbology

- 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



***Number of Households in
Minnesota's Unserved
Areas
by Census Block***

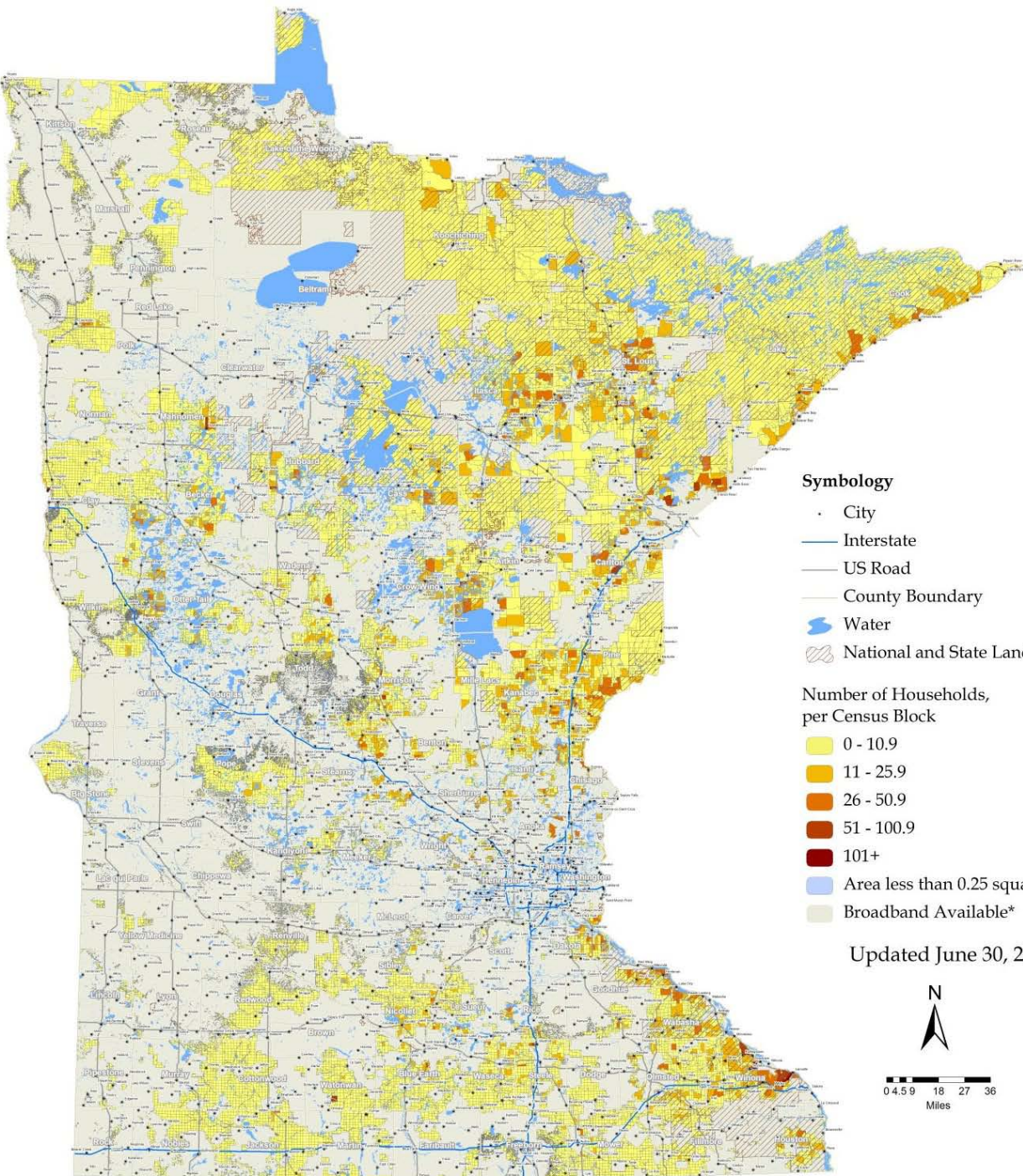
Symbology

- 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



The State Broadband Data and Development Grant Program (SBDD): Broadband Mapping



- **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. Chet Culver, via the Iowa Utilities Board, as the state’s “single designated entity” to receive SBDD grant funds**
- **An application was filed with NTIA on August 14th.**
- **A grant award decision from NTIA was expected by September 30.**

The State Broadband Data and Development Grant Program (SBDD): Broadband Mapping

- continued -



- If awarded, Connect Iowa will begin collecting infrastructure data from Iowa's broadband providers.
- A depiction of service availability at the street level will be created in GIS format using the supplied infrastructure data. The ensuing maps will be made available to the public via an interactive online application called "Broadband STAT" at www.connectiowa.org
- 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 2 years
- A project manager will be assigned as an on-the-ground resource in the state.
- A "substantially complete" data set will be collected and supplied to NTIA by February 1, 2010, with a final data set completed and submitted by March 1, 2010.

Broadband STAT: The Nexus Between Mapping and Planning



- **The Broadband STAT application represents the nexus between mapping current broadband availability and planning for the future.**
- **Broadband STAT is a powerful, yet user-friendly and customizable tool that will allow state leaders and the public to:**
 - **Search for and identify broadband service at a specific address, including available speeds and service providers**
 - **Understand and track broadband deployment over time**
 - **Analyze and prioritize unserved and underserved areas using population and household density information**
 - **Track ARRA-funded broadband projects**
 - **Build and evaluate scenarios to help score and prioritize future broadband infrastructure proposals**
 - **Track broadband adoption rates and barriers to broadband adoption, community by community across the state.**



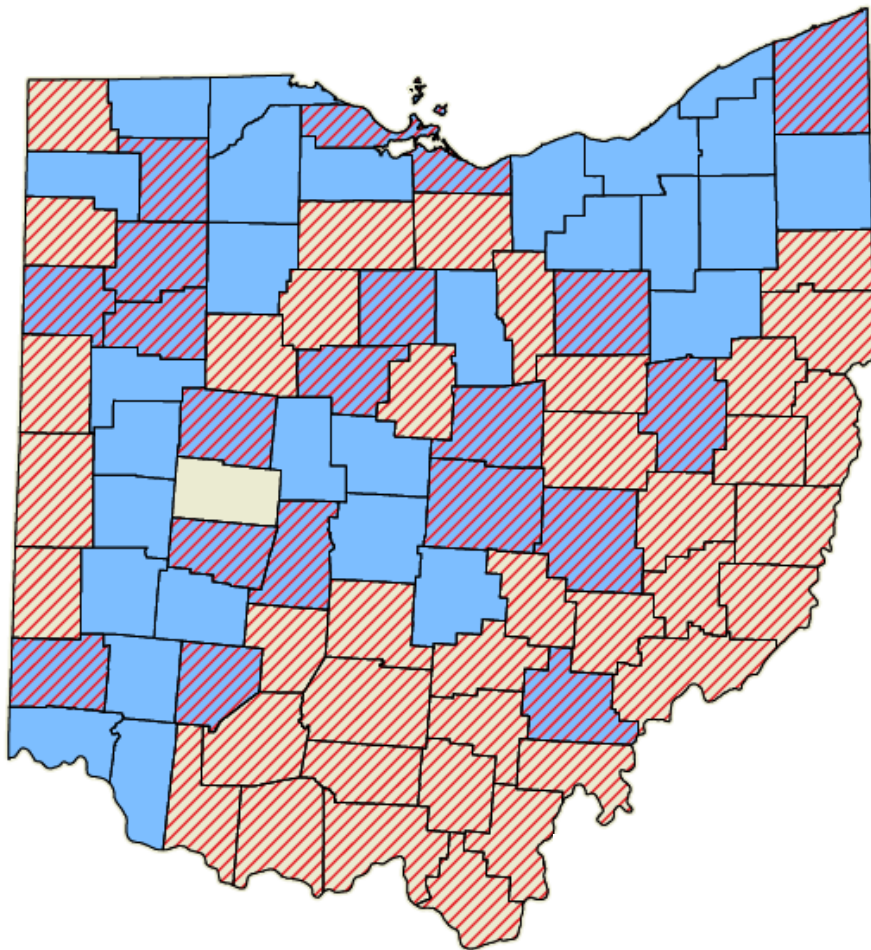
Broadband STAT Demonstration

The State Broadband Data and Development Grant Program (SBDD): Broadband Planning



- County-level research on broadband adoption, broadband use, and barriers to broadband adoption will help complete the picture of Iowa's broadband landscape.
- To plan for the future, it's important to understand where the “digital divide” exists and what is causing it.
- Connect Iowa will launch a statewide research project to understand broadband adoption issues in each county, including:
 - Adoption rates
 - Demographic factors that impact adoption
 - Monthly subscription costs
 - Computer ownership rates
 - Awareness/computer literacy issues and trends
- The resulting data will be used to create additional analytical layers within the Broadband STAT application.
- A sample research report for the State of Ohio can be found here: http://connectoh.org/documents/Res_OH_06192009_FINAL.pdf




Ohio Broadband Availability and Adoption by County



Low broadband adoption is not limited to areas with low broadband availability.

92% of Ohioans have broadband availability, yet only 55% actually subscribe.

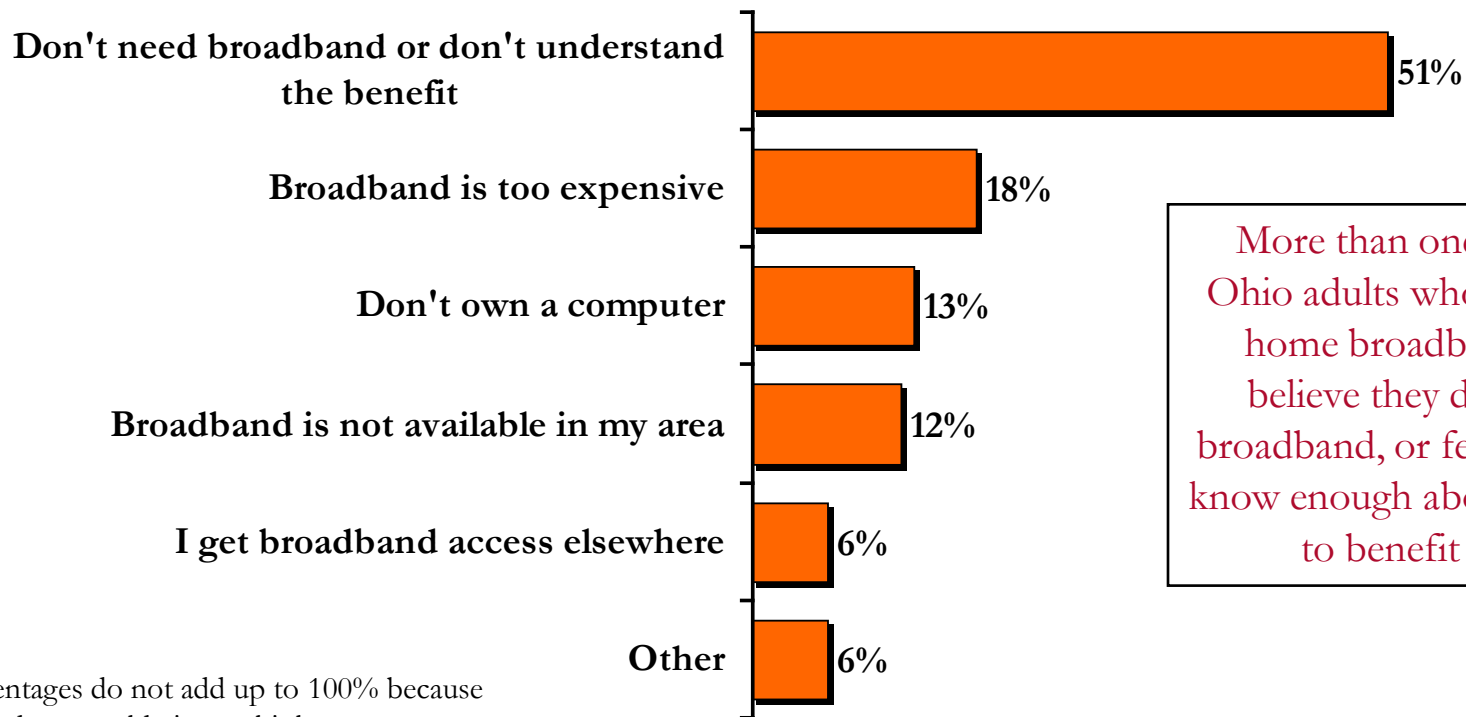
Legend

-  Lower Than Average Broadband Adoption (< 55%)
-  Higher Than Average Broadband Availability (>81%)
-  Higher Than Average Broadband Availability and Lower Than Average Broadband Adoption

Source: 2008 Connect Ohio Statewide Broadband Inventory Map

Barriers to Broadband Adoption

Among Ohio residents who do not subscribe to home broadband service:*



More than one-half of all Ohio adults who do not have home broadband service believe they do not need broadband, or feel they do not know enough about broadband to benefit from it.

*Percentages do not add up to 100% because respondents could give multiple responses.

Q: Why don't you subscribe to broadband Internet service?

Or if broadband is not available:

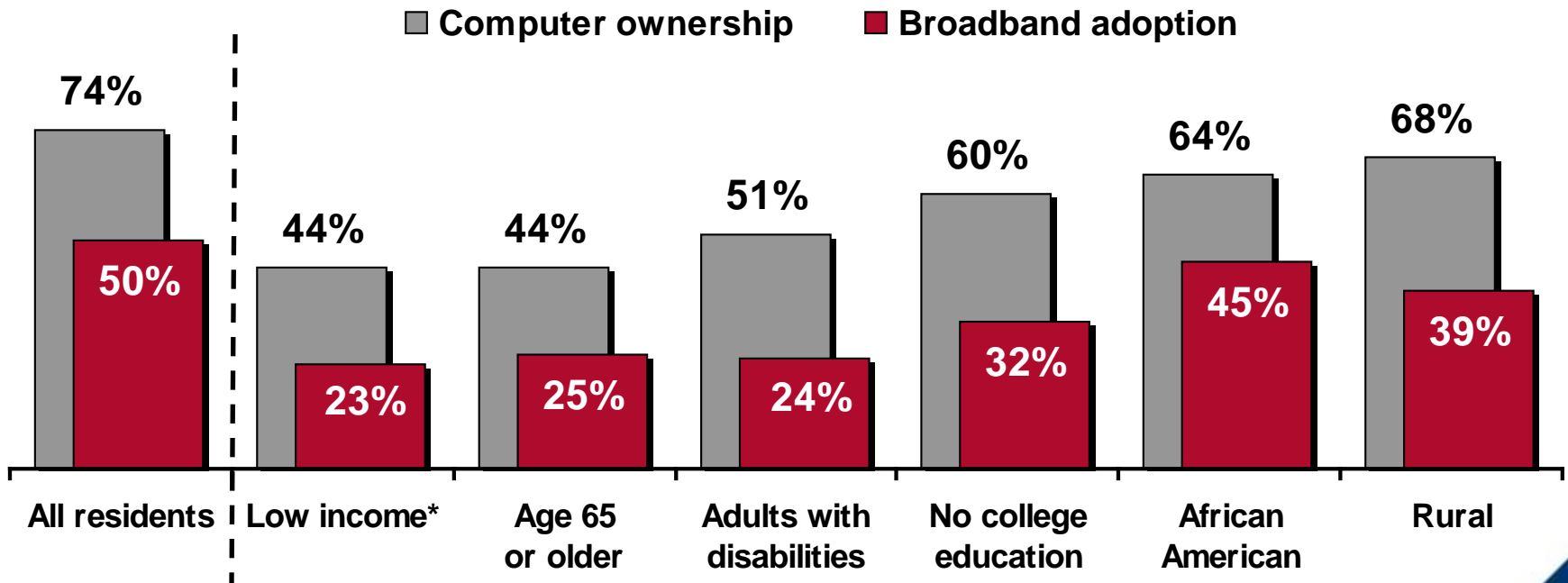
Q: Why wouldn't you subscribe to broadband Internet service?
(n = 542 OH residents with no home broadband service)

Source: 2008 Connect Ohio Statewide Residential Technology Assessment

Computer Ownership and Broadband Adoption Among Demographic Groups



Computer ownership and broadband adoption are lower than average among several demographic groups.



Source: 2007-2008 ConnectKentucky, Connected Tennessee, and Connect Ohio Residential Technology Assessments

*Low-income here is defined as annual household income less than \$25,000

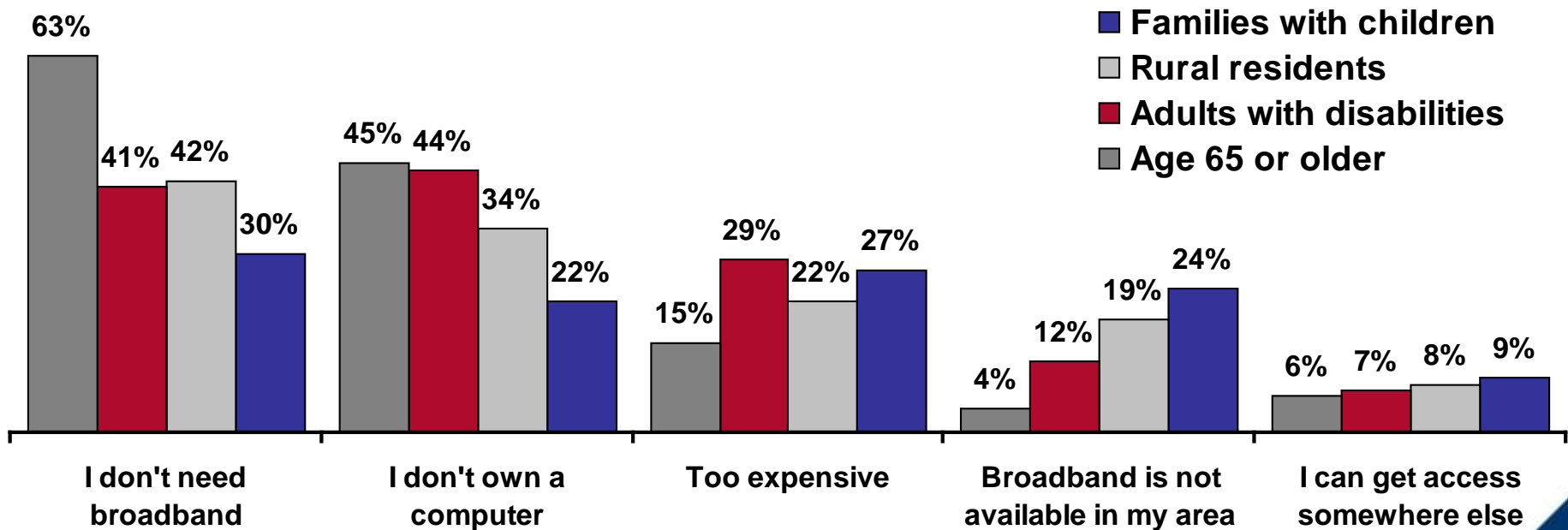
Q: Does your household have a computer?

Q: Which of the following describe the type of Internet service you have at home?

n = 3,005 residents in Ohio, Tennessee and Kentucky

Barriers to Broadband Adoption Locally

Among residents with no home broadband service:



Connect Iowa

“Sustainable Broadband Adoption”

Grant Application

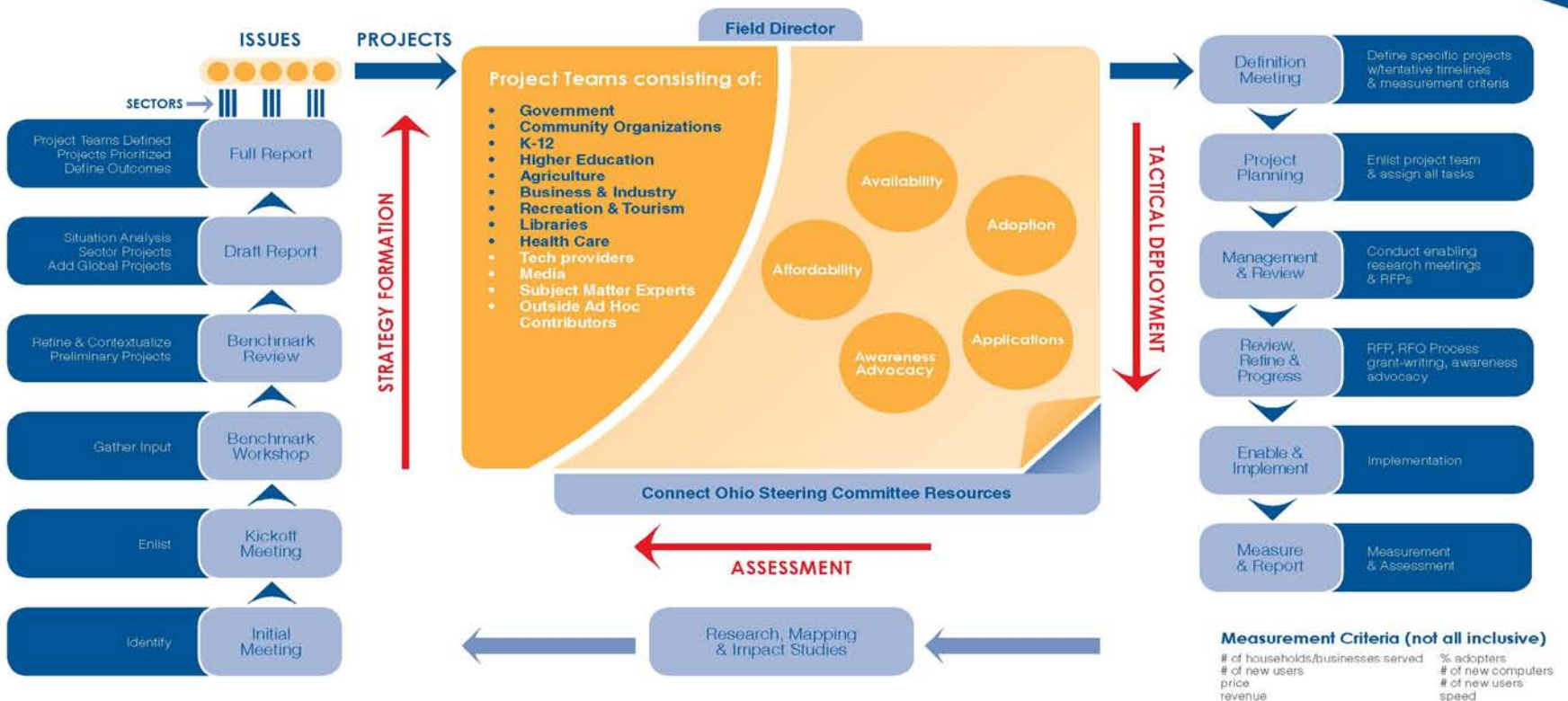


- In addition to Connect Iowa’s mapping and planning work, we also intend to submit a Round 2 application under NTIA’s BTOP “Sustainable Broadband Adoption” grant program.
- Although an exact timeline for Round 2 applications and awards hasn’t been announced, we anticipate that applications will be due to NTIA in December or January.
- If awarded, the demand stimulation initiative will focus on
 1. Launching “eCommunity Technology Planning Teams” in each of Iowa’s 99 counties to develop and implement an actionable technology strategic plan for each community, using Connect Iowa’s broadband mapping and survey research data as guides to impact broadband availability and adoption rates.
 2. Launching a program called “Computers 4 Kids” that will focus on increasing the ownership and use of computers by providing equipment and training to disadvantaged households and deserving community anchor institutions, especially in counties where our survey research indicates that computer ownership is one of the primary barriers to broadband adoption.

An Illustration of Connect Ohio's "eCommunity" Strategy Process



eCommunity Strategy Process





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