



Engaging People. Linking the World.

**CONNECTING**





Engaging People. Linking the World.

**CONNECTING**

# NEBRASKA BROADBAND MAPPING AND PLANNING GRANT



Engaging People. Linking the World.

**CONNECTING**

## Project History

- Fall of 2008 –
  - Congress enacts the Broadband Data Improvement Act (BDIA)
  - Intent is to provide funding to eligible entities in each state for mapping broadband and to support planning activities
  - Funding was not appropriated with enactment of the BDIA



Engaging People. Linking the World.

**CONNECTING**

## Project History continued

- February 2009 –
  - Congress enacts the American Recovery and Reinvestment Act (ARRA - the Stimulus Bill)
  - Appropriates \$350 million to fund the BDIA for five years



Engaging People. Linking the World.

**CONNECTING**

## Project History continued

- February 2009 – continued
  - \$7.4 billion was appropriated to fund grants/loans for broadband infrastructure projects funded through the National Telecommunications and Information Administration (NTIA) (Dept. of Commerce) and Rural Utilities Service (RUS) (Dept. of Agriculture)



Engaging People. Linking the World.

**CONNECTING**

## Project History continued

- July 2009 –
  - NTIA issues the Notice Of Funds Available (NOFA) for mapping/planning grant funding
  - Governor Heineman designates the Nebraska Public Service Commission (NPSC) to serve as the designated entity for the State of Nebraska to apply for Mapping and Planning grant money



Engaging People. Linking the World.

**CONNECTING**

## Project History continued

- August 2009 –
  - NPSC determines that agency can manage mapping portion of project, but lack staff resources/expertise to undertake the Planning Project
  - Relationship formed with Nebraska Department of Economic Development (DED), Nebraska Information and Technology Commission (NITC), and University of Nebraska – Lincoln (UNL) who developed the State’s planning effort



Engaging People. Linking the World.

**CONNECTING**

## Project History continued

- August 2009 – continued
  - NPSC files application with NTIA to secure funding for the mapping/planning effort
  - NPSC also releases a Request for Proposal (RFP), using State Purchasing, seeking a vendor to assist in the mapping effort



Engaging People. Linking the World.

**CONNECTING**

## Project History continued

- Fall 2009 –
  - The State designee's were notified by the NTIA that the original grant program of five years was to be reduced to a two year grant with the possibility of three additional years of funding at a later date.



Engaging People. Linking the World.

**CONNECTING**

## Project History continued

- January 2010 -
  - NTIA awarded NPSC a grant of \$2.1 million for years 1 and 2
    - \$1.6 million for the Mapping Project and
    - \$0.5 million for the Planning Project
  - AIM Institute joined planning team



Engaging People. Linking the World.

**CONNECTING**

## Project History continued

- May 2010 –
  - NTIA notified Grantees that they were now prepared to entertain supplemental application requests for years 3 - 5 of the original grant period authorized by Congress
  - The NPSC and the Planning Team had 30 days to prepare the supplemental grant proposal



Engaging People. Linking the World.

**CONNECTING**

## Project History continued

- September 2010 –
  - NPSC notified by the NTIA that Nebraska had been awarded a supplemental grant of approximately \$3.5 million for years 3-5
    - \$1.5 million for continuation of the Mapping effort and
    - \$2.0 million for the Planning effort



Engaging People. Linking the World.

**CONNECTING**

## Project History continued

- September 2010 – continued
  - Revised budget for the supplemental grant submitted on February 21, 2011
  - Awaiting final approval of the award by the NTIA



Engaging People. Linking the World.

**CONNECTING**

## Mapping Project Components

- Initial activity was identification of broadband providers coupled with drafting and executing non-disclosure agreements (NDA's)
- Followed by development of data models, collection tools, and collection of data from providers willing to participate in the project
- After data is provided it must be verified and plotted
- Twice a year data is updated and submitted to NTIA



Engaging People. Linking the World.

**CONNECTING**

## Mapping Project Challenges

- No ability to compel data from providers in a uniform format (voluntary participation)
- NTIA has not been consistent in program requirements/process
- Commission internal resources have been stretched by evolving grantee workload



Engaging People. Linking the World.

# CONNECTING

## Identification of Providers

FCC 477 submitters, NE Certificated LEC, Non-NE Certificated LEC, Registered Communications Providers (ISPs, Cellular Providers, Fixed & Mobile Wireless)	283
After extensive research some of original list were identified as subsidiary's or did not provide internet service	<159 >
Non Disclosure Agreement sent to potential ISPs	124
During NDA process some ISPs were determined to be resellers-41 Known ISPs refused to participate -2	<43>
Data Request sent to remaining ISPs	81
ISPs that responded with data for Round 1	66
ISPs that responded with data for Round 2	65



Engaging People. Linking the World.

# CONNECTING

## Mapping Project Key Dates

- Initial dataset provided to the NTIA in June, 2010
  - Update to original data provided October 1, 2010
  - Currently finalizing data for submission in April, 2011
  - Second data submission for 2011 due September and will complete data collection for years 1 & 2
- 
- Nebraska Map: <http://broadbandmap.nebraska.gov>
  - National Map: [www.broadbandmap.gov](http://www.broadbandmap.gov)



Engaging People. Linking the World.

**CONNECTING**

## Nebraska Broadband Map

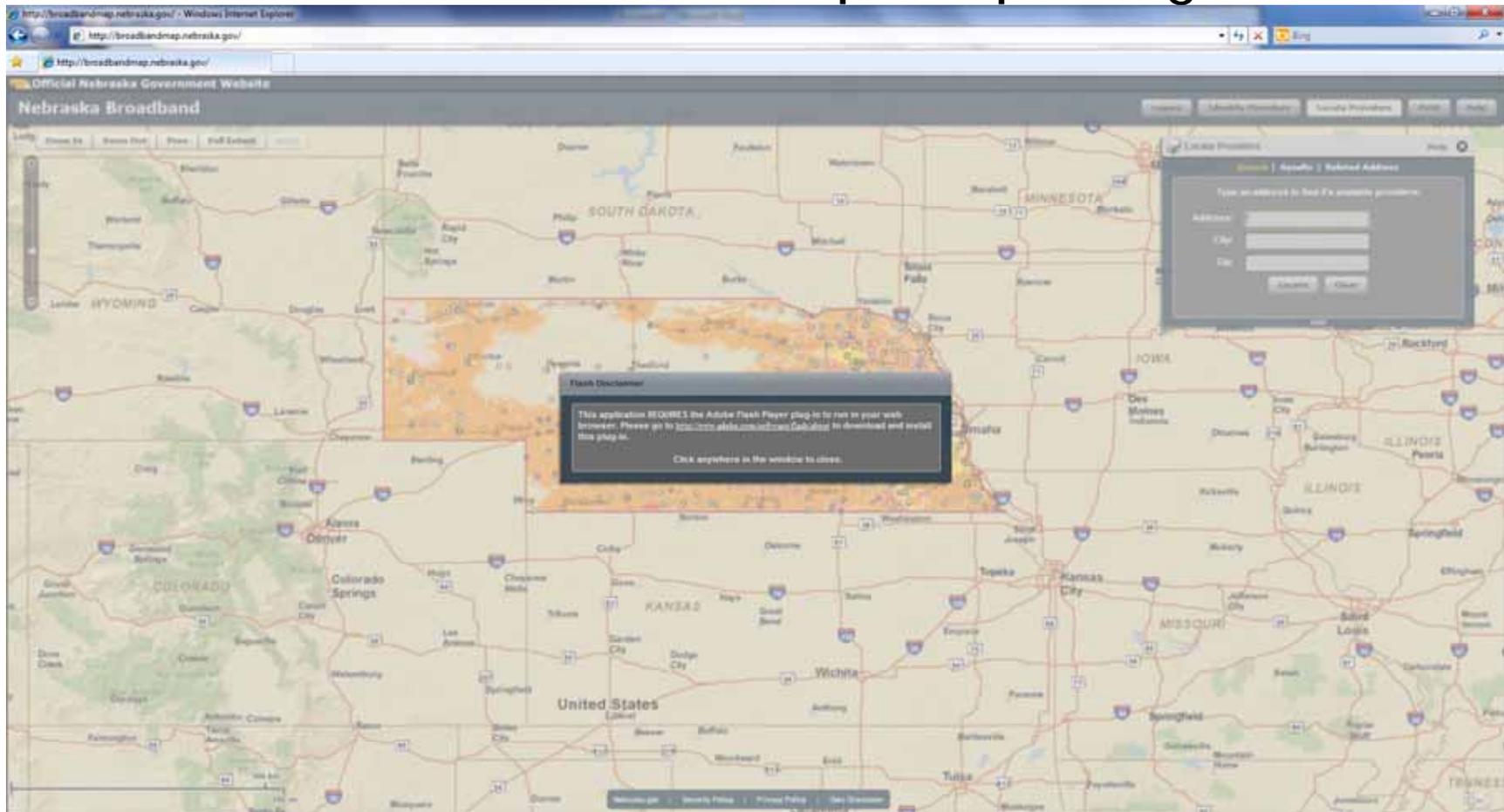
- <http://broadbandmap.nebraska.gov>
- Following series of slides provides an overview of the Nebraska Broadband Map capabilities and tools



Engaging People. Linking the World.

# CONNECTING

## Nebraska Broadband Map – Opening Screen

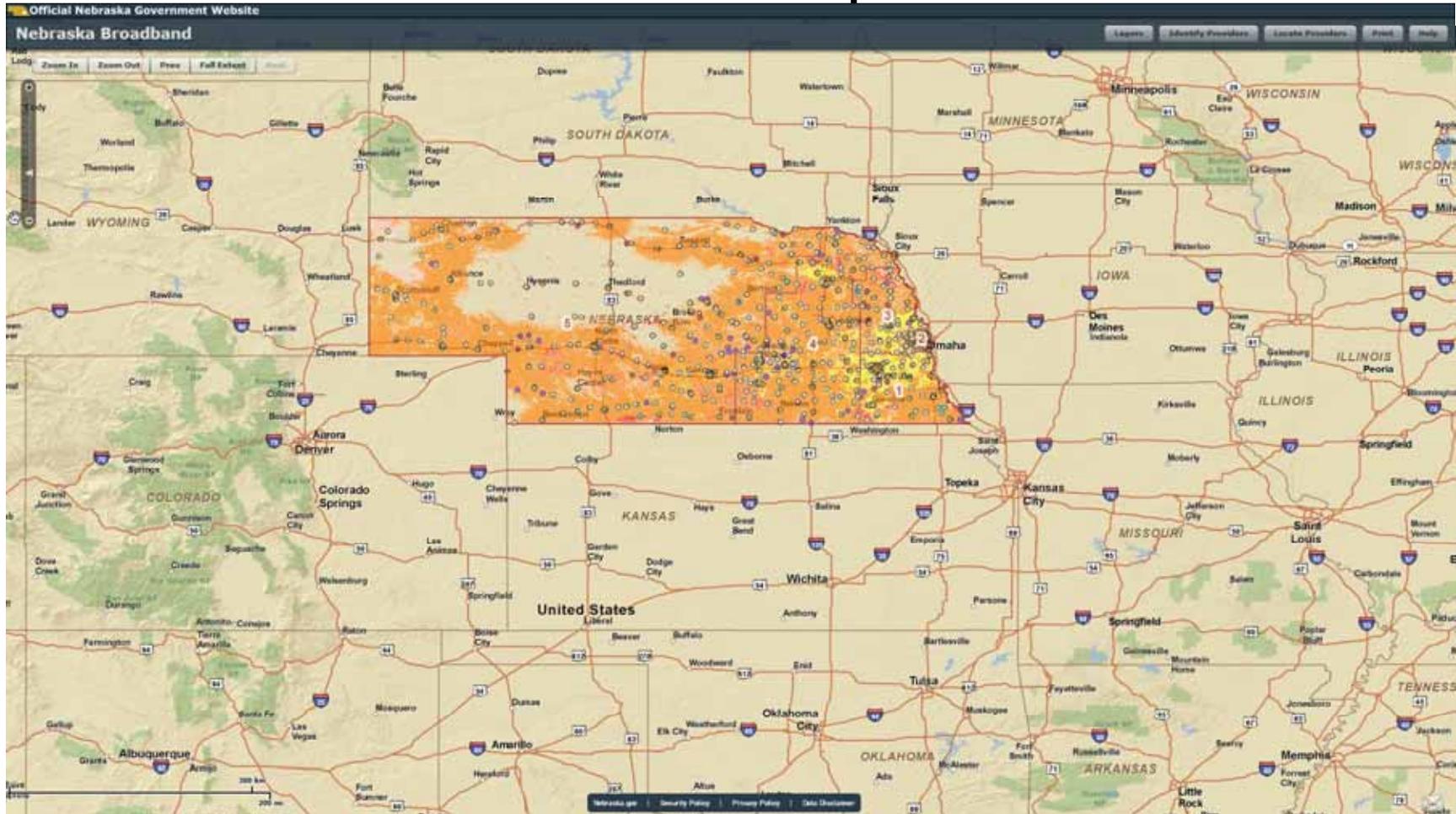




Engaging People. Linking the World.

# CONNECTING

## Nebraska Broadband Map – Basic Controls





Engaging People. Linking the World.

# CONNECTING

## Nebraska Broadband Map - Layers

Official Nebraska Government Website  
Nebraska Broadband

Layers | Identify Providers | Locate Providers | Print | Help

Click a layer's checkbox to toggle layer visibility on and off.

- Anchor Institutions
- MPO Contacts
- MIS Service Wires and Cable
- MIS Service Wires

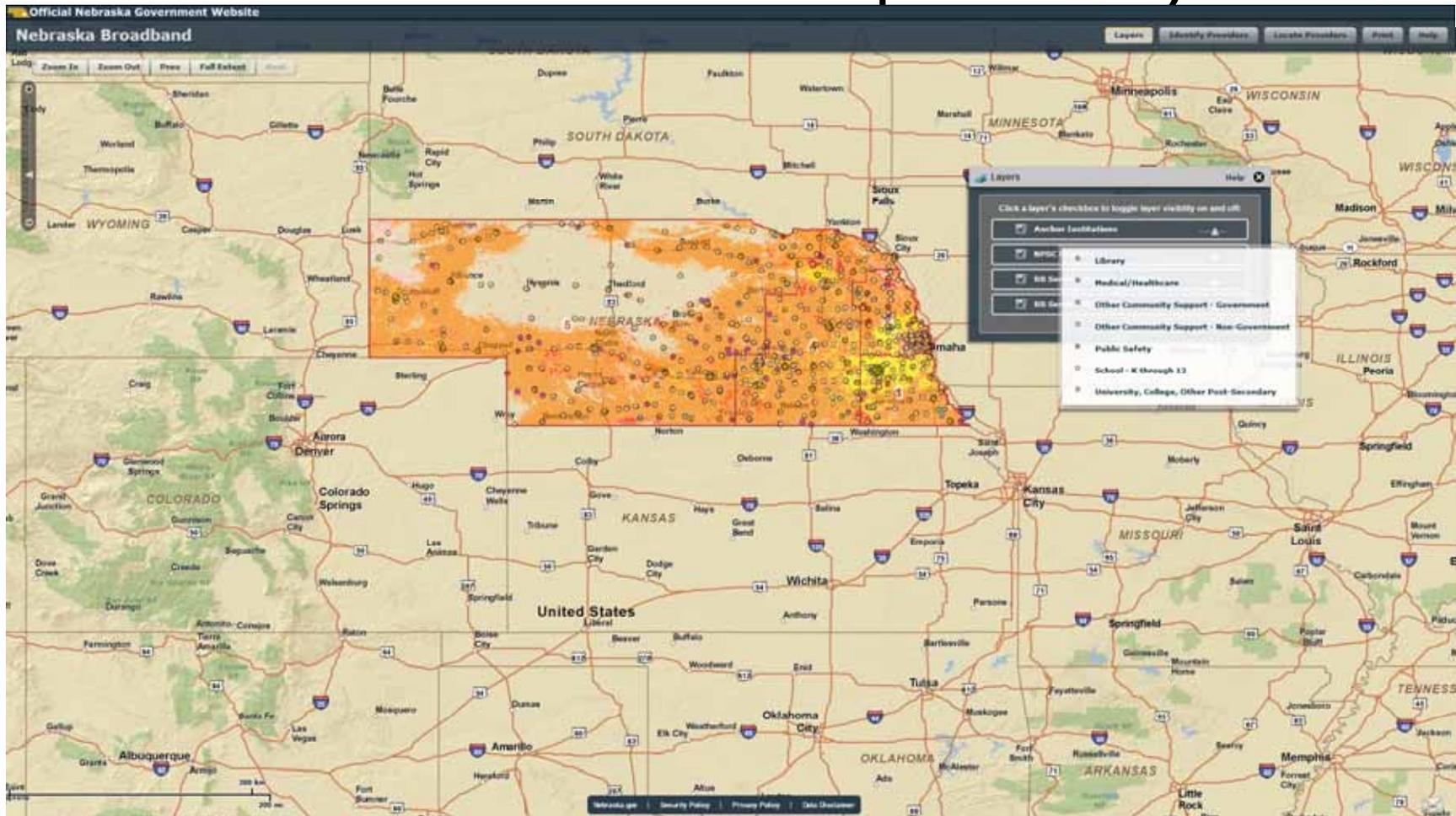
4/11/2011



Engaging People. Linking the World.

# CONNECTING

## Nebraska Broadband Map – CAI Symbols

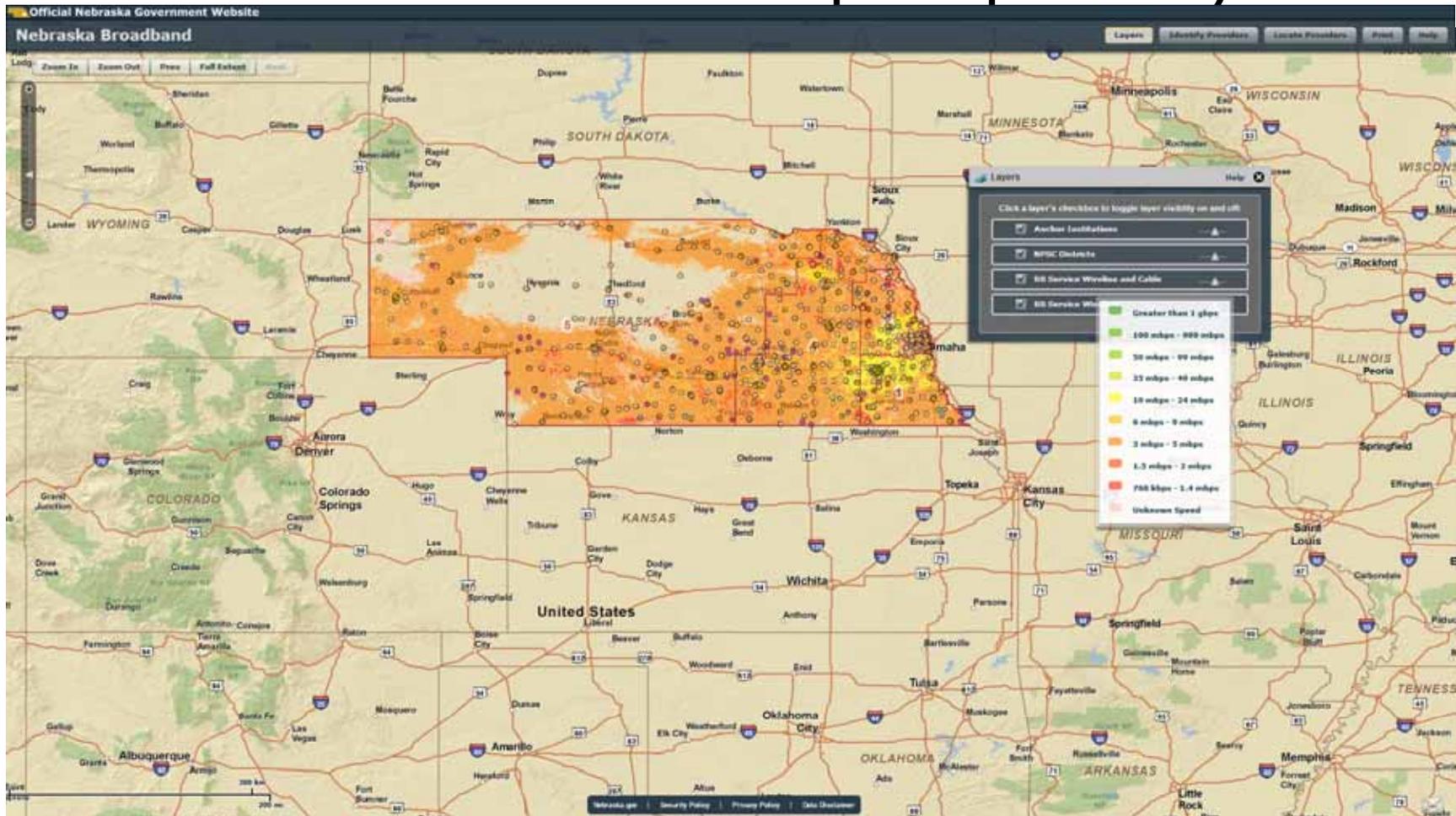




Engaging People. Linking the World.

# CONNECTING

## Nebraska Broadband Map – Speed Symbols

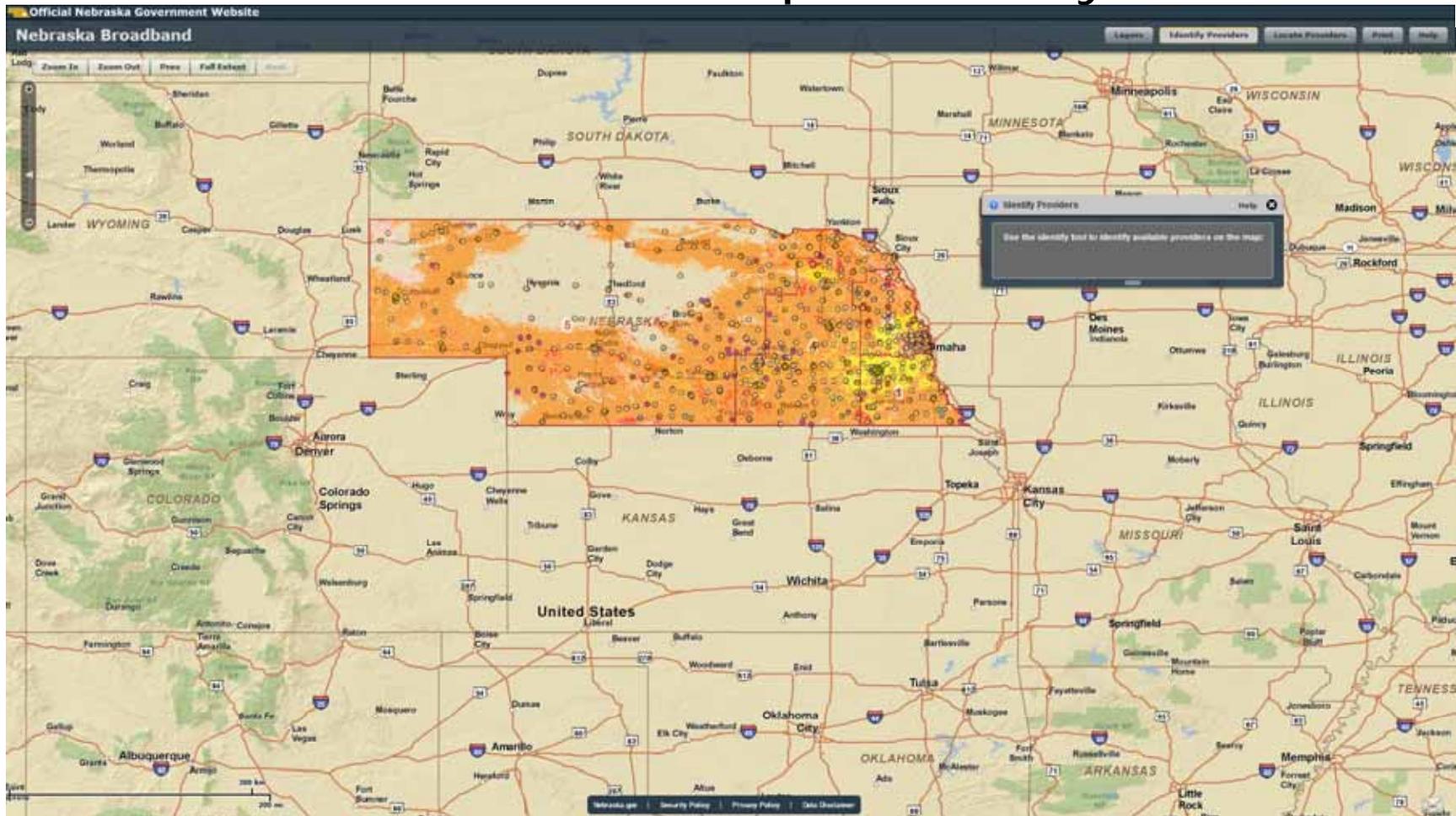




Engaging People. Linking the World.

# CONNECTING

## Nebraska Broadband Map – Identify Providers





Engaging People. Linking the World.

# CONNECTING

## Nebraska Broadband Map – Locate Providers



Engaging People. Linking the World.

# CONNECTING

## Nebraska Broadband Map – Locate Providers



Engaging People. Linking the World.

# CONNECTING

## Nebraska Broadband Map – Locate Providers Results

The screenshot displays the Nebraska Broadband Map interface. At the top, it says "Official Nebraska Government Website" and "Nebraska Broadband". There are navigation buttons for "Layers", "Identify Providers", "Locate Providers", "Print", and "Help". The map shows a grid of streets with a red circle highlighting a specific location. A pop-up window titled "Locate Providers" is open, showing search results for "1050 M ST, GERRI, NE, 68341". The results list several providers, including "Action Communications Inc.", "Castrolnet Inc.", and "Verizon Wireless". A scale bar at the bottom left indicates 100 meters and 3000 feet. The footer contains links for "Nebraska.gov", "Security Policy", "Privacy Policy", and "Data Disclaimer".



Engaging People. Linking the World.

# CONNECTING

## Nebraska Broadband Map – Locate Providers Results

The screenshot displays the Nebraska Broadband Map interface. At the top, it says "Official Nebraska Government Website" and "Nebraska Broadband". Navigation buttons include "Learn", "Identify Providers", "Locate Providers", "Print", and "Help". The map shows a grid of streets with a red circle highlighting a specific location. A tooltip for this location reads "1050 W ST, GERING, NE, 68541" and "Score: 100". On the right side, a "Locate Providers" panel is open, showing search results for "1050 W ST, GERING, NE, 68541". The results include:

- Arbore Communications Inc.**  
Technology of Transmission: Terrestrial Fixed Wireless - Unlicensed  
Advertised Downstream Service Speed: Greater than or equal to 8 mbps and less than 10 mbps  
Advertised Upstream Service Speed: Greater than or equal to 100 mbps and less than 1.0 mbps  
Contact: www.arbore.net/
- Centralnet**
- Arbore Communications Inc.**
- Wellnet Wireless**
- Arbore Communications Inc.**

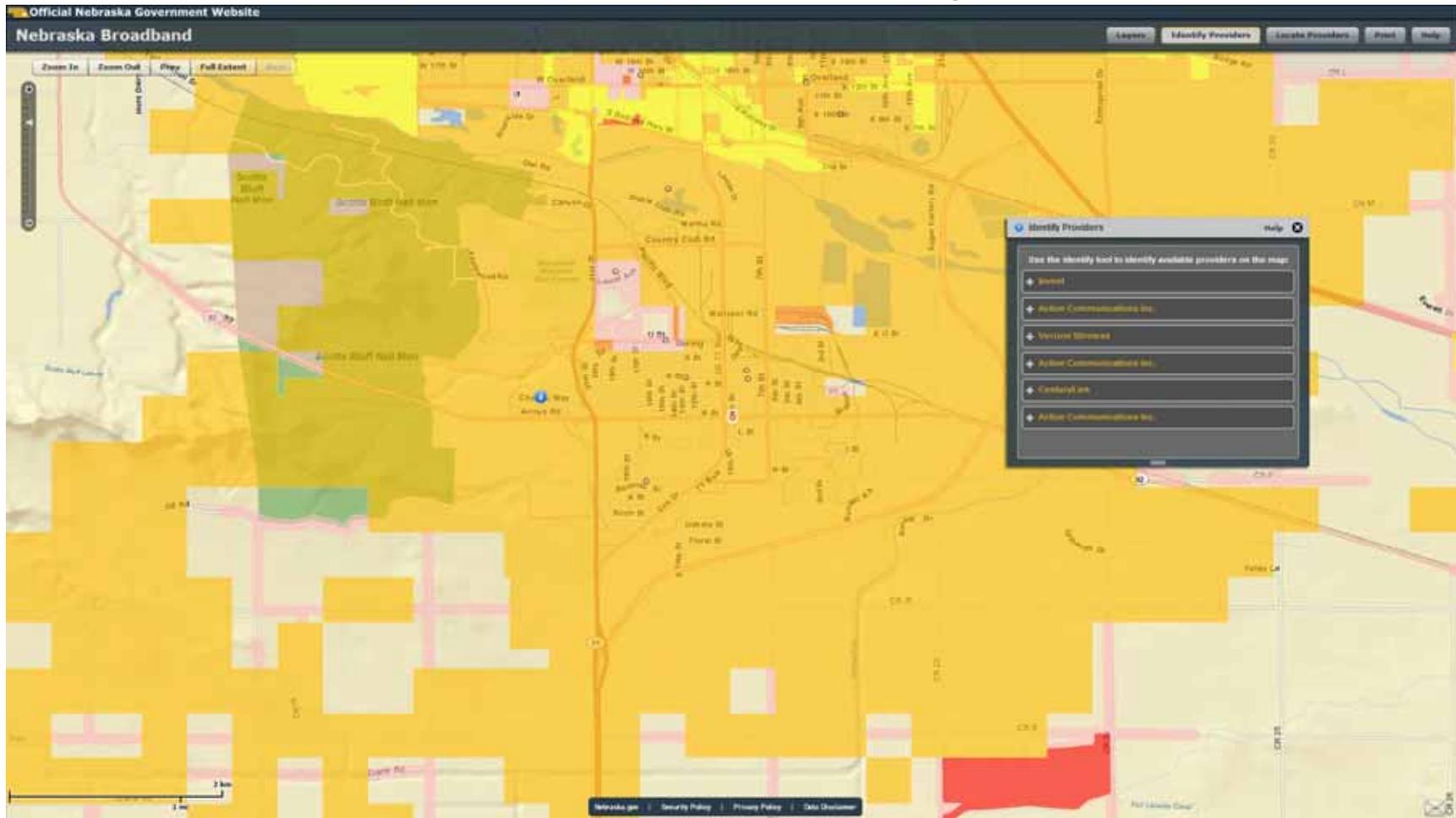
The map interface also includes zoom controls (Zoom In, Zoom Out, Prev, Full Screen) and a scale bar (500 m, 2000 ft) at the bottom left. Footer links include "Nebraska.gov", "Security Policy", "Privacy Policy", and "Data Disclaimer".



Engaging People. Linking the World.

# CONNECTING

## Nebraska Broadband Map – Identify Provider Results





Engaging People. Linking the World.

**CONNECTING**

## National Broadband Map

- [www.broadbandmap.gov](http://www.broadbandmap.gov)
- Following series of slides provides an overview of the National Broadband Map capabilities and tools



Engaging People. Linking the World.

# CONNECTING

## National Broadband Map – Opening

National Broadband Map - Windows Internet Explorer  
http://www.broadbandmap.gov

National Broadband Map

**NBM**  
National Broadband Map  
How connected is my community?

Please enter any address **FIND Broadband**

**Explore the Map** or **Analyze the Data**

[Analyze](#) • [Map](#) • [Developer](#) • [About](#) • [Native Nations](#)  
[Rank](#) • [Summarize](#) • [Engage](#) | [Share](#) • [Blog](#) • [Twitter](#) • [Data Download](#)

The **National Broadband Map** is a tool to search, analyze and map broadband availability across the United States.  
Created and maintained by the **NTIA**, in collaboration with the **FCC**, and in partnership with 50 states, five territories and the District of Columbia.

**NTIA** • **FCC** • [Website Policies and Notices](#) • [Privacy Policy](#) • [Recovery.gov](#) • [FOIA](#)



Engaging People. Linking the World.

# CONNECTING

## National Broadband Map

The screenshot shows the National Broadband Map website interface. At the top, there is a search bar with the text "1050 m street, gering, ne 69341" and a "FIND" button. Below the search bar, the page title is "Search Results: Broadband Providers for this Area". A paragraph explains that the list contains providers offering service to the shaded area on the map, listed by maximum speed. There are filters for "Show All", "Show Wired", and "Show Wireless".

**Advertised Speeds Above 3 Mbps** (Data as of 6/30/10)

Charter Communications	10-25 Mbps
Action Communications, Inc.	8-10 Mbps
Verizon Communications Inc.	3-8 Mbps

**Advertised Speeds Above 768 Kbps and Below 3 Mbps** (Data as of 6/30/10)

INVENT

Most Common Speed: 10 Mbps

Satellite is also available in most areas. [Click here to read more](#)

Is your broadband provider listed? If not, please enter the provider below



Engaging People. Linking the World.

# CONNECTING

## National Broadband Map

Broadband Map - Technology - National Broadband Map - Windows Internet Explorer  
http://www.broadbandmap.gov/technology

National Broadband Map  
How connected is my community?

Type of Technology Available Data as of 4/09/10

ASYMMETRIC XDSL SYMMETRIC XDSL OTHER COPPER WIRELINE CABLE MODEM DOCSIS 3.0 CABLE MODEM-OTHER FIBER TO THE END USER  
TERRESTRIAL FIXED WIRELESS UNLICENSED TERRESTRIAL FIXED WIRELESS LICENSED TERRESTRIAL MOBILE WIRELESS

The National Broadband Map is a tool to search, analyze and map broadband availability across the United States. Show Footer Show Gallery



Engaging People. Linking the World.

# CONNECTING

## National Broadband Map

**National Broadband Map**  
How connected is my community?

Type of Technology Available (data as of 4/30/11)

ASYMMETRIC XDSL SYMMETRIC XDSL OTHER COPPER WIRELINE CABLE MODEM-DOCSIS 3.0 CABLE MODEM-OTHER FIBER TO THE END USER  
TERRESTRIAL FIXED WIRELESS-UNLICENSED TERRESTRIAL FIXED WIRELESS-LICENSED TERRESTRIAL MOBILE WIRELESS

Type of Technology Available  
Description: This map displays broadband technologies offered to end users (e.g. DSL, cable, wireless, fiber, etc.).

Show Footer Hide Gallery



Engaging People. Linking the World.

# CONNECTING

## National Broadband Map

The screenshot shows the National Broadband Map website in a Windows Internet Explorer browser window. The address bar shows the URL <http://www.broadbandmap.gov/analyze>. The page header includes the NBM logo and the tagline "Now connected is my community?". Navigation links for "Homepage", "Analyze", "Map", "Developer", "About", and "Native Nations" are visible. The main content area is divided into two columns. The left column contains sections for "Analyze", "Rank", "Summarize", and "Popular Reports", each with a brief description of the tool's function. The right column contains sections for "Share", "Map", "Rank", "Summarize", "Broadband Classroom", "Engage", "Blog", and "Updates", each with a link to a specific feature or resource. At the bottom of the page, the text "results: 0.11 seconds" is displayed.

results: 0.11 seconds