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Broadband Availability in Minnesota: Measuring Progress

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The State of Minnesota has articulated, through word and deed, that connecting every resident to high-speed Internet is a top priority. In August 2011, Governor Mark Dayton signed an Executive Order that established the Governor’s Task Force on Broadband and reiterated the state’s goal of ensuring that all residents and businesses have access to broadband at download speeds of at least 10-20 Mbps and upload speeds of at least 5-10 Mbps.¹

To help the state measure its progress toward these goals, Connect Minnesota has partnered with the Minnesota Broadband Task Force and the Minnesota Department of Commerce to collect and validate broadband availability data statewide. This report outlines the statewide results of that broadband inventory with the aim of sparking discussions about the need to expand and enhance the broadband experience for all Minnesotans.

Analysis of Minnesota’s Broadband Inventory

Minnesota’s broadband marketplace is affected by its unique geographic and demographic make-up. Although the state is geographically large, 58% of households in Minnesota are in the Twin Cities metropolitan area.² Because so many of Minnesota’s households are concentrated in the Minneapolis-St. Paul area, broadband inventory data show high availability of upper speed tier broadband in the state.

As of October 2011, Connect Minnesota estimates that terrestrial, fixed broadband providers offer basic broadband at speeds of at least 768 Kbps download and 200 Kbps upload to 97.08% of all Minnesota households (Table 1).³ This implies that an estimated 61,000 Minnesota households (2.92%) lack basic broadband service and remain unserved by terrestrial, fixed broadband.

Table 1.
Estimate of Broadband Service Availability in the State of Minnesota -
By Speed Tier Among Fixed Platforms

SBI Download/Upload Speed Tiers	Unserved Households ('000)	Served Households ('000)	Percent of Households by Speed Tier
At Least 768 Kbps/200 Kbps	61	2,026	97.08%
At Least 1.5 Mbps/200 Kbps	68	2,019	98.73%
At Least 3 Mbps/768 Kbps	185	1,902	91.14%
At Least 6 Mbps/1.5 Mbps	392	1,695	81.2%
At Least 10 Mbps/1.5 Mbps	413	1,674	80.2%
At Least 10 Mbps/6 Mbps	889	1,198	57.4%
At Least 25 Mbps/1.5 Mbps	648	1,439	68.93%
At Least 50 Mbps/1.5 Mbps	725	1,362	65.24%
At Least 100 Mbps/1.5 Mbps	1,142	946	45.3%
At Least 1 Gbps/1.5 Mbps	2,087	0	0.0%

Furthermore, approximately 91.14% of Minnesota households have broadband available at download speeds of at least 3 Mbps download and 768 Kbps upload. This means that approximately 124,000 Minnesota households have access to basic broadband but cannot access fixed broadband service at speeds of at least 3 Mbps downstream and 768 Kbps upstream – a service level now often considered necessary to effectively conduct many Internet applications. The NTIA classifies broadband service at download speeds below 3 Mbps download and 768 Kbps upload as “underserved.”

1 <http://mn.gov/governor/multimedia/pdf/EO-11-27.pdf>

2 <http://factfinder2.census.gov/>

3 Broadband data collected from 109 Minnesota broadband providers. See Appendix A.

Broadband is available to 81.2% of Minnesota households at advertised speeds of at least 6 Mbps downstream and 1.5 Mbps upstream. This is an important benchmark as the FCC's National Broadband Plan considers actual broadband speeds of 4 Mbps downstream/1 Mbps upstream to be the threshold level of service for most broadband activity.

The state of Minnesota has a statutory goal of ubiquitous broadband service at speeds of at least 10 – 20 Mbps downstream/5 – 10 Mbps upstream by the year 2015. According to data collected and validated by Connect Minnesota, 57.4% of Minnesota households have access to broadband at speeds of at least 10 Mbps downstream and 6 Mbps upstream. This means that across the state, approximately 889,000 households are not connected to services that would qualify for the state's target.

This assessment of the broadband inventory in Minnesota is conducted by Connect Minnesota in partnership with the Minnesota Broadband Task Force and the Minnesota Department of Commerce as part of the State Broadband Initiative (SBI), funded by the National Telecommunications Information Administration (NTIA). The SBI grant program was created by the Broadband Data Improvement Act (BDIA), unanimously passed by Congress in 2008 and funded by the American Recovery and Reinvestment Act (ARRA) in 2009. As part of the SBI grant program, Connect Minnesota produced updated maps of broadband availability in October 2011 to identify served and unserved areas across the state.

Statewide estimates do not necessarily reflect the reality faced by each Minnesota community. Connect Minnesota's county-level availability estimates reveal variances, in some cases large, in measured broadband inventory across counties. These variances highlight the importance of granular data to identify gaps in infrastructure and adoption at the community level. Broadband inventory data at the county and street levels are available through Connect Minnesota's interactive, online broadband inventory map at www.connectmn.org. Also available on Connect Minnesota's website are more detailed tables on broadband inventory across the state by platform and at the county level.



APPENDIX A: Data Sources and Participating Providers

The data necessary to compile these broadband inventory estimates were collected on a voluntary basis from broadband providers serving the state of Minnesota. This appendix details which providers did, and did not, allow the use of their data in the creation of Minnesota's broadband inventory map.

Participating Providers:

360networks	Federated Telephone Cooperative
Ace Telephone Association	Felton Telephone Company
AirLink Broadband, LLC	Fibernet Monticello
Albany Mutual Telephone Association	Frontier Communications of Minnesota, Inc.
Alliance Communications Cooperative, Inc.	FTTH Communications
Arrowhead Communications Corporation	Garden Valley Telephone Company
Arvig Communication Systems	Gardonville Cooperative Telephone Association
AT&T Corp, Inc.	Genesis Wireless
Barnesville Municipal Telephone	Granada Telephone Company
Benton Cooperative Telephone Company	Halstad Telephone Company
Blue Earth Valley Telephone Company	Harmony Telephone Company
Bradco-Wisp, Inc.	Hiawatha Broadband Communications, Inc.
Broadband Corp	Hickory Tech Corporation
Cable ONE Inc.	HomeTown Solutions LLC
CenturyLink	Hughes Network Systems, LLC
Charter Communications, Inc.	Hutchinson Telecommunications, Inc.
Christensen Communications Company	Info Link Wireless, Inc.
CitEscape, LLC	Interstate Telecommunications Cooperative, Inc.
City of Chaska ⁴	InvisiMax, Inc.
City of Windom	Jaguar Communications
Clara City Telephone Company	Johnson Telephone Company
Clear Choice Communications	Kasson & Mantorville Telephone Company
Clearwire Corporation	KeyOn Communications, Inc.
Cogent Communications, Inc.	Knology of the Plains, Inc.
Comcast Cable Communications, LLC	Level 3 Communications, LLC
Consolidated Telephone Company	Lonsdale Telephone Company, Inc.
Crosslake Telephone Company	Loretel Systems, Inc.
DISH Network Corporation	Mabel Cooperative Telephone Company
diversiCOM	Manchester-Hartland Telephone Company
Eagle Valley Telephone Company	Mediacom Communications Corporation
Emily Cooperative Telephone Company	MegaPath Inc.
Enterpoint Wireless	Midcontinent Communications
Evertex Enterprises, Inc.	Minnesota Valley Telephone Company
Farmers Mutual Telephone Company	Minnesota Valley TV Improvement Corporation

⁴ City of Chaska has refused to participate and has not submitted data. Connect Minnesota created an estimated service area for City of Chaska.

New Ulm Telecom, Inc.
NorthfieldWiFi LLC
Park Region Mutual Telephone Company
Paul Bunyan Rural Telephone Cooperative
Pine Island Telephone Company
Polar Telcom, Inc.
Red River Rural Telephone Association
River Valley Telephone Coop.
Rothsay Telephone Company Inc.
Runestone Telecom Association
Sacred Heart Telephone Company
Savage Communications Inc.
Scott Rice Telephone Co.
Sheehan Gas
Sioux Valley Wireless
Sjoberg's Inc.
Sleepy Eye Telephone Company
Southern Cablevision, Inc.
Spring Grove Cooperative Telephone Co.

Sprint Nextel Corporation
Starbuck Telephone Company
Starpoint Communications, Inc.
TDS Telecommunications Corporation
T-Mobile USA, Inc.
tw telecom of minnesota, llc
Upsala Cooperative Telephone Association
US Cable Corporation
US Internet of Minnetoka
VAL-ED Joint Venture, LLP
Verizon Communications, Inc.
West Central Telephone Association
Western Telephone Company
Wikstrom Telephone Company
WildBlue Communications, Inc.
Windstream Communications
Winnebago Cooperative Telecom Association
Wolverton Telephone Company
Woodstock Telephone Company