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WISCONSIN STATE LEGISLATURE ... PUBLIC HEARING - COMMITTEE RECORDS

2011-12

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Wisconsin's Broadband Internet Availability

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I. Executive Summary

This report will answer questions regarding Wisconsin's broadband Internet availability. Specifically, this report will look at Wisconsin's rank relative to other states with respect to the availability and use of broadband Internet using statistically reliable information. This report will also look at the availability of broadband Internet and competitive private sector offerings in the four communities targeted by the UW Extension Community Area Networks (CANs).

Where does Wisconsin rank relative to other states with respect to the availability and use of broadband Internet using statistically reliable information?

The data collected for the National Broadband Map relies on information that includes the "advertised speed" of broadband Internet in state and local media outlets. This may produce misleading and inaccurate rankings of broadband availability, access, and use because advertisements covering a media market will not and do not translate to actual telecommunications company service availability. **This is similar to the common occurrence of political advertisements being seen or heard by voters who live outside a district targeted in a political campaign. Simply because a person is subjected to political campaign advertisements for a specific campaign, it does not make them a constituent.** Furthermore, the "advertised speed" approach does not take into account the fine print that may appear in advertisements such as "speeds up to" or "service not available in all areas". The result is that the National Broadband Map data created misleadingly low rankings for Wisconsin using data that is not as statistically reliable as other sources.

The Federal Communications Commission issues a report every six months that details the availability of broadband Internet. In the most recent of those FCC reports; "Internet Access Services: Report as of December 31, 2010"; Wisconsin is a top fifteen state when ranking the percentage of broadband connections with download speeds of 768Kbps and 3Mbps. This reliable measurement of Wisconsin's ranking for broadband availability utilizes detailed and reliable information gathered in FCC Report 477. The reliability of the data is insured by the fact that persons making willful false statements in a Form 477 filing can be punished by fine or imprisonment.

In the most recent FCC report examining broadband Internet availability:

- Only 10 states rank better than Wisconsin when looking at the percentage of broadband connections with 768Kbps download speeds and a minimum upload speed of 200Kbps
- Only 12 states rank better than Wisconsin when looking at the percentage of broadband connections with 3Mbps download speeds and a minimum upload speed of 200Kbps

The National Telecommunications and Information Administration conducts an annual survey on Internet use and availability. According to the National Telecommunications and Information Administration survey "Current Population Survey Internet Use 2010", Wisconsin ranks in the top ten for certain categories and in the top fifteen in other categories when looking at Internet use and broadband access. This statistically reliable information was gathered by the U.S. Census Bureau in a survey of more than 54,300 households:

- Wisconsin ranks 8th in the “Percent of People Who Use the Internet at Any Location”
- Wisconsin ranks 9th in the “Percent of People with Internet Broadband Access”
- Wisconsin ranks 12th in the “Percent of People with Internet Broadband Access” *in rural areas*
- Wisconsin ranks 15th in the “Percent of Households with Internet Broadband Access” *in rural areas*

What is the current level of private sector broadband competition in the communities targeted by the UW Extension project?

The private sector broadband competition in the Chippewa Valley, Platteville, Superior and Wausau is very real. The private sector in Wisconsin is doing what it does best: investing in our communities and providing service to our customers.

There is a Wisconsin specific broadband mapping project being overseen by the Public Service Commission of Wisconsin and subcontracted to LinkWISCONSIN. The LinkWISCONSIN (www.link.wisconsin.gov) broadband map shows a very competitive broadband market in each of the communities targeted by the UW Extension:

- Wausau’s competitive broadband marketplace has five private sector providers
- Chippewa Valley’s competitive broadband marketplace has seven private sector providers
- Superior’s competitive broadband marketplace has seven private sector providers
- Platteville’s competitive broadband marketplace has four private sector providers

II. Overview

In recent legislative sessions, Wisconsin policymakers and stakeholders have engaged in significant discussions about the future of telecommunications and, specifically, broadband availability and use throughout our state. The recent Telecommunications Reform Act, 2011 Wisconsin Act 22, provided necessary and significant updates to Wisconsin's telecommunications statutes, which had not seen major reforms in nearly 20 years. However, these landmark reforms did not end the debate on broadband availability and use in our state.

Notably, some comments and criticism of Wisconsin's broadband access have come from the UW Extension, which is undertaking a project that will compete directly with private sector providers of broadband Internet in four Wisconsin communities.

Some of the relevant questions that exist regarding the current status of Wisconsin's broadband marketplace include:

- ***Where does Wisconsin rank relative to other states with respect to the availability and use of broadband Internet using statistically reliable information?***
- ***What is the current level of private sector broadband competition in the communities targeted by the UW Extension project?***

To help answer those questions, we can review several recent national rankings, reports and surveys. The rankings, reports and surveys have been published by the National Broadband Map, Federal Communications Commission, and National Telecommunications and Information Administration. However, there is not a clear and

consistent answer regarding Wisconsin's broadband availability and use based on a cursory review of those publications.

This paper will examine the different rankings, reports and surveys in an effort to reconcile seemingly conflicting statistics regarding Wisconsin's broadband availability and use.

In light of criticism by the UW Extension regarding the level of broadband access in Wisconsin, this paper will also include information regarding the communities targeted by the UW Extension project.

III. Sources

All of the information and data cited in this report can be accessed online.

- The LinkWISCONSIN website at www.link.wisconsin.gov
- The National Broadband Map website at www.broadbandmap.gov
- The Federal Communications Commission report can be downloaded from the Wireline Competition Bureau Statistical Reports Internet site at www.fcc.gov/wcb/stats
- The National Telecommunications and Information Administration survey detail can be accessed at: http://www.ntia.doc.gov/data/CPS2010_Tables

IV. Defining Broadband

It is accepted that broadband Internet is increasingly important for education, business and entertainment. However, there may not be a universal definition for broadband that everyone can endorse.

For purposes of this document, the LinkWISCONSIN website (www.link.wisconsin.gov) provides information that can be the starting point for the discussion. LinkWISCONSIN is the state-wide initiative to promote the availability and sustainable adoption of broadband Internet access. The first phase of the project includes development of a comprehensive broadband coverage map and the identification of strategies for broadband expansion and adoption – particularly in historically unserved or under-served areas.

The FAQ section, which is easily accessed from the LinkWISCONSIN home page, identifies the current definition of broadband used by the National Telecommunications and Information Administration as ***a minimum of 768 kilobits per second (Kbps) download speed and 200 Kbps upload speed.*** This should not suggest that higher speeds aren't accessible in Wisconsin, but rather provides a baseline definition broadband and the starting point for the discussion.

V. National Rankings, Reports and Surveys that Measure Broadband Availability and Use

There are at least three different approaches taken in recent national rankings, reports and surveys on broadband availability and access. Below is an explanation of the different approaches contained in recent rankings, reports, and surveys...and what they actually measure.

A. National Broadband Map Data and Rankings

The information that has been cited by UW Extension regarding Wisconsin's low ranking for broadband availability is from the data analysis accessed on the National Broadband Map website at www.broadbandmap.gov. The National Broadband Map is a tool to search, analyze and map broadband availability across the United States. The map was created and is maintained by the NTIA.

The approach taken by the National Broadband Map includes, *and relies heavily on*, the "advertised speed" of broadband offerings in different states and combines that data to produce both a national map and broadband rankings. The reliance on broadband speeds that appear in advertisements produces a result that must be taken in context. The presence of an advertisement for broadband service in a certain state, region, or media market does not necessarily mean that the advertised service or advertised speed is available uniformly throughout the state, region, or media market.

The National Broadband Map reliance on data that includes "advertised speed" may produce misleading and inaccurate rankings of broadband availability, access, and use because advertisements covering a **media market** will not and do not translate to actual **telecommunications company service availability**. They also do not take into account the fine print that may appear in advertisements such as "speeds up to" or "service not

available in all areas". The result is that the National Broadband Map data created potentially misleading rankings for Wisconsin and other states.

Simply stated, the resources committed to advertisements about broadband Internet have as much, if not more, to do with the rankings than the actual availability or use of broadband Internet. Unfortunately, this approach does not make the National Broadband Map data rankings as statistically reliable as the Federal Communications Commission report or the National Telecommunications and Information Administration survey.



Please enter any address

Source » Rank

The Rank tool allows you to compare broadband availability in different areas. It generates a national list of states, counties, Metropolitan Statistical Areas (MSA), Congressional Districts, census designated places or Universal Service Fund (USF) study areas by broadband speed, technology, number of broadband providers or demographic information. The tool also generates ranked lists within a state, including by county, census designated place, Congressional District, state legislative district, MSA and USF study area.

We generated this list by overlapping every combination of broadband provider, technology employed, and advertised speed with every combination of state, county, metropolitan statistical areas, congressional districts, census designated places, and USF study areas.

For every unique combination, we tabulated the speed, technologies employed, number of providers and demographic data available and allow you to create ranked lists based on these combinations. The default sorting happens on the percent of the population meeting the criteria you select. You can change this to percent households with the manage metrics button. The metrics have the following options available for you to select;

Speed

- Combination of Advertised Upload and Download Speed (UL & DL); at least 3 mbps down and 768 kbps up
- Any maximum advertised speed tier down
- Any maximum advertised speed tier up

Even if the National Broadband Map rankings were statistically valid, Wisconsin would only rank low when look at the *advertised* broadband availability of 3 Mbps down and 768Kbps up. Looking at the the NTIA’s own definition of broadband (also used by the PSC’s LinkWISCONSIN project) of 768Kbps download and 200Kbps upload, Wisconsin would rank very well, with 99.8% of our population covered by broadband – or tied for 12th among all states. However, this is also a ranking that relies on “advertised speed” inputs, as discussed above. Below is the ranking for 768Kbps download speed and 200Kbps upload speed.

Rank » State » Within Nation
Metric » Speed Download Greater Than 0.768 Mbps Upload Greater Than 0.200 Mbps

Below are rankings for the requested broadband characteristics. The broadband data below is as of 12/31/10 and represents data collected by SBDD grantees.

Source • Print this page • Export Data • API Call

Change Geography

Rank My Area

Manage Metrics

Rank	Name	Speed Combo DL>.7 UL>.2	Add Metric	Add Metric
1	District Of Columbia	100%		
2	New Jersey	100%		
3	Rhode Island	100%		
4	Connecticut	100%		
5	Delaware	100%		
6	Massachusetts	99.9%		
7	Maryland	99.9%		
8	Florida	99.9%		
9	Iowa	99.9% ± 0.0		
10	New York	99.9%		
11	Kansas	99.9%		
12	Indiana	99.8%		
13	Illinois	99.8%		
14	Wisconsin	99.8% ± 0.0		
15	California	99.7%		

B. Federal Communications Commission Bi-annual Status Report “Internet Access Services”

Every six months, the Federal Communications Commission issues an updated report on the national status of Internet Access Services. The approach taken by the Federal Communications Commission uses information contained in responses to the FCC Form 477 regarding **Local Telephone Competition and Broadband Reporting**. The FCC collects this data every six months from providers of broadband service, including:

- Facilities-based Providers of Broadband Connections to End User Locations
- Providers of Wired or Fixed Wireless Local Exchange Telephone Service
- Providers of Interconnected Voice over Internet Protocol (VoIP) Service
- Providers of Mobile Telephony Services

The telecommunications and broadband providers listed above must file FCC Form 477 every six months. Significantly, persons making willful false statements in a Form 477 filing can be punished by fine or imprisonment under the Communications Act, 47 U.S.C. 220(e).

This is a more reliable approach to measuring Wisconsin’s access to broadband and utilizes the far more detailed and statistically reliable information gathered in FCC Report 477. Again, persons making willful false statements in a Form 477 filing can be punished by fine or imprisonment under the Communications Act, 47 U.S.C. 220(e).

The full report can also be downloaded from the Wireline Competition Bureau Statistical Reports Internet site at www.fcc.gov/wcb/stats.

On the next page, you will see Table 20 from the October 2011 FCC report. Table 20 compares the broadband availability using several different download speeds, beginning with 200Kbps downstream. The second and third columns show the rankings based on download speeds of 768Kbps and 3Mbps.

As you will see in Table 20, which details the percentage of broadband connections at different download speeds, Wisconsin ranks very favorably compared to other states:

- **Only 10 states rank better than Wisconsin when looking at the percentage of broadband connections with 768Kbps download speeds and a minimum upload speed of 200Kbps**
- **Only 12 states rank better than Wisconsin when looking at the percentage of broadband connections with 3Mbps download speeds and a minimum upload speed of 200Kbps**

Table 20
Percentage of Connections by Downstream Speed by State as of December 31, 2010
 (Connections over 200 kbps in at least one direction)

State	% over 200 kbps Downstream	Over 200 kbps Upstream and			
		% at least 768 kbps Downstream	% at least 3 mbps Downstream	% at least 6 mbps Downstream	% at least 10 mbps Downstream
Alabama	88.2	76.1	35.5	26.9	6.7
Alaska	88.7	1 (81.6)	26.8	14.8	9.1
American Samoa	.	.	.	.	.
Arizona	90.1	76.9	45.1	34.4	22.4
Arkansas	91.0	79.8	26.0	15.8	14.1
California	88.3	77.6	35.5	26.9	19.4
Colorado	91.2	79.3	42.3	38.2	24.9
Connecticut	90.4	78.0	39.6	32.9	22.8
Delaware	88.8	75.5	(51.8) 1	46.1	39.8
District of Columbia	85.3	68.1	45.4	38.6	14.5
Florida	90.0	2 (83.7)	46.9	36.8	21.8
Georgia	88.2	78.3	39.9	26.5	15.0
Guam	.	.	.	.	.
Hawaii	95.0	3 (87.7)	(52.8) 2	13.1	0.9
Idaho	87.5	72.8	39.5	15.4	5.0
Illinois	91.0	80.9	40.6	29.3	18.2
Indiana	88.2	76.4	36.9	25.9	18.8
Iowa	90.1	77.2	(51.4) 3	28.7	8.4
Kansas	87.7	77.7	43.4	29.3	13.9
Kentucky	89.1	4 (81.9)	41.8	27.3	19.6
Louisiana	87.6	81.1	28.5	20.0	14.0
Maine	86.8	79.7	(54.4) 4	36.3	7.3
Maryland	86.6	74.5	47.4	39.8	33.9
Massachusetts	89.0	77.9	(50.1) 5	44.0	36.1
Michigan	86.2	74.9	42.0	33.8	10.1
Minnesota	89.6	78.4	44.7	37.9	20.0
Mississippi	91.7	62.8	22.5	11.4	3.2
Missouri	88.9	80.8	34.1	22.7	6.4
Montana	76.5	53.5	31.6	25.7	2.4
Nebraska	84.6	69.1	43.7	29.3	17.2

Table 20 - Continued
Percentage of Connections by Downstream Speed by State as of December 31, 2010
 (Connections over 200 kbps in at least one direction)

State	% over 200 kbps Downstream	Over 200 kbps Upstream and			
		% at least 768 kbps Downstream	% at least 3 mbps Downstream	% at least 6 mbps Downstream	% at least 10 mbps Downstream
Nevada	91.7	5 (83.4)	44.0	29.0	17.7
New Hampshire	87.2	73.9	(54.6) 6	44.4	33.4
New Jersey	87.7	74.7	(49.6) 7	44.2	40.3
New Mexico	85.2	67.5	33.1	26.8	4.8
New York	87.8	77.5	(51.9) 8	43.0	36.5
North Carolina	84.9	72.9	46.9	33.3	6.9
North Dakota	81.1	58.8	44.8	28.8	24.5
Northern Mariana Isl	.	.	.	.	.
Ohio	83.7	6 (69.9)	40.2	29.2	7.1
Oklahoma	92.1	8 (87.0)	35.3	18.2	14.8
Oregon	92.1	7 (82.4)	45.8	38.5	24.9
Pennsylvania	88.7	77.9	(48.0) 9	35.9	28.8
Puerto Rico	87.2	78.7	22.7	12.5	0.4
Rhode Island	89.7	80.3	(56.5) 10	48.8	43.2
South Carolina	84.3	71.2	41.1	31.3	10.4
South Dakota	80.6	60.0	45.4	42.6	34.7
Tennessee	87.0	73.4	38.5	29.9	16.8
Texas	90.4	8 (82.3)	36.8	25.9	9.4
Utah	92.0	81.0	43.0	35.9	21.7
Vermont	.	77.1	(47.6) 11	21.7	7.1
Virgin Islands	.	71.0	.	.	3.3
Virginia	.	72.9	45.5	31.1	11.0
Washington	.	9 (81.9)	45.2	31.1	11.0
West Virginia	90.9	10 (86.2)	(53.1) 12	45.3	21.0
Wisconsin	90.1	81.2	47.4	31.4	(6.6)
Wyoming	82.8	56.6	38.2	30.4	2.5
Total	88.6	77.9	42.0	31.9	19.5

Only 10 states do better than Wisconsin

Only 12 states do better than Wisconsin

this puts us near the bottom

* = Data withheld to maintain firm confidentiality.
 Source: FCC Form 477, Part I.

C. National Telecommunications and Information Administration Annual “Current Population Survey Internet Use 2010”

The NTIA report “Current Population Survey Internet Use 2010” is an annual collection of data to measure Internet and broadband use. In October 2010, the U.S. Census Bureau within the Economics and Statistics Administration, in collaboration with NTIA, significantly expanded the Current Population Survey (CPS) to include new questions on computer and Internet use. *The Census Bureau surveyed about 54,300 households, and through statistical methods extrapolated the survey results to represent 119.5 million American households.*

The detail included below can be accessed at:
http://www.ntia.doc.gov/data/CPS2010_Tables

The screenshot shows the NTIA website header with the logo and navigation menu. The main content area is titled "Current Population Survey (CPS) Internet Use 2010". It lists several tables and their associated data files:

- TABLE 1: Persons using the Internet in and outside the home, by selected characteristics: Total, Urban, Rural, Principal City, 2010 (bt file)
- TABLE 1a: Persons using the Internet in and outside the home, by selected characteristics: Total, Urban, Rural, Principal City, 2010 (bt file)
- TABLE 1b: Persons using the Internet in and outside the home, by selected characteristics: Total, Urban, Rural, Principal City, 2010 (bt file)
- TABLE 2: Households using the Internet in and outside the home, by selected characteristics: Total, Urban, Rural, Principal City, 2010 (bt file)
- Percent of People Who Use the Internet at Any Location, Ranked by State: 2010 (Numbers in Thousands)
 - xls file: Table 3 (3a - urban) (3b - rural areas) (3c - principal city)
 - CSV files: Table 3 (3a - urban) (3b - rural areas) (3c - principal city)
- Percent of People with Internet Broadband Access, Ranked by State: 2010 (Numbers in Thousands)
 - xls file: Table 4 (4a - urban) (4b - rural areas) (4c - principal city)
 - CSV files: Table 4 (4a - urban) (4b - rural areas) (4c - principal city)

Arrows point to the "CSV files: Table 3" and "CSV files: Table 4" links. A "Featured Initiatives" sidebar on the right lists Digital Literacy, Broadband USA, Internet Policy Task Force, Wireless Broadband: 500MHz, and National Broadband Map. A "Welcome to Our New Website" message is also present.

Table 3 of the survey shows the “Percent of People Who Use the Internet at Any Location.” Table 4 shows the “Percent of People with Internet Broadband Access.” Both Table 3 and Table 4 show Wisconsin as a top ten state.

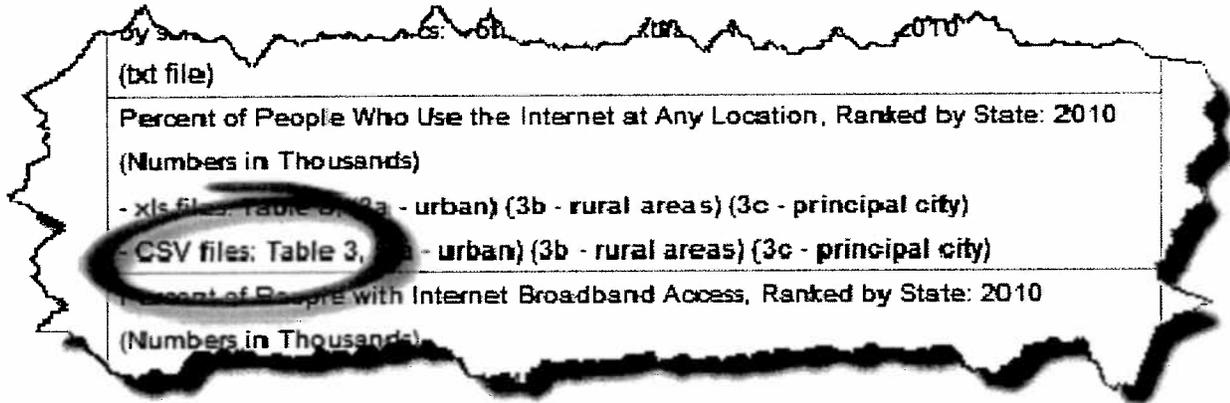
- **Wisconsin ranks 8th in Table 3, which shows the “Percent of People Who Use the Internet at Any Location”**
- **Wisconsin ranks 9th in Table 4, which shows the “Percent of People with Internet Broadband Access”**

The survey results are also broken out to show the ranking of Wisconsin’s rural areas compared to other states. Significantly, Wisconsin ranks as a top 15 state when examining the broadband availability and use in rural areas:

- **Wisconsin ranks 12th in Table 4b, which shows the “Percent of People with Internet Broadband Access” *in rural areas***
- **Wisconsin ranks 15th in Table 6b, which shows the “Percent of Households with Internet Broadband Access” *in rural areas***

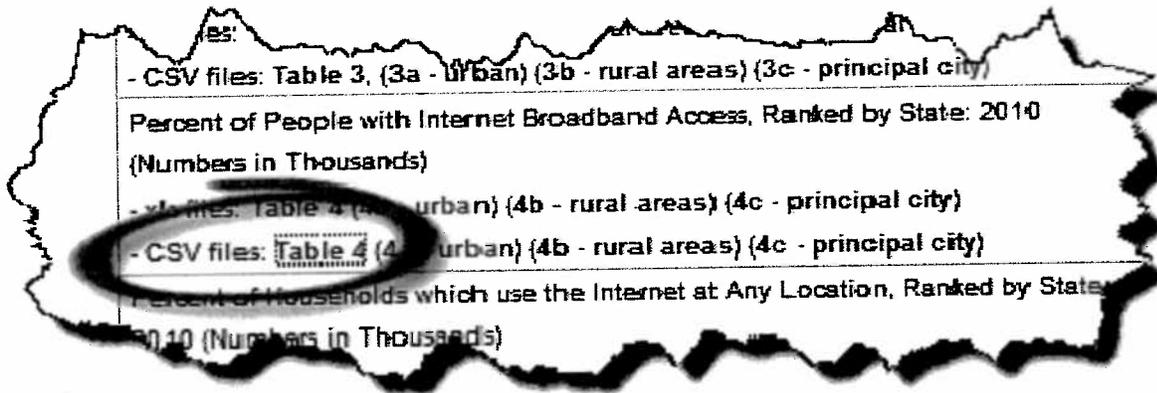
The detail for Table 3, Table 4, Table 4b, and Table 6b is shown on the next few pages.

Wisconsin ranks 8th in Table 3, which shows the
“Percent of People Who Use the Internet at Any Location”



State	Total People	Percent Use Internet	90% Confidence Interval
New Ham	1,270	80.3	1.52
Washingt	6,373	79.7	1.21
Alaska	660	79.4	1.5
Massachu	6,389	78.4	1.22
Utah	2,681	78.2	1.31
Connectic	3,364	78.1	1.53
Wyoming	521	78	1.58
Wisconsin	5,401	77.7	1.35 ← 8th
Minnesot	5,001	77.4	1.4
Maryland	5,431	77.2	1.38
Kansas	2,649	77.1	1.58
North Dak	608	76.8	1.58
Maine	1,254	76.6	1.74
Oregon	3,695	76.6	1.56
Vermont	592	76.4	1.71
Nebraska	1,695	75.9	1.6
Washingt	581	74.8	1.71
New Jerse	8,269	74.6	1.15

Wisconsin ranks 9th in Table 4, which shows the
“Percent of People with Internet Broadband Access”



State	Total People	Percent w Internet Broadband	90% Confidence Interval
New Ham	1,270	73.8	1.68
Connectic	3,364	73	1.64
Massachu	6,389	72.8	1.32
Washingt	6,373	72	1.35
Utah	2,681	70.9	1.45
North Dak	608	70	1.72
Maryland	5,431	70	1.5
Kansas	2,649	69.4	1.73
Wisconsin	5,401	69.1	1.5
Wyoming	521	68.7	1.77
New Jerse	8,269	68.3	1.23
Alaska	660	68.2	1.73
Minnesot	5,001	67.8	1.56
Oregon	3,695	67.7	1.73
Rhode Isla	994	67.1	1.83
Colorado	4,836	67	1.62
Washingt	581	66.9	1.86
Idaho	1,468	66.4	1.64

← 9th

Wisconsin ranks 12th in Table 4b, which shows the
“Percent of People with Internet Broadband Access” in rural areas

- CSV files: **Table 3, (3a - urban) (3b - rural areas) (3c - principal city)**

Percent of People with Internet Broadband Access, Ranked by State: 2010
 (Numbers in Thousands)

- xls files: **Table 4 (4a - urban) (4b - rural areas) (4c - principal city)**

- CSV files: **Table 4 (4a - urban) (4b - rural areas) (4c - principal city)**

Percent of Households which use the Internet at Any Location, Ranked by State:

State	Total People	Percent w Internet Broadband	90% Confidence Interval
Massachu	585	83.2	4.47
Connectic	392	81.8	5.11
Rhode Isla	96	78.8	6.26
Utah	393	74.5	4.44
New Ham	484	73.5	3.35
Maryland	715	73.4	4.89
Washingt	1,125	70.7	4
Colorado	531	70.3	5.82
Wyoming	236	68.4	3.22
New York	2,320	68.3	2.86
Idaho	475	65.6	3.54
Wisconsin	1,747	65.3	3.33 ← 12th
New Jerse	389	65	7.1
Arizona	823	64.8	4.86
Hawaii	85	64.6	7.94
Maine	774	64	3.07
Iowa	1,003	64	3.7
Delaware	169	63.1	4.89
Minnesoti	1,437	63.1	3.69

Wisconsin ranks 15th in Table 6b, which shows the
“Percent of Households with Internet Broadband Access” in rural areas

2010 numbers (Numbers in Thousands)

- xls files: **Table 5 (5a - urban) (5b - rural areas) (5c - principal city)**
 - CSV files: **Table 5 (5a - urban) (5b - rural areas) (5c - principal city)**

Percent of Households with Internet Broadband Access, Ranked by State: 2010
 (Numbers in Thousands)

- xls files: **Table 6 (6a - urban) (6b - rural areas) (6c - principal city)**
 - CSV files: **Table 6 (6a - urban) (6b - rural areas) (6c - principal city)**

Table 7: Households without High-Speed Internet Access at home, by selected characteristics: Total, Urban, Rural, Principal City, 2010 (Numbers in Thousands)

State	Total Households	Percent w Internet Broadband	90% Confidence Interval
Massachu	192	88.1	6.75
Connectic	147	85.5	7.6
Rhode Isla	37	81.3	9.69
Utah	160	78.8	6.53
New Ham	191	76.7	5.1
Colorado	207	76.6	8.63
Maryland	267	76.3	7.7
Nevada	90	74.3	10.19
Washingt	441	74	6.16
Arizona	295	72	7.63
Wyoming	98	70.6	4.89
New York	972	69.9	4.35
Delaware	68	69	7.41
Idaho	184	68.8	5.55
Wisconsin	682	68.7	5.19 ← 15th
New Jerse	182	67.5	10.18
Vermont	167	67.3	4.34
North Dak	116	65.8	4.99
Alaska	93	65.6	5.75
Maine	328	65.5	4.68

VI. Comparison of the National Broadband Map Rankings and FCC Report

As mentioned above, the National Broadband Map reliance on data that includes “advertised speed” is misleading, due to the fact that advertisements covering a media market will not and do not translate to actual telecommunications company service availability (and they won’t take into account the fine print like “speeds up to” or “service not available in all areas”).

The simple fact that a broadband speed is used in an advertisement that covers a neighborhood, subdivision, or community does not necessarily mean that every business or resident in that media market can get that service. However, that is the assumption that produced the National Broadband Map rankings.

Significantly, the results of the “advertised speed” data cited by UW show unusually high broadband availability percentages compared to the more statistically sound FCC reports.

These unusually high broadband percentages can be exposed when looking at the rankings of other states in the Midwest. For example:

- Based on the “advertised speed” approach, the average availability of 3Mbps broadband in Illinois, Iowa, Michigan, Minnesota, and Ohio is 98.8%...as compared to the FCC study that reports an average in those same five states of 43.8% for 3Mbps broadband.

- Based on the “advertised speed” approach, there is **nationwide** availability of 97.1% for 3Mbps broadband...as compared to the FCC study that reports 42% availability nationwide for 3Mbps broadband.

If the nationwide average for 3Mbps was actually 97.1%, there would be little need for the priority placed on this issue by decision makers in both the public and private sectors.

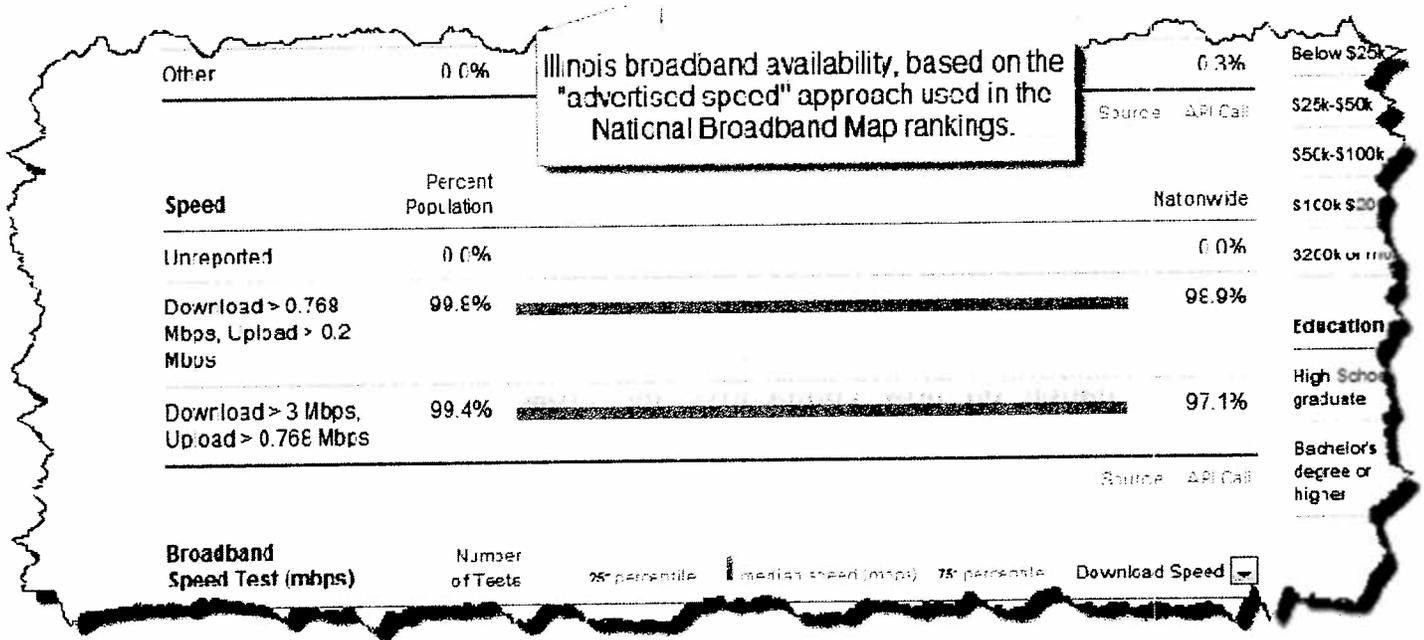
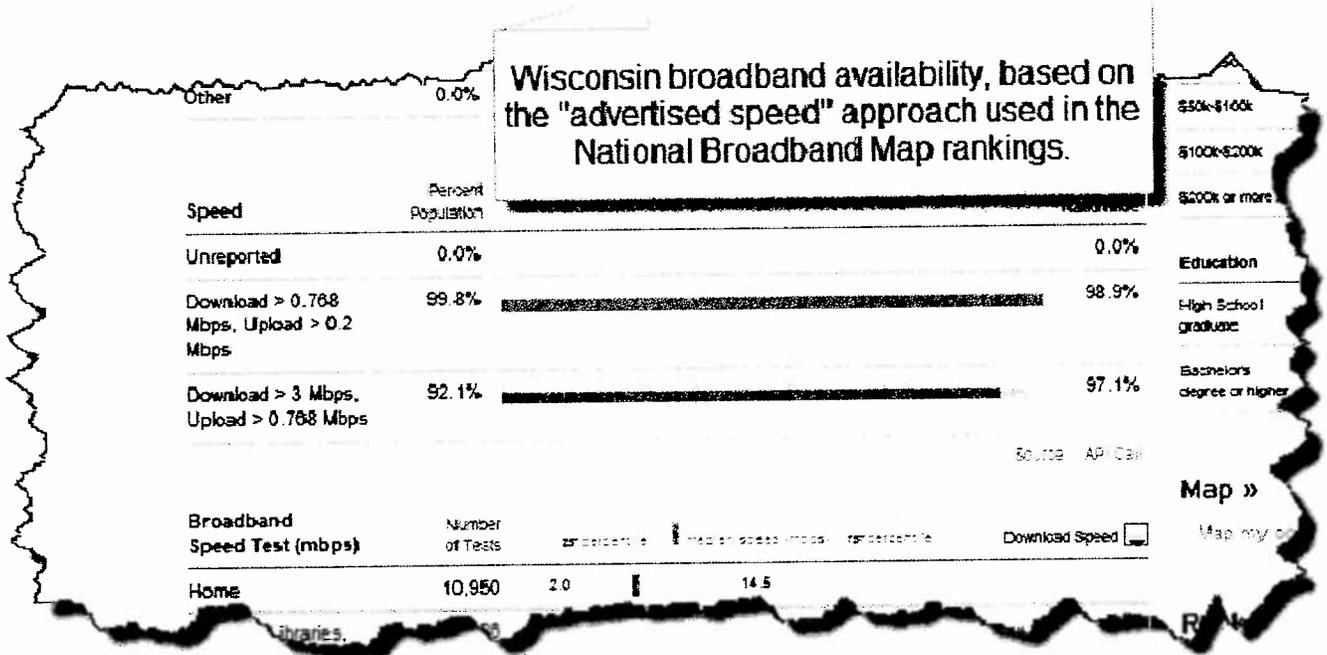
The following page contains the detail from the National Broadband Map data for both Wisconsin and Illinois.

Based on the information below, both Wisconsin and Illinois have 99.8% of their populations covered with broadband of 768Kbps download and 200Kbps upload. However, based on the more reliable FCC data, 80.9% of the broadband connections in Illinois meet or exceed 768/200Kbps while 81.2% of the broadband connections in Wisconsin meet or exceed 768/200Kbps.

Furthermore, based on the information below, Wisconsin has 3Mbps download broadband to 92.1% of its population while Illinois has 3Mbps download speeds available to a surprising 99.4% of its population. However, the FCC data ranks Wisconsin ahead of Illinois for 3Mbps broadband. According to the FCC, Wisconsin has 47.4% of its broadband connections at or above 3Mbps compared to 40.6% for Illinois.

Again, if the data that produced the National Broadband Map were accurate (99.8% coverage in Wisconsin for 768Kbps broadband and 92.1% coverage for 3Mbps broadband) the dialogue on this issue would be very different.

The only responsible conclusion that can be drawn upon thoughtful comparison of the National Broadband Map rankings and the Federal Communications Commission report is that the FCC report produces more reliable, statistically valid rankings.



VII. UW Extension Comments on Wisconsin's Broadband Ranking

After reviewing the information above about Wisconsin's ranking for broadband availability, it would seem logical to ask the following question:

Why is the UW-Extension issuing press releases on the misleading rankings showing Wisconsin as a bottom 10 state rather than highlighting the top 10 or top 15 rankings that are evident in the FCC reports and NTIA survey?

That is a good question. The answer probably lies in the fact that the UW Extension must rely on misleading data and "man bites dog" press releases to divert attention from the facts about the broadband availability in the communities targeted in their telecommunications project.

The UW Extension is pursuing a taxpayer-funded telecommunications project in the Chippewa Valley, Platteville, Superior and Wausau. They continually suggest that these projects are needed in those rural communities due to the lack of private sector broadband. Nothing could be further from the truth. The private sector competition in those four communities is very real. Unfortunately for the UW Extension, the facts tell a story of the private sector in Wisconsin doing what it does best: investing in our communities and providing service to our customers.

To get information on how competitive the broadband markets are in those rural communities, you only need to look on the www.link.wisconsin.gov website. The screen shots below were taken on November 14, 2011. As demonstrated in the maps below, there are as many as seven private sector options for broadband in these communities.

Wausau's Competitive Broadband Marketplace: Five Private Sector Providers



Choose a Broadband Map:

Number of Broadband Providers ▼

This map shows the total number of broadband providers (all technology types).

	1 Broadband Provider
	2 Broadband Providers
	3 Broadband Providers
	4 Broadband Providers
	5 or more Broadband Providers

About the Map:

- Click the map to get a provider list.
- Maps updated in October 2011 based on coverage as of June 30, 2011.
- Tips for using the Interactive Map
- Frequently asked Questions (FAQ)
- Overview of the Mapping Process
- How to Provide Feedback on the Map

All information presented herein is believed to be accurate but is not guaranteed to be without error. Maps may be printed but there are no claims of completeness or accuracy. All critical information should be independently verified. See the FAQ for additional information.

 RECOVERY.GOV

Broadband Provider Information ✕

Below is a list of providers in this general area. The number of providers may differ from that indicated by the shading on the map because we include additional providers who may be willing to extend service to this area. We encourage users to contact these providers directly for specific coverage information. Note: The information shown applies to this general area and not to a specific address or location.

- Frontier (Web Site)
- Charter Communications (Web Site)
- CellCom (Web Site)
- Sprint (Web Site)
- AT&T Mobility LLC (Web Site)

Satellite service may also be available here. [Click here for more information](#)

Provide Coverage and Speed Feedback | Close Window



Chippewa Valley's Competitive Broadband Marketplace: Seven Private Sector Providers

 **LINK WISCONSIN**
Broadband Coverage Maps

Choose a Broadband Map:

Number of Broadband Providers

This map shows the total number of broadband providers (all technology types).

	1 Broadband Provider
	2 Broadband Providers
	3 Broadband Providers
	4 Broadband Providers
	5 or more Broadband Providers

About the Map:

- Click the map to get a provider list.
- Maps updated in October 2011 based on coverage as of June 30, 2011.
- Tips for using the Interactive Map
- Frequently asked Questions (FAQ)
- Overview of the Mapping Process
- How to Provide Feedback on the Map

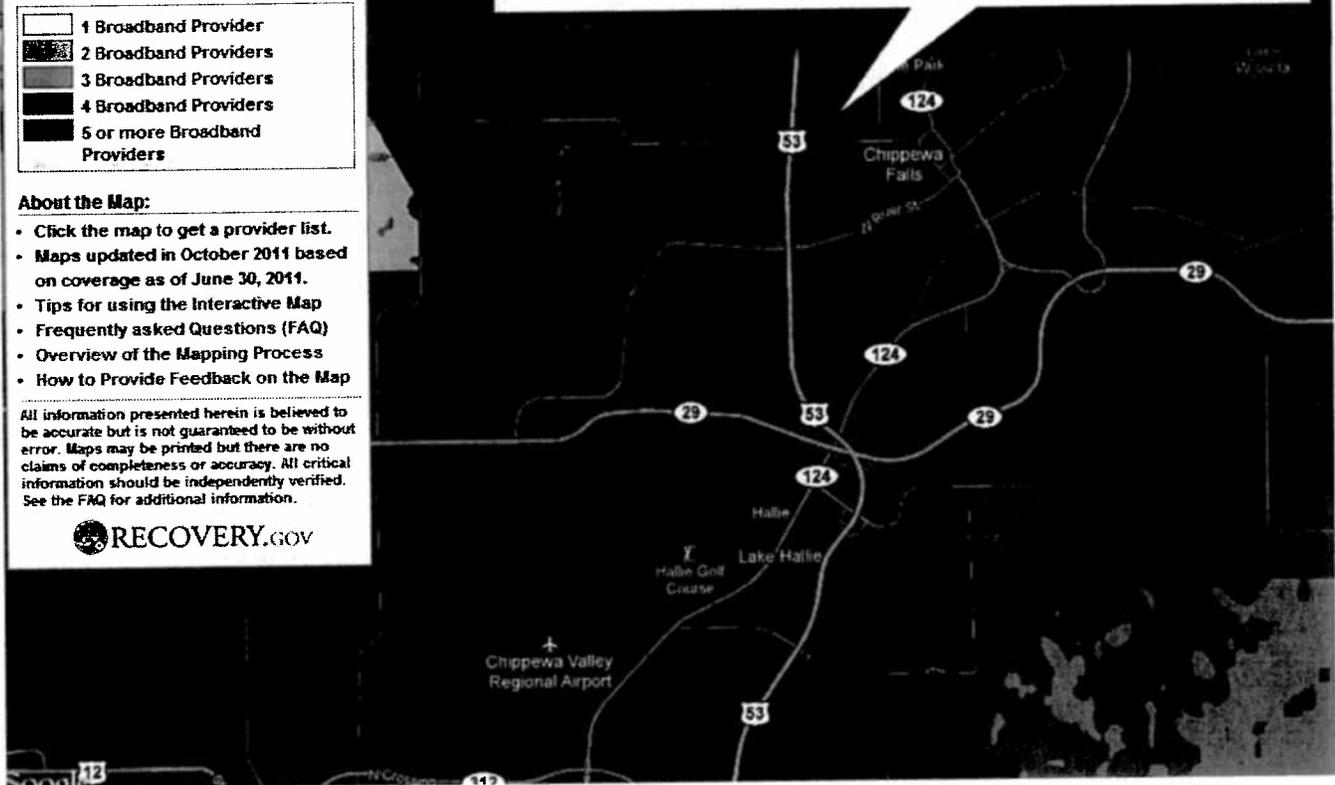
All information presented herein is believed to be accurate but is not guaranteed to be without error. Maps may be printed but there are no claims of completeness or accuracy. All critical information should be independently verified. See the FAQ for additional information.

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- Verizon Wireless (Web Site)
- AT&T Wisconsin (Web Site)
- T-Mobile (Web Site)
- AT&T Mobility LLC (Web Site)
- Charter Communications (Web Site)
- Sprint (Web Site)
- Clearwire (Web Site)

Satellite service may also be available here. [Click here for more information](#)

[Provide Coverage and Speed Feedback](#) | [Close Window](#)



Superior's Competitive Broadband Marketplace: Seven Private Sector Providers



Choose a Broadband Map:

Number of Broadband Providers

This map shows the total number of broadband providers (all technology types).

- 1 Broadband Provider
- 2 Broadband Providers
- 3 Broadband Providers
- 4 Broadband Providers
- 5 or more Broadband Providers

About the Map:

- Click the map to get a provider list.
- Maps updated in October 2011 based on coverage as of June 30, 2011.
- Tips for using the Interactive Map
- Frequently asked Questions (FAQ)
- Overview of the Mapping Process
- How to Provide Feedback on the Map

All information presented herein is believed to be accurate but is not guaranteed to be without error. Maps may be printed but there are no claims of completeness or accuracy. All critical information should be independently verified. See the FAQ for additional information.



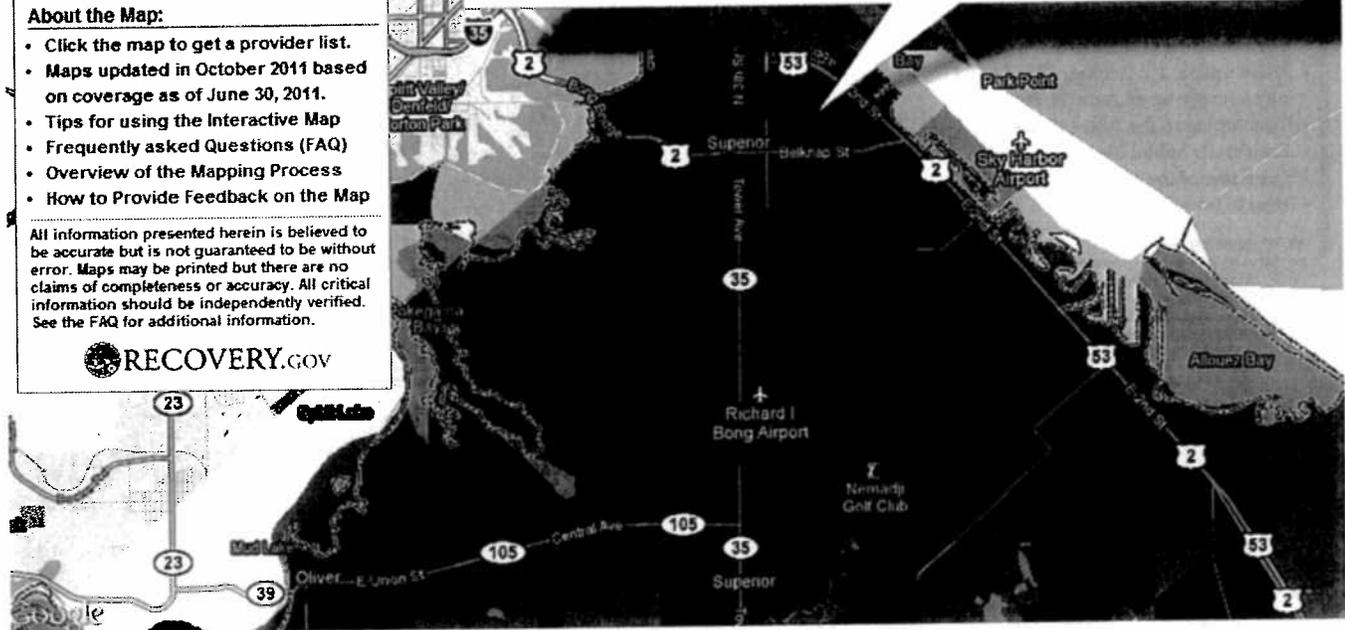
Broadband Provider Information

Below is a list of providers in this general area. The number of providers may differ from that indicated by the shading on the map because we include additional providers who may be willing to extend service to this area. We encourage users to contact these providers directly for specific coverage information. Note: The information shown applies to this general area and not to a specific address or location.

- AT&T Mobility LLC (Web Site)
- Verizon Wireless (Web Site)
- T-Mobile (Web Site)
- Charter Communications (Web Site)
- CenturyLink (Web Site)
- Clearwire (Web Site)
- Sprint (Web Site)

Satellite service may also be available here. [Click here for more information](#)

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Platteville's Competitive Broadband Marketplace:

Four Private Sector Providers

LINK WISCONSIN
Broadband Coverage Maps

Choose a Broadband Map:

Number of Broadband Providers

This map shows the total number of broadband providers (all technology types).

- 1 Broadband Provider
- 2 Broadband Providers
- 3 Broadband Providers
- 4 Broadband Providers
- 5 or more Broadband Providers

About the Map:

- Click the map to get a provider list.
- Maps updated in October 2011 based on coverage as of June 30, 2011.
- Tips for using the Interactive Map
- Frequently asked Questions (FAQ)
- Overview of the Mapping Process
- How to Provide Feedback on the Map

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RECOVERY.GOV

Broadband Provider Information

Below is a list of providers in this general area. The number of providers may differ from that indicated by the shading on the map because we include additional providers who may be willing to extend service to this area. We encourage users to contact these providers directly for specific coverage information. Note: The information shown applies to this general area and not to a specific address or location.

- CenturyLink (Web Site)
- Sprint (Web Site)
- Verizon Wireless (Web Site)
- UsCellular (Web Site)

Satellite service may also be available here. Click here for more information

Provide Coverage and Speed Feedback | Close Window

VIII. CONCLUSION

Where does Wisconsin rank relative to other states with respect to the availability and use of broadband Internet using statistically reliable information?

The data collected for the National Broadband Map relies on information that includes the “advertised speed” of broadband Internet in state and local media outlets. This may produce misleading and inaccurate rankings of broadband availability, access, and use because advertisements covering a media market will not and do not translate to actual telecommunications company service availability. **This is similar to the common occurrence of political advertisements being seen or heard by voters who live outside a district targeted in a political campaign. Simply because a person is subjected to political campaign advertisements for a specific campaign, it does not make them a constituent.** Furthermore, the “advertised speed” approach does not take into account the fine print that may appear in advertisements such as “speeds up to” or “service not available in all areas”. The result is that the National Broadband Map data created misleadingly low rankings for Wisconsin using data that is not as statistically reliable as other sources.

According to the Federal Communications Commission report “Internet Access Services: Report as of December 31, 2010”, Wisconsin is a top fifteen state when ranking the percentage of broadband connections with download speeds of 768Kbps and 3Mbps. This reliable measurement of Wisconsin’s ranking for broadband availability utilizes detailed and reliable information gathered in FCC Report 477. Again, persons making willful false statements in a Form 477 filing can be punished by fine or imprisonment.

- Only 10 states rank better than Wisconsin when looking at the percentage of broadband connections with 768Kbps download speeds and a minimum upload speed of 200Kbps
- Only 12 states rank better than Wisconsin when looking at the percentage of broadband connections with 3Mbps download speeds and a minimum upload speed of 200Kbps

According to the National Telecommunications and Information Administration survey “Current Population Survey Internet Use 2010”, Wisconsin ranks in the top ten for certain categories and in the top fifteen in other categories when looking at Internet use and broadband access. This statistically reliable information was gathered by the U.S. Census Bureau in a survey of more than 54,300 households:

- Wisconsin ranks 8th in the “Percent of People Who Use the Internet at Any Location”
- Wisconsin ranks 9th in the “Percent of People with Internet Broadband Access”
- Wisconsin ranks 12th in the “Percent of People with Internet Broadband Access” *in rural areas*
- Wisconsin ranks 15th in the “Percent of Households with Internet Broadband Access” *in rural areas*

What is the current level of private sector broadband competition in the communities targeted by the UW Extension project?

The private sector broadband competition in the Chippewa Valley, Platteville, Superior and Wausau is very real. The private sector in Wisconsin is doing what it does best: investing in our communities and providing service to our customers.

According to the LinkWISCONSIN (www.link.wisconsin.gov) broadband map:

- Wausau's competitive broadband marketplace has five private sector providers
- Chippewa Valley's competitive broadband marketplace has seven private sector providers
- Superior's competitive broadband marketplace has seven private sector providers
- Platteville's competitive broadband marketplace has four private sector providers



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1. Sen. Moulton ↑ (Author)
2. Chancellor Ray Cross ↑ (W-Ext)
3. Bill Esbeck ↓ (WSTA)
4. Ross Wilson (Wisnet) ↑ &
(b) David Lois (Exec. director of Wisnet) ↑
5. (a) John Klarer (Mt. Horeb Telephone Co.)
(b) Brad Welp ↓ (Richland Grant telephone cooperative, LaValle telephone cooperative)
6. Terry Dawson ↑ (Chair of Wi Lib. Ass.)
7. (b) John Klatt ↓ (Luck Tele Company)
(a) Scott Jensen ↓ (Amery tele Co.)
8. Tim Scheff ↑ (SAA & WEMTA)
9. Lorenzo Cruz ↓ (Century Link)
10. Morna Foy ↑ (WI Tech. College System)
11. Mark Weller ↓ (Access WI) &
Bill McClenahan ↓
12. Kara Slaughter ↔ (WI Farmers Union)

13. Jon-Mark Bolthouse (South Central Lib. System)
& Stephanie Morrill (WI Lib. Services)

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