

JULY, 2017

ELK RIVER, MN BROADBAND INFRASTRUCTURE REPORT

PREPARED FOR THE CITY OF ELK RIVER

July 31, 2017

RE: Broadband Competition in Elk River, MN

Dear Mr. Portner,

Broadband Internet access is critical for communities that want to participate in the modern economy.

Unfortunately, the FCC's latest Broadband Progress Report concluded "that advanced telecommunications capability is not being deployed to all Americans in a reasonable and timely fashion". According to their report, only 38 percent of Americans have more than one choice of providers for true broadband.^[1]

This fact is troubling, and not just to our team at BroadbandNow. Our broadband search tools are used by over 1.5 million people each month, and we're drowning in messages from Internet users frustrated by their lack of options.

To help spread the word about this situation, we've included a detailed report detailing the broadband availability and competition within Elk River and the surrounding areas.

Our goal in providing this report is to arm Elk River stakeholders and decision makers with the best facts and statistics currently available.

This report is based on data collected by the FCC, NTIA, Census, Speedtests, and directly from Internet Service Providers. Here is a glimpse of the data included:

1. Broadband Competition in Elk River at a glance.
2. A list of providers offering service in the city (based on FCC/NTIA filings)
3. A snapshot of residential competition
4. A snapshot of business competition
5. A list of data centers within 100 miles of Elk River and stats on telecom costs in the area.
6. An overview of competition, speeds, and availability in Minnesota
7. Resources created by federal agencies to help cities become more connected.

A copy of this report will be included along with our consumer facing tools on this page for permanent reference:

<http://broadbandnow.com/Minnesota/Elk-River>

Thank you for all you do to make Elk River a wonderful place to live.

Best Regards,



Nick Reese & the entire BroadbandNow team

BroadbandNow.com/mission

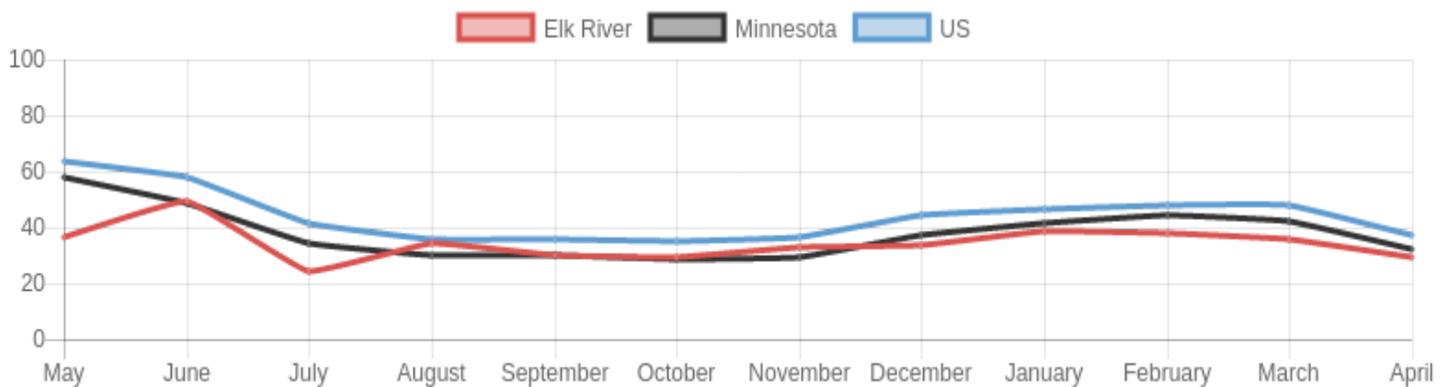
REFERENCE:

1. <https://www.fcc.gov/reports-research/reports/broadband-progress-reports/2016-broadband-progress-report>

EXECUTIVE SUMMARY OF ELK RIVER, MN BROADBAND:

- There are 20 internet providers in Elk River with 10 of them specializing in business services.
- There are 400 consumers with 1 or fewer wired broadband providers available at their address.
- There are 8 data centers within 50 miles of Elk River. (Full list included with this report)
- Elk River is the 4,146th most connected city in the US, ahead of Saint Michael, Zimmerman, and Big Lake

DOWNLOAD SPEEDS COMPARED TO STATE AND NATIONAL AVERAGES



This data is based off 34,602,727 IP verified speed tests nationwide, 573,646 IP verified tests in Minnesota, and 2,733 IP verified tests in Elk River

# OF PROVIDERS AVAILABLE TO CONSUMERS	ELK RIVER	SHERBURNE COUNTY	MINNESOTA	U.S.
0 Residential Providers	0.0%	0.0%	0.6%	1.4%
1 Residential Provider	1.2%	0.6%	4.6%	6.2%
2 Residential Providers	5.0%	11.3%	12.7%	31.9%
3+ Residential Providers	93.8%	88.1%	82.2%	55.9%

The statistics above include fixed wireless providers that offer residential service when available in the area.

COVERAGE TYPE	ELK RIVER	SHERBURNE COUNTY	MINNESOTA	U.S.
Wired (all types)	91.7%	83.3%	87.5%	95.1%
Fiber Optic	2.8%	0.0%	16.6%	25.4%

RESIDENTIAL INTERNET SERVICE PROVIDERS IN ELK RIVER

PROVIDER	AVERAGE DOWNLOAD SPEED	CABLE COVERAGE	DSL COVERAGE	FIBER COVERAGE	FIXED WIRELESS COVERAGE	OTHER COVERAGE
CitEscape High Speed Internet	-	-	-	-	100.0%	-
CenturyLink	14.1 mbps	-	94.0%	2.8%	-	-
Charter Spectrum	38.5 mbps	87.0%	-	-	-	-
Nextera Communications	2.8 mbps	-	-	-	61.2%	-
TDS Telecom	6.3 mbps	-	35.1%	-	-	-
dishNET	-	-	29.7%	-	-	-
Windstream	4.9 mbps	-	19.2%	-	-	-

We maintain a detailed analysis of coverage and download speeds in Elk River that is continually updated here:
<http://broadbandnow.com/Minnesota/Elk-River>

BUSINESS INTERNET SERVICE PROVIDERS IN ELK RIVER

PROVIDER	AVERAGE DOWNLOAD SPEED	CABLE COVERAGE	DSL COVERAGE	FIBER COVERAGE	FIXED WIRELESS COVERAGE	OTHER COVERAGE
CenturyLink Business	14.1 mbps	-	100.0%	-	-	-
Spectrum Business	38.5 mbps	70.0%	-	-	-	-
CitEscape High Speed Internet	-	-	-	-	100.0%	-
Nextera Communications	2.8 mbps	-	-	-	45.4%	-
Windstream Business	4.9 mbps	-	19.9%	-	-	-
Level 3 Communications	-	-	-	-	-	2.9%
XO Communications	-	-	-	-	-	2.6%
Integra Telecom	-	-	-	-	-	1.7%
Birch Communications	-	-	-	-	-	1.1%
Verizon Business	-	-	-	-	-	0.5%

We've explicitly found the providers listed above to be offering small business plans or advertising enterprise offerings on their websites. While most ISPs can offer service to businesses, this table is designed to illustrate the ones that cater specifically to businesses.

DOWNLOAD SPEEDS & RESIDENTIAL COMPETITION MAP IN ELK RIVER

AVERAGE DOWNLOAD SPEED

33.85 MBPS

8.1% slower than the state average of 36.60mbps. And 25.5% slower than the national average.

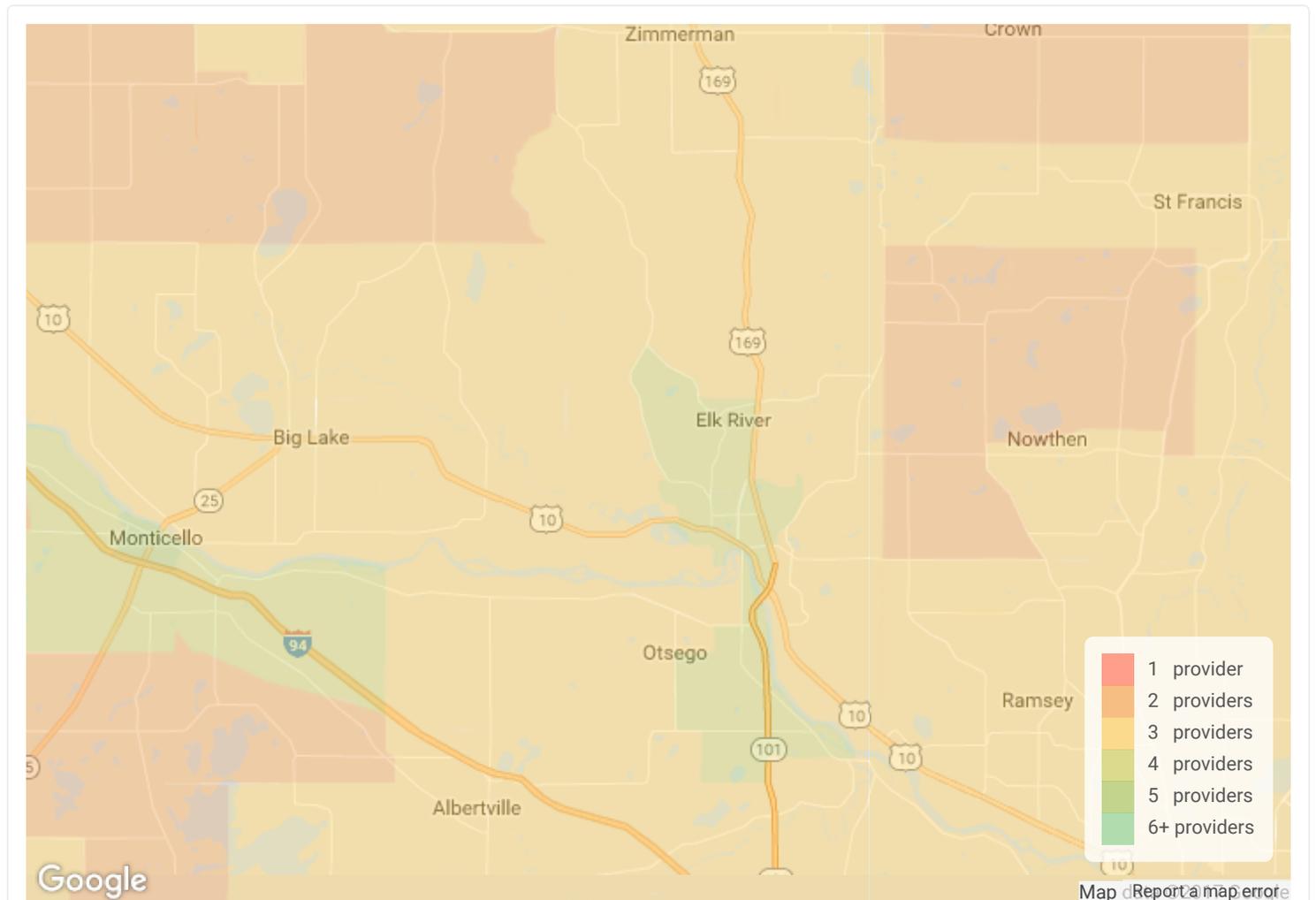
This analysis is based on 2,733 speed tests from IP verified users who took speed tests from an IP address in Elk River between May 2016 and April 2017. National statistics are calculated across 34,602,727 over the same time range.

OF CONSUMERS WITH 1 OR FEWER WIRED BROADBAND OPTIONS AVAILABLE TO THEM

400 People

Or 1.2% of consumers in Elk River

The FCC defines broadband as 30/3mbps. This data is calculated from FCC datasets which providers are legally required to supply twice a year. We further validate this data for accuracy.



This map displays wired ISP competition for residential consumers. For an interactive map visit: <http://broadbandnow.com/Minnesota/Elk-River#show=competition>

BUSINESS TELECOM COSTS & COMPETITION MAP IN ELK RIVER

AVERAGE PRICE BUSINESSES PAY PER MBPS

\$55

Across 65 verified contracts for businesses within Elk River

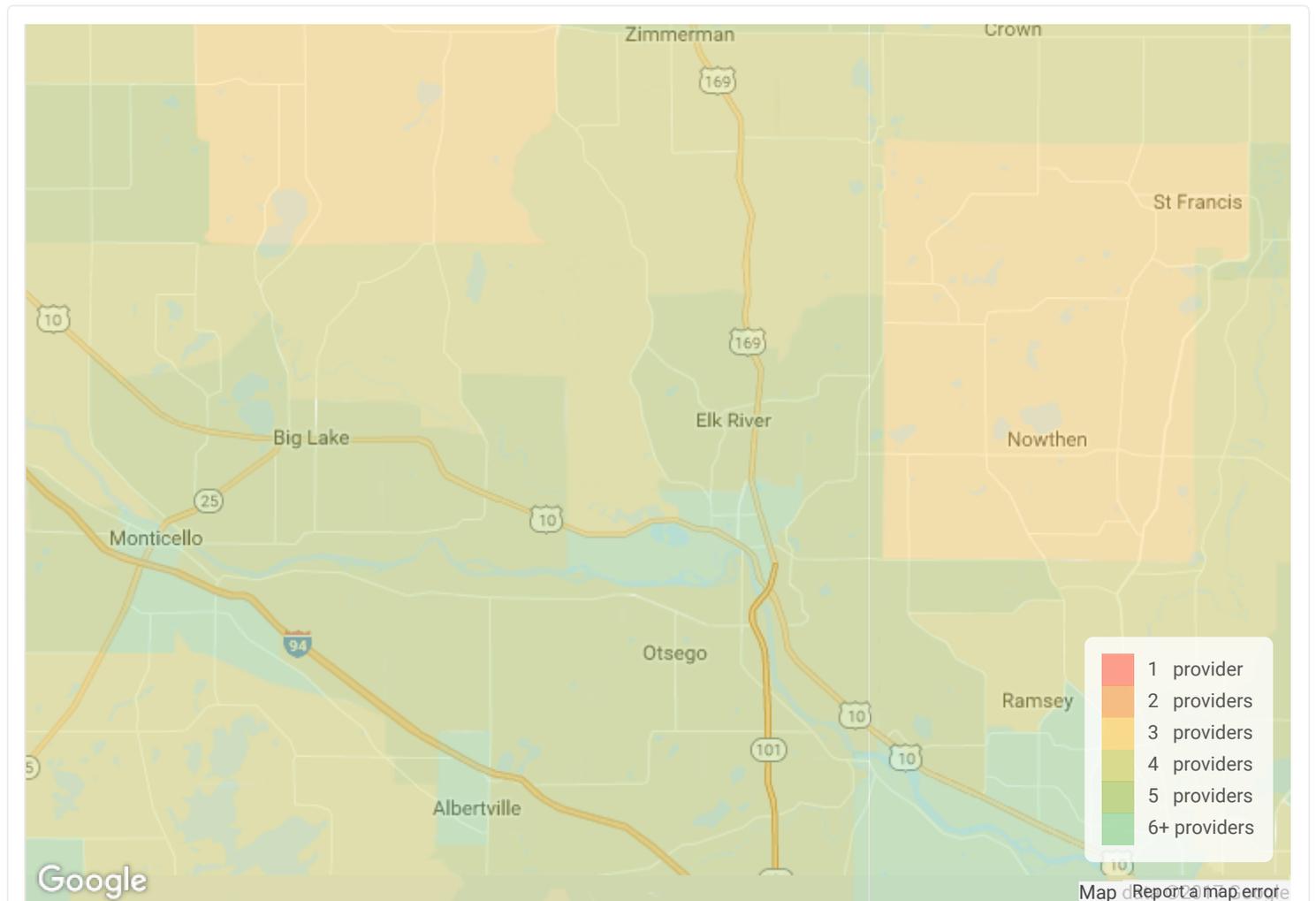
Data for this analysis and the "average total telecom spend" statistic is available on findbroadband.com/minnesota/elk-river. In short, we took 120,426 internet services quotes nationwide and looked at the average spend across all of those

AVERAGE BUSINESS TELECOM SPEND

\$505

Average telecom spend for the 65 business contracts within Elk River

"Telecom Spend" includes other services such as phone, tv and other business specific telecom services.



This map displays wired ISP competition for residential consumers For an interactive map visit: <https://findbroadband.com/minnesota/elk-river>

DATA CENTERS IN AND AROUND ELK RIVER, MINNESOTA

DATA CENTER	ADDRESS	DISTANCE
US Internet	12450 Wayzata Blvd, Hopkins, MN 55305	20-30 Miles
Level 3 Communications	5480 Feltl Rd, Hopkins, MN 55343	20-30 Miles
XO Communications	1200 N Washington Ave, Minneapolis, MN 55401	20-30 Miles
Level 3 Communications	222 S 9th St, Minneapolis, MN 55401	20-30 Miles
Cogent Communications, Inc.	250 S Marquette Ave, Minneapolis, MN 55401	20-30 Miles
ipHouse	331 2nd Ave S , Minneapolis, MN 55401	20-30 Miles
Level 3 Communications	715 N 2nd St, Minneapolis, MN 55401	20-30 Miles
IronGate Data Centers	150 S 5th St, Minneapolis, MN 55402	20-30 Miles

We continuously update our datacenter database. For the most up-to-date list visit: findbroadband.com/minnesota/elk-river

GOVERNMENTAL RESOURCES:

FEDERAL SMART CITIES AND COMMUNITIES PROGRAMS RESOURCE GUIDE

This is a collection of resources created by the “Federal Smart Cities and Communities Programs Resource Guide” to facilitate collaboration and coordination among Smart Cities and Communities (SCC) Task Force member agencies, academia, industry, local cities and communities, and other government entities.

<https://www.nitrtd.gov/apps/smartcity/index.aspx>

NTIA'S BROADBAND CONNECTIVITY ASSESSMENT TOOL (BCAT)

The BCAT complements the other tools and resources available through BroadbandUSA by introducing three new resources for local communities: Connectivity assessment framework, on-line self-assessment tool, report and recommendations.

<http://www2.ntia.doc.gov/BCAT>

PLANNING A COMMUNITY BROADBAND ROADMAP: A TOOLKIT FOR LOCAL AND TRIBAL GOVERNMENTS

NTIA's team provides expert advice and field-proven tools for assessing broadband adoption, planning new infrastructure and engaging a wide range of partners in broadband projects. This publication is one in a series of Toolkits that provides advice to local and tribal governments on these topics.

http://www2.ntia.doc.gov/files/ntia_planning_community_broadband_roadmap_051616.pdf

TOTAL GOVERNMENT FUNDING

The NTIA manages the Broadband Technology Opportunities Program and the State Broadband Initiative, that support the deployment of broadband infrastructure, enhance and expand public computer centers, encourage sustainable adoption of broadband service, and promote statewide broadband planning and data collection activities.

<https://www.ntia.doc.gov/grants-combined>

NTIA.gov's BROADBANDUSA PUBLICATION RESOURCES AND WEBINAR ARCHIVE:

The BroadbandUSA webinar archive contains a range of topics of interest to policymakers, decision-makers, practitioners and consumers.

<https://www2.ntia.doc.gov/webinars>

A collection of resources that makes the case for broadband and provides information around the toolkits and guides available.

<http://www2.ntia.doc.gov/publications>

GLOSSARY OF TERMS:

https://www2.ntia.doc.gov/files/bbusa_broadband_glossary_161024.pdf#page=5

FREQUENTLY ASKED QUESTIONS:

Q: CAN WE REPUBLISH THIS PDF REPORT ON OUR WEBSITE AND IF SO, IS THERE A COST?

A: Yes, please feel free to publish this PDF on your website as a resource for your visitors. If you choose to do so there is no cost, as long as the report is republished in its entirety, including attribution to BroadbandNow.

If you are a government organization, economic development organization, non-for-profit organization, or traditional media organization feel free to include complete pages of this report within other internal reports or activities without any special conditions.

Q: HOW COMPREHENSIVE IS THE DATA IN THIS PDF AND HOW OFTEN ARE YOUR SITES UPDATED?

A: The data you see in this PDF is based off our latest data as of July, 2017.

That said, to build BroadbandNow.com, FindBroadband.com, and this PDF we analyze more than 1 billion rows of data. Of this data, part is public and part is private. For coverage data it comes from multiple sources but primarily from our provider dashboard, FCC datasets, and industry sources.

In general, our core coverage dataset is majorly updated every 6 months, with other parts (plans, speed tests, ratings, reviews, etc) being updated with much more frequency.

Q: ARE YOU SELLING A SERVICE OR ARE YOU A SERVICE PROVIDER?

A: We aren't a service provider, we simply list and allow consumers to rate and compare providers nationwide. We have the most robust dataset of providers (even larger than what the FCC releases) that we offer free to consumers to help them make an informed decision. Our founders self funded the whole project and today the project generates revenue from providers using our provider dashboard to customize their listing on heavily trafficked sites. Our goal is to bring transparency to the market place and this PDF is just part of that process.

Q: HOW DO YOU MAKE MONEY?

A: In 2016 BroadbandNow and FindBroadband powered more than 13.6M searches by consumers and businesses looking for internet service. For ISPs, our site is one of their most important advertising channels. Regardless of whether we have a relationship with a provider or not, they always show up in our results based on their availability in the area. That said, BroadbandNow's data collection, data analysis and website development is supported by relationships with broadband providers who wish to list their latest "bundles" and other promotional materials on our site. That said, these relationships have no influence on our data analysis, the rankings of providers on our city pages (always ranked by availability), or any data in this report. We believe this financial arrangement is the most neutral way we can afford to exist and still build a tool that presents unbiased results for consumers.

Q: WHY DID BROADBANDMAP.GOV STOP BEING UPDATED?

A: Data displayed on the National Broadband Map site is only current as of June 30, 2014 and is no longer being updated. In 2016, the FCC sought funding for FY 2016 to maintain and update the National Broadband Map, but this request was not granted.

As there is no up-to-date unbiased source for coverage information, our goal is to help bring as much transparency to the market as possible by creating a sustainable alternative to broadbandmap.gov.

Q: WHAT IS THE DIFFERENCE BETWEEN FINDBROADBAND AND BROADBANDNOW?

A: FindBroadband.com is a site focused on business internet service. FindBroadband is a tool that offers address level coverage results for every business broadband provider nationwide. Businesses can search for available service using an address.

BroadbandNow.com is a comparison and research website that promotes internet availability for all Americans by bringing transparency to government data and research; aggregating IP verified customer reviews and ratings; and fostering competition through better awareness of local providers. BroadbandNow is 3 years older and helps nearly a million people (consumers) each month. Search capabilities are at a zipcode level. BroadbandNow has been cited by 100+ cities as a resource, referenced on the floor of congress, and is the #1 tool in the industry for finding consumer internet service. We're also the only unbiased tool out there now that BroadbandMap.gov is no longer being updated.

Q: THIS REPORT IS MISSING A PROVIDER. WHY AREN'T THEY LISTED?

A: We put an immense amount of effort into making sure our data is the best in the industry. That said, we do rely heavily on what providers submit directly to us or to the FCC. If a provider hasn't filed their FCC 477 data or they have filed it inaccurately then they may not show up on our tools. FCC 477 data is legally required to be filed twice annually but unfortunately not all providers file this information and some may underreport their coverage.

If you find a provider you think that is missing or is under reported, please bring it to our attention by emailing us at help@broadbandnow.com and our team will work with the provider to help get them listed free of charge.

Q: WHAT IS FIXED WIRELESS?

A: The majority of this report has focused primarily on wired coverage as this is what most consumers and businesses are familiar with. That said, where we list all of the providers in the city, we've explicitly included fixed wireless as in some areas it is becoming a viable alternative to DSL and Cable.

On our Fixed Wireless page (<http://broadbandnow.com/fixed-wireless>), we've included technical details about how it differs, but if you are new to it, basically know that it is quickly becoming a viable alternative to some wired services.

Q. WHAT IS "OTHER" COVERAGE?

A: "Other" coverage encompasses Satellite, Copper, Powerline, and Mobile Internet.

Q: WHY IS THERE NO DOWNLOAD SPEED LISTED FOR SOME PROVIDERS?

A: We show only IP verified speed tests. What this means is that we only tie a speed to a provider, if we are certain that the speed test originated from that provider. Some other sites use "guestimates" or ask a user to "choose their provider" as a way of tying speed tests to providers.

While this is nice, it allows bias into the system. By using only speed tests that we can verify originated from a specific ISPs network is one way we limit these biases.

If a provider's results aren't showing up and they are looking for them to, please have their networking team contact us at help@broadbandnow.com and we'll get their IP ranges verified and assigned.

ABOUT BROADBANDNOW

WHY WE STARTED BROADBANDNOW:

Launched in 2014, BroadbandNow was started to create an unbiased and user friendly tool to find broadband providers in any zip code.

Today, BroadbandNow has grown into the #1 most visited site for consumers shopping for internet service and lists over 2,500 providers nationwide.

We believe that by creating a tool that puts consumers first, we can bring transparency to the broadband industry and foster more competition. Our belief in this mission is even stronger now that broadbandmap.gov is no longer funded or being updated.

WHY WE STARTED FINDBROADBAND.COM

Launched in 2017, we realized that the process of buying business broadband was as confusing if not more confusing than buying residential internet. We launched FindBroadband to make that process easier.

Both BroadbandNow.com and FindBroadband.com are wholly owned by Microbrand Media LLC.

HOW BROADBANDNOW AFFORDS TO EXIST:

One of the most common questions we get is around how we make money.

Simply put since we launched BroadbandNow in 2014, consumers and businesses have grown to trust us as an unbiased resource to find which providers are in their area. As a trusted source, millions of people a year use our tools. With this attention and traffic, many ISPs have requested ways that they can control and augment their listings in exchange for a fee. So that is what we've built.

This small suite of tools allow participating ISPs to list additional details about their offers for interested consumers. Generally these offers are "bundles" or other promotions beyond the "internet only plans" we already collect (free of charge) for every provider nationwide.

In no way do these relationships impact BroadbandNow's data collection, data analysis, or this report. Our city pages will always be ranked in order of availability as that is the best customer experience.

We believe this financial arrangement is the most neutral way we can afford to exist and still build a tool that presents unbiased results for consumers and businesses.