

JANUARY, 2019

HUNTSVILLE, TX BROADBAND INFRASTRUCTURE REPORT

PREPARED FOR THE HUNTSVILLE ITEM

January 18, 2019

Subject: 2018 Internet Access Data Report for Huntsville.

Dear Mr. Brown,

Strong, modern economies require strong, modern broadband infrastructure.

If a community wants to grow, affordable internet access is an essential prerequisite. Just look at the turnaround in cities like Chattanooga, Tennessee and Austin, Texas, where fiber internet upstarts have driven down prices and enabled thriving tech industries.

Unfortunately, the FCC's latest reports paint a disappointing picture of internet access in the USA. 24 Million Americans still don't have access to broadband service^[1], and millions more only have two options for service. In rural areas, download speeds are barely better than dial-up.

The attached report shows detailed broadband statistics we've gathered on Huntsville over the past year. As discussed in our email, there is an exciting and impactful story to be told about broadband access roadblocks in Huntsville.

Engaging local residents is critical to raising public awareness about broadband issues. We know the report is dense, so here are the key facts for easy reference:

1. Huntsville is the 4,536th most connected city in the US.
2. There are 17 internet providers in Huntsville with 11 of them specializing in business services.
3. 71.34% of the city has access to AT&T Internet while 66.64% have access to Suddenlink Communications.
4. In general when it comes to competition, 11.6% of consumers have access to 2 wired internet providers.
5. The rest of the population 36.32% only has access to 1 or 0 wired broadband providers leaving them without a competitive marketplace.
6. When it comes to download speeds, the fastest provider in Huntsville is Suddenlink Communications with an average download speed of 96.83mbps. The runner up for fastest speeds Windstream with speeds of 59.68mbps.
7. When it comes to download speeds, the top 10% of download speeds in Huntsville clocked in at 94.73mbps. This is slower than the state average of 118.83mbps and slower than the national top speed of 100.81mbps

A copy of this report will be included here, along with our consumer facing tools, for future reference:

<https://broadbandnow.com/Texas/Huntsville>

Please reach out with any questions about our data and organization. If you move forward with a story, we can connect you with an analyst on our team to walk through the specific broadband challenges facing Huntsville in simple, human-friendly language.

Thank you,



Nick Reese & the entire BroadbandNow team

[BroadbandNow.com/mission](https://broadbandnow.com/mission)

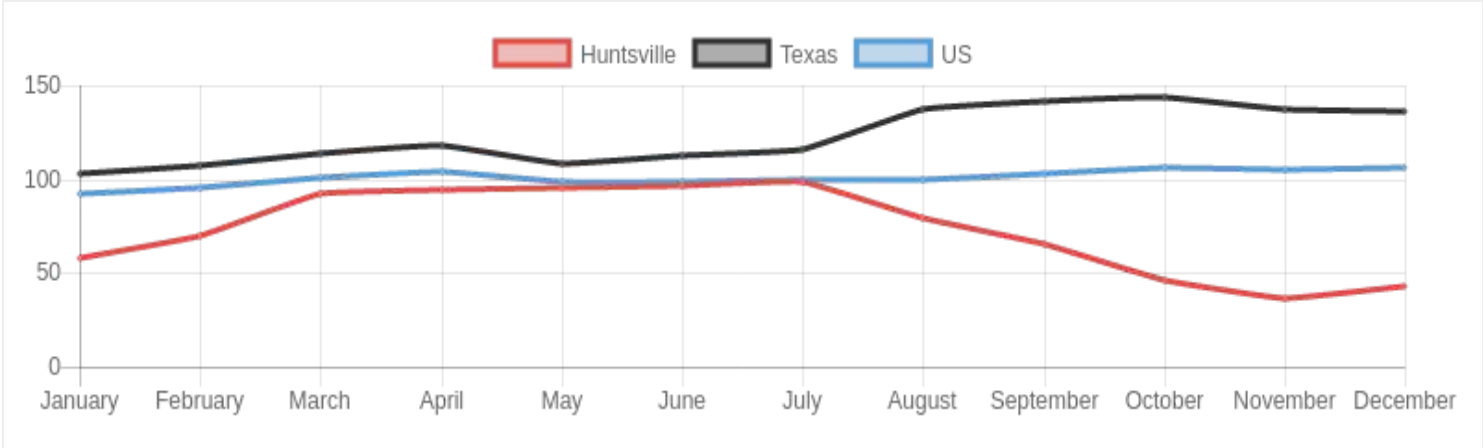
REFERENCE:

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

EXECUTIVE SUMMARY OF HUNTSVILLE, TX BROADBAND:

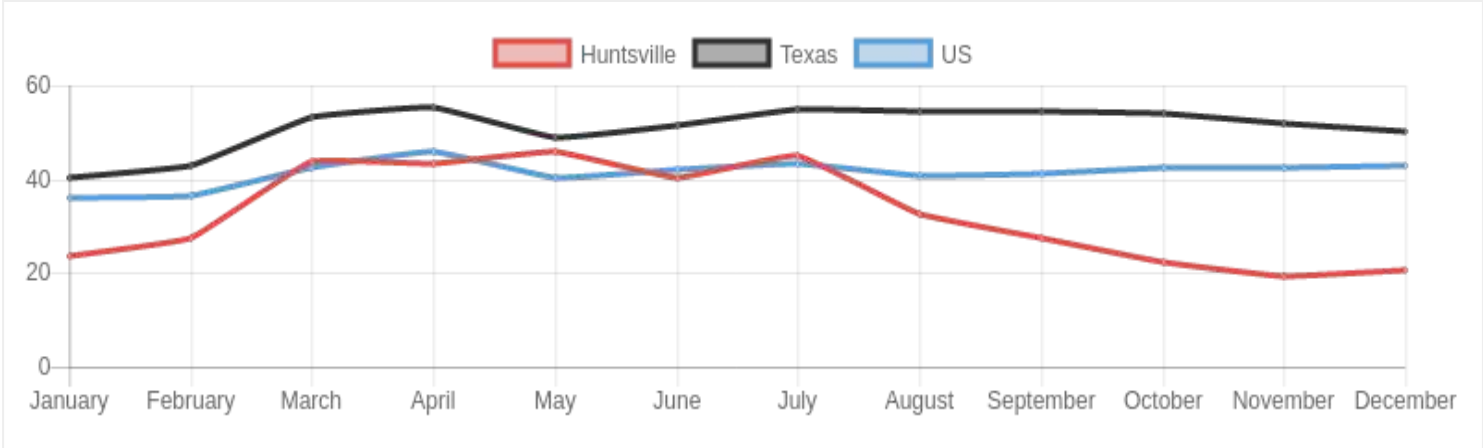
- There are 17 internet providers in Huntsville with 11 of them specializing in business services.
- There are 700 consumers with 1 or fewer wired broadband providers available at their address.
- There are 8 data centers within 50 miles of Huntsville. (Full list included with this report)
- Huntsville is the 4,536th most connected city in the US, ahead of Trinity and Pointblank. (Out of 26,868 cities in the US.)

FASTEST DOWNLOAD SPEEDS COMPARED TO STATE AND NATIONAL AVERAGES



This data is based off 320,498,650 IP verified speed tests nationwide, 21,728,714 IP verified tests in Texas, and 24,955 IP verified tests in Huntsville

AVERAGE DOWNLOAD SPEEDS COMPARED TO STATE AND NATIONAL AVERAGES



This data is based off 320,498,650 IP verified speed tests nationwide, 21,728,714 IP verified tests in Texas, and 24,955 IP verified tests in Huntsville

Cont.

# OF PROVIDERS AVAILABLE TO CONSUMERS	HUNTSVILLE	WALKER COUNTY	TEXAS	U.S.
0 Residential Providers	0.1%	0.0%	0.7%	1.2%
1 Residential Provider	1.0%	0.5%	3.3%	5.3%
2 Residential Providers	11.6%	11.1%	11.6%	30.8%
3+ Residential Providers	87.4%	88.4%	84.5%	58.1%

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

COVERAGE TYPE	HUNTSVILLE	WALKER COUNTY	TEXAS	U.S.
Wired (all types)	76.4%	71.1%	88.6%	96.5%
Fiber Optic	4.1%	3.9%	24.7%	27.1%

RESIDENTIAL INTERNET SERVICE PROVIDERS IN HUNTSVILLE

PROVIDER	AVERAGE DOWNLOAD SPEED	CABLE COVERAGE	DSL COVERAGE	FIBER COVERAGE	FIXED WIRELESS COVERAGE	OTHER COVERAGE
Razer Wireless	-	-	-	-	98.0%	-
SDWISP	-	-	-	-	98.0%	-
AT&T Internet	13.1 mbps	-	71.3%	4.1%	-	-
Suddenlink Communications	47.6 mbps	66.6%	-	-	-	-
Windstream	17.3 mbps	-	22.8%	-	-	-
Rise Broadband	5.7 mbps	-	-	-	21.7%	-
Campus Communications Group	-	-	-	11.6%	-	-

We maintain a detailed analysis of coverage and download speeds in Huntsville that is continually updated here:
<https://broadbandnow.com/Texas/Huntsville>

BUSINESS INTERNET SERVICE PROVIDERS IN HUNTSVILLE

PROVIDER	AVERAGE DOWNLOAD SPEED	CABLE COVERAGE	DSL COVERAGE	FIBER COVERAGE	FIXED WIRELESS COVERAGE	OTHER COVERAGE
Rise Broadband	5.7 mbps	-	-	-	82.2%	-
AT&T	13.1 mbps	-	100.0%	5.5%	-	-
Razer Wireless	-	-	-	-	100.0%	-
Suddenlink Business	47.6 mbps	53.8%	-	2.0%	-	-
Windstream Business	17.3 mbps	-	12.8%	-	-	-
GTT Communications	-	-	-	-	-	6.6%
Campus Communications Group	-	-	-	1.3%	-	-

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 HUNTSVILLE

AVERAGE DOWNLOAD SPEED

35.24 MBPS

31.6% slower than the state average of 51.51mbps. And
18.1% slower than the national average.

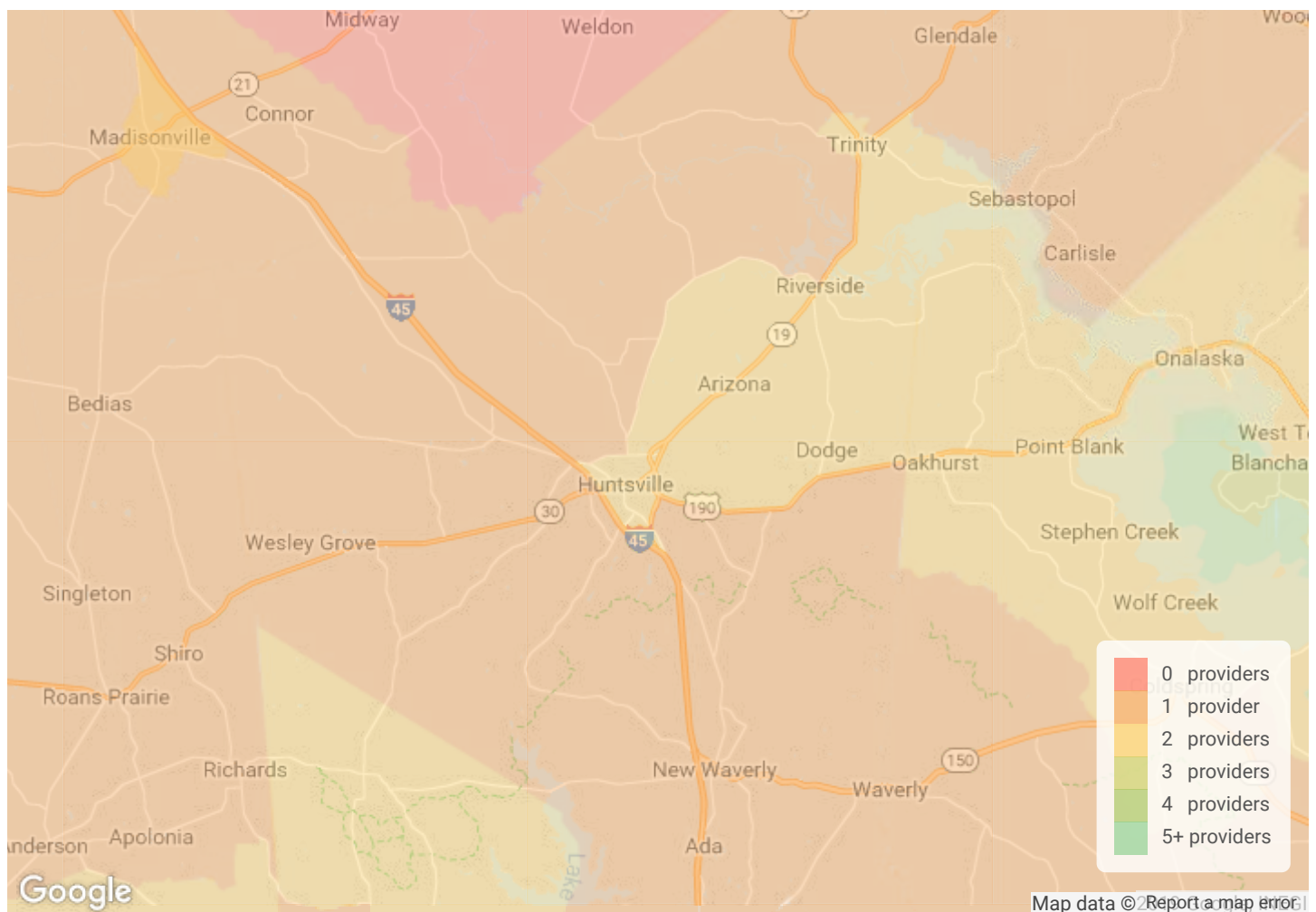
This analysis is based on 24,955 speed tests from IP verified users who took speed tests from an IP address in Huntsville between January 2018 and December 2018. National statistics are calculated across 320,498,650 over the same time range.

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

23,000 People

Or 36.3% of consumers in Huntsville

Wireless based services may be available as well, but often require clear line of sight to a tower. 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:
<https://broadbandnow.com/Texas/Huntsville#show=competition>

BUSINESS TELECOM COSTS & COMPETITION MAP IN HUNTSMVILLE

AVERAGE PRICE BUSINESSES PAY PER MBPS

\$292

Across 20 verified contracts for businesses within Huntsville

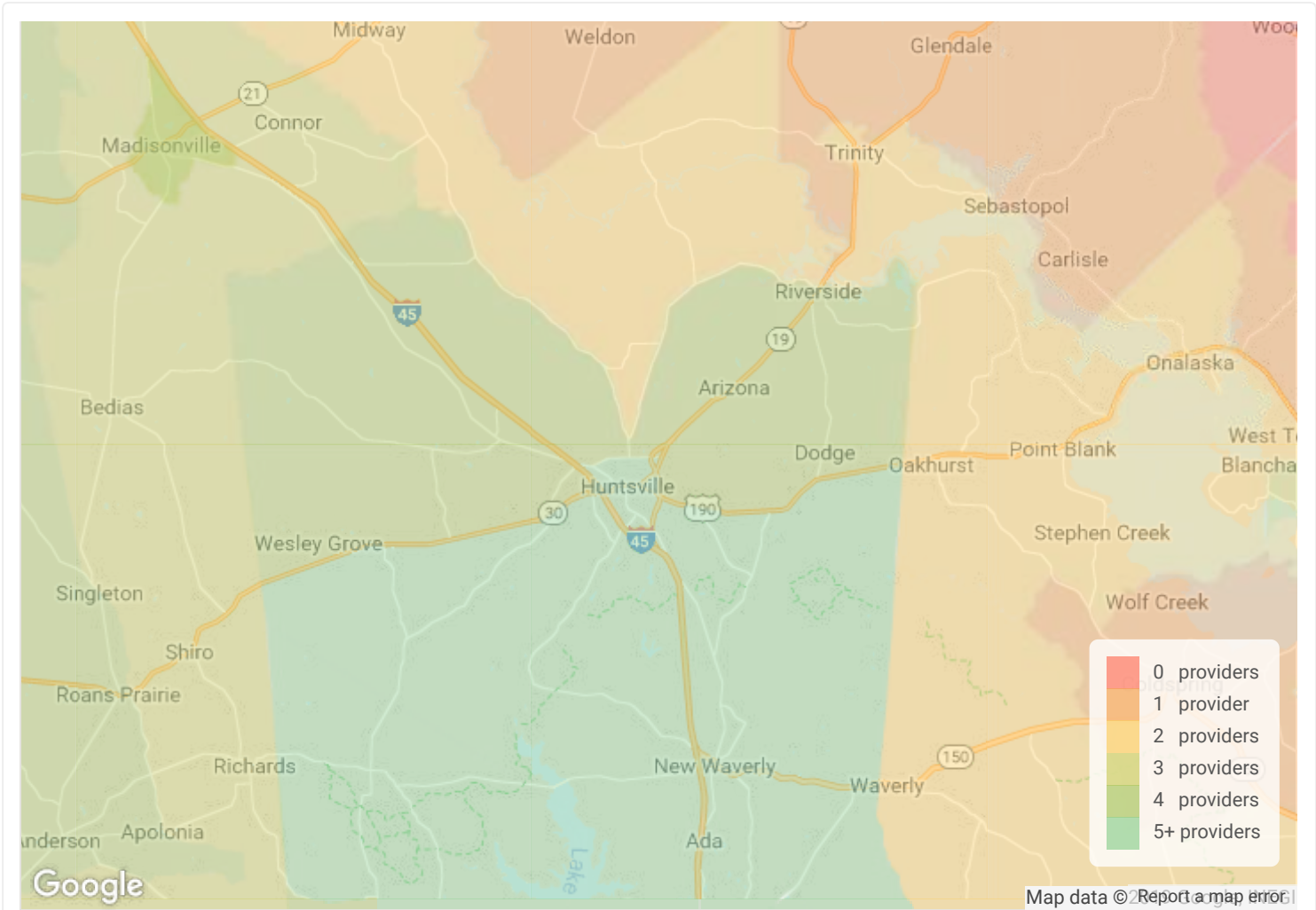
Data for this analysis and the "average total telecom spend" statistic is available on businessinternet.com/texas/huntsville . In short, we took 120,426 internet services quotes nationwide and looked at the average spend across all of those sales.

AVERAGE BUSINESS TELECOM SPEND

\$671

Average telecom spend for the 20 business contracts within Huntsville

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



This map displays wired ISP competition for business consumers For an interactive map visit: <https://businessinternet.com/texas/huntsville>

DATA CENTERS IN AND AROUND HUNTSVILLE, TEXAS

DATA CENTER	ADDRESS	DISTANCE
Montgomery Westland Bunker	550 Club Dr, Montgomery, TX 77316	20-30 Miles
Optiquest Internet Services, Inc.	780 Westridge Dr, Spring, TX 77380	40-50 Miles
Stream Data Centers	4001 Technology Forest Blvd, Spring, TX 77381	40-50 Miles
FIBERTOWN	120 N Main St, Bryan, TX 77803	40-50 Miles
Alpheus Communications	1510 Primewest Pkwy, Katy, TX 77449	60-70 Miles
Skybox Datacenters	22000 Franz Rd, Katy, TX 77449	60-70 Miles
Quasar Data Center	1001 Texas St, Houston, TX 77002	60-70 Miles
Internap Network Services Corporation	1301 Fannin St, Houston, TX 77002	60-70 Miles

We continuously update our datacenter database. For the most up-to-date list visit: businessinternet.com/texas/huntsville

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.nitr.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/bbuser_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 January, 2019.

That said, to build BroadbandNow.com, BusinessInternet.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 BusinessInternet.com 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 BUSINESSINTERNET.COM AND BROADBANDNOW?

A: BusinessInternet.com is a site focused on business internet service. Businessinternet.com 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 (<https://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 BUSINESSINTERNET.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 BusinessInternet to make that process easier.

Both BroadbandNow.com and BusinessInternet.com are wholly owned by Centerfield BBN 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.