

September 11, 2019

Senator Cecile Bledsoe Representative Jeff Wardlaw Arkansas Legislative Council State Capitol, Room 315 Little Rock, Arkansas 72203

Dear Senator Bledsoe and Representative Wardlaw,

Pursuant to A.C.A. § 25-4-125, I am pleased to submit the Arkansas State Broadband Manager's Report for the January 1-June 30, 2019 reporting period.

A central focus of this Arkansas State Broadband Manager's Report is to continually evaluate Arkansas's progress in expanding broadband and to track the public and private initiatives that will make broadband increasingly available, adequate, and affordable to all Arkansans regardless of geographical location.

As noted in the report, legislation approved during the 2019 session enabled Governor Hutchinson to designate the state broadband manager. He subsequently designated Dr. Nathan Smith, research director for the Department of Commerce, to serve in this capacity. Therefore, future reports will originate from Dr. Smith.

Please contact me personally by email at <u>yessica.jones@arkansas.gov</u> or by phone at 501-682-5148 with any questions or additional information about this report.

Sincerely,

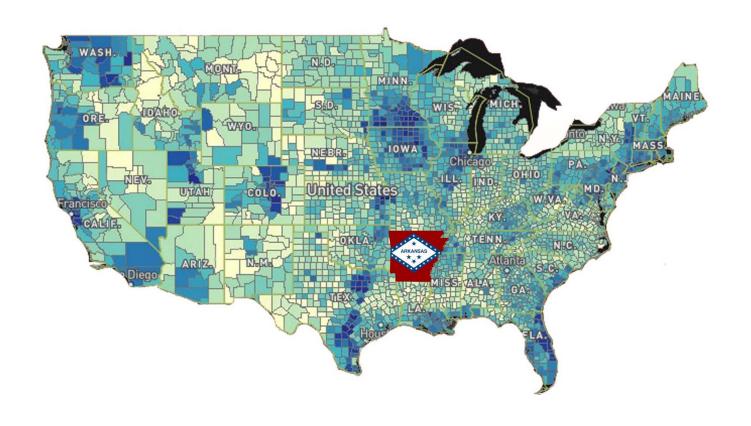
Yessica Jones

State Chief Technology Officer

Director, Division of Information Systems

Department of Transformation and Shared Services

## ARKANSAS STATE BROADBAND MANAGER'S REPORT



PERIOD ENDING June 30, 2019

Cover Art: This is the National Broadband Map displaying broadband technologies offered to end users (DSL, cable, wireless, fiber, etc.). This data is created and maintained by the National Telecommunications and Information Administration (NTIA) in collaboration with the Federal Communications Commission (FCC), and in partnership with the 50 states, five territories and the District of Columbia.

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#### **Executive Summary**

Internet connectivity and access to high speed broadband is now viewed by many as a necessity in parallel to other utilities such as water and electricity. It is also considered to be a critical tool for cultivating economic development; enhancing educational opportunities; increasing the effectiveness and responsiveness of public safety; expanding health care to rural Arkansans; empowering citizens to interact with and connect with government, among others.

This semi-annual Arkansas State Broadband Manager's Report reflects the initiatives taking place within the federal and state public sector and by the private sector to expand and bring the power of broadband to Arkansans in all geographic regions of the state. Initiatives range from the adoption of new policies, changes to existing policies, the build out of broadband infrastructure, and broadband mapping of the state to illustrate where adequate high-speed broadband exists and areas where expansion is needed.

As the report provides details in the state's areas of focus (availability, affordability and adequacy) for broadband expansion, the following key findings illustrate the progress.

#### **Key Findings**

- Arkansas established a broadband plan focused upon accessing and leveraging federal programs to the fullest extent and upon deploying highspeed broadband to Arkansas communities with more than 500 residents by 2022.
- The average broadband speed in Arkansas is 29.5 Mbps
- 15.2% of Arkansans have access to one gigabit broadband. Arkansas rural electric service cooperatives are joining forces to share costs and data to bring gigabit (Gbps) broadband to thousands of Arkansans
- Legislation approved during the 2019 regular session was amended to enable the governor to designate the state broadband manager.

The broadband needle moved back down for Arkansas from previous reports, according to <u>BroadbandNow</u>. Arkansas consistently ranked as the 48<sup>th</sup> most connected state in the nation. As of the last reporting period, its ranking had improved to 45<sup>th</sup>. As of the current reporting period, the state's ranking has fallen to the 50<sup>th</sup> most connected state in the nation. Much work remains to ensure that every Arkansan has access to high-speed internet in the coming years.

### Background

Arkansas Code Annotated § 25-4-125 designates the director of the Arkansas Department of Information Systems to serve as the state broadband manager to coordinate efforts to expand and improve broadband capacity and availability.

However, as cited in the key findings of this document, legislation (act 792), approved during the 2019 regular session, was amended to enable the governor to designate the state broadband manager.

The state broadband manager serves as the single point of contact for state agencies, boards, commissions, and constitutional officers, including without limitation the governor, Department of Education, Department of Higher Education, the Arkansas State Department of Transportation, private businesses, enterprises, broadband providers, nonprofits, governmental entities and other organizations. The legislation requires the state broadband manager to submit a report on a semiannual basis to the Arkansas Governor's Office, Arkansas Legislative Council, and Joint Committee on Advanced Communications and Information Technology of the activities and operations of the state broadband manager for the preceding six months. The report is to be submitted on or before January 1 and July 1 of each year.

#### What are the Areas of Focus for Arkansas?

#### Availability

Broadband is available if it is accessible to accomplish all necessary goals regardless of the nature of those goals (business or educational, economic or legislatively mandated).

#### Affordability

Broadband is affordable if it is both affordable to the consumer to purchase and for the provider to offer.

#### Adequacy

Broadband is considered adequate if it provides enough bandwidth to meet the personal, business, educational, and economic development needs of each constituency and is capable of expansion to meet future needs.

#### What is Broadband?

#### **Definitions:**

- <u>FCC's Definition</u> (Federal Communications Commission) categorizes an internet service as "broadband" if it transmits at a speed of at least 25 megabits/second (Mbps) for downloading and at least 3Mbps for uploading Broadband speed requirements vary for personal use versus use by institutions
- Advanced Telecommunications Capability- The FCC has sometimes used the term "broadband" to refer to "advanced telecommunications capability." The definition of advanced telecommunications capability found within this report is without regard to any transmission media or technology, as high-speed, switched, broadband telecommunications capability that enables users to originate and receive high-quality voice, data, graphics, and video telecommunications using any technology." The term broadband is not equated to advanced telecommunications capability, but the availability of various broadband services that contribute to advanced telecommunications capability is taken into consideration.

**Source:** FCC 2018 Broadband Deployment Report

#### What are the Types of Broadband?

- Digital Subscriber Line (DSL)
- Cable Modem

Fiber

Wireless (Wi-Fi, Mobile, and Fixed Wireless)

Satellite

#### Fixed Broadband

Fixed (wired) broadband services generally require a physical transmission path to connect a user to the internet. Examples include coaxial cable, copper wire, or fiber-optic cable.

#### Why is Broadband Important?

Broadband is fast becoming of primary importance for

Citizens

Education

Public safety

- Health care
- Economic development
- Government

Business

Environmental management

All of which are significant enablers to economic growth, delivery of services and quality of life.

#### **How Important Is Broadband Speed?**

The FCC definition of broadband speed changes as technologies continue to evolve. The FCC indicated that advances in technology, market offerings by broadband providers and consumer demand prompted updating broadband benchmark speeds to 25Mbps for downloads and 3Mbps for uploads. The FCC's Broadband Speed Guide below compares typical online activities with the minimum download speed needed to adequately perform each application.

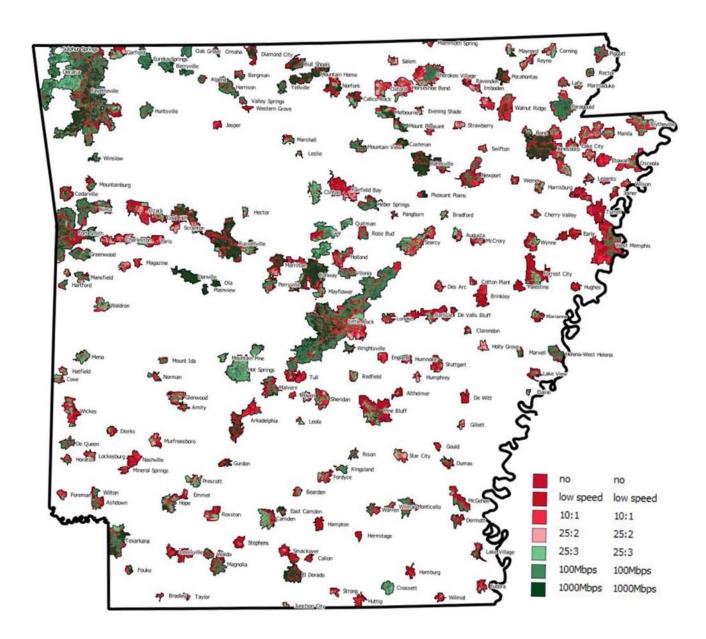
**Source**: FCC Broadband Speed Guide

Online A	ctivity
General Usage	Minimum Download Speed (Mbps)
General Browsing and Email	1
Streaming Online Radio	Less than 0.5
VolP Calls	Less than 0.5
Student	5-25
Telecommuting	5-25
<ul> <li>File Downloading</li> </ul>	10
Social Media	1
Watching Video	Minimum Download Speed (Mbps)
<ul> <li>Streaming Standard Definition Video</li> </ul>	3-4
<ul> <li>Streaming High Definition (HD)</li> </ul>	5-8
Video	
Streaming Ultra HE 4K Video	25
Video Conferencing	Minimum Download Speed (Mbps)
Standard Personal Video Call (e.g. Skype)	1
HD Personal Video Call (e.g. Skype)	1.5
HD Video Teleconferencing	6
Gaming	Minimum Download Speed (Mbps)
Game Console Connecting to the	3
Internet	
<ul> <li>Online Multiplayer</li> </ul>	4

#### What is the Governor's Goal for Broadband in Arkansas?

After leading Arkansas from the bottom of the nation in K-12 internet connectivity to the top as a national role model, Governor Asa Hutchinson has now put forth a goal to connect Arkansas population centers of 500 or more to FCC-defined broadband by 2022.

In a new Broadband Plan for Arkansas, the map below estimates how close the state currently is to achieving that goal.



Source: Arkansas Broadband Plan

#### What is the State of Broadband in Arkansas?

The source for these statistics is <u>BroadbandNow</u>. This website compiles data each year from public and private sources as well as from providers to make sure its data is as up-to-date and accurate as possible. Datasets from the FCC and U.S. Census Bureau are combined with data obtained directly from broadband providers, resellers and other sources in which proprietary data is used to as a counterbalance to potentially skewed national broadband data.

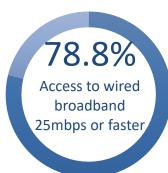
#### **Broadband Snapshot\***

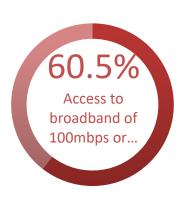
The following statistics provide a snapshot of broadband penetration in Arkansas as researched by BroadbandNow. This private company located in Austin, Texas, collects data for its statistics from the FCC and U.S. Census Bureau and compares it to data acquired from broadband providers and other sources.

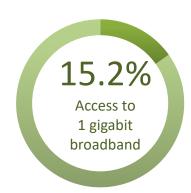
Arkansas broadband stats from BroadbandNow:

- 129 internet providers in Arkansas
- 603,000 Arkansans without access to a wired connection capable of providing FCC defined broadband
- 661,000 Arkansans with access to only one wired provider
- 226,000 Arkansans without access to any wired provider

The chart below depicts the percentage of Arkansans with access to the FCC defined wired broadband speed of at least 25Mbps/3Mbps or faster, 100Mbps or faster and 1 Gbps broadband.







### The average statewide speed is 29.5 Mbps

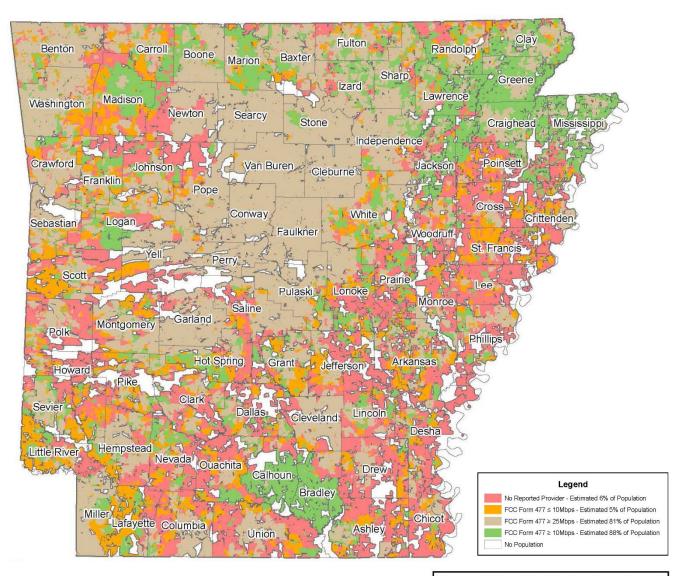
Source: Broadband Now

\*\*Arkansas has shown improvement in broadband penetration from the BroadbandNow statistics cited in the June 30, 2018, Broadband Manager's Report.

For that reporting period, there were 614,000 Arkansans without access to a wired connection capable of providing FCC defined broadband; 230,000 Arkansans without access to any wired prover; 79.6 percent with access to wired broadband 25Mbps or faster and 62.8 percent with access to 100Mbps or faster.

The most notable improvements from the previous report are the increase in the percentage of Arkansans with access to 1 gigabit broadband from 7.6 percent to 15.2 percent and the increase in the average statewide speed which improved from 22.1Mbps to 29.5 Mbps.

#### Statewide Broadband Speed Coverage Map



**Source:** Arkansas Geographic Information Systems

Appendix I: Americans with Access to Fixed 25Mbps/3Mbps Service by State\*\*

\*\*From FCC Broadband Report



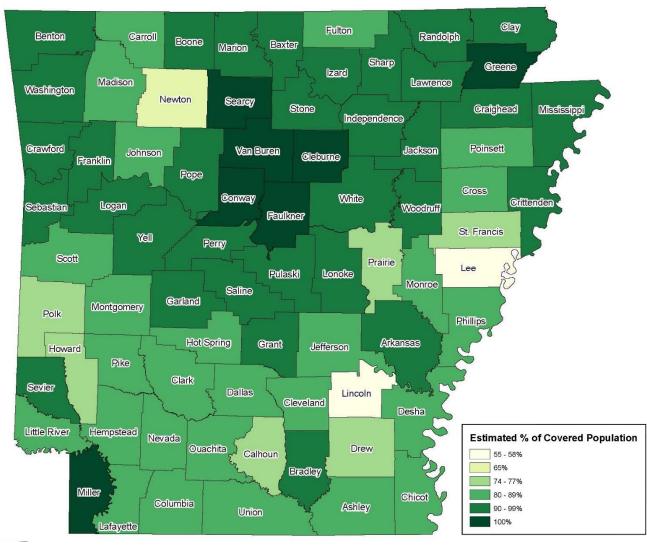
Source: FCC Form 477 - https://www.fcc.gov/general/ broadband-deployment-data-fcc-form-477 December 2016v1 (includes revisionsmade through 11/06/17)

Source: 2010 Census Blocks - https://gis.arkansas.gov /product/blocks-2010-census/

Note: A provider that reports deployment of a particular technology and bandwidth in a census block may not necessarily offer that service everywhere in the block, resulting in potentially less specific data.

As a result, population statistics shown herein will overstate the actual number of residents with access to broadband speeds. However, this approach is an effort to convey the nature of broadband access in Arkansas using the available data

#### County Populations with Access to Fixed Broadband of any Speed



**Source:** Arkansas Geographic Information Systems

Appendix II: Percentage of County Population with Access to Broadband at any Speed

Source: FCC Form 477 - https://www.fcc.gov/general/broadband-deployment-data-fcc-form-477 December 2016v1 (includes revisionsmade through 11/06/17)

Source: 2010 Census Blocks - https://gis.arkansas.gov/product/blocks-2010-census/

Note: A provider that reports deployment of a particular technology and bandwidth in a census block may not necessarily offer that service everywhere in the block, resulting in potentially less specific data.

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#### Clay Fulton Benton Randolph Carroll Boone Baxter Marion Sharp Greene Izard Madison Lawrence Washington Newton Searcy Stone Craighead Mississippi Independence Crawford Poinsett Van Buren Jackson Johnson Cleburne Franklin Pope Cross Conway White Crittenden Sebastian Woodruff Faulkner St. Francis Yell Perry Scott Prairie Lee Pulaski Lonoke Monroe Saline **Garland** Montgomery Polk Phillips Hot Spring Arkansas Grant Jefferson Howard Pike Clark Sevier Dallas Lincoln Cleveland Desha Estimated % of Covered Population Little River Hempstead Nevada ≤ 50% Ouachita Drew 51 - 59% Calhoun 60 - 69% Bradley 70 - 79% Miller 80 - 89% Chicot Columbia Ashley 92 - 99%

#### County Populations with Access to 25Mbps of Fixed Broadband

**Source**: Arkansas Geographic Information Systems

Lafayette

Union

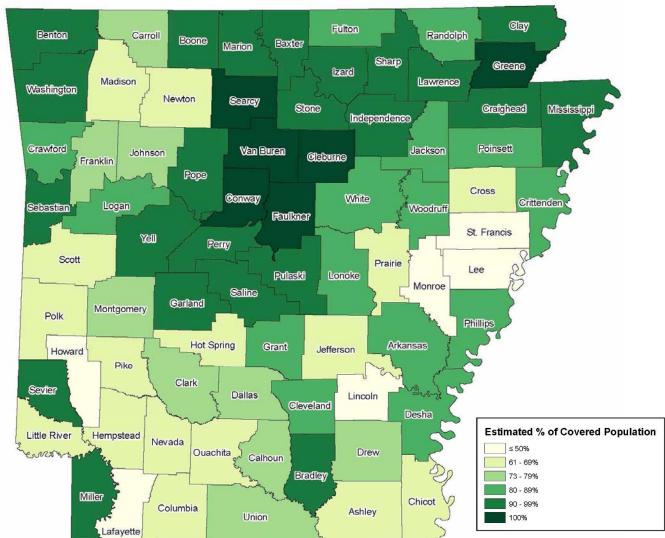
**Appendix III:** County Populations with Access to 25Mbps of Fixed Broadband

Source: FCC Form 477 - https://www.fcc.gov/general/ broadband-deployment-data-fcc-form-477 December 2016v1 (includes revisionsmade through 11/06/17) Source: 2010 Census Blocks - https://gis.arkansas.gov /product/blocks-2010-census/ Note: A provider that reports deployment of a particular technology and bandwidth in a census block may not necessarily offer that service everywhere in the block, resulting in potentially less specific data. As a result, population statistics shown herein will overstate the actual number of residents with access to broadband speeds. However, this

approach is an effort to convey the nature of broadband access in Arkansas using the available data.

100%





#### County Populations with Access to 10Mbps of Fixed Broadband\*

**Source**: Arkansas Geographic Information Systems

\*Excludes satellite. Although the FCC redefined broadband as 25Mbps/3Mbps, minimum speed requirements for phase II Connect America Fund eligibility were 10Mbps/1Mbps. The rationale for the difference is that it allowed carriers to build networks in rural areas capable of upgrading to faster speeds found in urban areas. The FCC further determined that additional flexibility made it easier for carriers to expand service to more challenging outlying households it otherwise would have excluded from expansion.

<u>Appendix IV:</u> Percentage of County Population with Access to 10Mbps Broadband

Source: FCC Form 477 - https://www.fcc.gov/general/broadband-deployment-data-fcc-form-477 December 2016v1 (includes revisionsmade through 11/06/17)

Source: 2010 Census Blocks - https://gis.arkansas.gov/product/blocks-2010-census/

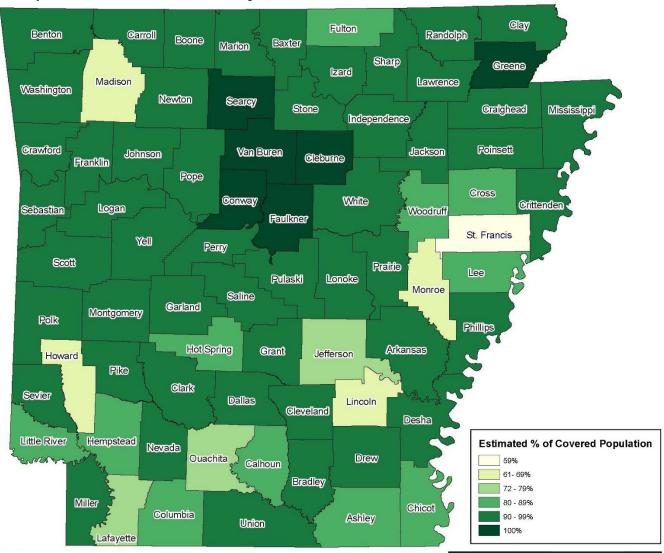
Note: A provider that reports deployment of a particular technology and bandwidth in a census block may not necessarily offer that service everywhere in the block, resulting in potentially less specific data.

As a result, population statistics shown herein will overstate the actual number of residents with access to broadband speeds. However, this approach is an effort to convey the nature of

broadband access in Arkansas using the available data



# County Populations with Projected Access to 10Mbps of Fixed Broadband upon Completion of CAF II Funded Projects\*



#### **Source:** Arkansas Geographic Information Systems

\*In the Broadband Manager's Activities and Operations Report for period ending December 31, 2015, it was documented that AT&T and CenturyLink received a share of \$54 million from phase II CAF to deploy broadband services in rural and remote areas of the state with little or no high speed internet access. This map depicts access to 10Mbps of fixed broadband when projects by AT&T and CenturyLink are completed. The combined total of Arkansans estimated to benefit from these projects was 97,500.

<u>Appendix V:</u> Percentage of County Population with Access to 10Mbps Broadband Upon Completion of CAFII

Source: FCC Form 477 - https://www.fcc.gov/general/ broadband-deployment-data-fcc-form-477 December 2016v1 (includes revisionsmade through 11/06/17)

Source: 2010 Census Blocks - https://gis.arkansas.gov /product/blocks-2010-census/

Source: Connect America Fund - https://transition. fcc.gov/wcb/CAM43\_Supported Locations.zip

Source: Connect America Fund - https://transition. fcc.gov/wcb/ACAM231\_CB\_funded\_Yes\_list\_081516.zip

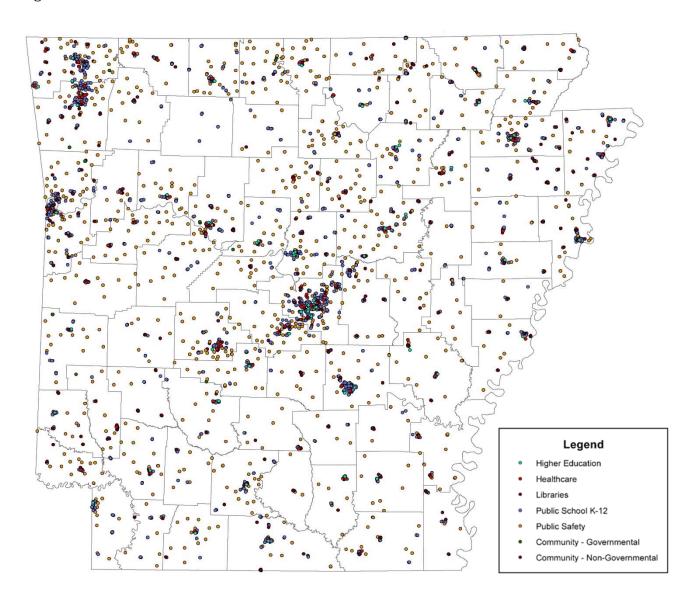
Note: A provider that reports deployment of a particular technology and bandwidth in a census block may not necessarily offer that service everywhere in the block, resulting in potentially less specific data.

As a result, population statistics shown herein will overstate the actual number of residents with access to broadband speeds. However, this approach is an effort to convey the nature of broadband access in Arkansas using the available data



### **State Community Anchor Institutions**

The dots on this map are state government locations including schools, libraries and other governmental entities where broadband exists.





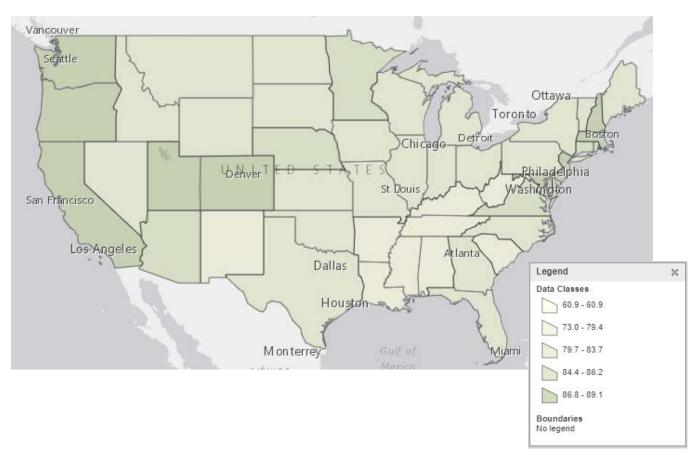
#### **Broadband Adoption by Arkansans**

Although broadband adoption is on the rise, Arkansans still lag behind a vast majority of the population when turning to the internet for aspects of daily life, according to the U.S. Census Bureau.

The percentage of U.S. households with a broadband internet subscription reached 83.5% in 2017.

In Arkansas, The Census Bureau indicates that 73% of the population has a broadband internet subscription.

#### Percentage of Households with Broadband Internet Subscription by State 2017



#### Source:

https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=bkmk

In its 2019 Broadband Deployment Report, the FCC put the state's overall adoption rate for fixed broadband much lower depending upon speed.

The FCC placed Arkansas's adoption rate of 10Mbps/1Mbps fixed broadband at 49%, 25Mbps/3Mbps at 37.7% and 50Mbps/5Mbps at 33.5%.

Arkansas and Mississippi were the lowest ranking states in overall adoption of 25Mbps/3Mbps broadband speed.

Overall Adoption Rate for Fixed Broadband

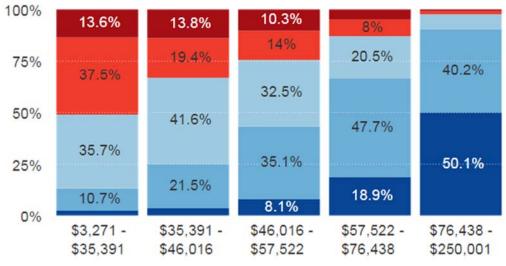
	10Mbps/1Mbps	25Mbps/3Mbps	50Mbps/5Mbps
United States	69.7%	60.2%	54.8%
Arkansas	49.0%	37.7%	33.5%

Source: FCC 2019 Broadband Deployment Report

Income and education are also two key factors most closely correlated with broadband adoption. High subscription areas tend to be high income and have a smaller percentage of population with less than a high school diploma.

#### Share of population by neighborhood broadband subscription rate ...

... for neighborhoods with low to high median household income



Median household income

Subscription rate (%): 0-20 20-40 40-60 60-80 80-100

**Source:** <a href="http://www.pewinternet.org/2015/12/21/3-barriers-to-broadband-adoption-cost-is-now-a-substantial-challenge-for-many-non-users/">http://www.pewinternet.org/2015/12/21/3-barriers-to-broadband-adoption-cost-is-now-a-substantial-challenge-for-many-non-users/</a>

Source: <a href="https://docs.fcc.gov/public/attachments/DOC-351633A1.pdf">https://docs.fcc.gov/public/attachments/DOC-351633A1.pdf</a>

**Source:** <a href="https://www.brookings.edu/research/signs-of-digital-distress-mapping-broadband-availability/">https://www.brookings.edu/research/signs-of-digital-distress-mapping-broadband-availability/</a>

#### **Broadband Affordability in Arkansas**

Cost continues to be the number one obstacle for broadband adoption at home. A previous FCC broadband study found that 71 percent of those without broadband cited affordability as the major factor. A study of barriers to broadband adoption by Pew Research Center pointed to multiple factors for why residents do not subscribe to high-speed service at home.

- Monthly cost of a broadband subscription is too much
- Cost of a computer
- Functionality of mobile devices rivals the monthly cost of in-home broadband makes traditional broadband a lesser priority
- Lack of access to suitable broadband service in their area

In its findings, 65 percent of non-adopters said that a lack of home broadband is a major disadvantage of some sort.

As recently as June 15, the FCC's rural healthcare fund was expected to realize a \$171 million increase in its annual budget. This fund could offer low income Americans with options when it comes to their ability to subscribe to broadband as this fund covers some of the costs of broadband connectivity in rural areas where delivery of the service is much higher than in urban areas.

The FCC's Lifeline program also helps to make communications services, including broadband more affordable for low-income individuals by providing a discount on monthly telephone or broadband service from participating providers.

Date	Mobile Voice	Mobile Broadband	Fixed Broadband	Voice Support Amount (Per Month)	Broadband Support Amount (Per Month)	
December	750	Speed: 3G	Speed: 15/2***	\$9.25	\$9.25	
I, 2017	Minutes	Usage Allowance: 1 GB	Usage Allowance: 250GB			
December	1000	Speed: 3G or Bureau	Speed: Mechanism			
1, 2018	Minutes	Determination	Usage Allowance: CAF Standard or	\$9.25	\$9.25	
		Usage Allowance: 2 GB	Bureau Determination			

To qualify to participate in the Lifeline program, individuals must either have an income that is at or below 135 percent of the federal Poverty Guidelines or participate in certain assistance programs such as Medicaid, Supplemental Nutrition Assistance Program, Supplemental Security Income, or Federal Public Housing Assistance.

The budget for the Lifeline program is \$2.279 billion effective January 1, 2018, according to the FCC.

Source: Lifeline Program for Low-Income Consumers

Source: FCC Consumer Guide: Lifeline Support for Affordable Communications

#### State and Federal Initiatives to Expand Broadband

#### **Arkansas State Network Broadband Upgrade**

The Arkansas Department of Finance and Administration Office of State Procurement (OPM) awarded two bids to provide broadband Ethernet services to state agencies, boards, and commissions. Except for the pricing received for the K-12 broadband upgrade in the spring of 2015, the bid prices were generally much better than the Department of Information Systems (DIS) has previously seen. In some cases, the cost of bandwidth will be one-half of the current price or better. There are cases where agencies can receive 10 times the bandwidth for the same price they have been paying.

This initiative, led by DIS, will enable some agencies with offices in other areas of the state to migrate from T-1 technology to broadband. In one example, an agency will be able to increase its bandwidth by eight times at two sites and save enough money in one year to fund the vendor fiber build out for the two sites alone.

The sum of non-school user site bandwidths will increase from 7.6G to 32G (421%). Additionally, these DIS customers will be saving \$4.8M annually.

Examples: Arkansas Department of Health is increasing its county health office's connectivity from a mixture of 3M, 4M and 10M circuits to all 50M and saving \$30K/month. The Department of Agriculture had 100M which was an inadequate amount of bandwidth for this agency. They were able to upgrade to 1G at no increase in cost. The Department of Human Services is increasing connectivity in each of its county offices from 10M to 100M with no increase in cost.

#### Act 198 of the 92<sup>nd</sup> Arkansas General Assembly

The Arkansas Legislature amended the Telecommunications Regulatory Reform Act of 2013 to enable a government entity owning an electric utility system or television signal distribution system to provide voice, data, broadband, video or wireless telecommunications services. A government entity may also make any telecommunications capacity or associated facilities it owns available to the public subject to terms and conditions under the government entity's governing authority.

Source: An Act to Amend the Telecommunications Regulatory Reform Act of 2013

#### Act 703 of the 92<sup>nd</sup> Arkansas General Assembly

The Arkansas Legislature amended the Local Government Bond Act of 1985 to expand the definition of "capital improvements of a public nature" and "capital improvement" to include voice, data, broadband, video or wireless telecommunications services. The expansion of the definition will allow a municipality's or county's portion of the net casino gaming receipts to be used to retire capital improvement bonds or economic development projects.

Source: An Act to Amend the Laws of Local Government Bonds

#### Act 999 of the 92<sup>nd</sup> Arkansas General Assembly

The Arkansas Legislature established the Small Wireless Facility Deployment Act. This legislation grants the use of public rights-of-way to a wireless provider to co-locate, maintain, modify, operate and replace small wireless facilities and to install, maintain, modify and replace poles it owns or manages, or, with the permission of the owner, a third party's pole associated with a small wireless facility along, across, upon and under the right-of-way.

Source: The Small Wireless Facility Deployment Act

#### FCC Offers Additional Funding to Rural Broadband Providers to Expand 25/3 Mbps Service

Four Arkansas broadband providers will benefit from a share of \$67 million in additional funding for rural broadband. If Cypress Break, Ritter Communications, Townes Telecommunications or Yelcot Holding Group accept the funding, the company must agree to expand service capable of delivering 25 Mbps/3 Mbps to rural customers that otherwise would have received 10/1 Mbps or less, according to a February 2019 press release.

FCC Au	ıthorized A-0	CAM Suppo	ort & Obliga	tions (Arkar	nsas Provide	ers)
Holding Company	Annual A-CAM Support	Total # of Rate-of- Return Locations in Census Blocks Receiving	Number of Locations in Eligible Census Blocks with Obligation to Offer 25/3 Mbps	Number of Locations in Eligible Census Blocks with Obligation to Offer 10/1 Mbps	Number of Locations in Eligible Census Blocks with Obligation to Offer 4/1 Mbps	Number of Locations Remaining on Reasonable Request Standard
Cypress Break	494,879	260	83	61	29	87
Ritter Communications	6,337,996	8,200	5,044	2,716	110	330
Townes Telecommunications	2,273,149	3,124	1,888	1,017	54	165
Yelcot Holding Group	3,023,736	5,979	5,003	883	46	47

# FCC Authorizes First Wave of Funding for Rural Broadband from Connect America Fund Auction

Three Arkansas broadband providers received a share of \$111.6 million in funding over the next decade to expand broadband to unserved rural homes and businesses. The funds represent the first wave of support awarded in last year's Phase II auction.

State	Company	Minimum Speed	Locations	Support/10 years
AR	Ozarks Go	1 Gbps/500 Mbps	4,028	\$11,453,537
AR	Wave Rural Connect	1 Gbps/500 Mbps	758	\$3,969,608
AR	South Central Connect	1 Gbps/500 Mbps	566	\$2,826,047

**Source**: FCC Press Release

#### Second Wave of FCC Funding Expected to Expand Broadband in Northeast Arkansas

A second wave of funding from the Connect America Fund will be leveraged to expand high-speed broadband to unserved rural homes across six counties in Northeast Arkansas.

The FCC authorized \$22.6 million over the next 10 years to provide broadband to 6,582 homes and businesses in Baxter, Fulton, Izard, Marion, Sharp and Stone Counties.

County	Support/10 years
Baxter	\$3,399,664
Fulton	\$7,536,166
Izard	\$5,175,805
Marion	\$364,233
Sharp	\$5,933,299
Stone	\$190,869

Source: KAIT 8

#### FCC Proposes 900 MHz Band Realignment to Create Broadband Licenses

To facilitate the expansion of high-speed broadband, the FCC issued a proposal to realign the 900 MHz band that it said would create opportunities for robust broadband networks. The FCC's proposal said the 900 MHz band could enable a wide variety of businesses to unlock the full potential of broadband and its applications.

Source: Notice of Proposed Rulemaking

#### Private Initiatives to Expand Broadband

#### **Arkansas Valley Electric Offers Rural Broadband**

Wave Rural Connect, LLC, a subsidiary of Arkansas Valley Electric, offers high-speed broadband and other advanced telecommunications services to customers in a 13-county area in western Arkansas. Phase one of a six-phase smart grid build out on Arkansas Valley's system was approved last year. Wave Rural will leverage the excess fiber capacity to provide broadband services to the electric cooperative's members.

**Source**: <u>Southwest Times Record</u>

#### Ritter Announces Plans to Bring All Fiber Network to Hot Springs

Ritter Communications announced in February of its plans to invest \$7 million in infrastructure to build out a 100% fiber network to Hot Springs. Ritter will become the first company to offer service with access to speeds up to 10 gigabits per second. The signals on the ultra-high-speed network will travel at the speed of light. The infrastructure will serve the city's major business corridors and is expected to be available by August 2019.

Source: KARK

#### Ritter Tri-County Telephone

Ritter elected the revised ACAM model-based support system for Arkansas in 2019. This is a 10-year program to take the following minimum service levels to the following number of undeserved locations: 25/3Mbps to 5,044 locations, 20/1Mpbs to 2,716 locations. The initiative is 14% complete for the 25/3 build out obligation and 100% complete for the 10/1 obligation.

**Source**: 2019 Provider Survey

#### Little Rock Included in Expansion of \$50 200 Mbps Internet From Starry

Wireless home internet provider Starry said Little Rock will be included in an expansion plan to bring \$50 200 Mbps internet to households in 25 states. In business since 2016, Starry has primarily served larger metropolitan areas such as Washington DC, Los Angeles and New York City. However, it announced in June that it has acquired enough spectrum to expand its network to serve an additional 25 million households, including households in Little Rock. It is not yet known how long it will take the company to offer service in Arkansas.

Source: ARS Technica

#### Windstream Expands Gigabit Service to Thousands in North Arkansas

Windstream completed a network expansion that provided access to 1 gigabit broadband speed to 4,000 homes and businesses in Harrison. The announcement was made by the company in May 2019.

Source: <u>Telecompetitor</u>

#### Windstream

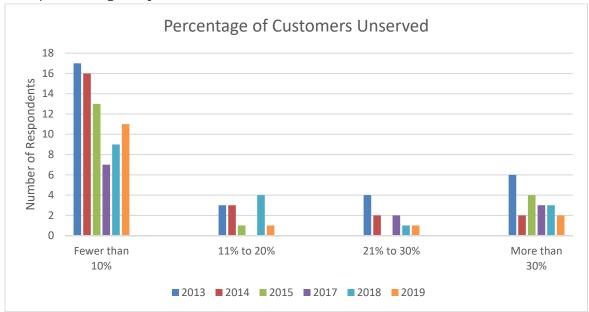
Windstream recently won spectrum in the 24Ghz and 28Ghz auctions. A significant portion of Windstream territory in Arkansas is covered by this, which will be used for fixed wireless 5G applications in the future.

**Source:** 2019 Provider Survey

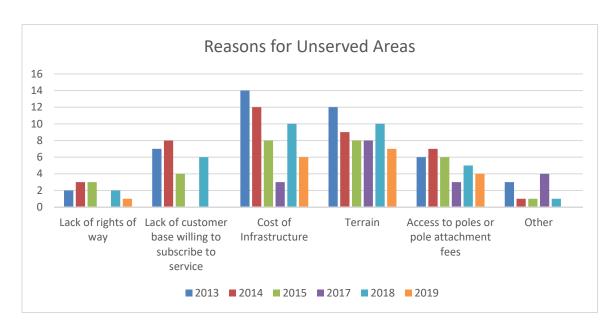
#### Provider Survey for Broadband Expansion (June 2019)

Each year, a survey is sent to Arkansas telecommunications providers to help provide a representation of Arkansas's current overall broadband standing as the state pursues the availability of broadband connectivity to all Arkansans regardless of geographical location. Survey responses were received from 19 providers.

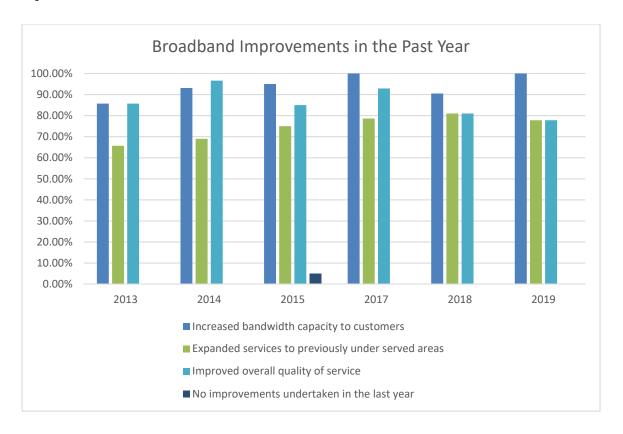
#### Q. What percentage of your customers are unserved?



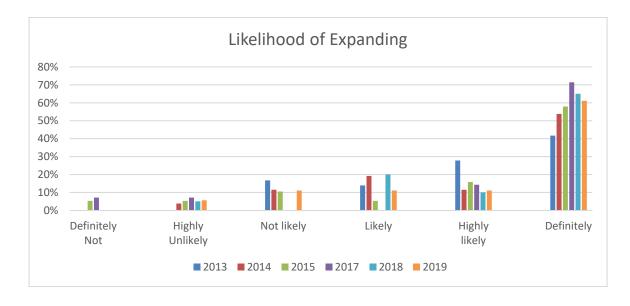
#### Q. What are the reasons for unserved areas?



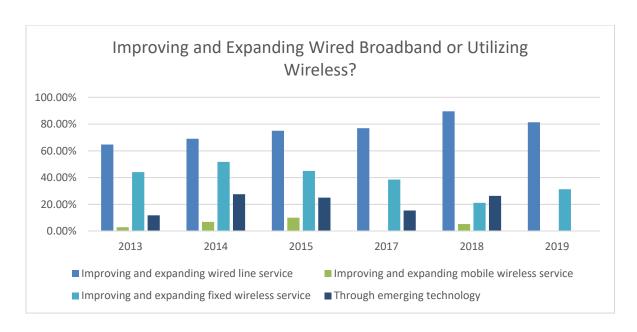
Q. Within the past year, what broadband improvement efforts have you undertaken within your service area?



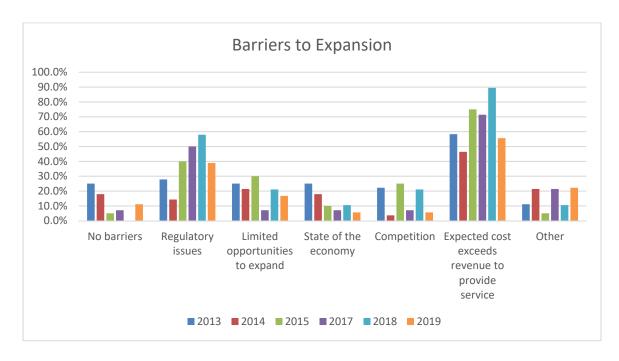
Q. How likely are you to expand broadband coverage in your service area in the next six months?



# Q. Are you focusing more on improving and expanding wired broadband or utilizing wireless?



#### Q. Do you have barriers to expansion?



The following are provider responses to describe other barriers to expansion.

- The only way a small rural company can expand quality broadband throughout their service area is with the help of the Arkansas High Cost Fund. Without this support, these rural areas will see slow development
- Capital

- The most uncertain barrier is constant attacks on the Arkansas High Cost Fund and other entities, including some in state government wishing to change the way the funding is distributed. This causes concern which causes delays in deployment.
- The company has no physical barriers for expansion, but the support from the Arkansas High Cost Fund is allowing us to continue upgrading facilities in areas that we did not get ACAM funding support for.

Q. What can the state do from a policy or regulatory perspective to incentivize broadband expansion in rural areas? \*

\*The comments below are inserted unedited directly from the survey response.

#### What can the state do from a policy or regulatory perspec...

Again, as mentioned above keep the Arkansas High Cost fund for the small rural carriers

Let the High Cost Fund remain in place

I am sure there are many things that could ultimately help, but mostly they need to let the free market work. If it is financially feasible companies will serve these areas.

#### Capito

Protect the way the Arkansas High Cost fund is distributed. In order of our company to deploy services to a very rural and rocky service area, we rely on long term loans from USDA-RUS. We depend on a stable Arkansas High Cost fund to help repay these important loans.

persuade city's or town to allow wireless provider use of there water towers.

The State must insure the Arkansas High Cost fund remains stable and allows companies to be reimbursed for their broadband deployment. Companies rely on the AHCF to pay back construction loans needed to deploy broadband services to rural areas.

Keep supporting telephone companies by the Arkansas High Cost Fund. We have also applied for a RUS grant for Mountain View Telephone and are finishing up a grant/loan for Yelcot Telephone Company.

Assist in driving down entry costs.

Work on adoption issues. Help with continued access to the HFC, the underlying support system for our rural ILECs.

More efficient management of regulations. Eliminate redundant and unnecessary regulations and speed up approvals for necessary regulations. Any programs designed to offset costs should be flexible enough to allow carriers to propose the areas to be built based on network cost considerations and knowledge of the territory at an address level, not census block. Calling a census block served by some speed just because 1 person in the block has that speed denies everyone else the opportunity to see better service. There are many pockets of unserved and underserved locations that exist below the census block level.

## Americans with Access to Fixed 25Mbps/3Mbps Service by State\*\*

	Pop.	Fixed 25 Mb <sub>1</sub>	-	Mobile l Mbp 1 Mb	os/	Pop.	Mobile I Mbps/3	
	Evaluated	Pop. With Access	% of Pop.	Pop. With Access	% of Pop.	Evaluated	Pop. With Access	% of Pop.
United States	322.518	297.766	92.3%	321.347	99.6%	300.036	261.898	87.3%
Rural Areas	62.926	43.604	69.3%	61.802	98.2%	47.025	32.962	70.1%
Urban Areas	259.592	254.162	97.9%	259.545	100.0%	253.011	228.936	90.5%
Alabama	4.857	4.036	83.1%	4.826	99.4%	4.189	3.966	94.7%
Rural Areas	2.002	1.277	63.8%	1.970	98.4%	1.475	1.323	89.7%
Urban Areas	2.856	2.759	96.6%	2.856	100.0%	2.713	2.644	97.4%
Alaska	0.738	0.582	78.8%	0.626	84.8%	0.695	0.429	61.8%
Rural Areas	0.259	0.120	46.4%	0.169	65.2%	0.236	0.072	30.5%
Urban Areas	0.479	0.461	96.4%	0.457	95.4%	0.459	0.357	77.8%
Arizona	6.915	5.917	85.6%	6.850	99.1%	6.810	5.299	77.8%
Rural Areas	0.798	0.275	34.4%	0.740	92.7%	0.749	0.276	36.8%
Urban Areas	6.116	5.642	92.2%	6.110	99.9%	6.061	5.023	82.9%
Arkansas	2.982	2.316	77.6%	2.971	99.6%	2.242	1.682	75.0%
Rural Areas	1.318	0.758	57.6%	1.306	99.2%	0.790	0.570	72.2%
Urban Areas	1.665	1.557	93.5%	1.665	100.0%	1.452	1.112	76.5%
California	39.171	37.114	94.7%	39.126	99.9%	39.071	36.530	93.5%
Rural Areas	2.255	1.042	46.2%	2.210	98.0%	2.190	1.735	79.2%
Urban Areas	36.916	36.072	97.7%	36.916	100.0%	36.880	34.795	94.3%

	Pop.	Fixed 25 Mbj		Mobile l Mbp 1 Mb	os/	Pop.	Mobile I Mbps/3	
		Pop. With Access	% of Pop.	Pop. With Access	% of Pop.	Evaluated	Pop. With Access	% of Pop.
Colorado	5.520	5.241	94.9%	5.503	99.7%	5.074	4.294	84.6%
Rural Areas	0.834	0.601	72.1%	0.816	97.9%	0.557	0.425	76.3%
Urban Areas	4.686	4.640	99.0%	4.686	100.0%	4.517	3.869	85.7%
Connecticut	3.571	3.538	99.1%	3.570	100.0%	3.571	3.570	100.0%
Rural Areas	0.431	0.427	99.2%	0.430	99.9%	0.431	0.430	99.9%
Urban Areas	3.140	3.111	99.1%	3.140	100.0%	3.140	3.140	100.0%
Delaware	0.950	0.925	97.4%	0.950	100.0%	0.950	0.731	76.9%
Rural Areas	0.166	0.153	92.2%	0.166	100.0%	0.166	0.075	45.0%
Urban Areas	0.784	0.772	98.4%	0.784	100.0%	0.784	0.656	83.7%
District of Columbia <sup>2</sup>	0.678	0.665	98.1%	0.678	100.0%	0.678	0.678	100.0%
Florida	20.564	19.698	95.8%	20.557	100.0%	20.245	19.829	97.9%
Rural Areas	1.955	1.469	75.2%	1.947	99.6%	1.722	1.476	85.7%
Urban Areas	18.609	18.229	98.0%	18.609	100.0%	18.522	18.354	99.1%
Georgia	10.284	9.341	90.8%	10.266	99.8%	8.861	8.451	95.4%
Rural Areas	2.521	1.812	71.9%	2.503	99.3%	1.512	1.270	84.0%
Urban Areas	7.763	7.529	97.0%	7.763	100.0%	7.348	7.181	97.7%
Hawaii	1.425	1.358	95.3%	1.423	99.8%	1.425	0.434	30.4%
Rural Areas	0.130	0.082	63.1%	0.128	98.3%	0.130	0.117	90.1%
Urban Areas	1.295	1.276	98.5%	1.295	100.0%	1.295	0.317	24.5%
Idaho	1.680	1.490	88.7%	1.657	98.6%	1.362	0.910	66.8%
Rural Areas	0.512	0.346	67.6%	0.489	95.6%	0.314	0.160	50.8%
Urban Areas	1.168	1.144	98.0%	1.168	100.0%	1.048	0.751	71.6%
Illinois	12.791	12.114	94.7%	12.785	100.0%	12.005	11.779	98.1%
Rural Areas	1.473	0.935	63.5%	1.468	99.6%	0.973	0.877	90.1%
Urban Areas	11.317	11.179	98.8%	11.317	100.0%	11.032	10.902	98.8%

	Pop.	Fixed 25 M	_	Mobile l Mbp 1 Mb	os/	Pop.	Mobile L Mbps/3	
	Evaluated	Pop. With Access	% of Pop.	Pop. With Access	% of Pop.	Evaluated	Pop. With Access	% of Pop.
Indiana	6.626	5.759	86.9%	6.624	100.0%	5.921	5.383	90.9%
Rural Areas	1.829	1.070	58.5%	1.828	99.9%	1.328	0.988	74.4%
Urban Areas	4.797	4.689	97.8%	4.797	100.0%	4.594	4.396	95.7%
Iowa	3.130	2.832	90.5%	3.125	99.8%	2.105	2.101	99.8%
Rural Areas	1.130	0.875	77.4%	1.126	99.6%	0.437	0.433	99.0%
Urban Areas	2.000	1.957	97.9%	2.000	100.0%	1.668	1.668	100.0%
Kansas	2.901	2.589	89.2%	2.901	100.0%	2.277	2.195	96.4%
Rural Areas	0.751	0.499	66.5%	0.750	99.9%	0.338	0.306	90.6%
Urban Areas	2.151	2.090	97.2%	2.151	100.0%	1.939	1.889	97.4%
Kentucky	4.428	3.799	85.8%	4.301	97.1%	3.443	2.941	85.4%
Rural Areas	1.823	1.255	68.8%	1.697	93.1%	1.004	0.678	67.6%
Urban Areas	2.605	2.544	97.7%	2.604	100.0%	2.439	2.263	92.8%
Louisiana	4.670	3.948	84.5%	4.669	100.0%	4.231	2.862	67.6%
Rural Areas	1.252	0.713	56.9%	1.251	99.9%	0.938	0.730	77.9%
Urban Areas	3.418	3.235	94.7%	3.418	100.0%	3.293	2.132	64.7%
Maine	1.332	1.198	89.9%	1.298	97.4%	1.231	0.369	30.0%
Rural Areas	0.826	0.708	85.7%	0.792	95.9%	0.732	0.244	33.4%
Urban Areas	0.506	0.490	96.9%	0.506	100.0%	0.499	0.125	25.0%
Maryland	6.001	5.850	97.5%	6.001	100.0%	5.861	4.895	83.5%
Rural Areas	0.790	0.740	93.7%	0.790	100.0%	0.695	0.356	51.2%
Urban Areas	5.211	5.110	98.1%	5.211	100.0%	5.166	4.539	87.9%
Massachusetts	6.794	6.634	97.7%	6.793	100.0%	6.783	6.712	99.0%
Rural Areas	0.544	0.492	90.3%	0.544	99.9%	0.542	0.503	92.8%
Urban Areas	6.249	6.143	98.3%	6.249	100.0%	6.241	6.209	99.5%
Michigan	9.934	8.965	90.2%	9.926	99.9%	9.450	8.953	94.7%
Rural Areas	2.547	1.692	66.4%	2.538	99.7%	2.213	1.846	83.4%
Urban Areas	7.387	7.273	98.5%	7.387	100.0%	7.238	7.107	98.2%

	Pop.	Fixed 25 I		Mobile l Mbp 1 Mb	os/	Pop.	Mobile L Mbps/3	
		Pop. With Access	% of Pop.	Pop. With Access	% of Pop.	Evaluated	Pop. With Access	% of Pop.
Minnesota	5.513	5.102	92.6%	5.506	99.9%	4.843	4.768	98.5%
Rural Areas	1.466	1.099	74.9%	1.459	99.5%	1.001	0.951	95.0%
Urban Areas	4.046	4.003	98.9%	4.046	100.0%	3.842	3.817	99.3%
Mississippi	2.986	2.157	72.3%	2.977	99.7%	1.979	1.359	68.7%
Rural Areas	1.515	0.756	49.9%	1.507	99.4%	0.752	0.449	59.8%
Urban Areas	1.470	1.401	95.3%	1.470	100.0%	1.227	0.910	74.1%
Missouri	6.086	5.080	83.5%	6.065	99.7%	5.097	4.297	84.3%
Rural Areas	1.814	0.897	49.5%	1.793	98.9%	1.084	0.708	65.4%
Urban Areas	4.272	4.183	97.9%	4.272	100.0%	4.013	3.589	89.4%
Montana	1.041	0.803	77.1%	0.981	94.2%	0.722	0.306	42.4%
Rural Areas	0.474	0.280	59.2%	0.419	88.5%	0.271	0.066	24.4%
Urban Areas	0.568	0.523	92.1%	0.561	98.9%	0.450	0.240	53.2%
Nebraska	1.903	1.692	88.9%	1.901	99.9%	1.284	1.246	97.0%
Rural Areas	0.509	0.333	65.5%	0.507	99.5%	0.140	0.126	90.5%
Urban Areas	1.394	1.359	97.5%	1.394	100.0%	1.144	1.120	97.8%
Nevada	2.937	2.820	96.0%	2.926	99.6%	2.864	0.602	21.0%
Rural Areas	0.197	0.104	53.0%	0.185	94.1%	0.160	0.082	51.1%
Urban Areas	2.741	2.716	99.1%	2.741	100.0%	2.704	0.520	19.2%
New Hampshire	1.334	1.258	94.2%	1.329	99.6%	1.262	0.711	56.3%
Rural Areas	0.530	0.465	87.9%	0.524	98.9%	0.483	0.163	33.7%
Urban Areas	0.805	0.792	98.4%	0.805	100.0%	0.779	0.548	70.3%
New Jersey	8.933	8.842	99.0%	Contract Contract	100.0%	8.933	8.778	98.3%
Rural Areas	0.466	0.454	97.3%	0.466	100.0%	0.466	0.432	92.6%
Urban Areas	8.466	8.388	99.1%	8.466	100.0%	8.466	8.347	98.6%
New Mexico	2.075	1.672	80.6%	2.058	99.2%	1.844	0.817	44.3%
Rural Areas	0.487	0.208	42.8%	0.470	96.4%	0.364	0.059	16.2%
Urban Areas	1.588	1.464	92.2%	1.588	100.0%	1.480	0.757	51.2%

	Pop.	Fixed 25 I		Mobile I Mbp 1 Mb	os/	Pop.	Mobile L Mbps/3	
	Evaluated	Pop. With Access	% of Pop.	Pop. With Access	% of Pop.	Evaluated	Pop. With Access	% of Pop.
New York	19.721	19.328	98.0%	19.692	99.9%	19.263	17.349	90.1%
Rural Areas	2.351	1.992	84.7%	2.322	98.8%	2.020	1.025	50.7%
Urban Areas	17.370	17.336	99.8%	17.370	100.0%	17.242	16.325	94.7%
North Carolina	10.123	9.481	93.7%	10.045	99.2%	9.440	7.540	79.9%
Rural Areas	3.375	2.768	82.0%	3.302	97.8%	2.807	1.722	61.3%
Urban Areas	6.749	6.714	99.5%	6.743	99.9%	6.633	5.818	87.7%
North Dakota	0.756	0.689	91.2%	0.753	99.6%	0.458	0.455	99.3%
Rural Areas	0.334	0.281	84.1%	0.331	99.1%	0.119	0.116	97.4%
Urban Areas	0.422	0.408	96.7%	0.422	100.0%	0.339	0.339	100.0%
Ohio	11.610	10.724	92.4%	11.600	99.9%	11.101	10.061	90.6%
Rural Areas	2.570	1.827	71.1%	2.561	99.6%	2.199	1.715	78.0%
Urban Areas	9.039	8.896	98.4%	9.039	100.0%	8.902	8.346	93.8%
Oklahoma	3.915	3.014	77.0%	3.906	99.8%	3.518	2.727	77.5%
Rural Areas	1.341	0.617	46.0%	1.331	99.3%	1.046	0.649	62.0%
Urban Areas	2.574	2.397	93.1%	2.574	100.0%	2.471	2.078	84.1%
Oregon	4.086	3.717	91.0%	4.052	99.2%	3.907	3.744	95.8%
Rural Areas	0.813	0.521	64.0%	0.780	95.8%	0.717	0.641	89.3%
Urban Areas	3.273	3.196	97.7%	3.273	100.0%	3.190	3.103	97.3%
Pennsylvania	12.774	12.124	94.9%	12.753	99.8%	12.178	11.626	95.5%
Rural Areas	2.724	2.252	82.7%	2.703	99.2%	2.307	2.010	87.1%
Urban Areas	10.050	9.871	98.2%	10.050	100.0%	9.871	9.616	97.4%
Rhode Island	1.056	1.036	98.1%	1.056	100.0%	1.056	1.056	100.0%
Rural Areas	0.097	0.095	97.6%	0.097	100.0%	0.097	0.097	100.0%
Urban Areas	0.958	0.941	98.2%	0.958	100.0%	0.958	0.958	100.0%
South Carolina	4.950	4.373	88.3%	4.948	100.0%	4.451	3.669	82.4%
Rural Areas	1.676	1.165	69.5%	1.674	99.9%	1.302	1.107	85.0%

	Pop.	Fixed 25 M		Mobile l Mbp 1 Mb	os/	Pop.	Mobile L Mbps/3	
	Evaluated	Pop. With Access	% of Pop.	Pop. With Access	% of Pop.	Evaluated	Pop. With Access	% of Pop.
Urban Areas	3.274	3.208	98.0%	3.274	100.0%	3.148	2.562	81.4%
South Dakota	0.863	0.762	88.3%	0.860	99.6%	0.387	0.383	99.2%
Rural Areas	0.384	0.288	75.1%	0.381	99.2%	0.090	0.086	96.4%
Urban Areas	0.479	0.474	98.9%	0.479	100.0%	0.297	0.297	100.0%
Tennessee	6.640	6.049	91.1%	6.606	99.5%	5.705	5.206	91.2%
Rural Areas	2.235	1.716	76.8%	2.200	98.5%	1.483	1.177	79.4%
Urban Areas	4.406	4.332	98.3%	4.406	100.0%	4.222	4.029	95.4%
Texas	27.764	25.943	93.4%	27.754	100.0%	26.660	20.521	77.0%
Rural Areas	4.512	3.260	72.3%	4.503	99.8%	3.826	2.113	55.2%
Urban Areas	23.251	22.683	97.6%	23.251	100.0%	22.834	18.408	80.6%
Utah	3.040	2.936	96.6%	3.022	99.4%	2.882	2.170	75.3%
Rural Areas	0.361	0.265	73.4%	0.343	95.2%	0.263	0.116	44.1%
Urban Areas	2.679	2.671	99.7%	2.679	100.0%	2.619	2.054	78.4%
Vermont	0.624	0.538	86.1%	0.599	96.0%	0.394	0.000	0.0%
Rural Areas	0.383	0.301	78.5%	0.358	93.4%	0.199	0.000	0.0%
Urban Areas	0.241	0.237	98.3%	0.241	100.0%	0.195	0.000	0.0%
Virginia	8.387	7.617	90.8%	8.347	99.5%	7.457	5.549	74.4%
Rural Areas	2.053	1.459	71.1%	2.014	98.1%	1.372	0.340	24.8%
Urban Areas	6.334	6.158	97.2%	6.334	100.0%	6.085	5.209	85.6%
Washington	7.269	7.147	98.3%	7.234	99.5%	7.157	6.806	95.1%
Rural Areas	1.226	1.124	91.7%	1.193	97.4%	1.154	0.964	83.5%
Urban Areas	6.043	6.023	99.7%	6.040	99.9%	6.003	5.842	97.3%
West Virginia	1.830	1.504	82.2%	1.710	93.4%	1.148	0.287	25.0%
Rural Areas	0.934	0.647	69.2%	0.816	87.4%	0.453	0.089	19.6%
Urban Areas	0.896	0.857	95.7%	0.894	99.7%	0.696	0.199	28.5%
Wisconsin	5.775	4.992	86.4%	5.738	99.4%	5.228	4.824	92.3%
Rural Areas	1.736	0.988	56.9%	1.699	97.9%	1.293	1.055	81.6%

	Pop.	Fixed 25 I	-	Mobile l Mbj 1 Mb	os/	Pop.	Mobile I Mbps/3	
	Evaluated	Pop. With Access	% of Pop.	Pop. With Access	% of Pop.	Evaluated	Pop. With Access	% of Pop.
Urban Areas	4.039	4.004	99.1%	4.039	100.0%	3.935	3.768	95.8%
Wyoming	0.585	0.457	78.2%	0.574	98.2%	0.341	0.048	14.2%
Rural Areas	0.217	0.099	45.5%	0.207	95.1%	0.084	0.015	18.2%
Urban Areas	0.367	0.358	97.6%	0.367	100.0%	0.257	0.033	12.8%

<sup>\*\*</sup> This table from the FCC also depicts access to Mobile LTE with a minimum advertised speed of 5Mbps/1Mbps and Mobile LTE with a median speed of 10Mbps/3Mbps.

## Appendix II

# Percentage of County Population with Access to Broadband at any Speed

County Name	2010 Population 🔻	Population Covered 🔻	Percentage 🔻
Arkansas	19019	17558	92
Ashley	21853	18138	83
Baxter	41513	39424	95
Benton	221339	215241	97
Boone	36903	36642	99
Bradley	11508	10714	93
Calhoun	5368	4160	77
Carroll	27446	24086	88
Chicot	11800	9622	82
Clark	22995	20146	88
Clay	16083	15712	98
Cleburne	25970	25870	100
Cleveland	8689	7615	88
Columbia	24552	20240	82
Conway	21273	21273	100
Craighead	96443	95477	99
Crawford	61948	57460	93
Crittenden	50902	46963	92
Cross	17870	14884	83
Dallas	8116	7079	87
Desha	13008	11214	86
Drew	18509	14241	77
Faulkner	113237	113177	100
Franklin	18125	16316	90
Fulton	12245	10927	89
Garland	96024	93862	98
Grant	17853	16654	93
Greene	42090	42069	100
Hempstead	22609	19322	85
Hot Spring	32923	26415	80
Howard	13789	10265	74
Independence	36647	35640	97
Izard	13696	13094	96
Jackson	17997	16374	91
Jefferson	77435	68441	88
Johnson	25540	22461	88

County Name	2010 Population 🔻	Population Covered 🔻	Percentage 💌
Lafayette	7645	6295	82
Lawrence	17415	16448	94
Lee	10424	5769	55
Lincoln	14134	8139	58
Little River	13171	11247	85
Logan	22353	20135	90
Lonoke	68356	65741	96
Madison	15717	13186	84
Marion	16653	16323	98
Miller	43462	43281	100
Mississippi	46480	45364	98
Monroe	8149	6630	81
Montgomery	9487	8437	89
Nevada	8997	7170	80
Newton	8330	5408	65
Ouachita	26120	21409	82
Perry	10445	10271	98
Phillips	21757	18947	87
Pike	11291	9783	87
Poinsett	24583	21071	86
Polk	20662	15909	77
Pope	61754	59934	97
Prairie	8715	6605	76
Pulaski	382748	378782	99
Randolph	17969	16650	93
Saline	107118	101817	95
Scott	11233	9144	81
Searcy	8195	8182	100
Sebastian	125744	124159	99
Sevier	17058	16237	95
Sharp	17264	16804	97
St. Francis	28258	20779	74
Stone	12394	12331	99
Union	41639	36815	88
Van Buren	17295	17295	100
Washington	203065	198024	98
White	77076	72310	94
Woodruff	7260	6564	90
Yell	22185	21207	96

# County Populations with Access to 25Mbps of Fixed Broadband

County Name	2010 Population	Population Covered 🔻	Percentage 🔻
Arkansas	19019	13293	70
Ashley	21853	8719	40
Baxter	41513	34653	83
Benton	221339	203753	92
Boone	36903	31817	86
Bradley	11508	7216	63
Calhoun	5368	314	6
Carroll	27446	18264	67
Chicot	11800	6416	54
Clark	22995	17064	74
Clay	16083	11970	74
Cleburne	25970	25834	99
Cleveland	8689	7298	84
Columbia	24552	16332	67
Conway	21273	21273	100
Craighead	96443	82922	86
Crawford	61948	53153	86
Crittenden	50902	40942	80
Cross	17870	10537	59
Dallas	8116	4757	59
Desha	13008	9557	73
Drew	18509	13147	71
Faulkner	113237	113156	100
Franklin	18125	8817	49
Fulton	12245	7677	63
Garland	96024	92935	97
Grant	17853	11311	63
Greene	42090	31017	74
Hempstead	22609	14267	63
Hot Spring	32923	16941	51
Howard	13789	1201	9
Independence	36647	31584	86
Izard	13696	9772	71
Jackson	17997	14083	78
Jefferson	77435	46205	60
Johnson	25540	17386	68

County Name	2010 Population	Population Covered 🔻	Percentage 🔻
Lafayette	7645	1097	14
Lawrence	17415	9859	57
Lee	10424	3411	33
Lincoln	14134	4567	32
Little River	13171	7002	53
Logan	22353	13429	60
Lonoke	68356	51325	75
Madison	15717	3291	21
Marion	16653	7269	44
Miller	43462	38760	89
Mississippi	46480	34877	75
Monroe	8149	2586	32
Montgomery	9487	5699	60
Nevada	8997	4263	47
Newton	8330	5136	62
Ouachita	26120	13642	52
Perry	10445	10076	96
Phillips	21757	17764	82
Pike	11291	6279	56
Poinsett	24583	15680	64
Polk	20662	13422	65
Pope	61754	56717	92
Prairie	8715	2332	27
Pulaski	382748	372584	97
Randolph	17969	12019	67
Saline	107118	98274	92
Scott	11233	6856	61
Searcy	8195	8070	98
Sebastian	125744	119802	95
Sevier	17058	13627	80
Sharp	17264	13377	77
St. Francis	28258	10375	37
Stone	12394	10964	88
Union	41639	30147	72
Van Buren	17295	17235	100
Washington	203065	188615	93
White	77076	54402	71
Woodruff	7260	4644	64
Yell	22185	19291	87

# Appendix IV Percentage of County Population with Access to 10Mbps Broadband

County Name	2010 Population	Population Covered >	Percentage *
Arkansas	19019	16847	89
Ashley	21853	13359	61
Baxter	41513	38654	93
Benton	221339	208621	94
Boone	36903	35803	97
Bradley	11508	10374	90
Calhoun	5368	4027	75
Carroll	27446	21036	77
Chicot	11800	7277	62
Clark	22995	18160	79
Clay	16083	14908	93
Cleburne	25970	25849	100
Cleveland	8689	7316	84
Columbia	24552	16911	69
Conway	21273	21273	100
Craighead	96443	95042	99
Crawford	61948	54642	88
Crittenden	50902	43497	85
Cross	17870	11932	67
Dallas	8116	6438	79
Desha	13008	10386	80
Drew	18509	13470	73
Faulkner	113237	113177	100
Franklin	18125	13556	75
Fulton	12245	9824	80
Garland	96024	93131	97
Grant	17853	14679	82
Greene	42090	42045	100
Hempstead	22609	15588	69
Hot Spring	32923	22629	69
Howard	13789	4293	31
Independence	36647	34808	95
Izard	13696	13014	95
Jackson	17997	16060	89
Jefferson	77435	48479	63
Johnson	25540	20163	79

County Name	2010 Population	Population Covered 🔻	Percentage 💌
Lafayette	7645	3487	46
Lawrence	17415	15844	91
Lee	10424	4014	39
Lincoln	14134	7087	50
Little River	13171	8818	67
Logan	22353	18190	81
Lonoke	68356	60881	89
Madison	15717	10009	64
Marion	16653	14958	90
Miller	43462	41622	96
Mississippi	46480	44706	96
Monroe	8149	3686	45
Montgomery	9487	6910	73
Nevada	8997	6074	68
Newton	8330	5348	64
Ouachita	26120	15963	61
Perry	10445	10076	96
Phillips	21757	18280	84
Pike	11291	7708	68
Poinsett	24583	20255	82
Polk	20662	14359	69
Pope	61754	58096	94
Prairie	8715	5946	68
Pulaski	382748	375232	98
Randolph	17969	15162	84
Saline	107118	98962	92
Scott	11233	7710	69
Searcy	8195	8179	100
Sebastian	125744	120970	96
Sevier	17058	15364	90
Sharp	17264	16195	94
St. Francis	28258	11219	40
Stone	12394	12016	97
Union	41639	32425	78
Van Buren	17295	17235	100
Washington	203065	192687	95
White	77076	64673	84
Woodruff	7260	5772	80
Yell	22185	20234	91

## Appendix V

# County Populations with Projected Access to 10Mbps of Fixed Broadband upon Completion of CAF II Funded Projects

County Name	2010 Population 🔻	Population Covered 🔻	Percentage 💌
Arkansas	19019	18535	97
Ashley	21853	17991	82
Baxter	41513	38791	93
Benton	221339	213577	96
Boone	36903	36677	99
Bradley	11508	11269	98
Calhoun	5368	4675	87
Carroll	27446	25804	94
Chicot	11800	9496	80
Clark	22995	21112	92
Clay	16083	15651	97
Cleburne	25970	25943	100
Cleveland	8689	8396	97
Columbia	24552	21504	88
Conway	21273	21273	100
Craighead	96443	95319	99
Crawford	61948	58503	94
Crittenden	50902	46661	92
Cross	17870	15160	85
Dallas	8116	7630	94
Desha	13008	11888	91
Drew	18509	17434	94
Faulkner	113237	113237	100
Franklin	18125	17026	94
Fulton	12245	9895	81
Garland	96024	94198	98
Grant	17853	17013	95
Greene	42090	42087	100
Hempstead	22609	18918	84
Hot Spring	32923	28043	85
Howard	13789	8805	64
Independence	36647	36129	99
Izard	13696	13192	96
Jackson	17997	17217	96
Jefferson	77435	55867	72
Johnson	25540	24086	94

County Name	2010 Population	Population Covered 🔻	Percentage 🔻
Lafayette	7645	6027	79
Lawrence	17415	17172	99
Lee	10424	8326	80
Lincoln	14134	9429	67
Little River	13171	11396	87
Logan	22353	21607	97
Lonoke	68356	63826	93
Madison	15717	10868	69
Marion	16653	16106	97
Miller	43462	42876	99
Mississippi	46480	45699	98
Monroe	8149	4935	61
Montgomery	9487	9001	95
Nevada	8997	8604	96
Newton	8330	8150	98
Ouachita	26120	20396	78
Perry	10445	10361	99
Phillips	21757	20118	92
Pike	11291	10638	94
Poinsett	24583	22702	92
Polk	20662	18879	91
Pope	61754	60445	98
Prairie	8715	8062	93
Pulaski	382748	376477	98
Randolph	17969	17568	98
Saline	107118	104179	97
Scott	11233	10738	96
Searcy	8195	8195	100
Sebastian	125744	123526	98
Sevier	17058	16720	98
Sharp	17264	16351	95
St. Francis	28258	16696	59
Stone	12394	12301	99
Union	41639	37327	90
Van Buren	17295	17295	100
Washington	203065	192734	95
White	77076	71447	93
Woodruff	7260	6466	89
Yell	22185	21657	98

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JUNE 2017





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