

Testimony of Jonathan Spalter President and CEO, USTelecom before the Senate Commerce Committee "Broadband Mapping: Challenges and Solutions" April 10, 2019

Chairman Wicker, Ranking Member Cantwell, and other distinguished Members of the Committee, thank you for the opportunity to testify at this important hearing. My name is Jonathan Spalter, and I am the President and CEO of USTelecom – The Broadband Association.

USTelecom is the nation's trade association representing broadband providers, suppliers, and innovators connecting our families, communities and enterprises to the future. Our diverse membership ranges from large publicly traded global communications providers, manufacturers, and technology enterprises, to small companies and cooperatives – all providing advanced communications services to markets, both urban and rural and everything in between.

Today's hearing presents a timely opportunity to discuss why accurate broadband mapping is integral to accelerating the deployment of broadband infrastructure to all Americans. Broadband service is no longer a luxury; it is an essential component of our national infrastructure and economic success, as well as the health, well-being, safety, and prosperity of every American.

That is why American broadband companies have invested \$1.6 trillion of their own capital since 1996 – \$76 billion in 2017 alone – to upgrade and expand the nation's digital infrastructure. As a result, over the past decade, broadband access in rural homes has risen 71 percent.

USTelecom members also have enjoyed a strong partnership with government through the FCC's Connect America Fund (CAF) to help deploy broadband to the nation's hardest to reach communities. Some of our members began working on CAF II in 2015 to bring broadband to over 3.6 million rural locations—or more than 9 million Americans over six years. As of March 1, 2019, these CAF II participants are in aggregate 10 percent ahead of schedule and, as a result, over 5.7 million more rural Americans have an on-ramp to the internet.

While significant progress is being made, millions remain on the wrong side of the connectivity gap. Part of the challenge is our nation lacks a comprehensive connectivity map indicating precisely where high-speed broadband service is available and, most importantly, where it is not.

There is a well-known management adage: "if you can't measure it, you can't manage it." Today, it is equally true that when it comes to broadband, "if you can't map it, you can't deploy to it." If our aim is to leave no American behind, then the tools and instruments we use—in both the public and private sector—must be capable of accurately pinpointing where we need to focus our efforts. That is why USTelecom has launched the Broadband Mapping Initiative pilot.



Why a New Broadband Map?

Currently, the FCC collects deployment data from broadband providers by census block. Unfortunately, location data on homes and businesses too often are not accurately reflected in census block or other available data.

For example, if a provider is able to serve a single location in a census block, then the FCC considers every location in that block "served." Therein lies the challenge. In some cases, only a fraction of locations in the block can access broadband services. This issue is particularly acute in rural areas where census blocks are far larger than their urban and suburban counterparts and data sources are lacking. The "one-served-all-served" reporting is simply not a reliable tool to accurately understand broadband availability, nor is it a viable approach to identifying where scarce federal support for broadband deployment should be allocated.

There is broad agreement between industry and government on the deficiencies of current reporting methods. When the FCC launched an open proceeding on improving the FCC's broadband data collection process, Chairman Ajit Pai said, "Maintaining updated and accurate data about broadband deployment is critical to bridging the digital divide. It lets us target our efforts to those areas that most need it."

And when the Administration released its American Broadband Initiative Milestones report, it referenced the need for "more comprehensive and granular data" to provide an improved foundation upon which to base broadband funding decisions. The report went on to say, "With limited funding available, getting better data to target investments to under and unserved areas remains a high priority across federal and state agencies." As NTIA Administrator David Redl stated, "In order to ensure that all Americans have access to broadband, we need a more precise picture of the current services and infrastructure that are available."

Broadband Mapping Initiative Pilot

There is widespread agreement that policymakers need better and more granular information about areas without broadband before they can design efficient funding programs to address the problem, avoid overbuilding, and track progress.

The growing use of competitive reverse auctions to distribute broadband funding puts an even higher premium on having the best possible data about the areas up for bid in order to ensure a fair and cost-effective result. USTelecom members' recent experiences with CAF programs, however, have revealed the type of granular mapping data needed to efficiently fund targeted programs for broadband deployment in rural areas is neither readily available nor consistent.

After working with innovative broadband companies and associations across the country, and having discussions with key federal and state level government stakeholders and Congress, USTelecom launched the Broadband Mapping Initiative pilot to quite literally "map this gap."

Our mission is to create a consistent national dataset identifying all broadband serviceable locations using a single methodology to provide a harmonized reference point for broadband reporting. The



Broadband Mapping Initiative pilot, using modern data analytics, will deliver a more detailed and cohesive view of where broadband is, and is not.

Here's how USTelecom's proof of concept pilot program will be implemented:

We will begin in two states—Missouri and Virginia—with the aim of developing a single, comprehensive next-generation broadband mapping system for the nation. With the help of our partners at ITTA and the Wireless Internet Service Providers Association, our pilot will involve multiple companies of different sizes and technology types, including AT&T, Consolidated, CenturyLink, Frontier, RiverStreet, TDS, Verizon, and Windstream.

Working together, we will utilize new digital resources, including satellite imagery, digitized parcel and land attribute data, a mix of open source data sets and commercial software, and existing broadband provider address information. These data sets will be combined and organized by conforming addresses, removing duplicates, cross-checking information with carrier-provided address lists and using managed crowdsourcing to review records for accuracy. The pilot also will test different methods for reporting service availability. Carrier size and technology is likely to influence the method that works best for each participant, and we anticipate testing several methods including: reporting by individual address/location; submitting shape files of service area; and submitting results of propagation maps for fixed wireless service. Once this process is complete and a full set of broadband serviceable locations is identified, carriers will be able to report where they can provide broadband.

Creating a database at this level of granularity is a major endeavor and enlisting the help of consumers and state officials on the ground will help confirm, correct, and refine the data. We are attempting to map in a highly dynamic environment where service deployment, homebuilding, business development, natural disasters, and developments in GIS resources create a constantly changing landscape that must be updated and improved over time. In addition to a systematic schedule to refresh data and reporting, this pilot is designed to support a cooperative, collaborative approach to creating and maintaining an important national data source.

The hoped-for result? A comprehensive database of all broadband serviceable locations in our two pilot states—and a roadmap for a collaborative government-led effort to expand the system nationwide.

We anticipate the pilot project will be completed by Q3 of this year. At the end of that period, USTelecom and its consortium will submit the pilot results into the record in the FCC's open Form 477 reform proceeding. We expect the pilot will provide clear evidence that this methodology is scalable and achievable in a timely and cost-effective manner and should be adopted nationwide.

USTelecom also is closely coordinating with NTIA, which recently issued a contract for a new mapping platform to update its national broadband availability map. The initial map will include available nationwide data for every state combined with additional state-level data from eight states it has identified as part of a pilot program. USTelecom looks forward to collaborating with NTIA going forward to ensure our efforts are coordinated and complementary.

The opportunities associated with accelerating rural broadband connectivity require an enduring public private partnership. USTelecom and its member companies stand ready to work with this Committee, Congress, and the Administration to improve broadband mapping, a critical step toward closing the digital divide. A sustained effort will take time and resources, along with partnership, imagination and



innovation, but these are essential if all Americans are going to have the opportunity to fully benefit from our nation's global digital leadership.

Thank you again for this opportunity.